Health Systems & Reform

ISSN: 2328-8604 (Print) 2328-8620 (Online) Journal homepage: https://www.tandfonline.com/loi/khsr20

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To cite this article: Gerald Bloom (2019) Service Delivery Transformation for UHC in Asia and the Pacific, Health Systems & Reform, 5:1, 7-17, DOI: 10.1080/23288604.2018.1541498

To link to this article: https://doi.org/10.1080/23288604.2018.1541498

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Published online: 04 Jan 2019.

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Health Systems & Reform, 5(1):7–17, 2019
Published with license by Taylor & Francis Group, LLC
ISSN: 2328-8604 print / 2328-8620 online
DOI: 10.1080/23288604.2018.1541498

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Research Article

Service Delivery Transformation for UHC in Asia and the Pacific

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Abstract—This article was drafted as part of a review of strategies for making progress toward universal health coverage in the countries of Asia and the Pacific. It focuses on strengthening the delivery of services, in the context of population aging. It argues that it is important to take into account big differences in development contexts and also the rapid, interconnected changes that many countries are experiencing. The article focuses especially on countries with relatively undeveloped institutions and pluralistic and highly segmented health sectors. It argues that attempts by these countries to import institutional arrangements from outside are likely to be complicated. It argues that government needs to focus on both short-term measures to meet immediate needs and the longer-term aim of establishing effective institutional arrangements. This means that they need to take into account the political factors that influence the direction of health system change. The article emphasizes the need to strengthen the capacity of the health system to address the growing challenge of chronic noncommunicable diseases to avoid heavy political pressure to expand hospital services. It then explores the opportunities and challenges associated with the rapid expansion of digital health services. It concludes with a discussion of government stewardship and management of health system transformation to address the major challenges associated with population aging.

Keywords: change management, politics of health system change, population aging, primary health care, universal health coverage

Received 26 August 2018; revised 17 October 2018; accepted 21 October 2018.

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INTRODUCTION

Most countries in East and Southeast Asia and the Pacific are implementing strategies for making progress toward universal health coverage (UHC). This article is concerned with strengthening the provision of services to meet health-related needs, especially for disadvantaged social groups. It focuses particularly on the challenge of adapting health services to the changing needs of an aging population. There is a broad consensus that this will involve (1) strengthening the capacity of the health system to provide a continuum of care and support to people with chronic illnesses, (2) reorienting

existing health workers and equipping new ones with the skills and knowledge to meet changing health care needs, and (3) providing support for individuals and their families in managing chronic illness and caring for people with debilitating illnesses.[1] The strategy for making progress toward this goal will vary depending on the state of the health sector and the institutional context within which it is embedded.

This article was initially prepared as a background document for a workshop for researchers and policy makers organized by the Regional Office for the Western Pacific of the World Health Organization. This influenced the selection of countries. It draws on policy documents and recent reviews of health policy in a number of countries and on the insights gained by the author through work in several of these countries. Its aim is to highlight how contextual factors can be taken into account in formulating and implementing strategies for strengthening service delivery in a period of change.

The article begins with a discussion of different development and institutional contexts and outlines the implications for the management of change. It then discusses how health systems have responded to growing demands for hospital treatment of noncommunicable diseases (NCDs), adapted primary health care (PHC) services to the needs of an aging population, and built the capacity of the workforce to meet needs. It then explores the potential contribution of information technologies and digital health services to the provision of support to individuals in managing chronic health problems. It concludes by outlining steps that governments can take to facilitate the adaptation of their health systems to the changing needs of an aging society.

TRANSFORMING INSTITUTIONS FOR UHC

The patterns of health service transformation are as diverse as the contexts within which they occur.[2] The countries concerned are diverse, including some of the most highly industrialized, urbanized, and organized parts of the world; rapidly growing cities with large and weakly regulated informal urban settlements; and remote rural areas that largely depend on subsistence agriculture and/or remittances from out-migrants. Demographic change is only one of a number of simultaneous transitions that are affecting health needs and the capacity of health systems to meet these needs. Many countries are undergoing rapid and interconnected changes in, for example, the relative roles of the state and markets, the movement of people to cities, the emergence and rapid diffusion of new technologies, exposure to environmental toxins, and the patterns of economic and social inequality.[3]

Some countries have well-established health and welfare services with institutional arrangements that include systems for training, employing, supervising, and regulating a wide variety of health personnel; facilities with defined mandates and mechanisms for ensuring safety, quality, and coordination; and widely accepted norms of professional behavior. These countries need to modify these services to take into account changing needs. Japan's health system, for example, has contributed to very good health indicators, but the growth in the number of elderly is creating severe financial pressures and questions have been raised about the quality of support provided to the chronically ill.[4,5] Options for reform include changing the training of PHC doctors and strengthening the capacity to monitor the performance of health services in addressing NCDs.[6] Malaysia has a well-established government PHC service and many private medical clinics that serve urban residents.[7] It needs to transform a government system designed to provide basic services to rural residents with acute infections to one that can meet the needs of an aging and increasingly urban population. A recent study, for example, documents very low levels of control of hypertension.[8] Malaysia's strategy is likely to combine measures to reorient government PHC facilities to meet the needs of an aging population more effectively and measures to improve the performance of private health service providers.[9]

This article focuses on countries that have less solid institutional arrangements.[10] This includes those with weak government administrative capacity (Laos, Cambodia, some Pacific island states), in transition from command economies where a relatively strong government has been adapting to rapidly changing relationships between the state and markets (China, Vietnam), and with relatively developed institutions but where formal and informal markets provide an important share of health services, particularly in relatively remote rural areas and informal urban settlements (Indonesia, the Philippines). These countries share the reality of a pluralistic and highly segmented health sector, where some people have access to well-organized and regulated services and others rely on a variety of providers of medical care and drugs operating privately and, in some cases, outside the regulatory framework. Their regulatory systems are often not well developed and the capacity for enforcement is limited.[11,12] In many cases, the boundaries between public and private sectors are blurred and people make formal or informal payments to use government services. Attempts by these countries to import institutional arrangements from highly organized societies are often complicated. In addition, policies that concentrate on improving the well-organized

services are unlikely to benefit large numbers of relatively poor people who rely on low-cost private providers.

One consequence of the weakness of institutions is that there are many problems with the quality and cost of health services provided by both public and private providers. This means that individuals and their families have to take a lot of responsibility for protecting their own health. This applies particularly to people who have limited access to regulated health service providers because of where they live, their social status, or their sex, age, or ethnicity. Those responsible for managing health system transformation in these countries need to ensure that interventions address the immediate challenges that people face by improving the performance of suppliers of medical advice and drugs and strengthening the capacity of people to make informed decisions in managing their health and treatment of illness, while supporting the longer-term establishment of appropriate institutions.

UHC STRATEGIES FOR AN AGING SOCIETY

Many countries have formulated a strategy for addressing NCDs and have established a Ministry of Health administrative unit to oversee its implementation. A review of these plans found that they mostly treated NCDs as just another government program, raising questions about the feasibility of implementation at scale.[13] Population aging has a big impact on the pattern of health care needs, with implications for all aspects of a health service. It raises fundamental questions about the allocation of resources between levels of care, the roles of public and private sectors, and the relative responsibilities of individuals and the formal health service in managing chronic disease. UHC strategies need to take these issues into account.

Managing Competing Interests

A recent reflection by a senior Japanese health system analyst argues that the major lessons from his country's experience are less about specific institutional arrangements than about decisions that have influenced the long-term trajectory of institutional development, such as the early decision to integrate a variety of health service providers into the formal system, decisions to limit the rate of growth of hospital services, and the empowerment of PHC stakeholders in decision making.[14] This highlights the need to pay attention to the political pressures on health systems in formulating strategies for long-term development.

Population aging is putting individuals and their families under a lot of pressure. It is associated with a rise in the prevalence of chronic NCDs and in the number of hospital admissions for cardiovascular, cerebrovascular, and chronic respiratory illnesses and cancer.[15,16] Hospital treatment of these diseases accounts for a large share of health care expenditure in many countries.[17,18] Where households are responsible for a large share of medical costs, many experience "catastrophic health expenditure" to pay for hospital care and/or long-term drug treatment of a member of the family.[19] Some people become disabled and need long-term care, putting more pressure on their families and on hospitals or nursing homes. Governments are experiencing increasing political pressure to help people cope with these challenges. The way they respond will strongly influence the future trajectory of the health system.

A common response to the rising burden of the serious complications of NCDs has been to build more hospitals and establish insurance schemes to pay for hospital care. China, for example, increased the number of hospital beds fourfold between 1980 and 2013 and introduced new insurance schemes to cover rural and urban residents.[20] Health expenditure rose rapidly and the sophistication of care increased significantly. Large numbers of people, whose health insurance provides limited coverage, now need to choose between avoiding hospital admission or paying a large hospital bill, and government is under pressure to increase its spending on hospitals. Many countries have followed a similar path, creating a feedback loop in which the managers of hospitals and representatives of their patients exert political pressure for increased social funding of hospital care, leading to increased demand, while basic health services are starved of resources. Over time this lobby can strongly influence the direction of health system development. The alternative is for governments to formulate an integrated approach for meeting the health care needs of an aging population and win political support for it. This requires a concerted effort to strengthen alternative health services and understand and manage competing interests in the health sector.

The challenge of incorporating NCDs into UHC strategies is illustrated in the case of several countries in the Pacific.[21,22] The median age in these countries is quite low and there is little public awareness of the issues associated with demographic transition. Several countries have very high prevalence of diabetes and other risk factors for cardiovascular disease, but the impact on hospital admissions has been modest. As the population ages, the demand for hospital care is projected to rise rapidly and analysts emphasize the need to adapt PHC services to support effective management of NCDs before this happens.[22] However, it is easier for governments to respond to immediate problems than to those projected to occur in the future.

Measures to Improve Hospital Treatment of NCDs and Control Costs

Many countries are acting to improve hospital performance, often in response to political and financial pressures

associated with rapid rises in expenditure. One common approach has been to give hospitals and their managers more autonomy. Governments need to ensure that these increasingly autonomous facilities meet their responsibility as part of an overall effort to make progress toward UHC. This involves a combination of measures.

One is to ensure that investments in hospital facilities and equipment are appropriate to the population's needs. Hospitals in a number of countries are able to finance investments out of their revenues, by borrowing money or through some form of public–private partnership. In China, for example, hospitals generate a high proportion of their revenue from payments by patients and insurance schemes and have had a lot of leeway in their investment decisions.[23] In Vietnam, hospitals have built partnerships with private investors.[24] Decisions by individual facilities to increase their capacity to compete for patients can add up to over-investment by the hospital sector and lead to supplier-induced pressures to provide an expensive form of inpatient care. This can encourage rapid increases in both the number of hospital admissions and the cost of each admission. That is why many countries are strengthening their capacities to plan investments in facilities and expensive equipment, in terms of the population's needs.

Another measure is to improve the capacity of hospitals to provide cost-effective inpatient care. This can involve training people as hospital managers and establishing hospital management as a high-status position. It can also involve measures to reduce unnecessarily high levels of use of diagnostic equipment, drugs, and surgical interventions and to reduce the length of hospital stays. One example of an intervention to improve hospital performance is the partnership between the China National Health Development Research Centre and the UK National Institute of Clinical Excellence to introduce evidence-based clinical pathways for stroke and chronic obstructive pulmonary disease in hospitals in rural China.[25] This partnership demonstrated that clinical practice can be altered by retraining health workers and monitoring their performance. Other interventions have focused on modifying payment mechanisms that reward costly styles of medical care.[26] Effective interventions tend to combine development of performance guidelines, strengthening of monitoring, and modification of financial and other incentives.

A third measure has been to strengthen the links between hospitals and the PHC system. One important element of this is to ensure effective referral services so that people believe that they can get access to specialized advice and treatment, when necessary, without going to a hospital outpatient department. It is important to ensure two-way referral, so that PHC facilities can ensure continuity of care when people are discharged from hospital. In some cases, hospitals establish outreach clinics to reduce the pressure on outpatient departments.

A fourth element of hospital reform is strengthening governance arrangements. This means specifying hospital mandates in terms of the kind and quality of care provided and the integration of hospital and outpatient health care. It also means the establishment of mechanisms for monitoring performance and acting, when necessary. This may involve strengthening the capacity of regulatory agencies to monitor performance and enforce regulations, requiring hospitals to publish performance indicators, and the establishment of a board with members who represent the users and providers of PHC services. As countries have introduced nationwide health insurance schemes it has become clear that these schemes need to build their capacities to purchase services effectively and monitor cost-effectiveness or risk facing very rapid cost increases.[7,27,28] A recent study in Mongolia documents the complex mix of regulations already in existence to regulate hospital behavior and the additional efforts needed to establish effective institutional arrangements.[29]

Strengthening PHC Services and Personnel

The progression of NCDs can be slowed and the incidence of exacerbations requiring hospital care can be reduced by managing blood pressure, blood sugar, asthmatic attacks, and so forth, with support of an effective PHC service.[30] The number of hospital admissions can also be reduced, if people have enough support to treat exacerbations on an outpatient basis. In order to achieve this outcome, people need to have easy access to diagnosis, treatment, long-term support, and referral to specialist services.[31]

As the population ages, the need for health care and social support increases. This creates a demand for more skilled personnel, including doctors (generalists and specialists), nurses, physiotherapists, pharmacists and drug sellers, informal health care providers, community health workers, and providers of social and physical support. Training may be offered to those already providing services and to people entering the workforce. It can take the form of highly focused in-service training, revision of the curricula of existing training courses, or the training of new categories of personnel. It is important that training strategies be based on an assessment of current patterns of provision of services and on cost-effective ways to meet health care needs by

public or private providers. They also need to be associated with agreed-upon guidelines for organizing services to an aging population. It will be important to involve training institutions in planning and oversight of the UHC strategy.

Strategies are needed to improve the performance of a pluralistic health system by both reorienting the work of government health facilities and engaging with nongovernment providers of health services and drugs. This is likely to involve training personnel who provide health services to the population (including government employees, private practitioners, informal providers of health services, and community health workers), creating guidelines for providing support for people with NCDs, establishing systems to encourage good performance (including financial and other incentives, monitoring and sanctions for bad behavior), building two-way referral between primary and higher levels of care across the public and private sectors, and establishing mechanisms for oversight of population-based services. The strategies for achieving change at scale will involve collaboration between stakeholders, who may include government bodies, organized professions, community organizations, and not-for-profit and for-profit providers of health care and drugs.[10]

The experience of China illustrates many of the issues that countries with a pluralistic health system need to address. This experience is particularly useful, because the speed with which China is managing major health system reforms highlights the issues to be addressed. Village doctors have been the first point of contact for most rural residents in that country. Initially, they were “barefoot” doctors, with limited training and, since the transition from collective agriculture in the early 1980s, they have worked privately.[32] During the 1990s the government required village doctors to pass competency tests to retain a license to practice. The government has gradually integrated these health workers into the health system. For many years they have been responsible for ensuring that pregnant women seek antenatal care and that children are immunized, receiving minimal payments and undertaking this activity as part of their license to practice. More recently, they have been required to work closely with township hospitals to provide a package of PHC services.

Other providers of PHC services are township hospitals in rural counties and community care clinics in urban areas. These are owned by local governments and staffed by salaried employees. Prior to 2000, many of their health workers did not have a medical degree. This changed because of an increase in the number of medical schools, which meant that many new graduates entered the job market. However, they have had a limited amount of training on cost-effective strategies for providing health care to an aging population. These facilities raise a significant proportion of their revenue from user charges and their medical practices are influenced by financial incentives that encourage use of diagnostic tests and high levels of drug use. The government is attempting to alter these financial incentives by removing the opportunity to earn money from selling drugs and, in some cases, increasing their allocation of government funds.[33]

In the 2000s, township health centers were made responsible for monitoring and improving the performance of village doctors, and in the late 2000s, the government earmarked funds for PHC services, including the management of hypertension and diabetes. This stimulated experiments with integrated approaches. Henan Province, for example, has shown that a combination of detailed guidelines that define the roles of different levels of care in supporting patients with hypertension and diabetes, case-based payment of village- and township-level providers, and the establishment of mechanisms for monitoring overall performance of the PHC system leads to better control of these conditions.[34] This is one of many experiments in China with innovative approaches for strengthening local health services. However, to achieve change at scale, measures are needed to improve the pay of PHC workers, shift the allocation of funds in favor of PHC, and strengthen two-way referral between hospitals and community facilities.[35,36]

Although there is a tiered health system with options for referral, health facilities compete and people commonly bypass local services in favor of hospital outpatient departments.[37] Despite the efforts to strengthen PHC, expenditure on hospital care has continued to rise quickly.[38] Much needs to be done to ensure that PHC services meet the needs of an aging population and convince people that they can rely on the quality of these services.

China’s experience illustrates the need to combine measures for (re)-training personnel, changing inappropriate financial incentives, strengthening monitoring of performance, and ensuring better coordination. Formal ownership of a health service provider is less important than the institutional arrangements that influence performance. Strengthening of these governance arrangements requires sustained leadership at national and local levels.[39] It takes time to achieve health system change and it is important to test a variety of options before taking any to scale.[40]

A number of countries are implementing measures to adapt their government health systems to changing patterns of health needs. The Philippine Health Insurance Corporation has produced guidelines to be used by all PHC

benefit providers in assessing and managing hypertension and diabetes.[41] The Malaysian Ministry of Health has issued national protocols for NCD management in its clinics.[42] These guidelines will need to be linked to other measures aimed at modifying the performance of service providers in order to meet the needs of large numbers of people who currently rely on the nongovernment providers that they can afford to pay.

Countries have evolved a variety of approaches for improving the performance of the nonstate providers used by the poor. One is “social franchising,” whereby a not-for-profit organization trains frontline health workers, monitors their adherence to good practice treatment guidelines, and assures potential clients about the quality of services. A number of social franchises have demonstrated success in improving quality. There is a challenge, however, in taking this approach to scale and making it financially sustainable. In the Philippines, for example, a social franchise has attempted to solve this problem by enabling franchisees to link to that country’s social insurance scheme. This enabled them to secure a stable source of income, but it raised difficult questions about the impact on poorer social groups, who are not covered by social insurance.[43] This experience illustrates the need to build close links between interventions for improving the quality of services and the arrangements for ensuring that they are affordable. The experience of social franchises also demonstrates that a health system needs to cover the cost of measures to ensure quality, whether within the government, as a government quality assurance organization, or as a nonstate organization.

Another approach is for nongovernmental organizations (NGOs) to support people in managing a chronic illness and in getting access to appropriate medical care. This is illustrated by MoPoTsyo, a Cambodian NGO that supports people with diabetes and/or hypertension. The Cambodian government health system has focused on the needs of people with acute infections and has limited capacity to support people with a chronic illness. MoPoTsyo began in the early 2000s by screening people for diabetes and organizing community self-help groups, facilitated by local residents with diabetes, to help people manage their condition. This included support for changing diets and lifestyle, seeking medical advice, and taking drug therapy. MoPoTsyo made agreements with hospital doctors to provide referral services and it later organized procurement of drugs, which it supplied to local pharmacists, who dispensed them with a modest price markup. This arrangement has led to reductions in both blood glucose and blood pressure.[44] The success of this relatively modest pilot raises questions about the best way to take this approach to scale. In 2013, the Ministry of Health included the expansion of peer education networks in its National Strategic Plan for Prevention and Control of NCDs 2013–2020.[45] However, a recent study has shown that the links between the community organization of care and the government system remain quite tenuous.[46]

The residents of remote rural communities face particular challenges in addressing the growing challenge of NCDs. This is the case in a number of island nations in the Pacific, where a recent review of progress with the “Healthy Islands Strategy” emphasized the need to strengthen PHC services that integrate public health and clinical services.[47] There is a renewed interest in the role of community health workers as the first point of contact with the health system for rural residents and as leaders of local efforts to reduce the risk of NCDs. Reviews of experience of village health workers have emphasized the importance of both providing appropriate training and establishing effective institutional arrangements. On the one hand, this means embedding them in the health system and providing effective monitoring and supervision.[48] On the other hand, it may also mean ensuring that they are integrated into traditional village structures.[49] These PHC services also need good links to hospitals, which provide more complex medical care.

These experiences illustrate the efforts needed to implement cost-effective strategies for addressing the challenge of NCDs, especially for the relatively poor. Individuals and their families can take a lot of responsibility for managing their own health, but they need support in the form of access to information to enable them to make informed decisions and advice from people with relevant expertise and experience.[50] The providers of this advice and suppliers of drugs need to function within appropriate institutional arrangements, including arrangements to monitor their performance and provide access to referral services, when needed. This may involve new types of partnership between public and private sectors. A number of countries are experimenting with the appropriate roles and responsibilities of government organizations and NGOs in undertaking these oversight tasks and in creating an effective regulatory framework. The next section explores the opportunities that innovations in information and communication technologies are creating for empowering people to manage health problems more effectively.

Technological Innovation for a People-Centered Health Service

Individuals and their families play an important role in managing chronic illness as they develop expertise over time.[51] This is especially important in countries where the

government health system cannot provide consistent medical support to the entire population. Rapid increases in connectivity to mobile phones and the Internet are creating opportunities for improving access to appropriate knowledge and advice.[52] The possibilities for rapid health system transformation induced by information and communications technology (ICT) are especially great in countries that have become centers of global innovation with companies that produce ICT hardware and software and provide cutting-edge information technology (IT)-based services.[53,54] The degree to which these technologies contribute to the achievement of UHC depends, to a considerable extent, on government action.

There have been many pilot tests of digital health interventions that have included sending public health messages to mobile phones, developing electronic patient records, providing medical advice via mobile phones or the Internet, and establishing real-time surveillance. Many have achieved their immediate objectives, but very few have resulted in large-scale and sustainable changes.[55] This experience has led analysts to conclude that future interventions will need to focus on overcoming clearly identified barriers as part of a systemwide change process to avoid duplication of effort and the creation of parallel information systems.[56,57]

Private investment in the development of digital health services has been much greater than that of governments and international funders. In China, for example, private investment in this sector amounted to 15.75 billion RMB (2.5 billion USD) in 2015.[56] The kinds of services coming onstream include online pharmacies with door-to-door delivery, online medical advice services, and support for the management of chronic health problems using devices to monitor health indicators. Although a number of services are already operating at scale, the impact on the overall functioning of the health system has been modest. There has been little interaction between private services and the government health service and many regulatory issues remain to be resolved. This has limited the capacity to provide an integrated package of services.

Several things need to happen for the transformational potential of ICTs to be realized.[58] The cost of access to the Internet through smartphones needs to fall. People need easy and inexpensive ways to measure parameters, such as blood pressure, blood sugar, and electrocardiograms, and use them for decision making. Algorithms are needed that link symptoms and the results of diagnostic tests to advice on management of conditions such as hypertension and diabetes. A number of smartphone apps already embody this kind of algorithm, demonstrating their potential value. This could be linked to an online drug delivery service. In addition, referral should be facilitated through the use of an electronic patient record and an IT platform that links providers of PHC services and health facilities that provide specialist care.

The translation of this vision of IT-enabled patient-centered care of chronic illnesses into new organizational arrangements at scale will involve new kinds of partnership between government health services, private IT platforms, and public and private providers of health care advice and drugs. There is no guarantee that the result will be equitable and cost-effective. Differences in access to smartphones and the Internet could lead to big inequalities in access to the benefits of digital health and access to some ICT-enabled health services may be limited to a minority of the population that can afford them.[54,59] In addition, services could reflect commercial interests by encouraging unnecessary use of diagnostic tests and drugs. Governments will need to play an effective stewardship role to ensure that digital health services contribute to progress toward UHC. This will be particularly challenging for countries with relatively weak public administrative systems.

The experience of the past few years suggests that government support for digital health innovation has to go beyond implementing changes to government health systems and funding of pilot projects. There is a need to develop and test new kinds of partnerships that utilize new technologies to meet the needs of poor clients at scale. Other measures are needed to strengthen the capacity of government and other stakeholders to play an effective regulatory and stewardship role. The experiences of other sectors (such as online shopping and supply of taxi services) suggest that once a tipping point is reached, the process of change can be very rapid. That is why it is important that governments build their capacities to steer the direction of digital health development before this tipping point is reached and powerful stakeholders increase their influence.

CONCLUSIONS

This article has explored the implications of population aging for UHC strategies in places with very different economic and institutional contexts. Where health system institutions are well established, government strategies can focus on adapting existing systems to meet the different needs of an aging population. This may involve retraining existing personnel and training new categories or personnel to provide support for the management of chronic diseases, strengthening links between hospital and outpatient care and between health and social support services, and providing support to people who are disabled or

Strategic Objectives	Approaches
Provide strategic leadership	Map services used by different population groups and identify needs Implement communications plan to inform the population and secure political support Involve key stakeholders in governance bodies
Improve hospital performance and control costs	Define hospital ownership and management responsibilities Strengthen hospital management and the quality of services Strengthen population-based planning of hospital services Build links with PHC services Modify incentives through regulation, accreditation, and purchasing of services
Strengthen and adapt provision of PHC	Develop management guidelines for NCDs Train providers of frontline services (public and private) Fund frontline services adequately Train providers of frontline services (public and private) Fund frontline services adequately Modify incentives for providers of frontline services to reward support for management of NCDs Monitor performance and establish mechanisms to recognize good quality Strengthen access to referral
Support people in managing NCDs	Provide information on health promotion and on the management of NCDs Provide information to support decisions about facilities to consult Provide access to digital health services that support management of NCDs
Build partnerships for management of NCDs	Develop new kinds of partnership between government and social enterprises, NGOs, informationcompanies, and so forth Explore new kinds of partnership with information companies Strengthen stewardship and regulation to ensure that partnerships contribute to UHC strategy

TABLE 1. Elements of a Strategy for Adapting Pluralistic Health Systems to Population Aging

with diminished abilities. This implies a reallocation of resources, which will require committed political leadership.

The situation of countries, or regions within countries, with weaker institutional arrangements is more complex. Strategies for adapting the health system to an aging population should be based on an analysis of the providers of health and welfare services used by different social groups and the identification of challenges to be overcome in meeting needs. The strategies for addressing these challenges will need to take into account weaknesses in the institutional arrangements. They are likely to involve interventions to influence both public and private sectors, employing a combination of strategies to improve performance (Table 1).

The relative weakness of institutional arrangements means that the behavior of health-sector stakeholders can be strongly influenced by market-like incentives and political pressure. In the absence of a countervailing government policy, the increasing burden of NCDs is likely to lead to increased demand for hospital care and to pressure on governments by powerful stakeholders, such as the more affluent users of these services and specialized doctors, to expand hospital services. The alternative is for government to create countervailing influences in favor of an integrated approach for managing NCDs. This requires active stewardship to inform the public and secure political support and ensure that representatives of different social groups and the providers of services to them are appointed to advisory committees and decision-making boards of health facilities and insurance schemes. It is important that all stakeholders contribute to the formulation of policy and that their roles and responsibilities are mutually agreed upon.

Strategies for ensuring that people with NCDs have access to PHC support need to build on existing services. Where people rely on a variety of public and private providers, it is important to formulate strategies for improving the quality of services of all providers, especially those used by the poor, and for ensuring effective referral. This raises important questions about the role of individuals, community services, and referral services in managing common NCDs to ensure that the available resources are used well. It also raises questions about the role of government and other types of social organization in monitoring provider performance and ensuring coordination between different

providers. Technological developments and the new kinds of organization that are emerging have the potential to improve health system performance and enable individuals to manage chronic disease more effectively, but governments will need to play an active role in creating an appropriate regulatory framework and in supporting the establishment of partnerships that ensure that they meet the population's need.

There are no blueprints for overseeing health system transformation. Governments will need to follow a learning approach to the implementation of change.[38] Activities that contribute to this approach could include studies that model the likely increases in hospitalization and costs of health care and social support as a result of aging if measures are not taken to help people prevent or delay the progression of chronic illnesses; experiments with interventions to improve the support provided to people in managing chronic NCDs; monitoring for the emergence of new needs and unintended outcomes of interventions; and arrangement of opportunities for mutual learning about what works and what does not between countries in the region.

DISCLOSURE OF POTENTIAL CONFLICTS OF INTEREST

The author confirms that there are no conflicts of interest.

ACKNOWLEDGMENTS

The author acknowledges the very useful comments and suggestions by the participants of the side event on The Asia-Pacific Pathway to Universal Health Coverage organized on 12 December 2017 at the meeting of the UHC Forum in Tokyo.

FUNDING

The author acknowledges financial support from the Western Pacific Office of the World Health Organization, a grant from UK Aid to the Future Health Systems Consortium, and a travel grant from the Asian Development Bank.

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