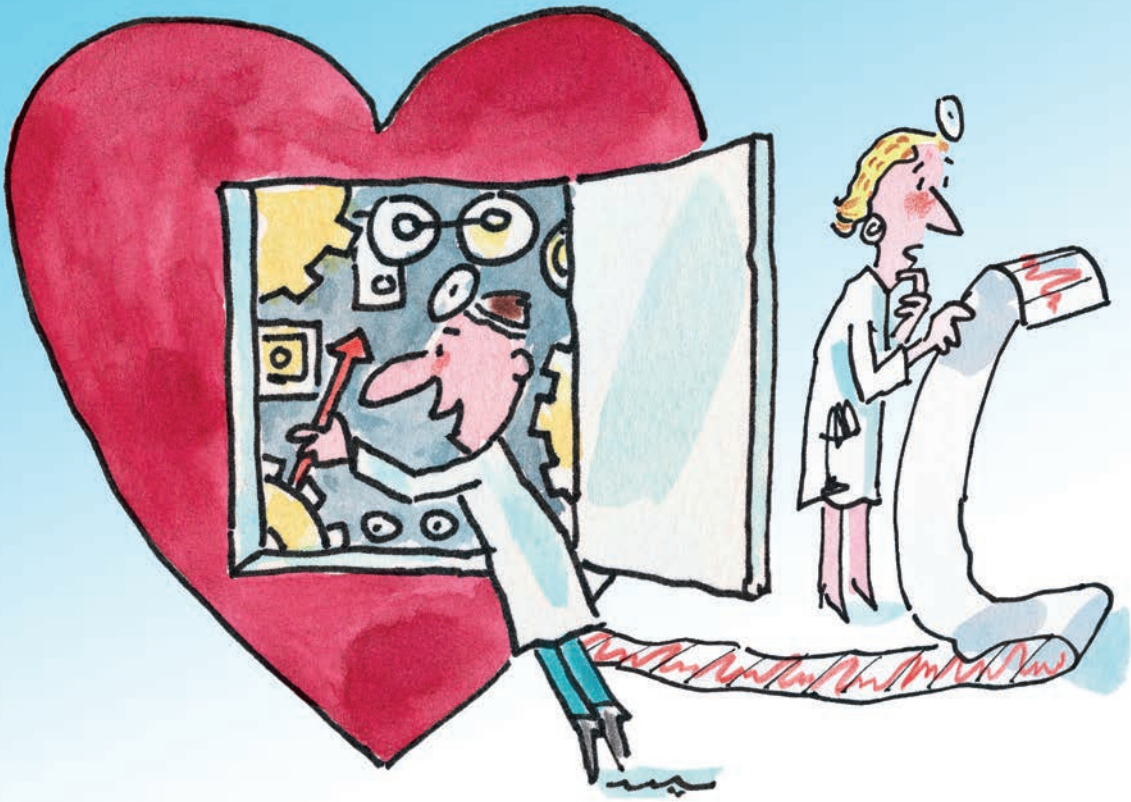
OECD Reviews of Health Care Quality

JAPAN

RAISING STANDARDS



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OECD Reviews of Health Care Quality: Japan 2015

RAISING STANDARDS

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BETTER POLICIES FOR BETTER LIVES

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Foreword

This report is published as part of a series of publications reviewing the quality of health care across selected OECD countries. As health costs continue to climb, policy makers increasingly face the challenge of ensuring that substantial spending on health is delivering value for money. At the same time, concerns about patients occasionally receiving poor quality health care have led to demands for greater transparency and accountability. Despite this, there is still considerable uncertainty over which policies work best in delivering health care that is safe, effective and provides a good patient experience, and which quality-improvement strategies can help deliver the best care at the least cost. *OECD Reviews of Health Care Quality* seek to highlight and support the development of better policies to improve quality in health care, to help ensure that the substantial resources devoted to health are being used effectively in supporting people to live healthier lives.

This report reviews the quality of health care in Japan, and seeks to highlight best practices, and provides a series of targeted assessments and recommendations for further improvements to quality of care, particularly in the area of primary care, hospital care and mental health care. Japanese health care faces formidable challenges. The population is ageing rapidly – keeping people healthy, economically and socially active will demand a health system that offers proactive, co-ordinated and personalised care to individuals with one or more chronic diseases. Strengthening primary care will be central to meeting these challenges. In particular, Japan needs to shift to a more structured health system, separating out more clearly different health care functions (primary care, acute care and long-term care in particular) to ensure that peoples' needs can be met by the most appropriate service, in a co-ordinated manner if needed. At the same time, Japan needs to strengthen the information infrastructure underlying the processes and outcomes of primary and hospital care, and consider ways in which its hospital payment systems can be better used to reward high quality care. Japan must also continue to develop high quality care in the community for severe mental illness, while turning attention to improving care available for mild-to-moderate mental illness.

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Acronyms and abbreviations

ACT	Assertive Community Treatment
ADL	Activities of daily living
AJHA	All Japan Hospital Association
ALOS	Average length of stay
AMI	Acute myocardial infarction
CABG	Coronary artery bypass graft surgery
CBT	Cognitive behavioural therapy
CME	Continuing Medical Education
CMHT	Community Mental Health Team
COMHBO	Community Mental Health & Welfare Bonding Organization
COML	Consumer Organisation for Medicine and Law
COPD	Chronic obstructive pulmonary disease
CP	Cerebral palsy
CPD	Continuous professional development
CRHT	Crisis Resolution/Home Treatment Team
CT	Computed tomography
DPC	Diagnosis Procedure Combination
DRG	Diagnosis-related group
EBM	Evidence-based medicine
FFS	Fee for service
FM	Family mdicine
FY	Fiscal year

GDP	Gross domestic product
GP	General practitioner
HCQI	OECD’s Health Care Quality Indicator
HoNOS	Health of the Nation Outcome Scales
IAPT	Increasing Access to Psychological Therapies
ICP	Individualised care plans
ICT	Information and communication technology
ID	Identification
IHD	Ischemic heart disease
IIMHL	Assertive Community Treatment
ISQua	International Society for Quality in Healthcare
ISO	International Standard Organization
JAB	Japan Accreditation Board
JCI	Joint Commission International
JCQHC	Japan Council for Quality Health Care
JHA	Japan Hospital Association
JMA	Japan Medical Association
JNA	Japan Nursing Association
JPCA	Japan Primary Care Association
JPY	Japanese yen
LTC	Long-term care
MHLW	Ministry of Health, Labour and Welfare
MRI	Magnetic resonance imaging
NHO	National Hospital Organisation
NICE	National Institute for Health and Care Excellence
OCD	Obsessive compulsive disorder
OOP	Out-of-pocket payment
PCI	Percutaneous coronary intervention
PET	Positron emission tomography

PHC	Public Health Centre
PMDA	Pharmaceutical and Medical Device Agency
PROM	Patient-Reported Outcome Measure
QICH	Quality Indicators in Community Healthcare
QIP	Quality Improvement Project
TB	Tuberculosis
VAT	Value-added tax

Executive summary

This report reviews the quality of health care in Japan. The report begins by giving an overview of policies and practices aimed at supporting quality of care in Japan (Chapter 1). The report then focuses on three areas that are of particular importance for Japan's health system at present: strengthening primary care (Chapter 2), improving hospital care (Chapter 3) and strengthening mental health care (Chapter 4). In examining these areas, this report seeks to highlight good practice, and provides a series of targeted assessments and recommendations for further improvements to quality of care.

To date, Japanese health care has performed well at low cost – life expectancy is famously long, at 83.2 years compared to an OECD average of 80.2 years, whilst health spending is at USD 3 649 PPP per capita per year, slightly higher than USD 3 484 on average. Strategic direction for the health system, and the fee schedule (so-called "*Shinryo Hoshu*"), are set by The Ministry of Health, Labour and Welfare (MHLW). The fee schedule is proposed by the ministry every other year, which is subsequently negotiated by the Central Social Insurance Medical Council, comprising providers, insurers, patient representatives and other stakeholders. The fee schedule is applied to all providers, and accounts for the vast majority of the revenues of physicians, clinics and hospitals, serving as a lever to steer the whole system towards desired goals. The fee schedule also plays a significant role in incentivising quality, by specifying minimum inputs, and in some cases indicators linked to outcomes (such as the proportion of patients in rehabilitation wards discharged to their pre-admission home). Beyond the fee schedule, governance of the system is currently undertaken with a light touch. The providers themselves have a considerable degree of flexibility, and within the boundaries of the fee schedule reimbursement can provide whatever services they consider appropriate. The next steps for Japan will be very much focused on responding to the needs of the "super-ageing" society, where elderly individuals with one or more complex, chronic diseases will need continuous, proactive and tailored services. This report provides a series of recommendations to guide Japan on this complex path.

Japan's "***primary care***" sector (that is, the services which can manage new health complaints that pose no immediate threat to life, manage long-term conditions and support the patient in deciding when referral to hospital-based services is necessary) is, in many ways, unique. Primary care is largely delivered through a network of some 100 000 community clinics, and by a cadre of semi-generalist/semi-specialists – that is, physicians who leave hospital practice after an unspecified amount of time to set up as generalists (with no compulsory further training) in the community. While Japan's primary care configuration has in many ways served the population well until now. However, sociodemographic shifts and a growing elderly population with complex health needs, fiscal pressures driving care away from inpatient settings, and high consultation rates and unplanned admission, suggest a change is needed. Japan needs a system of community care that is capable of providing a consistent point of care over the longer term; this system should be tailoring and co-ordinating care for those with multiple health care needs and supporting the patient in self-education and self-management. A new medical speciality for a primary care specialist has been developed (called *sougou shinryou senmon-i*) and should be in place from 2017, and Japan should seize this opportunity to secure a greater quality dividend from primary and community care. A key function of the primary care speciality should be provision of holistic care for those with multiple, complex health care needs, including the elderly and mental health care needs. Clear licensing credentials, information systems, regulation and embedded quality improvement initiatives, should be in place from the start.

Japan's large ***hospital care sector*** has traditionally been the dominant care provider in the health care system; in 2012, Japan had the highest number of hospital beds among OECD countries, the longest lengths of hospital stay, and very low discharge rates. The shortage of long-term care facilities, nursing homes or rehabilitative and chronic care means that long-term care is being delivered hospitals, which is an inappropriate use of resources. The abundant supply of beds, as well as the structure of hospital payments in Japan has further provided hospitals with incentives to keep patients much longer than seen in other OECD countries. A key priority for Japan is to shift opportunities for treatment towards care-delivery settings other than hospitals for post-acute care or non-acute care. Japan might want to reduce the number of hospital beds while developing at the same time nursing home beds or alternative facilities for patients upon discharge, either in long-term care settings, or through primary and community follow-up care. As Japan moves toward establishing a distinct speciality of primary care, better referrals protocols between primary and secondary care should be developed. Another important challenge in Japan's hospital sector is the specialisation and differentiation of medical functions. While specialisation of hospital beds has been undertaken in a number of OECD countries under pressure to drive improvement in quality and reduce costs, this process is still relatively new in Japan. Hospital payments should reflect strategic changes; the payment system in Japan needs to become more effective at rewarding quality of care, and discouraging over-provision of hospital services.

Considerable commitment to improvement is now needed if Japan is to secure a high quality ***mental health care system***. The high suicide rate, high numbers of psychiatric beds, and long average length of stay have drawn attention to Japan's mental health system for all the wrong reasons. Commitment and effort over the past decade in Japan have generated positive change, with falling reliance on long inpatient stays, and increased provision of community care. These improvements must be recognised, but many challenges remain. Care in the community for severe mental illness should be increased, and steps to assure quality in inpatient settings – measuring and evaluating care, holding hospitals to high standards – should be taken. More attention to population wellbeing is needed, particularly through better care provision for mild and moderate mental illnesses, which have a high prevalence rate. In doing this there is likely a key role to be played by doctors engaging in primary care including the soon-to-be established primary care specialists. Additionally, targeted programmes to address mild and moderate disorders could be developed, including wider availability of psychological therapies.

Assessment and recommendations

One of Japan's foremost policy challenges is to create an economically-active ageing society. Excellent health care will be central to achieving this. Thus far, Japanese health care has performed well – life expectancy is famously long, at 83.2 years compared to an OECD average of 80.2 years, whilst health spending is at USD 3 649 PPP per capita per year, slightly higher than USD 3 484 on average. A striking feature of the Japanese health system is its openness and flexibility. In general, clinics and hospitals can provide whatever services they consider appropriate, clinicians can credential themselves in any speciality and patients can access any clinician without referral. These arrangements have the advantage of accessibility and responsiveness. Such light-touch governance and abundant flexibility, however, may not best meet the health care needs of a super-ageing society. Instead, elderly individuals with one or more complex, chronic diseases will need continuous, proactive and tailored services to maintain their health and maximise their ability to participate in society. Japan needs to shift to a more structured health system, promoting differentiation of functions (primary care, acute care and long-term care, for example) while assuring mutual collaboration to ensure that peoples' needs can be met by the most appropriate service, in a co-ordinated manner if needed. As this differentiation occurs, the infrastructure to monitor and improve the quality of care must simultaneously deepen and become embedded at every level of governance –institutionally, regionally and nationally.

Japan is a country that achieves good health at relatively low cost. As well as long life expectancy, some indicators of the quality of health care are amongst the best in the OECD. Five-year relative survival estimates after a diagnosis of breast, cervical or colorectal cancer are all high, for example, and 30-day case fatality after an ischaemic stroke is the lowest in the OECD, at 3%. Low cost is achieved through a nationally binding prices based on a fee schedule that is revised every other year. The fee schedule operates not only as a mechanism for tight fiscal control, but also as Japan's main lever to steer and reform the health system more broadly. Incentivising certain elements of activities (such as co-ordination and communication between service providers before a patient is due to leave hospital) means that the fee schedule has also been heavily depended on to drive quality improvement at system-level. Most other quality improvement activities take place at institutional level. Hospitals, for example, develop their own sets of quality indicators, with varying levels of depth, coverage and sophistication. Higher-levels of organisation, such as Japan's 47 prefectures, are mainly concerned with ensuring access and efficiency, and have a limited role in relation to health care quality.

The most significant health reforms of recent years have centred on financing. Japan highlights a successful cost-containment policy through the extensive use of the fee schedule (so-called "*Shinryo Hoshu*"). The Ministry of Health, Labour and Welfare (MHLW) proposes a fee schedule, which is subsequently negotiated by the Central Social Insurance Medical Council, comprising providers, insurers, patient representatives and other stakeholders. Formal revision of the fee schedule happens every other year, applies to all providers, and determines the revenue of over 95% of clinics and hospitals. This latter fact means that the fee schedule also serves as a major policy lever to steer the whole system towards desired goals. The April 2014 revision, for example, incentivises shifting care from hospitals to communities, by further developing community comprehensive health care services; promoting continuity and co-ordination of care across different settings and improving transparency and accountability of practice. The fee schedule also plays a significant role in incentivising quality, by specifying minimum inputs, and in some cases indicators linked to outcomes (such as the proportion of patients in rehabilitation wards discharged to their pre-admission home).

Japan's main challenge in terms of monitoring and improving health care quality is two-fold: first, there are few quality initiatives embedded at system-level; second, as one steps away from system-level, a proliferation of quality-related activities is found, but these are haphazardly applied. At system-level, the quality architecture is almost exclusively focussed on minimum staff numbers, minimum qualifications and minimum standards for health care services. Other elements fundamental to other health systems, such as requirements for professional development and recertification or systems to collate and learn from adverse events, are less well established although some progress are being made. A number of accreditation agencies operate in Japan, with divergent minimum standards and qualifying criteria, and numerous medical societies produce their own clinical guidelines, carrying the risk of duplication, disagreement or gaps. Japan's payment systems, while sophisticated, do not reward quality in a particularly sophisticated or consistent way. Quality-benchmarking projects in the hospital sector, for example, are often voluntary and public awareness of the benchmarking results is still low although increasing. Likewise, the information infrastructure at system-level is focused on quantifying activities. A quality- and outcomes-oriented systematic data infrastructure, comprising patient registers and quality indicators is required.

Other challenges include:

- The health care system is strongly oriented toward curative care. Although there is a desire to pivot the system toward primary care but the quality architecture is not in place to support expansion of this sector.
- The use of electronic health records is surprisingly limited and the collection, linkage and analysis of health data is relatively undeveloped. Japan is further behind other OECD countries in resolving the trade-offs between personal data security and use of such data to drive more effective and responsive health care.
- Reforms of the hospital sector are underway to differentiate acute from non-acute beds (and ensure an appropriate level of care for each admission), but the data infrastructure and quality architecture to systematically evaluate the effect of these reforms is not in place.
- Even though the main system-level approach to quality is focussed on minimum staffing levels, the approach to workforce quality is limited. Primary care is delivered by a cadre of semi-generalists/semi-specialists, for example, and dozens of hospital specialities exist, with doctors certified by medical societies based on their own training requirements. Furthermore, there are still some doctor shortages in some specialties and in some regions.
- Although Japan has pioneered some initiatives for better quality care, they are not as patient-centred as they could be. For example, the care managers for beneficiaries of the long-term care insurance do not necessarily play a role as a co-ordinator among different services if they are admitted into hospital. In addition, health care quality metrics are not primarily designed for public use.
- Japan’s high suicide rate, high numbers of psychiatric beds, and long average length of stay in psychiatric institutions suggest potential for significant gains in the quality and outcomes of mental health care. In particular, care in the community for severe mental illness, and care provision for mild-to-moderate mental illness, should be enhanced.

If Japan is to be confident of securing consistent improvements in the quality of its health care, the next priority must be to move from a system that prioritises fiscal control, to one that gives equal priority to quality. The overarching policy priority in the Japanese health system has, for many years, been tight fiscal governance. Whilst this has worked well to contain costs and should not be relaxed (indeed, many countries have much to learn from Japan's example), it is important that equal attention is now paid to quality governance. This will require a more consolidated approach to quality monitoring and improvement. In particular, the main lever which currently exists at system-level to drive quality improvement (the FFS schedule) will need to be accompanied by other instruments; and the current loose and disparate approach to quality monitoring and improvement across different levels of the health system will need to be systematised based on a quality framework, using all existing data sources.

In addition, given Japan's rapidly ageing population, a clear orientation toward preventive and holistic elderly care will be necessary. A coherent primary care sector, delivering consistent proactive care, across the life-course will be essential to Japan's reorientation toward more cost-effective preventive health care. As differentiation of the hospital sectors occurs into intensive and less intensive beds, with the aim of reducing inappropriate use, a sufficiently sophisticated quality monitoring and improvement architecture will need to be built to evaluate the reforms' impacts. Finally, community-based mental health care and welfare service should be developed more fully, reducing dependency on in-patient services. In both specialist and community mental health and welfare services, further work is needed to reduce inappropriate use of pharmaceuticals (polypharmacy), and ensure that alternative therapies are adequately reimbursed through the fee schedule.

Strengthening primary care

Japan's approach to delivering a "primary level" of health care (that is, the services which can manage new health complaints that pose no immediate threat to life, manage long-term conditions and support the patient in deciding when referral to hospital-based services is necessary) is, in many ways, unique. Primary care is largely delivered through a network of some 100 000 community clinics which include those with beds. Rather than having a dedicated workforce with specialist training in the functions described above, however, primary care in Japan is typically delivered by a cadre of semi-generalist/semi-specialists – that is, physicians who leave hospital practice after an unspecified amount of time to set up as generalists (with no compulsory further training) in the community. Likewise, rather than having a distinct primary care estate, primary care may be delivered in a department in a hospital and patients who come to clinics with beds or hospitals with primary care department can stay for inpatient care if needed. And rather than patients being required, or strongly encouraged, to seek care for new complaints or non-complex chronic disease management from the primary care level, patients have the right to access hospital specialists directly for any health care need.

Japan's primary care configuration has, in many ways, served well until now. In particular, access is good, with some community clinics having a range of diagnostic and therapeutic equipment that would be the envy of many OECD systems. There are, however, several factors that raise the question whether current arrangements are delivering optimal quality and value for money:

- Sociodemographic shifts mean an increasingly elderly population, many of whom have multiple complex health care needs, and some of whom suffer frailty or social isolation.
- Fiscal pressures are driving a reorientation of health care away from inpatient care to community care.
- Consultation rates, particularly of the elderly, are high and data from some hospitals show increasing unplanned readmission rates; both suggest that community services may be struggling to provide adequate care.

Taken together, these factors suggest a need to have a system of community care that is capable of providing a consistent point of care over the longer term, tailoring and co-ordinating care for those with multiple health care needs and supporting the patient in self-education and self-management. In response to these challenges, Japanese Medical Specialty Board is developing a system of new medical specialties including a distinct specialtyin primary care which will start in 2017.

Current outcomes associated with primary and community care in Japan

Data submitted to the OECD's Health Care Quality Indicator (HCQI) project show that hospital admission rates for chronic conditions – an indirect measure of the quality of primary care – are lower in Japan than for the majority of OECD countries. At 23 admissions per 100 000 population, Japan has the lowest age-sex standardised admission rate for COPD observed in the OECD (although rates are not standardised for background prevalence of the condition or smoking). Admission rates for asthma are also lower than the OECD average. Significant reductions in admission rate for both conditions over recent years suggest real improvements in the quality of primary care.

In other clinical areas, however, the quality of primary care appears less reassuring. Data from some hospitals show a rising trend of unplanned readmissions, suggesting that community care services may not be coping well with the complexity or volume of patients being discharged from hospital. Furthermore, recent National Health and Nutrition Surveys have identified large numbers of undiagnosed and untreated hypertension, hypercholesterolaemia and diabetes.

In general, much less information on the activities and outcomes achieved within primary care is available in Japan compared to other countries. Even though there is potential for using national database of fee-for-service claims to identify patterns of cares undertaken in community clinics, it is not used in this way. In any case, the fee-for-service database would have limitations as a tool to monitor the quality of care. Its primary purpose is accounting, not quality monitoring, and there are still difficulties in using unique patient identifiers within it.

Quality initiatives in Japanese primary and community care

The national fee schedule is the main lever in the Japanese health system to monitor and improve quality. Activities appearing in the fee schedule that are intended to improve the quality of community or primary care include medical fees to reward the setting up co-ordinated community care plans upon a patient’s discharge; to provide information to patients on self-management; to set up cancer care plans; and to provide home care health services. In addition, recent reforms have also introduced a fee if a doctor provides lifestyle advice and co-ordinated management for these patients with two or more of the following conditions: hypertension, diabetes, dyslipidaemia or dementia.

The fee schedule, however, is based predominantly on inputs and activity – the lack of a sufficiently rich information infrastructure covering community clinics means that incentives based on the outcomes of care may not feature. In addition, incentivised activities are patchy. The care co-ordination management fee mentioned earlier, for example, is only available for patients with stroke and upper femoral fracture and not for other patients who might equally benefit, such as those admitted with a heart attack or other fractures or falls. Most significantly, however, the number of patients who benefit from the incentive system as a proportion of those who *should* benefit can never be known because Japan lacks a systematic doctor-patient or clinic-patient registration system that would allow denominator populations to be identified.

In Japan, all health care providers must meet minimum quality standards as a condition for reimbursement. The requirements to be met , however, are relatively basic and largely focus on staffing levels. In other OECD countries, accreditation is based upon a more demanding set of requirements. Standards around the full breadth of primary care activities (including health promotion and disease prevention) are often included in other accreditation systems, as well as broader objectives such as integration with other parts of the health system and with the community at large. At present, there is no national, prefectural or clinic-based system for adverse event reporting within primary care. A new system starting in October 2015 will require reporting of unexpected deaths, but not adverse events more widely.

Securing a greater quality dividend from primary and community care in Japan

Japanese Medical Specialty Board is now developing a system of new medical specialties, which will start in 2017 and it has already started to define the expected roles and training requirements for the new primary care specialist, called *sougou shinryou senmon-i*. This work should continue, to ensure that the speciality starts off on a secure, well-recognised and well-respected footing, underpinned by a national vision for primary care that is shared by community physicians, hospital doctors, the wider clinical workforce and patient groups. Clear licensing or credentialing criteria would be needed to make the distinction between the current cadre of physicians working as community generalists and the future primary care specialists that Japan wishes to create while providing training opportunities for community generalists to become primary care specialists. Such a distinction should be unambiguously evident to patients and other health care professionals and be based upon a clear vision of how primary care specialists will differ from the current workforce, in terms of extended or different knowledge, skills, roles and responsibilities.

Creation of academic departments of primary care in each medical school will also be instrumental in embedding the speciality. Some Japanese medical schools already provide courses of social medicine or public health and the development of a department of specialist primary care would complement these. These new departments could undertake research in primary care, support development of clinical guidelines specific to primary care, as well as teach the speciality at both under-graduate and post-graduate level.

It is important that a key function of the primary care speciality should be provision of holistic care for those with multiple, complex health care needs, including mental health care needs. In relation to other OECD primary care systems, Japan is starting from an unusually strong position in one respect, in that the fee schedule already directs additional resources for treatment of patients with multiple chronic conditions, continuity of prescribed drugs and management plans and establishment of continuous care which offers on-call services with medical advice. One option would be to consider extension of individualised care plans (ICPs) for patients who have one or more long-term conditions. ICPs are currently offered only to long-term care recipients. Issuing guidance on which patients should have an ICP, developing a monitoring framework to ensure that these patients are offered an ICP and standardising their content would be ways in which wider use and application of ICPs could be achieved.

Embedding continuous quality improvement from the start

Japan's primary care sector, currently delivered through community clinics, stands out for its dearth of systematic data on activity or outcomes. Developing the information infrastructure underpinning primary care, so that a fuller and more detailed picture of the effectiveness, safety and patient centredness of primary care can be built, is a priority. In particular, indicators linked to the scope of practice defined in guidelines for the new speciality of primary care should be developed, relating to the outcomes and patient's experience of care as far as possible. A richer information system is needed to assure the public of the quality of local services and to support them in choosing between providers, to enable central and local governments get a better picture of the value for money of their public spending, and allow professionals to benchmark their performance and seek continuous quality improvements.

Candidate indicators to measure the quality of primary care in Japan would most likely concentrate around prevention and management of chronic diseases, elderly care, child health and mental health care. Whilst models such as Israel's QICH, England's QOF or Denmark's DAK-E programmes should inform development of candidate indicators, it is particularly important that any indicators align as much as possible with the indicators already used in Japanese secondary care. A suite of indicators for the management of diabetes, spanning both primary and secondary care, would be timely, for example. Considerable thought will need to be given to how data can be made accessible and useful to both professionals and the public.

In addition, a reform requiring individuals to register with a regular primary care physician may be a pre-requisite to developing more effective primary care. In Japan, studies show that many individuals are able to name their "regular" or "family" doctor if asked. In addition, the fee schedule incentivises doctors to provide lifestyle advice and co-ordinated management for patients with two or more of the following conditions: hypertension, diabetes, dyslipidaemia or dementia. The patient's consent is required, which effectively nominates the doctor as his or her primary care doctor and creates, in effect, a doctor-patient registration system in this group, and promotes care co-ordination.

There may be scope to establish doctor-patient registration more systematically and extend it to a wider set of patients. A registration system brings significant benefits beyond the ability to co-ordinate an individual's care. With registers, the primary care specialist can then build a profile of the health needs of his/her registered population and ensure that resources are better matched to need. It is important to emphasise that the purpose of doctor-patient registration is to facilitate continuity, co-ordination and a better understanding of population health needs; its purpose is not to limit choice. International experience demonstrates this well. In Norway, for example citizens used to be able to consult one (or several) primary care doctors without restriction. Discussions from the mid-1980s onward, however, increasingly centred on the possibility that lack of a registration system might jeopardise the co-ordination of care, especially for those with complex needs. The introduction of a registration system was intended to improve the quality of care by strengthening the relationship between and patient and their primary care doctor, bringing new rights and opportunities to both parties. Despite anticipated difficulties in implementing a registration system across the diversity of Norway's geographical and social settings, national implementation was a success. Close to 100% Norwegians are now registered with a primary care doctor, signalling the popularity of the reform. In a recent survey of public attitudes to state funded services, their primary care doctor s were the second most popular institution after public libraries.

It is also worth giving detailed consideration to how the fee schedule can best be used to support a new speciality of primary care, define its objectives and encourage continuous quality improvement. Currently, most of the service elements incentivised through the fee schedule are focussed on inputs (hiring an extra nurse, for example, or having extended opening hours). Thought should be given to reorienting the fee schedule to incentivising outcomes to a greater extent, such as adequate control of blood pressure or glycaemia in diabetics. Although the international evidence on incentivising outcomes (or "pay for performance") is perhaps equivocal, many would agree that it seems to make sense to pay for outcomes, and the international evidence does not suggest in any way that such schemes should be abandoned. Examples would include a fee to reimbursing a wider range of nurse-led activities may also be a direction in which Japan wishes to move over the longer term. In many OECD countries, nurses with additional specialist training are undertaking an increasingly wide range of primary care tasks, particularly around chronic disease management, including clinical assessment, ordering investigations, referring for onward care, clinical management and, in some settings, prescribing. The evidence is that this has not led to any lapses in quality and can be associated with higher rates of patient satisfaction.

Finally, dependent upon the introduction of a registration system, some capitation element might be appropriate to deliver population-based health promotion and preventive health care activities. Most health systems in the OECD use a mix of payment mechanisms for primary care. This is because primary care has a wider range of objectives which includes improving the health of population, not only those seeking care but also others in the community and capitation payment is considered to promote proactive provision of primary care. Japan already has an active programme in this area. Since 2008, there have been services for those between 40 and 74 years old to provide health check-ups to monitor their metabolic syndrome. Likewise, *Health Japan 21* sets a target to prevent disease associated with adult life habits. Contracting for population-based activities also lays the foundations for primary care specialists to take on a leadership role in local and national health systems. They would be ideally suited for this through having a clear idea of local health needs, as well as weaknesses in local service delivery (particularly concerning issues at the interface between primary and secondary care). Japan should take the establishment of a primary care speciality in 2017 as opportunity to develop a new cadre of health service leaders.

Improving quality of hospital care

The hospital setting has traditionally been the dominant sector in the Japanese health care system. In 2012, Japan had the highest number of hospital beds among OECD countries with 13.4 beds per 1 000 population compared to 5 per 1 000 population across OECD countries. Japan had also the longest lengths of hospital stay and very low hospital discharge rates, possibly reflecting the availability of rehabilitative and chronic care in hospitals and weak availability of post-acute care settings to provide rehabilitative and long-term care services after discharge. At the same time, some acute care quality indicators, such as 30-day mortality after AMI, suggest room for improvement in this sector. While health spending in Japan is around OECD average, these statistics suggest that the institutional structures and associated incentives might pose efficiency and quality challenges in Japan’s hospital sector. There are strong arguments to strengthen the quality information infrastructure around hospitals and to develop new policy orientations to drive improvement in hospital outcome of care. Plan to specialise and more clearly differentiate the function of hospital beds is an essential step to ensure an appropriate use of hospital resources and improve both the outcomes and efficiency of care.

Hospital outcomes of care

Japan shows a mixed picture on indicators of quality of care in hospitals. Based on some OECD indicators related to five-year survival estimate for cancer, Japan appears to be performing well. Although data are somewhat outdated due to lack of regular national monitoring in the country, Japan is in the best 4 countries for five-year survival estimate for cervical and breast cancer in the 2000s. With regards to colorectal cancer, Japan has attained five-year survival estimate over 65% for both men and women in the early 2000s, which is above the OECD average of 61.3% for men and 63.3% for women in the late 2000s.

Other acute care indicators however, apparently suggest significant gaps in the quality of hospital outcomes of care. A striking feature of the Japanese hospital sector is the high in-hospital case fatality rates for acute myocardial infarction (AMI). Although Japanese are less likely to die of ischemic heart disease compared to people in other OECD countries, they are more likely to die once admitted into hospital for AMI than patients in other OECD countries. Japan’s in-hospital case fatality from AMI is 12.2 per 100 admissions in 2011, compared to an OECD average of 7.9 per 100 admissions in the same year. In contrast, however, Japan’s in-hospital case fatality rates within 30 days after admission for ischemic stroke was in 2011 the lowest among all OECD countries, with an age-sex standardised rate of 3 per 100 patients compared to 8.5 per 100 patients across OECD countries. Several factors, such as the admission of patient with particularly complex or exacerbated cardiovascular disease, difficulties in accepting patients transferred by ambulance or inefficiency and lapses in clinical processes might explain the apparently poor performance of Japanese hospitals with regards to in-hospital case fatality for AMI.

Several quality assurance mechanisms are set-up in the hospital sector but a more unified approach is needed to systematically monitor quality of care

Japan has a number of voluntary quality assurance mechanisms established in its hospital sector. The MHLW or the prefectural government can authorise or certify Advanced Treatment Hospitals, Clinical Training Hospitals or Cancer Care Coordinating Hospitals. The Japan Council for Quality Health Care (JCQHC), which was set up in 1995 as a third party organisation, is further involved in a number of quality activities such as the reporting of medical adverse events or hospitals accreditation. The current accreditation programme, which is accredited by the International Society for Quality in Healthcare (ISQua), is voluntary and nearly covers a quarter of Japanese hospitals, while some of the remaining hospitals are engaged in other accreditation programmes. From 2004, data on medical adverse events are systematically collected and analysed by the JCQHC's Department of Adverse Event Prevention. The overarching aim is to promote patient safety by sharing information with medical institutions and users. To this end, quarterly and annual reports around medical adverse events are issued, workshops organised and warnings or guidelines published.

Whilst quality assurance mechanisms around accreditation and patient safety are developed, a comprehensive information infrastructure is lacking and clinical guidelines are not consistently implemented. JCQHC has been developing guidelines since 2007 through rigorous and scientific approach, and nearly 160 guidelines are at present available on the JCQHC's website; Medical Information Network Distribution Service. But some studies found low rates of adherence to clinical guidelines by hospital physicians. Minimum quality standards and the use of clinical guidelines might be promoted and enforced at a system level by setting up economic incentives to achieve more efficient clinical processes and deliver safe, patient-centred and appropriate care.

At the same time, Japanese hospitals do not systematically collect data on outcomes of care, reducing the possibilities for monitoring and evaluating hospital care quality. Although Japan does provide quality indicators such as 30 day in-hospital mortality for AMI and stroke as part of the HCQI project at OECD, these indicators are estimated based on surveys while most other OECD countries use hospital administrative data. The whole hospital sector is not covered by the survey, demonstrating the need to strengthen the information infrastructure around hospital care. The hospital information infrastructure at system-level is mostly focussed on input and medical activities including in-patient diagnosis and treatment. The Diagnosis Procedure Combination (DPC) database for example, includes mostly process indicators such as length of hospital stay and only covers 1 505 hospitals. The set of indicators in the DPC system is not comprehensive enough to support quality monitoring and establish a clear picture of the quality of care provided. There are however some sophisticated initiatives conducted by some hospitals to measure and improve quality, but they are not uniform across the country. The Quality Indicator project undertaken by St Luke's International Hospital is particularly impressive and may serve as a model to be rolled-out across the country.

Significant challenges lie ahead for driving further improvement in hospital care

While Japan had the highest number of acute hospital beds and lengths of hospital stay across OECD countries, many of these beds appear inappropriately used (i.e., used for non-acute medical attention). One of the most important reasons is the significant role that hospitals have traditionally played in providing long-term care to the elderly population. The shortage of long-term care facilities or nursing homes in Japan is one of the most important factors accounting for the provision of long-term care in hospitals. The abundant supply of beds, as well as the structure of hospital payments in Japan has further provided hospitals with incentives to keep patients much longer than seen in other OECD countries.

Another important challenge in Japan's hospital sector is the specialisation and differentiation of medical functions. While specialisation of hospital beds has been undertaken in a number of OECD countries under pressure to drive improvement in quality and reduce costs, this process is still relatively new in Japan. Over recent decades, there were no major differences between small, medium or large hospitals in the type of patients treated. But the functional differentiation of hospital beds is now regarded as a key area for action in the Japanese policy agenda. Health care reform of 2014 introduced a system in which hospitals should report to the prefecture the details of the medical bed function (acute, convalescent and long-term care beds) in order to promote the specialisation and differentiation of medical functions. The government plan is a key step to generate improved care outcome, particularly in clinical area requiring improvement such as cardiovascular or cerebrovascular care.

Furthermore, the current payment system for hospital might have introduced perverse incentive for over-provision of hospital services. In 2012, nearly half of all acute hospital beds are funded under the DPC and fee-for-service components, while the other half are reimbursed solely on a fee-for-service basis. The DPC component is a case-mix scheme for inpatient care and offers per-diem rates depending upon diagnosis, procedure and length of hospital stay. Although, the DPC was introduced in 2003 to curb hospital cost and reduce average length of stay, it might not provide enough incentives to increase hospital quality of care and hospital efficiency. This is because as part of the case-mix scheme, a conversion factor is applied to reflect hospital historical charge, an important number of acts and services are paid outside of the DPC and hospitals can further charge by a traditional fee-for-service scheme if the hospitalisation is prolonged beyond a specified period. Taken together, these arrangements might undermine hospital efforts to improve performance, and provide incentives to shift costs to services paid outside of the DPC component. Evidence demonstrates that outpatient expenditures increased by 4.1% between 2002 and 2003 in hospitals participating to the DPC payment scheme, and readmission rates have also increased from 4.7% to 9.7% between 2002 and 2004. These figures might reflect inappropriate incentives associated with the hospital payment structure.

At the same time, there are large differences in hospital capacity across region, as well as in the number of physicians. Although Japan compares well to other OECD countries in terms of the evenness of doctors' geographical distribution, available evidence suggests persisting problems of workforce supply in hospitals. In 2010 for example, the MHLW estimated that 725 emergency care physicians were lacking across the health system. The shortage of specialists is further pronounced for anaesthetists, obstetricians and paediatricians. The increasing demand for health care and the shortage of specialists is likely to have adversely affected hospital physicians' working conditions.

In a similar vein, patient refusal from emergency hospital is not uncommon in Japan, causing delay in the transportation time for emergency patient. In 2007, it is estimated that 16% of patients with severe disease or injury who were sent to emergency hospitals by ambulance were rejected by at least one hospital. Taken together, physician shortages and inadequate pre-hospital emergency support such as delayed pre-hospital transportation services or lack of co-ordination between emergency departments constitute a major public health problem in Japan.

How to further improve hospital quality of care

To encourage efforts to reduce inappropriate use of hospital beds, as well as to help monitoring safety and effectiveness of care, Japan need to further develop the collection and reporting of quality indicators. It would seem desirable to strengthen the information system with a comprehensive number of outcome indicators, as well as to extend it to the whole hospital sector. The introduction of outcome indicators (such as the prevalence of complication from surgeries, percutaneous coronary intervention mortality rate, number of patient undergoing CABG within 24 hours after PCI, incidence of pressure ulcer or patient experiences), would allow hospitals and health authorities to have a more direct measure of hospital performance. Performance feedback might also be provided to hospitals to explore any shortcomings and identify areas that may require improvement. The central or prefectural governments could play a more active role in this direction to ensure that data collection and monitoring are performed in each hospital in a systematic and coherent way.

Greater leadership and improved co-ordination from the MHLW could be necessary to avoid incompatible local projects and to guide prefecture in such a process while acknowledging the importance of developing a system which responds to local situations. This is especially important in light of the functional differentiation and specialisation of hospitals beds. As Japan is shifting to a more differentiated health system, a stronger information infrastructure will be needed to evaluate the impact of the reform on outcomes of care. The experience of other OECD countries such as Australia and England could guide Japan in such a process. At the same time, Japan might better exploit the existing data such as the DPC database (or the health insurance claims) to compare variations in hospital case-mix and identify a range of appropriate case-mix by type of hospital, which could further facilitate the process of functional differentiation of hospital beds.

As Japan moves toward establishing a distinct speciality of primary care, it would seem desirable to strengthen requirements for referrals between primary and secondary care at the same time. This is particularly important given current patient preferences to access hospital and emergency care facilities directly. In many cases, their health care needs could have been met more efficiently in the community sector. Although a provision exists to charge a co-payment if patients attend a hospital without referral, additional co-payment is not required for follow-up visits in a small hospital (with less than 200 beds) even when patients can receive appropriate care in primary care settings. The payment for follow up visits, however, could be increased for patients who wish to continue seeing hospital doctors after their recommendation to consult in primary or community sectors. At the same time, dissemination of referral guidelines and other educational interventions for both patients and doctors may help to ease the problem of inappropriate use of hospital facilities.

Another key priority for Japan is to shift opportunities for treatment towards care-delivery settings other than hospitals for post-acute care or non-acute care. As the functional differentiation of hospital beds occurs, Japan might want to reduce the number of hospital beds while developing at the same time nursing home beds or alternative facilities for patients upon discharge. This would be essential to shift long-term care out of hospitals, to prevent inappropriate hospitalisation and to provide follow-up care in primary and community settings. Although Japan is making considerable efforts to differentiate the medical functions, international examples, for example from Denmark or Norway may be useful. Denmark has experienced a reduction in acute care beds accompanied by increases in nursing homes while Norway has begun to establish intermediate care facilities. This process will require a further development of care co-ordinators or care managers to effectively transfer patients from acute care to community setting and to achieve better co-ordination across health and long-term care services.

Most importantly, there is a need to make the payment system more effective in rewarding quality of care and to tackle incentive for over-provision of hospital services. With regards to the DPC component, efforts are needed to remove the conversion factor in order to better encourage hospital to improve their performance. Introducing adjustment rates based on clinical outcomes rather than structural or process indicators is another possible action for consideration. Candidate clinical outcomes might for example be readmission rates, prevalence of complication from surgeries or mortality rate from percutaneous coronary intervention. A last option would be to extend the coverage of hospitals costs paid under the DPC component such as clinical tests and diagnostics that are performed in outpatient departments (particularly when patients are admitted later). At the same time, Japanese authorities might want to take advantage of the fee schedule to introduce stronger financial incentives to drive improvement in quality of acute care. Some steps are currently being made in this direction with the 2014 fee schedule. Yet, there is still room to better link payments to hospital outcome of care especially around areas that require improvement such as cardiovascular care. Japan has the opportunity to learn from the experience of other OECD countries such as Korea. Korea has developed a pay-for-performance programme designed to reward improvements in clinical care and patient outcomes which has resulted in significant progress in the quality of care for AMI and caesarean deliveries. In addition, another potential option would be to use the fee schedule to encourage adherence to clinical guidelines.

Last, Japan must take concerted action to address imbalance in the supply of hospital and emergency services related to physician shortage. Japanese authorities have already undertaken efforts to tackle physician shortages, by removing for example the policy of restricting the number of physicians or by establishing Community Health Care Support Centres. Additional mechanisms are needed, however, to guarantee that numbers of hospital physicians match local needs and to ensure that the current policy shift from inpatient to outpatient services do not put additional burden on physician workload. The redistribution of tasks to nurses or the broader clinical team could be exploited, notably in emergency facilities that face increasing pressures from the demand side. A more co-ordinated and faster response from emergency department is furthermore urgently needed. There are innovative examples that can be found in Japan or in other OECD countries. The new Tokyo Rules for Emergency Medical Care or the See and Treat model set-up in the United Kingdom might have potential to support a more timely and patient-centred response.

Improving the quality of mental health care

Mental health care in Japan faces challenges which require urgent action. The high suicide rate, high numbers of psychiatric beds[1] , and long average length of stay have drawn attention to Japan's mental health system for all the wrong reasons. While currently available data and information are not sufficient for evaluating the current situation and a full picture is obscured, these indicators suggest some major weaknesses in mental health care quality. On the one hand, the Japanese mental health care system is slowly changing. Commitment and effort over the past decade is generating positive change in the system: inpatient psychiatric beds are falling along with the reduction of average length of stay in psychiatric hospitals, and community care provision is increasing. The fee schedule is being used to drive many of these changes, as in other areas of the health system. These steps for improvement must be recognised and commended, but many challenges remain. Care in the community for severe mental illness along with the provision for mild-to-moderate mental illness should be enhanced. Transition from a reliance on inpatient care to care in the community should be promoted. For further improvements, Japan should look to build on the important progress that has been made so far, but will need to take further measures to promote high care quality for mental health. Collection of indicators of care quality needs to improve, and become more widespread, both to identify challenges and drive improvements, and as a quality control mechanism in areas such as patient safety. Steps should be taken to measure and evaluate quality of care in inpatient care, as well as to hold all hospitals to high standards of treatment and quality. Equally important will be the further development of a comprehensive community care system for severe mental illness, which will likely mean that some inpatient beds can be reduced in the future. Care for mild-to-moderate mental illness must be scaled up, and in doing so there is a key role to be played by doctors engaging in primary care including the soon-to-be established primary care specialists.

The state of mental health care in Japan

For mild-to-moderate disorders, for instance mild or moderate depression, depressive symptoms or anxiety, care would typically be delivered at mental health clinics in the community. However, in some cases, care is not easily accessible. The stigma around mental illness in Japan likely deters people from seeking help from mental health specialised facilities. These facilities can deliver pharmacological treatments, and some talking therapies such as counselling depending on capacity and can refer people to specialised mental health providers. Family doctors and other physicians performing a primary care “function” in Japan can provide care to patients with mild and moderate mental disorders, and can prescribe a fairly standard range of pharmaceuticals for mental health care. However, in reality, unlike in other OECD countries generalists or primary care physicians (except for those specialised in psychiatry) do not play the central role in the provision of care for mild-to-moderate disorders.

Care for severe mental illness – severe depression, schizophrenia, bipolar disorder and other serious and enduring disorders – is currently provided principally in inpatient settings, although the importance of care in the community is growing. Psychiatric inpatient care in Japan is provided principally by private not-for-profit hospitals – which account for 90% of all inpatient beds – but also by public hospitals. Psychiatric inpatient bed numbers, and average length of stay (ALOS), have been falling steadily, although taken as reported ALOS and numbers of psychiatric patients are still high relative to the OECD average. When considering the typically reported ALOS (298 days, compared to an OECD average of 36 days) and psychiatric bed numbers (2.6 beds per 100 000 population, compared to the OECD average of 0.7) it is important to note that in Japan a high number of psychiatric care beds are utilised by long stay chronic patients which might not be reported under the psychiatric bed category by other OECD countries. When excluding such long stay beds the number of beds in Japan and ALOS are closer to the OECD average. Nonetheless, many of these long-stay beds are occupied by patients who have, at root, a psychiatric diagnosis. Patients in these long stay psychiatric beds may well have been institutionalised as part of a historically strong tendency to institutionalise patients with psychiatric disorders, along with patients with learning difficulties and dementia, who would not be admitted to "psychiatric" long-stay beds, or even inpatient facilities, in many other OECD countries.

The policy direction in Japan is, however, clearly turned towards moving from inpatient care to community care, and this is reflected in incentive structures for care providers – for example, incentives in the fee schedule have been set for hospitals to encourage treatment and discharge of acute patients within 90 days. The community-based infrastructure in Japan, however, remains insufficient with relatively low numbers of professionals working in the community, and low numbers of supportive facilities such as group homes and other housing which can accommodate patients in the community, coupled with a strong emphasis on physical treatments rather than psychosocial treatments. The broad perception that mentally ill patients could be discharged out of hospital and could live independently in the community is far from widespread, and more positive attitudes of both professionals and community need to be fostered.

Available indicators suggest significant gaps in mental health care quality, but a full picture is obscured by poor information availability

The insufficient data infrastructure around mental health care means that it is difficult to establish a clear picture of the quality of care provided. There are few nationally collected indicators of mental health care quality, and Japan is unable to report on any of the indicators collected under the OECD Health Care Quality Indicator (HCQI) collection for mental health (inpatient suicide, suicide after discharge, re-admission for schizophrenia or bipolar, excess mortality for patients with schizophrenia or bipolar). To facilitate quality improvement for mental health care in Japan a better understanding of care quality is an indispensable foundation, and more consistent and widespread monitoring and quality indicator development will help facilitate this. A number of quality indicators are in fact under development by a small but innovative group of hospitals, led by the National Centre of Neurology and Psychiatry (NCNP) and efforts to expand and operationalise collection of these indicators should be encouraged, perhaps incentivised in the fee schedule – across Japan. A starting point would be to collect the indicators included under the OECD HCQI mental health indicator collection. Excess mortality for bipolar and schizophrenia would be a key indicator to collect, and although data linkage, which has not be done extensively partly due to lack of legal framework in the country, is needed, its collection could be introduced in tandem with efforts to improve physical health care for psychiatric patients. Furthermore, as Japan develops its community care sector there is scope for learning from other countries to embed data systems and outcome measurement systems, for example outcomes frameworks, from the start. England and the Netherlands both have sophisticated outcomes frameworks for mental health care that could serve as a model for Japan to follow. Given that many community mental health services are organised and governed at a local level, by municipalities, municipal governments could take the lead in implementing such outcome frameworks.

Indicators that are available – inpatient beds, ALOS, suicide rate – suggest a strong tendency towards hospitalisation, a community care sector which requires further improvement, and high levels of untreated mental disorders. Furthermore, over-medication was reported as an area for concern, and is an area on which the ministry is taking fee schedule-based action through reducing reimbursements when prescribed drugs exceed the amount specified by the MHLW. Such policy, and indeed quality efforts more widely, would be very much supported by a broader range of relevant quality activities, for example systematic collection of data on prescribing practice and a survey of adherence to clinical guidelines.

Establishing a patient-centred mental health care system for severe mental disorders

Because of the historical background of the Japanese mental health system, care provision is too centred upon inpatient facilities, which are at best the hub for a more diverse range of providers, but at worse – and too frequently – the only treatment option for patients with severe mental disorders. A significant shift away from the dominance of inpatient facilities in Japanese mental health, and the concurrent necessary building-up of care in the community, which would facilitate patient choice and contribute to a truly patient-centred care model will be many years coming, as such a change is complex and time consuming to achieve. However, Japan must take concerted action now, and face some of the difficult decisions that are needed to put the patient at the centre of the mental health system. Policy commitment from the MHLW to change the shape of the mental health system is moving forward in large part through changes to the fee schedule, as well as changes to the legal framework around mental health care provision. These levers appear to have had some success. The newly introduced fee schedule incentive around discharge planning, and discharge within 90 days is one step towards reducing reliance on long-term inpatient care. This should be backed up by ensuring that community care provision is sufficient, and of high quality, which will call for a steady promotion of structural development and a significant investment in mental health care.

As previously mentioned, reforms to the mental health system will not happen overnight. There should be, as planned, a stronger functional split of beds between acute inpatient beds and long-term care beds for psychiatric disorders, and incentives through the fee schedule for psychiatric hospitals to increase the outpatient care that they provide. However, there is likely a limit to such proposals. The Japanese Government will have the difficult task of reducing demand for inpatient care by improving community services. Japan will have to ensure that the right incentives are in place to make sure that each episode of mental health care is provided in the most appropriate setting and is acceptable to patients. In order to assure high quality and patient-centred mental health care, efforts should also be made to ensure that treatment requirements are robust and quality standards are high in psychiatric hospital. Service user views on system change should also be sought, and service user groups should look to other OECD countries in which users' voices have been a powerful force for change: in the Netherlands a National Platform for Mental Healthcare (*Landelijk Platform GGz*) was set up to unify 20 mental health consumer and carer organisations which then report back to the government with one voice. Supporting user groups for mental health is particularly important – in Japan as in all counties – given the widespread stigma around mental illness, given the difficulties associated with respecting patient rights when treatment is given involuntarily, and the challenge of significant change in the mental health system, the MHLW could consider establishing a "platform" which draws together smaller user and family groups to make sure that these views are properly represented in policy making. Service user groups can also look to other OECD countries, as the support and insights of international networks of mental health service users could help them make their views better heard and better respected.

Promoting population-wide mental wellbeing: Addressing the unmet need for care

Alongside the agenda for changing the mental health care system, which focuses on severe mental illness, services for mild-to-moderate disorders such as depression and anxiety requires improvement. Efforts are needed to ensure that appropriate care for mild-to-moderate mental illness is available and accessible to the population. Japan should consider two steps:

- Firstly, assuring that there is a strong mental health component in the establishment of the primary care speciality will be a key step in better care provision. Experience from other OECD countries has shown that when primary care-level provision for mild-to-moderate disorders is very effective when also backed up by good training (both during medical training and as part of Continuing Medical Education), by support from specialist mental health care practitioners and support networks, and by good referral options should a patient need to access a more specialised level of care (for example a psychologist, or specialist community mental health service or centre). Competency in treating and diagnosing mild and moderate disorders should be integrated into training for Japan's primary care speciality from the start.
- Secondly, though, greater development of appropriate, evidence-based specialist services for mild-to-moderate disorders would be appropriate. It is recommended that Japan considers the expansion of evidence-based treatments for mild-to-moderate disorders, in particular increasing availability of psychological therapies. Japan has the opportunity to both learn from the experiences of other OECD countries in approaching the expansion of psychological therapies, and in some instances can exploit existing resources to make greater treatment options available to the population rapidly and at a low cost. The stand-alone psychological therapies programme IAPT in England, which involved a wide-scale roll out of a tailored evidence-based form of Cognitive Behavioural Therapy delivered by specially trained “IAPT therapists”, is one particularly interesting example for Japan to consider.

When considering how to better mild-to-moderate disorders, Japan should be attentive to the needs of particular population groups. Specifically, young and elderly populations are often particularly vulnerable to mental distress, and can be excluded from mental health systems – which are usually targeted towards working-age adults – and their particular needs should be considered in policy planning and service design.

Recommendations for improving health care quality in Japan

Japan has a sophisticated health system with lessons for all other OECD countries; cost-containment and good access are particular successes. Quality governance has historically received less attention, however, and has been characterised by a somewhat laissez-faire approach. A more consolidated approach to quality monitoring and improvement is now needed, if the Japanese health system is to continue to deliver excellence and value-for-money in the face of ever more complex health care needs. In particular, Japan must:

1. Strengthen health care quality governance and delivery generally

- Develop a national quality framework with a focus of effectiveness, safety and patient-centredness to strengthen quality governance architecture and explore the use of national databases on health insurance claims and medical check-up more extensively and systematically for national and regional health system assessment and quality monitoring.
- Explore the use of unique identifiers for data linkage to allow secondary use of individual-level health data while protecting privacy in order to advance the data use for quality monitoring and improvement.
- Expand the scheme of monitoring and reporting of medical adverse events to all hospitals and clinics to improve patient safety and to reduce recurrence. Current systems are not extensively covering all providers and the third party agency assessment is needed to investigate adverse events and develop prevention guidelines.
- Make reporting of health system performance available in a user-friendly manner to increase the provider accountability and to promote patients' choice and their health system literacy.

2. Establish a distinct speciality of primary care

- Ensure that the new primary care specialists are unambiguously distinct from current community generalists, based upon extended knowledge, skills, roles and responsibilities, and underpinned by clear licensing criteria. A twin-track approach, with some community physicians credentialing as primary care specialists early on, and others remaining as community generalists, may be necessary initially.
- Support the creation of academic departments of primary care in Japanese medical schools to undertake research in primary care, support development of clinical guidelines specific to primary care, as well as teach the speciality.
- Develop post-graduate training in specialist primary care, ranging from short courses and certificates in primary care topics at one end to diplomas or Masters degrees in primary care at the other.

Recommendations for improving health care quality in Japan *(cont.)*

- Prioritise provision of continuous, holistic care for those with multiple, complex health care needs, including mental health care needs, as a key function for the new speciality. Wider use of individualised care plans (currently available only to those under long-term care insurance) or extending the scope of practice of long-term care managers could underpin this.

- Develop the information infrastructure underlying primary care, so that a richer picture of the effectiveness, safety and patient centredness of primary care can be built. Candidate indicators would be around prevention and management of chronic diseases, elderly care, child health and mental health care, as well as patient experience.

- Consider introduction of a system to allow patients to formally register with a named primary care specialist. This would support continuous, co-ordinated care as well as allow calculation of quality indicators for specific patient groups (e.g. rate of adequate glycaemic control amongst diabetics).

- Look for ways to develop the fee schedule so that it rewards quality and outcomes in primary care as far as possible. Adequate glycaemic control in diabetics, mentioned above, is one example of where a financial incentive could be applied. Several other examples around chronic disease management could be developed, based on experience in other OECD countries.

- Modelled on successes in other OECD countries, consider a wider range of nurse led primary care, and this could focus on chronic disease management, including clinical assessment, ordering investigations, referring for onward care and, in some cases, prescribing.

- Dependent upon the introduction of a registration system, consider introduction of a capitation element to pay for primary care. This would support delivery of population-based health promotion and preventive health care and lay the foundations for primary care specialists to take on leadership roles in local (and national) health systems.

3. Promote quality monitoring and quality improvement activities in the hospital sector

- Develop a stronger information infrastructure with a more comprehensive number of outcome indicators and extend it to the whole hospital sector to establish a clear picture of the quality of care provided in hospital. Candidate outcome indicators would be the prevalence of complication from surgeries, percutaneous coronary intervention mortality rate, number of patient undergoing CABG within 24 hours after PCI, incidence of pressure ulcer or user satisfaction.

Recommendations for improving health care quality in Japan *(cont.)*

- Analyse the existing data such as the DPC database (or the health insurance claims) to compare variations in hospital case-mix and identify a range of appropriate case-mix by type of hospital. To facilitate the functional differentiation and specialisation of hospitals beds, factors contributing to inadequate case-mix could be also examined.
- Strengthen referrals and requirement for referrals between primary and secondary care as Japan makes progress in developing its primary care sector.
- As the functional differentiation and specialisation of hospitals beds occurs, reduce the number of hospital beds and develop nursing home or alternative facilities for patient in post-acute phase; further develop care co-ordinators or care managers to effectively transfer patients from acute care to community setting.
- Make the DPC component more effective in rewarding the best-performing hospitals: remove the conversion factor, extend the coverage of hospital costs paid under the DPC component (such as clinical tests and diagnostics performed in outpatient departments for patients admitted later), introduce adjustment rate based on clinical outcome (such as readmission rates) with risk adjustment, rather than structural or process indicators.
- Incentivise the promotion of acute care outcomes using the fee schedule, for example by introducing financial incentives for improving cardiovascular care. Special attention should go to acute myocardial infarction.
- Address imbalance in the supply of hospital and emergency services by exploiting task shifting between health professionals. Experiment new model of emergency care such as the Tokyo Rules for Emergency Medical Care that might have potential to support a more timely and patient-centred response.
- Strengthen quality governance for the hospital system to encourage the adherence to agreed standard of care and clinical guidelines. Consider the reform of fee schedule so that it rewards the compliance to clinical guidelines in hospital to ensure the effectiveness and safety of acute care.

4. Work to secure high-quality mental health care

- Work to make key indicators available to better understand quality of care through broadening small-scale quality indicator collection initiatives, and by providing incentives for quality improvement in the fee schedule, and develop data systems and ways to measure treatment outcomes in community mental health services;
- Prioritise and promote nationwide collection of indicators that can be mapped to action taken to improve care quality: excess mortality for patients with schizophrenia or bipolar; prescribing practices; use of seclusion and restraint; and unplanned readmissions;

Recommendations for improving health care quality in Japan *(cont.)*

- Use the fee schedule to reduce incentives for hospital admissions and long hospital stays, and invest in building up the community care system to reduce demand for psychiatric hospital care;
- Continue efforts to change the function of hospitals, especially when pushing hospitals to provide outpatient services, but recognise that to establish a high-quality mental health system inpatient beds need to be reduced in the future; incentives to provide more community mental health care should be strengthened.
- Put the patient at the centre of the mental health system: promote patient-centred care by making a range of services available in inpatient settings and in the community, where they should be easily accessible and close to population centres; establish a platform to make service user views heard and reflected in policy;
- Include a strong mental health component in the work of the new primary care specialist physicians from the beginning, including mental health skills in education, training, guidelines and core service requirements;
- Make evidence-based specialist services for mild-to-moderate disorders available more widely, for example internet-based therapies, and talking therapies delivered by psychologists. Further work is needed to reduce inappropriate use of pharmaceuticals (polypharmacy).

Note

1. It is important to note that in Japan a high number of psychiatric care beds are utilised by long stay chronic patients which might not be reported under the psychiatric bed category by other OECD countries

Chapter 1

Quality of health care in Japan

This chapter summarises the main policies and activities that are in place in Japan to assure and improve quality of health care. After describing the legal framework around quality of care in Japan, regional medical care plans to improve health system performance at the prefecture level, and the national fee schedule which is used to control health spending growth and also to stir changes in medical practice patterns and quality improvement, this chapter focuses on other quality governance structure such as mechanisms to assure quality of professionals, facilities, and pharmaceuticals. The chapter continues with clinical guideline development, information infrastructure for quality monitoring and reporting, and systems to promote patient safety. Specific attention is given, lastly, to policies aimed at strengthening the role and perspective of the patient in the health system.

1.1. Introduction

Japan has achieved broadly health outcomes with relatively low spending on health, with reported health care quality also good when compared to other OECD countries. In Japan, the central government sets national priorities and standards, while health care delivery is organised and planned at the prefectural level. Quality of care is becoming an important part of the health care agenda, and political priorities for health, but many efforts are still fragmented.

This chapter takes stock of the key policies and strategies that Japan has used to encourage improvements in the quality of health care. The description of policy for quality of care in this chapter is structured according to a framework that is detailed in Table 1.1, below. After providing some general context information, the chapter presents the following:

- the *governance and legislative framework* for quality of care in Japan
- the quality assurance of *health care inputs* including health care professionals, facilities and technologies
- policies related to *standards and guidelines* for quality of care
- policies for *measuring and monitoring* quality of care and the related information infrastructure and *public reporting*
- policies for promoting *patient safety* and *patient involvement*

Table 1.1. A typology of health care policies that influence health care quality

Policy	Examples
Health system design	Accountability of actors, allocation of responsibilities, legislation
Health system input (professionals, organisations, technologies)	Professional licensing, accreditation of health care organisations, quality assurance of drugs and medical devices
Health system monitoring and standardisation of practice	Measurement of quality of care, national standards and guidelines, national audit studies and reports on performance
Improvement (national programs, hospital programmes and incentives)	National programmes on quality and safety, pay for performance in hospital care, examples of improvement programmes within institutions

A short description of the Japanese health care system is provided in Box 1.1. The European Observatory's Health Systems in Transition report on Japan (Tatara and Okamoto, 2009) and Lancet article series in Japan: Universal Health Care at 50 years, which includes contributions by numerous authors (Takemi and Horton, 2011), offer more detailed descriptions of the Japanese health care system.

Box 1.1. Japanese health care and long-term care systems

Since the achievement of universal health coverage in 1961, Japanese people have been covered by the public health insurance scheme. The employed and their dependents are covered by the employment-based insurance scheme, and the self-employed and the retired population below age 75 are covered by the municipality-based insurance scheme. Those above 75 and those aged 65-74 with a certain disability level are covered by the insurance for the elderly, in which the fund is managed at the prefecture level to diversify the financing risk across municipalities. All these insurance schemes are public. Insurance premium rates for the employment-based insurance differ by insurers, and regionally-managed schemes also have different premiums across regions. There are also a number of complementary and supplementary private insurance schemes by which people are covered on a voluntary basis.

Health care is provided by national, prefectural, and municipality hospitals, (not-for-profit) private hospitals and clinics, and all providers use the uniform fee schedule, which defines health services, drugs and their cost covered by the public health insurance system. Most hospitals and clinics are privately-owned (approximately 70% of hospitals and 80% of clinics) and they are funded by fee-for-service (FFS) based on the fee schedule while public providers are also partly funded by subsidies. One-quarter of hospitals are also funded by Diagnosis Procedure Combination (DPC), a combination of bundle payment based on diagnosis-related group and FFS, which is explained further in Chapter 3.

The Japanese health system allows patients to access a wide range of health care services and providers relatively freely; patients can receive care anywhere in the country with the same fee level. Patients usually pay 30% of the health care cost set in the fee schedule, but cost sharing is reduced for certain population groups such as children under school age and the elderly. The poor receiving welfare benefits are exempted from out-of-pocket payments (OOP), and there are monthly upper limit for OOP depending on income, age and care-mix (outpatient or both outpatient and inpatient care). The cost burden is further reduced for those who reached the upper payment limit more than three times in a year. There is also a monthly upper payment limit set for people with specific diseases which require frequent health care, such as chronic kidney failure requiring dialysis, in order to reduce their financial burden.

Sources of health financing are insurance premiums and subsidies, in addition to out-of-pocket payments. The proportion of subsidies for total expenditure differs by insurance scheme.

Japan's long-term care (LTC) insurance system was introduced in 2000 and is managed at the municipality level. Each municipality sets premiums by income level and people aged 40 and over contribute to the LTC insurance system. 50% of the LTC service cost is financed by subsidies, 40% by premiums, and the rest by OOPs.

People aged 65 and over with LTC and LTC prevention needs are classified into one of seven LTC categories based on the result of a need assessment, which is renewed every 3 to 24 months depending on the recipient's condition. People aged 40 and over who have specific diseases and require LTC can also undertake the need assessment. LTC services include care at institutions, and community-based care including home care, short stay, day care and preventive services. The cost of LTC services is the same nationwide and is set in the fee schedule. LTC beneficiaries pay 10% of cost up to a maximum payment limit which is set for each of the seven categories and income levels, and beneficiaries are required to pay the entire cost above the limit. There is also an annual upper payment limit for OOP for health and long-term care combined.

1.2. Context

Health care quality in Japan is strong in some areas, but the picture is incomplete

Based on available information, the Japanese health care system is delivering good health outcomes and health care quality, including in comparison to OECD peers. Japan has the longest life expectancies of the OECD, at 83.2 years in 2012, well above the OECD average of 80.2 years. Indicators of the quality non-acute care suggest good performance in Japan, notably hospital admission rates for conditions – COPD, asthma – that should be managed in primary or community settings, are low. Specifically, avoidable hospital admissions for COPD are the lowest among OECD countries at 23.5 per 100 000 population in 2011, while the average rate for the OECD is 203.0. Similarly, asthma hospital admissions are also low at 26.0 per 100 000 population, compared with the OECD average of 45. Indicators of quality for hospital setting also give a positive picture of care, with case-fatality of stroke patients low, and survival estimates for cancer patients long compared to the OECD average. Although the case-fatality rate for heart attack is more troubling, mortality from Ischemic heart disease is one-third of the OECD average, the lowest in the OECD (OECD, 2014) and this is discussed further in Chapter 3.

However, there are important gaps in understanding of health care quality in in Japan because the current health information infrastructure does not allow for systematic and comprehensive monitoring of health care quality. For instance, indicators on prescribing, patient safety and mental health care used for international comparison in the OECD's Health Care Quality Indicator project are not available. These shortcomings in information availability mean that the picture of care quality in Japan remains incomplete.

The super-ageing society and pressure on health care spending represent significant challenges

The super-ageing society, and precarious health care spending situation, represent significant challenges with which Japan must content. Japan has by far the highest public debt as a share of GDP in the OECD, at 227% in 2011 (OECD, 2014). The revenue from the value-added tax (VAT) increase from 5 to 8%, in April 2014, has begun to be channelled to social security systems including health and long-term care. However, this additional income is considered insufficient to financially sustain the systems over coming decades. The fiscal sustainability of the Japanese health care system is complicated in particular because population ageing is progressing at an unprecedented speed; already Japan's share of the people over 65 is – at 25.1% in 2013 – the highest in the OECD (OECD, 2014), and population ageing is projected to peak in 2042 with about 40% of the population aged 65 and over. Health expenditure is growing continuously, mainly to respond to increasing demand for health care in the super-ageing society. Although the share of total health expenditure in GDP was kept below the OECD average with the tight price control through fee schedule revisions for over a decade, it surpassed the OECD average in 2010, and since then it has continued to grow while health expenditure in other OECD countries has stagnated or even declined. In 2012, Japanese health spending reached 10.3% of GDP, higher than the OECD average of 9.3% (OECD, 2014).

Given the fiscal constraints, it may be difficult to make additional investment in the health sector as health care already has a large share of public spending after pension, but focusing on quality is important to ensure that the quality of health care is not compromised when the budget is tight and that safe, effective and patient-centred care is provided even while demand for health care is rapidly changing and increasing in the super-ageing society. Furthermore, quality governance may also facilitate the streamlining of health care activities, and lead to make more informed decisions around health financing and resource allocation.

1.3. Health system design

Legislative frameworks are set nationally to set minimum standards for care

Japan's Medical Service Act, Health Insurance Act and Long-term Care Insurance Act are the three most important legal frameworks for health care quality assurance.

The *Medical Service Act* aims to contribute to the maintenance of population health through protecting the interests of health care recipients. Services stipulated under the Act are not limited to treatment, but also include prevention and rehabilitation. The Act sets out requirements in the following areas: support for health care recipients to make appropriate choice for health care, medical safety, opening and management of hospitals, clinics and birth centres, maintenance of facilities, division of work among health care facilities, and promotion of care co-ordination. Based on this Act, national and regional governments are required to set up a health system in which high quality and appropriate care is provided efficiently. Governments and providers such as hospitals and clinics also need to take necessary measures to assure health care safety. The Act specifies minimum standards for facilities, and staff ratios. Beyond these specific requirements the Act remains general, and falls short of establishing specific measures to maintain and improve quality of care, and thus leaves considerable professional freedom to health care professionals in terms of care quality.

The *Health Insurance Act* is the second piece of key legislation for health care quality in Japan, as the health insurance system is at the core of the system's health financing. The Health Insurance Act stipulates the needs to ensure effective management of health insurance, appropriate level of benefit coverage and cost sharing, and quality improvement of health care. The Act specifies hospital standards including the use of in-hospital care plans, nosocomial infection prevention measures, patient safety management systems, and preventive measures against pressure ulcers and others. It also includes requirements that facilities need to meet in order to receive payments set in the fee schedule, such as staffing ratio of nurses and rehabilitation physiotherapist, and the availability of intensive care units, stroke care units, and blood product management. Requirements to assure quality and safety are specified in detail, covering a wide range of services for each professional and facility type, and there is also a consideration for providing patient-centred care included in the Act. Requirements are generally considered minimum standards for assuring quality, rather than standards which fully support quality improvement.

The *Long-term Care Insurance Act* sets out the Japanese LTC system, which started in 2000, specifying the patient needs assessment requirements, insurance benefits related to LTC and its prevention, providers for institutional and home care, and financing. This Act has more detailed regulations on quality than the Medical Service Acts in areas such as the provision of home help services and nursing homes, as the result of a lengthy debate over the quality of care which took place during the law-making process.

Regional Medical Care Plans are developed to drive health system performance at the prefecture level

Since 1985, based on the Medical Service Act, each of Japan's 47 prefectures has set out a five-year Regional Medical Care Plans which evaluates the current status of the regional health system and addresses specific local needs and challenges, supplemented by many statistics. The requirement to develop a Plan was initially established to reduce regional variations in health care resources and to promote co-ordination across providers within each prefecture. Starting from 2006, the Plans have been expected to promote functional differentiation of providers, as well as co-ordination between providers, and should strive for seamless care delivery throughout patient pathways covering acute care, rehabilitation and home care in the community. The current Plan requirements, introduced in 2013, specify regional targets, care co-ordination systems and public awareness strategies in relation to five major diseases (cancer, stroke, AMI, diabetes and mental health disorders) and five care areas (emergency care, health care during disaster, health care in isolated areas, perinatal care and paediatric care (including emergency paediatric care) and home care. Mental health care and home care are included in the most recent Plan template, as they are considered as key policy priorities. The current regional Plans should also address challenges related to medical safety, review health care delivery zones and identify the number of beds needed in the prefecture.

Although the Regional Medical Care Plans covers a number of important health policy areas, at present they do not include explicit quality of care requirements or reporting. Several OECD countries, such as Canada, Denmark, England, Norway and Sweden (Box 1.2), require national or regional quality reporting based on a national quality assessment framework, which includes safety, effectiveness, patient-centredness and sometimes access. Reports can inform different stakeholders such as decision makers, providers, payers, patients and the public on variations and trend of health care quality across regions and often across individual providers, and contribute to quality benchmarking and quality improvement among providers.

Box 1.2. Quality monitoring in Sweden

The *Quality and Efficiency in Swedish Health Care* publication is a simple and effective tool that drives quality improvement. This yearly report serves as a well-used source of information for care providers at different levels. The report is the result of collaboration between the National Board of Health and Welfare and the Swedish Association of Local Authorities and Regions (SALAR), and is commissioned by the Swedish Government. The first report was published in 2006, and reports are also available in English. The first purpose of the report, which transparently publishes comparative data about health care performance, is to inform and stimulate public debate about health care quality and efficiency. The second purpose is to stimulate and support local and regional efforts to improve health care services. Data for the report is collected from a wide range of national quality registers as well as from the health care registers managed by the National Board. All such registers include unique patient identified data, which in Sweden is based on an individual's social security number. The report gives an overview of regions', county councils' and hospitals' achievements in a wide range of diagnostic and health care areas.

The report does not analyse reasons for geographical, gender and socio-economic differences, nor does it give specific suggestions as to how quality differences between the regions, county councils and units can be reduced. Instead the different recipients of the report are expected to analyse the results themselves bearing in mind local/regional factors that may influence the results.

Box 1.2. Quality monitoring in Sweden *(cont.)*

The latest report, published in 2013, included 169 indicators. In 2011 a *Quality and Efficiency* report specifically focusing on cancer care was published as well. Similar open comparisons of quality and efficiency are published in areas such as care of the elderly, support to persons with disabilities, and child and youth welfare.

In-depth national assessments of a defined area of care are conducted by the National Board of Health and Welfare and aim to offer a richer analysis than possible in *Quality and Efficiency in Swedish Health Care*. An assessment report typically examines 20 to 60 guideline-specific indicators, largely from relevant quality registers although other appropriate sources are used as well. Data are presented on different levels (national, regional, county council and unit for instance hospital) as well as being disaggregated by age, gender and socio-economic status (such as educational level). In an appendix to the main report the county councils' and units' results are presented as profile graphs showing their achievements relative to the national mean value per indicator. For each county council a summary of what areas need to be improved is compiled, and measures to be taken in order to increase the quality of care are recommended. The assessment also results in national recommendations to care providers focusing on indicators where performance appears poor.

There is a close relationship between national guidelines and the national assessment reports outlined above, and the guidelines forming the basis for the indicators are used in the assessment reports. This means, however, that only areas with national guidelines undergo assessment. So far *National Assessments* have been published for cardiac care (available in English), psychiatric care, stroke care and diabetes care. During 2012 and 2013 National Assessments will be published for psychiatric (an update), dental, cancer, dementia and cardiac care (also an update).

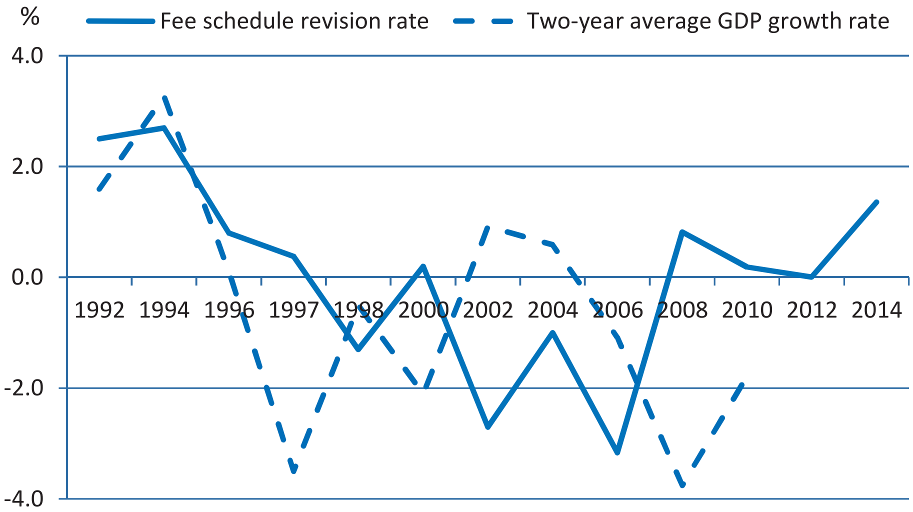
Source: OECD (2013), *OECD Reviews of Health Care Quality: Sweden 2013*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264204799-en.

The fee schedule is a central leaver for health system governance

A number of health system characteristics suggest that the Japanese health system is vulnerable to high levels of service demand and un-checked consumption, wasted resources, and growing need for care. The Japanese health system has by far the highest number of hospital beds and medical technologies such as CTs and MRIs per population and longest average length of stay (ALOS) in the OECD. The population enjoys relatively free access to all health care providers with low cost sharing, leading to highest doctor consultations per capita across OECD countries. The share of the elderly over 65 represents over a quarter of population, and ageing is progressing at the fastest speed in the OECD.

However, despite the apparent vulnerability of the system towards high levels of consumption, health spending growth has been controlled over the past decades by a strict health service fee schedule, which is revised every other year. Fundamental principles for the fee schedule revision are initially decided by two Social Security Council task forces within the Ministry of Health, Labour and Welfare (MHLW) and based on these, the specific fee level for each health service and pharmaceutical good is revised by a council composed of payers, providers and experts who represent the public. Although until two decades ago the fee schedule was typically revised upward, since 1998 payment rates have been revised downward several times. Overall, price level of the fee schedule for both health services (including services provided in Diagnosis Procedure Combination (DPC) hospitals paid through a combination of diagnosis-related group (DRG) and fee-for-service) and pharmaceuticals declined or stagnated over recent decades, partly reflecting the sluggish economic growth during the period (Figure 1.1). It should be noted that the latest revision in 2014 takes account of the cost increase due to the VAT rate increase from 5 to 8% as providers need to pay the tax themselves, leaving very marginal actual price increase. Price control based on the fee schedule revision has worked to some extent, and although health expenditure increased by 2.4% per year between 1992 and 2012, it would have been expected to have grown 3% annually over the past two decades had there been no downward price adjustment with fee revisions (OECD, 2014).

Figure 1.1. Change of fee schedule revision and two-year GDP growth rates



Source: Ministry of Health, Labour and Welfare for fee schedule revisions and OECD Health Statistics 2014 for GDP.

Beyond cost containment, the fee schedule is used to set financial incentives for providers and patients, to use provider fees to reorganise the health system, and to increase efficiency gains. The regular revision of the fee schedule allows for incentives to be corrected in order to make progress in health care reforms without delay. Fee schedule revisions try to leverage changes in providers' practice patterns and health-seeking behaviours of patients. For instance, recent fee schedule revisions aimed to disincentivise the provision of non-acute care in hospitals, promote care co-ordination among health care providers, promotion of comprehensive community health care services such as home care, care co-ordination across different settings and services, and reduction of hospital stays. The fee schedule revision is also used to shift resources to areas with more funding needs, for instance in the latest revision towards obstetric, paediatric, emergency and surgical care and mental health care. For several disease categories the fee schedule also incentivises the following of defined clinical pathways.

While the fee schedule applies to all health care providers, the impact of the financial incentives is not necessarily felt to an equal extent by providers, which means that practice patterns do not always change as intended and there is a limit to the scope for the fee schedule to change behaviours.

There are also some incentives to promote better quality of care in the fee schedule, but most incentives reward structure and resources, not outcomes. A number of additional payments are set in the fee schedule to reward accredited hospitals and providers with better structures and resources, such as a higher number of health professionals and a bigger size of inpatient room. But recently, additional payment has also been introduced in the fee schedule for care complying with clinical guidelines in palliative care and pressure ulcer management and continuous professional development (CPD) training requirements for palliative care. The fee schedule also promotes outcomes of rehabilitation care such as a certain share of patients with improved ADL by the time of discharge and the share of patients who developed bed soars in hospital being less than a threshold.

While the fee schedule is an important lever for health system change, there is clear scope for the Japanese payment system to embed more incentives to promote higher health outcomes and better quality. Such approaches could include further inclusion of quality of care incentives in the fee schedule, and also outcome- and quality-oriented payment approaches for primary and hospital care is discussed in following chapters.

1.4. Assuring the quality of inputs to the Japanese health care system

Professionals have the national-level licenses, allowing them to practice anywhere in the country

Japan has national qualifications for a number of areas related to medical care and ensures quality of health professionals through specific legislation for each professional qualification, which regulate each profession's tasks and obligations. Professionals in medical care include medical doctors, dentists, pharmacists, public health nurses, midwives, nurses, registered dietician, radiology therapists, clinical laboratory technicians, physical therapists, occupational therapists, orthoptist, clinical engineers, prosthetists, speech therapists, emergency life-saving technicians, dental hygienists, dental technicians, licenced masseurs, acupuncturist and practitioner of moxibustion.

Following the success in the national examination for a specific type of profession, the MHLW grants a license to an individual. For physicians a minimum of two years (one year for dentists) of additional clinical training is required before starting to practice, but there is no further requirement for other professionals.

Licences of assistant nurses and long-term care managers are issued by the prefectural government upon passing qualification examinations, and these professionals can begin practice as fully qualified professionals immediately. For care managers, prior professional experience in relevant areas (five years for certified social workers and those with relevant qualifications, but ten years for others) is required to become eligible to take the qualification exam. Although the license is issued at the prefectural level, once qualified professionals can practice in any prefecture in the country.

Health care professionals are registered at the national level and physicians, dentists and pharmacists need to report to the MHLW every other year about their work address and specialization, among other requirements. Public health nurses, midwives and nurses need to report to the prefectural government every other year.

As part of quality assurance, national (Japanese) licences are required to provide health and long-term care in Japan. Unlike in many OECD countries, immigration policies are not actively used to resolve the professional shortage in health and long-term care. However, in order for Japanese physicians to benefit from advanced medical technologies available abroad, requirements for physicians with foreign qualifications to practice medicine in the country were relaxed, but do remain quite restrictive. Since October 2014, highly experienced physicians with a foreign licence who meet certain professional requirements have been allowed to provide health care at clinical teaching and research hospitals to increase the opportunities for physicians with a Japanese licence to learn advanced treatment methods and to promote international collaboration in clinical research with Japanese researchers.

Licencing renewal is not required for qualified health care professionals

All licenses for health professionals are life-time entitlement without a need for renewal, and temporary suspension or revocation of licence is not generally intended for quality assurance, with the exception of licences for care managers. Licenses are, though, subject to temporary suspension or revocation if health professionals commit crimes or conduct unlawful acts. For example, if serious negligence is involved in medical malpractice, a physician or a dentist may be prosecuted and criminal charges brought, and if found guilty a conviction may lead to disciplinary action either with a temporary suspension, or a permanent revocation of license. The Medical Ethics Committee of the MHLW, including the presidents of Japan Medical Association (JMA) and Japan Dental Association, reviews each of these cases individually and determines the recommended level of sanctions, and following the recommendation, the Minister executes the sanctions. Physicians or dentists who were sanctioned with temporary suspension of their license are allowed to return to practice medicine once they have undergone retraining and the suspension period is over.

However, the long-term care manager license is an exception to the life-time licencing of other health professionals. Long-term care managers need to undergo CPD to renew their licence every five years in order to standardise and assure quality of services that they provide. However, given their various professional backgrounds in the welfare and social care sectors, each care manager has his or her own specialisation based on previous professional experiences and it is considered difficult to evaluate what a ‘high quality care manager’ should be, and the current renewal system alone consequently cannot be relied upon to fully professional quality. The Japan Care Manager Association has, though, published a guideline on ‘high quality’ care managers.

Certification and continuous professional development is available on a voluntary basis

In the Medical Doctors Act, continuous professional development (CPD) is not required for physicians, but many physicians in Japan do voluntarily take additional training, especially to increase their specialisation. Hospital physicians pursue CPD targeted at certain treatment methods or focused on specific organs or diseases while practicing, and often obtain multiple certifications from different professional societies during their hospital careers. CPD is also provided at Clinical Training Hospitals. Currently, these numerous certification and training schemes are developed by an array of professional societies, but not designed systematically with whole-system needs in mind.

These certification programmes and CPD currently are under review, with the eventual intention of introducing a coherent national specialist system in 2017 as discussed further in Chapter 2. As part of this new system, a specialisation in comprehensive medical care will be introduced with the primary intention of developing primary care physicians as seen in other OECD countries such as the Belgium, France, Netherlands and the United Kingdom.

In addition to specialisation qualifications, JMA has a CPD programme mainly for physicians practicing in clinics and issues a licence, which is valid for three years, after training required over three years. Physicians also go through training and certification programmes organised by Medical Associations in their regions and professional societies such as Japan Primary Care Association. Although there are numerous training opportunities and many physicians do participate in these programmes, no financial incentive is given to obtain specialised certifications or to pursue CPD, with the exception of palliative care.

For nurses, taking CPD is not an obligation but is encouraged, and nurses are expected to make appropriate efforts to improve their professional capacity according to the Act on Public Health Nurses, Midwives and Nurses. In relation to practicing public health nurses, midwives and nurses, the MHLW is expected to make efforts to secure funding and make financial arrangements to improve their capacity through training, besides improving their working conditions at hospitals and securing their numbers. Since 2010, the MHLW has provided financial support for the training of new nursing staff which complies with newly qualified nursing staff guidelines, and in 2011, 94.6% of hospitals which hired newly qualified nurses carried out such training. The MHLW also tries to improve the capacity of nurses by providing financial support to prefectures which can then implement the practical training for mid-career nursing professionals with practical experiences of five years and more, and specialised training in cancer and diabetes.

A Certified nurse programme has also been established by the Japan Nursing Association (JNA) with the aim of improving the quality of nursing care; at present, about 1% of nurses are certified under this scheme. Although it is not national certification, MHLW supports prefectures which provide training to nurses to acquire advanced nursing skills and expertise in specific nursing areas in order to become certified nurses. JNA also has a certification programme of specialised nurses with advanced medical knowledge and they are required to complete designated graduate school credits for instance in cancer, mental health and acute care. These specialised nurses represent 0.1% of nurses. These certifications are valid for five years and renewal assessment is required afterwards.

Due to the increasing demand for home care in the context of super-ageing society and shift of care from hospital to community, MHLW is developing additional CPD for nurses as they may need to provide certain medical assistance in accordance with procedure manuals without physician's judgements. For example, they may be required assess the degrees of dehydration and adjust levels of infusion solution and provide intravenous fluids for dehydration appropriately during home care.

CPD is also provided to inactive nursing staffs at the prefecture level as part of the support to encourage their return to work. It is estimated that 710 000 of qualified nursing staff in Japan were not active in labour market in the end of 2010, while about 1 540 000 nursing staff were working in the end of 2012, and it is expected that by 2025 about 2 000 000 nursing staff will be needed to cope with the increasing demand for health and long-term care and to assure quality of care. For this reason, the MHLW provides information about support for return to work to displaced nursing staff, and provides them support such as CPD and introduces them to appropriate job for free.

All health care facilities need to meet minimum standards and accreditation schemes exist for specialised hospitals

Japanese quality assurance for facilities mainly focuses on the inspection of structural requirements. Public Health Centres (PHCs), set up in 495 prefectures and major cities, are responsible for the enforcement of the Medical Care Act, which regulates medical facilities. They conduct periodic inspections at hospitals and clinics in their jurisdictions based on minimum standards on health human resource, structure and safety. The purpose of inspections is to ensure that all facilities meet the set standards, rather than being focused on improving quality of care. Regional Bureaus of MHLW also conduct inspections of specialised hospitals based on the structural requirements.

Specialised hospitals are accredited at the national level if certain requirements are met. The MHLW awards the Advanced Treatment Hospital certification to hospitals providing advanced health care, developing advanced treatment methods and providing advanced training. MHLW designates hospitals as Clinical Training Hospitals if they have capacity to provide effective and appropriate clinical training to licenced physicians, and designates hospitals as Cancer Care Coordinating Hospitals if they provide high quality cancer care, have co-ordination systems for cancer care, and provide supports such as counselling and information to cancer patients within the prefecture. In 2013, there were 86 Advanced Treatment Hospitals, 1 014 Clinical Training Hospitals and 397 Cancer Care Coordinating Hospitals.

Several categories of specialised hospitals are also accredited at the prefectural level. Prefectural governments authorise hospitals to be Community Care Support Hospitals if they provide health care to referred patients, have capacity to support primary care physicians/dentists who are primarily responsible for community care through shared use of medical equipment, and are equipped with structure and equipment to ensure the delivery of community care. Prefectural governments also designate hospitals as Emergency Care Hospitals/Clinics to take charge of providing health care to people transferred by emergency and rescue teams. As of 2012, there were 439 Community Health Care Support Hospitals, 3 990 Emergency Care Hospitals and 375 Emergency Care Clinics.

Some incentives are in place to encourage accreditation and assure quality maintenance, if not quality improvement. Financial incentives are part of the fee schedule: once a hospital is authorised or designated with the relevant accreditation, additional payments in the fee schedule are applied. In addition, to maintain quality, regular monitoring and evaluation of these specialised hospitals is undertaken at the national and prefectural levels, and the authorisation and designation of these hospitals can be revoked depending on the assessment.

Nationwide and smaller scale voluntary hospital accreditation schemes also exist, supporting quality improvement

Although it is not a national accreditation programme, Japan Council for Quality Health Care (JCQHC), an independent agency, has been carrying out hospital accreditation assessment since 1995. JCQHC developed sets of specific quality standards for general hospitals, chronic care hospitals, psychiatric hospitals and rehabilitation hospitals and for emergency, palliative and rehabilitation care based on the standards developed at the United States Joint Commission. Hospitals are assessed based on standards of patient-centredness, quality and safety assurance, and organisational management. The accreditation is valid for five years and a number of hospitals have already participated again to renew accreditation. As of 2014, 27.5% of hospitals were accredited by this programme.

There is generally no financial incentive given to hospitals to take part in JCQHC accreditation, with the exception of palliative care. Nonetheless, hospitals are motivated to take part in the quality assurance evaluation in order to have well-grounded evidence that they provide high quality care, to support identification of areas for improvement, to let hospital professionals to unite as a team to prepare for the evaluation process, and to reduce adverse medical events. Hospitals also participate in the programme because once accredited, they can have a director who is not a medical doctor. In palliative care, JCQHC accredited hospitals can receive additional payments in the fee schedule.

Positive consequences from JCQHC accreditation have been observed. For instance, hospitals have come to clarify and define their mission and policies about patients' rights, and reorganise management structures to focus more clearly on quality improvement. Accredited hospitals have also been setting guidelines and protocols in high-risk areas such as medication errors and wrong-site procedures and also on informed consent to improve quality and safety. It is also reported that they enhanced patient participation in their own health care.

A quality assurance culture is also expanding beyond JCQHC accredited hospitals. Although not endorsed by the government, the JCQHC's accreditation manual is widely considered as *de facto* standards for hospital quality assessment. Some hospitals which do not participate in the accreditation programme have nonetheless been using it to improve their quality of care. For instance, Japan Psychiatric Hospital Association developed a checklist to their members based on the JCQHC manual.

Furthermore, the Japan Accreditation Board (JAB) is responsible for ISO accreditation under the conformity assessment scheme. JAB evaluates services based on the Mutual Recognition Agreement Law, publicises certified organisations, promotes multilateral/mutual recognition from foreign accreditation bodies, and responds to complaints related to accreditation and certifications. JAB reported that 511 medical facilities were certified in ISO 9001 (quality management system) and 67 medical facilities were certified in ISO 14001 (environment management systems and standards) in 2013.

Strict quality assurance mechanisms exist for pharmaceuticals but cost-effectiveness is not considered

The Pharmaceutical and Medical Device Agency (PMDA) is responsible for evaluating the effectiveness of new medical devices under the Act on Securing Quality, Efficacy and Safety of Pharmaceuticals, Medical Devices, Regenerative and Cellular Therapy Products, Gene Therapy Products, and Cosmetics which stipulates the quality, effectiveness and safety of pharmaceuticals and medical device. New drugs are evaluated on their effectiveness and safety based on randomised clinical trials but strict requirements for clinical trial sometimes lead to a drug lag.

After the PMDA reviews new drugs' efficacy and safety, they are approved by the Minister of Health, Labour and Welfare and automatically included in public health insurance coverage without assessment on cost-effectiveness unlike other OECD countries which require economic technology assessment such as Australia, Canada, France, Korea, the Netherlands, Norway, Sweden and Switzerland. Japan has started to consider economic evaluation in health system management. Possibilities for introducing cost-effectiveness assessment for pharmaceuticals and medical devices have been recently discussed by the Central Social Insurance Medical Council which decides on the fee schedule and health benefit baskets, and the importance of economic evaluation was emphasised during the recent fee schedule revisions.

1.5. Health system standards and guidelines

Many guidelines are developed by professional societies and made available publicly

Clinical guidelines are developed by numerous professional societies, sometimes with a subsidy from the MHLW, to promote quality of care. For instance, JMA recently developed a guideline for mental health disorders for primary care physicians, and based on the Japan Diabetes Society's clinical guidelines, JMA, the Japan Diabetes Society, Japan Association for Diabetes Education, Care and Japan Dental Association and other related associations together developed a guideline summary for physicians practicing in clinics.

JMA provides key information to physicians working in the community and primary care physicians for major diseases treated in clinics in the form of leaflet. These leaflets are developed together with other specialised societies, for example for chronic kidney disease, COPD, asthma and allergy, and they cover not only disease symptoms, risk factors, diagnosis and treatment but also refer to care co-ordination with specialists, indicating the time when specialist referrals are needed for each type of disease. Some guidelines are also developed by Medical Associations at the regional level.

MINDS, the evidence-based medicine (EBM) database of JCQHC commissioned by MHLW, shares up-to-date medical knowledge including clinical guidelines contributing to medical safety and quality improvement, on the website. The selection of guidelines for the database involves the principle of EBM and cost-effective analysis, although many guidelines are developed based on clinical safety and effectiveness, and the cost-effectiveness principle is not usually evaluated when developing guidelines. Compliance to evidence-based medicine is promoted through online information-sharing, but the actual level of compliance is not systematically monitored.

Compliance to guidelines is voluntary and the impact of guideline developments on quality is not clear

Compliance to clinical guidelines is voluntary in Japan and the use of guideline-recommended treatment is varied across providers. Although guideline uptake has not been systematically assessed in the current health information system, several studies were conducted covering some hospitals or a specific region and found variations in the use of recommended treatment methods in caring for AMI (Park et al., 2013), ischemic stroke (Lee et al., 2013) and end-stage cancer patients (Morishima et al., 2013).

There is some evidence that guideline development leads to quality improvement, but other evidence suggests no correlation between the publication of guidelines and quality improvement. One study showed that the proportion of breast-conserving surgery undertaken to breast cancer patient was increased from 26.4% before guideline publication to 59.9% afterwards (Fukuda et al., 2009). But another study found that the development of national treatment guidelines for ovarian cancer primary chemotherapy did not seem to have a substantial impact on chemotherapy practice patterns and practice variations persisted (Shirai et al., 2009).

CPD may be one way to expand the use of recommended and up-to-date clinical practice in Japan. One study found that patients receiving asthma care at facilities with respiratory or allergy specialists were more likely to receive guideline-recommended treatment than facilities without specialists (CPD in Japan usually leads to specialisation awards) (Morishima et al., 2013). This could suggests that physicians with specialised training, following CPD, are more likely to be up-to-date with the latest and recommended treatment methods than others and promote better quality care. But beyond CPD, more can be done to further expand the use of recommended medical practice as discussed in Chapter 3.

Monitoring compliance with guidelines requires advanced health information infrastructures, and Japan needs to shift its thinking on information and monitoring needs for health policy making. This will be covered in the next section.

1.6. Health system monitoring: Building an information infrastructure for measuring quality

A large amount of data has been collected in Japan in order to respond to imminent health care challenges

Many surveys have been conducted over the past decades in Japan with a focus on health status and the structure of health system. These surveys have been vital for health care reform proposals and fee schedule revisions. For instance, since 1989, the Survey on Economic Conditions in Health Care (Survey on Health Care Facilities) has been conducted every two years to collect the status of health service management at hospitals, clinics and pharmacies, and the findings have been used to help inform for fee schedule revisions. Since the mid-1990s, the Dynamic Survey of Medical Institutions has annually reported distribution and organisation of health facilities, the Hospital Report has made available information related to the utilisation of hospitals and clinics with beds every month, and the Hospital Human Resource Survey has been conducted every year. Starting from 2003, the Survey on Health Expenditure Trends has been conducted every month to monitor trends in health expenditure in a timely manner through information provided by insurance societies and used for health insurance administration. Data are usually reported at the national and prefecture levels but not at the provider levels.

Over the past decade new surveys were also developed to monitor the disease patterns of the population and to address issues related to changes in the needs of care delivery in the rapidly ageing society. Since 2006, the Health Care Delivery Status Survey has annually evaluated the utilisation of health care with different perspectives such as age and disease categories. Starting from 2011, the Survey on Home-Visit Nursing Care Expenses has been conducted every other years to examine changes in expenditure of home nursing visits, the findings of which are used for fee schedule revisions and human resource allocation decisions. These data are also reported at the national level and sometimes at the prefecture level but again not at a provider level.

Administrative data have been also collected from providers but is mainly focus on structure. Advanced Treatment Hospitals and Community Health Care Support Hospitals need to submit information related to their service delivery to the MHLW and prefectural governors. All hospitals, clinics and birth centres are obliged to report information regarding health care services and capacity to the prefecture. If health care providers do not provide sufficient information or report false information, prefectural governors can order an improvement in reporting. These data are available in the public domain, but again not by provider level.

There has been additional reporting from DPC participating hospitals since its start in 2002, where data is used to monitor and report performance at the hospital level. DPC Hospitals need to submit detailed data on the number of patients, basic clinical records and length of stay by diagnosis to the MHLW. These data are publically available at the hospital level and have been used extensively to compare performance of DPC Hospitals. It is believed that public reporting at the hospital level has led to quality improvement such as shorter length of stay and reduced medical practice variations, and shift from inpatient to outpatient admissions was also observed.

Furthermore, some patient-level information is collected from hospitals for certain diseases. To improve cancer care, hospitals report data on cancer patients to the cancer registry, which is managed at the prefecture level. These patient-level data are have great potential to improve health system governance, and effective analysis could helpfully inform policy across areas such as prevention and screening, allocation of resources, and quality improvement efforts. Although cancer monitoring had been undertaken at regional levels, starting from 2016 the National Cancer Center will be involved in national monitoring, covering all prefectures, and it will also produce national survival estimates. Similarly a disease-specific information system exists for cardiovascular diseases, TB, infectious disease and intractable diseases.

Large national databases have been developed but they could be more fully exploited

Japan has been developing a national database of health insurance claim data, covering almost all services provided since 2009. The database is based on the electronic collection of insurance claim data in a uniform format nationwide. The database includes an estimated 130 million claims including inpatients, outpatients and dental care and prescriptions, every month, but does not include medical records such as test results and cancer stage. Japan could explore the potential to exploit this data source to provide missing data to the *OECD Health Statistics,* as done by Korea which uses a similar data source to report quality indicators to the OECD. Using this data source, Japan could provide not only the data on quality of care but also on process indicators such as diagnostic examinations and medical procedures for which Japan is one of the few OECD countries not at present providing these essential data.

There are some mechanisms to ensure the quality of insurance claim data. The validity of insurance claim data is monitored at multiple levels. Health Insurance Claim Review and Reimbursement Services check the claim data before requesting health insurance societies to reimburse health care providers. Additionally almost all employment-based insurance societies also analyse data validity, provide feedback to Health Insurance Claim Review and Reimbursement Services and request further investigation if needed. Insurance societies also report reimbursement information to the insured, so that they could also check if health care provider's claims are correct or not.

The analysis of claim data sometimes goes beyond its validity check and tries to identify inappropriate health care use. In the health insurance system for the elderly aged 75 and over, which pays for services provided to the population group with the highest care needs, insurance claim data are evaluated also to identify an inappropriate use of health care and give feedback to providers to promote appropriate use. For example, through the assessment, the use of generic drugs is promoted.

As fees are set differently by type of hospitals in the fee schedule, insurance claims are also assessed together with the provider's structure information. If up-coding is found, for instance a health care facility claiming a higher inpatient fee for lower staff ratio, the provider must return the money reimbursed during the specific period. But the current information system does not systematically identify all up-coded cases.

MHLW also has a national database on preventive medical check-ups, which started in 2008. The insured aged between 40 and 74 can receive medical check-ups to prevent metabolic syndrome and counselling if risk factors such as abdominal obesity, high blood glucose, high blood pressure, and lipid abnormality exist. Depending on the insurance scheme, the insured party needs to pay part of the check-up cost. 46.2% of the population aged 40-74 underwent these services in 2012. The database includes longitudinal individual-level data on the results of these check-ups. Linking these data with health insurance claim database could provide a very rich database to analyse the impact of medical check-up on health care, but data linkage and such analysis has not been done systematically.

Since 2011, these national databases have been used for research. For privacy protection, data are anonymised and people's names are not included in the database. Besides researchers, an increasing number of prefectures and municipalities also use the data to analyse health care delivery and health service utilisation for developing Prefectural Medical Care Plans or improving the efficiency of health systems and quality of care.

Although there is a large potential in the use of these data, data access is considered difficult to obtain. As a result, analyses based on these data are still limited and there are only 20 to 30 applications reviewed per year, so far. This is partly because researchers are not familiar with the data, making the development of a feasible research proposal difficult. The small number of applications are also likely due to strict requirements to establish a data security environment in the research institute where researchers work, which can be challenging to achieve.

There is growing interest in using ICT for better information management and improved care delivery

The use of ICT to collect and store individuals' medical records is increasing but is still not very extensive in Japan, and there are challenges among many providers in using ICT. Only 15.2% of physician offices and 14.2% of hospitals use electronic medical and patient records in Japan while countries such as Finland, the Netherlands and Sweden had a complete coverage of electric medical record use by physicians and hospitals by 2011, and a majority of providers also use electronic medical records in other countries including Australia, Belgium, Estonia, Germany, Iceland, Israel, Korea, Portugal and Slovenia (OECD, 2013b). In Japan, challenges include expensive start-up and maintenance cost, concerns over network security and the use of information during disaster or power cut, and inadequate ICT skills among professionals. As it is challenging to introduce greater use of ICT in smaller providers, a subsidy based on the additional revenue through VAT increase is also given to small-scale hospitals.

However, after the Great East Japan Earthquake in which many medical records and prescription data were lost in the disaster-hit regions, it has been considered important to find ways to manage important patient information electronically in a secure place, in order to ensure continuous provision of adequate care during disaster and post-disaster periods. Partly as crisis management, several regions or health care provider groups are actively seeking ways to improve health information sharing and management. In Nagano prefecture, for example, sharing of medical information including test results, diagnosis, and medical and treatment explanation is promoted among providers in view of providing appropriate care to patients. The national government also subsidies these projects.

Even if electronic medical records are introduced, their formats are not necessarily coherent across providers and regions. In order to expand the use of electronic medical records in the country, standard data requirements need to be developed and applied to all providers nationwide, or at least minimum data set should be defined so that the same set of information are collected to facilitate information-sharing across providers and regions.

In the area of electronic prescription, Japan considers it important to build an infrastructure to promote sharing of patients' prescription information across multiple providers to provide adequate care particularly for the patients with multiple conditions, and to reduce inappropriate prescribing, and MHLW is undertaking a project to evaluate challenges related to its introduction.

Data linkage is still limited in the Japanese health system

About half of OECD countries regularly use unique IDs for linking different data and analyse these data for improving population health and promoting effective, safe and patient-centred health systems. In Japan, however, data linkage across health system information sets, is very limited. Data linkage can facilitate a richer understanding of health system performance and quality of care, for instance allowing analysis of health care use, quality of care provided to an individual over the life course, or cost-effectiveness of treatment for example. Effective data linkage can help to identify under-use, over-use and mis-use of therapies, and variations in care practices, and can contribute to informed policy changes in response, for instance assessing and revising clinical care guidelines, or a change in approach to managing health expenditure.

Given the potential gains from data linkage, several regions in Japan do already try to link data across different sources in order to maximise the benefit that data analysis can bring to improve population health and quality of health care. Hiroshima prefecture, for instance, is planning to develop a health information system in which insurance claim data are linked with electronic medical records to improve health care delivery and quality.

Health system monitoring needs to be modernised to address current challenges and to assess quality of care based on a national quality framework

Although monitoring of quality of care has been started, approaches to monitoring are not undertaken systematically. The National Hospital Organisation is developing indicators for quality improvement for its members (143 national hospitals while there are 8 565 hospitals in the country in 2012). The National Centre of Neurology and Psychiatry is also developing quality indicators to monitor quality of mental health care but the hospital coverage is still low. Some hospitals also undertake their own quality monitoring and develop monitoring tools and manuals to improve quality of care. The use of and compliance to guidelines is also sometimes evaluated by professional societies, though monitoring of guideline adherence has not been undertaken for the primary care sector. These monitoring efforts would have a greater impact, and likely have more traction in terms of systematic quality improvement, if they were brought together in a more coherent nationwide framework.

In order to advance approaches to quality governance and monitoring, Japan could look to develop a national quality framework as a foundation for quality governance. In a number of OECD countries, safety, effectiveness, patient-centredness and sometimes access are included as key domains of health care quality in the national framework. Using these domains of quality, Japan could undertake more systematic national and regional monitoring. For example, the Regional Medical Care Plan could use a nationally-developed framework to monitor health care quality at the regional level as done in other OECD countries.

As part of, or prior to the development of a national framework for quality monitoring, Japan could better utilise data sources such as national databases on insurance claims and medical check-ups for better national and regional health policy making and quality governance. For instance, while many OECD countries are moving towards being able to monitor at least some dimensions of the quality of primary care and hospital care on an annual or even monthly basis using administrative data sources, Japan relies on a sample survey, conducted every three years, which does not cover all providers. The currently available data sources do not allow for the reporting of many quality indicators, and efforts to explore other data sources for quality monitoring could be undertaken. With the introduction of unique identifier for social security, tax and disaster relief in 2016, Japan could also look to strengthen quality governance by using unique IDs for data linkage as done in other OECD countries as indicated earlier.

It should also be noted that Japan already has a long history of utilising highly sensitive patient data in a way that is respectful of privacy concerns. For instance, cancer registry, which contains individual-level data on cancer patients that are considered highly sensitive, has been used extensively to improve cancer care systems over many years.

Nonetheless, where privacy concerns remain, international examples can give guidance on ways to carefully balance privacy concerns, and data-driven health care improvement (OECD, 2013b; Box 1.3). For example, in France, Denmark, Finland, Sweden and the United Kingdom, data protection legislation sets out the framework within which identifiable data may be processed without informed consent. Decision making on individual projects may be delegated to data custodians or to national approval bodies who weigh the risk trade-off between individual privacy, and monitoring and research that is in the public's interest. National data custodians in Australia, Canada and the United States may have their role incorporated within legislation that enables them to set up an internal process for decision making for individual projects involving the linkage of personal health data. Korea and Singapore have legislative frameworks that set out conditions where public data custodians may process personal health data without consent.

Box 1.3. Developing health information infrastructure for quality improvement

Health data, particularly individual-level data, is a significant potential resource in OECD countries, not only to improve population health and improve quality of health care, but also to promote innovation and economic development. Privacy-respectful uses of data for health, health care quality and health system performance monitoring and research must become widespread regular activities.

A balance privacy rights and rights to health and health care in a way that permits privacy-respectful data use for monitoring population health and the quality of health care is difficult to achieve. In order to reach this balance, countries need to identify and weigh the trade-offs on data risks and data utilities, which are specific to them. The OECD study on health information infrastructure recommends the following:

- Allow that patient consent is not required for each project involving the processing of large existing population database in order to set up comprehensive and evolving programmes of health care quality monitoring and research.
- Define what constitutes acceptable patient consent while bearing in mind more generalised patient consent approach would enable a broader range of future monitoring and research.
- Bring together data from decentralised systems to support national information infrastructure and capacity for data linkages at the level of the country.

OECD also found that a few OECD countries provide interesting examples of centralising the difficult tasks of linking data, de-identifying data, approving access to data and supervising access to data. In Australia, Belgium, Finland and the United Kingdom, trusted third parties have been engaged to conduct data linkages and to de-identify linked data for use by government and external researchers. The development of dedicated linkage centres is a strategy that could be further explored to both enhance and standardise data privacy protection and to reduce costs otherwise born by individual data custodians. Canada, Singapore and the United States have established secure supervised facilities where researchers can access de-identified data that carries a higher re-identification risk. Australia and the United States have also established a secure remote data access option for researchers where they may submit programmes to analyse de-identified data and receive outputs.

Source: OECD (2013), *Strengthening Health Information Infrastructure for Health Care Quality Governance: Good Practices, New Opportunities and Data Privacy Protection Challenges*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264193505-en.

1.7. Public reporting of performance

Public reporting needs to focus on provider-level performance, benchmarking quality to increase accountability

The Japanese reporting of health system mainly focuses on health status and lifestyle, structure and service delivery, and reporting on quality of care is limited. Report on quality of care which has been developed in an increasing number of countries such as Canada, England, Denmark, Norway and Sweden is still not available in the country. In Japan many data are available in the public domain, and reporting is usually limited to the national and prefecture levels, but not at the provider level such as hospitals and clinics. One exception is the reporting of DPC hospitals, in which some process indicators are publically reported at the provider level, as previously discussed.

Although not at the national scale, public reporting of quality of care has recently started based on voluntary assessment. Reports of quality indicators from hospital groups such as Japan Hospital Association (JHA), All Japan Hospital Association (AJHA) and National Hospital Organization (NHO) provide comparative data which enable quality comparisons among participating providers. In 2013, for example, 250 hospitals joined Quality Indicator/Improvement Project (QIP) run by JHA. Reports are published periodically and communicated back to the participating hospitals. The information has been also made available on the website but it is mainly used by providers and not by the public.

The current reporting approach needs to be reviewed to maximise the impact of existing data and provider-level reporting is worth exploring as there is some evidence that such reporting leads to quality improvement. For example, in countries such as Denmark, Norway, the Netherlands and Singapore in which patient experiences with health care are reported publicly in periodic national health system reports or on public websites, illustrating differences in patient experiences across providers and regions and over time, many providers and professionals have implemented quality improvement measures. Also in Japan, public reporting at the provider levels is considered to have been effective in reducing ALOS and medical practice variations among DPC hospitals.

Besides public reporting, providing feedback is also an effective way of improving provider performance. In several OECD countries, together with provider-specific reporting, feedback has been provided. In countries such as Canada and Denmark, reporting is available up to the hospital department and unit level and in England, feedback is provided to surgeons based on patient experience data to reduce inappropriate care and improve quality of care. As mentioned earlier, this is starting also in Japan and insurance societies give feedback to providers based on the evaluation of insurance claims, but efforts made are fragmented and not systematic.

Data should be provided in a user-friendly manner to inform patient's choice of provider and to promote provider performance

Although large quantities of data exist in Japan, they are not widely available in the public domain, and are not used to educate and inform patients and the public for their provider choice and to increase their involvement in shaping health systems. For instance, the Regional Medical Care Plan contains useful information and statistics also aimed at the public, and as part of the Plan, for example, prefectures identify specific health care facilities for major diseases and areas of care such as home care. However, such information is available on the prefectural government's website which the public is not used to accessing.

Several OECD countries have found ways of report health care quality information in a user-friendly and informative way. For example, the Norwegian Knowledge Centre for the Health Services developed standardised reporting formats and it includes the use of traffic light colours to compare provider performance and a composite index to provide aggregate picture of provider performance. Similar efforts are also made in England and the Netherlands.

1.8. Patient safety

A general framework is used for assuring medical safety and promoting prevention

Medical safety is assured by several pieces of legislation – the Medical service act, and the Pharmaceuticals Affairs Act –, and safety monitoring and reporting is required. The Medical Service Act aims to contribute to the maintenance of population health through protecting the interests of health care recipients and securing the system in which high quality and appropriate health care is provided efficiently. The Act also stipulates rules related to assuring medical safety. Based on Medical Service Act Article 6.11, prefectures share necessary information related to medical safety to health care providers, patients, their family and the public and also provide training to health care providers. The Pharmaceutical Affairs Act regulates quality, effectiveness and safety assurance for medical equipment and pharmaceutical products.

Based on the Medical Service Act, prefectures, cities with public health centres and special districts of Tokyo are expected to make an effort to establish a Medical Care Safety Support Centre, which handles complaints, responds to their queries and gives advice The Medical Care Safety Support Centre needs to provide necessary support to assure medical safety and for example, it provides information related to assuring medical safety to the owners, administrators, and employees of hospitals, clinics and birth centres, patients, their families, and citizens, and conducts training on medical safety to the administrators and employees of the hospitals, clinics, and birth centres. The national government provides information on medical safety to prefectures, and provides advice and other support related to the management of Medical Care Safety Support Centres. Safety monitoring is also carried out to check for and record adverse drug reactions based on the Act on Securing Quality, Efficacy and Safety of Pharmaceuticals, Medical Devices, Regenerative and Cellular Therapy Products, Gene Therapy Products, and Cosmetics.

All hospitals and clinics with beds have medical safety management committees, and incident reports are collected and analysed in order to develop measures to assure safety. Hospitals are expected to provide training on medical safety to their employees. Additionally, Advanced Treatment Hospitals appoint a staff member to be responsible for medical safety management and nosocomial infection, and establish a safety management unit.

Furthermore, pharmaceutical companies and physicians/pharmacists are required to report adverse drug reactions to Pharmaceutical and Medical Device Agency (PDMA). PMDA analyses and evaluates reported adverse drug reactions, and based on the evaluation results warnings are issued by MHLW to medical providers if necessary. Recently PMDA started to report this data on its website.

Several other efforts also exist to prevent adverse events. Prefectures provide training to health care providers and JMA has been organising different workshops on patient safety. JMA also developed a booklet for reducing adverse events and actively disseminate information on medical adverse event prevention to their members. JMA tries to strengthen the efforts to promote patient safety particularly in clinics and small-size hospitals as these providers are not sometimes sufficiently equipped or funded compared with larger hospitals. JMA also provides training to professionals with repeated adverse medical incidents.

Specific schemes have been introduced to strengthen reporting and monitoring of adverse events but are limited in scale

The management of patient safety has been strengthened in Japan, and in 2004 a mechanism to systematically monitor and evaluate medical adverse events in certain health care facilities was introduced. This mechanism covers 275 specialised hospitals (for example, Advanced Treatment Hospitals, the National Cancer Centre, the National Cerebral and Cardiovascular Centre) which are required to report any adverse event set out in the Medical Care Act Enforcement Ordinance to JCQHC. Reporting includes adverse event which happened anywhere within these hospitals, for example cases in which health care providers are victims of adverse event and also falls in corridors. Near-miss reports are also collected from voluntarily participating hospitals. JCQHC reports medical adverse event information and analysis based on hospital reports to other providers but information is rather general, and includes the number of reported cases and their types, participating providers and provider departments concerned, and job titles of concerned. Collected data is also published in the National Database of Medical Adverse Events to warn the medical community of potential risks, to prevent recurrence and to inform the public. JCQHC also publishes warnings and reports as part of accident prevention efforts, and collected information has been used in the training of health care professionals. JMA actively uses the JCQHC information on medical adverse events to inform their members as well.

One example of good practice in Japan, where investigation and feedback are well-established, is around adverse events during birth and cerebral palsy. In relation to cerebral palsy (CP), JCQHC also examines all records of deliveries for which damages were claimed as part of Japan Obstetric Compensation System for CP, no-fault civil damage system in obstetric care to alleviate the heavy legal obligation imposed on OBGY doctors over CP cases of new born babies. As of March 2013, 99.8% of obstetric care providers participate in the system and a total of 461 cases were awarded damages between January 2009 and March 2013. JCQHC evaluate the causes of CP and the report is sent to the nursing mother and providers concerned. JCQHC also publishes a report which proposes prevention strategies to improve quality and safety of obstetric care and avoid recurrence and this is made widely available via website to providers, academia and the public.

In 2008, voluntary reporting of near-miss events in pharmacy also started. Participating pharmacies report near-miss events to JCQHC, who undertake the analysis of these events and administer the National Database of Near-miss Event in Pharmacy. As of March 2013, 7 382 pharmacies, about 13.5% of all pharmacies, were participating in this project, and in 2012 7 166 near-miss cases were reported. JCQHC shares example cases to build awareness among pharmacies and the public.

A new nationwide scheme of reporting and investigation of unexpected deaths will cover all hospitals, clinics and birth centres

It is estimated that there are about 1 300 to 2 000 cases of unexpected deaths occurred during health care, every year, and a more systematic approach and nationwide coverage in patient safety reporting is needed in order to reduce adverse medical events and avoid reoccurrence. The current approach is not necessarily functioning well, because mutual learning to help reduce adverse events is generally based on the information reported by hospitals in which adverse event occurred. Investigations on causes of adverse events and studies to develop preventive measures could be improved, for instance, by involving the third parties from outside the incident site. As discussed in the next section, an investigation of patients and their family's feedback on their health care has rarely been done in such a way as to help to improve quality.

A national system to record unexpected deaths will begin in October 2015, and all administrators of hospitals, clinics and also birth centres will be obliged to report any unexpected deaths, and stillbirths caused or suspected to be caused by medical care provided. Administrators will need to conduct an investigation with external experts and report the results to the bereaved family and to a private third-party organisation such as the Medical Accident Research and Support Center. The private third-party sorts and analyses the administrator's reports and promotes awareness-building for preventing these events. Administrators and bereaved families can also request the private third-party to undertake further investigation of the incidence cases reported by the administrators, but will need to bear part of the investigation cost themselves.

1.9. Strengthening the role and perspective of the patient

Patient's voice has become more influential in decision making but is not used systematically to improve quality of care

In the Japanese health care system patient representatives are often included in the committees for policy making, and their opinions are sometimes regarded influential. Japan's influential patient and service user organisations include the Japan Association of Kidney Disease Patients, one of the strongest patient organisation which has exerted particular influence over the reimbursement policy of dialysis treatment, resulting in the reduction of patients' copayment to JPY 10 000 (USD 85) per month. The Japan Patient Association is another influential patient organisation, representing the patients with intractable diseases, and due to their lobbying activities, patients with these diseases also obtained an entitlement to a reduced copayment.

At decentralised levels, there is a mechanism in which individuals can share their opinions on health care received but it is not known whether this feedback has an effect on quality of care and provider behaviour. Patients and their families can provide feedback and complaints related to health care received to prefecture governments, and the government should respond to them by giving advice to patients and their families, and also managers of specific health care providers concerned if needed. For LTC services, complaints can be also made directly to municipalities. Patients and their families can also report their opinions and feedback to providers directly. These facilities collect and utilise the information for quality improvement but it does not seem common to use it for giving feedback to individual professionals in the facility. Specialised hospitals need to have a system of responding to patient's inquires and JMA established enquiry counters in prefectural Medical Associations to deal with complaints and respond to inquiries. However, the way that these complaints and feedback are handled are not well known, and likely vary across regions and providers.

There is scope for patients to become more health system literate and health care professionals need to improve communication skills

The Japanese health system has started to involve patient in their own health care decisions in recent years. Since the mid-1990s, the importance of informed consent and second opinions has been advocated and patient's role in health care decision has been increasing.

In this context, there is also a need for Japanese patients to adapt their own health-seeking behaviours, and better understand their roles in health and long-term care system. There is still knowledge and expectation gap between what the current health system can provide, and what patients and their families expect to receive. For example, ambulance care is often overloaded by non-urgent care needs, which becomes an obstacle to provide appropriate care at hospitals as discussed in Chapter 3.

There are some efforts already in place to promote health and health system literacy among the public, and some NGOs actively work in this area. For example, the Consumer Organisation for Medicine and Law (COML) aims to promote better communication between health care professionals and patients and to educate patients on the health system, the use of health services and healthy lifestyle so that they can actively involve in making their health care decisions. The organisation's main activities includes monthly seminars in which participants learn to become "smart patients" who ask the "right questions to get necessary information", lectures on communication for patients, and training courses for people who wish to work as volunteers in health care.

Similarly, professionals will also need to adapt to the changing needs of patients. COML provides various seminars and training on communication to health care professionals and ways to deal with patients as patient-centredness, accountability and transparency are becoming increasingly important for their daily medical practice. JMA also recognises the importance of building trustful relationship with patients and their families in order to improve quality of care and developed guidelines on providing medical care information. JMA together with JCQHC also organise seminars on better communication with patients and their family to professionals. During medical school education, the curriculum includes communication and the relationship between patients and doctors, and during the clinical training after graduating from school, one of the targets includes establishing a better relationship between patients and doctors.

Patient experiences have been measured but further monitoring and reporting is needed for quality improvement

Monitoring of patient experiences and satisfaction levels has been done through surveys at the national and provider levels but it is not systematically used to promote better provider performance. Patient Behaviour Surveys cover patient experiences and satisfaction with inpatient and outpatient care every three years since 1996. This sample survey is comprehensive and nationally representative, and collects information such as reasons for choosing a specific hospital, the level of understanding with regards to explanations given on health interventions, satisfaction level for facilities and care received, and perception on waiting time, diagnosis and costs, among others. Information is available on the MHLW website but only at the national level and by major hospital categories. JMA Research Institute has been also conducting patient surveys with a smaller sample size since 2002 and some hospitals also conduct and report findings on patient satisfaction surveys. But the use of patient experiences data are rather limited and it is not systematically monitored as part of health system performance as done in other countries in which patient-centredness is one of the key quality domains in their health care quality framework.

Several OECD countries are using patient experience data as key measurements of health care quality and they are used systematically to improve provider performance. In some countries such as Canada, patient experiences are monitored and used for funding providers and hospital accreditation and in England, Patient-Reported Outcome Measures (PROMs, see Box 1.4) are sometimes used locally in pay-for-performance payment. In Denmark, patient experience data have been used for benchmarking in hospitals, and they are also used as part of the accreditation process. Some OECD countries are also considering to link patient experiences with clinical guideline development and it is also considered that patient's experiences could contribute to discussions on resource allocation.

Japan has started to follow these international developments in putting patient-centredness as a core dimension of quality of care. Since 2010, MHLW has supported a national project on evaluation and reporting of patient-centredness, measured by patient satisfaction, clinical information, patient health outcomes after health interventions. It is hoped that this project will lead to a development of quality monitoring framework which includes patient-centredness as one of the core quality domains in assessing health system performance.

Box 1.4. Outcome Framework and Patient-Reported Outcome Measures (PROMs) in England

In England, improving NHS quality has been a government priority since 2008, and the NHS Outcomes Framework, a performance assessment framework consisting of indicators on effectiveness, experiences and safety, includes patient experiences (PREMs) and PROMs. PROMs are used for quality improvement through benchmarking and monitoring and also used to address health inequalities and are sometimes used locally in incentive schemes. Through public reporting, PROMs data are also used for patient choice, and it is considered that cost-effectiveness analysis using PROMs can contribute to discussions on resource allocation such as concentration of specialised care.

PROMs have been collected for hip and knee replacement, groin hernia and varicose veins surgery from all providers of NHS-funded care since 2009. More specifically, condition-specific measures (such as Oxford Hip Score, Oxford Knee Score and Aberdeen Score (for varicose veins) and generic health measures (EQ-5D covering mobility, self-care, usual activities, pain/discomfort, and anxiety/depression) are collected before and after operations (three months after hip and knee replacement and six months after operations for hernia and varicose veins), and post-operative questionnaires also collect information on complications. Based on these, health status and health gains are assessed. Patients are consented for the data linkage, and Information Centre and Central Record Linkage Survey is authorised to link patient questionnaires data to patient's hospital records.

PROM data from NHS-funded patients are collated and analysed centrally by the Health and Social Care Information Centre, an official repository of all health and social care data in England. The data linkage allows provider performance assessment based on case-mix adjustment (in terms of age, sex, deprivation and co-morbidities, etc.). PROMs data are reported at provider and regional levels and they are made available in NHS Choice as well as Health and Social Care Information Centre for the public and providers. Hospitals get feedback also at surgeon levels, although such disaggregated data are not published.

England plans to expand the data collection and analysis in other areas, and pilot data collection is underway for coronary artery bypass grafts, angioplasties, and secondary care treatment of depression, and PROMs developments are also considered for HIV, renal dialysis, musculoskeletal, trauma, depression, dementia, psychological therapies, specific patient groups such as children and young people and other surgeries.

1.10. Conclusion

While reported data suggest that the Japanese health system is performing well, the current health information infrastructure is not adequate for systematic and comprehensive monitoring of health care quality. This is unfortunate, as monitoring and reporting could support to further quality improvement, through increased transparency and provider accountability and more informed decisions making by policy makers. Quality monitoring can also give rise to opportunities protect quality of care even while streamlining health care activities, a priority when the budgets are tight and demand for care is rising.

In order to advance in quality governance and monitoring, Japan could look to develop a national quality framework with a focus of effectiveness, safety and patient-centredness to strengthen quality governance architecture. Based on such a framework, national and regional quality monitoring mechanisms could be established. Using the framework, the Regional Medical Care Plan could be used as a tool for monitoring health care quality at the regional level by reporting quality-related indicators. All existing data should fully exploited, particularly national databases on health insurance claims and medical check-up and databases based on data linkage. Electronic medical records could be also used for quality monitoring through data linkage but in order to expand its use, standard data requirements for electronic medical records will need to be developed and applied to all providers nationwide, or at least a minimum data set should be defined.

Effective data linkage can increase the potential uses of existing data in health policy making and health system assessment, and contribute to deeper understanding of health system performance. The benefits of greater exploitation of health data, including data linkage, will need to be balanced against privacy concerns that might arise over the secondary use of individual-level health data. However, international examples do suggest that it is possible to balance privacy rights, and rights to health and health care. Japan will need to work to establish where the balance lies for their system, and for Japanese patients. This may, for example, mean clarifying patient consent requirements for projects in the public’s interest which involve the linkage of personal health data, stronger data firewalls, or robust data anonymisation procedures. Many OECD countries use unique identifiers for data linkage and health care quality governance, and this might be an avenue for Japan to follow also.

As of now, many quality assurance mechanisms are voluntary, are not in place nationwide, and coverage can be patchy. To strengthen the quality of care agenda, steps should be taken to broaden and strengthen a range of existing mechanisms. Japan could expand the scheme of monitoring and reporting of medical adverse events to all hospitals, clinics and birth centres, for example.

Although large amounts of data exist in Japan, they are not widely publically available, and they are not systematically presented in such a way so as to educate and inform patients and the public, for example around provider choice. Nor patient participation and involvement in shaping health systems as mature as in other countries. In order to increase the provider accountability by promoting patient choice – which is discussed further in Chapter 3, as a lever for quality improvement –, and to promote patients' health system literacy, reporting of health system performance needs to become more user-friendly. Efforts to support patient and health care professionals in moving closer to a system in which patients are key partners in their own care have begun. However, more work is needed before Japan's health system can be described as truly patient-centred.

References

Fukuda, H. et al. (2009), "Change in Clinical Practice After Publication of Guidelines on Breast Cancer Treatment", *International Journal for Quality in Health Care*, Vol. 21, No. 5, pp. 372-378.

Lee, J. et al. (2013), "The Association Between Health Care Spending and Quality of Care for Stroke Patients in Japan", *Journal of Health Services Research & Policy*, Vol. 18, No. 2, pp. 77-82, April.

Morishima, T. et al. (2013a), "Physician Adherence to Asthma Treatment Guidelines in Japan: Focus on Inhaled Corticosteroids", *Journal of Evaluation in Clinical Practice*, Vol. 19, No. 2, pp. 223-229, April.

Morishima, T. et al. (2013b), "Impact of Hospital Case Volume on Quality of End-of-life Care in Terminal Cancer Patients", *Journal of Palliative Medicine*, Vol. 16, No. 2, pp. 173-178, February.

OECD (2014), *OECD Health Statistics 2014*, online database, OECD Publishing, Paris, http://dx.doi.org/10.1787/health-data-en.

OECD (2013a), *OECD Reviews of Health Care Quality: Sweden 2013. Raising Standards*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264204799-en.

OECD (2013b), *Strengthening Health Information Infrastructure for Health Care Quality Governance: Good Practices, New Opportunities and Data Privacy Protection Challenges*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264193505-en.

Park, S. et al. (2013), "Quality of Care and In-hospital Resource Use in Acute Myocardial Infarction: Evidence from Japan", *Health Policy*, Vol. 111, No. 3, pp. 264-272, August.

Shirai, T. et al. (2009), "QIP Ovarian Cancer Expert Group. Primary Chemotherapy Patterns for Ovarian Cancer Treatment in Japan", *Journal of Obstetrics and Gynaecology Research*, Vol. 35, No 5, pp 926-934.

Takemi, K. and R. Horton (2011), *Japan: Universal Health Care at 50 Years: Introduction*, www.thelancet.com/japan, accessed 1 August 2014.

Tatara, K. and E. Okamoto (2009), "Health System Review Japan", *Health System in Transition*, Vol. 11, No. 5, European Observatory on Health Systems and Policies.

Chapter 2

Primary and community care in Japan

Rather than having a dedicated workforce with specialist training, primary care in Japan is typically delivered by a cadre of semi-generalist/semi-specialists – physicians who leave hospital practice after an unspecified amount of time to set up as generalists in the community. In many ways, these arrangements have served well until now. Access is good, particularly to advanced diagnostics, and the system is patient-centred in offering free choice of primary or secondary care provider. The challenges of an ageing society and multimorbidity, fiscal pressures and some worrying indicators around readmission rates, however, call into question whether this model of primary care is best suited to Japan's emerging health and social care needs. Recognising these challenges, Japan plans to introduce a distinct, specialist primary care workforce throughout the health care system, as of 2017. This chapter examines the steps that are needed to achieve this, and to embed quality monitoring and improvement activities from the start.

2.1. Introduction

Japan’s approach to delivering a “primary level” of health care (that is, the services which can manage any or most new health complaints that pose no immediate threat to life, manage long-term conditions and support the patient in deciding when referral to hospital-based services is necessary) is in many ways unique. Rather than having a dedicated workforce with specialist training in the functions described above, primary care in Japan is delivered by a cadre of semi-generalist/semi-specialists – that is, physicians who leave hospital practice after an unspecified amount of time to set up as generalists (with no compulsory further training) in the community. Likewise, rather than having a distinct physical setting for primary care, primary care is sometimes delivered in out-patient departments which form part of the hospital setting. And although there are incentives to encourage patients to use community clinics for new complaints or non-complex chronic disease management, patients remain able to access hospital specialists directly for any health care need.

In many ways, Japan’s primary care configuration has served well until now. In particular, access is good, with some community clinics offering a range of diagnostic and treatment facilities that would be the envy of many OECD systems. There are, however, several factors that raise the question whether current arrangements are delivering optimal quality and value for money:

- Sociodemographic shifts mean an increasingly elderly population, many of whom have multiple complex health care needs, and some of whom suffer physical or mental frailty or social isolation.
- Fiscal pressures are driving a reorientation of health care away from inpatient care to community care.
- Consultation rates, particularly of the elderly, are high and data from some hospitals show increasing unplanned readmission rates. These suggest that community services may be struggling to provide adequate care.

Taken together, these factors suggest the need to have a system of community care that is capable of providing a consistent point of care over the longer term, tailoring and co-ordinating care for those with multiple health care needs and supporting patients in self-education and self-management. In response to these challenges, Japan has decided to create a distinct and specialist primary care workforce by 2017. This chapter explores the extent to which current arrangements are aligned with this ambition and what more needs to be done, particularly in terms of quality monitoring and improvement, to achieve it. The chapter argues that work should start now to professionalise and define a speciality of primary care, based upon a clear, consensual vision of how the speciality will be different in knowledge, skills, roles and responsibilities from current community generalists. Strengthening of the information infrastructure, possible reforms to payment systems, and close attention to primary care specialists' role in co-ordinating care will also be needed.

The rest of this chapter is structured as follows: Section 2.2 describes how the primary health care needs are met in Japan, given its lack of a distinct primary care speciality and the Section 2.3 considers quality and outcomes associated with primary care. Section 2.4 describes the challenges, including a super-ageing society that primary care would be expected to address and Section 2.5 considers the extent to which current arrangements are well placed to meet these challenges. Sections 2.6 and 2.7 describe the steps that Japan should take to develop a distinct and specialist primary care workforce and embed quality monitoring and improvement from the start.

2.2. The provision of primary care in Japan

This section describes how services which aim to manage most new health complaints that pose no immediate threat to life, as well as services that manage long-term conditions and support the patient in deciding when referral to hospital-based services is necessary, are configured in Japan. Whilst the speciality of general practice or family medicine has yet to take root in Japan, efforts are underway to establish a more holistic and co-ordinated system of community-based health care.

Although Japanese health care is often thought of as hospital centric, Japan spends more on ambulatory care than most OECD countries

Although typically thought of as a hospital-centric health system, Japanese health care is in fact strongly oriented toward out-patient (or "ambulatory") care. Out-patient care is provided by both hospitals and community clinics. With regard to the latter, there are just under 100 000 community clinics in Japan. Although around 10% of these maintain beds, they are still classed as clinics as long as bed numbers are fewer than 20. As well as offering consultations, community clinics may dispense pharmaceuticals and are often equipped with laboratory, imaging and other diagnostic equipment (some even housing MRI or PET scanners). Any doctor can set up a community clinic in any location as long as certain minimum standards, which are discussed below, are met.

Regarding hospitals, almost all run walk-in clinics for their speciality departments, alongside out-patient services for cases already under their management. A significant proportion of a hospital's activity is directed toward out-patient care. Whilst the long average length of stay in Japanese hospitals is well known, this is, in fact, a signal of low-intensity use. Japan spends slightly more on outpatient care (32% of total health expenditure in 2011) compared to the OECD average (29%). Hence, even though a majority of Japanese doctors work in hospitals (around 61% in 2006), a significant part of their workload will be devoted to ambulatory care. Japan's 2011 Patient Survey in 2011 estimated that 4.24 million patients visited a community clinic and 1.66 million patients a hospital outpatient department, on the survey day (Ministry of Health, Labour and Welfare, 2011).

Working alongside community clinics, there are around 3 000 municipal health centres and around 500 public health centres. The former mainly provide health services for residents (consultations and screening services, for example) and are owned by municipal governments. The latter are more oriented toward control of communicable diseases, environmental health or provision of regional health statistics, and are run by prefectures.

A distinct speciality of general practice or family medicine is not well established in Japan

Much of the activity that takes place in the out-patient sector constitutes primary care (that is, the services which can manage most new health complaints that pose no immediate threat to life, manage long-term conditions and support the patient in deciding when referral to hospital-based services is necessary). Furthermore, leaving hospital medicine to work in a community clinic is a popular career choice amongst Japanese doctors. Nevertheless, a distinct speciality of general practice or family medicine has failed to establish itself in Japan.

A Japanese Association for Primary Care has existed since 2011 and now counts around 11 000 members. The Association has defined a sphere of practice, a training curriculum and certification criteria for primary care doctors, but fewer than 500 physicians have taken it up. Similarly, prefectural initiatives to define, train and license primary care specialists locally have not proved popular. Classes in primary care are common in Japanese medical schools, but few have dedicated research and teaching departments of general practice or primary care. This number has been gradually increasing, however, over recent years. This is a result of historical legacy, rather than any explicit policy decision. It is thought that previous attempts to differentiate primary from secondary care more explicitly have failed for a variety reasons. First, a fear that a formally distinct primary care sector may be seen as subordinate to hospital specialists, or function merely as a referral service. Second, a fear that hospitals (particularly private hospitals) might face a loss of activity and income if a referral system were introduced. Some patient groups may have also opposed a perceived loss of freedom to access hospital specialists without referral.

Japanese primary care is distinct to that developed in other countries such as the Netherlands, the United Kingdom or Nordic countries. In these countries, a specialist primary care workforce has responsibility for meeting the following needs: i) initial assessment and management of undiagnosed but non-urgent complaints; ii) on-going assessment and management of patients with long-term conditions such as diabetes, with particular attention of the co-ordination of such care in patients with multiple long-term conditions; and, iii) supporting the patient in deciding when, where and for how long hospital-based health care services may be needed.

Arrangements in Japan differ from this model in at least three respects. First, very few doctors working in primary care have undertaken specialist training in general practice or family medicine. Instead, the primary care service is delivered by a cadre of semi-specialists/semi-generalists. These are physicians who have spent a variable amount of time practicing in hospital specialities before transferring to the community to provide general primary care, without further obligatory training. Second, there is no distinct primary care estate. Although much primary care is delivered through community clinics, a significant proportion is delivered by and in hospitals, as indicated above. Third, there is no formal hierarchy of care. Individuals are neither obliged to register with a regular primary care doctor, nor obtain a primary care referral before seeing a hospital-based specialist.

Nonetheless, it should be noted that most Japanese, in practice, have a regular doctor that they see most often. He or she will, to some extent, offer a primary level of care even if a specialist, especially for new health complaints. Patients are given information on doctors who could manage their chronic condition(s) in the community and the latest version of the fee-for-service schedule encourages individuals with some chronic conditions to register with a community doctor on a voluntary basis. In addition, individuals who seek hospital care directly without referral from primary care are required to pay a copayment of between JPY 3 000 and 5 400 (EUR 20-40, USD 30-54).

There are efforts underway to develop a broader and more holistic system of community care

Discussions on strengthening community care have been underway in Japan for a number of years. In 2004 community practice has become part of the compulsory residency training for newly qualified doctors (although the community placement may be as short as one month). Between 2011 and 2013, the MHLW convened a panel of experts to advise on future development of the medical specialities, including primary care (or the "general medicine speciality" in the community, to translate the panel's terminology directly). Also in 2011, the Japan Primary Care Association (JPCA) was made more prominent, by merging with using the Family Medicine and General Medicine Societies. The JPCA aims to provide continuous and comprehensive health and medical care and welfare services in close liaison with the community. It also conducts relevant academic studies. They have a specialist programme and certification programme in primary care and they also have a certification programme for pharmacists.

In addition, successive revisions of the fee schedule over recent years have encouraged the provision of home care and care at weekends or overnight. In 2011, around 20% of community clinics offered home care or visits to peoples' homes. Other revisions have sought to incentivise the continuity of care after hip fracture or stroke. Both conditions occur unexpectedly and can represent a sudden and profound loss of functional capability, triggering input from an array of professionals. Continuity and co-ordination are paramount to maximise an individual's chances of recovery. The fee schedule now contains incentives for "critical path management and guidance" after these conditions. Fees are paid for creation of an individual care plan, explanation of it to the patient or his/her family, and sharing the plan when an individual moves from one hospital to another.

For long-term care recipients, a range of facilities have been developed that offer a mix of medical, nursing, rehabilitation and welfare services and have the stated aim of encouraging independent living at home. Admission is possible, however, and in these cases stays are typically very long (around a year). Treatment and rehabilitation of dementia (especially acute deteriorations) is a particular speciality of these facilities. Each is expected to develop links with the community and liaise closely with the family members of each individual treated.

Current arrangements have the strengths of flexibility and high accessibility

The current configuration of primary care services is more a result of historical legacy than active policy planning and has resisted far-reaching reform before now. Nevertheless, it does have strengths. In particular, it is a patient-centred system in the sense that the patient has free choice of primary or secondary care provider and the fee-for-service payment system motivates providers to see patients. Additionally, the breadth of imaging and laboratory services that are offered in many community clinics would be the envy of other OECD systems aspiring to build “one-stop shop” services for ambulatory care. Even though patients may have to wait a few hours, it is reported that most of these diagnostic services can be accessed on the same day.

Free access does not appear to have been inflationary, with total national health expenditure in Japan (per head, or as a percentage of GDP) being close to OECD averages. Current arrangements have apparently been effective in delivering major population health benefits, serving as a good platform to screen and educate people as part of the national hypertension strategy as long ago as 1982, for example. Reduction in the prevalence and incidence of stroke are partly credited to this strategy, and its provision of population screening, primary and secondary prevention and public health education through the community health system (Iso et al., 1998).

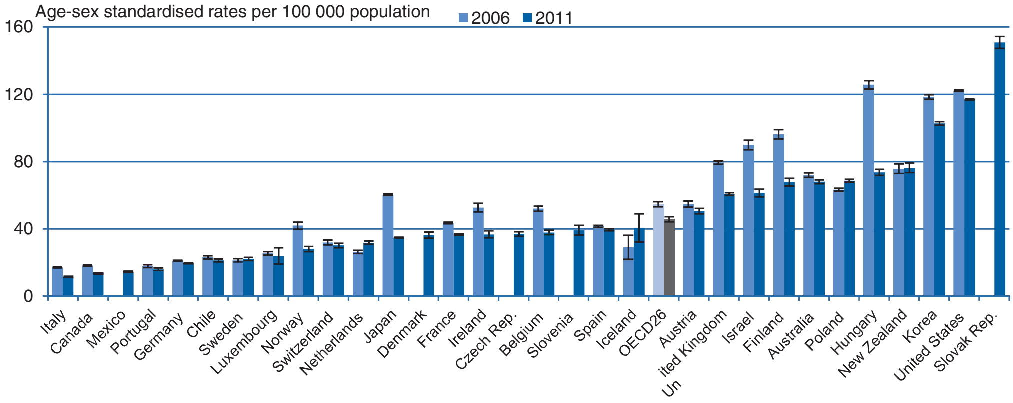
2.3. Current outcomes associated with primary and community care in Japan

Some indirect measures, such as rates of avoidable admission to hospital, suggest good quality of primary care in Japan. Other measures, such as high rates of inadequately untreated high blood pressure or lipids, reported in some studies, are a cause for concern. Another troubling sign are data from one major hospital showing a rising trend of unplanned readmissions. This suggests that community care services may not be coping well with the complexity or volume of patients being discharged while hospital care is being reorganised (see Chapter 3). Perhaps most worryingly, however, a more systematic picture of the quality of primary care at local level is not available.

At aggregate national level the quality of care provided by Japanese primary care appears variable

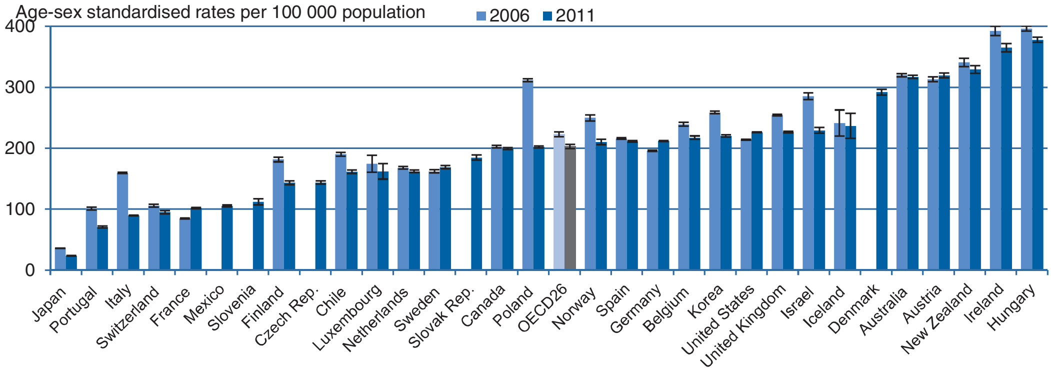
Data submitted to the OECD's Health Care Quality Indicator project show that hospital admission rates for chronic conditions – an indirect measure of the quality of primary care – are lower in Japan than for the majority of OECD, as shown in Figures 2.1 and 2.2. Indeed, Japan has the lowest admission rate for COPD observed in the OECD. Of note, rates are not standardised for background prevalence of the condition or other factors which are likely to influence admission rates such as, in this case, international variation in smoking rates. Nevertheless, the fact that age-sex standardised admission rates have been decreasing over recent years suggests genuine improvements in primary care for asthma and COPD.

Figure 2.1. Asthma hospital admission in adults in OECD countries, 2006 and 2011 (or nearest year)



Source: OECD Health Statistics 2013, http://dx.doi.org/10.1787/health-data-en.

Figure 2.2. COPD hospital admission in adults in OECD countries, 2006 and 2011 (or nearest year)



Source: OECD Health Statistics 2013, http://dx.doi.org/10.1787/health-data-en.

In other clinical areas, however, the quality of primary care appears less reassuring. A recently reported analysis of data from the 2007 National Health and Nutrition Survey (Hashimoto et al., 2011) found that that only half of patients receiving drugs to control high blood pressure and hypercholesterolaemia achieved target levels of outcomes. Perhaps of greater significance – given Japan's loosely constituted primary care system – large numbers of undiagnosed and untreated hypertension, hypercholesterolaemia and diabetes were found. Linked to this, it has been noted that Japan has extremely high rates of kidney failure and dialysis, mostly due to diabetic nephropathy. This is an avoidable complication if diabetes and associated hypertension and hypercholesterolaemia are managed adequately. Management is feasible in both primary care and secondary care. It should be noted, however, that complications such as nephropathy take many years to develop and so reflects care in earlier decades. The authors of these studies note that the situation might have improved since the introduction of screening for metabolic syndrome in 2008.

Patients Behavior Survey demonstrate improving satisfaction rates

Cross-sectional surveys undertaken by the Ministry of Health, Labour and Welfare show that patient satisfaction is poor, with less than half of patients satisfied with the care they received in hospital outpatient departments, a figure unchanged from 1996 Satisfaction about the length of time they had with the doctor is on a downward trend (48% satisfied in 2008 compared to 33% in 2011). Satisfaction rates with in-patient services are higher (around 65%).

In another survey of 1 246 adults, which also captured patient experiences from the community clinic sector across Japan, 88.3% of people were satisfied with the care they most recently received. As with the MHLW figures above, satisfaction in this survey is on an upward trend, having increased from 72% around a decade ago (Eguchi, 2013).

Across other OECD countries, patients generally report positive experiences in the ambulatory health care system. Between 75% and 95% of patients report favourably on the time they spent with the doctor, explanations given, opportunities to ask questions or raise concerns, as well as involvement in care and treatment decisions. These are different questions to those used in the Japanese surveys mentioned above. With this caution in mind, satisfaction rates in Japan ambulatory care nevertheless appear broadly in line with those reported elsewhere.

High consultation rates and increasing unplanned admission rates reported by some hospitals are signs that all might not be well

Japan, along with Korea, has the highest rates of doctor consultations in the OECD, at more than once a month (the OECD average is around six per year). Although cultural preferences are likely to be important, even higher consultation rates among the elderly may also suggest that care co-ordination is weak. Within Japan’s system of free access to any doctor, it is reported that “doctor shopping” and duplicate patient visits are not uncommon and many believe that such redundancy brings much waste. Even if some patients perceive a value in seeing more than one doctor for the same health complaint, it is not necessarily in their best interests in terms of the quality or co-ordination of care.

Similarly, data from some hospitals show a rising trend of unplanned readmissions, suggesting that community care services may not be coping well with the complexity or volume of patients being discharged from hospital. An alternative explanation is that this trend is driven by the incentives for shorter lengths of stay embedded in the way hospital are paid, particularly those using the DPC payment mechanism. This is discussed more fully in the following chapter.

At the same time, however, it would be wrong to characterise Japanese primary care as being entirely *ad hoc* – continuity does exist. A survey of 2 066 persons aged 65 or over in a city in Osaka Prefecture in 1998 asked respondents to name the person consulted first when having a health problem. The most common answer was their families (82.0%); the next most common answer was the family doctor (48.2%) and then the municipal health centre (22.3%). The fact that many Japanese are able to identify a family doctor suggests that the health system does furnish some continuity of care.

Little is known about the quality of care at a more local level

Beyond these broad measures though, there are no further measures of the quality of primary care at a national aggregate level. To a significant extent, this is due to the difficulty of defining a distinct primary care sector in Japan as discussed earlier. Even though there is potential for using national database of fee for service claims to identify patterns of care undertaken in community clinics, it is not used in this way. It is important to note that, despite its potential, the fee for service database would have considerable limitations as a tool to monitor the quality of care. Its primary purpose is accounting, not quality monitoring, and there are still difficulties in using unique patient identifiers within it.

The absence of information on the activities and outcomes in primary care is reflected at local level. Although the Japanese prefectures are required to develop regional health plans and to have a role in the quality monitoring and improvement of local services, in practice this is largely confined to service planning, accreditation and annual paper-based inspections around minimum levels of service. Some statistics may be gathered on levels of activity (such as local screening rates), but more sophisticated monitoring of the quality and outcomes of the care delivered by community clinics is not available.

2.4. Challenges faced by primary and community care in Japan

Most OECD countries are struggling to reorient their health systems to cope with an ageing population and burgeoning health care costs. Almost uniquely, however, Japan must confront the "burning platforms" of a super-ageing society, unusually high consultation rates and – in some hospitals – increasing readmission rates. In recognition of this, Japan will start the training of a distinct and specialist primary care workforce from 2017.

Rapid population ageing is increasing the burden of complex, long-term conditions

Japan faces a set of sociodemographic challenges that will place increased pressure on the primary care sector, in particular in relation to the provision of continuous and well co-ordinated care for patients with long-term conditions. First, the proportion of the population aged over 80 years is projected to rise to over 15% by 2050, well above the OECD average of 9%. Although many of these elderly individuals may be fit and independent, many will have one or more chronic health conditions, such as diabetes, heart disease or cancer. The International Diabetes Federation predict that around 1 in 12 Japanese will have diabetes, and 1 in 6 impaired glucose tolerance by 2035 (IDF, 2013). This is much less than other countries, but still a significant health burden. Moreover, other chronic conditions do not spare Japan: around 1 in 16 Japanese over the age of 60 were estimated to have dementia in a recent study, similar to the OECD average prevalence of 5.5% (Wimo et al., 2010).

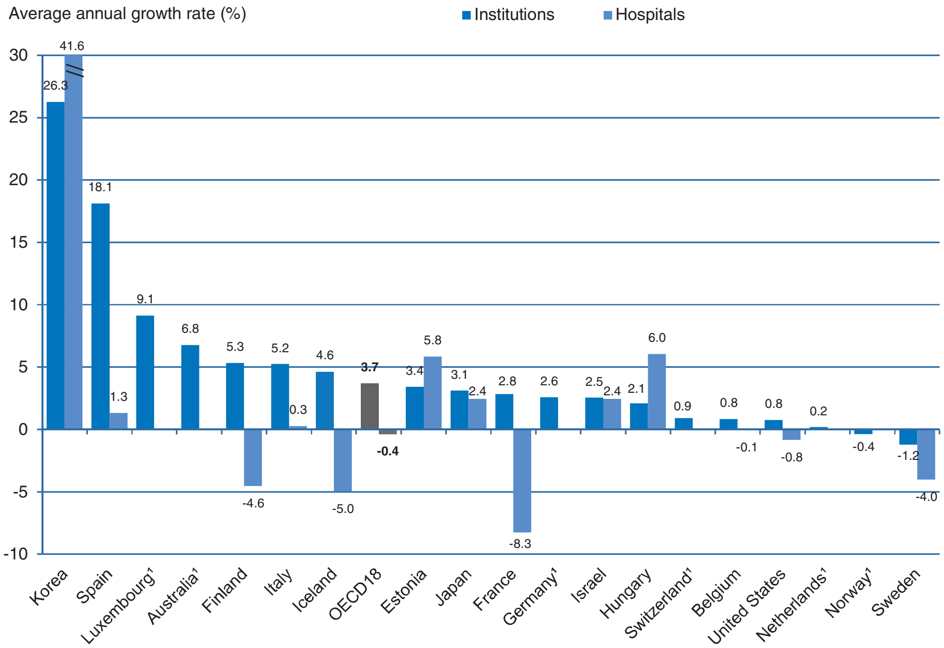
The exact burden of need that should be anticipated as a result of this demographic evolution is, however, unclear. A recent review noted that Japan lacks regular, objective, national assessment of the functional abilities of its elderly population and called for urgent improvements to the national information infrastructure in this regard. Of note, self-reported good health has deteriorated slightly from 41.3% in 2004 to 38.5% in 2013. In addition, the number of elderly individuals receiving care at home – compared to institutions – is high in Japan. In total of 12.6% of the population over the age of 65 received long-term care, of which 2.8% in institutions (OECD average 4%) and 9.8% at home (OECD average 7.9%) in 2011.

Despite efforts to reduce dependency on the hospital sector, progress in this area is slow

As discussed in Chapter 3, the hospital setting has traditionally been the dominant sector in the Japanese health care system. To a significant extent, this situation continues. In 2011, Japan had the highest number of hospital beds among OECD countries with 13.4 beds per 1 000 population compared to 5 per 1 000 population across OECD countries. Japan had also the longest lengths of hospital stay and very low hospital discharge rates, possibly reflecting weak availability of post-acute care settings to provide rehabilitative and long-term care services.

Efforts to reduce dependency on the hospital sector appear to have met with limited success. Only 20% of community clinics, for example, provide home care or care out-of-office hours. Japan's network of *roken* (health care facilities for the elderly) were developed to support independent living in peoples' homes, yet the average length of stay after an admission to one of these facilities is remarkably long, at around a year. Furthermore, OECD data shown that long-term care beds in hospitals continue to increase in number in Japan, by around 2% a year (Figure 2.3). This stands in contrast to several other OECD countries which have pursued policies to actively reduce long-term care beds within hospitals. Finland, France, Iceland and Sweden, for example, have achieved reductions of at least 4% a year.

Figure 2.3.Trends in long-term care beds in institutions and in hospitals, 2000-11 (or nearest year)



1. Australia, Germany, Luxembourg, the Netherlands, Norway and Switzerland do not report any long-term care beds in hospital.

Source: OECD Health Statistics 2013, http://dx.doi.org/10.1787/health-data-en.

Japan needs to pivot its health system decisively toward community-based care

A number of recent reforms have the ambition to integrate health and long-term care (LTC) and reduce bed use in both sectors through better preventive care. In 2006, the Japanese Government introduced a community-based, prevention-oriented LTC benefit in their long-term care insurance system. The aim was to prevent seniors in need of low levels of care from becoming dependent, by providing services targeted at improving the individual’s physical strength, mental health, oral function and nutritional status.

More recently, a bill around ensuring sustainability of social security system was passed in December 2013. This bill aims to secure adequate numbers of health care professionals and providers, and bring them into an efficient and high quality health system. Future reforms are planned to create a health system that delivers “community-contained” health care, and a community integrated care system, rather than "hospital-contained" health care delivery, as currently occurs.

A direct consequence of these policy reforms can be seen in the rapid reduction in average length of hospital stay (ALOS) observed in Japan. ALOS has dropped from around 25 days to 18 days over the past decade in Japan, a more dramatic decline than seen across OECD countries (although still remains well above the average). At the same time, hospital activity has been increasing. This combination of increasing numbers of hospital discharges and shorter lengths of stay imply increasing pressure on the community and primary care sector to take over the care of increasing numbers of patients earlier in the course of their recovery.

Box 2.1. The benefits of specialist primary care to patients and to health systems

In most OECD countries, primary care systems are characterised by person- rather than disease-focused care, comprehensiveness of care (particularly for first-contact health care needs) and continuity of care (Starfield et al., 2005; Kringos, 2010). Delivering such a care model is challenging, and many countries have developed a distinct, specialist sector within their health care system to deliver the model successfully.

A distinct, specialist primary care sector is believed to bring benefits to individual patients and to health systems alike. This is particularly the case in the context of population ageing, where more and more individuals will have multiple, long-term and complex care needs – the need for an "expert generalist" or "co-morbidity specialist", rather than a disease specialist, has never been greater. Primary care professionals are ideally placed to fill this role, not only because patients often enter a care pathway through primary care, and retain contact with it throughout their care, but also because of its holistic, rather than disease-centred, orientation (Masseria et al., 2009). Continuity and co-ordination of care have been identified as key elements of primary care, which are associated with improved quality, outcomes and patient satisfaction (Kringos et al., 2010). The 2011 Commonwealth Fund Survey of patients with complex care needs found that care is often poorly co-ordinated in the 11 countries surveyed (Schoen and Osborn, 2011). However, adults seen at practices where clinicians knew individual patients' medical history and proactively co-ordinated care – rated their care higher and were less likely to experience co-ordination gaps or report medical errors.

From a system point of view, a distinct and specialist primary care sector has been shown to contribute to better quality, co-ordination, responsiveness and cost-effectiveness of health care services, particularly with respect to the management of long-term conditions (Shi et al., 2002; Boerma et al., 1998; Kringos et al., 2010). Similarly, a study by the Commonwealth Fund of care management programmes that spanned care settings and engaged interdisciplinary teams across the continuum of care found that multifaceted, boundary-spanning approaches were associated with reduced hospital use and readmissions (McCarthy et al., 2013). A specialitst primary care sector also has the potential to promote the health and wellbeing of the practice population (Thorlby, 2013; Goodwin et al., 2011).

Evidence such as this supports the argument for moving from a loosely defined primary care sector staffed by semi-specialists/semi-generalists, to a specialist primary care sector that sees itself as the hub of a wider system of care, with responsibility for co-ordinating an individual care needs, including services beyond health care (Goodwin et al., 2011). Looking to the future, the United Kingdom's Royal College of General Practitioners sees continued evolution of the speciality as delivering a skilled, resilient, adaptable, multidisciplinary workforce that delivers health promotion and disease prevention strategies to local populations, manages multi-morbidity and co-ordinates complex care across boundaries (Royal College of General Practitioners, 2013).

The government has decided to create a defined primary care speciality, in order to meet these challenges

In recognition of the "burning platforms" of a super-ageing society, high consultation rates and – in some hospitals – increasing readmission rates, Japan has recognised that some reorganisation of the way its health system delivers primary care is needed.

In contrast to current arrangements in Japan, most other OECD countries have decided that a distinct primary care specialism brings advantages of a consistent point of care over the longer term, tailoring and co-ordinating care for those with multiple health care needs and supporting the patient more fully in self-education and self-management (Kringos, 2010). Responses to the OECD's Health Systems Characteristics Survey of 2012 indicated that around two thirds of OECD health systems require or encourage patients to register with a named primary care practitioner. In aligning with this thinking, Japan plans to develop a distinct, specialist[1] primary care workforce from 2017.

The key questions which emerge in response to this reform concern how should the community-based generalist role be developed, and the quality architecture should be built around it. The rest of this chapter considers the extent to which current arrangements are well placed to support creation of such a speciality and what more needs to be done.

2.5. How well set up is Japanese primary care to meet this challenge? Quality initiatives in Japanese primary and community care

Japan has set out its intention to establish a distinct, specialist primary care workforce in the near future. Some key infrastructure elements that would be needed to underpin this, however, are missing. In particular, there is a dearth of information on the activities and outcomes currently delivered by community clinics. Although the fee-for-service schedule is seen as the main lever to monitor and improve health care quality, it is largely focused on inputs and activity rather than outcomes. Other elements of quality architecture, such as systematic reporting of adverse events, are also poorly developed.

A striking information deficit marks out Japanese primary care in comparison to peers

Much less information on the activities and outcomes achieved within primary care is available in Japan, compared to other countries.

This is not surprising, since the sector is poorly defined, being supplied by "semi-specialists, semi-generalists" as earlier discussed. A disaggregation of activities on a clinic vs. hospital basis (i.e. a disaggregation more in line with the Japanese system) does not open up significant new data sources. Patient registers, for example, are not a feature of Japanese community care. A clinic would not typically be able to pull up a list of patients with diabetes for example, and so would not be able to audit the quality of their care. Somewhat inevitably, there are no national or local registers of patients with complex or chronic needs.

As discussed in Chapter 1, prefectures are responsible for delivering integrated health care plans for five major diseases such as heart disease. It is reported, however, that there is little information linked to these plans that can be used to assess the quality or outcomes of care in a systematic fashion. Prefectures are required to make regular audits and improvements to their plans, but there is not a systematic or comparable approach to this.

In these respects, Japan compares unfavourably with other countries that would be considered peers, several of whom have developed comprehensive and actionable indicators to support quality improvement in primary care. Without a clear means of distinguishing the primary care sector, it is hard to see how measures to strengthen primary care activities or improve outcomes could be generated.

Box 2.2. National quality registers in Denmark and Sweden

Denmark has made remarkable progress in the development of the measuring of quality of care through clinical registries (OECD, 2013a). Initially, databases were created in single departments by motivated physicians, but they quickly spread to cover regions or the whole country. The first national database focussed on treatment of breast cancer, initiated in 1976. Currently, over 60 national quality registers exist, alongside regional and institutional registers.

In 1999, the Danish National Indicator Project (NIP) was established as a mandatory disease-specific quality system for all hospitals. A national Quality Improvement Programme (RKKP) was established late 2010 to provide a framework for strengthening the infrastructure around the clinical quality databases and standardise, to some extent, their application and use. Several methods are applied systematically to ensure that the data collected in the clinical registries are used actively for quality improvement. Among them are an annual clinical audit at national level (all national clinical databases publish an annual report), annual qualitative audits at regional and local level, ad hoc in-depth national clinical audits on specific items (for example reports on regional variation in survival on lung cancer) and feedback of results to decision makers and public reporting.

Box 2.2. National quality registers in Denmark and Sweden *(cont.)*

In Sweden, quality indicators are developed on several different levels and in different organisations (OECD, 2013b). The National Board has been appointed the task to develop national guidelines, and one part of the process is to propose national indicators that reflect the performance of the care provider based on the guideline's key recommendations. National quality registers develop indicators for their specific diagnostic areas, and individual county councils and regions develop indicators for local follow-up work. Indicators with national status (for example those published in the national assessment reports and to some extent in the Quality and Efficiency reports are available over the internet from a data base administered by the National Board. The data base today contains over 800 indicators covering a wide variety of diagnostic areas and levels.

A recently formed unit at the National Board called Registry Service has been given the task to map the various data points collected through the national quality registers. This will be a valuable step to support development of new indicators and to ensure that the use of registries is not merely focused on scientific research but equally emphasises the use of registry data for quality assurance and quality improvement.

Japan's payment system is viewed as the main lever to drive quality improvement. The fee-for-service schedule, however, is based predominantly on inputs and activity rather than outcomes

As discussed in Chapter 1, the national fee schedule is the main lever in the Japanese health system to monitor and improve quality. Activities appearing in the fee schedule that are intended to improve the quality of community or primary care include fees to reward the setting up co-ordinated community care plans upon a patient's discharge; to provide information to patients on self-management; to set up cancer care plans; and to provide home care health services. In addition, recent reforms have also introduced a fee if a doctor provides lifestyle advice and co-ordinated management for these patients with two or more of the following conditions: hypertension, diabetes, dyslipidaemia or dementia.

The fee-for-service schedule, however, is based predominantly on inputs and activity – the lack of a sufficiently rich information infrastructure covering community clinics means that incentives based on the outcomes of care do not feature. In addition, incentivised activities are patchy. The Care Coordination Management fee mentioned earlier, for example, is only available for patients with stroke and upper femoral fracture and not for other patients who might equally benefit, such as those admitted with a heart attack or other fractures or falls. Most significantly, however, the number of patients who benefit from the incentive system as a proportion of those who should benefit can never be known. The lack of a patient registration system, and/or disease-based registers, means that the denominator population for each item in the fee schedule (all those with two or more of hypertension, diabetes, dyslipidaemia or dementia for example) is not measured. Hence, there is no monitoring mechanism to track if incentivised activities in the fee schedule are benefitting all those in the target population.

Despite the fee schedule, the quality of inputs into primary care appear weakly monitored

In Japan, all health care providers must meet minimum quality standards as a condition for reimbursement. The requirements to be met, however, are relatively basic and largely focus on staffing levels. In other OECD countries, accreditation is based upon a more demanding set of requirements. Standards around the full breadth of primary care activities (including health promotion and disease prevention) are often included, as well as broader objectives such as integration with other parts of the health system and with the community at large. In addition, accreditation is seen as a continuous, formative process rather than as a one-off. In Japan, there are legal mechanisms to close community clinics if they do not comply with minimum requirements, but is not clear whether quality concerns would ever be a basis for identifying a clinic in need of support.

Regarding staff, Japan's lack of regulation in terms of which doctors are entitled to provide a primary care services was discussed earlier in Section 2.2. Beyond this, there are no formal requirements or guidance around CPD and no system of regular recertification in Japan. Identification of doctors who may need professional support would only occur in the context of severe lapses in the quality of care (such as professional negligence leading to death or criminal activities) or doctors experiencing physical or mental illness.

Use of standards, indicators and clinical guidelines in primary care is low and adverse event reporting is poorly developed

The MHLW is funding an electronic platform that shares clinical guidelines developed either by professional or academic societies. These are available to patients as well as doctors. Guidelines address discrete disease areas and tend to be exclusively focused on medical aspects of management. They do not emphasise the need for co-ordinating the care of multiple long-term conditions, or identify opportunities where co-ordination across medical management plans, or across health and social care plans, should be sought. Furthermore, there are no explicit incentives for doctors to use these guidelines and some evidence suggests that the quality of care may suffer as a result. It was recently reported, for example, that blood pressure is adequately controlled in fewer than one in five Japanese people suffering from hypertension (Hashimoto et al., 2011). Encouraging adherence to clinical guidelines was suggested by the study authors as an important means to improve this statistic.

There are a number of health information systems, including the cancer treatment support system, cardiovascular treatment support system, the surveillance system for TB and infectious diseases and the treatment support system for intractable diseases that have been developed in Japan and that support the delivery of care in both hospitals and community clinics. There is no national, prefectural or clinic-based system for adverse event reporting, however, within primary care. As mentioned in Chapter 1, a new system starting in October 2015 will require reporting of unexpected deaths, but not adverse events more widely. As a result, collating events and learning from them does not occur and opportunities for reflection, analysis and learning are lost, both at individual practitioner and system level. At a broader level, there are no frameworks agreed to systematically measure the outcomes of care delivered by community clinics as discussed earlier.

2.6. Steps toward a new speciality of primary care in Japan

In creating a new speciality of primary care, the most important task for Japan will be to enhance the skills of the current cadre of physicians working as community generalists. As the same time, it will need to train future primary care specialists which have extended knowledge and skills with the clear criteria. Other essential steps will be to develop clinical guidelines for conditions to be fully or largely managed in primary care, create academic departments of primary care and give careful thought to how the new speciality should articulate with hospital specialists, including mental health care services, and Japan’s unique cadre of long-term care managers.

Professionalisation of primary care should start now, in preparation for it recognition as a distinct speciality in 2017

Japan is right to want to create a distinct speciality of primary care within the next few years. It is not starting from scratch, but will build upon the strengths of pre-existing community clinics. Nevertheless, to maximise the contribution and value that the new speciality of primary care will bring, work should start now to define and professionalise the speciality.

Work has already started to define the values, scopes and goals of a Japanese primary care speciality, such as the incipient definition published by the expert panel on specialist training, that was convened by the MHLW between 2011 and 2013. This work should continue, to ensure that the speciality starts off on a secure, well-recognised and well-respected footing, underpinned by a national vision for primary care that is shared by community physicians, hospital doctors, the wider clinical workforce and patient groups. Rich and extensive definitions of primary care are already available, such as that developed by Wonca. This, and other versions, should be debated in a forum comprising clinic and hospital doctors, insurers and patients, to develop a version that fits with the Japanese context.

Development of clinical guidelines for conditions to be fully or largely managed in primary care will also help define and professionalise the speciality. Guidelines for a wide range of conditions, such as those developed by the Japanese Medical Association, already cover the care delivered in community clinics. Tailoring these further to primary care will help define the scope of practice for specialist primary care. This will be particularly important if a central aim of a new primary care speciality is to reduce unnecessary use of specialist secondary care. Increasingly across OECD countries, primary care physicians are being expected to take on a broader and more sophisticated scope of practice. The diagnosis and management of type II diabetes (including, in some cases, the initiation of insulin) falls entirely within the scope of primary care in some countries, for example. Likewise, on-going management of depression and schizophrenia (including, in some cases, adjustment of medication regimes) is also expected of primary care in some settings.

Creation of academic departments of primary care in each medical school will also be instrumental in embedding the speciality. Some Japanese medical schools already provide courses of social medicine or public health and the development of a department of specialist primary care would complement these. These new departments could undertake research in primary care, support development of clinical guidelines specific to primary care, as well as teach the speciality. It will be important for undergraduate medical courses to include a phase dedicated to primary care and formal assessment of primary care knowledge and skills. The Ministry of Education has previously published a core curriculum for medical schools, which makes special recognition of the skills and knowledge needed for primary health care, and this should be built upon. A recent review recommended that the Ministry of Education transform its system for evaluation of medical schools, which currently focuses on research impact, to also address the extent to which they meet societal needs in health care, and this seems appropriate.

An even more pressing need, perhaps, will be to develop post-graduate training in primary care, for doctors already qualified, given that the current workforce will be in post for decades to come. Current Continuing Medical Education (CME) arrangements as described in Chapter 1 may suffice for some. Nevertheless, a more ambitious, stepped-approach to post-graduate training could be offered, ranging from short courses and certificates in primary care topics at one end to diplomas or Masters degrees in primary care at the other. Presumably multiple educational providers will be authorised to offer this training – some mechanism to ensure consistency of content and quality will need to be developed. For the moment, it is envisaged that certification and qualification of primary care specialists will be conducted by a third party (independent of the JMA and government), which seems appropriate.

A clear distinction between current community generalists and future primary care specialists should be made, based upon a clear vision of how primary care specialists will be different

Clear licensing or credentialing criteria would be needed to make the distinction between the current cadre of physicians working as community generalists and the future primary care specialists that Japan wishes to create while providing training opportunities for community generalists to become primary care specialists. Such a distinction should be unambiguously evident to patients and other health care professionals and be based upon a clear vision of how primary care specialists will differ from the current workforce, in terms of extended or different knowledge, skills, roles and responsibilities. This vision should be jointly created by a broad group of stakeholders, including insurer, physician and patient groups.

It may be reasonable to run a twin-track approach initially, with some community physicians credentialing as primary care specialists early on, and others remaining as community generalists. The distinction could be made operational by i) insurers paying a higher FFS to credentialed physicians for certain services, ii) patients only being allowed to register with a credentialed GP, if systematic doctor-patient registration were to be brought in. It is likely that there may be some opposition to either approach (particularly from physician groups). If all community physicians were to be credentialled as primary care specialists without differentiation, however, it is difficult to see how the reform would usher in any significant changes to the current status quo.

Box 2.3. The creation of a new specialty of family medicine in Turkey

Turkey's transition towards a specialist primary care service (called "family medicine" and staffed by "family physicians") is being pursued along two lines (OECD, 2014b). The first path consists of direct training in the speciality for new medical graduates; the second, retraining of existing general practitioners (GPs). Concerning the former, nearly all Turkish medical schools now have departments of family medicine (FM) which supervise speciality training over three years, largely in practice, leading to a post graduate diploma in FM. Regarding retraining of existing GPs, original plans envisaged that GPs would become recognised as specialist Family Physicians if they completed ten days of preliminary orientation, followed by a one year programme of specialist training, achieved by distance-learning embedded alongside continuing daily practice. FM is increasingly being seen as a viable and rewarding career option, on a par with the hospital-based specialties.

Family physicians are reimbursed on a capitation basis, alongside fees-for-service. Payments are adjusted for local health needs, calculated on the basis of local pregnancy rates, elderly population, prison population and development index. Embedded within the capitation payments is an element of performance related pay – one of FM's key reforms. Family physicians are required to offer defined programme of antenatal and postnatal care (including breastfeeding and contraceptive advice) and early years follow-up (including growth and development monitoring and immunisation) up to two years of age. Financial incentives also exist to encourage work in underserved or disadvantaged populations.

By way of comparison, Turkey's transition towards a specialist family physician (FP)-led primary care service is being pursued along two lines: direct training in the speciality for new medical graduates and retraining of existing GPs. Concerning the former, nearly all Turkish medical schools now have departments of family medicine which supervise speciality training over three years, largely in practice, leading to a post graduate diploma in primary care. Regarding retraining of existing GPs, original plans envisaged that GPs would become recognised as FP if they completed ten days' of preliminary orientation, followed by a one year programme of specialist training, achieved by distance-learning embedded alongside continuing daily practice. Nevertheless, specialist primary care is increasingly being seen as a viable and rewarding career option, on a par with the hospital-based specialties.

An explicit function of the new speciality should be to provide proactive and co-ordinated care for people with long-term conditions

There is strong recognition of the need for a renewed focus on long-term conditions at national level. In recognition of the challenges set out in Section 2.3, it is important that a key function of the primary care speciality should be provision of holistic care for those with multiple, complex health care needs, including mental health care needs. In relation to other OECD primary care systems, Japan is starting from an unusually strong position in one respect, in that the fee schedule already directs additional resources for treatment of patients with multiple chronic conditions, continuity of prescribed drugs and management plans and establishment of continuous care which offers on call services with medical advice.

One option to strengthen current arrangements would be to consider extension of individualised care plans (ICPs) for patients who have one or more long-term conditions. ICPs are currently offered only to long-term care recipients. Other individuals, not eligible for long-term care insurance but with complex, chronic conditions such as diabetes would also benefit, however, from a written, co-ordinated care plan. This would set out the roles of the patient, primary and secondary care specialists, as well as other health and social care workers. It would specify what services are offered in the community and at home, and when use of hospital-based services might be necessary. A suite of clinical guidelines for primary care, as discussed earlier, would underpin the writing and application of ICPs. Clinical guidelines for the management of common long-term conditions should be aligned, cross-referencing each other appropriately and spanning both primary and secondary care.

Issuing guidance on which patients should have an ICP, developing a monitoring framework to ensure that these patients are offered one and standardising their content would be ways in which wider use and application of ICPs could be achieved. At the same time, additional items might be included in the FFS, designed to support care for those with multiple needs. Examples would include a fee to proactively and regularly review of the functional status, care needs and/or medication regime of patients with multimorbidity, including when they fail to attend for a booked appointment.

Careful thought should be given to how primary care should interact with social welfare and mental health services

Careful thought should be given to how primary care should interact with care managers, who already have the role of co-ordinating care for those qualifying under long-term care insurance. Flexibility and innovation will be needed here. It will be important to ensure that the co-ordinating function of primary care does not conflict of duplicate that of the care manager. In fact, the existence of care managers in Japan is a strength that should be exploited. The role and profession in Japan is still developing and it may be that current care managers could be involved in the co-ordination of care for a wider set of clients, such as individuals not covered by long-term care insurance who have complex health care needs. A national approach is probably not necessary – some prefectures and municipalities may wish to experiment using their long-term care managers in this way, developing different models to do so.

If Japan were to pursue this line of reform, it would be internationally innovative. It is consistently assumed that care co-ordination should fall to primary care specialists, but this assumption has never been tested. It may be that only the individuals with the most complex needs require a care manager with a clinical background, once an initial multidisciplinary assessment has been completed. Similarly, it may be that individuals with a single, complex need (such as neurological disability or a severe and persistent mental illness) have their care better co-ordinated with a professional with specific expertise in that area, rather than a generalist. If Japan were to demonstrate that, for some patients, care co-ordination can be performed equally well by a wider set of professionals, and to more closely define the set of skills required, these findings would be of great interest to all OECD health systems.

Establishing regular, systematic liaison with other key figures in the health and social care system will also be necessary, such as mental health services. This might best be developed on a local basis. Models would include regular meetings or case-conferences, to agree and update shared management plans for particular patients, running specialist clinics on primary care premises or vice-versa, or occasional shared clinics.

2.7. Embedding continuous quality improvement from the start

As well as defining the content and key relationships of a new speciality of primary care, quality monitoring and continuous quality improvement initiatives should be embedded from the start. A fundamental element would be a data infrastructure capable of monitoring primary care activities and outcomes in a consistent way. Regular publication would drive aspiration for ever better performance and could be used to develop the fee-for-service schedule, to financially incentivise desired outcomes.

More systematic registration with a named primary care doctor who could serve as the focal point for co-ordinating and integrating care may also drive better care for patients with complex needs, and may be a reform that Japan wishes to consider in the future.

A better information system will be a priority

Japan's primary care sector, currently delivered through community clinics, stands out for its dearth of systematic data on activity or outcomes. Developing the information infrastructure underpinning primary care, so that a fuller and more detailed picture of the effectiveness, safety and patient centredness of primary care can be built, is a priority. In particular, indicators linked to the scope of practice defined in guidelines for the new speciality of primary care should be developed, relating to the outcomes and patient's experience of care as far as possible. A richer information system is needed to assure the public of the quality of local services and to support them in choosing between providers, to enable central and local governments get a better picture of the value for money of their public spending, and allow professionals to benchmark their performance and seek continuous quality improvements.

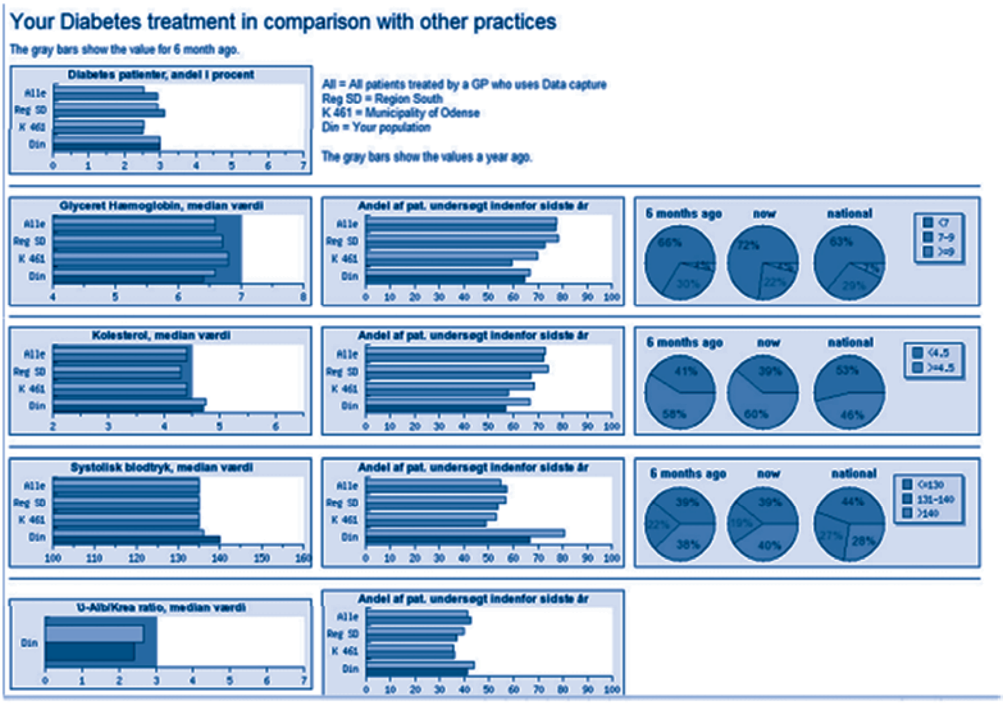
Professional groups may initially feel some reluctance to open up their practice to more detailed public scrutiny, but international experience suggests that this reluctance can be overcome if the process is handled in a consensual manner and the potential quality yield made clear. It will also be an important element in professionalising the sector. Public reporting of the performance of hospitals using the DPC payment system, as described in the following chapter, provides a precedent for this in Japan. In addition, the recent development of a national database of all insurance reimbursements may be a step towards the necessary infrastructure. Nevertheless, new legislation may be required to allow the collection of more comprehensive primary care data. It should also be noted that increasing numbers of OECD countries are exploring possibilities to link data from clinical and administrative databases, from health and social care, as well as other public services.

Candidate indicators to measure the quality of primary care in Japan would most likely concentrate around prevention and management of chronic diseases, elderly care, child health and mental health care. Whilst models such as Israel's QICH, England's QOF or Denmark's DAK-E programmes should inform development of candidate indicators, it is particularly important that any indicators align as much as possible with the indicators already used in Japanese secondary care. A suite of indicators for the management of diabetes, spanning both primary and secondary care, would be timely, for example. Considerable thought will need to be given to how data can be made accessible and useful to both professionals and the public.

The Quality Indicators in Community Healthcare (QICH) programme in Israel, for example, covers six areas of primary care activity and reports performance at individual provider-level, after adjustment for health need and sociodemographic factors (OECD, 2012). Managers report that the data fed back to them is instrumental in quality improvement work; one of Israel's health funds, Maccabi, reports that amongst diabetic patients between 2004 and 2009, poor HbA1c control fell by 29% and adequate cholesterol control increased by 96.2%, for example. Of note, QICH is neither mandated nor reliant on financial incentives; instead, its success is thought to be due to its robust scientific basis, consensual development of the indicator set involving GP and health insurance companies early on, clear patient-oriented objectives and, crucially, systematic and continuous feed-back of comparative data to both professionals and the public.

Denmark has developed a system of automatic data capture from primary care records, which allows Primary care providers to access quality reports from their own practice for over 30 areas (OECD, 2013a). These include management of chronic diseases such as depression, COPD, diabetes or heart failure; routine care such as childhood vaccination and provision of contraception and aspects of effective practice administration. As well as being able to identify individual patients that are sub-optimally treated, the system allows them to benchmark their practice against other practices at municipal, regional, and national levels. Patients can also monitor their own clinical data. Analyses using the data collected have reported significant improvements in the proportion of diabetics on appropriate antidiabetic, antihypertensive and lipid-lowering medications (Figure 2.4).

Figure 2.4. DAMD output allowing GPs to compare the quality of their practice with peers



Glossary: *Median værdi*: median value; *andel af pat. undersøgt indenfor sidste år*: proportion of patients with an annual check in the last 15 months.

Source: www.dak-e.dk.

Performance monitoring and better care co-ordination may benefit from a more systematic approach that requires patients to register with a named primary care specialist

Initiatives at the level of sophistication of Israel's QICH or Denmark's DAK-E depend on being able to identify a denominator population (that is a list of registered patients with, for example, diabetes). Without this, an indicator of the adequacy of care or outcomes cannot be calculated. More broadly, having a regular primary care doctor, or other primary care professional, is likely to be a pre-requisite if primary care is to fulfil the function of ensuring better co-ordinated care. Both observations suggest that a reform requiring individuals to register with a regular primary care physician may be a pre-requisite to developing more effective primary care in Japan.

In Japan, many individuals will be able to name their “regular” or “family” doctor if asked. In addition, the fee schedule incentivises doctors to provide lifestyle advice and co-ordinated management for patients with two or more of the following conditions: hypertension, diabetes, dyslipidaemia or dementia. The patient’s consent is required, which effectively nominates the doctor as his or her primary care doctor and introduces what is in effect a registration system for these patients. Still, without a systematically registered denominator population, the proportion of patients potentially benefitting from these interventions who are actually receiving them remains unknown.

There may be scope to extend this reform to a wider set of patients, or to make registration more systematic. Continuity of care is a fundamental element of high quality primary care (Kringos et al., 2010), particularly for patients with multiple health conditions, and is delivered best when patient and clinician know each other well (Roland, 2012). A registration system can support this, and has been shown to improve consultation follow-up and the planning of care (Kringos et al., 2010). A registration system also brings public health benefits beyond the ability to co-ordinate an individual’s care. With registers, the primary care specialist can then build a profile of the health needs of his/her registered population and ensure that health needs are being met and that resources are matched to need. Whether registration systems are voluntary or compulsory, geographically determined or freely chosen, the important thing is “to ensure that no-one is left out” (WHO, 2008). Currently, Japan has weak mechanisms to monitor whether the health needs of defined patient groups are being met consistently.

In recognition of these benefits increasing numbers of OECD health systems are developing primary care registration systems. Australia, for example, is encouraging patients with chronic diseases such as diabetes to register with a named primary care doctor (OECD, 2015). Some countries have made registration with a regular primary care specialist compulsory. Portugal did, and views this step as a fundamental part of its success in improving health access and health outcomes (WHO, 2008; and OECD, forthcoming). Norway, too, moved from a situation similar to Japan (where individuals could see any primary care specialist of their choosing) to a registration system. Although concerns about loss of freedom were voiced, the reform has proved popular (see Box 2.4). Turkey, in its Health Transformation Program, did the same.

Box 2.4. Introduction of compulsory registration with a GP in Norway

The Regular General Practitioner (GP) reform (the *Fastlegeforskriften*) of the early 2000s required, for the first time, all citizens to register with a named GP (OECD, 2014). This GP would be primarily responsible for providing or co-ordinating each individual's prevention, investigation and treatment of health care needs, including decisions on the need for referral for secondary care. Responsibility for appropriate liaison with social security and social services was also specified. The maximum number of patients a GP could have on his or her list was set at 1 500 (reduced pro rata for those working less than full-time). The reform also specified that GPs should maintain a balanced portfolio of work and engage in public health activities, emergency care, out-of-hours care and the supervision of students and doctors in training.

Prior to this reform, Norwegian citizens were able to consult one (or several) GPs without restriction. Discussions from the mid-1980s onward, however, increasingly centred on the possibility that lack of a one-to-one arrangement might encourage over-activity and jeopardise the co-ordination of care, especially for those with complex needs or those less able to state their needs. The reform was intended to improve the quality of care by strengthening the relationship between and patient and their GP, bringing new rights and opportunities to both parties.

Piloting of a named-GP system was undertaken in four municipalities in 1993, prior to national implementation. Despite anticipated difficulties in implementing *Fastlegeforskriften* across the diversity of Norway's geographical and social settings, national implementation was a success. Close to 100% Norwegians are now registered with a GP, signaling the popularity of the reform. In a recent survey of public attitudes to state funded services, GPs were the second most popular institution after public libraries. The reform also served to strengthen links between municipal authorities and local doctors, since municipalities were required to sign contracts with a sufficient number of local GPs to meet their populations' needs.

Before deciding on the utility and feasibility of introducing systematic doctor-patient registration as undertaken in Norway and elsewhere, Japan should first of all achieve a good understanding of i) how many individuals claim to have a "regular" doctor; ii) how often these are community clinic doctors; and iii) the true frequency with which individuals consult these doctors first. An evaluation of the popularity and impact of the quasi-registration system described above (for patients with hypertension, diabetes, dyslipidaemia or dementia) should also be undertaken.

Consideration should be given to incrementally reforming the fee-for-service schedule, in order to incentivise health care outcomes and population-based primary care activities

As noted earlier, the fee-for-service schedule is an important policy lever in the Japanese health system. It is worth giving detailed consideration to how it can best be used to support creation of a new speciality of primary care, define its objectives and encourage continuous quality improvement.

Currently, most of the service elements incentivised through the FFS schedule are focused on inputs (hiring an extra nurse, for example, or having extended opening hours). Thought should be given to reorienting the fee schedule to incentivising outcomes to a greater extent. Although the international evidence on incentivising outcomes (or "pay for performance") is perhaps equivocal (see Box 2.5), many would agree that it seems to make sense to pay for outcomes, and the international evidence does not suggest in any way that such schemes should be abandoned. In particular, a FFS payment system may not be ideally suited to support integrated and continuous care, and incentivising on clinically important outcomes may go some way to avoiding the risk of episodic, fragmented care that FFS payment systems may engender.

Box 2.5. International experience with pay-for-performance schemes in primary care

Since their inception in the United States, United Kingdom and Australia in the late 1990s and early 2000s, pay-for-performance schemes have become increasingly popular payment mechanisms for primary care across the OECD. Pay-for-performance is, in fact, more widely used in primary care than in secondary care. Primary care schemes operate in around half of countries, focusing mainly on preventive care and care for chronic disease. Design varies widely, ranging from relatively simple schemes in New Zealand (ten indicators) or France (16 indicators) to the complexity of the United Kingdom's Quality and Outcomes Framework (QOF) – the largest scheme currently in operation. QOF covers over 100 indicators in 22 clinical areas and is implemented across the whole country.

Given its scale, and the fact that it was a system-wide reform, much research has focused on the impacts of QOF. Gillam et al. (2012), in a systematic review covering 124 published studies, note that evaluation is complicated by lack of a control group and the difficulty of ascribing changes in clinical practice or outcomes (each with manifold determinants) to a complex intervention such as the QOF. Nevertheless, against a background of improving care generally, they report that quality of care for incentivised conditions during the first year of implementation improved at a faster rate than prior to QOF, although subsequently returned to prior rates of improvement. Given the cost of QOF (an extra GBP 1 billion per year), much debate has focused on its cost-effectiveness. Gillam et al. reported evidence of modest cost-effective reductions in mortality and hospital admissions in some areas, such as epilepsy. Of note, however, work by Walker et al. finds no relationship between the size of payments in a clinical domain (ranging from GBP 0.63 to GBP 40.61 per patient), suggesting substantial efficiency gains by reducing the upper spread of these figures.

In a review of 22 systematic reviews looking at pay-for-performance schemes internationally (not confined to primary care), Eijkenaar et al. (2013) find that P4P seems to have led to a 5% improvement in performance of incentivised aspects of care. Effects were generally stronger in primary care than in secondary care although, given the extent of variation in findings and the paucity of rigorous study designs, the authors conclude that there is insufficient evidence to support or not support the use of pay-for-performance in the quality of preventive and chronic care in primary care.

Box 2.5. International experience with pay-for-performance schemes in primary care *(cont.)*

Beyond clinical effectiveness and efficiency measures, pay-for-performance schemes have been associated with improvements such as narrowing of the quality-gap between deprived and non-deprived areas (Doran et al., 2008); systems strengthening by expanding use of practice-based IT, patient registers, call-recall procedures and audit; and expansion of nursing roles and competencies, including better team working. They may also support better dialogue between purchasers and providers, promote broader public debate and thereby clarify the objectives of primary care services (Cashin et al., 2014). Some evidence of negative effects, such as deprioritisation of non-incentivised activities or a fragmentation of the continuity of care, have also been noted.

Pay-for-performance in primary care should not be seen as the ideal or only payment system, but a potentially useful tool in a blended payment system, particularly where it might spur other activities such as development of quality indicators and better monitoring. As stated in a recent editorial cautioning against over-enthusiastic adoption of the schemes, “the choice should not be P4P or no P4P, but rather which type of P4P should be used and with which other quality improvement interventions” (Roland, 2012). Fundamentally, pay-for-performance should be seen as part of the means to move toward better purchasing (including, in this case, GPs’ time), in which quality plays a more prominent role.

The United Kingdom’s Quality and Outcomes Framework (QOF) is an example of a primary care payment system with a strong focus on evidence-based outcomes. Importantly, targets in the QOF are aligned with clinical practice guidelines and include outcomes such as adequate control of blood pressure (<150/90), cholesterol (<5mmol/l) and glycaemia (HbA1c <7%) in diabetics. A linked website (qof.hscic.gov.uk) allows the public to see any primary care practice’s achievement within the Quality and Outcomes Framework system of indicators and incentives. A detailed breakdown of the practice’s achievement is available, alongside comparisons with local practices and national averages.

Reimbursing a wider range of nurse-led activities may also be a direction in which Japan wishes to move over the longer term, recognising the workload pressure that Japanese community clinic physicians are under. As discussed in Chapter 1, the Japanese Nurses Association has developed a certification programme for nurses with advanced knowledge in cancer, mental health and acute care and others. Thus far, however, very few Japanese nurses have taken up this opportunity. In contrast, in many other OECD countries, nurses with additional specialist training are undertaking an increasingly wide range of primary care tasks, particularly around chronic disease management, including clinical assessment, ordering investigations, referring for onward care, clinical management and, in some settings, prescribing. The evidence is that this has not led to any lapses in quality and can be associated with higher rates of patient satisfaction.

Finally, dependent upon the introduction of a registration system, some capitation element might be appropriate to deliver population-based health promotion and preventive health care activities. Japan already has an active programme in this area. Since 2008, there have been services for those between 40 and 74 years old to provide health check-ups to monitor their metabolic syndrome. Likewise, Health Japan 21 sets a target to prevent disease associated with life habits. Contracting for population-based activities also lays the foundations for primary care specialists to take on a leadership role local and national health systems. They would be ideally suited for this through having a clear idea of local health needs, as well as weaknesses in local service delivery (particularly concerning issues at the interface between primary and secondary care). Japan should take this opportunity to develop a new cadre of health service leaders.

2.8. Conclusion

Most OECD countries are struggling to reorient their health systems toward primary care in order to cope with an ageing population and burgeoning health care costs. Almost uniquely, Japan is in the position of confronting a super-ageing society and unusually high consultation rates without a distinct and specialist primary care workforce in place. This is not to say that community-based care is lacking, however, and some indicators of the quality of care in this sector are reassuring.

Nevertheless, Japan has set out its intention to establish a distinct, specialist primary care workforce in the near future. Some key infrastructure elements that would be needed to underpin this, however, are missing. In particular, there is a dearth of information on the activities and outcomes currently delivered by community clinics. In addition, although the fee-for-service schedule is seen as the main lever to monitor and improve health care quality, it is largely focused on inputs and activity rather than outcomes. Other elements of quality architecture, such as systematic reporting of adverse events, are also lacking.

In creating a new speciality of primary care, the most important task for Japan will be to distinguish the current cadre of physicians working as community generalists from future primary care specialists. This distinction should be unambiguously evident to patients and other health care professionals, and be based upon extended knowledge, skills, roles and responsibilities, including around mental health care. The application of clear licensing criteria should underpin this in practice. Other essential steps will be to develop clinical guidelines for conditions to be fully or largely managed in primary care, create academic departments of primary care and give careful thought to how the new speciality should articulate with hospital specialists and Japan's unique cadre of long-term care managers.

As well as defining the content and key relationships of a new speciality of primary care, quality monitoring and continuous quality improvement initiatives should be embedded from the start. A fundamental element would be a data infrastructure capable of monitoring primary care activities and outcomes in a consistent way. Regular publication would drive aspiration for ever better performance and could be used to develop the fee-for-service schedule, to financially incentivise desired outcomes.

Registering with a named primary care doctor who could serve as the focal point for co-ordinating and integrating care may also drive better care for patients with complex needs, and may be a reform that Japan wishes to consider in the future.

Note

1. Within the current regulatory context, this means that primary care will become “advertisable” – a recognised specialism that community clinics can advertise as a service.

References

Boerma, W.G.W. et al. (1998), *The Role of General Practice in Primary Health Care*, World Health Organization Regional Office for Europe, Copenhagen.

Cashin, C. et al. (2014), *Paying for Performance in Healthcare: Implications for Health System Performance and Accountability*, Open University Press.

Doran, T. et al. (2008), "Effect of Financial Incentives on Inequalities in the Delivery of Primary Clinical Care in England", *The Lancet*, Vol. 372, No. 9640, pp. 728-736.

Eguchi, N. (2013), "The Trend of Public Perception of Healthcare in Japan", in the 4th Perception Survey of Japanese Healthcare, *Japan Medical Association Journal*, Vol. 56, No. 4, pp. 267-274, www.med.or.jp/english/journal/pdf/2013_04/267_274.pdf.

Eijkenaar, F. et al. (2013), "Effects of Pay for Performance in Health Care: A Systematic Review of Systematic Reviews", *Health Policy*, http://dx.doi.org/10.1016/j.healthpol.2013.01.008.

Gillam, S.G. et al. (2012), "Pay-for-performance in the United Kingdom: Impact of the Quality and Outcomes Framework – A Systematic Review", *Annals of Family Medicine*, Vol. 10, pp. 461-468.

Goodwin, N. et al. (2011), "Improving the Quality of Care in General Practice: Report of an Independent Inquiry Commissioned by The King's Fund", The King's Fund, www.kingsfund.org.uk/publications/improving-quality-care-general-practice.

Hashimoto, H. et al. (2011), "Cost-containment and Quality of Care in Japan: Is There a Trade-off?", *The Lancet*, http://dx.doi.org/10.1016/S0140-6736(11)60987.

IDF – International Diabetes Federation (2013), *Diabetes Atlas*, 6th edition, International Diabetes Federation, Brussels, available at: www.idf.org/atlasmap/atlasmap, accessed 21 July 2014.

Iso, H. et al. (1998), “Effects of a Long-term Hypertension Control Program on Stroke Incidence and Prevalence in a Rural Community in Northeastern Japan”, *Stroke*, Vol. 29, pp. 1510-1518.

Kringos, D.S. et al. (2010), “The Breadth of Primary Care: A Systematic Literature Review of Its Core Dimensions”, *BMC Health Services Research*, No. 10:65, http://dx.doi.org/10.1186/1472-6963-10-65, http://w21.biomedcentral.com/1472-6963/10/65/.

Masseria, C. et al. (2009), “Primary Care in Europe”, Policy brief, Directorate-General Employment, Social Affairs and Equal Opportunities Unit E1, Social and Demographic Analysis, European Commission.

McCarthy, C., A. Cohen and M. Bihrle Johson (2013), “Gaining Ground: Care Management Programmes to Reduce Hospital Admissions and Readmissions Among Chronically Ill and Vulnerable Patients”, The Commonwealth Fund, New York.

Ministry of Health, Labour and Welfare (2011), “Patient Survey, Emergency Department Visits”, provided to the OECD by the Ministry of Health, Labour and Welfare.

OECD (2015), *OECD Reviews of Health Care Quality: Portugal 2015 – Raising Standards*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264225985-en.

OECD (forthcoming), *OECD Reviews of Health Care Quality: Australia – Raising Standards*, OECD Publishing, Paris.

OECD (2014a), *OECD Reviews of Health Care Quality: Norway 2014 – Raising Standards*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264208469-en.

OECD (2014b), *OECD Reviews of Health Care Quality: Turkey 2014 – Raising Standards*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264202054-en.

OECD (2013a), *OECD Reviews of Health Care Quality: Denmark 2013 – Raising Standards*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264191136-en.

OECD (2013b), *OECD Reviews of Health Care Quality: Sweden– Raising Standards*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264204799-en.

OECD (2012), *OECD Reviews of Health Care Quality: Israel – Raising Standards*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264029941-en.

Roland, M. (2012), "Pay-for-performance: Not a Magic bullet", *Annals of Internal Medicine*, Vol. 157, No. 12, pp. 912-913.

Roland, M. and C. Paddison (2013), "Better Management of Patients with Multimorbidity", *British Medical Journal*, Vol. 346, p. f2510.

Royal College of General Practitioners (2013), "The 2022 GP: a vision for General Practice in the future NHS", Royal College of General Practitioners, London.

Schoen, C. and R. Osborn (2011), "The Commonwealth Fund 2011: International Health Policy Survey of Sicker Adults in Eleven Countries", www.commonwealthfund.org/~/media/files/publications/in-the-literature/2011/nov/ihp-survey/pdf_schoen_2011_survey_article_chartpack.pdf.

Shi, L.B. et al. (2002), "Primary Care, Self-rated Health, and Reductions in Social Disparities in Health", *Health Services Research*, Vol. 37, pp. 529-550.

Starfield, B. et al. (2005), "Contribution of Primary Care to Health Systems and Health", *Milbank Quarterly*, Vol. 83, pp. 457-502.

Thorlby, R. (2013), "Reclaiming a Population Health Perspective: Future Challenges for Primary Care", Nuffield Trust, www.nuffieldtrust.org.uk/sites/files/nuffield/publication/130425_reclaiming-a-population-health-perspective.pdf.

WHO – World Health Organization (2008), *World Health Report, 2008: Primary Care – More Now than Ever*, World Health Organisation, Geneva.

Wimo, A., B. Winblad and L. Jonsson (2010), "The Worldwide Societal Costs of Dementia: Estimates for 2009", *Alzheimer's & Dementia*, Vol. 6, pp. 98-103.

Chapter 3

Improving the quality of Japan's hospital care

With a large number of hospital beds, long lengths of stay and low discharge rates, the hospital setting has traditionally been the dominant sector in the Japanese health care system. Given that patients are able to access hospitals specialists directly for any health care need, consumer preferences for seeking hospital care had been traditionally high. However, as demonstrated by some acute care quality indicators, such as 30-day mortality after acute myocardial infarction, there is room for improvement in the quality of hospital care in Japan. Ongoing reforms in the hospital sector seek to differentiate acute from non-acute beds to ensure an appropriate use of hospital resources and improve both outcome and efficiency of care. This chapter seeks to contribute to the implementation process of these reforms by suggesting key instruments to steer quality improvement in the hospital sector as a whole.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

3.1. Introduction

The hospital setting has traditionally been the dominant sector in the Japanese health care system, with a large number of hospital beds, long lengths of stay and low discharge rates. Given that patients are able to access hospital specialists directly for any health care need, consumer preference for seeking hospital care had traditionally been high. On the supply side, hospitals have generally provided whatever services they wish, with no major differences between small, medium or large hospitals in the type of patient treated. Although these arrangements have guaranteed high accessibility, it might not have resulted in an efficient and appropriate use of costly hospital inputs. Some acute care quality indicators, such as 30-day mortality after AMI, suggest room for improvement in the quality of hospital care in Japan.

Plans to shift to a more structured health system, by more clearly different health care functions, and by differentiating acute from non-acute beds, are a key step to ensuring an appropriate use of hospital resources and improve both outcome and efficiency of care. Special attention should go to ensuring that ongoing reforms do not adversely affect hospital outcomes of care. In this regard, there are strong arguments to strengthen the quality governance structure of Japanese hospitals, particularly around the information infrastructure. Japan should consider developing the collection and reporting of outcome indicators, as done in other countries, to encourage efforts to reduce unnecessary treatment and inappropriate use of hospital beds, as well as to help monitor safety and effectiveness of care. Besides this, there are a number of other challenges that lie ahead to ensure safe, effective and patient-centred hospital care. They relate to the incentive structure associated with the payment system, the shortage of specialist physicians and the growing pressure faced by emergency hospital departments.

This chapter seeks to contribute to the implementation process of Japan's ongoing hospital sector reforms, and provide recommendations to help strengthen quality of care and improve outcomes in hospitals. After describing the Japanese hospital system, its arrangements and characteristics (Section 3.2), this chapter examines available indicators of hospital performance in Japan (Section 3.3). The chapter then presents the quality initiatives that have been set up in the hospital sector, and suggests that a more co-ordinated approach at system-level is needed (Section 3.4). Section 3.5 discusses the challenges the core Japanese hospital sector is facing, and the chapter finishes (Section 3.6) by suggesting key options for improving quality monitoring and quality improvement activities as the functional differentiation and specialisation of hospital beds occurs.

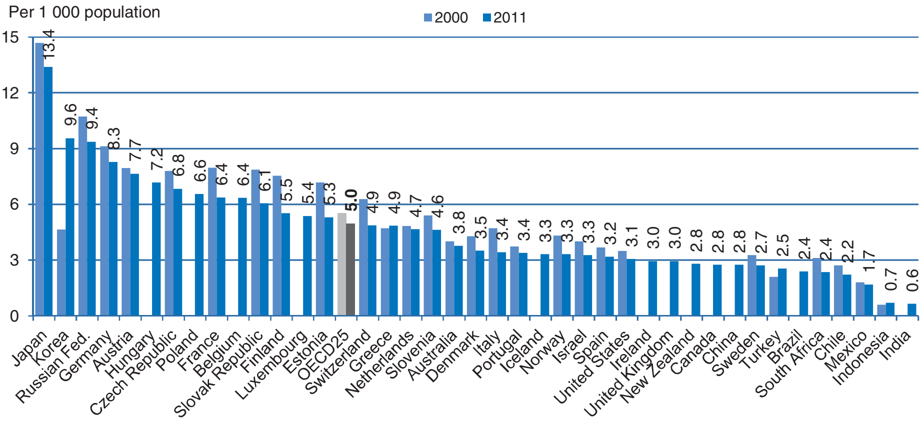
3.2. Overview of the hospital sector in Japan

Health care facilities in Japan need to have at least 20 beds to be defined as a hospital (units with fewer than 20 beds are classified as clinics). In 2012, there were approximately 8 565 hospitals in Japan (and a total of 1 703 950 beds). Japan's hospital sector is characterised by a diversity of ownership types. There are public hospitals managed by the government (from national to municipal level), by national or local universities, and by organisations such as farmers' associations or charitable bodies. The public sector comprises nearly one third of hospital beds, providing intensive medical care and also serving remote areas. Private hospitals (which are non-profit organisations), are owned by physicians and their families, representing nearly two thirds of hospital beds.

The Japanese health care system is characterised by a large supply of hospital services and high volumes of medical equipment

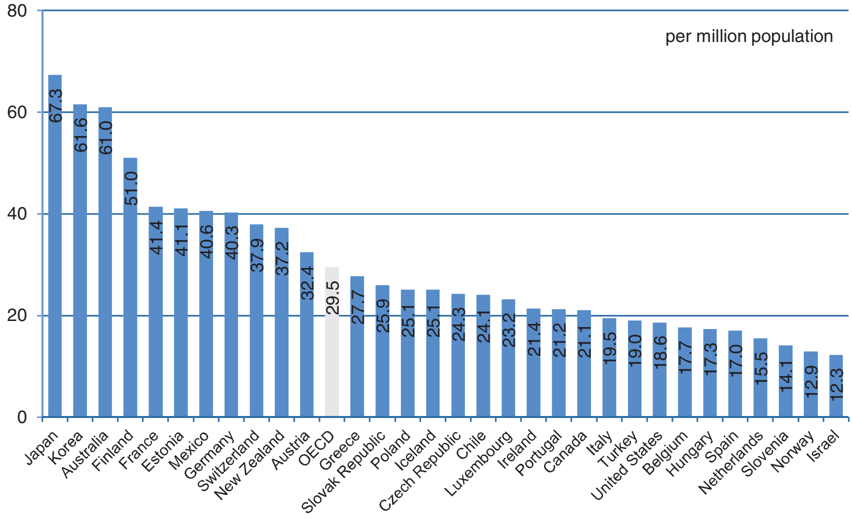
In Japan, the hospital setting has traditionally been the dominant sector with a large supply of acute services. For its population, Japan has one of the most substantial hospital sectors amongst OECD countries. In 2011, Japan had the highest number of hospital beds, with 13.4 beds per 1 000 population compared to 5.0 per 1 000 population across OECD countries (Figure 3.1). With 67.3 hospitals per million persons, Japan further has the highest number of hospitals relative to its population (Figure 3.2). This is well above the OECD average of 29.5 hospitals per million populations. Like other OECD countries, the supply of hospital service in Japan has been decreasing over the years to reduce the size of the hospital sector. Hospital beds in Japan have decreased by 8.9%, falling from 14.7 per 1 000 population to 13.4 per 1 000 population between 2000 and 2011. However, it is worth mentioning that the decline in hospital beds in Japan has been much smaller than in other OECD countries such as Ireland, the United Kingdom, Italy, Canada, Finland or Estonia where the number of hospital beds decreased by more than 25% during the past decade (Figure 3.1).

Figure 3.1. Hospital beds per 1 000 population, 2000 and 2011 (or nearest year)



Source: OECD Health Statistics 2013, http://dx.doi.org/10.1787/health-data-en.

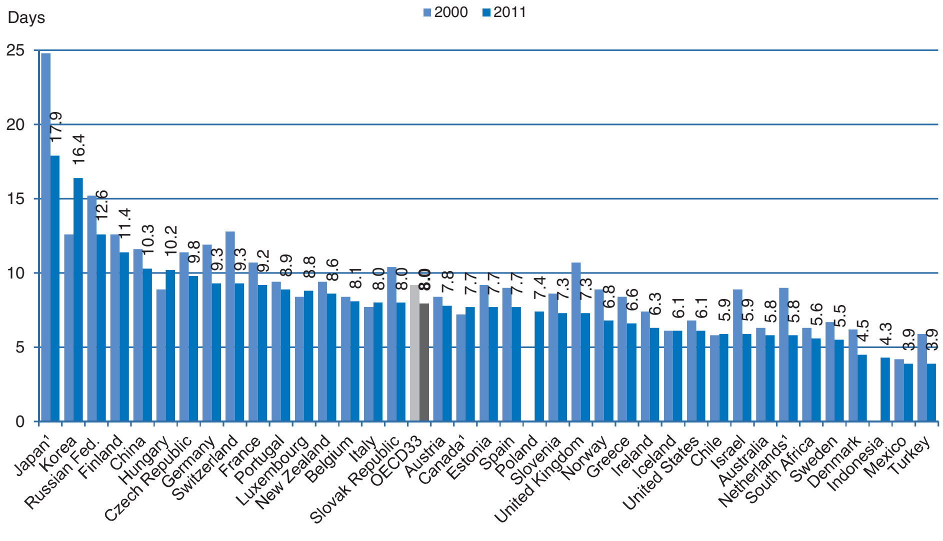
Figure 3.2. Hospitals per million population, 2011 or latest year available



Source: OECD Health Statistics 2013, http://dx.doi.org/10.1787/health-data-en.

Furthermore, Japan has the longest average length of hospital stay (ALOS) of all OECD countries, at 17.9 days, a figure that is more than double the OECD average of eight days (Figure 3.3). This figure can be partly explained by a large number of beds devoted to long-term care, meaning that hospital stays do not necessarily reflect intensive use. It is also true that Japan's average length of stay has fallen by 28% between 2000 and 2011. At the same time, however, Japan reports among the lowest hospital discharge rates across OECD countries, reflecting the heavy reliance of the health care system on hospital care (OECD, 2013a). This low discharge rate is in large part explained by the fact that hospitals have traditionally provided care in an extremely comprehensive manner, so patients received all care needed within the facilities during their stay (from acute, through to rehabilitation). This tendency has led to a low availability of rehabilitative and chronic care outside hospitals, and low supply of post-acute care settings to provide rehabilitative and long-term care services (see Section 3.5). In addition, it is possible that relatively underdeveloped primary care sector has not been effectively preventing inappropriate hospital admissions (see Chapter 2).

Figure 3.3. Average length of stay in hospital, 2000 and 2011 (or nearest year)



1. Data refer to average length of stay for curative (acute) care (resulting in an under-estimation).

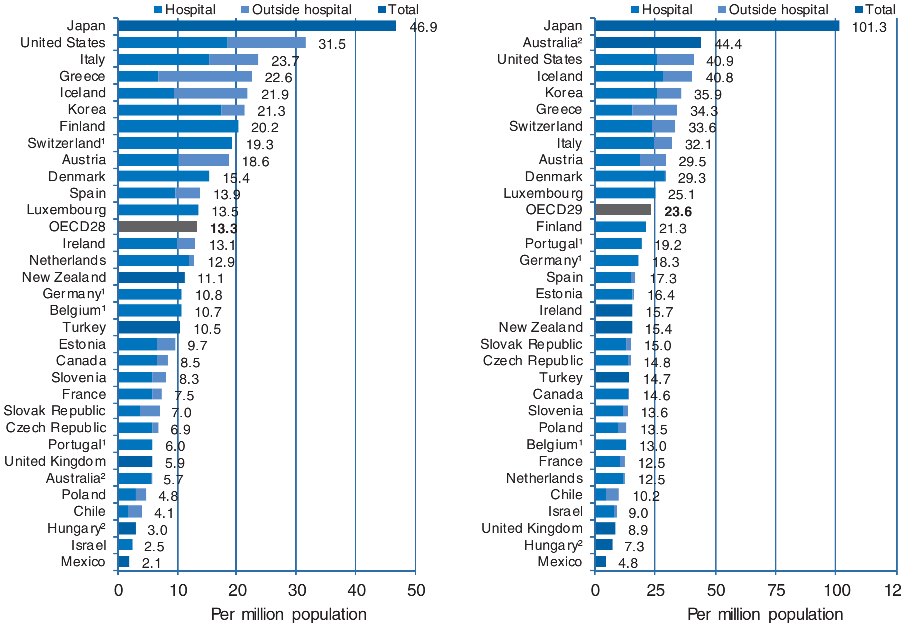
Source: OECD Health Statistics 2013, http://dx.doi.org/10.1787/health-data-en.

As well as having one of the biggest hospital sectors in the OECD, the Japanese health care system has the highest level of medical equipment amongst OECD countries. As demonstrated by Figure 3.4, with 46.9 magnetic resonance imaging units per million persons, Japan has the highest rate of such equipment among all OECD countries followed by

United States (31.5 per million persons) and Italy (23.7 per million persons). In a similar vein, Japan has the highest number of computed tomography (CT) scanners, with one CT scanner per 101.3 million people, more than four times higher the OECD average of 23.6 CT scan per million persons.

Both the high levels of hospitals supply, alongside the significant level of high technology medical devices, reflect a health system with very significant acute care capabilities.

Figure 3.4. MRI units (left) and CT scanners (right), 2011 (or nearest year)



1. Equipement outside hospital not included.

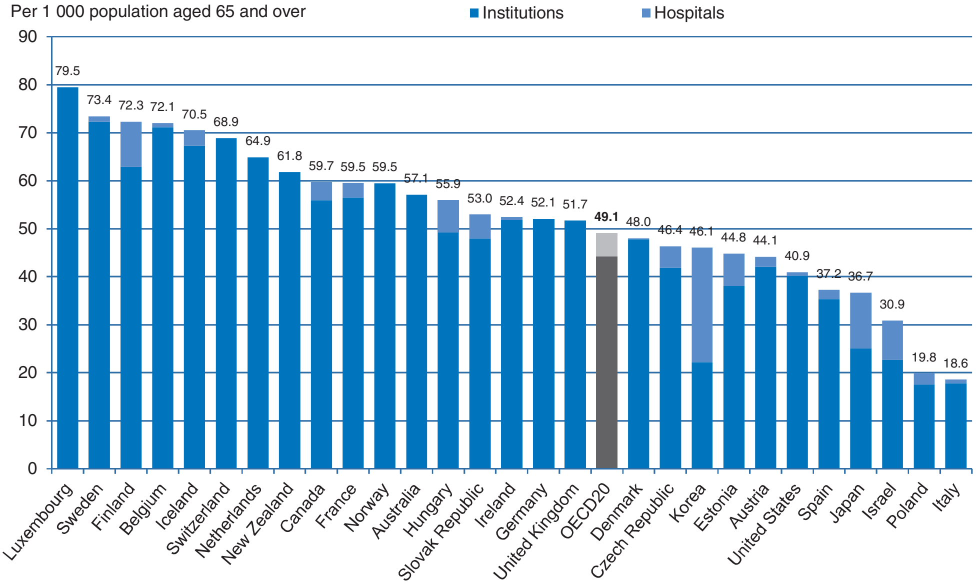
2. Only equipment eligible for public reimbursement.

Source: OECD Health Statistics 2013, http://dx.doi.org/10.1787/health-data-en.

Japanese hospitals have traditionally provided long-term care to the elderly population

A striking feature of the Japanese hospital sector is its tradition of providing long-term care to the elderly population. Even today, many hospitals beds are used for long-term care, which suggests a significantly different – and potentially inappropriate or at least inefficient – use of hospital resources compared with other countries. Although the number of beds in long-term care institutions in Japan increased significantly following the implementation of the long-term care insurance scheme in 2000 (see Chapter 1), many beds in hospitals are still dedicated to long-term care services. On average in Japan there were 25 beds in long-term care institutions [1] and 11 long-term care beds in hospitals per 1 000 people aged 65 and over in 2011 (Figure 3.5).

Figure 3.5. Long-term care beds in institutions and hospitals, 2011 (or nearest year)



Source: OECD Health Statistics 2013, http://dx.doi.org/10.1787/health-data-en.

While Japan has the longest life expectancy in the OECD at 82.7 years, compared to an OECD average of 80.1 years, the country reports the fourth lowest number of long-term care beds in institutions amongst OECD countries, just above Italy, Poland and Israel. Like most OECD countries, Japan will likely need to expand capacity in long-term care institution, further developed home care, and at the same time reduce the number of long-term care beds in acute or acute-equivalent hospitals. At present, long-term care beds in hospitals have continued to increase by around 2% per year in Japan (OECD, 2013a).

Given the rising health care needs of a super ageing society, where the elderly might have one or more complex chronic diseases, Japan needs to more clearly separate out health function (especially from acute to non-acute services such as primary or long-term care services), to make sure that the appropriate level of care intensity, and the appropriate resources, are best aligned with patient needs. It should be noted that as part on the new Regional Health Plan in Japan the differentiation of medical functions will be pursued, which will should dependency on the acute hospital sector and ensure that elderly or other patients who do not need acute care receive the most appropriate services, and don't tie-up acute care beds.

Hospitals are paid according to a mix of fee-for-services and the Diagnosis Procedure Combination payment system

The Japanese health care system reimburses hospitals through a mix of approaches including fee-for-services (see Chapter 1 for a further description of the fee schedule), and a diagnosis-adjusted per diem payment known as the Diagnosis Procedure Combination (DPC).[2] The DPC payment system was first introduced in 2003 for eighty main hospitals to curb hospitals cost and reduce average length of stay (Ikegami, 2004). At present, the DPC payment system targets only acute care hospitals, but the scheme is expected to eventually cover more general hospitals (Ministry of Health, Labour and Welfare, 2014). Hospitals can choose to participate in the DPC payment scheme on a voluntary basis, or remain solely under the fee-for-service scheme.

The DPC component is a case-mix scheme which offers per-diem rates depending upon diagnosis, procedure and length of hospital stay. Under the payment system, patients are categorised into DPC, which is composed of 18 major diagnosis categories, 504 diagnostic groups, and 2 873 case-mix groups (Ministry of Health, Labour and Welfare, 2014).

A per diem payment is set for each DPC patient group. The reimbursement rate is calculated per day but the amount gradually reduces as the length of stay increases (Mastuda et al., 2008; Besstremyannaya, 2013). Three periods are defined for the DPC reimbursement rate. During the first period, per day reimbursement is set at 15% more than the average per day reimbursement in order to encourage shorter length of stay. During the second period, per day reimbursement is set at the average payment amount, while during the third period, per day reimbursement is set at 15% below the average payment to provide hospitals with an incentive of discharging patients. Over an upper limit period, the DPC component is no longer applied and hospitals can charge in the traditional fee-for-service scheme (University of Tokyo, 2014).

The DPC component includes basic hospital fees, and charges for medication, injections, laboratory examinations and most simple procedures costing less than JPY 10 000. The fee-for-service component covers the cost of surgical procedures, anaesthesia, pharmaceuticals, outpatient services and expensive devices used in operating rooms, or procedures costing more than JPY 10 000.

It is important to note that the DPC component also provides a set of adjustments for hospitals to promote better quality of care (Anderson and Igekami, 2011). The DPC reimbursement rate thereby varies depending upon structural and process indicators. Adjustments are made according to length of stay, the severity of patient's condition, the diagnostic groups, the nursing staff level, compliance with medical records standards and safety standards, the contribution to community health or the use of generics. A conversion factor is furthermore applied to reflect the hospital historical charges. This conversion factor has been set-up to approximately guarantee the same level of hospital reimbursement as before the introduction of the DPC. Although the conversion factor has been reduced over time, it is still in place ten years after the DPC introduction.

Hospitals participating in the DPC programme are required to report data around patient background information, diagnoses, procedures, admission, discharge, claim data and other detail clinical information including for example the activities of daily living (ADL) score, a cancer's stage or the level of patient's consciousness in the DPC database. This data is submitted to the MHLW. The introduction of the DPC system has therefore been an important step towards providing a standardised information platform at system level, enabling analysis of national trends in hospital utilisation, access, and outcomes and costs, although it does not cover the whole hospital sector.

In April 2012, there were 1 505 hospitals participating in the DPC payment scheme, which represents 480 000 acute beds (53.1% of the total hospital beds). After ten years of implementation, nearly half of all acute-care hospital beds are funded under the DPC and fee-for-service components, while the other half are reimbursed solely on a fee-for-service basis. It should be noted that a number of requirements must be met for hospitals to participate in the DPC payment programme (Ministry of Health, Labour and Welfare, 2014, p. 16). Japanese hospitals must:

- provide enough medical resources to manage acute care
- manage the electronic medical record and the DPC database, and set a full-time professional to deal with these records
- submit the "Discharge Patients Survey" conducted by the MHLW in order to capture diagnoses and medical treatments provided in DPC hospitals

- achieve a ratio between the number of discharges and the number of beds of around 0.87 per month
- establish a coding committee.

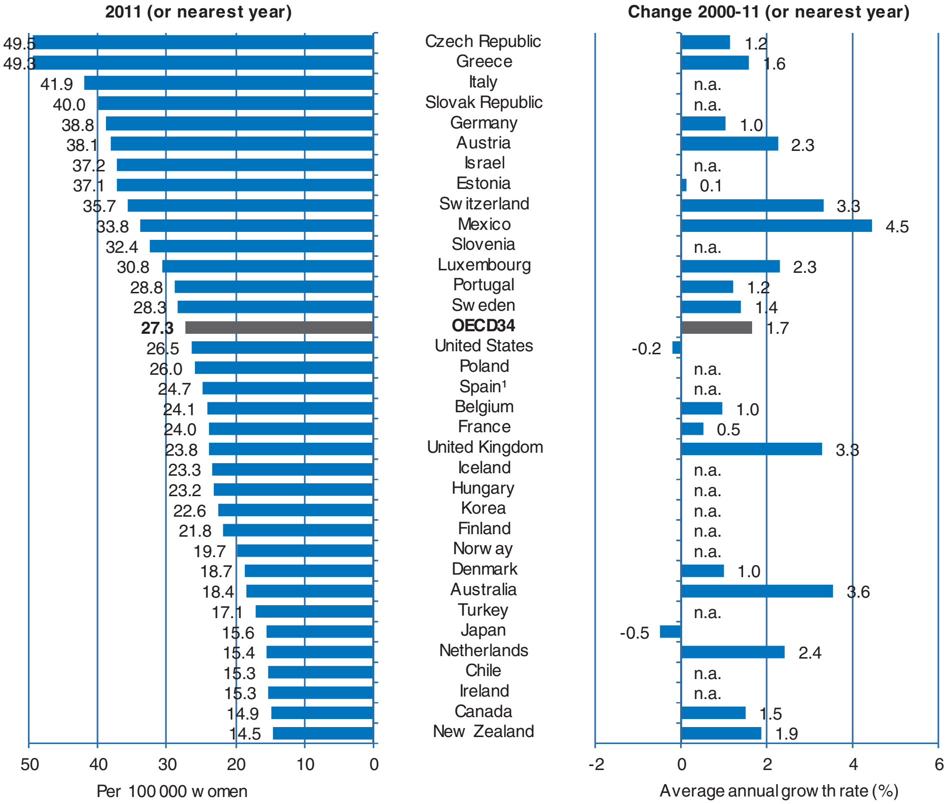
Japan has a low number of practicing doctors relative to its population

Compared to its population, Japan has relatively fewer practicing doctors. In 2011, the ratio of physicians per 1 000 population was 2.2, a figure that places Japan in the last quarter position amongst OECD countries (OECD, 2013a). Although it is not possible to separate general practitioner and specialist for Japan in OECD health statistics, international differences appear regarding certain specialties.

In Japan, the shortage of physician is particularly pronounced for anaesthetists, obstetricians, gynaecologists and paediatricians. As demonstrated by Figure 3.6, the number of gynaecologists and obstetricians per 100 000 women in Japan was amongst the lowest across OECD countries.[3] Between 2000 and 2011 the number of gynaecologists and obstetricians per 100 000 women has also declined in Japan (although a slight increase in the number of gynaecologists and obstetricians has been reported from 2006). In 2011, there were 0.12 paediatricians per 1 000 population compared to an average of 0.17 per 1 000 population across the OECD. In emergency medicine there are also shortages; while in 2010 there were 2 610 emergency physicians, the MHLW estimated that 725 emergency care physicians were lacking across the health system (Ministry of Health, Labour, and Welfare, 2010).

Although Japan compares well to other OECD countries in terms of the evenness of doctors' geographical distribution, available evidence suggest regional disparities and a persistent problem of workforce supply in hospitals. As of 2006, the number of practicing physicians per 1 000 population was 2.65 in Tokyo, in contrast to 1.70 to 1.96 in the six prefectures of Tohoku, a northern area of Japan (Yasunaga, 2008). Prefectures with the highest number of physicians are Tokyo, Kyoto and the Western Region of the country. In order to secure an adequate number of doctors in regional areas, the Ministry of Education, Culture, Sports Science and Technology in co-operation with the MHLW has increased the admission capacity of existing medical schools since the fiscal year 2008. The absolute number of physician has therefore increased, but there is still evidence suggesting that hospitals in Japan might be understaffed, increasing the workload of hospital physicians and affecting quality of care (Wada et al., 2009; Nishimura et al., 2014; Yasunaga, 2008).

Figure 3.6. Gynaecologists and obstetricians per 100 000 women, 2011 and change between 2000 and 2011



1. In Spain, the number of gynaecologists and obstetricians only includes those working in hospital.

Source: OECD Health Statistics 2013, http://dx.doi.org/10.1787/health-data-en.

Emergency care facilities are organised around three levels, while ambulance transportation is the responsibility of the Fire Department

Unlike most others OECD countries, the Fire Department in Japan has responsibility for pre-hospital transportation of victims. The universal emergency call number 119 is directly linked to the dispatch centre located in the regional fire defence headquarters. When the dispatch centre receives an ambulance call, they send the nearest ambulance to the incident location. The ambulance provides hospital transportation services when the patient needs more advance care. The local government covers the charge for care and transportation, and no co-payments or deductibles apply to these services. Ambulance consists of three emergency personnel trained in rescue, stabilisation, transportation, and advanced care. In remote areas, there are Intensive Care Unit ambulances staffed with physicians, as well as a helicopter services staffed with specially trained emergency physicians and nurses (Tanigawa and Tanaka, 2006).

Alongside ambulance services, emergency care centres are organised around three levels:

- *Primary-care facilities* are supposed to treat low-acuity patients who can be discharged at home. These facilities consist of clinics without beds and are recognised as a dispatch centre to provide medical advice to patient by telephone and orient the patient to the appropriate services. Primary care facilities only receive walk-in patients during nights and holidays
- *Secondary-care facilities in hospitals* are supposed to provide care for moderate-acuity patients requiring inpatient admission. These facilities provide in-hospital care for acute illnesses and trauma for both walk-in patients and ambulance-transported patients.
- *Tertiary emergency facilities,* which are called “Critical Care Centres” provide total care for critically ill and severely injured patients. Tertiary emergency facilities also provide a training programme for medical staff, including for ambulance staff. An advanced tertiary emergency facility can also be set-up in hospital, called “Advanced Critical Care Centre” to provide care for severe burns, acute intoxication, and reconstructive surgery.

Theoretically, there is one regional primary and secondary emergency facility for every 50 000 inhabitants, and at least one tertiary emergency facility for each region with 1 million inhabitants. As of 2013, there were 259 tertiary emergency facilities in Japan, 2 904 secondary emergency facilities and 553 primary emergency facilities (data provided by the MHLW).

The idea behind the 3 levels of organisation is to better orient patients, and to get the right resources to the right patients. Accordingly, patients are first expected to visit the primary care facility, so as to seek medical advice to then be transferred to a secondary or tertiary emergency centre if judged medically necessary. However, on the ground, patients have typically self-referred directly to a secondary-care emergency facility, without first visiting a primary care facility. At the same time, it is reported that ambulances often transport victims directly to a tertiary-care facilities, which might suggests inappropriate assessment of emergency patients, as well as a lack of co-ordination between the fire department and the second or third levels of in-hospital emergency department (Hori, 2010). This, with the growing ageing population and the rising burden of long-term conditions, places a growing pressure on in-hospital emergency departments (see Section 3.5).

3.3. Care outcomes in the hospital sector

Based on some OECD indicators such as five-year survival estimates for cancer, Japan appears to be performing well. Other measures, such as in-hospital case fatality rates for acute myocardial infarction or relatively high mortality from cerebrovascular disease might reflect the poor availability of the primary care sector to cope with long-term conditions in a more holistic and co-ordinated way (as shown in Chapter 2), but might also signal inefficiency and lapses in clinical processes, as well as difficulties in accepting patients transferred by ambulance.

Japan appears to be performing well for five-year survival estimates for cancer

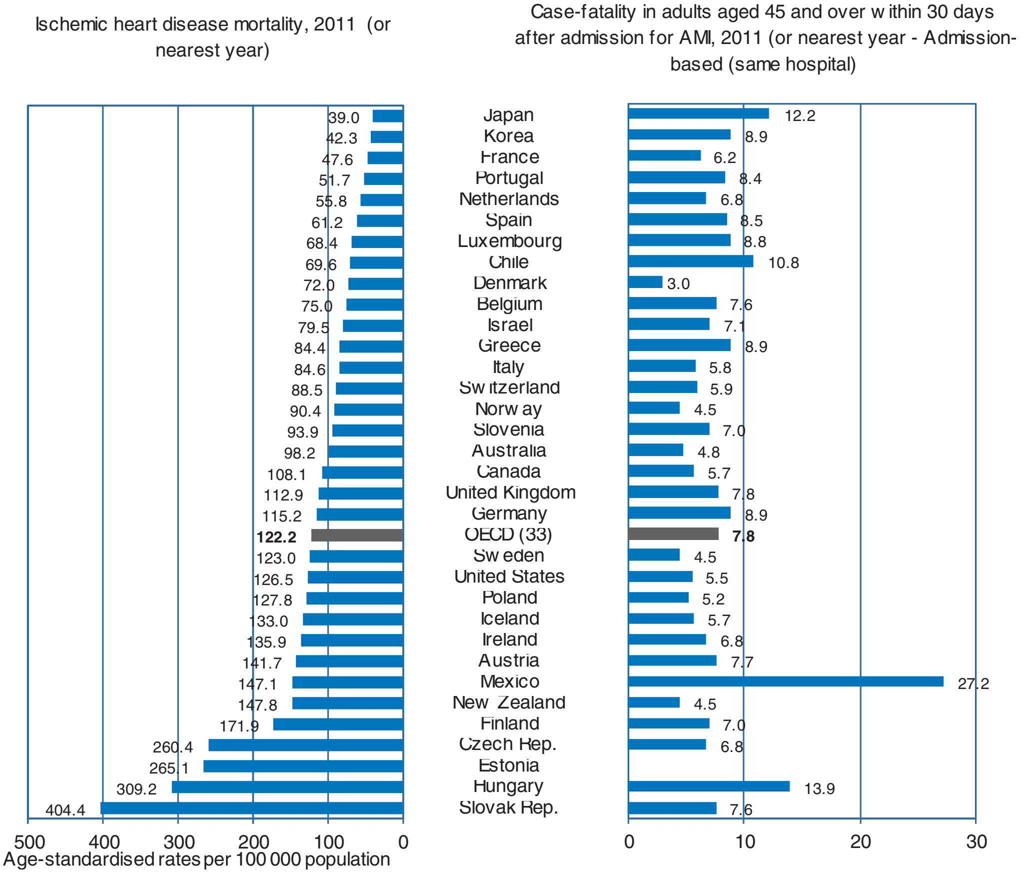
Japan shows a mixed picture on indicators of quality of care in the hospital sector. Based on some OECD indicators related to five-year survival estimates for cancer, Japan appears to be performing well (OECD, 2013a). Five-year relative survival estimates for cervical, breast or colorectal cancer are well above the OECD average in Japan. Although data are somewhat outdated due to lack of regular national monitoring in the country, Japan is in the best four countries for five-year survival estimate for cervical and breast cancer in the 2000s. Over this period, five-year survival estimates for cervical cancer attained 70% (compared to 64% across OECD countries) whilst survival estimates for breast cancer attained 87% (compared to 82% across OECD countries). With regards to colorectal cancer, Japan has attained five-year survival estimates over 65% for both men and women in the early 2000s, which is above the OECD average of 61.3% for men and 63.3% for women in the late 2000s. This performance is a sign of well advanced surgical techniques and effectiveness of the treatment, and can also reflect early detection of cancer.

Japan's hospitals perform poorly on some reported cerebrovascular outcomes, but well on cardiovascular outcomes

A striking feature of the Japanese hospital sector is the apparent high in-hospital case fatality rates for acute myocardial infarction (AMI), while the country reports the lowest mortality rate from ischemic heart disease (IHD) amongst all OECD countries. According to OECD health data, although Japanese are less likely to die of IHD compared to people in other OECD countries, they are more likely to die once admitted into hospital for AMI than patients in other OECD countries. Japan's in-hospital case fatality from

AMI is 12.2 per 100 admissions in 2011, compared to an OECD average of 7.9 per 100 admissions in the same year (Figure 3.7). Based on OECD health data, the Japanese hospital sector appears thereby to report inverse outcomes when we compare total mortality from IHD and in-hospital case-fatality rates for AMI. It is important to note that a different estimate for AMI in-hospital case fatality rates has been computed based on administrative data. Using the National DPC database for example, the Japanese's in-hospital case fatality from AMI in 2012 ranges between 7.2 and 9.2 per 100 admissions, which is well below the OECD estimation.[4]

Figure 3.7. Ischemic heart disease mortality and case fatality in adults aged 45 and over within 30 days after admission for AMI, 2011



Source: OECD Health Statistics 2013, http://dx.doi.org/10.1787/health-data-en.

Even more surprising is the opposite situation that is observed for stroke (OECD, 2013a). Japan's in-hospital case fatality rate within 30 days after admission for ischemic stroke was the lowest among all OECD countries in 2011, with an age-sex standardised rate of 3 per 100 patients compared to 8.5 per 100 patients across OECD countries. Japan's overall mortality from cerebrovascular disease, however, was relatively high (even though it has declined by 56% between 1990 and 2011). Yet, while population wide mortality from stroke is still relatively signficant, case fatality rates from stroke once in hospital are relatively low when compared to other OECD countries.

These paradoxes[5] have also been reported for Korea (OECD, 2012) when comparing i) mortality from IHD to in-hospital case fatality rates for AMI, and ii) mortality from cerebrovascular disease to in-hospital case fatality rates for stroke.[6]

With regard to the latter (high mortality from cerebrovascular disease and low in-hospital case fatality rates for stroke), it is important to note that Japan had traditionally reported a heavy burden from strokes. As a result, many efforts have been dedicated to improving the treatment of stroke patients in hospitals, through systematic blood pressure monitoring, massive material investment in hospitals (such as CTs and MRIs) or the establishment of stroke units. Together, these efforts have driven considerable improvements in hospital outcome of care. The combination of high mortality and low case fatality could also suggests that while improvements of medical care in the acute phase have led to good quality of care in hospitals, timely transfer to hospitals might be inadequate and deficient, especially in the case of rural populations. Overall, the paradox suggests that policy makers should look beyond hospital settings, such as community or primary care services that may not provide adequate services for patients being discharged from hospital (see Chapter 2).

Several factors ranging from the demand and supply side can be mapped out to explain the former paradox (low mortality rates from IHD and relatively high in-hospital case fatality rates for AMI). On the demand side, it might be possible that persons presenting at hospital with AMI represent advanced or particularly complex cases amongst a smaller group of people across the population that are dying from IHD (OECD, 2012). On the supply side, a lack of supervision and monitoring in primary or community care settings of adults with high levels of risk factors might also result in admission of patients with exacerbated underlying cardiovascular disease, which in turn leads to high in-hospital case fatality rates. At the same time, as shown by Kitamura et al. (2013), prolonged pre-hospital transportation time due to problem with selecting appropriate hospitals for AMI patients has led to poor hospital outcome of care. The paradox might lastly reflect inefficiency or lapses in clinical processes in the hospital setting, due a poor compliance to clinical guidelines, adversely affecting health outcomes.

3.4. Several quality initiatives are set up in the hospital sector but a more unified approach is needed

Japan has already developed initiatives for inspecting and accrediting hospitals and reporting adverse medical events, as described in Chapter 1. However, a comprehensive information infrastructure covering the whole hospital sector is at present lacking, and clinical guidelines are not consistently implemented. Emphasis should now move to strengthening quality governance in the hospital system as a whole, with a goal of achieving a more unified or co-ordinated approach to monitor and to drive quality improvement in the hospital sector. Particular attention should be given to the enforcement of minimum standards of acute care, as well as to the data infrastructure and monitoring of quality of care. These steps are especially important in light of the ongoing government plans seeking to differentiate and specialise the function of hospitals beds. There will also be a need to evaluate the effect of these reforms on quality and outcomes of care.

The Japanese hospital sector has a number of quality initiatives around inspection and accreditation

As described in Chapter 1, Public Health Centers (PHCs) regulate medical facilities and are responsible for the enforcement of the Medical Care Act. They conduct periodic inspections at hospitals based on the minimal structural and safety standards set out in the Act. The purpose of inspection is to ensure that all facilities fulfil the standards. Inspections are carried out once a year and consist of inspectors checking prepared documents and interviewing staff members, to then issue an inspection report. Patient satisfaction is not taking into account during the inspection. If there are aspects that do not meet the required standards, consultations are made with the manager or the owner of hospital. At the same time, the MHLW or the prefectural government can authorise the establishment of the categorisations of Advance Treatment Hospitals, Clinical Training Hospitals or Cancer Care Coordinating Hospitals if they meet requirements. As of 2013, there were 86 Advanced Treatment Hospitals, 1 014 Clinical Training Hospitals, 397 Cancer Care Coordinating Hospitals and about 490 Community Health Care Support Hospitals in the country.

The Japan Council for Quality Health Care (JCQHC) was set up in 1995 as a third party organisation to carry-out hospital accreditation, which has been adapted from the Joint Commission programme. The current accreditation programme, which is accredited by the International Society for Quality in Healthcare (ISQua), is voluntary and covers nearly a quarter of Japanese hospitals. The JCQHC accreditation programme makes hospital care processes explicit and standardised. It involves determining minimum standards of hospital quality, assessing health care professionals against these standards, and using any deficiencies identified as an empirical basis to improve quality. As part of the accreditation programme hospitals are asked to set up policies and management structures and to improve quality and safety through setting guidelines and protocols. As of 2013, a total of 2 369 hospitals were accredited (29.6% of hospitals). Accredited hospitals can receive additional payments from the health insurance system. Accreditation results are published on the JCQHC website where hospitals are subject to the following scoring system: Excellent (S); Standards are met (A); Standards are partially met and several minor concerns remain (B); Important criteria are not met, high priority areas necessary for improvement are required to improve (C).

Accreditation, based on administrative record files and on-site visits, is valuable for a five-year period, but hospitals that went through the accreditation process after 2013 are now required to undergo a paper-based assessment checking for improvement on the third year. Since 2013 there are five types of accreditation depending upon the function of hospitals:

- for general hospitals (type 1), which are small hospital to support community care in small geographical area
- for general hospitals (type 2), which are main hospitals to support acute care in larger geographical area
- rehabilitation hospitals
- chronic phase hospitals, which have long-term care beds and deliver care for chronic conditions
- psychiatric hospitals.

It is worth mentioning that some other hospitals are engaged in international accreditation programmes such as JCI. As of 2014 for example, eight hospitals were accredited by the JCI, but this number is likely to increase rapidly in the years to come. Overall, there are a number of accreditation agencies that operate in the Japanese hospital sector with divergent minimum standards and qualifying criteria.

The reporting of adverse events in the hospital sector is improving

From 2004, data on medical adverse events have been systematically collected and analysed by the JCQHC's Division of Adverse Event Prevention. Participation in this project is made mandatory by the Medical Care Act Enforcement Ordinance for a certain set of hospitals and facilities (see also Chapter 1). Near miss reports are also collected by some hospitals but on a voluntary basis.

Founded in 2004, the JCQH's Center for Medical Adverse Event Prevention (now called the Division of Adverse Event Prevention) is responsible for the collection of adverse event information. It analyses medical near miss or adverse event information, compiles quarterly reports and organises workshops (JCQHC, 2012). The overarching aim of the project is to promote patient safety by sharing information with not only medical institutions but also the general public. To this end, quarterly and annual reports around medical adverse events are issued, workshops organised and warnings or guidelines published. Information related to medical safety is widely shared across users, health care professionals, facilities and the government. To prevent medical accidents, warnings and reports are also published by the JCQHC. Between January and December 2012, the JCQHC received 2 882 reports of medical adverse event information, while 347 were reported by voluntarily participating medical institutions. Reporting adverse events has gradually become an established practice over the eight years since the project began (JCQHC, 2012).

Clinical guidelines are not consistently implemented

While clinical guidelines are defined to help health care professionals in making clinical decisions, meeting defined standards and reducing unwarranted variation in care, their implementation in Japan is patchy and there are not enough incentives in place to encourage compliance.

In Japan, clinical guidelines were introduced in the late 1990s and are developed by professional societies. JCQHC has also been developing guidelines since 2007 through a rigorous and scientific approach. Nearly 160 guidelines are at present available on the JCQHC's website, the Medical Information Network Distribution Service. As demonstrated by empirical evidence however (Imai-Kamata and Fushimi, 2011, Sekimoto et al., 2004; Murata et al., 2011), the rate of adherence to clinical guidelines in the hospital sector appears low for certain clinical areas. A recent study has revealed inadequate implementation of the antimicrobial-prophylaxis guidelines, showing that some hospital providers are likely to practice according to their own standards or to the local hospital guidelines, regardless of the updated evidence-based criteria (Imai-Kamata and

Fushimi, 2011). In a similar vein, other studies (Sekimoto et al., 2004, Murata et al., 2011) show that antimicrobial prophylaxis practice in Japanese hospital was significantly different from recognised international guidelines. Variations in the use of recommended treatment methods in caring for AMI (Park et al., 2013) or ischemic stroke (Lee et al., 2013) were have also been observed.

Taken together, these studies suggest that rates of adherence to guidelines might be particularly low for some hospital physicians. Minimum quality standards and clinical guidelines might be promoted and encouraged at system-level to achieve more efficient clinical processes and deliver safe, patient-centred and appropriate care. As emphasised in Chapter 1, there is a need to develop strategy for improving professional understanding and adherence to disease-specific guidelines. Setting formal educational programmes, through continuous medical education for example, including learning sessions on disease knowledge and treatment, and practical sessions to prove the utility of the guidelines are specific avenues for consideration. In addition, there is not enough economic incentive to enhance adherence to clinical guidelines, which may also be an area that Japan wishes to consider.

Quality measurement and monitoring of hospital outcomes is not systematic

In Japan, the hospital information infrastructure at system-level is mostly focused on input and medical activities, including in-patient diagnosis and treatment. The introduction of the DPC payment system has been an important step towards providing a standardised information platform at system level, enabling the analysis of national trends in hospital utilisation, access, processes and costs. Although it only reaches 1 505 hospitals, those participating in the DPC programme are required to report administrative claims data and patient data for all discharged patients. The DPC database includes information around patient background, diagnoses, procedures, admission and discharge data (such as length of stay, type of discharge or readmission), claim data and other clinical detail. The introduction of the DPC system has provided hospitals with the basis for improving hospital processes of care, particularly around length of hospital stay. However, there are no outcome indicators in the DPC system to support performance monitoring and improvement at system-level. At the same time the DPC database, as well as the national health insurance claims are not exploited to compare variations in hospital case-mix or to identify appropriate case-mix by type of hospital.

Although Japan does provide quality indicators such as 30 day in-hospital mortality for AMI and stroke as part of the HCQI project at OECD, it is worth mentioning that indicators around acute care quality are estimated based on survey, while most other OECD countries use hospital administrative data. These quality indicators are collected from a national sampling survey conducted every three years on hospitals and clinics. The whole hospital sector is thereby not covered by the survey, underlining the need to strengthen the information infrastructure around hospital care in Japan. The extent to which these data are used to regularly report on health care quality also remains unclear (OECD, 2013b).

There are, however, an important number of local initiatives toward quality measurement where outcome indicators are collected on a voluntary basis. Provider associations and local hospitals, including for example St Luke's International Hospital, the Japan Hospital Association (JHA), All Japan Hospital Association (AJHA), National Hospital Organisation (NHO) or the Quality Improvement Project (QIP), periodically publish reports on hospital outcomes of care and provide comparative data, encouraging hospital benchmarking. These reports are communicated back to the participant hospitals to seek continuous quality improvement. The project undertaken by St Luke's hospital is particularly impressive and may serve as a model for the country. St Luke hospital has also been engaged in the Quality Indicator Project since 2004, which measures hospital outcome of care based on medical record data. The richness of the data infrastructure makes possible to appropriately explore any shortcomings and identify areas that may require improvement (see Box 3.1).

Although valuable, quality measurement initiatives are too fragmented and there is a critical lack of co-ordination at system-level, limiting the scope for monitoring and evaluating hospital performance. The under-developed data infrastructure around hospital outcomes means that it is difficult to establish a clear picture of the quality of care provided at hospital level. As further described in Sections 3.5 and 3.6, the quality governance structure could be consolidated through developing a stronger information system with a comprehensive set of quality indicators. This is especially important to evaluate the impact of the current reforms which seek to differentiate the function of hospital beds, with a view of guaranteeing safe and appropriate acute care.

Box 3.1. St Luke's International Hospital initiatives toward quality measurement

The value-added of the electronic patient record implementation in St. Luke's International Hospital has been maximised by the development of the Quality Indicator Project. A working group was created in 2005 gathering doctors, nurses, health information managers, engineers and clerical staff, to develop the St Luke's Quality and Health care Report. The overarching aim of the report is to assess and publish the quality of medical care provided at the hospital level.

The development of the project was a comprehensive process involving several steps:

1. identification of international experience
2. implementation of a survey in hospital departments to identify which consistent indicators could be collected
3. compilation of sample data which was supplied to each department for discussion and data validation.

As part of the programme, quality of hospital care is evaluated based on three aspects: structure, process and outcome. Indicators with priority need for improvement have been identified, and target values have been set to be achieved within a year. These indicators are calculated each month, their changes are observed and analysed, and improvement proposals are devised and implemented. Discussions with hospital managers point to the need to give performance feedback to hospital physicians as a key instrument to achieve quality improvement.

Other measures and actions are also undertaken to continuously improve hospital outcome of care. Workshop, seminars and training sessions are organised for specified departments to update medical knowledge around new drugs, devices or latest evidence-based-medicine. Evidence shows that large improvements in blood glucose control of diabetes patients have been achieved since the setting-up of these workshops. Beyond workshops, St. Luke's hospital also revises guidelines and adopts new rules of practice. Facilities and equipment are also adapted to facilitate continuous improvement of quality. The organisation of regular conferences or meetings between doctors is another tool used to drive medical performance through improving communication. This approach has been very successful for Acute Myocardial Infarction patients. Emergency physicians and cardiovascular doctors, for example, had the opportunity to specify the 'rule' for care procedures regarding a patient with suspected myocardial infarction during these conference. Since then, the proportion of myocardial infraction patients who received percutaneous coronary intervention within 90 minutes of arrival to the hospital has improved by nearly 20%.

Source: St. Luke's International Hospital Quality Indicator 2011. *Cutting-edge Approach by St. Luke's International Hospital. Measuring and improving quality of medical care.*

3.5. Challenges lie ahead, especially around driving further gains in hospital efficiency, and in securing better outcomes of care

Besides setting-up measures to strengthen and deepen the data infrastructure in the hospital sector, other challenges remain, particularly around a need to drive improvement for the sector as a whole. As well as continuing its efforts toward greater specialisation of hospitals and the functional differentiation of hospital beds, other key challenges for Japan relate to the inappropriate use of hospital beds (i.e. used for non-acute medical attention), the incentive structure associated with the payment system, the shortage of specialist physicians and the growing pressures placed on in-hospital emergency departments.

Many acute hospital beds are being used inappropriately

While Japan had the highest number of acute hospital beds and longest length of hospital stay across OECD countries (see Section 3.2), it can be stated that some of these beds have been inappropriately used (i.e. used for non-acute medical attention). Several factors might account for the inappropriate use of acute hospital beds, ranging from the supply induced-demand-theory, the hospital financing system, to the important role hospitals have traditionally played in providing long-term care to the elderly population. One should note that based on the Regional Health Plan, functional differentiation of hospital beds will be pursued, thereby enabling a distinction between hospitals based on medical bed function (acute, convalescent and long-term care beds) (see next section).

The abundant supply of beds in Japan is likely to drive both admissions and the average length of stays. The well-known Roemer's Law – "a built bed is a filled bed" – has been extensively validated by empirical evidence (Henke et al., 2009), showing a positive relationship between bed supply and hospital utilisation. Although the underlying theory has to be proven empirically in Japan, the important density of hospital beds might have provided hospitals with incentives to keep patients much longer than medically necessary. Accordingly, hospital providers might have used their discretionary power to keep patients longer when they faced difficulties in filling their beds. At the same time, inducement activities are more likely to happen given the structure of hospital payments that had been exclusively based on fee-for-services until 2003. The literature on the relationship between hospitals financing system and hospital activity, which notes that fee-for-service payments reward professionals for the number and type of activities they perform, strongly suggests that fee-for-services creates incentives for over-supply of health care services (WHO, 2007; OECD, 2010). Under the fee-for-service payment, Japanese hospitals might have had incentives to keep patient longer and to deliver more and lucrative services so as to maximise their revenue.

Another important underlying factor explaining the inappropriate use of hospital beds (i.e. used for non-acute medical attention) is the significant role hospitals had traditionally played in providing long-term care to the elderly population. As emphasised in Section 3.2, many hospitals beds have been dedicated to long-term services. Even today, there are 11 beds used for LTC purpose in hospital per 1 000 people aged 65 and over (based on 2011 figures). This "social hospitalisation" has dramatically risen since the 1970s, as demonstrated by the proportion of elderly patients in hospitals, which increased from 16.2% to 64.1% between 1970 and 2005 (Jones, 2009). It is worth mentioning that between 1973 and 1983, hospital provision became free for people aged over 70 years old. At the same time, the shortage of long-term care institutions and of nursing homes, alongside the reduction in family caregivers, have been key elements encouraging "social hospitalisation". It can nevertheless be stated that the introduction of the Elderly Health Care Act in 1982 and the Long-Term Care Insurance System in 2000 has reduced this trend. As already mentioned in Chapter 2, despite efforts to reduce dependency on the hospital sector, progress is slow and the primary and community settings should be better exploited.

Japan needs to consolidate its efforts toward the specialisation and the functional differentiation of hospital beds

While specialisation of hospital beds has been undertaken in a number of OECD countries under pressure to drive improvement in quality and reduce cost, this process is relatively new in Japan. Over recent decades, there were no major differences between small, medium or large hospitals in terms of the type of patients treated (except for some specialised hospitals such as the National Cardiovascular Center, for example). However, the functional differentiation of hospital beds is now regarded as a key area for action in the Japanese policy agenda. The health care reform implemented in 2014 introduced a system in which hospitals should report the details of the medical bed function (acute, convalescent and long-term care beds) to the prefecture in order to promote the specialisation and differentiation of medical functions.

The literature on the relationship between specialisation of hospital beds and efficiency is extensive. Specialisation is widely recognised as a fruitful tool to improve quality of care. Empirical evidence suggests that specialisation positively affects outcomes of care, mainly because specialised hospitals undertake higher volumes of similar treatments. Hospitals and physicians gain experience and the clinical processes become better organised. For example, nearly 70% of studies demonstrate that patients who receive care from physicians who undertake a type of surgery frequently are less likely to die (Halm et al., 2002). Although some of these studies do not make adequate adjustment for differences in patient case-mix, in some specialties there appear to be significant quality gains associated with increased hospital or physician volume (Nuffield Institute for Health, 1996). This is particularly true for surgery on cancer and procedures for cardio-vascular diseases. At the same time, specialised hospital are often more efficient than non-specialised hospitals because of the operation of economies of scale. Specialised hospitals making large investment in human and physical capitals can see a decrease in average cost as output increases, although economies of scale are most exploited in acute hospitals with less than 200 beds (Nuffield Institute for Health, 1996).

At present, there is a very uneven approach toward specialisation and the functional differentiation of hospital beds in Japan. The Nagano Prefecture is a success model to follow in that the prefecture has managed to assign different roles to the three municipal hospitals that previously did not co-operate to meet total regional population needs. In this prefecture, a first hospital has an emergency care function; another has a rehabilitation care function and the last one focuses on home care. Before the differentiation of function, the three hospitals performed all roles and there were no co-ordination. The three specialised hospitals are well functioning in delivering safe, appropriate and patient centred care. The specialisation of hospital beds is an important priority for Japan, particularly in clinical areas requiring improvement such as cardiovascular, cerebrovascular care or other diseases. There are also key opportunities for learning internationally, for example from Nordic countries such as Sweden and Denmark that have established large stroke or cardiac units (Indredavik, 2009; OECD, 2013c, OECD, 2013d), improving overall outcome of care while securing access to care.

Although the current payment system is likely to encourage shorter lengths of stay, it might paradoxically introduce perverse incentives for over-provision of hospital services

The case mix-based payment for hospitals which was introduced in 2003 is an adaptation of the DRG systems used in a number of OECD countries. As described in Section 3.2, the DPC payment system classifies patients according to their diagnosis and treatment, and mostly covers basic hospital inpatient costs (such as room or nursing) and simple procedures and drugs, while the fee-for-service component covers surgical procedures, expensive procedures or outpatient services. Although the DPC payment system has been introduced to reduce ALOS and to control hospital spending, it might not have provided enough incentives to increase hospital efficiency. Compared to the DRG payment scheme that is extensively used across OECD countries, the

Japanese system does not encourage a consistent allocation of resources and does not reward hospitals that deliver services more efficiently.

There are currently a number of concerns related to the DPC and FFS hospital payment system (Anderson and Igekami, 2011). First, the financing scheme is a per-day system with a decline in the reimbursement rate as the length of hospital stay increases. Although the decline in reimbursement rate is a fruitful way to encourage shorter lengths of hospital stay, it can negatively affect quality of care. Data from St Luke's International hospital, for example, show a rising trend of unplanned readmissions which might have been driven by shortens length of stay. At the same time, it should be remembered that the DPC component is no longer applied if the hospitalisation is prolonged beyond the last period. This means that hospitals facing extremely long lengths of stay are paid under the traditional fee-for-service component. Unlike the DPC scheme, the DRG prospective payment system is a per-case payment system where each patient is paid the same amount regardless of lengths of hospital stay, removing incentive for inducement activities.

Available evidence reveals that the introduction of the DPC has decreased lengths of hospital stay and reduced medical variations but has not led to a reduction in overall costs (Wang et al., 2010). In particular, empirical analysis indicates that the average length of stay has decreased from 20.4 days in 2002 to 18.8 days in 2003 (Wang et al., 2010). At the same time, readmission rates increased from 4.7% in 2002 to 9.7% in 2004, while some hospitals have been doing some clinical or diagnostic tests in outpatient departments before admitting patients so as to increase hospital revenue. Outpatient expenditures for example, increased by 4.1% between 2002 and 2003 in hospitals participating to the DPC payment scheme while inpatient expenditures remained the same (Okamura et al., 2005). Other studies show that the implementation of the new payment system has led to limited efficiency gain due to inadequate incentives related to both components (Brestremyannaya, 2013; Yasunaga et al., 2005; Yasunaga et al., 2006).

Most importantly, the DPC scheme covers basic hospital inpatient costs such as room, nursing or non-expensive laboratory costs and it thereby leaves an important number of acts and services to the traditional fee-for-services component, including surgical procedures, medicines, supplies used in operating room, and outpatient services. In the traditional DRG payment system a more extensive set of hospitals costs are covered and payments are made for the entire admissions (Schoenstein and Kumar, 2013). Under the Japanese case-mix payment system, hospitals have an incentive to overuse some hospital resources, and particularly to shift costs to services paid outside the DPC payment system (Anderson and Igekami, 2011). As a result, the payment system might limit hospital efforts to control spending, undermining efficiency.

Beyond adjustment made to promote better quality of care (see Section 3.2), there is a conversion factor in the DPC payment scheme to reflect the hospital's historical charges. This consists of taking into account the past reimbursement level when setting the new reimbursement level. The intention is to keep the reimbursement level more closely in line with historical levels and to guarantee the same level of reimbursement as before the introduction of the DPC. Although this adjustment system was used in the US Medicare programme after the implementation of the DRG system, it was been progressively removed in this case. However, the conversion factor might also limit hospital efforts to improve efficiency. The current DRG prospective payment relies entirely on DRG-based payments to hospitals (Anderson and Igekami, 2011). Efficiency gains may be greater in Japan if the conversion factor is progressively suppressed (as scheduled for 2018).

The Japanese hospital sector suffers from a number of imbalances which might affect adversely quality of care

The low number of physicians and specialists in Japan, together with the high number of hospital beds and high number of hospitals, suggest that hospitals in Japan might be understaffed, increasing thereby the workload of hospital physicians. A recent study (Wada et al., 2009) reveals that between 50% and 60% of physicians in Japan are satisfied with their job, a figure well below other OECD countries including Switzerland, Canada and the United States. While physician satisfaction is essential to ensure safe and patient-centred care, numerous studies have reported a decline in job satisfaction among Japanese physicians (Wada et al., 2009; Nishimura et al., 2014; Yasunaga, 2008).

Regional disparity in physician density and the current shortage of obstetricians, paediatricians, emergency physicians or surgeons, alongside the increasing demand for health care, has led to long working hours and a heavy workload for Japanese physicians (Yasunaga, 2008; Nishimura et al., 2014; Wada et al., 2009). In stroke care for example, a nation-wide survey revealed that Japanese physicians work an excessive number of hours per week compared to the general population (66.3 hours versus 45.8 hours), perhaps explaining physicians' high rate of 'burnout' (Nishimura et al., 2014). Beyond this, it is worth mentioning that the shortage of obstetricians or emergency physicians in hospital has resulted in a number of accidents due to difficulties in accepting large numbers of patients in emergency departments (Yasunaga, 2008). At the same time, the past decade has seen a public concern about medical errors and an increasing rate of complaints and appeals overwhelming Japanese physicians (Yasunaga, 2008). As a result, a significant number of physicians facing considerable pressures, a trend of physicians leaving their hospital posts to open their own clinics, or leaving the profession, has been observed (Wada et al., 2009; Yasunaga, 2008).

Physician pressure and the heavy workload have been negatively associated with quality of care and have also resulted in medical errors and undesirable outcomes (Seki and Yamazaki, 2006; Yasunaga, 2008; Nishimura et al., 2014). In the years to come, it will be critical for the hospital sector limit the burden on hospital physicians to guarantee safe and patient-centred acute care. At the same time, the expanding role or primary care physicians (see Chapter 2) will be a key component in such a process.

The increasing demand for medical services places pressure on in-hospital emergency departments

As noted in Chapter 2, there is an increasing demand for medical services in Japan, and notably in emergency departments, related in large part to the ageing population and the growing burden of long-term conditions (Ishii and Nagata, 2009).

Given the current shortage of emergency physicians and the increasing patient's need, emergency departments face difficulties in accepting patients. In 2007 for example, it is estimated that 16% of patients with a severe illness or injury who were sent to emergency hospitals by ambulance were rejected by at least one hospital. In a similar vein, it has be shown that ambulances tried to referred the patient to at least four hospitals in 3.9% of emergency cases, to at least six hospitals in 1.5% of cases and 11 hospitals in 0.3% of cases (Yasunaga, 2008). The acceptance refusal by emergency hospitals is not uncommon in Japan, causing delay in the transportation time for emergency patients. As a result, pre-hospital emergency care can be poor, such as delayed pre-hospital transportation services or lack of co-ordination between emergency departments, presenting a major public health problem in Japan, which might partly account for the high in-hospitals case fatality rates for AMI (Kitamura et al., 2013). To improve outcomes and improve quality of care, it is critical for Japan to achieve fast transportation and more efficient assessment – and hospital admission or acceptance – of emergency patients.

While the number of physician might be insufficient in emergency department to meet patients' increasing need (Yasunaga, 2008; Hamamoto et al., 2014), there is also evidence suggesting inappropriate training of health professionals in emergency department (Hori, 2010). Most secondary-care emergency hospitals are staffed by non-emergency specialists, meaning that physician specialty may not be appropriate to deliver care for all types of emergencies. In 2006 for example, only 1.1% of Japanese physicians were classified as 'emergency physician' with an acute care specialty, and not all the certified emergency physicians practice emergency medicine (Hori, 2010). Hence, when patient injuries or diseases do no match the physician specialty, patients are more likely to be refused and sent to another hospital.

3.6. How to further improve hospital quality of care

Beyond strengthening the information infrastructure underlying hospital care to ensure that ongoing reform does not adversely affect hospital outcomes of care, another key priority for Japan is to shift incentives and preferences for treatment towards care delivery settings other than hospitals. To shift long-term care out of hospitals, prevent inappropriate hospitalisation and provide follow-up care in primary and community care settings, Japan should look to strengthen the referral system, and consider reducing the number of hospital beds, whilst developing nursing home and alternative facilities for patients upon discharge. At the same time, Japan could make the DPC component more effective in rewarding the best-performing hospitals while keeping unnecessary unplanned admissions low, and also consider alternative uses of the fee schedule to better incentivise good outcomes of acute care. Last, the increasing demand for health care and the imbalance in the supply of hospital and emergency care call for policy reforms to ensure that numbers of hospital physicians match local needs, that scope to redistribute tasks to nurses and the broader clinical team is exploited and that pre-hospital care offers a more timely and patient-centred response.

A stronger information infrastructure would support both quality improvement and the functional differentiation of beds and hospital functions

Apart from the DPC system that only includes structural and process indicators, Japanese hospitals have developed their own sets of quality indicators with different level of coverage and sophistication. This fragmented approach toward quality measurement and monitoring means incompatible local projects, reducing the possibilities for evaluating hospital quality of care at system-level.

To encourage efforts to reduce unnecessary treatment and inappropriate use of hospital beds, as well as to help to monitor safety and effectiveness of care, Japan needs to further develop the collection and reporting of quality indicators. Section 3.4 has already described some innovative local approaches and revealed that at system-level some process indicators are reported for hospitals participating in the DPC programme such as lengths of hospital stay. It would seem desirable to strengthen the quality governance structure through developing a stronger information system with a comprehensive number of outcome indicators covering the whole hospital sector. Candidate indicators would be the prevalence of complications from surgeries, percutaneous coronary intervention mortality rate, number of patient undergoing CABG within 24 hours after PCI, incidence of pressure ulcer or patient experiences. Such outcome indicators would allow hospital physicians, managers and health authorities to have a direct measure of hospital performance. Performance feedback might also be provided to hospitals to explore any shortcomings and identify areas that may require improvement in a timely manner. In a similar vein, Japan could better exploit existing data such as the DPC database and the national health insurance claims to compare variations in hospital case-mix and identify a range of appropriate case-mix by type of hospital. Identifying factors that contribute to inadequate case-mix in hospitals could facilitate the functional differentiation and specialisation of hospitals beds.

It would also seem advisable to make this new set of quality indicators available to users to encourage informed decision making and increase public awareness of the benchmarking results. Promoting informed consumer choice based on benchmarking and public reporting might affect hospital reputation, which is a fruitful instrument to drive hospital quality improvement.

The central or prefectural governments could also play a more active role in this direction to ensure that data collection and monitoring are performed in each hospital in a systematic and coherent way. Greater leadership and improved co-ordination with the MHLW would be necessary to avoid incompatible local projects and to guide prefectures in such a process, while acknowledging the importance of developing a system which responds to local situations. This is especially important in light of the functional differentiation and specialisation of hospitals beds; a stronger information infrastructure will be needed to evaluate the impact of the reform on outcomes of care, with a view to ensuring that hospital quality of care is improving. Data collection, feedback on hospitals' performance and public reporting will be key components to fulfil the functional differentiation of hospitals beds and to reduce inappropriate use of hospital beds. The experience of other OECD countries could guide Japan in their efforts to collect and report quality indicators in the hospital sector. Australia and England for example (see Box 3.2) have a strong data infrastructure to monitor and report quality indicators in the hospital sector.

Box 3.2. Lesson from Australia and England for the collection and reporting of quality indicators

The Australian website MyHospital

The Australian website MyHospital gathers information derived largely from data recorded in a number of national hospitals databases held by the Australian Institute of Health and Welfare (AIHW). It contains service and performance information for over 1 000 public and private hospitals. Performance measures are available by location or by hospital name, and hospital profiles are displayed, and performance results can be compared. Indicators reported include surgery waiting times, waiting times for emergency departments, time in emergency department from arrival to departure, safety and quality, staphylococcus aureus bloodstream infections, hand hygiene, cancer services, cancer surgery waiting times, stays in hospital, admissions, average length of stay for acute and non-acute admissions and length of stay for selected conditions.

In addition, the Australian Institute of Health and Welfare provide comparative reports on hospital performance to empower patient choice. All Australians are able to compare how hospitals are performing against other one across the country. Public reporting gives clinicians, service providers and policy makers access to timely and impartial information about how hospitals are performing against national standards.

The Care Quality Commission in England

The Care Quality Commission (CQC) in England is the independent regulator of health and adult social care services in England. The CQC monitors, inspects and regulates hospitals to make sure they meet fundamental standards of quality and safety.

The CQC also publishes performance ratings to help people choose their preferred care provider. Indicators reported include, for example, waiting times for emergency admissions, waiting less than two weeks for all cancers; hospital cleanliness, time spent in emergency departments, as well as ten clinic indicators and 16 indicators focused on the patient.

Source: Information taken from www.myhospitals.gov.au/; www.cqc.org.uk/search/site/publications.

Strengthening the referral system has potential to reduce the inappropriate use of hospitals

Given the strong patient preferences for visiting hospitals, an important step to reducing inappropriate use of hospitals (i.e. used for non-acute medical attention) would be to strengthen the referral systems between primary and secondary care settings. A referral system is a key organisational feature of health care systems, having important implications for patients, health care quality and costs. Appropriate referral helps to ensure that patients receive the best possible care for their conditions; referral can improve care co-ordination and promote a cost-effective use of health resources. An effective referral system has the potential to steer patients through the health care system, ensuring an appropriate use of different levels of care.

While most OECD countries do have a formalised referral system such as Denmark, Finland, Ireland, or Portugal, Japan is one of the few OECD countries without an obligation to visit a family physician before accessing hospital services. Japanese patients have traditionally had strong preferences for visiting emergency department or hospitals without proof of medical necessity, while in many cases their health care needs could have been met more efficiently in the community or the primary care settings. That said, some hospitals such as Saku Central Hospital Advance Center, have successfully managed to implement a referral system between primary and secondary care settings, where users are well informed about the importance of consulting a family physician before going to hospitals.

As Japan is setting about strengthening its primary care sector through the creation of a distinct primary care specialty (see Chapter 2), it would seem desirable to strengthen at the same time requirements – or incentives – for referrals between levels of care. Although a provision exists to charge a co-payment if patients attend a hospital without referral, additional co-payment is not required for follow-up visits in a small hospital (with less than 200 beds) even when patients can receive appropriate care in primary care settings. The payment for follow-up visits, however, could be increased for patients who wish to continue seeing hospital doctors after their recommendation to consult in primary or community sectors. Beyond these demand-side incentives to access a family physician before visiting hospital services, there is evidence showing that organisational and professional educational interventions might improve the rate of appropriate referrals (Imison and Naylor, 2010). The dissemination of referral guidelines and the setting-up of educational strategies for patients and family physicians for example constitute potential interventions that are likely to improve referral rates and practice between primary and secondary care.

Japan should consider reducing the number of hospital beds whilst developing nursing home beds or alternative facilities for patients upon discharge

Beyond the referral system, another key priority for Japan is to shift opportunities for treatment towards care-delivery settings other than hospitals for post-acute care or non-acute care. As already emphasized, the hospital setting has traditionally been the dominant sector in the Japanese health care system with a large supply of hospital services. The ongoing government plan is to conduct hospital specialisation and to differentiate the function of hospital beds to rationalise the whole hospital sector. As this specialisation and functional differentiation occur, Japan might want to reduce the number of hospital beds and shift care away from the hospital sector through developing greater nursing home capacity for long-term care, or by setting up alternative facilities for patients upon discharge from hospitals (and in need for rehabilitation for example). These strategies are critical to ensure that peoples' needs can be met by the most appropriate service, and therefore improve both the outcomes and efficiency of care. Developing nursing homes and setting-up alternative facilities for post-acute care or non-acute care is essential to pivot the health care system toward primary and community care, which is particularly important given Japan's rapidly ageing population and the growing burden of chronic conditions.

A reduction in hospital beds could constitute an important measure to reduce dependency on the Japanese acute care setting. When fewer hospitals beds are available, the use of the remaining beds is likely to be modified. In most OECD countries a reduction in the number of hospital beds has been accompanied by a reduction in average lengths of stay and an increase in occupancy rates (OECD, 2013a). Available evidence shows that countries which have succeeded in reducing the number of hospitals beds have, at the same time, developed appropriate alternative facilities to hospital, to encourage rapid discharge and shift from inpatient to ambulatory interventions (McKee, 2004).

Although Japan is making considerable efforts to differentiate between medical functions, the experience of Denmark may be a useful example to follow. In Denmark, the number of hospital beds has fallen to 3.5 per 1 000 population in 2011 from 4.5 hospital beds per 1 000 population in 1997, compared to a fall from 6.1 per 1 000 people to 4.9 per 1 000 people among all OECD countries over the same period. Perhaps more importantly, beds reduction in Denmark has been accompanied by increases in nursing homes, as well as increases in social and nursing support to individuals living in their homes (OECD, 2013c).

As in Denmark, the reduction in hospital beds in Japan should be accompanied by the development of nursing home beds and of alternative facilities to shift long-term care out of hospitals, to prevent avoidable hospitalisation and to provide follow-up care in primary and community settings. They are other key examples for learning internationally, for example from Norway, which has begun to establish supplemented primary health care units (also called intermediate care facilities) (see Box 3.3). In Norway, the setting-up of these facilities has contributed to a reduction in avoidable hospitalisation and has also contributed to better health outcomes (OECD, 2014).

At the same time, this process will require a further development of care co-ordinators or care managers. Although in Japan some care managers can be in charge of patients with long-term care needs, once admitted to hospitals care pathways and care follow-up might be broken. Better co-ordination across health care settings is thereby called for to effectively transfer patients from acute care to community setting.

Box 3.3. The development of intermediate care facilities in Norway

To respond to the challenges of an ageing population, falling lengths of hospital stay, a rising rate of discharges and the resulting pressures on primary care settings, Norway has begun to establish supplemented primary health care units (also called intermediate care facilities in other OECD countries or “Distriktsmedisinsk senter” or “Sykestue” in Norwegian). According to the King Funds, these models of primary care services can be defined as any service structure or set-up, established by municipalities, “to provide short-term intervention to preserve the independence of people who might otherwise face unnecessarily prolonged hospital stays or inappropriate admission to hospital or residential care” (Stevenson and Spencer, 2002, p. 5).

In Norway, these new facilities will have a key responsibility in taking care of patients upon discharge from hospital, or where there is a risk of admission to hospitals when the condition could be appropriately managed at a lower intensity care setting. These units are service models for integrated care, financed jointly by hospitals and municipalities, for patients with intermediate care needs. By providing a mix of post-acute, rehabilitation and nursing care, these supplemented primary health care units are intended to curb hospital care costs through reducing hospital admissions, lengths of hospital stay, and preventing readmissions. While these primary care units are not explicitly set up for older people, several potential users would be frail elderly, chronically ill patients, or others patient needing post-acute care.

Broadly speaking, these facilities can be grouped into three main types:

- Municipal emergency beds. These new facilities provide care for patients for whom it is hoped hospitalisation could be avoided but who are too sick to remain in their homes, as well as patient at risk of exacerbation.
- Nursing homes with rehabilitation or post-acute care units attached to it and beds for short-term medical observation for patients discharged from hospitals. Typically, these facilities are staffed with nurses and nursing assistant. A single nurse is looking after a large number of patients during nights and week-end and with a physician on call.
- Other types of municipal services including rehabilitation units, local medical centers and dedicated units for patients with specific care needs (e.g., cardiovascular) or services at home.

Source: OECD (2014), *OECD Reviews of Health Care Quality: Norway – Raising Standards*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264208469-en; Stevenson, J. and L. Spencer (2002), “Developing Intermediate Care: A Guide for Health and Social Service Professionals”, The King’s Fund, London.

Japanese authorities should consider making the payment system more effective at rewarding quality of care, and remove incentive for over-provision of hospital services

It seems fair to say that the implementation of the DPC component has upgraded the quality of care in making hospital services and outcomes measurable and in strengthening competition (Jones, 2009). Hospitals participating in the DPC programme are required to report to the MHLW data on inpatient treatments, lengths of hospital stay or readmissions rates, providing hospitals with the basis for improving process of care and supporting informed decision making for patient. At the same time, the DPC component contains a set of adjustments to promote better quality of care such as the nurse staffing level, the compliance with safety standards or with medical record standards. Although these adjustments intend to act as drivers for quality improvement, they are based on structural and process indicators and there does not seem to be adjustment based on clinical outcomes as part of the DPC component.

The DPC reimbursement rate should therefore better reward the best-performing and the most-efficient hospitals. As noted earlier, the conversion factor that has been set-up to reflect the hospital historical charges is likely to reward the least efficient hospitals, and should thereby be removed (as planned for 2018) to better encourage hospital to improving their performance. A further option worth considering would be to introduce an adjustment rate based on clinical outcome rather than structural or process indicators. Candidate clinical outcomes might be the prevalence of complication from surgeries, the mortality rate form percutaneous coronary intervention, the number of patient undergoing CABG within 24 hours after PCI or patient experience.

At the same time, the fee-for-service component only rewards hospitals for the number and types of activities they perform. Given this background, Japanese authorities might want to take advantage of the fee schedule to introduce stronger financial incentives to improve quality of care in the acute sector. Steps have already been made in this direction with the introduction of financial incentives to increase hospital discharge and improve care co-ordination between levels of care. From 2008, hospitals admitting stroke victims or patients with hip fractures are offered an incentive to use post-discharge protocols and to contract with physician office to provide follow-up care upon discharge (Inoue et al., 2011). As described in Table 3.1, the 2014 fee schedule further introduces financial incentives to encourage hospital discharges and also to foster co-operation between hospitals, clinics and community care.

Table 3.1. The 2014 fee schedule revision

Subjects	Objectives	Requirements
Improve hospital discharge	Provide incentives for general hospitals to have a role in discharging patients at home	More than 75% patients discharging to home, nursing home or hospitals for rehabilitation
High quality in rehabilitation ward	Provide incentive to provide high-quality rehabilitation care and to discharge patients to home	Place a full time physician and social worker at each ward The physician is required to have experience of rehabilitation treatment for more than three years The social worker is required to have experience of co-ordinating discharge for more than three years
Home care provided by visiting nurse	Provide incentives to provide high-quality home care	Place more than seven nurses Provide home services 24 hours a day Report the government about the services each year

Source: Author's own work based on information provided by Japanese authorities.

Although these financial incentives to provide appropriate follow-up on community care might steer significant improvement in quality of care and reduce inappropriate use of inpatient hospital services, there is room to better link payment to desired hospital outcomes of care, particularly around areas that require improvement. As in Korea, Japanese authorities might want to develop a pay-for-performance programme (P4P) designed to reward improvements in clinical care and patient outcomes (see Box 3.4). Korea has made a lot of progress in the quality of care for AMI and caesarean deliveries following the implementation of its so-called *Value Incentive Programme*. Another potential option would be to use the fee schedule to enforce compliance to clinical guidelines. Financial incentives to comply with clinical or practice guidelines might have favourable effects on hospital physicians' adherence, while driving improvement in quality of care.

Box 3.4. The Value Incentive Programme in Korea

The introduction of a pay for performance scheme in Korea's hospitals is one of the more innovative policies to use financing to drive improvements in quality of care across OECD countries. Launched in 2007, the Value Incentive Programme (VIP) initially sought to cover Korea's tertiary hospitals in seeking to improve Korea's performance in two areas of comparatively poorer performance amongst OECD countries: acute myocardial infarction (AMI) and the proportion of caesarean deliveries.

As part of the VIP, Korea started to publicly publish hospital specific mortality indicators to highlight which hospital need improvement. Accordingly, hospitals are ranked according to their performance in delivering good quality clinical care and patient outcome. The participation to the programme was made mandatory among tertiary hospitals. The VIP works by computing "quality scores" for each hospital on their performance in addressing acute myocardial infarction and delivering an appropriate amount of caesarean deliveries (see Table 3.2 for indicators used). The composite scores are measured on a yearly basis and compared against a hospital's previous performance, with 2007 as the baseline year. Each year, hospitals are distributed into one of five grades according to their score. These grades are critical to determining whether a hospital receives a financial bonus as a reward for good performance.

Box 3.4. The Value Incentive Programme in Korea *(cont.)*

As demonstrated by Table 3.2, results from the VIP suggest performance is improving in large tertiary hospitals, with improvements made on AMI treatment performance and outcomes over the three years since the programme was established. There was a 1.55 points increase in the quality score for AMI between 2007 and 2008, and a cumulative improvement of 5.28 points from 2007 to the end of year three in 2009. Data indicates an observable reduction in caesarean sections, with the rate dropping by 0.56 points between 2007 and 2008.

Source: OECD (2012), *OECD Reviews of Health Care Quality: Korea 2012 – Raising Standards*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264173446-en.

Table 3.2. Indicators and changes in performance for acute myocardial infarction under the Value Incentive Programme

		Baseline (late 2007)	2008	2009
AMI	Thrombolytic drug administration rate within 60 minutes of hospital arrival	70%	86%	91%
	Primary PCI performance rate within 120 minutes of hospital arrival	85%	89%	96%
	Aspirin administration rate at hospital arrival	98%	99%	100%
	Aspirin prescription rate at discharge	100%	100%	100%
	Beta-blocker prescription rate at discharge	96%	98%	99%
	30-day case fatality	8%	8%	6%
Cesarean section	Risk adjusted C-section delivery rate	35%	34%	33%

Source: OECD (2012), *OECD Reviews of Health Care Quality: Korea 2012 – Raising Standards*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264173446-en.

Addressing imbalance in the supply of hospital and emergency care services

The increasing demand for health care and the shortage of specialist (such as anaesthetists, obstetricians, paediatricians and emergency physicians) have adversely affected hospital physicians' working conditions, which might in turn have led to poor quality of care in hospitals or in emergency department (see Section 3.5). Japanese authorities have already identified the need to loosen the policy of restricting the number of physicians. The Japanese Government has increased the admission capacity of existing medical schools since the fiscal year (FY) 2008 and as a result, medical students quota has been increased by 1 509 securing 9 134 new medical students in the FY 2015. Further, the Japanese Government has subsidised the establishment of Community Health Care Support Centres from 2011 (set up at the prefectural level). The overarching aim of the centre is to analyse the shortage of physician at hospital levels, to provide job placement services and support career development. As of 2013, there are 30 centres across the country and they sent over 1 000 doctors to hospitals facing physician shortage. Additional efforts also have been undertaken at the regional level. The Nagano prefecture for example has introduced student loans and subsidies to attract specialists in obstetricians, anaesthetists and radiation, with incentives to practice in the prefecture for a defined period of time. The prefecture also has developed child care facilities within hospitals to attract female physicians and has further implemented a "doctor bank project" aims at placing unemployed physicians from other prefectures into hospitals facing significant physician shortages.

Whilst these initiatives are adequate response to the hospital workforce issue, additional mechanisms are needed to guarantee that numbers of hospital physicians match local needs and to ensure that the current policy shift from inpatient to outpatient services do not put additional burden on physician workload.

First, it might be desirable to set up a rigorous approach to assess local needs in order to better match the supply of hospital physician with the health care demand, particularly in more remote areas facing important imbalances in health care resources. This would be required to set-up strategies encouraging hospital physicians to work in these areas by directing for example adequate financial resources in inpatient settings. Another possible action for consideration would be to redistribute tasks to nurses or to other health professionals. Some encouraging efforts are made to expand the role of health professionals in Japan but more has been done in other countries. Many OECD countries are using changes to scope of practice as a means of coping with health workforce shortages. One approach that has been adopted is nurse practitioners or physician assistants. In Canada or the United Kingdom for instance, these providers have been established to take on some of the duties that previously only doctors could perform. Available evidence indicates that the introduction of these providers roles do not compromise health care outcome and is likely to relieve pressure on hospital physicians.

Given the increasing pressures on emergency department, the development of physician assistant or nurse practitioner roles as seen in Canada can also be of relevance in Japan. In Canada, the integration of these providers in six emergency departments has improved patient flow in the emergency department and it has been associated with a reduction in waiting times, lengths of stay in the emergency department and in the proportion of patients who left without being seen (Ducharme et al., 2009). Most importantly, a more co-ordinated and faster response from emergency department is urgently needed. Thus far, the referral system between the three levels of emergency care has not been functioning. More efficient assessment of emergency patients is needed to select the most suitable and appropriate receiving hospitals for the patients' condition.

There are innovative examples that can be found in Japan as well, such as the *Tokyo Rules for Emergency Medical Care*[7] (see Box 3.5), which can serve as a model to be experimented across the country. Launched in 2009, the overarching objective of the *Tokyo Rules for Emergency Medical Care* is to support a timely response to patient, by transporting him to the most appropriate hospital. Evidence suggests that the *Emergency Medical Care Model* is a success[8] having potential to improve acute stroke care (Aruga, 2011).

The development of the *See and Treat* initiative or fast-track system might be alternatives option to improve patient experience with emergency care and achieve better outcome of care. *See and Treat* initiatives and *fast-track systems* have been set-up in several OECD countries including Canada, the United States, the United Kingdom or France (Berchet, forthcoming).

Both strategies involve rapid assessment and treatment in emergency department and have the potential to remove inefficient patient triage. *See and Treat* initiative involves the early assessment of patients by a clinical team led by a senior doctor who will then define a care plan and make a decision of whether the patient requires admission, referral or discharge. Evidence suggests that critical treatments and diagnostics are more timely delivered for emergency patients while minor injuries are appropriately transferred to an alternative provider, service or facility.[9]

In a similar vein, fast-track systems consist of treating patients with non-urgent conditions in a dedicated area within the emergency department. Medical attention is only undertaken by one person for low-urgency patients (such as residents, nurse practitioners, and physician assistants), while some patients in no need of emergency care are discharged to appropriate clinics. Fast track-systems apply for stable patients for whom medical workload is weak and do not require medical imaging or biology. There is strong evidence showing that fast track systems are effective in managing non-urgent patients, reducing the use of emergency department resources and increasing patient's satisfaction (Berchet, forthcoming).

Box 3.5. Tokyo Rules for Emergency Medical Care

To provide prompt and appropriate emergency medical attention, the “Tokyo Rules for Emergency Medical Care” has been set-up to develop “Prompt admittance of emergency patients”, to “Conduct triage” and to support “Tokyo resident’s understanding and participation”. As part of these efforts, emergency co-ordinators are established to achieve more timely and patient-centred response. The following rules are defined:

Rule 1: Prompt admittance of emergency patients

A system to promptly admit emergency patients will be developed through co-ordination with hospitals emergency department and related organisations, by developing the “Regional Emergency Medical Care Centers” playing a key role at regional level, and by assigning “Emergency Co-ordinators” at the Tokyo Fire Department to co-ordinate the admittance of patients across Tokyo.

Rule 2: Conduct “triage”

To protect the lives of patients who require immediate medical attention, “triage” to determine the necessity or order of clinical examination will be conducted in various situations in emergency care.

Rule 3: Residents’ understanding and participation

In order to protect the emergency medical system, the population from Tokyo is expected to use the system appropriately. Relevant information are publicly disseminated to increase patient’s awareness.

Source: www.fukushihoken.metro.tokyo.jp/joho/koho/tokyo_fukuho_e13.files/2013fukusi_eigo_3.pdf.

3.7. Conclusion

As many other OECD countries, Japan is seeking to specialise and differentiate the function of hospital beds under pressure to drive improvement in quality of care and reduce health care cost. Although these reforms are likely to contribute to more appropriate use of hospital beds and improve both outcome and efficiency of care, a comprehensive data infrastructure underlying hospital care is lacking.

At present quality measurement initiatives are too fragmented and there is a crucial lack of co-ordination at system-level, limiting the scope for monitoring and evaluating hospital performance. To encourage efforts to reduce unnecessary treatment and inappropriate use of hospital beds, as well as to monitor safety and effectiveness of care, Japan needs to further develop the collection and reporting of quality indicators. Other OECD countries experiences such as Australia and England could provide Japan with inspiration to establish a strong data infrastructure to monitor and report quality indicators in the hospital sector. While conducting the functional differentiation of hospital beds, another key priority for Japan is to develop and co-ordinate standards of care at system-level, and to encourage compliance to clinical guidelines to tackle lapses or inefficient clinical processes in the acute sector.

Beyond monitoring and strengthening of the information infrastructure, a worth priority for Japan is to shift incentives and preferences for treatment towards care delivery settings other than hospitals for post-acute care and non-acute care. To shift long-term care out of hospitals, prevent inappropriate hospitalisation and provide follow-up care in primary and community care settings, Japan should consider strengthening the referral system; reducing the number of hospital beds, while developing nursing homes for long-term care and alternative facilities for patients in post-acute phase. At the same time, Japan could make the DPC component more effective in rewarding the best-performing hospitals and also make a better use of the fee schedule to better incentivise outcome of acute care. The Value Incentive Programme in Korea provides important insight to steer improvement in quality of care for acute myocardial infarction for example.

Last, the increasing demand for health care and the imbalance in the supply of hospital and emergency care, call for policy reforms to ensure that numbers of hospital physicians match local needs and that scope to redistribute tasks to nurses and the broader clinical team is exploited. Other essential steps will be to offer a more timely and patient-centred response for emergency patients. In this regard, the experimentation of the new *Tokyo Rules for Emergency Medical Care* or international initiatives such as *See and Treat* models or fast-track systems that might have potential to improve patient experience with emergency department.

Notes

1. *Source of data*: Ministry of Health, Labour and Welfare, “Survey of Institutions and Establishments for Long-term Care”. Coverage: Data refer to a total capacity in “Long-term care and health service facilities for the elderly” and “Long-term care and welfare service facilities for the elderly”. The survey was conducted by prefectures and major cities until 2008 and via mail by commissioned private businesses from 2009 onwards.
2. Public hospitals also receive subsidies from the government.
3. The low number of gynaecologists and obstetricians in Japan is also related to the low fertility rates.
4. OECD acute care indicators for Japan are estimated based on a national sampling survey conducted every three year on hospitals and clinics which does not cover the whole hospital sector.
5. One should note that considerable care is required when analysing this data, especially in inferring that high-case fatality rates are a principle cause of high population-based mortality rates. Population-based mortality is an indication of overall population health, dependent on social and economic health determinants, preventive care and access to secondary care. While case-fatality rates of patients admitted with an AMI or stroke are intended to indicate the quality of hospital care, hospitals admitting a higher proportion of complex and more advanced disease cases will – possibly – have worse outcomes. Furthermore, the preceding step of ambulance care will determine which patients will be admitted alive to receive the necessary services. In the absence of a proper international method for adjusting for differences in case mix, it is difficult to precisely unpack this paradox in Japan’s indicators of quality of care for CVD.
6. Although, Korea reports the same paradox than Japan, it is important to note that Korea has made significant progress in cardiovascular care following the Value Incentive Programme (See Section 3.6).
7. Please refer to www.fukushihoken.metro.tokyo.jp/iryo/kyuukyuu/tokyorule.html.
8. Available at: http://medical.nikkeibp.co.jp/leaf/mem/pub/report/201401/534826.html.
9. Available at: www.sath.nhs.uk/Library/Documents/betterhealth/2012urgentcare/121017-edeffectiveapproachespaper2.pdf.

References

Anderson, G. and N. Ikegami (2011), “How Can Japan’s DPC Inpatient Hospital Payment System Be Strengthened? Lessons from the U.S. Medicare Prospective System”, Report of the CSIS global health policy center, available at https://csis.org/publication/how-can-japans-dpc-inpatient-hospital-payment-system-be-strengthened.

Aruga, T. (2011), “An Emergency Medical Liaison System for Acute Stroke Care in Japan: An Example of the Tokyo Metropolitan Area”, *Japan Medical Association Journal*, Vol. 54, No. 1, pp. 3-9.

Berchet, C. (Forthcoming), “Emergency Care Services: Trends, Drivers and Interventions to Manage the Demand”, *OECD Health Working Paper*, OECD Publishing, Paris.

Besstremyannaya, G. (2013), “The Impact of Japanese Hospital Financing Reform on Hospital Efficiency: A Difference-in-Difference Approach”, *Japanese Economic Review*, Vol. 64, No. 3, http://dx.doi.org/10.1111/j.1468-5876.2012.00585.x.

Ducharme, J. et al. (2009), “The Impact on Patient Flow After the Integration of Nurse Practitioners and Physician Assistants in 6 Ontario Emergency Departments”, *Canadian Journal of Emergency Medicine*, Vol. 11, No. 5, pp. 455-461.

Halm, E.A., C. Lee and M. Chassin (2002), “Is Volume Related to Outcomein Health Care? A Systematic Review and Methodoligic Critique of theLiterature”, *American College of Physicians-American Society of Internal Medicine*, Vol. 137, No. 6.

Hamamoto J., Y. Hiroaki and Y. Yamase (2014), “Impacts of the Introduction of a Triage System in Japan: A Time Series Study”, *International Emergency Nursing*, Vol. 22, No. 3, pp. 153-158.

Henke, N., S. Kadonaga and L. Kanzler (2009), *Improving Japan’s Health Care System*, The McKinsey Quarterly, May, McKinsey & Company.

Hideaki T., H. Nagata and H. Nogawa (2011), “The Current Shortage and Future Surplus of Doctors: A Projection of the Future Growth of the Japanese Medical Workforce”, *Human Resources for Health*. Vol. 9, No. 14, May.

Hori, S. (2010), "Emergency Medicine in Japan", *Keio Journal of Medicine*, Vol. 59, No. 4, pp. 131-139.

Imai-Kamata, S. and K. Fushimi (2011), "Factors Associated with Adherence to Prophylactic Antibiotic Therapy for Elective General Surgeries in Japan", *International Journal for Quality in Health Care*, Vol. 23, No. 2, Article ID mzq080, pp. 167-172.

Imison, C. and C. Naylor (2010), *Referral Management: Lessons for Success*, The King's Fund.

Indredavik, B. (2009), "Stroke Unit Care Is Beneficial Both for the Patient and for the Health Service and Should BeWidely Implemented", *Stroke*, Vol. 40, No. 1, pp. 1-2.

Inoue, Y., S. Jeong, K. Kondo (2011), "Changes in Hospital Performance After Implementation of Pay-for-Performance in Japan", *Clinical Audit*, Vol. 3, pp. 17-23.

Ishii, M. and T. Nagata (2009), "Emergency Medicine in Japan", *Japan Medical Association Journal,* Vol. 52, No. 4, pp. 211-213.

Iso, H. (2011), "Lifestyle and Cardiovascular Disease in Japan", *Journal of Atherosclerosis and Thrombosis*, Vol. 18, No. 2.

JCQHC – Japan Council for Quality Health Care (2012), "Project to Collect Medical Near-miss/Adverse Event Information. 2012 Annual Report", www.med-safe.jp/pdf/year_report_english_2012.pdf.

Jones, R.S. (2009), "Health-Care Reform in Japan: Controlling Costs, Improving Quality and Ensuring Equity", *OECD Economics Department Working Papers*, No. 739, OECD Publishing, Paris, http://dx.doi.org/10.1787/220005270870.

Kitamura, T. et al. (2013), "Ambulance Calls and Prehospital Transportation Time of Emergency Patients with Cardiovascular Events in Osaka City", *Acute Medicine & Surgery*, http://dx.doi.org/10.1002/ams2.25.

Lee, J. et al. (2013), "The Association between Health Care Spending and Quality of Care for Stroke Patients in Japan", *Journal of Health Services Research & Policy*, Vol. 18, No. 2, pp. 77-82.

Mastuda, S. et al. (2008), "Development and Use of the Japanese Case-mix System", *Health Policy Developments*.

McKee, M. (2004), "Reducing Hospital Beds: What Are the Lessons To Be Learned?", Policy Brief No. 6, European Observatory on Health Systems and Policies.

Ministry of Health, Labour and Welfare (2014), *Overview of Health Payment System 2014,* available at: www.mhlw.go.jp/stf/seisakunitsuite/bunya/0000038855.html.

Ministry of Health, Labour and Welfare (2011), "Patient Survey, Emergency Department Visits", provided to the OECD by the Ministry of Health, Labour and Welfare.

Ministry of Health, Labour and Welfare (2010), "Demand for Physicians", available at www.mhlw.go.jp/bunya/iryou/other/dl/07.pdf.

Murata, A. et al. (2011), "Evaluation of Compliance with the Tokyo Guidelines for the Management of Acute Cholangitis Based on the Japanese Administrative Database Associated with the Diagnosis Procedure Combination System", *Journal of Hepato-Biliary-Pancreatic Sciences***,** Vol. 18, pp 53-59.

Nishimura, K. et al. (2014), "Cross-sectional Survey of Workload and Burnout Among Japanese Physicians Working in Stroke Care: The Nationwide Survey of Acute Stroke Care Capacity for Proper Designation of Comprehensive Stroke Center in Japan (J-ASPECT) Study", *Circulation. Cardiovascular Quality and Outcomes,* Vol. 7, No. 3, pp. 414-422, http://dx.doi.org/10.1161/CIRCOUTCOMES.113.000159.

Nuffield Institute for Health (1996), "Hospital Volume and Health Care Outcomes, Costs and Patient Access", *Effective Health Care*, Vol. 2, No. 8.

OECD (2014), *OECD Reviews of Health Care Quality: Norway – Raising Standards*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264208469-en.

OECD (2013a), *Health at a Glance 2013: OECD Indicators*, OECD Publishing, Paris, http://dx.doi.org/10.1787/health_glance-2013-en.

OECD (2013b), *Strengthening Health Information Infrastructure for Health Care Quality Governance: Good Practices, New Opportunities and Data Privacy Protection Challenges*, OECD Health Policy Studies, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264193505-en.

OECD (2013c), *OECD Reviews of Health Care Quality: Denmark – Raising Standards*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264191136-en.

OECD (2013d), *OECD Reviews of Health Care Quality: Sweden – Raising Standards*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264204799-en.

OECD (2012), *OECD Reviews of Health Care Quality: Korea – Raising Standards*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264173446-en.

OECD (2010), *Value for Money in Health Spending*, OECD Health Policy Studies, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264088818-en.

Okamura, S., R. Kobayaski and T. Sakamaki (2005), "Case-mix Payment in Japanese Medical Care", *Health Policy*, pp. 282-286.

Park, S. et al. (2013), "Quality of Care and In-hospital Resource Use in Acutemyocardial Infarction: Evidence from Japan", *Health Policy*, Vol. 111, pp. 264-272.

Schoenstein, M. and A. Kumar (2013), "Managing Hospital Volumes: Germany and Experiences from OECD Countries", *OECD Health Working Paper*, OECD Publishing, Paris, http://dx.doi.org/10.1787/5k3xwtg2szzr-en.

Seki, Y. and Y Yamazaki (2006), "Effects of Working Conditions on Intravenous Medication Errors in a Japanese Hospital", *Journal of Nursing Management*, Vol. 14, No. 2, pp. 128-139.

Sekimoto, M. et al. (2004), "Practice Variation in Perioperative Antibiotic Use in Japan", *International Journal for Quality in Health Care*, Vol. 16, No. 5, pp. 367-373.

St. Luke's International Hospital Quality Indicator (2011), "Cutting-edge Approach by St. Luke's International Hospital. Measuring and Improving Quality of Medical Care".

Stevenson, J. and L. Spencer (2002), *Developing Intermediate Care: A Guide for Health and Social Service Professionals*, The King's Fund, London.

Tanigawa, K. and K. Tanaka (2006), "Emergency Medical Service Systems in Japan: Past, Present, and Future", *Resuscitation*, Vol. 69, pp. 365-370.

University of Tokyo (2014), "DPC Database", available at: http://plaza.umin.ac.jp/~hmp/cgi-bin/wiki/wiki.cgi?page=DPCDatabase.

Wada, K. et al. (2009), "Physician Job Satisfaction and Working Conditions in Japan", *Journal Occupational Health*, Vol. 51, pp. 261-266.

Wang, K. et al. (2010), "Impact of the Japanese Diagnosis Procedure Combination-based Payment System in Japan", *Journal of Medical Systems*, Vol. 34, pp. 95-100.

WHO – World Health Organization (2007), "Provider Payments and Cost-containment Lessons from OECD Countries", Technical Briefs for Policy-Makers, No. 2, WHO/HSS/HSF/PB/07.02.

Yasunaga, H. (2008), "The Catastrophic Collapse of Morale Among Hospital Physicians in Japan", *Risk Management and Healthcare Policy*, Vol. 1, pp. 1-6.

Yasunaga, H. et al. (2006), "Influence of Japan's New Diagnosis Procedure Combination-Based Payment System on the Surgical Sector: Does It Really Shorten the Hospital Stay?", *Surgery Today*, Vol. 36, No. 7, pp. 577–585.

Yasunaga, H. et al. (2005), "Impact of the Japanese Diagnosis Procedure Combination Based Payment System on Cardiovascular Medicine-Related Costs", *International Heart Journal*, Vol. 46, pp. 855–866.

Chapter 4

Quality of mental health care in Japan

Mental health care in Japan faces a number of challenges which require urgent action. The high suicide rate, high numbers of psychiatric beds, and long average length of stay have drawn attention to Japan's mental health system for all the wrong reasons. This picture is slowly changing. Commitment and effort over the past decade is generating positive change in the system: inpatient psychiatric beds are falling along with average length of stay in psychiatric facilities, and community care provision is increasing. These positive steps must be recognised and commended, but more remains to be done. Japan should continue to develop high quality care in the community for severe mental illness, while also turning attention to improving care available for mild-to-moderate mental illness. Despite a small number of innovative and impressive initiatives around measuring and promoting quality of care for mental health, extremely limited information availability means that a real picture of care quality is obscured. Efforts should be made to improve quality measures for all mental health care, and patient safety and care quality assurance should be priorities in inpatient care.

4.1. Introduction

The high suicide rate, high numbers of psychiatric beds, and long average length of stay have drawn attention to Japan's mental health system for all the wrong reasons. However, commitment and effort over the past decade are generating positive change in the system: inpatient psychiatric beds are falling along with average length of stay in psychiatric facilities, and community care provision is increasing. These positive steps must be recognised and commended, but more remains to be done. This chapter assesses mental health care quality in Japan, and makes recommendations for areas for improvement and growth.

This chapter starts by describing the organisation and delivery of services for mental ill-health in Japan, including the system's historical development, policy and governance, and the current shape of services for severe and mild-to-moderate disorders,[1] at service provision for child and adolescent mental illness, and at policies targeted at suicide prevention. Section 4.3 looks at available indicators of the quality of mental health care in Japan, suggesting that a lack of good information limits understanding of quality, but available indicators do give some cause for concern.

Sections 4.4 and 4.5 of this chapter build off challenges identified in Section 4.3, and make recommendations to improve the quality of mental health care in Japan. These recommendations are grouped around developing a patient-centred care system for severe mental illness, and improving mental wellbeing – and provision for mild-to-moderate mental illness – for the whole Japanese population.

4.2. Organisation and delivery of services for mental ill-health in Japan

Development of Japanese mental health system

Mental health care in Japan had, historically, been orientated towards confining patients – first to their own home, and later to psychiatric hospitals and institutions – for the protection of the individual, their family, and the public. This approach has contributed to the growth of a highly hospital-dominated mental health system in Japan, where inpatient care has been the primary form of service provision. From the early 1960s, long stays in psychiatric institutions for individuals with mental disorders became standard.

In 1900 the Mental Patient's Custody Law provided the legal grounds to confine mentally ill patients to their own home (Asai, 1999). The Mental Patient's Custody Law introduced administrative procedures under which individuals could be detained compulsorily in their house or psychiatric institutions, on the grounds of protecting patients' wellbeing and rights, as well as protecting the public. In 1919 the Mental Hospital Law was enacted to promote the establishment of public mental hospitals to provide treatment for people with mental illnesses. Few local governments established metal hospitals, and most local governments instead called on private hospitals to provide services. The Mental Hygiene Law was passed in 1950, which dictated that confinement of individuals with mental ill-health should be in psychiatric hospitals (Tatara and Okamoto, 2009). Involuntary admission was included, and could be made by administrative order, or by the proxy consent of a legally responsible person (Asai, 1999). After the introduction of the Mental Hygiene Law the number of psychiatric hospital beds started to increase, reaching 44 250 in 1955 (Tatara and Okamoto, 2009).

According to the European Observatory Health Systems in Transition report on Japan (Tatara and Okamoto, 2009) the National Survey of Mental Health in 1963 showed that the estimated number of persons diagnosed with mental disorders was 1.24 million and the number per 1 000 population was 12.9. Of these, 280 000 were estimated to need institutional care and 480 000 needed outpatient care. The government did begin to cover outpatient mental health care with the revision of the Mental Hygiene Law in 1965. This revision included a requirement for prefectures to build mental health centres with mental health counsellors on their staff, a Council for Mental Health in each prefecture, and subsidies for outpatient care (Tatara and Okamoto, 2009).

However, while other countries – such as Italy, the United States and the United Kingdom – began to reduce hospital beds in the 1970s, inpatient psychiatric beds in Japan continued to increase. In the 1970s political and social momentum around deinstitutionalisation was leading to the closure of psychiatric institutions in a number of OECD countries, driven variously by concerns about the human rights of patients, the development of new antipsychotic drugs, and an interest in recouping and selling some of the valuable state-owned infrastructure that was being used for psychiatric care and reducing spending on such inpatient care. In Japan, psychiatric beds increased up until the 1990s, from which point numbers have been gradually decreasing. An incident of great significance in the history of Japanese mental health care was the knife attack of the then US Ambassador to Japan Edwin Reischauer by an individual with schizophrenia in 1964. This attack led to significant public alarm, and contributed to further stigma towards mental illness, fuelled by a mass media campaign, on top of high existing levels of stigma directed towards mental disorders. This incident also contributed to the 1965 revision of the Mental Hygiene Law discussed previously.

The Mental Health Law was amended in 1987, and new provisions were introduced orientated towards the protection of human rights of individuals with mental disorders. New provisions included increased emphasis on voluntary admissions, a Psychiatric Review Board to review the necessity of involuntary hospitalisation and appropriateness of treatment, and to promote rehabilitation measures. In 1993, the Mental Health Law was amended again, with a particular focus on care in the community, including the authorisation of the building of group homes in the community for individuals with mental disorders (Tatara and Okamoto, 2009). The Community Health Care Law introduced in 1994 and further supported the establishment of a community-based mental health system.

The Mental Health Law was transformed to become the "Law Related to Mental Health and Welfare of the Person with Mental Disorder (Mental Health and Welfare Law)" in 1995. Amendments emphasised the need to provide welfare services for individuals with mental disorders, to expand community-based mental health programmes, to encourage the independence and social integration of individuals with mental ill-health (Asai, 1999), and to establish stricter criteria for involuntary hospitalisation. This amendment also meant that the law recognised for the first time that mental illness is a disability, and that individuals with mental disorders should be treated equally to those with physical disabilities.

Treatment for mental ill-health increased in the 1990s, with the estimated number of inpatients and outpatients increasing from 1 570 000 in 1993 to 2 170 000 in 1996 (Ito and Sederer, 1999). This increase in treatment can be interpreted as part of increased efforts to engage with mental ill-health – including outside of hospital settings –, as well as a slow move towards great "normalisation" of mental disorders. Since this point commitment to change in the mental health system has continued, and psychiatric beds numbers have fallen slowly. Nonetheless, psychiatric bed numbers remain high compared to the OECD average, and the average length of stay in psychiatric beds is long (see Figures 4.1 and 4.2).[2]

Policy and governance for mental health care

Mental health care in Japan is led by the Ministry of Health, Labour and Welfare (MHLW), with policy directions set by the Mental Health and Welfare Division in line with the guidelines registered by Mental Health and Welfare Law, following discussion with key stakeholders. The guidelines should then be implemented by physicians and providers. There is nominally some cross-ministerial collaboration around aspects of mental health policy governance, for example between health, employment, education, transport and others are involved in the establishment of Basic Plans for the Disabled (*Shougaisha kihon keikaku*) which cover disability related to mental disorders, but Ministries are responsible for implementing the Plan independently. Mental health concerns are also included in some of the work across other part of ministries (beyond the Mental Health and Welfare Division), for example in employment policy attention is paid to mental health concerns in areas such as supportive employment and return to work, and in education.

Japan's 2009 mental health strategy, updating Japan's 2004 strategy (Reform vision of the mental health and welfare), established the need to build up community services and reduce reliance upon inpatient care, and raised concerns around legislative dimensions of Japanese mental health care (including involuntary admissions) and the functional differentiation of service categories and quality of care (including concern about Japan's long average length of stay, and high number of inpatient beds).

The legal framework for mental health care is set out in the Law Related to Mental Health and Welfare of the Person with Mental Disorder (Mental Health and Welfare Law), which was revised in June 2013 and applied from April 2014 (the evolution of this legislation around mental health care is set out above). This legal framework is one of the central government's two key tools to enact change in line with policy direction. The June 2013 revision of the Mental Health and Welfare Law includes four key changes:

- adjustments around the availability of services – including the legal establishment of greater functional differentiation of inpatient beds, for instance distinctions between an acute psychiatric care bed and a long-stay psychiatric care bed; promotion of health and welfare services in the community; and promotion on interdisciplinary teams working in the community
- changes in establishment of "caretaker" provision for individuals with mental ill-health
- changes to provisions around involuntary admissions
- and provisions for consultations and review boards.

Based on the Medical Services Act, which for example regulates facilities, certification, standards, and inspection, the MHLW also sets fundamental principles to secure the delivery of health care – including mental health care – across the system as a whole. Through this Act, which is discussed in detail in Chapter 1, the MHLW indicates the national policy direction and secures funding required.

Perhaps the most important tool that the MHLW has to encourage change is the fee schedule for reimbursement for health care acts and pharmaceuticals – including mental health care – which is revised every two years. Because 90% of psychiatric hospitals, which are the dominant provider of mental health care, are privately owned (not-for-profit) institutions, change in care delivery is pursued principally through this payment system incentive. The Spring 2014 revision of this fee schedule included a number of important provisions for mental health care which seek to shift care delivery in line with policy objectives (see Box 4.1).

Box 4.1. Fee schedule revision 2014: Mental health

The Japanese Government revised the fee schedule for the whole health system in 2014, in line with standard biennial revisions. This included revisions to reimbursement for mental health services. There are six significant areas of change to the fee schedule (hospital care, community care, care for mental disorders in emergency departments, appropriate use of psychotropic medicine, encourage more timely and appropriate emergency admissions during a psychiatric crisis, and promoting mental health care for children and adolescents). Some of these changes are detailed further below. These changes are encouraged through set requirements, which can lead to the award of a set number of points. In Japan, the government set the fee schedule using a point. Every procedure, device, and treatment are individually 1 point is corresponded to JPY 10.

Hospital care

Changes the functional definition of certain psychiatric inpatient facilities and a push for a higher ratio of staff to patients were key objectives of revisions to the fee schedule for mental health care. Five new or revised fee schedule items were introduced for hospitals.

Strengthening community care

Promoting community care for patients, including the coverage of additional home care services and costs (four items in total).

Appropriate usage of psychotropic medicine

Concerns have been raised in Japan about the high rate of prescribing of psychotropic medicines compared to other countries, and the prescribing of multiple psychotropic drugs simultaneously, and revisions are designed to encourage more moderate and controlled prescribing practice. With the 2014 fee schedule revision the additional reimbursement schedule item for the use of psychotropic medicine has been removed. Furthermore, fee reductions will be imposed under certain circumstances: a 20% subtraction shall be made if three or more anxiolytics or sleeping pills, four or more anti-psychotic drugs, and four or more antidepressants are used; a 10% subtraction to the reimbursement fee shall be made if more than seven orally administered pharmaceuticals are used.

Emergency patients with mental illness

Weak procedures around emergency admission of psychiatric patients are an area of concern in Japan; there can be a significant delay before patients are admitted to an appropriate facility following a psychiatric emergency, especially during "out-of-hours" periods. Incentives have been introduced to encourage admission of patients directly to mental health care facilities, in an effort to reduce this delay.

Source: Ministry of Health, Labour and Welfare (2014*),* "Overview of Health Payment System 2014", available at: www.mhlw.go.jp/stf/seisakunitsuite/bunya/0000038855.html, accessed 2 July 2014; Ministry of Health, Labour and Welfare (2014), "Revision of the Fee Schedule", *a*vailable at: www.mhlw.go.jp/file/05-Shingikai-12404000-Hokenkyoku-Iryouka/0000035826.pdf, accessed 3 July 2014.

Some of the responsibility for mental health policy planning is decentralised. Prefectures develop Regional Medical Care Plans including for mental health for the region, provide guidance and supervise health care providers. Prefectures also have a central role in the administration of the Mental Health and Welfare Law, and are responsible for locating the two designated psychiatrists required to sign off on an involuntary admission, and are responsible for locating a hospital place for these involuntary admissions. Municipalities also provide welfare services to people with mental ill health, for example through Public Health Centres and Mental Welfare Centres, and should play a central role in the co-ordination of care for patients. Municipal governments also respond to region-specific challenges, for example areas of particular need or concern – keeping in mind national priorities.

Prefectural plans do include some specific targets related to mental health care provision, in particular around the policy direction of promoting discharge from inpatient care and transition to community care. Specifically, indicators to measure progress against targets in the fiscal period 2012-14 include: to increase average discharge rate amongst patients with less than one year of hospitalisation by 7% against 2008 rate; and to reduce the number of elderly (over 65) patients with a long hospitalisation (five years or more) by 20% in 2014.

Mild-to-moderate disorders

Mild or moderate mental disorders have less severe and debilitating symptoms than other (for example, psychotic) mental disorders, and would typically include frequently occurring disorders such as (mild and moderate cases of) depression and anxiety as well as disorders such as obsessive compulsive disorder (OCD) or somatoform disorders (OECD, 2014a). These disorders are not usually treated by the most specialised sectors of the mental health system, and typically do not require inpatient care. Instead, lower intensity services – often led by or in conjunction with the primary care sector – typically deliver the bulk of care for mild-to-moderate disorders in OECD countries (OECD, 2014a).

Care for mild-to-moderate disorders in Japan, for instance mild-to-moderate depression or anxiety, would typically be delivered at clinics in the community. Clinics in community can deliver pharmacological treatments, and some talking therapies such as counselling. A range of support services such as occupational therapy/counselling may be available, but varies between clinics. Individuals with mild-to-moderate mental health needs may also receive home visits – for example from community nurse – or phone counselling.

In many OECD countries primary care practitioners are the first point of access for tackling mental health problems, and often continue to deliver care and manage mild and moderate disorders even after the initial diagnosis. Family doctors and other physicians performing a primary care "function" in Japan can provide care to patients with mild and moderate mental disorders, and can prescribe a fairly standard rage of pharmaceuticals for mental health care (for instance first and second generation antidepressants, benzodiazepines) (OECD, 2014a). However, in reality, unlike in other OECD countries generalists or primary care physicians (except for those specialised in psychiatry) do not play the central role in the provision of care for mild-to-moderate disorders, mainly related to the fact that Japan has a relatively underdeveloped primary care system.

In general, whether or not care is provided by family doctors depends upon the expertise of individual doctors. Prefectures and major cities do organise training as a way to promote aspects of mental health care, which would include attention to mild-to-moderate disorders in some cases. Training might include depression care training for physicians, or training for mental health welfare specialists (nurses, case workers, school officials and others), but the focus is not usually on these common and less severe disorders, but rather on improving co-ordination around, for example, (severe) depression.

Some specialist services are available for mild-to-moderate disorders. Psychotherapy and psychological services, including therapies such as cognitive behavioural therapy (CBT), are sometimes available for certain patients and disorders.

Severe mental illness

While the prevalence of severe is much lower than that of mild-to-moderate mental illness, the primary focus of mental health systems has tended to be on the former (OECD, 2014a). Care for severe mental illness is usually delivered through a combination of hospital care, and care in the community. Across the OECD mental health policy, and mental health system planning and change, has been mostly preoccupied with organising and improving the care for these types of disorders – severe depression, schizophrenia, bipolar disorder and other serious and ensuring disorders.

Inpatient care

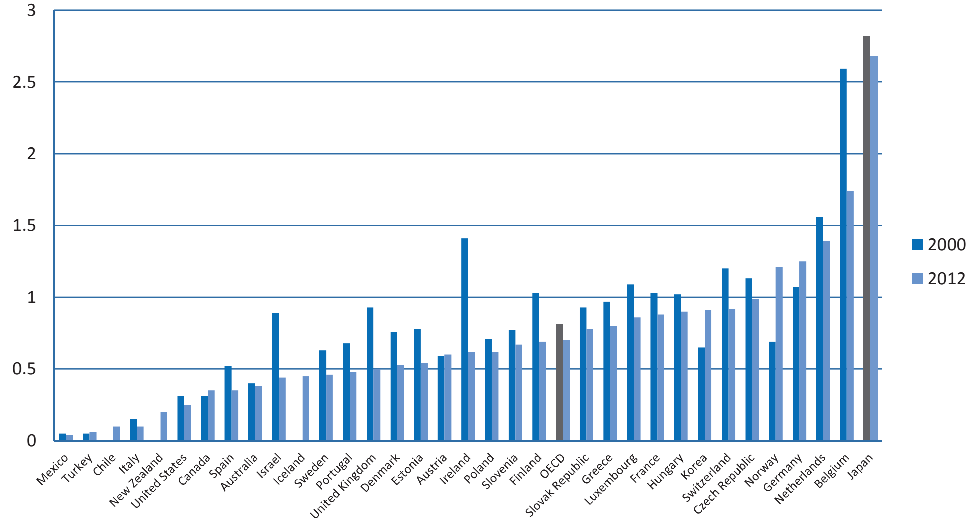
In Japan care for severe mental illness is provided primarily in inpatient settings, although the importance of care in the community is growing. Psychiatric inpatient care in Japan is provided for the most part by private hospitals – which account for 90% of all inpatient beds – but also by public hospitals funded by local and national government. In the event that a patient has concurrent mental and somatic health needs they may be transferred to general acute care facilities which would then treat their physical and psychiatric needs simultaneously. Patients with mild somatic needs can be treated in these private and public hospitals. Patients with severe somatic needs are usually treated in more highly specialised university hospitals, and some private hospitals which have developed capacity to provide somatic care to patients with highly acute psychiatric needs which general acute hospitals are not equipped or competent to treat. Although care provision varies between facilities, inpatient treatment could include pharmacological treatment, psychotherapy, psychological therapies, occupational care, and nutritional advice.

The Japanese mental health system's reliance on inpatient care is reflected in both the high number of inpatient psychiatric beds, and the very long average length of stay (ALOS) in inpatient settings (Figures 4.1 and 4.2). Definitions of mental health beds vary across countries and some beds which are not classified as mental health beds in other OECD countries – for example long-term care beds, and/or beds for dementia patients – are likely to be included in Japan, meaning that the OECD data on psychiatric care beds could give an inflated picture of the number of psychiatric care beds in Japan. The same can be said of data on average length of stay (for further discussion, see Yamazaki, 2013).

Nonetheless, many of the psychiatric care beds which are not acute care beds are still inpatient care beds for psychiatric patients, typically long-stay patients. While some OECD countries likely have such long-stay psychiatric beds but do not count them in the data on psychiatric care beds submitted to the OECD, many others have closed the vast majority of such beds, providing care in community settings as an alternative. In Japan long-stay inpatients in psychiatric beds may well have been institutionalised as part of a historically strong tendency to institutionalise patients with psychiatric disorders, along with patients with learning difficulties and dementia.

Average length of stay for psychiatric beds is also high compared to the OECD average but, like the number of psychiatric beds, has fallen across the past decade (Figure 4.3). Indeed, the falling average length of stay can be traced as far back as 1989; in 1989 average length of stay in psychiatric beds in Japan was 496 days, falling to 455 days in 1995, to 377 days in 2000. Restricting beds to hospitals delivering acute mental health care alone, ALOS was 56.7 days in 2011 and this is closer to the average across all OECD countries. On the other hand, when ALOS for all mental health care beds is considered, ALOS in 2011 was extremely long at 298 days, compared to an OECD average of 36 days.

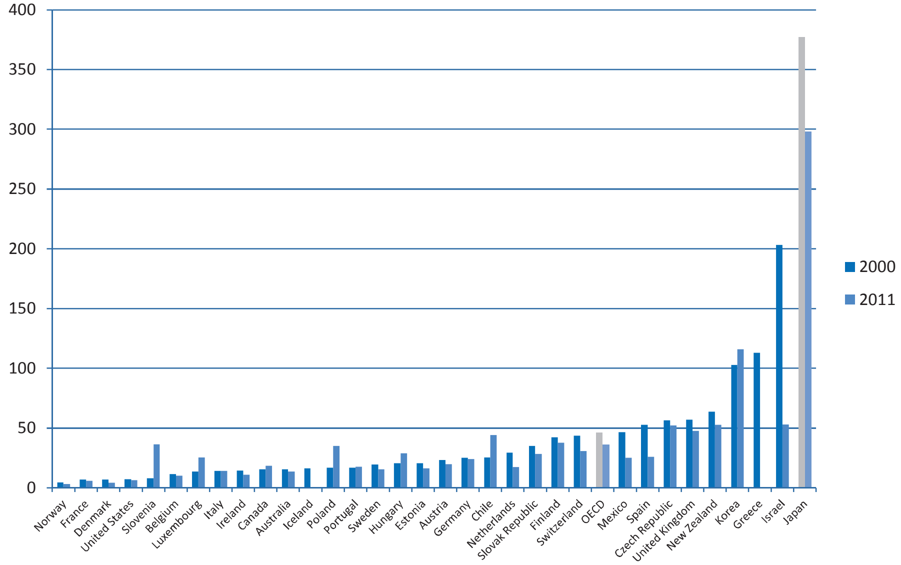
Figure 4.1. Psychiatric care beds per 100 000 population, 2000 and 2012



Note: In Japan, a high number of psychiatric care beds are utilised by long-stay chronic patients. In the Netherlands, psychiatric bed numbers include social care sector beds that may not be included as psychiatric beds in other countries.

Source: OECD Health Statistics 2014, http://dx.doi.org/10.1787/health-data-en.

Figure 4.2. Average length of stay in psychiatric care beds (days), 2000 and 2011



Note: In Japan, a high number of psychiatric care beds are utilised by long-stay chronic patients, which may mean that recording of average length of stay does not meet the same definitions as in other reported data, inflating reported average length of stay days.

Source: OECD Health Statistics 2013, http://dx.doi.org/10.1787/health-data-en; Japanese data from hospital reports.

The policy direction in Japan is, however, clearly turned towards shifting care provision away from inpatient settings and long inpatient stays, and towards care provided in the community. Recent trends – falls in inpatient bed numbers and ALOS – would suggest some success. This policy direction is also reflected in changes to incentive structures for care providers – for example, funding incentives (see Box 4.1) have been created for hospitals which treat and discharge acute patients within 60 days of admission, and a policy target of discharge within 90 days of admission.

Some mental health hospitals have been also renovated to improve physical amenities and greater functional differentiation of these hospitals has been implemented in order to provide a comprehensive range of services to meet patients' needs. However, the broad perception that mentally ill patients could be discharged out of hospital and could live independently in the community is far from widespread, and more positive attitudes of both staff and community need to be fostered (Ng et al., 2010).

The community-based infrastructure in Japan remains underdeveloped with relatively low numbers of staff working in the community, and low numbers of supportive housing facilities, coupled with a strong emphasis on pharmacological treatments rather than psychosocial treatments (Ng et al., 2010). Home visits can be organised by mental health hospitals and clinics, and home nursing organised by mental health hospitals and home nursing stations are health services provided to support the community life for people with severe mental disorders. In addition, within the country, several home visit support teams called ACT teams (Assertive Community Treatment) have been established and these teams provide home visit support to severe schizophrenic patients and deliver health care without relying on hospitalisation. There are also payments related to placement of nursing staff for Overnight Stay-based Training for Independence Support and placement of health care professionals for disability welfare services and they make it possible for individuals to live in the community while receiving health-related support. Nursing outreach visits and community oriented services in private hospitals and clinics have been established in order to support early discharge. The numbers of psychiatric day care centres, private psychiatric outpatients' clinics and social rehabilitation facilities have also increased.

Child and adolescent mental health care

Within the Medical Service Act, there is no distinction made between health care services for children, adolescents and adults but some health care institutions are specialised in providing care for children and adolescents. In addition, the MHLW provides subsidies for "Child mental health care network" projects implemented by prefecture. There is also a voluntary organisation called Japanese Council of Child and Adolescent Mental

Institution with participation through specialised hospitals. However, there is a shortage of hub hospitals which specialise in care for children's mental health, with just 21 hospitals with specialised child and adolescent wards across Japan. "Hikikomori", a group identified in Japan generally understood to be reclusive adolescents or young adults who withdraw from social life, often seeking extreme degrees of isolation and confinement, are a particular cause for concern.

Adolescent mental health counselling (including counselling for *hikikomori*) is part of counselling activities run by Mental Health Centres and Public Health Centres, as well as in services run by municipalities. The National Authority also has a "training on actions for adolescent mental health" and "(early diagnosis and mental) medical training for developmental impairment".

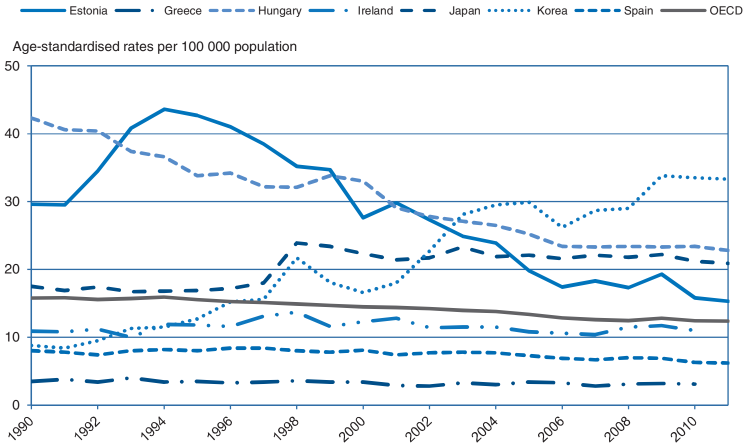
In a study of the mental health of people aged 16-35 in Japan who came to Mental Welfare Centres for counselling targeted at "*hikikomori*" (in this study, "*hikikomori*" was essentially defined as "those who stayed at home for more than six months"), found that 80% were given a diagnosis of a mental disorder in a research project led by researcher Kazuhiko Saito. Thirty-three per cent of reporting patients had a diagnosis of schizophrenia or mood disorder, 32% had generalised developmental impairments or mental deficiencies which required living and employment support, and 34% had personality disorders or adjustment disorders. Through a project to promote to support hikikomori, "Hikikomori community support centers" were established in prefectures and major cities and they will take the role of a primary counselling place, of which there were 39 in 2013.

Focus on suicide

The high rate of suicide in Japan is a source of considerable concern. While the suicide rate has been in falling recent years, following a high of 23.9 per 100 000 population in 1998, the suicide rate in Japan remains amongst the highest in the OECD, with 20.9 deaths by suicide per 100 000 population in 2011, compared to the OECD average of 12.4 deaths per 100 000 population.

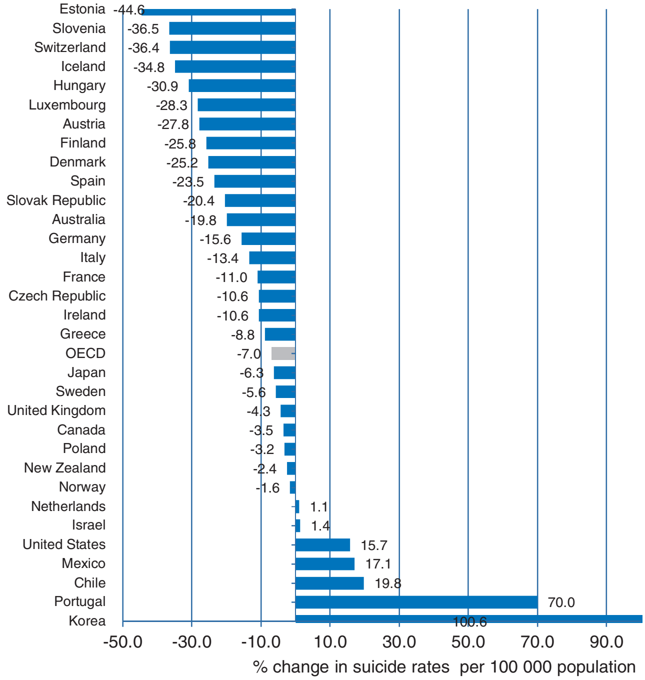
Furthermore, while suicide rates in Japan have fallen, they have not fallen as fast as the OECD average over the past decade (Figure 4.5). Only a very few OECD countries have seen an increase in suicide rate across the past decade, and those which have seen declines below the OECD average often already had a low rate of suicide in the year 2000. The fact that Japan's suicide rate has remained relatively stable and around a rate of 20 per 100 000 is cause for further concern.

Figure 4.3. Trends in suicide rates, selected OECD countries, 1990-2011



Source: OECD (2013), *Health at a Glance 2013: OECD Indicators*, OECD Publishing, Paris, http://dx.doi.org/10.1787/health_glance-2013-en.

Figure 4.4. Change in suicide rates, 2000 and 2011 (or nearest year available)



Source: OECD (2013), *OECD Health Statistics 2013,* OECD Publishing, Paris, www.oecd.org/health/healthdata.

The number of suicides and rate per population is reported each month by prefecture, and disaggregated by age, cause, and factor analysis. In 2012, "health problem" was the highest reported reasons for committing suicide. Based on a 1994 study of people who had made suicide attempts who were then delivered to acute care facilities, a high proportion of them, 75%, were found to have a mental disorder, 46% with a diagnosis of depression and 26% a diagnosis of schizophrenia (Asukai, 1994).

In June 2007, a broad outline of comprehensive measures on suicide was developed, led by the Japanese Cabinet Office. The Centre for Comprehensive Measures of Suicide Prevention also develops an activity plan and implements it. The Centre also organises training for staff care for attempted suicides.

A research study (ACTION-J), which assessed the impact of multiple case management following suicide attempts, was carried out through collaboration with multiple facilities. Case management (psychological training, support for care, support to utilise social resources to resolve problems in the background and others) was provided to people with suicide attempts who were delivered to acute care facilities, and this study examined the impact that this intervention had on the prevention of repeated suicide attempts. This study was meaningful because based on the co-ordination between acute care and mental health care, a network for clinical research for developing suicide prevention measures was developed, human resource capacity was increased, and data related to suicide in acute care facilities were collected. Based on the knowledge accumulated from this study on handling people with suicide attempts two handbooks, "Handling people with suicide attempts: handbook for staff in ER, acute care and emergency care centres" and "Mental health acute care guidelines: to handle patients with suicide attempts" were developed. Technical skills to handle suicide attempts are promoted in the acute care setting, for examples by conducting workshops for emergency and acute care staff, and for mental health care professionals, on how to respond to people who have made suicide attempts.

In addition to broad population-wide suicide prevention campaigns, and interventions targeted at suicide attempters or very high-risk individuals, some efforts have been made to prevent suicide by improving identification of psychiatric risk signs by all physicians. Notably, in the late 1990s the Japanese Medical Association raised concerns that of all suicide cases, most were already in touch with a physician (but usually not a psychiatrist), and many were showing signs of severe depression that went undiagnosed. Individuals in Japan may be particularly reluctant to seek help from a psychiatrist or specialised mental health services given the very high levels of stigma around mental ill-health in Japan, and may therefore seek help from physician from another specialisation, for example their family doctor, and may not present with obvious psychological distress but rather with unexplained physical symptoms. Patients presenting with (often multiple) physical symptoms such as joint aches, back pain or gastrointestinal problems, or with complaints such as sleep disturbance or changes in appetite, may have an underlying diagnosis of depression (Trivedi, 2004). Following their concerns that physicians across the Japanese health system were not able to identify signs of psychological distress which could help reduce suicide, the Japanese Medical Association reports that they began sharing information and guidance on depression with all doctors, first in 2004 and then again in 2009.

4.3. Understanding quality shortcomings in the Japanese mental health care system

Measures of health care quality are limited

Efforts to measure mental health care quality in Japan have started, and the smaller scale programmes that exist are quite impressive, but data collection is limited to localised initiatives developed by highly motivated practitioners, with no national platform. At present, only indicators on the rate of seclusion and restraint, and involuntary admission, are collected by providers and at a Prefectural level. Systematically collected information on the mental health care system is limited to structural indicators – facilities, staff numbers, bed numbers. Japan was not, for example, able to report on the mental health quality indicators collected by the OECD, namely readmission for bipolar and schizophrenia, excess mortality for bipolar and schizophrenia, suicide in inpatient settings or suicide after discharge (OECD, 2013; OECD, 2014a).

Some localised efforts to improve collection of indicators of mental health care quality have been started, but are not being rolled out nationally. The National Institute of Mental Health has been engaging with international efforts to improve quality indicator collection for mental health, for example the Assertive Community Treatment (IIMHL) Clinical Leaders Group project on quality of mental health care, which aims to develop and implement a balanced, inclusive, and common framework of measures that allows for international comparisons and benchmarking of system performance, with a long‑term goal of informing initiatives to improve mental health services in these countries (OECD, 2014a). Some new localised movements have been focused on reducing polypharmacy (over-prescribing of pharmaceuticals, both with multiple prescriptions of different pharmaceuticals, and with relation to high prescribed dosage, is anecdotally reported) (Ito, 2009). The Japanese Association for Emergency Psychiatry has started a web-based monitoring system to improve pharmacotherapy. A project led by the National Center of Neurology and Psychiatry has led to the launch of a quality feedback computer platform, wherein hospitals record both the rate of seclusion and restraint in the hospital by ward over time, and the diagnosis and function level of the patient, and set hospital-specific goals based on this information. This information should then be able to be shared between hospitals, and discussed between them.

While local initiatives are encouraging, there is a clear lack of a national strategic approach to measuring quality in mental health care. Without a more comprehensive programme of indicator collection – both a nation-wide collection effort, and the collection of a greater number of indicators – it is difficult both to fully understand the quality of mental health care in Japan, and to push for improvements. The collection of good information on the quality of mental health care is a challenge that many OECD countries are struggling with, but Japan should look to establishing national collection of some key indicators as a first step, for example those set out in Table 4.1. To maximise the utility of such collection, a nationally co-ordinated approach is likely needed, either led by the ministry, or led by an institution already involved in quality measurement with the explicit support of the ministry. There may also be scope to better exploit information provided through fee schedule data – data collected in the national database of health insurance claims – especially given the recent revisions to the fee schedule to include requirements such as timely discharge, and the establishment of treatment and discharge plans.

Table 4.1. Mental health quality indicators recommended by the OECD Health Care Quality Indicator (HCQI) Mental Health Panel

Area	Indicator name
Patient outcomes	Mortality for persons with severe psychiatric disorders
Treatment	Hospital re-admissions for psychiatric patients
	Use of anti-cholinergic anti-depressant drugs among elderly patients
	Length of treatment for substance-related disorders
	Visits during acute phase treatment of depression
	Continuous anti-depressant medication treatment in acute phase
	Continuous anti-depressant medication treatment in continuation phase
Co-ordination of care	Case management for severe psychiatric disorders
Continuity of care	Timely ambulatory follow-up after mental health hospitalisation
	Continuity of visits after hospitalisation for dual psychiatric/substance-related conditions
	Racial/ethnic disparities in mental health follow-up rates
	Continuity of visits after mental health-related hospitalisation

Source: OECD (2014), *Making Mental Health Count: The Social and Economic Costs of Neglecting Mental Health Care*, OECD Health Policy Studies, OECD Publishing, Paris, http://dx.doi.org10.1787/9789264208445-en.

Existing indicators give cause for concern

Despite the lack of comprehensive information on the quality of mental health care in Japan, there are other signs that suggest cause for concern. The high rate of inpatient beds points to a still-standing tendency towards hospitalisation, reinforced by an under-developed community care sector. While a community-orientated mental health system does not preclude a role for inpatient care (OECD, 2014a; Thornicroft and Tansella, 2002), Japan's mental health system is tipped too far towards hospitals.

Japan's long average length of stay in psychiatric institutions also gives cause for concern. When all psychiatric beds are included Japan's ALOS reaches close to 300 days; even excluding long-stay beds, the ALOS is estimated at 55.6 days, still longer than any other OECD country except Korea (Yamazaki, 2013). The long ALOS can point to poor provision in the community for individuals with mental disorders, or under-treatment in hospitals wherein patients are stabilised and/or sedated and contained but are not actively treated with timely discharge as an express goal. Most likely, the long ALOS points to both, suggesting shortcomings in the care available, and the quality of care provided.

Furthermore, if carefully managed there is no good evidence to preclude the possibility of successful discharge of even very long-stay patients into supportive community settings, for example small community-based residential care homes (Thornicroft and Tansella, 2002). A 13-year follow up of a large group of long-stay non-demented psychiatric patients in London discharged from a psychiatric hospital into supervised community living environments showed broadly positive results (Leff and Knapp, 2000). Patients were discharged to small residential homes (an average of 8 residents per home) with support staff; after 13 years the death rate and suicide rate had not increased, readmission to hospital was below 40%, and patients gained community living skills, and importantly, appreciated the increased freedom in their new homes (Leff and Knapp, 2000).

Japan's high rate of suicide could also point to unmet need for mental health care. While there are complex reasons behind why some people choose to take their own life – individual, social, cultural or economic factors, for example (OECD, 2013) – mental disorder is a major risk factor. Estimates suggest that over 90% of people who have attempted or committed suicide have been diagnosed with mental disorders such as severe depression, bipolar disorder and schizophrenia (Nock et al., 2008), with untreated, undertreated or mistreated mental illness a further risk factor. It is also likely that mild-to-moderate mental illness is untreated or undertreated. Common mental disorders such as depression and anxiety are highly prevalent – affecting an estimated 20% of the working-age population at any given time (OECD, 2014) – and widely undertreated – world-wide around 50% of common mental disorders go untreated (OECD, 2014a). While such estimates are difficult to establish for Japan, it is very unlikely that treatment options currently available for mild and moderate disorders are sufficient to meet needs. Untreated mental illness is not only a care quality concern, but can also be very economically costly; depression is estimated to cost Japan about USD 11 billion each year, of which USD 5.6 billion are accounted for in absenteeism costs, and USD 1.13 billion in lost productivity in the work place (presenteeism) (Okumura and Higuchi, 2011).

Assuring patient safety (adverse events) and monitoring care quality

While some steps to assure patient safety – a particular concern in inpatient facilities – and monitor care quality have been taken, more could still be done.

Rates of seclusion and restraint are collected nationally, and by region, and are important indicators for monitoring care standards in hospitals. Restraining patients physically (usually with straps on a bed can occur when hospital staff feel that a patient is out of control, presenting a danger to themselves or others, or is causing disruption. While staff working in hospitals, including nurses and psychiatrists, may feel that such action is necessary or justified, restraint can be very stressful and traumatic for the patient, and can result in injury or even death. A report on the use of restraint in England found that in 2011 alone there were eight deaths linked to the use of restraint, and in 2012 there were 1 000 injuries resulting from the use of restraint (MIND, 2013). Seclusion of patients, where patients are kept in a confined space, is often used for similar reasons to restraint, but again can be highly distressing to patients and can have a lasting impact on their mental wellbeing, and their confidence in hospital staff (National Mental Health Consumer & Carer Forum, 2009).

Monitoring of rates of seclusion and restraint are important given the distress and harm they can cause to patients, and because they can be a sign that inpatient settings and staff are not coping with patient needs. Incidents of seclusion and restraint should be kept as low as possible, and it is possible to reduce rates. In a large state-run psychiatric hospital in the United States, for example, rates of seclusion and restraint were reduced through staff training and changes to the treatment culture in the hospital, including changes to unit rules and language, changes to the physical characteristics of the therapeutic environment, and involvement of patients in treatment planning (Borckardt et al., 2011). Promoting a patient-centred care environment in hospital settings, and raising the need for awareness of patient safety concerns, can also have a positive impact (Wale et al., 2011).

Seclusion and restraint rates vary significantly between prefectures, with seclusion rates ranging from 1.6% to 5.2% of patients in 2012, and use of restrain ranging from use on 0.2% of patients to 5.9% of patients (National Center of Neurology and Psychiatry, 2012). This variation suggests significant room for improvement in some prefectures and hospitals. Even more worryingly, the national average rates for seclusion and restraint have risen from 2.4% and 1.6% respectively in 2004 (National Center of Neurology and Psychiatry, 2004), to 3.2% and 3.2% in 2012 (National Center of Neurology and Psychiatry, 2012).

The range of nationally collected indicators, which can be used to monitor patient safety and quality, could be expanded. Incidents of patient injury, self-harm, or inpatient suicide could be reported by prefecture and nationally, as seclusion and restraint, and involuntary admission are. Over-medication has been reported as an area for concern in Japan, and is an area on which the ministry is taking fee schedule-based action through adjusting prescribing fees and prescription fees when more certain drugs are prescribed simultaneously (in cases where more than three anxiolytics or sleeping drugs are prescribed, or more than four anti-depressants or anti-psychotics). Such policy, and indeed quality efforts more widely, would be very much supported by a broader arrange of relevant quality activities, for example systematic collection of data on prescribing practice and good clinical guidelines.

Developing a more comprehensive and ambitious information system for quality

Japan could be more ambitious in collection data and indicators on mental health quality. A number of quality indicators are in fact under development by a small but impressive group of hospitals, led by National Centre of Neurology and Psychiatry, and such efforts should be promoted. If quality indicator collection is made a priority, as it should be, it could also be incentivised using the fee schedule, or the collection and reporting of certain quality indicators could be included as a requirement in existing fee schedule items. Such information need not be reported publically by hospital, but could be reported by prefecture – as for seclusion and restraint – or could be anonymised in such a way that hospitals can identify their own data, but identification is not public.

As Japan develops community sector it should learn from other countries and embed data systems and outcome measurement, for example outcomes frameworks, from the start. England and the Netherlands both have sophisticated outcomes frameworks for mental health care that could serve as a model for Japan to follow (OECD, 2014a). The Health of the

Nation Outcome Scales (HoNOS) was developed in 1993 by the Royal College of Psychiatrists Research Unit to be used in England, and has since also been adapted and used widely in Australia and New Zealand. The HoNOS instrument has 12 items measuring four domains of behaviour, impairment, symptoms and social functioning, which are scored by providers (psychiatrist, nurse, psychologist or social worker, or by the clinical team), from 0 (no problem) to 4 (severe problem) yielding a total score in the range of 0 (best) to 48 (worst). Using HoNOS the individual patient's treatment outcome can be followed over time, and the use of HoNOS is not reserved for inpatient settings, and gives more of a detailed picture of outcomes than indicators like discharge or readmission rates.

In the Netherlands a comprehensive suite of performance indicators on outcome, safety and client satisfaction was developed. Since 2006, as part of an agreement between the Dutch Ministry of Health, the insurance market, and mental health service providers, service providers have collected relevant mental health outcome data and submitted these to a national database. The results of each service provider are published on the internet. After an adjustment to the tool in 2010 the number of performance indicators in mental health care was reduced from 28 to 10 indicators covering the three domains of effectiveness and support, safety and client satisfaction. This exercise is one of the most far-reaching efforts to measure outcomes in mental health care. The goal is for the majority of all mental health care episodes to be measured. Each year, the percentage of patients measured is to increase to eventually cover the whole population.

Given that there is a need for Japan to increase service provision for mental health in the community, and scope to improve information on quality in existing services, there is potential to learn from these outcome frameworks, as well as those seen in other OECD countries, such as Sweden and the United States (see OECD, 2014a, Chapter 4). Particularly in newly introduced or expanded services, quality monitoring and outcomes tracking should be integrated from the beginning. When used appropriately, such tools can be very valuable for service providers, medical practitioners, policy makers and patients themselves.

4.4. Establishing a patient-centred mental health care system for severe mental disorders

The Japanese mental health system has evolved in such a way that is centred upon inpatient facilities, which are at best the hub for a more diverse range of providers, but at worse – and too frequently – the only treatment option for patients with severe mental disorders. Japan must now move to providing high quality patient-focused care: patient needs and wishes must be at the centre of service provision, and must guide the patient's care pathway. A significant shift away from the relative dominance of inpatient facilities in Japan, and concurrent building-up of alternative care in the community, which would facilitate a truly patient-centred care model will be many years coming, as such a change is complex and time consuming to achieve. However, Japan must take concerted action now, and face some of the difficult decisions that are needed to put the patient at the centre of the mental health system.

Focus on care provision and incentives

The challenge now facing Japan, which it has begun to address for example through fee schedule incentives and legislative changes to the functional definition of beds, is to meet the mental health needs of both patients with acute psychiatric needs and chronic historically long stay patients with a reduced, high quality inpatient sector and high quality comprehensive care in the community. A plan recently prepared, and currently under consideration by the MHLW, suggests that the function of some existing psychiatric hospitals be changed to community or supported living institutions, with stays in these institutions restricted to a defined period just before the patient returns to the community, and should be organised based on patients' wishes.

Currently, the measures in place in Japan and under consideration in Japan, likely do not go far enough. In order to make hospital stays shorter and to make care in the community a reality for all patients who choose it, the right balance between care provision and incentive structures has to be achieved. Newly introduced fee schedule incentives around discharge planning, and discharge within 60 days are good first steps towards reducing reliance on hospital care. However, the 60-day discharge target introduced in the fee schedule in 2014 (Box 4.1) is still an incentive for a discharge well above the OECD average ALOS, and also does not consider readmission. Furthermore, the fee schedule as it stands does not fully address improving care, and creating new care options, for very long stay patients.

There is scope to be more ambitious still with the provisions included in the fee schedule, as one part of improving quality of care for severe mental illnesses. Reimbursement could cover a wider but more specific range of treatments and services, for example psychological talking therapy, participation in community engagement projects, or art or music therapy sessions. The fee schedule could also be used to pay for services in hospitals that would help facilitate safe and earlier discharge, and help improve quality of care. The Mental Health Nurse Incentive Programme in Australia provides payments to community-based general practices and private psychiatric practices, to engage mental health nurses to assist in the provision of co-ordinated clinical care for people with severe mental disorders. This programme has seen some success, with a positive effect on patient outcomes, which were measured carefully (OECD, 2014a). Japan could consider a similar approach – using the fee schedule to introduce new services and provisions in hospitals, which could contribute to improved quality of care.

Such developments should be backed up by ensuring that community care provision is sufficient, and of high quality. To achieve this, it will be necessary to make steady progress in streamlining the system, and shifting care away from inpatient settings, which will likely call for a significant investment in mental health care. For example, in other OECD countries Community Mental Health Teams (CMHTs) have been described as the basic building block for community mental health services (Thornicroft and Tansella, 2004), but are relatively under developed in Japan. CMHTs comprise a range of mental health professionals including psychiatrists, community psychiatric nurses, social workers, psychologists and occupational therapists who deliver a range of interventions for people with severe mental illness within a defined geographical catchment area (Thornicroft and Tansella, 2004). Because of the evolution of care for severe mental illness in Japan the growing emphasis on care in the community has built up around increasing outpatient care provision from psychiatric inpatient facilities, for example outpatient clinics run from psychiatric hospitals, or day care services from psychiatric hospitals. In the medium- to long-term, Japan's mental health system is in need of a stronger, more sophisticated community care structure.

While there is scope for some of the function of existing inpatient facilities to be changed, as is the stated intention of mental health policy in Japan, there is likely a limit to such proposals. There has been, for example, a push to encourage psychiatric institutions to provide outpatient care. This approach is probably preferable to maintaining the existing structure of inpatient beds, but to make living in the community a reality for individuals with severe mental illness community services and outpatient care need to be provided in a way that is accessible and convenient. Community care services would need to be easy to get to, and allow individuals to live in communities where they have support systems – friends, family, social services and health care services –, and opportunities to work, socialise, and pursue interests. When existing psychiatric inpatient facilities are geographically isolated, or difficult to reach, a transformation of their function to emphasise outpatient care will not help secure high quality community-based mental health care. The same can be said of transforming existing inpatient wards into community living centres – if patients remain far from communities, in isolated hospital-type settings, this functional change will not make a significant difference in the quality of care delivered, or the quality of life of these individuals.

The difficult reality for the Japanese mental health system is that if high quality mental health care for severe mental illnesses is to be firmly established, inpatient beds will have to be reduced significantly, and some psychiatric hospitals will have to close. To make this happen the Japanese Government will have to take a strong stance: in other OECD countries where many hospital beds and institutions were closed they were state-owned, for example in the United States and the United Kingdom, while in Japan hospitals are 90% privately owned. The Japanese Government will have the difficult task of reducing demand for inpatient care by improving community services, and reducing the incentive for keeping beds open, by cutting back on reimbursement for inpatient care.

Reducing unplanned admission through improving emergency care procedures

Access to specialist out-of-hours treatment is a core part of providing effective care in the community for severe mental illness. Without access to appropriate out-of-hours care, hospital care is the default option after 6pm, which can drive up unnecessary emergency admissions. Out-of-hours access to specialist care in Japan is primarily via emergency departments. Japan has begun to address this through the fee schedule changes in 2014, but there are more options that could be explored.

Some countries have more specialised crisis care provided outside of hospitals. Where they do exist – and they are relatively widespread in OECD countries (OECD, 2014a) – crisis and home treatment services can form a central role in out-of-hours access to care. A recent Cochrane Review of crisis intervention for people with severe mental illness (Murphy et al., 2012) found that crisis intervention – in the form of home care with elements of crisis intervention; mobile crisis teams; or crisis homes compared favourably to standard care in terms of reduced re-admissions and family burden, improved mental states and higher satisfaction with care by both patients and families although there were no differences in death outcomes. in the United Kindom (England) a key function of Crisis Resolution/Home Treatment Teams (CRHTs) is a 24 hour a day service 365 days a year. Research specifically on CRHTs in England has provided some evidence supporting cost-effectiveness (McCrone et al., 2009), but does not suggest that CRHTs per se make any difference to admissions (Jacobs and Barrenho, 2011).

Efforts should be made to support service user groups, to help promote and protect patient rights

A strong voice for mental health service users, and their families and carers, can be a crucial tool for promoting high quality of care for mental disorders. Service users can have a unique perspective on the experience of having a mental disorder, and the experience of using mental health services. These personal insights and experiences can be an important resource to help to identify gaps in the mental health system. Furthermore, considering patients' wishes, and ensuring that their human and patient rights are respected, are of upmost importance.

In Japan, where high levels of inpatient care, involuntary admission, and significant use of pharmaceuticals have been raised as concerns, good representation of patients' views and wishes will be an important way of protecting patients' basic rights. Mental health service user advocacy and representation is particularly important given the nature of mental illness, and the fact that individuals are often struggling with a disabling condition, restrictive circumstances, and high levels of stigma. Service user groups – and groups representing the families of service users – can also play a role in shaping the mental health system, and improving care quality. User groups can alert authorities to breaches in care and adverse events, promoting quality and patient safety. User groups can also lobby for care that most appropriately meets the needs of individuals with mental ill-health, based on individuals' own perceived needs.

Compared to other OECD countries – Australia, Italy, the Netherlands, the United Kingdom – where user groups are well established and powerful voices in the national mental health field, mental health user groups in Japan are much less influential. Given the important role that user groups can play in encouraging and assuring high quality care, Japan should look to strengthen the position of mental health service users. For the MHLW, efforts should be made to meaningfully engage with representatives of mental health service users and their families around mental health policy making and planning, and appropriate forums to listen to concerns should be found. Given that Japan does not have a single large mental health user group, one path to follow would be that of the Netherlands, who set up a National Platform for Mental Healthcare (Landelijk Platform GGz), a not-for-profit association with 16 employees that unifies 20 mental health consumer and carer organisations (Forti et al., 2014). This Platform has been actively involved in a range of policy initiatives, notably co-operating with the government in the development and modification of laws and legislation which affect the mental health system, and around youth mental health and compulsory treatment protocols, in developing quality standards, guidelines, and indicators.

Service user organisations, and organisations representing family members, could make their voice heard more loudly through strengthening collaboration between groups in Japan, and internationally. Given that stigma around mental ill-health in Japan remains high a strong and united voice for change seems particularly important. Some groups and associations appear to already work together in part, but systematic joint working, commonly defined aims, and strategic goals could increase the influence of these often marginalised and stigmatised groups. International support and insights will also be valuable. Some groups are already in touch with organisations in other countries, for example "COMHBO" (in Japanese: =特定非営利活動法人地域精神保健福祉機構コンボ) is in touch with mental health service users in Italy and elsewhere. Beyond opportunities for social exchange and dialogue, working internationally would mean that Japanese user groups could benefit from the experiences of groups in other countries, to help understand strategic approaches to increase their influence.

Integrating mental and somatic care should be a priority

A further dimension of moving the centre of care away from psychiatric hospitals and focusing on patient-centred care should be attention to the physical health needs of patients with severe mental illness, as well as their care needs for their mental disorder. It is well established that individuals with severe mental illness have poorer physical health outcomes than the rest of the population; individuals with severe mental illness die up to 20 years earlier than the general population, typically from heart disease and diabetes (OECD, 2014a). Data from England show a premature mortality rate among people with severe mental illness that is three-fold higher compared with the general population; in Australia a life expectancy gap of almost 16 years for males and 12 years for females has been observed (OECD, 2014a). This "excess mortality" is due to a complex combination of factors related to mental diagnosis and psychopathology, adverse side effects of psychotropic medication, lifestyle and health behaviours, professional attitudes and roles, and health system organisation and funding (OECD, 2014a). Japan would do well to explore the extent to which such health outcome and life expectancy differentials exist amongst the Japanese population with severe mental illness; the OECD reports on excess mortality for schizophrenia and bipolar disorder, but Japan is not yet submitting data for this indicator due to the lack of regular data linkage as discussed in Chapter 1.

These differences in life expectancy and health outcomes are not, however, inevitable. Action is needed in order to properly address these disparities. Japan should focus on two areas of change: a shift in the attitudes and roles of mental health professionals in treating the physical health problems of people with severe mental illness, and improved integration of physical and mental health care. With regards to the shift in professional attitude, awareness raising around the need to attend to the physical health needs of individuals with mental ill-health would be a first step (De Hert et al., 2011). Such training and awareness raising would need to be addressed both to mental health professionals, and to professionals in the rest of the health sector who may be unused to interacting with patients with mental ill-health, and would need extra support to deliver high quality care to these patients.

In other OECD countries efforts to improve the integration of mental and physical health care have often been focused on better co-ordination from the primary care sector, with co-ordination often led by GPs or family doctors. However, given Japan does not at present have a very developed family doctor or GP system, improvements in care will rely on improving co-ordination between the mental health sector and the wider health sector. Basic physical health checks systematically performed upon admission to psychiatric care, and including physical health needs in care planning and discharge planning, would be two possible approaches. Regular visits by a medical generalist to psychiatric inpatient settings, as part of outpatient clinics, and to community care settings, is another approach that could be explored. Research has also found that there is potential for mental health nurses to help improve the physical health of people with severe mental illness. With appropriate training (Bradshaw and Pedley, 2012), mental health nurses can play an important role in the assessment and monitoring of a patient’s physical health alongside their psychiatric needs: nurses can enquire about the quality of people’s dietary intake, level of physical activity, smoking behavior and sexual health, and actively collaborate with other health professionals to design or promote specialist health promotion programmes for people with severe mental illness (Robson and Gray, 2007; Bradshaw and Pedley, 2012).

4.5. Population-wide mental wellbeing: Unmet need for care

There are some identifiable gaps in care for mental disorders in Japan; service provision for mild-to-moderate disorders, such as depression and anxiety is poor relative to the expected burden of disease. The fact that service provision is limited is a significant concern, as it is well understood that untreated mild-to-moderate have a significant harmful effect on the physical health of sufferers, on economic productivity, and on the productivity of working-age populations (OECD, 2012; OECD, 2014a). Additionally, the mental health needs of population groups understood internationally to be particularly at-risk to mental ill-health – children and adolescents, and elderly populations – do not appear to be being met at present in Japan.

A stronger primary care sector and a greater role for primary care practitioners in providing for mild-to-moderate disorders

Stronger primary care-level provision for mild-to-moderate disorders is needed in Japan. Mild-to-moderate disorders are typically understood not to require highly specialised treatments delivered by psychiatrists or in inpatient settings in the vast majority of cases. Instead, in most OECD countries primary care practitioners take a leading role in treating mild-to-moderate disorders (see Table 4.2). When primary care-level provision for mild-to-moderate disorders is backed up by good training (both during medical training and as part of Continuing Medical Education), by support from specialist mental health care practitioners and support networks, and by good referral options should a patient need to access a more specialised level of care, it can be a highly effective way of delivering care to a large number of patients.

Some mental health care is already provided by the primary care level in Japan, but this provision could stand to be strengthened for three key reasons. Firstly, given that there is a high level of stigma around mental disorders in Japan (as in many other countries), individuals may well feel uncomfortable seeking help directly from a mental health professional. Individuals may worry about the stigma associated with visiting specialist mental health services. It is understood that many individuals prefer to seek help from a primary care provider, especially if they are already seeing this provider regularly, as would be the case when patients have an ascribed general practitioner (GP). The current lack of such a contact point in Japan – a provider from whom the patient feels comfortable seeking help and advice – may drive up under-diagnosis of mild-to-moderate disorders, and thus contribute to under-provision of care.

Table 4.2. Care provided by primary care providers for mental ill health

	Care provided by primary care providers for mental ill health
Australia	Patients with mild-to-moderate disorders, or refer them to specialist services including the ATAPS (Acess to Allied Psychological Services) programmes and the Better Access programme
Austria	Patients with mild depression, anxiety disorders, other mild disorders
Belgium	In principle, primary health care physicians can treat all patients, and the physician also has the freedom to refer patients or not
Canada	Mild-to-moderate depression, stress and anxiety-related disorders
Czech Republic	Anxiety disorders, depressive disorders, dementia
Estonia	Mild-to-moderate anxiety and mood disorders
Finland	Treatment of mild and moderate disorders (depression, anxiety disorders, insomnia, alcohol dependence)
France	Patient can address themselves directly to a psychiatrist (unless under 25, in which case there are financial incentives for obtaining a referral from primary treating physician)
Germany	Principally general practitioners (GPs) are able to carry out the first care of mental illnesses. As soon as possible patient get referral to specialist or hopital care, depending on severity
Hungary	Primary care manages mild mental health diseases i.e. anxiety, and manages interdisciplinary problems such as insomnia and dementia
Ireland	90% of mental health presentations occur in a primary care context and account for over 5 million occasions of care each year
Israel	Common mental disorders
Italy	General practitioners usually act as gatekeepers to the secondary level of care, often treating themselves symptoms of depression and anxiety, and referring patients suffering from more severe disorders to mental health services
Japan	Primary care physicians have varying degrees of mental health expertise and provide mental health services according to this varying expertise
Korea	Patients meet psychiatric specialists easily, and there is no settled family doctor system. For patients with mild mental disorders treatment can be at a primary care level
Luxembourg	Referrals and treatment depend on the professional judgment and the conscience of the providers
Mexico	Primary care services only treat people with mild mental disorders. If the person has a moderate or severe mental disorder, he/she is reffered to specialised care
Netherlands	The GP deals with mental health problems which are not severe, or where patients are stable, and plays a gatekeeping role
New Zealand	Screening, assessment, prescription of medication and primary mental health services that include packages of care. GP consultation and psychological interventions
Norway	Mild-to-moderate disorders, including anxiety and depression
Portugal	Family doctors provide care to people with common mental health disorders (i.e. depression, anxiety). Several local mental health services in general hospitals deliver outpatient care in the Primary Health Care Centres (PHCCs)
Slovak Republic	Prescription regulations authorise primary health care doctors to prescribe and/or to continue prescription of psychotherapeutic medicines but with restrictions
Slovenia	In primary care setting stress disorders, depression and anxiety disorders are treated, and patient with more severe symptoms are referred to specialists
Spain	Common mental disorders, and follow-up for severe mental disorders
Sweden	Organisation and delivery are managed regionnaly and locally and based on agreement and contracts between the regional goverment and the providers of local primary health care
Switzerland	Depending on the severity they can decide on their own to treat or to refer the patient to a specialist or to an inpatient clinic
Turkey	Mild-to-moderate mood disorders, anxiety disorders, and mild drug dependences (nicotine and alcohol)
United Kingdom (England)	Depression and anxiety disorders especially, but also other mental illnesses such as eating disorders, are frequently treated by general practitioners at a primary care level, although treatment is very variable across the country
United States	Primary care physicians provide care for a variery of mental health conditions, most typically conditions where there is less risk of self-harm or when prescribed medications have less serious side effects. Primary care physicians are more likely to provide care for some mood disorders, anxiety disorders, and attention deficit/hyperactivity disorder

Source: OECD (2014), *Making Mental Health Count: The Social and Economic Costs of Neglecting Mental Health Care*, OECD Health Policy Studies, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264208445-en.

Secondly, primary care practitioners are uniquely placed to identify unmet need mental health needs, even when a patient does not present with symptoms of mental distress. For instance, a patient may present with acute back pain or stomach problems, but have an underlying diagnosis of depression (Trivedi, 2004). A case like this is unlikely to be spotted if the patient presents directly to an osteopath or internist who do not have the experience or understanding needed to identify underlying mental disorders in such circumstances. Furthermore, primary care practitioners can remain aware of the risk of mental disorder for patients with particular somatic conditions; it is well-established that physical conditions can contribute to increased risk of mental disorder, for example the increased risk of depression after a heart attack or stroke (Norra et al., 2007; Carney and Freedland, 2008; Hackett et al., 2005). Primary care practitioners could help identify and treat depression in such cases if they are properly encouraged to do so, for example if this concern is emphasised during medical training, and/or if screening for such disorders amongst at-risk patient groups is established as standard.

Thirdly, a broad perspective on the needs of a patient – both mental and physical needs – can contribute to success in managing chronic disorders. Mild-to-moderate disorders contribute to poorer physical health, and can make the management of chronic conditions harder, and thus drive up health care costs. Notably, there is evidence of poorer outcomes for diabetes, COPD, weight loss and smoking cessation amongst patients with depression (DiMatteo et al., 2000; Egede and Ellis, 2010; Gonzalez et al., 2008; Schram et al.,2009; Naylor et al., 2012). A primary care provider who takes responsibility for managing a patient's multiple medical needs, taking a wider perspective than, for example, a diabetologist in a specialist care setting might, can contribute to the success of treatments for all of the patient's needs.

Mental health competency should be integrated into training for Japan's primary care speciality

While a stronger primary care system could stand to improve the diagnosis of mild-to-moderate mental disorders and improved mental health care treatment, such benefits are nonetheless dependent on ensuring competence of primary care providers. Crucially, with the development a new specialism for primary care (see Chapter 2 for further details) Japan has the opportunity to promote the mental health competency of professionals at the centre of providing primary care.

For the new primary care speciality, mental health should be at the heart of education, training, and accreditation. Alertness to mental disorders, and appropriate treatment, should be part of the core care responsibilities of these practitioners. A joint report of the WHO and World Organization of Family Doctors (WHO and Wonca, 2008) stresses the importance of pre-service and/or in-service training of primary care workers on mental health as an essential prerequisite for mental health integration, and reducing the treatment gap for mental health. The inclusion of mental health training for such primary care level practitioners is common in many OECD countries (OECD, 2014a), and with the development of this new specialty Japan has the valuable opportunity to effectively integrate mental health training for Generalists from the beginning.

In addition to training, there are a range of other mechanisms that can support the provision of high quality care for mild-to-moderate disorders by primary care-level practitioners. Specifically, provision for mild-to-moderate disorders at the primary care level can be strengthened, appropriate primary care-specific prescribing and treatment guidelines and appropriate specialist referral options have been shown to be effective treatment approaches for mild-to-moderate disorders. Primary care level clinical guidelines are in place in six OECD countries and in Canada and Ireland there are incentives and monitoring for guidelines and treatment protocols with sanctions for poor compliance (OECD, 2014a). Good networks among professionals can strengthen primary care delivery, while informal and formal linkages are a further way of improving knowledge and skills held in primary care (OECD, 2014a).

Specialised care for mild-to-moderate disorders needs to be increased

Unmet need for treatment for mild-to-moderate disorders is unlikely to be met fully by improved primary care provision, especially given that the primary care speciality that is under development will not be operating at full capacity.

It is recommended that Japan consider the expansion of evidence-based treatments for mild-to-moderate disorders, in particular increasing availability of psychological therapies such as CBT. Japan has the opportunity to both learn from the experiences of other OECD countries in approaching the expansion of CBT and other therapies, and in some instances can exploit existing resources to make greater treatment options available to the population rapidly and at a low cost. Even in countries where treatment and management of mild-to-moderate disorders by primary care practitioners is well established – for example in Norway and the United Kingdom – additional service delivery has still been deemed necessary (OECD, 2014a; OECD, 2014b). Specifically, there is great potential for talking therapies (psychological therapies) to be as effective as pharmacological treatments for disorders such as depression and anxiety (NICE, 2009; NICE, 2011), and to be a preferred option for patients (Layard et al., 2007), and to be an effective treatment when used in conjunction with pharmacotherapies. Investments may be needed to increase such specialist services, but given the estimated high cost of some mild-to-moderate disorders (see Section 4.3) effective treatments could help bring down the overall economic burden of diseases such as depression. As a first step of care, for patients with mild mental illness, or with a first diagnosis of mental illness, low-intensity therapies and self-led therapies can be effective. Bibliographic self-help and internet-based psychological therapies are gaining popularity in OECD countries as relatively low-costs ways of increasing care availability for common mental disorders (see Box 4.2).

Box 4.2. Computerised and internet-based therapies for common mental disorders

A range of computerised counselling courses are available on prescription from general practitioners in the United Kingdom, two of which – Beating the Blues and FearFighter – have been approved by NICE as effective evidence-based treatments. Beating the Blues is a computerised CBT course for mild depression, whilst FearFighter is a computerised CBT course specifically for panic and phobias. In addition, in Scotland "Living Life to the Full Interactive", a computerised CBT course for mild-to-moderate depression and anxiety supervised by a GP or qualified therapist, is widely accessible to all Scottish citizens who score a set "mood score" on a standardised test.

In the Netherlands a large number of online treatment modules (for depression, anxiety, alcohol, eating disorders, dementia, diabetes and co-morbid depression, stress at work and others) have been developed by mental health care organisations and the Trimbos Institute, the national institute for mental health and addiction. These programmes have been clinical effectiveness and cost-effectiveness, leading to positive recommendations from the government for large scale roll-out. In order to provide users with transparent information about quality, a "self-accreditation" tool has been developed that will help organisations assess the quality of their programme and provide it with a "quality label". Currently a trend of mobile eMental health apps is emerging, through which patients can be treated anytime, anywhere.

Source: NHS Choices, *Self-help Therapies,* www.nhs.uk/Conditions/stress-anxiety-depression/Pages/self-helptherapies.aspx, accessed 2 September 2013; Putters, K. et al. (2012), "E-health: Face-to-Facebook. Over E-health en zelfredzaamheid van patiënten in de ggz" [E-health: Face-to-Facebook. About e-health and self-reliance of patients in mental health care], Erasmus University, Rotterdam; Trimbos (2013), [Online], available at www.trimbos.nl/, accessed 8 July 2013; Riper, H. et al. (2013), "Preventie & eMental- Health kennissythese 2012" [Prevention eMental Health knowledge synthesis], ZonMW. Den Haag.

Most important will be the development of evidence-based services delivered by trained professionals, typically psychologists. Japan may struggle to provide a wider portfolio of psychologist-delivered services given the low number of psychologists; there were five psychologists per 100 000 population in 2010, compared to an OECD average of 26 per 100 000 (OECD, 2014a). However, other countries have found it possible to increase the numbers of psychologists providing psychological therapies for mild-to-moderate disorders relatively rapidly with targeted funding. In Norway the number of psychologists was increased significantly with the addition of over 150 psychologists between 1998 and 2008, following significant political and financial investment in building the workforce for mild-to-moderate disorders under the Escalation Plan for mental health 1998-2008 (OECD, 2014b).

In England the development of the workforce for mild-to-moderate disorders fell under the establishment of a specially designed programme of CBT (later expanded to include other psychological therapies) for mild-to-moderate depression and anxiety, under the Increasing Access to Psychological Therapies (IAPT) initiative (see Box 4.3). Prior to the establishment of IAPT – which was backed by an investment of GBP 177 million – the programme was strongly argued to have the potential to be not just cost effective but would pay for itself in the medium- to long-term; in "The Depression Report" (London School of Economics, 2006) the well-known economist Lord Layard argued that with better availability of evidence-based treatment for mild-to-moderate disorders as the indirect costs of mental ill health and sickness absences would drop, productivity would improve, disability claims would fall, and employment and tax revenues would increase as individuals return to work. Since the implementation of the IAPT programme recovery rates of patients who have passed through the IAPT programme have been found to be consistently in excess of 45% and approaching those expected from the randomised controlled trials that generated the initial NICE recommendations (Department of Health, 2012). Significant effects were seen for patients with higher depression scores, even though a lower proportion moved to recovery, suggesting IAPT services are effective across a range of symptom severity. Roll-out of IAPT across England continues, and is due to be available to all patients nation-wide by 2015. Potential cost savings are still projected high, with the expectation that with a fully operational IAPT service savings to the NHS will be up to GBP 272 million and the wider public sector will benefit by more than GBP 700 million.

Given that there are signs that Japan – as other OECD countries – has a high burden of untreated disorder, a stand-alone programme such as IAPT is of considerable interest.

Mental wellbeing across the lifecourse: Supporting the working population

Mental ill-health, and in particular mild-to-moderate disorders, can represent a significant burden for employers, and for the employment health insurance system. Poor mental health has been shown to be highly correlated with unemployment, sickness from work (absenteeism), and reduced productivity at work (presenteeism) (OECD, 2012; OECD, 2014a). Untreated mild-to-moderate disorders can thereby contribute to significant economic losses (*indirect* costs).

Employers should play a bigger role in preventing and treating mental ill health, both for the mental wellbeing of employees and because of the potential for cost savings over time. If investments in provision for mild-to-moderate disorders will reduce sickness absence and presenteeism (see sub-sections above) it makes good economic sense. Some large Japanese firms are already getting involved in promoting wellbeing and preventing ill-health. The National Federation of Health Insurance Societies also carries out activities such as information sharing and awareness raising making efforts to help identify mental distress amongst their employees, and advice around encouraging employees to seek help for mental distress. In addition, the government has taken some measures to promote efforts by employers to foster good mental health, for instance a guideline on good mental health maintenance and promotion, and a plan to begin the implementation of the Revised Industrial Safety and Health Act in 2015 so that employers are obliged to undertake stress checks and interviews/coaching in order to prevent poor employee mental health.

Small scale existing efforts could be encouraged and spread. Given the harmful impact that untreated mild-to-moderate disorders can have on employee productivity, employers and insurers in Japan should follow other OECD countries and provide (a greater range) of preventative interventions and services for mild-to-moderate disorders, going beyond information sharing and employment raising.

Mental wellbeing across the life course: Growing up healthy and ageing well

Young and elderly populations are often particularly vulnerable to mental distress, and can be excluded from mental health systems – which are usually targeted towards working-age adults – and their particular needs can remain unmet. Drawing on a range of cross-country prevalence surveys, it is apparent that need can be acute: international prevalence data show a very young age of onset for a range of mental disorders and especially for anxiety disorders (median age of onset 11 years), and the prevalence of mild and moderate disorders is often higher amongst young people than across the general population (OECD, 2014a). Elderly populations are at risk from disorders such as depression just as the working-age population are, and untreated mental disorders may harmfully impact upon the physical health of older individuals. Elderly populations may be less likely to seek help due to generational stigma, isolation, or poor availability of appropriate services.

Growing up health: Services for children and adolescents

Some limited services for child and adolescent mental health care are in place in Japan (see sub-section above), but sufficiently comprehensive services are not yet in place. A growing body of international evidence is stressing the importance of treating the mental health concerns of children and adolescents early, and treating these concerns effectively. Otherwise, the negative impacts are two-fold: firstly, untreated mental disorders of children and adolescents can adversely affect educational achievement and transition to the workforce (OECD, 2012); and secondly, if the mental health needs of children and adolescents are not met appropriately each generation there is a new cohort of service users arriving at the doors of adult mental health services, and these patients who have gone untreated for too many years therefore risk having more complex needs, for example comorbid disorders such as drug and/or alcohol addiction, often driven by self-medication by individuals nor receiving appropriate treatment to control or alleviate their symptoms (OECD, 2014a). In Japan, given the considerable concern around the status of *hikkomori*, the need for stronger and more proactive child and adolescent mental health services seems particularly acute (see Box 4.2).

A number of OECD countries are developing interesting initiatives. Mental wellbeing programmes in schools have been introduced in countries such as Finland, where the KivaKoulu school programme was launched by the Ministry of Education in 2006, and has been quite successful (OECD, 2014a; Patana, 2014). In a small number of countries early intervention approaches are being launched, wherein the mental health needs of young people are identified early in course of their disorder, and individuals are directed rapidly towards quite high intensity services. The “Headspace” programme in Australia is a particularly well-recognised example of such an intervention.

Ageing well: Mental health needs of the elderly population

It is well-established that Japan has a rapidly ageing population, and that this population represents a growing social burden and, in particular, a burden for the health system. As part of Japan’s focus on a “health life expectancy” approach there needs to be a consideration of the importance of a *mentally* healthy ageing population. Mental wellbeing is important not just for the quality of life of Japan's elderly citizens, but also given the understood links between mental ill health and somatic conditions, for example the fact that a patient with depression may be less proactive in seeking help for a range of other health conditions, which can thus be left untreated until they reach a more acute stage.

To support the mentally healthy ageing of the population, Japan should take two steps: raise awareness of the impact of mental illness on elderly populations, and secondly make appropriate treatment available for these populations. First, Japan should raise awareness of the importance of mental wellbeing, and the risk of depression and other disorders, amongst typical care providers for elderly populations. For example, systemised screening for depression could be carried out in long-term care institutions or in Geriatric Service Facilities, and by Generalist specialists for elderly populations. Second, and to back up screening, high quality mental health care and evidence-based treatments for mental disorders should be made available to elderly populations. This should including availability to less mobile populations, for example with practitioners with mental health training going into elderly care facilities, or psychologists visiting the elderly in their homes or in care settings.

4.6. Conclusion

Real efforts to better address mental health care needs in Japan have been made across the past decade, and their benefits are beginning to be seen: suicide rate has fallen, inpatient stays have gotten shorter, hospital bed numbers are falling, and community care provision is improving. Nonetheless, Japan's mental health system lags behind those of other OECD countries which Japan would usually see as peers in health system quality. Inpatient care is still dominant, information on quality is poor, and patient wishes and demands are not put at the centre of care delivery. To build a modern, high quality, patient-centred mental health system Japan must be ambitious, ready to make difficult choices, and drive important and significant change.

Improvements need to be made to service availability and care delivery, with continued efforts to change the function of hospitals, especially when pushing hospitals to provide outpatient services, as well as a reduced number of inpatient beds. Patient wishes should be the centre of the mental health system, which can be helped by making a range of services available in inpatient settings and in the community, where they should be easily accessible and close to population centres. Patient views should also be sought by policy makers and reflected in policy documents. Another priority is increasing the availability of services for mild-to-moderate disorders, for example using internet-based therapies or bibliographic self-help, and talking therapies delivered by psychologists, and making sure that there is a strong mental health component in the work of the new primary care specialist physicians. The availability of key indicators will help improve understanding of the quality of mental health care in Japan, and indicators could be broadening through both small-scale quality indicator collection initiatives, and by providing incentives for quality improvement in the fee schedule, as well as embedding data systems and outcome measurement systems in new community services from the start.

Notes

1. This chapter distinguishes between “mild-to-moderate” mental disorders and “severe” mental disorders. This distinction is based both on a clinical separation commonly made, and related to the different service needs and intensities demanded by different severities of disorder. Severity of the disorder is determined by the number of and severity of symptoms, the degree of functional impairment, and the duration of symptoms. While this chapter makes a distinction between the severities of mental disorders, it is important to note that for patients and practitioners the reality of disorders is frequently more fluid. The mental state of a patient experiencing a moderate depressive episode can worsen and become “severe”, just as a severe episode can be stabilised with symptoms lessened or alleviated.
2. It is important to note that in Japan a high number of psychiatric care beds are utilised by patients with long-term care needs, which may not be reported under the psychiatric bed category by other OECD countries.

References

Asai, K. (1999), "New Mental Health and Welfare Law and Recent Mental Health Policy in Japan", WHO/Shanghai Symposium (14-15, Nov. 1999), available at: www.npo-jam.org/en/pdf/en_asai_016.pdf, accessed 10 July 2014.

Asukai, N. (1994), "Mental Disorder as a Risk Factor for Suicide", *Psychiatry and Clinical Neurosciences*, Vol. 96, pp. 415-443.

Borckardt, J. et al. (2011), "Systematic Investigation of Initiatives to Reduce Seclusion and Restraint in a State Psychiatric Hospital", *Psychiatric Services*, Vol. 62, No. 5.

Bradshaw, T. and R. Pedley (2012), "Evolving Role of Mental Health Nurses in the Physical Health Care of People with Serious Mental Health Illness", *International Journal of Mental Health Nursing*, Vol. 21, No. 3, pp. 266-273.

Carney, R.M. and K.E. Freedland (2008), "Depression in Patients with Coronary Heart Disease", *American Journal of Medicine,* Vol. 121, No. 11, Supplement 2, pp. S20–S27, November.

De Hert, M. et al. (2011), "Physical Illness in Patients with Severe Mental Disorders. II. Barriers to Care, Monitoring and Treatment Guidelines, Plus Recommendations at the System and Individual Level", *World Psychiatry*, Vol. 10, No. 2, pp. 138-151.

Department of Health (2012), "IAPT Three-year Report: The First Million Patients", available at www.iapt.nhs.uk/silo/files/iapt-3-year-report.pdf.

DiMatteo, M.R., H.S. Lepper and T.W. Croghan (2000), "Depression Is a Risk Factor for Noncompliance with Medical Treatment: A Meta-analysis of the Effects of Anxiety and Depression on Patient Adherence", *Archives of Internal Medicine*, Vol. 160, pp. 2101-2107.

Egede, L. and C. Ellis (2010), "Diabetes and Depression: Global Perspectives", *Diabetes Research and Clinical Practice*, Vol. 87, pp. 302-312.

Forti, A. et al. (2014), "Mental Health Analysis Profile (MhAPs): The Netherlands", *OECD Health Working Papers*, OECD Publishing, Paris, http://dx.doi.org/10.1787/18152015.

Gonzalez, J. et al. (2008), "Depression and Diabetes Treatment Nonadherence: A Meta-Analysis", *Diabetes Care*, Vol. 31, No. 12, pp. 2398-2403, December.

Hackett, M. et al. (2005), "Frequency of Depression after stroke: A Systematic Review of Observational Studies", *Stroke*, Vol. 36, No. 6, pp. 1330-1340, June.

Ito, H. (2009), "Quality and Performance Improvement for Mental Healthcare in Japan", *Current Opinion in Psychiatry*, Vol. 22, No. 6, pp. 619-622, http://dx.doi.org/10.1097/YCO.0b013e3283318ea5.

Ito, H. and L. Sederer (1999), "Mental Health Services Reform in Japan", *Harvard Review of Psychiatry*, Vol. 7, pp. 208-215.

Jacobs, R. and E. Barrenho (2011), "Impact of Crisis Resolution and Home Treatment Teams on Psychiatric Admissions in England", *British Journal of Psychiatry*, Vol. 199, No. 1, pp. 71-76.

Layard, R. et al. (2007), "Cost-Benefit Analysis of Psychological Therapy", *CEP Discussion Paper,* No. 829, Centre for Economic Performance, London, available at http://eprints.lse.ac.uk/19673/1/Cost-Benefit_Analysis_of_Psychological_Therapy.pdf.

Leff, J. and M. Knapp (2000), "The TAPS Project: A Report on 13 Years of Research, 1985-1998", *Psychiatric Bulletin*, Vol. 24, pp. 165-168, http://dx.doi.org/10.1192/pb.24.5.165.

London School of Economics (2006), *The Depression Report: A New Deal for Depression and Anxiety Disorders*, Centre for Economic Performance's Mental Health Policy Group, London.

McCrone, P., S. Johnson, F. Nolan, S. Pilling, A. Sandor, J. Hoult, N. McKenzie, M. Thompson and P. Bebbington (2009), "Economic Evaluation of a Crisis Resolution Service: A Randomised Controlled Trial", *Epidemiologia e Psichiatria Sociale*, Vol. 18, No. 1, pp. 54-58.

MIND (2013), "Mental Health Crisis Care: Physical Restraint in Crisis. A Report on Physical Restraint in Hospital Settings in England", accessed 1 August 2014, available at: mind.org.uk/crisiscare.

Ministry of Health, Labour and Welfare (2014a), "Overview of Health Payment System 2014" [Online], available at: www.mhlw.go.jp/stf/seisakunitsuite/bunya/0000038855.html, accessed 2 July 2014.

Ministry of Health, Labour and Welfare (2014b), "Revision of the Fee Schedule" [Online], available at: www.mhlw.go.jp/file/05-Shingikai-12404000-Hokenkyoku-Iryouka/0000035826.pdf, accessed 3 July 2014.

Murphy, S, Irving C.B., C.E. Adams and R. Driver (2012), "Crisis Intervention for People with Severe Mental Illnesses", *Cochrane Database of Systematic Reviews*, No. 5.

National Center of Neurology and Psychiatry (2012), "Mental Health Welfare Studies 2012" [in Japanese], accessed 01.08.2014, available at: www.ncnp.go.jp/nimh/keikaku/vision/630data.html.

National Center of Neurology and Psychiatry (2004), "Mental Health Welfare Studies 2004" [in Japanese], accessed 1 Oct. 2014, available at: www.ncnp.go.jp/nimh/keikaku/vision/630data.html.

National Mental Health Consumer & Carer Forum [Australia] (2009), "Ending Seclusion and Restraint in Australian Mental Health Services", accessed: 1 August 2014, available at: www.nmhccf.org.au/documents/.

Naylor, C. et al. (2012), *Long-term Conditions and Mental Health: The Cost of Co-morbidities*, The Kings Fund, London.

Ng, C. et al. (2010), "The Ongoing Development of Community Mental Health Services in Japan: Utilizing Strengths and Opportunities", *Australasian Psychiatry*, Vol. 18, No. 1, pp. 57-62.

NHS Choices (2013), "Self-help Terapies", www.nhs.uk/Conditions/stress-anxiety-depression/Pages/self-helptherapies.aspx, accessed 2 September 2013.

NICE (2011), "Generalised Anxiety Disorder and Panic Disorder (with or without agoraphobia) in Adults: Management in Primary, Secondary and Community Care", available at www.nice.org.uk/Guidance/CG113, accessed 21 July 2014.

NICE (2009), "Depression. The Treatment and Management of Depression in Adults", available at www.nice.org.uk/guidance/CG90, accessed 21 July 2014.

Nock, M.K. et al. (2008), "Suicide and Suicidal Behavior", *Epidemiologic Reviews,* Vol. 30, pp. 133-154.

Norra, C. et al. (2007), "High Impact of Depression in Heart Failure: Early Diagnosis and Treatment Options", *International Journal of Cardiology*, Vol. 125, No. 2, pp. 220-231.

OECD (2014a), *Making Mental Health Count: The Social and Economic Costs of Neglecting Mental Health Care,* OECD Health Policy Studies, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264208445-en.

OECD (2014b), *OECD Reviews of Health Care Quality: Norway – Raising Standards,* OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264208469-en.

OECD (2013a), *Health at a Glance 2013: OECD Indicators*, OECD Publishing, Paris, http://dx.doi.org/10.1787/health_glance-2013-en.

OECD (2012), *Sick on the Job? Myths and Realities about Mental Health and Work,* OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264124523-en.

Okumura, Y. and T. Higuchi (2011), "Cost of Depression among adults in Japan", *Primary Care Companion for CNS Disorders*, Vol. 30, No. 3, pp. e1-e9.

Patana, P. (2014), "Mental Health Analysis Profile (MhAPs): Finland", *OECD Health Working Papers*, OECD Publishing, Paris, http://dx.doi.org/10.1787/5jz1591p91vg-en.

Putters, K. et al. (2012), "E-health: Face-to-Facebook. Over E-health en zelfredzaamheid van patiënten in de ggz" *[*E-health: Face-to-Facebook. About e-health and self-reliance of patients in mental health care], Erasmus University, Rotterdam.

Riper, H. et al. (2013), "Preventie & eMental- Health kennissythese 2012" [Prevention eMental Health knowledge synthesis], ZonMW. Den Haag.

Robson, D. and R. Gray (2007), "Serious Mental Illness and Physical Health Problems: A Discussion Paper", *International Journal of Nursing Studies*, Vol. 44, No. 3, pp. 457-466.

Schram, M., C. Baan and F. Pouwer (2009), "Depression and Quality of Life in Patients with Diabetes: A Systematic Review from the European Depression in Diabetes (EDID) Research Consortium", *Current Diabetes Review,* Vol. 5, No. 2, pp. 112-119, May.

Tatara, K. and E. Okamoto (2009), "Japan: Health System Review", *Health Systems in Transition*, Vol. 11, No. 5, pp. 1–164.

Thornicroft, G. and M. Tansella (2004), "Components of a Modern Mental Health Service: A Pragmatic Balance of Community and Hospital Care: Overview of Systematic Evidence", *British Journal of Psychiatry*, Vol. 185, pp. 283-290.

Thornicroft, G. and M. Tansella (2002), “Balancing Community-based and Hospital-based Mental Health Care”, *World Psychiatry.* Vol. 1, No. 2, pp. 84-90.

Trimbos (2013), [Online], available at www.trimbos.nl/, accessed 8 July 2013.

Trivedi, M. (2004), “The Link Between Depression and Physical Symptoms”, *Primary Care Companion, Journal of Clinical Psychiatry*, Vol. 6, Suppl. 1, pp. 12-16.

Wale, J., G. Belkin and R. Moon (2011), “Reducing the Use of Seclusion and Restraint in Psychiatric Emergency and Adult Inpatient Services – Improving Patient-Centered Care”, *The Permanente Journal*, Vol. 15, No. 2, pp. 57-62.

WHO – World Health Organization (2012), “Health Service Delivery Profile Japan 2012” [Online], available at: www.wpro.who.int/health_services/service_delivery_profile_japan.pdf?ua=1, Accessed 2 July 2014.

WHO and Wonca (2008), *Integrating Mental Health into Primary Care: A Global Perspective*, World Health Organization, Geneva.

Yamazaki, M. (2013), “WHO Lecture in 2013 – Japanese Psychiatric Hospitals Association”, available at: www.nisseikyo.or.jp/admin/ippan/02info/05topic/201310_WHO.pdf, accessed 16 July 2014.

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