Strategies to strengthen referral from primary care to secondary care in low- and middle-income countries
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## Acronyms and abbreviations

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<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>DHS</td>
<td>district health service</td>
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<tr>
<td>GP</td>
<td>general physician</td>
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<td>HICs</td>
<td>high-income countries</td>
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<td>JKN</td>
<td><em>Jaminan Kesehatan Nasional</em></td>
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<td>LMICs</td>
<td>low- and middle-income countries</td>
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<td>NCD</td>
<td>noncommunicable disease</td>
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<td>OOP</td>
<td>out of pocket</td>
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<td>OPD</td>
<td>outpatient department</td>
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<td>PHC</td>
<td>primary health care</td>
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<td>PhilHealth</td>
<td>Philippine Health Insurance Corporation</td>
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<td>QoC</td>
<td>quality of care</td>
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<td>UCS</td>
<td>universal coverage scheme</td>
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<td>UHC</td>
<td>universal health coverage</td>
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<td>UK</td>
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<td>WHO</td>
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I. Policy brief

Introduction

Low- and middle-income countries (LMICs) face challenges while moving towards universal health coverage (UHC). These include balancing an increasing demand for health services – resulting from the reduction in financial barriers to access – with maintaining the quality of care and controlling cost escalation.

Effective management of service provision and patient care between levels of service, and referral of patients between levels, is essential in the face of a rising demand for services. This remains a critical issue in most LMICs, where the epidemiological transition drives a shift from episodic care of acute illness to ongoing care of chronic and noncommunicable diseases (NCDs).

This policy brief recommends appropriate strategies to address these issues within the context of the national health system. It examines the approaches adopted to manage the proportion of cases treated at each level and the process of referral between the primary and secondary levels of care. And it recommends a consistent approach to policy-making.

The recommendations of this policy brief are based on evidence obtained from systematic literature reviews that include: (i) studies from both high-income countries (HICs) and LMICs; (ii) intervention, descriptive and analytical studies from LMICs; and (iii) case studies of five Asia-Pacific countries that are introducing UHC reforms (China, Fiji, Indonesia, Philippines and Thailand).

What is the problem?

The World Health Organization (WHO) defines referral as a process in which a health worker at one level of the health system connects with the same or a higher level that is better, or differently, resourced, either
to provide assistance or to transfer the management of the patient to the higher level.

Generally, the referral occurs either as a result of the nature of the treatment required or from difficulties arising due to insufficient drugs, equipment or skills to manage the patient at the lower level. In principle, referral may occur from lower to higher levels of care, or it may occur from higher to lower levels of care where that provides the most appropriate use of resources.

This policy brief focuses on service delivery at the primary and secondary levels of care and non-emergency referral between these levels. This approach is tied most closely to UHC reforms and offers the greatest opportunity to improve health system performance. Effective operation of the referral system in turn requires balancing competing health system outcomes – patient satisfaction, quality of care and costs of health care.

The immediate challenge is to strengthen provision of primary care services and the referral system. For LMICs that introduce financial protection programmes and move towards UHC, careful management of the referral system can lead to improvements in the quality of care while controlling the costs of service delivery.

What do we know?

Many LMICs show evidence of patients commonly bypassing primary care facilities and seeking care directly from secondary-level facilities. Often, the proportion of patients referred from primary care to secondary care through the formal referral process is low, and there are high rates of non-compliance with referral when it is recommended.

Several factors have been identified as influencing the process of referral between the primary and secondary levels and the proportion of care provided at each level:

- the nature of the health system (including the extent of public and private provision of care and the degree to which the system is formally regulated);
- the nature of the referral system and the extent to which formal gatekeeping procedures or policies exist to regulate referral;
- the nature and level of routine communication between providers at the primary and secondary care levels;
• the quality of primary health care and capacity to provide these services (which may discourage the use of primary-level services);
• financial incentives and payment mechanisms for providers at the primary- and secondary-care levels (which may encourage or discourage referral);
• patient and community trust and confidence in providers at the primary and secondary levels of care;
• the ease and cost of transportation between levels and access to secondary or referral care; and
• the nature and perceived severity of the health problem.

There is considerable variation between countries – even among HICs – in the policies and strategies used to manage the division of care between the primary and secondary levels, or between general and specialist levels of care. Nonetheless, all countries face a high degree of complexity and competing objectives in introducing more formal policies and strategies to manage referral care.

Common identifiable issues in the performance of referral systems include:

• on the one hand, failure of referral or the inability to access secondary care when needed, which can result in delays in diagnosis, patient dissatisfaction and reluctance to comply with treatment, and also lead to restrictions on patient choice and limit patient-centred care; and
• on the other hand, excessive referral from primary to specialist care, which may result in higher costs, expose patients to the risk of unnecessary treatment or investigations, and contribute to inequalities in use of care (as wealthier members of the population tend to take advantage of access to secondary care more than the poor).

WHO emphasizes that referral is properly seen as a two-way process: referral from primary to secondary services where a higher level of care is needed; and return referral from secondary to primary care where that is appropriate to meet patient needs. This two-way transfer is based on an understanding of patient-care pathways that acknowledge not only the role of the specialist but also the critical role of the primary health worker in coordinating patient care over the longer term.
The literature from both LMICs and HICs suggests that several factors influence the effectiveness of referral systems:

- **The nature of the health system.** In mixed public-private health systems, many with informal providers, patients often “shop around”; effective regulation and clear patient pathways are crucial.
- **The nature of the referral system.** Where regulations are inadequate, or incentives are not in place, the gatekeeping function of primary health care is unlikely to operate effectively.
- **The nature of the health problem.** Referral for emergency care (especially obstetrics and neonatal concerns) are more common; referral must also encompass management of chronic diseases and NCDs.
- **The nature of primary care.** Where the quality of care is low, service delivery is weak, and access is limited, patients are likely to bypass primary care services.
- **Communication between primary health care and referral hospital providers.** Both formal and informal channels are required in a two-way process.
- **Financial incentives and payment mechanisms.** Fee-for-service mechanisms encourage providers to treat patients and reduce referral; capitation methods may lead to underprovision; providing the correct incentives is critical.
- **Financial barriers to referral.** Patients may face prohibitive costs of travel and ancillary expenses.
- **Patient perceptions.** These include trust in providers and confidence in the referral process.

Many of these factors also contribute to the extent and quality of care provided at the primary and secondary levels, which, in turn, contribute to several key health system outcomes, including equitable and efficient service delivery and patient satisfaction. These issues are also particularly important for countries introducing UHC reforms and reducing barriers to access to services, which commonly result in an increase in demand.

**Policy options, strategies and approaches**

Three strategies were identified as contributing to better management of referral. One is to enhance the gatekeeping role of primary care providers; the second is to clearly and formally define the package of services to be provided at each level; and the third is to link financing and provider payment mechanisms at each level to the delivery of the defined service
package. But these strategies are not effective in isolation. It is the combination of these three strategies that provides the best opportunity for achieving efficient and effective health system outcomes rather than the implementation of one or two as otherwise unconnected policies.

1. **Gatekeeping.** Many LMICs have introduced gatekeeping reforms in the context of UHC, with financial penalties for patients who bypass primary care and self-refer to secondary-level services. Gatekeeping is defined as an arrangement in which the primary care provider controls access to secondary care and coordinates the care pathway for each patient. Patients must first attend primary care facilities to receive a referral. When combined with high capacity for and delivery of good-quality primary care, together with high levels of patient and community confidence in primary providers, as in Thailand, for example, this appears to be an effective approach within a wider strategy. In some cases, such as in China or Indonesia, results have been mixed, with considerable patient dissatisfaction at the loss of previous rights to self-refer.

2. **Benefit package.** Defining the benefit package requires identifying the most appropriate and most cost-effective services to be provided at each level within each particular context, with savings that come from using resources in the most appropriate way and creating economies of scale. Thailand provides a good example of the use of the defined benefit package in combination with contracting of district primary care–secondary care networks and capitation payment mechanisms within a budget ceiling.

3. **Financing and provider payment.** The use of defined benefit packages and a gatekeeping function has been found to be an effective strategy in conditions where the benefit package is properly costed and linked to financing and payment mechanisms that support the defined service provision. Some form of contracting or regulated pay-for-performance arrangement is one way to define provider payment mechanisms that provide incentives to deliver the required services in an appropriate way.

An approach to introducing these policy changes and strategies involves the following steps:

(1) **Identify the current challenges and the aim of reforms within the referral system.** This should focus on the capacity for service delivery and the quality of care provided at the primary and secondary levels, the distribution of workforce between the levels, and levels of
patient confidence in services at each level. Different issues may arise in different local contexts, such as the overuse of hospitals in urban areas and underuse in rural areas or by disadvantaged groups.

(2) Define the benefit package for each level of care. One key policy objective may be resource redistribution from secondary to primary care levels to achieve efficiencies and economies of scale. This requires the implementation of appropriate, well-defined and cost-effective benefit packages at each level of care. This could provide a clear basis for obtaining increased funding for efficient service delivery and create a foundation for negotiation of agreements with both social and private health insurance agencies for the delivery of contracted services.

(3) Identify the key drivers of provider practices and patient behaviours. The most important issues include the determinants of service provision at each level, such as funding levels, workforce distribution and capacity to provide services. Other issues are the determinants of provider behaviours such as payment mechanisms, salaries and non-salary incentives, and the determinants of patient behaviours, including barriers to access, beliefs and expectations, and confidence and trust in providers.

(4) Develop regulations to provide a gatekeeping role at the primary care level. This will be effective only where primary care services are effective and well resourced. It provides the means for effective management of the increased demand for health services in the context of UHC and the changing composition of the burden of disease.

These steps and strategies provide the tools to better manage both the division of services between primary and secondary levels and the process of referral between levels. They will also provide the basis for a more effective response to the rising demand for care and control of costs. However, the effectiveness of these strategies depends on the performance of other health system functions, including financing and workforce allocations to facilities at different levels, the incentives generated by payment mechanisms, and the trust and confidence of patients and communities in the services provided.
Many low- and middle-income countries (LMICs) are moving towards universal health coverage (UHC) within the context of a rising burden of noncommunicable diseases (NCDs). This environment presents challenges for LMICs in balancing the increasing demand for primary and secondary health-care services resulting from a reduction in financial barriers with maintaining the quality of care (QoC) and controlling escalation in health costs.

Coordinating the division of service provision and patient care between the primary and secondary levels of services, and transfer of patients between these two levels, or referral, is a key element of wider strategies to manage rising demand. This requires balancing competing health system outcomes such as patient satisfaction, QoC, control of costs, and equity in utilization.

In practice, the effectiveness of strategies to manage demand and referral between health-care levels depends on many other health system functions, including financing and workforce allocation to facilities at different levels, incentives generated by payment mechanisms, and the trust and confidence of patients and communities in the services provided.

1.1 What is a referral and how does it relate to the health system?

As health systems evolve, so too does the practice of moving, or referring, patients from one facility to another and between levels of service. WHO defines referral as a process in which a health worker at one level of the health system connects with the same or higher level that is a better or differently resourced facility for assistance with or transfer of the management of a patient, due to insufficient resources (drugs, equipment and skills) to manage the clinical condition at the lower level (WHO, 2007). It is important to understand that referral is a two-way process,
from primary to secondary level for patients requiring a higher level of care, and from secondary to primary level where patients receive health-care services more appropriate to their medical needs (WHO, 2007).

The medical rationale for referral is that patients cannot themselves “judge the precise nature of the treatment needed” (Stefanini, 1994: p.15) or where and from whom treatment is needed and so rely on health workers to make this decision. The purpose of a referral system is described as twofold: to provide the most *effective treatment at minimal cost to both the patient and the health system*.

At the level of the patient–health worker relationship (micro level), a referral is defined as a “transfer of responsibility for an aspect of the patient’s care” (McWhinney, 1989, as cited in Akbari et al., 2008: p.3). While some definitions focus solely on the transfer “from generalists to specialists” (Coulter, 1992, as cited in Akbari et al., 2008: p.3), others have also recognized the importance of a return referral (WHO, 2007) from the higher to the lower level of service. Emphasis on a two-way transfer acknowledges not only the role of the specialist but also the role of the primary health worker in coordinating patient care and giving time to the human dimension of care (Stefanini, 1994) over the longer term.

As a network (meso level), referral systems are described as an “organisational structure” (Coulter, 1992, as cited in Akbari et al., 2008: p.2). This structure requires effective protocols of care that are adhered to, sound communication between health workers within different institutions, and support for patients to access referral care (WHO, 2007). As noted by Bossyns & Van Lerberghe (2004), this structure is more akin to “software” than “hardware” and is more difficult to establish than physical facilities.

From a health systems perspective, the referral function results from the interaction and functioning of different elements of the health system. These include (a) the organization of services, and the capacity and QoC provided by primary care and referral care health facilities; (b) the financing of services, and incentives generated by payment systems for providers to manage patients at particular levels of facilities, or refer to higher or lower facility levels; (c) the regulations and policies that establish the expectations and standards for service provision, and for communication between service levels; and (d) the expectations of patients and the community, their trust in providers and preference for different models of service provision, and their capacity and willingness to travel to access services from different facilities.
1.2 Importance of referral and the linkage with QoC

The importance of referral services has also been recognized as a key element of the paradigm shift in health-care delivery required to respond to the changing disease burden in most LMICs (from infectious diseases to NCDs) (WHO, 2002 & 2015). The experience in countries in which this epidemiological transition has already taken place indicates that health systems need to move from referral systems that cater for single episodes of emergency care towards greater two-way connection between primary and referral facilities to provide ongoing coordinated care (WHO, 2015).

A patient's transition across organizational boundaries, as Haggerty et al. (2013) describe, is a potential breaking point for continuity of care and hence will impact on QoC and clinical outcomes. QoC is receiving new emphasis as countries working towards UHC find that increasing access to care needs to be accompanied by improving the QoC in order to achieve better health outcomes for all (Lagomarsino et al., 2012; Mate et al., 2013). Building on this recognition, WHO and the World Bank recently defined UHC as based on the “principle that individuals and communities should receive quality health services without suffering financial hardship” (WHO & World Bank, 2017: p. 8) so that “coverage with QoC is at the heart of the UHC endeavour” (WHO & World Bank, 2015: p.11). (See Fig. 1.)

UHC programmes themselves provide an opportunity to improve QoC (Mate et al., 2013). To date, much of the policy analysis in countries of Asia and the Pacific has focused on opportunities to improve quality as part of the accreditation of hospitals (Mate et al., 2014) and regulation of ambulatory care (Dayal & Hort, 2015), for example, through selective contracting and by linking payment to quality standards. Another important mechanism for improving QoC that may be addressed through UHC programmes, but has received less emphasis to date, is ensuring that referral systems function well so that patients receive effective care in a safe and timely manner at the appropriate level of service (Measure Evaluation, 2013; Murray & Pearson, 2006; Stefanini, 1994; WHO, 2015).

Challenges in the functioning of referral systems have been noted in several countries, particularly in LMICs. These are most commonly concerned with bypassing of primary care providers and overcrowding in referral facilities, and are critical issues that we discuss in this analytical paper.
This working paper explores the following research questions that are derived from a review of the published and grey literature and some country case studies:

− What are the key elements of a referral system and how are they linked together?
− How do functioning referral systems contribute to QoC?
− What strategies can be used to improve the functioning of referral systems?
− How can policy-makers determine which strategies might be most appropriate to the context of their health system?

2.1 Literature review
We conducted an initial scoping review of the literature related to referral systems in LMICs. Two main searches were conducted using “referral” AND “developing country” in the title or abstract on PubMed and “referral” in the Cochrane database. For peer-reviewed papers on LMICs, we reviewed both systematic reviews and original research (descriptive or analytical) and for HICs, we reviewed systematic reviews only. We also reviewed selected grey literature from WHO and other sources. The key findings were extracted from these studies. In reviewing this literature, we focused on referral between the primary care level and the first-level referral hospital, rather than referral from the community to primary care or referral to tertiary-level care within or outside the country from the first-level referral hospital.
The literature included:

- 16 systematic reviews from HICs;
- 6 systematic reviews from LMICs;
- 15 analytical research articles (intervention studies) from LMICs; and
- 44 descriptive and other research articles (case studies and commentaries) from LMICs.

2.2 Case studies

To develop case studies of relevant countries, we reviewed the Health Systems in Transition reports prepared by the Asia Pacific Observatory on Health Systems and Policies for five countries in the region that have made progress towards UHC in recent times: China, Fiji, Indonesia, Philippines and Thailand. We extracted information on UHC-related reforms, the changes to the referral system brought about by these reforms and their impact on QoC. Where we found gaps in the country reports, we conducted specific country literature searches to add to our understanding.
3.  Literature review

3.1 What is the state of referral systems in LMICs?

The literature on the state of referral systems in LMICs largely focuses on describing the extent to which patients comply/do not comply with the referral system and possible reasons for it. Studies report that patients bypass primary health care (PHC) facilities in favour of seeking care directly from facilities that provide secondary or higher levels of care in many LMICs. One result is that many patients attending higher-level facilities have not been assessed or provided initial treatment from primary care facilities. In these cases, the risk is that the benefits of the PHC approach – both in understanding the family and community context and in managing patient pathways – are more difficult to obtain. Many cases indicate that the majority of patients at the secondary level are non-referred; for example, only 9.9% of sampled outpatients at referral facilities reported being referred in Ethiopia (Abrahim et al., 2015), 20% in Kenya (Nordberg, Holmberg & Kiugu, 1996), and between 7.7% and 37.6% in Nigeria (Aguwa et al., 2010; Akande, 2004) (see also Akpede et al., 2005; Eskandari, Abbaszadeh & Borhani, 2013; Low et al., 2001; Mahmoud et al., 2010; Murray & Pearson, 2006).

Patients may also bypass primary care in favour of seeking care initially from traditional or informal providers. This can then result in delays and multiple health worker contacts before accessing secondary- or higher-level care where needed (Bossyns & Van Lerberghe, 2004; Dye et al., 2010; Kauye, Udedi & Mafuta, 2015; Razali & Yasin, 2008). Additionally, there are generally few links between private and/or informal care providers and referral facilities (Jindal, 2011; Nakahara et al., 2010).

There are several reasons for patients bypassing primary care facilities and seeking care directly from secondary-level facilities. For example, rural populations and the poor may lack access to good-quality, affordable
primary care due to human resources and supply issues (Islam et al., 2015; Kruk et al., 2010; Nordberg et al., 1996). Patients in urban settings may live in closer proximity to a referral hospital than a primary care facility (Abrahim et al., 2015). In emergency contexts, PHC facilities may be closed (Al-Attas et al., 2010). Patients may also be unclear about the role of primary versus referral care (Aguwa et al., 2010; Bossyns & Van Lerberghe, 2004; Eskandari et al., 2013).

Other studies have assessed the rate of referral from primary to referral facilities and find that it is low (0.1% in Nepal, less than 0.9% in Kenya and 2.5% in Niger) (Bossyns et al., 2006; Furber, 2002; Nordberg et al., 1996) (see also Ohara et al., 1998). There are many different reasons why a needed referral may not take place: for example, health workers may delay referral, particularly for non-emergency cases, to exhaust all other treatments (Akpede et al., 2005; Al-Attas et al., 2010; Bossyns & Van Lerberghe, 2004); health workers may be reluctant to refer to avoid “losing face” (Bossyns & Van Lerberghe, 2004) or to protect an income from patient user fees; the patient may discourage the health worker from making the referral (Bossyns & Van Lerberghe, 2004); or there may be human resource issues such as (commonly) a high nurse–patient ratio (Shimoda et al., 2015), which might include shortages of midwives, medical assistants, nurse practitioners, volunteer or community health workers or community-based medical practitioners.

Even where patients are referred, they may not comply with the referral for several reasons (Bossyns & Van Lerberghe, 2004). For example, in Pakistan, Owais et al. (2011) found that only 24% of families with newborns who were referred to a hospital carried through with the referral. They may be unclear about the reason for referral (Tanon-Anoh, Sanogo-Gone & Kouassi, 2010); they may face barriers, including financial difficulties related to both the direct and indirect costs of seeking care (Bossyns & Van Lerberghe, 2004; Owais et al., 2011; Pembe et al., 2010; Tanon-Anoh, Sanogo-Gone & Kouassi, 2010); transport may be unavailable or financially prohibitive (Bose et al., 2012; Bossyns & Van Lerberghe, 2004; Bossyns et al., 2006; Macintyre & Hotchkiss, 1999; Nakahara et al., 2010); or there may be cultural or family restrictions on patients who need referral (Owais et al., 2011; Tanon-Anoh, Sanogo-Gone & Kouassi, 2010) (such as restrictions on women seeking care alone from a male health provider).

Even where referral takes place, problems may arise. For example, there are often no standards for the documentation required (Abate &
Enquselassie, 2010; Gyedu et al., 2015) or the documentation provided is incomplete (Abate & Enquselassie, 2010; Dafallah, Yousif & Idris, 2005; Ibiyemi & Ibiyemi, 2012) or not returned to the PHC facility (Eskandari et al., 2013; Islam et al., 2015; Ohara et al., 1998). Few referred patients are referred back to primary care (Eskandari et al., 2013).

3.2 What is the relationship between referral and QoC?

Much of the literature on referral systems in LMICs takes a normative approach and focuses on how referral systems should function. For example, WHO’s 2007 framework focuses on prescribing the roles and responsibilities of different institutions in the referral system (refer to Fig. 2). While this literature does not define the relationship between referrals and QoC, it does suggest that the relationship is not linear and may best be conceptualized as being interdependent, as follows:

- Referral is a component of QoC. For example, the WHO vision statement for improving the QoC for pregnant women and newborns conceptualizes referral as a part of the “process of care” that is essential for the QoC provided to each patient (Tuncalp et al., 2015).

- QoC also impacts use of the referral system. As noted above, quality issues may lead to bypassing of primary care facilities (and thus the referral system) in favour of informal, private, secondary or tertiary facilities, and may also work against it (e.g. because of concerns about the quality of hospital care, the overall experience, or fear of a negative outcome from a more serious illness).

- The limited use of the referral system in turn impacts QoC. Bypassing of primary care leads to overburdening of secondary and tertiary facilities, reducing QoC at those facilities, especially resulting in undertreatment of emergencies and complications.

The interdependent nature of the referral system and QoC reinforces the view that QoC, like other dimensions of health system performance, can be seen as an outcome of the interaction between different levels of the health system and is not simply a question of patient or provider behaviour at the facility level. Table 1 provides an analysis of the interconnections between referral system function and QoC based on the Institute of Medicine components of QoC (2001).
3.3 What factors influence the effectiveness of referral in LMICs?

The literature summarized above describes how referral systems differ from country to country and are influenced by the nature of the health system and broader context in which they operate.

WHO (2007) notes that referral systems are influenced by both health system determinants (capabilities at the lower levels; availability of specialized personnel; training capacity; organizational arrangements; cultural issues, political issues, and traditions); as well as general determinants (population size and density; terrain and distances between urban centres; pattern and burden of disease; demand for and ability to pay for referral care). The literature from both LMICs and HICs suggests that the major factors influencing the effectiveness of referral systems in LMICs are as follows:

- **The nature of primary care: strong/weak.** Where populations do not have good access to a primary care facility and/or one of good quality, patients often bypass primary care and self-refer to specialist care. Where patients do attend primary care, health workers may not make the referral for a variety of reasons cited above. While patient preference for referral care is common across both HICs and LMICs, where patients have access to primary care of good quality and/or an ongoing relationship with a primary health care worker, they may be more likely to follow the pathway set out in the referral system.

- **The nature of the referral system: formal/informal and extent of gatekeeping function.** Many HICs have a highly formalized referral system, where patients are incentivized or mandated to attend primary care before seeking specialist care. In such systems, primary care providers act as gatekeepers to specialists. In contrast, referral systems in most LMICs are informal and little “gatekeeping” of referral care exists. This in part relates to the nature of primary care – if it is not universally available then patients will be dependent on secondary or tertiary care for their primary care. It also relates to the financing of UHC – gatekeeping generally depends on public or private health insurance policies or service user fees that create incentives to comply with the referral system.
The nature of the health system: public/private and regulated/unregulated. In many LMICs, enforcement of regulations in the health system is limited, with very little interaction between the public and private sectors, and with a large supply of “informal” or “traditional” health workers. Patients may see multiple providers in the public, private or informal sector before accessing specialist care. While indirect patient pathways are not unique to LMICs, patients in LMICs, especially those in underserved areas that may not have access to primary care of good quality, may be reliant on unregulated providers who have limited capacity or incentive to refer patients to specialist care, or limited functional connection with providers of secondary and tertiary care.

Financial incentives and payment mechanisms for providers at PHC and referral levels. Fee-for-service payment mechanisms tend to encourage providers to manage patients and reduce referral; while capitation payment may encourage more referral, although this depends on whether capitation payments include fundholding responsibilities, whereby the primary care provider is responsible for payment of the costs incurred in referral.

Connections and communication between PHC providers and those at referral hospitals. A variety of formal and informal connections can develop between PHC facilities and referral hospitals. PHC workers can develop informal connections with hospital providers during in-service training and refresher training sessions. The availability of consultation by phone can facilitate this communication. Where hospital providers have a role in providing technical supervision or review to PHC providers, this can also contribute to both formal and informal communication, for example, through audits of maternal deaths.

The nature of financial hardship associated with referrals: high/low. The degree to which patients have the necessary resources to comply with a referral in a timely manner, and the costs that might be incurred through referral, also affects the functioning of a referral system. This includes not only the costs of transportation, but also the costs of family members accompanying patients on referral in situations where patients require family support for travel or to consult with another provider. In some cases, such costs may be subsidized through social health protection and insurance schemes.
- **The nature of health problems: emergency/episodic and extent of chronic NCDs.** Until recently, in LMICs, most attention was given to activities that reflect the disease burden and improve emergency referral (for example, emergency obstetric or neonatal/child health referrals) rather than care for chronic conditions. Chronic conditions require ongoing care from, and referral between, a variety of primary care providers, specialists and allied health-care providers. They may also require urgent referral to specialist or higher-level care for acute complications that can occur.

- **Patient/community perceptions, trust, relationships with providers.** Patients may prefer and trust more in private than public providers, and in providers in hospital facilities, as they are perceived to have greater skill or knowledge than PHC providers. Other communities may be afraid of attending hospital – either because of costs, or fear of dying in hospital, or abuse from providers.

The multiplicity of factors involved demonstrates that referral reflects the functioning of the health system as a whole, and impacts the interface between primary care and secondary-level care. Given that health system structures and functions vary considerably from country to country, this finding also suggests that strategies to address the referral function need to be appropriate to individual contexts and health systems, which may differ in some of the key factors noted above.
We identified two systematic reviews of strategies to improve referral: Blank et al. (2015), which focuses on the context of the United Kingdom (UK) National Health Service system; and Akbari et al. (2008). In both cases, the majority of the evidence identified in the reviews originated from HICs, so we have supplemented the evidence from the reviews with case studies from selected LMICs that have introduced strategies to address referral.

Akbari et al. (2008) noted considerable variation between countries in terms of referral rates, and the extent to which the referral process was managed by a formal system. They noted that, for example, Denmark, the Netherlands and the UK had more formal systems, with primary care physicians acting as gatekeepers in defining which patients were referred for specialist care; while countries such as France, Germany and the USA had less formalized systems.

Blank and colleagues situate referral management as part of a broader process of demand management. They note that: “Referral management entails moving from a system that reacts in an ad-hoc way to meet increasing needs to one that is able to plan, direct and optimise services in order to optimise demand, capacity and access across an area” (Blank et al., 2015: p.2).

They also highlight the multiple, and potentially competing, objectives of any referral strategy. In a more recent paper focused on gatekeeping, Greenfield, Foley & Majeed (2016) note that referral “has crucial influences on service utilisation, health outcomes, healthcare costs and patient satisfaction”. Restricting access to specialist services can result in lower patient satisfaction, delays in diagnosis and treatment, and worse health outcomes; and can undermine efforts towards patient-centred care, and
respecting patient decisions. On the other hand, allowing direct access to specialist care can intensify inequalities in use and QoC, as wealthier groups may make more use of specialist care than disadvantaged groups; as well as contributing to overall higher costs due to the higher cost of specialist care. They note that “a good gatekeeping policy is one that balances clinical needs, patient choice and system constraints”. We believe that these are also the characteristics of good referral management policy.

Thus, a first step in selecting strategies to improve referral management is to determine the current balance among these objectives, and the change sought through any strategy. One approach is to define appropriate or avoidable referrals. Referrals are classified as appropriate or not appropriate based on the patient’s condition, reason for referral and capacity of PHC management; and avoidable if it is possible to remove the obstacle to the patient’s management at the PHC facility (Ang et al., 2014). However, determining the degree of appropriateness or avoidability of any particular referral may be difficult or contested.

Interventions to improve referral may also have unintended consequences through influencing other aspects of the primary care/specialist care interface: general practice management of non-referred patients, secondary care management of patients, the flow of patients through the referral system, patient outcomes and satisfaction, and resource use (Akbari et al., 2008).

Blank et al. (2015: p.xix) also note that the “complexity of the intervention–outcomes pathway highlights that, in order to tackle demand management of primary-care services, the focus cannot be on primary care alone – a whole-systems approach is needed as the introduction of interventions in primary care is often just the starting point of the referral process”.

In terms of effective strategies, Akbari and colleagues (2008) were able to identify only a few effective strategies based around educational interventions, such as dissemination of guidelines with structured referral sheets, and involvement of secondary care specialists in educational activities with primary care providers.

Blank et al. (2015) identified four groups of factors influencing referral: primary care provider knowledge and attitudes; patient attitudes and beliefs, and condition; the local health-care context (waiting times, location of services, and availability of specialists); and some system-level functions. They noted that individual-level interventions had only
limited evidence of effectiveness; and that process change interventions were strongly influenced by local and context-specific variations. They did suggest that some system-level interventions, such as the addition or removal of gatekeeping and changes to health-care payment systems, were worthy of further consideration.

As these system-level interventions are likely to be particularly relevant for countries introducing UHC, and also emerged from the case studies of LMICs as strategies that have been implemented in such countries, we have particularly focused on these two strategies.

### 4.1 Gatekeeper role of PHC

The process of decision-making at the PHC level to refer the patient to the secondary or tertiary facility is called gatekeeping. Gatekeeping has been defined as “an arrangement between primary care providers and specialists, which involves a generalist... who controls access to specialist care and coordinates care for patients” (Starfield quoted in Xu & Mills, 2017). However, while gatekeeping has given rise to mixed results in the referral systems of developed countries, our understanding of how gatekeeping and the referral system work in LMICs is limited.

Gatekeeping at the primary care level is a common element in more formalized referral management systems in HICs. But, as noted by Greenfield et al. (2016), there are concerns that excessive focus on limiting access to specialist care through gatekeeping can also result in increased risk of poorer health outcomes, and a “light touch” approach has been recommended (Blank et al., 2015).

Several LMICs have introduced reforms to strengthen gatekeeping at the primary care level, and to limit direct access to specialist care in hospitals. Countries that have tried this approach include lower-income countries such as Kenya, as well as middle-income countries such as China and Indonesia. As described in the case studies, the results from the introduction of gatekeeping have been variable. In Kenya, the focus was on reducing overcrowding and inappropriate referrals to district hospitals, but lack of knowledge of the requirements at both primary care and hospital levels undermined the effectiveness of gatekeeping. In China and Indonesia, gatekeeping was introduced in the context of UHC reforms, which resulted in financial penalties to patients who self-referred to hospitals. In both countries, the reforms were introduced in a context of no previous restriction on access to hospitals, and among patients who
had limited confidence in the abilities and capacities of their PHC provider. This has led to considerable patient complaints and dissatisfaction with the services provided.

It is clear that effective gatekeeping depends on the PHC provider having the capacity and willingness to provide the required services at the expected level of quality, and on the patients’ confidence and trust in the provider. Thailand provides an example of a country that has significantly invested in building PHC capacity, and has thus built up the confidence and trust of its population in PHC services. As a result, the introduction of UHC reforms, which reduced the costs of accessing both PHC and hospital services, resulted in an increase in outpatient consultation at the PHC level, and reduction in consultation at the hospital level (Tangcharoensathien et al., 2015). Similarly, Malaysia has strengthened PHC services through the introduction of family medicine specialists, and reports relatively low rates of referral, and low rates of referral on request of patient or family (Ang et al., 2014).

4.2 Defining the services to be provided at each level through benefit packages and linking with payment mechanisms that support provision of these services

Glassman et al. (2016) claim that “the creation of an explicit health benefits package is an essential element in creating a sustainable system of UHC”. It should then contain a detailed statement of the services to be made available that secure the maximum value (however defined) from the limited funds available.

Benefit packages define the services to be provided at each level of facility, and provide a structured and transparent basis for calculation of payments. However, packages need to be costed and linked to budget allocation in order to be effective. As a list of services or interventions alone, it is of little value. The link to funding requires consideration of delivery mechanisms, and supports the definition of what services should be provided at which level of care, which consequently determines referral behaviour (WHO, 2008).

Packages are most useful if regarded as a political instrument rather than as a purely technical exercise. Their development can help to promote dialogue on health priorities, and structure negotiations on who should deliver what and where in order to get better value for money (WHO, 2008).
Changing incentives generated by different payment mechanisms influence physician and patient behaviour. Greenfield et al. (2016) note that payment mechanisms impact on general physician (GP) behaviour, with capitation payment mechanisms increasing referrals, while fundholding (which requires the primary care provider to cover the cost of referrals) can reduce referrals, or result in almost as many referrals as capitation if GP care costs are high.

Social protection schemes may lead to a reduction or increase in hospital utilization. Increased use of effective PHC could reduce avoidable hospitalizations, while decreased financial barriers could lead to more hospitalization when needed. In Iran, a social protection scheme for rural residents resulted in an initial increase in hospitalization, possibly due to relative underutilization prior to introduction of social protection, which then plateaued at a new level (Rashidian et al., 2013).

Xu & Mills (2017) describe how salary and an incentive payment structure for PHC doctors in China, as well as social protection schemes, influenced the behaviour of patients and providers in a complex interaction (see China case study).

Studies of the Thai UHC scheme demonstrate how appropriate payment strategies, linked to an explicit definition of benefit packages, have been a key element in achieving UHC goals, particularly in controlling costs. Contracting with the district health service network and capitation payment mechanisms encouraged efficient use of PHC and referral services. A key element supporting the payment mechanism was the design of benefit packages and their progressive revision based on cost-effectiveness evaluation.
The extent of and quality of care provided at primary and secondary levels is a key determinant of a number of health system outcomes, including QoC, patient satisfaction, and costs of care. Formal management of the division of services between these levels, and of the process of referral between the primary and secondary levels, can enable better management of demand for care, improve patient care and patient satisfaction, and control costs. This is particularly an issue for countries introducing UHC schemes, which reduce barriers to access to services, and can result in an increase in demand.

Effective management of the division of services and referral between service levels requires balancing across competing outcomes – patient satisfaction, QoC, control of costs, and equity in utilization. While there are effective strategies, the effectiveness of these strategies depends on other aspects of health system function, including financing and workforce allocation to facilities at different levels, incentives generated by payment mechanisms, and the trust and confidence of patients and communities in the services provided.

**Approach to addressing referral**

(1) Identify current problems with the referral system, with a focus on the quality and capacity of services at the primary and secondary levels, distribution of workforce between the levels, and levels of patient satisfaction and confidence in services at each level. There may be different issues in different local contexts, e.g. overuse of hospitals in urban areas, and underuse in rural areas or by disadvantaged groups. Based on this, identify the aims for policy in this area.

(2) Identify the key drivers of provider practices and patient behaviour that result in these problems. In particular, these include the
determinants of the services and capacity to provide these services at the primary and secondary levels (e.g. funding and workforce distribution), the determinants of provider behaviour (e.g. payment mechanisms and salary incentives), and the determinants of patient behaviour (e.g. barriers to access, beliefs and expectations, confidence and trust in providers).

(3) Where resource redistribution (e.g. from secondary to primary care levels) is a key policy objective, consider defining benefit packages/packages of services to be provided at each level, as a lever to obtain increased funding, and to determine payment mechanisms, particularly from insurance schemes that provide the appropriate incentives.

(4) Where more active demand management is sought, consider a formal gatekeeping role for PHC, while ensuring adequate PHC capacity, appropriate incentives for patients and doctors, and establishing an effective process and mechanism for referral upwards and backwards.
Appendix: Case studies in Asia and the Pacific

(See Table 2 for a summary of health system characteristics.)

Thailand

With the introduction of the UHC scheme in 2001, Thailand has achieved nearly universal coverage with financial protection for its population, while controlling costs and providing quality health care. Thailand uses a formal demand management system that is built around the definition of the health benefits package, a closed-end capitation payment mechanism, and contracting with district health system networks.

An important precursor to the establishment of this system was the significant and long-term investment in building the public health system infrastructure and workforce, which commenced in the 1980s. This included the construction of rural district hospitals and primary care health centres, and incentives to educate and place doctors in rural facilities. This alone resulted in an increase in outpatient visits in rural health centres from 29.4% in 1977 to 41.1% in 2006, while the percentage of outpatient visits in urban provincial hospitals fell from 46.2% to 20.1% (MoPH, 2007; Wibulpolprasert & Pengpaibon, 2003).

Under the UHC scheme, the district health service (DHS) network, consisting of 10–15 subdistrict health centres and a district hospital, is contracted to provide outpatient services to the catchment population, and receives payment based on capitation. PHC services are usually delivered by paramedics in health centres or general doctors in outpatient departments (OPDs) of hospitals. Patients are entitled to receive services from their registered provider network, either at health centres or at the district hospital. The network acts as a gatekeeper, and is liable to pay for costs of referral outside the network. However, patients bypassing and seeking care outside the network are liable to pay for services in full (Tangcharoensathien et al., 2015).
Tangcharoensathien et al. (2015) conclude that gatekeeping by the DHS contributes to rational use of services and system efficiency, while the comprehensive benefit package contributes to financial risk protection. Funding allocation is aligned with the benefit package, which ensures that the capitation payment is financially feasible.

Rather than increasing reliance on district hospitals, this contracting approach is associated with a reduction in the ratio of patients accessing hospital OPDs to local health centres from 1.2 in 2003 to 0.8 in 2011. Bypassing of PHC facilities (from any facility within the DHS) is more likely to occur among richer quintiles.

**China**

China is currently facing a number of challenges related to the underuse of primary care, and has introduced reforms to try to address this. Underuse of primary care has been attributed to the shift in investment from primary care and the “barefoot doctor” programme towards specialized care in hospitals. This has been driven by payment reforms that limited user fees for services in government facilities, reduced government subsidies to 10% of hospital revenue, but allowed a mark-up of 15% on the sale of drugs and high-tech investigations. As Wu & Lam (2016) comment: “Medical practices became profit-driven entities, and hospitals competed for patients with primary care facilities. To make matters worse, hospitals tended to expand their own scale and services to attract more patients – and thereby more profits – without proper government regulations.”

Despite reforms to encourage the development of primary care, and the introduction of insurance schemes to reduce financial barriers to access to care, the proportion of visits to primary care fell from 63% in 2005 to 59% in 2013, while the proportion of visits to hospitals rose from 34% to 37% (Wu & Lam, 2016). The main causes for the overuse of hospitals include: the low educational status and low fixed salaries of primary care providers, public lack of confidence in primary care and preference for hospital facilities, lack of formal gatekeeping policies with patients free to present to any level of care, and the growing economy and improved transportation enabling ready access to higher-level facilities.

Several cities have introduced pilot programmes of gatekeeping in primary care. Xu & Mills (2017) describe the results and unintended consequences of a programme in two townships in northern China. Under the gatekeeping programme, patients required a referral letter from a primary care provider to access OPDs in district hospitals; and a referral
letter from district hospitals to access tertiary hospitals. Without a referral letter, patients had to cover the full costs themselves. However, Xu & Mills (2017) found that salary changes and loss of performance bonus for primary care providers, and the restricted list of medicines available at primary care centres, together with patient lack of confidence in primary care, limited the impact of the gatekeeping programme.

A key underlying issue appears to be the low professional status of primary care, combined with low salaries and limited opportunities for bonuses, leading medical professionals to prefer opportunities to work in hospitals, while construction of large hospitals has created the demand and opportunity for medical professionals to work in hospitals (Wu & Lam, 2016).

**Fiji**

Like other Pacific Island countries, health services in Fiji are primarily publicly financed and provided. However, over the past decade, the Ministry of Health acknowledged an issue with patients bypassing PHC facilities in favour of OPDs at hospitals. This led the Ministry of Health to commence a process of deconcentrating outpatient services from public tertiary hospitals to public PHC facilities and improving the quality of PHC facilities. Efforts included additional resourcing for PHC facilities (increased workforce, including through the contracting of private providers), improved facilities and services, and extended hours. Utilization of these PHC facilities has increased by 150%, although the length of time of an average consultation has decreased. This has enabled general OPDs at major tertiary hospitals to close, retaining only specialist outpatient clinic functions. The government has also introduced fees in the public sector for those coming across from the private sector for specialized treatment.

**Indonesia**

Indonesia has invested significantly in the construction of a network of over 9000 public PHC centres (*puskesmas*) to enable ready access to primary care across the country. However, the relatively low quality of services, and the growth of the private sector led to increasing use of private primary care in the more economically developed areas of central and western Indonesia. Prior to the introduction of the national health insurance scheme (*Jaminan Kesehatan Nasional* or JKN) in 2014, access to outpatient or inpatient care in public or private hospitals was not limited.
The introduction of the JKN provided a comprehensive benefit package, subsidized premium for the poor, with no co-payments or ceilings. Providers were paid through capitation at the primary care level, and reimbursement at the hospital level. However, the scheme does specify which conditions and services must be provided at the primary care level in the benefit packages, and requires that the patient obtain a referral letter to access hospital or specialist care. Conditions for which referral may be provided are also specified in the benefit package.

The government has a target referral rate of 10% from primary to secondary care, although data suggest that the rate is much higher than this in some areas (Ekawati et al., 2017). The JKN operates through both public and private providers; however, the participation of private providers in the scheme is low due to the limited capitation payment. There has also been low participation in the JKN scheme among the non-subsidized population to date, which may reflect their access to and perceptions of the QoC at puskesmas, as well as their trust in the ability of GPs who staff puskesmas (Ekawati et al., 2017). In the 10 years prior to the introduction of the JKN, there was an increase in utilization of both public and private facilities, but approximately 60% of outpatient consultation still takes place at private facilities, including for the poorest 40%. The government is aiming to improve the quality of and increase the accreditation of puskesmas, although this is a difficult task in Indonesia’s highly decentralized system.

Ekawati et al. (2017) found that patients, who previously had no restrictions in bypassing primary care and directly seeking care from hospital facilities, were unhappy when new regulations required that they seek care from a PHC facility before being able to access referral. PHC providers were also constrained in terms of the conditions and circumstances in which they could refer, and felt that this restricted their access to specialist advice.

**Philippines**

In Philippines, a universal national insurance programme known as PhilHealth was introduced in 1995 with both contributory (employed, self-employed, overseas workers) and non-contributory members (poor, elderly). Further reforms in 2010 aimed to eliminate co-payments for the poor, although out-of-pocket (OOP) costs remained high (62% of the total health expenditure), particularly for medicines. Initially, the PhilHealth benefit package was focused on inpatient care and was only extended in 2015 to a limited number of outpatient services for part of the population (the poor). This means that there has been little financial incentive for most patients to attend PHC, and
while patients were encouraged to present to a PHC facility (barangay or rural health centre), in practice there was no gatekeeping mechanism or any financial incentive to stop self-referral. Self-referral to tertiary and specialized care is thus common practice, as evidenced by the significantly high overuse of tertiary facilities for ordinary illnesses. The main reasons for bypassing are dissatisfaction with the QoC and lack of supplies at PHC facilities. Similar to Indonesia, decentralization poses challenges to improving the quality of PHC, although the recent 2017 UHC reform aims to expand the outpatient benefit package and better define the roles and responsibilities of the various levels of government.

Fig. 1. WHO and the World Bank’s framework for health systems strengthening and UHC with five health system dimensions and three entry points for change

![Health System Framework](image_url)

Fig. 2. WHO’s framework for understanding referral system flows

**Overall health system**
- Network of service providers
- Adherence to referral protocols
- Transport, communication and other resources

**Initiating facility**
- The client and their condition
- Protocol of care
- Provide care and document
- Decision to refer

**Referral practicalities**
- Outward referral form
- Communication with receiving facility
- Information to the client
- Empathy

**Receiving facility**
- Receive client with referral form
- Treat client and document
- Plan rehabilitation

**Referral practicalities**
- Back-referral form
- Feedback to initiating facility
- Referral register

**Supervising organization**
- Monitor referrals
- Ensure back-referral
- Provide feedback and training for facility staff
- Provide feedback to central level

*Source: WHO, 2007: p.1*
<table>
<thead>
<tr>
<th>IOM aim</th>
<th>How referral system contributes to QoC elements</th>
<th>Key elements of referral system function to enable this contribution</th>
<th>Evidence on these functions from literature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safe</td>
<td>Information on the patient's condition and treatment is available at each level of the referral system; for more serious and acute conditions, staff have skills to manage unstable patients correctly.</td>
<td>Health workers (HWs) have clearly defined roles in which they are supported. HWs record patient history in full and share in paper or electronic structured form(^1) from primary to referral care and back again.</td>
<td>No standards for documentation.(^2) Documentation is incomplete(^3) or not returned to PHC.(^4)</td>
</tr>
<tr>
<td>Effective</td>
<td>Patient receives most effective care mix for their condition.</td>
<td>Primary HWs have working knowledge of up to date referral protocols(^5) and make decision to treat/refer based on current clinical standards. Primary HWs lead development of coordinated care plans where needed.</td>
<td>Primary HWs do not have access to protocols or effective training(^6) and lack knowledge about rare conditions. HWs have minimal supervision; lack of feedback. Links between private/informal and referral facilities are few.(^7)</td>
</tr>
</tbody>
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1 Gyedu et al., 2015; Ohara et al., 1998
2 Abate & Enqueselassie, 2010; Gyedu et al., 2015
3 Abate & Enqueselassie, 2010; Dafallah et al., 2005; Ibiyemi & Ibiyemi, 2012
4 Eskandari, Abbaszadeh & Borhani, 2013; Islam et al., 2015; Ohara et al., 1998
5 Gureje et al., 2015; Kongnyuy, Mlava & van den Broek, 2008; McCaw-Binns et al., 2004; Rudge et al., 2011
6 Bossyns & Van Lerberghe, 2004
7 Jindal, 2011; Nakahara et al., 2010
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<td>Patient-centred</td>
<td>Patients understand the rationale for decision and have knowledge and resources to navigate referral system.</td>
<td>Primary HWs explain decision to treat/refer patients effectively and discuss practicalities of referral process with patient.(^8) Referral HWs explain importance of the patient’s relationship with primary care.(^9)</td>
<td>HWS find it difficult to persuade patients to follow through with referrals.(^{10}) Patients unclear about the role of primary vs referral care(^{11}) or reason for referral.(^{12})</td>
</tr>
<tr>
<td>Timely</td>
<td>Patients have necessary means (for example, affordable transport) and family and community support to access primary and referral care as needed.</td>
<td>Primary HWs make decision to refer promptly. Telemedicine/communication available where needed.(^{13}) Transport available and financially accessible.(^{14})</td>
<td>HWS delay referral(^{15}), may be reluctant to refer to save face and maintain expert status(^{16}). Transport unavailable or financially prohibitive.(^{17})</td>
</tr>
</tbody>
</table>

8 Al-Attas et al., 2010  
9 Natale et al., 2010; Owais et al., 2011  
10 Bossyns & Van Lerberghe, 2004  
11 Bossyns & Van Lerberghe, 2004; Eskandari, Abbaszadeh & Borhani, 2013; Aguwa et al., 2010  
12 Tanon-Anoh, Sanogo-Gone & Kouassi, 2010  
13 Bossyns et al., 2005; Dadlani et al., 2014; Ebrahimia dib et al., 2016  
14 Macintyre & Hotchkiss, 1999  
15 Akpede et al., 2005; Al-Attas et al., 2010  
16 Bossyns & Van Lerberghe, 2004  
17 Bose et al., 2012; Bossyns et al., 2006; Macintyre & Hotchkiss, 1999; Nakahara et al., 2010
### IOM aim

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<td><strong>Efficient</strong></td>
<td>Patients progress from primary to referral care and back, and receive most efficient mix of care for their condition.</td>
<td>Well-resourced primary HWs have ongoing relationships with patients. Primary HWs coordinate and communicate prevention and treatment plans to patients and specialists. (^{16}) The PHC gatekeeping function operates well. HWs’ financial incentives encourage care at the appropriate level. Patient transport and ancillary costs are covered where possible and appropriate.</td>
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</tbody>
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18 Haggerty et al., 2013
19 Abraham et al., 2015; Aguwa et al., 2010; Akande, 2004; Eskandari, Abbaszadeh & Borhani, 2013; Low et al., 2001; Mahmoud et al., 2010; Murray & Pearson, 2006; Nordberg et al., 1996
20 Bossyns & Van Lerberghe, 2004; Dye et al., 2010; Kauye et al., 2015; Razali & Yasin, 2008
21 Eskandari, Abbaszadeh & Borhani, 2013
## Table 1. Referral system contribution to quality of care (contd)

<table>
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<tr>
<td>Equitable</td>
<td>Patients have access to good quality primary and referral care regardless of geographic location, gender, socioeconomic or other status.</td>
<td>Good quality primary and referral care available for the poor, where HWs do not discriminate.</td>
<td>Rural/poor lack access to good quality affordable primary and referral facilities; rich benefit from bypassing primary for referral care. Family also face barriers in supporting visit to referral facilities, including cost and cultural barriers.</td>
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</tbody>
</table>

HW: health worker; IOM: Institute of Medicine; PHC: primary health care; QoC: quality of care

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22 Abrahim et al., 2015  
23 Islam et al., 2015; Kruk et al., 2010; Nordberg et al., 1996  
24 Bossyns & Van Lerberghe, 2004; Owais et al., 2011; Pembe et al., 2010; Tanon-Anoh, Sanogo-Gone & Kouassi, 2010
Table 2. Summary of findings of analysis of *Health Systems in Transition* reviews for Fiji, Indonesia, the Philippines and Thailand

<table>
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<tr>
<th>Country</th>
<th>UHC reforms</th>
<th>Changes to referral system</th>
<th>Impact on referral system function</th>
<th>Impact on QoC</th>
</tr>
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</table>
| China   | • Urban Employee Basic Medical Insurance Scheme introduced in 1998.  
          • New Rural Cooperative Medical Schemes introduced in 2003 provide financial protection for rural residents.  
          • Urban Residents Basic Medical Insurance introduced in 2007. | • Increased investment in primary care system, including construction of facilities and GP training scheme introduced over 2009 – 2011.  
          • Patient referral regulation introduced in 2006 requiring patients seek care at PHC institutions first, with referral to secondary or tertiary hospitals if required. | • Patients tended to bypass PHC and directly present to hospitals due to perceptions of poor quality in PHC facilities. | • More recent investment in improving quality of PHC services through training of GPs and increased funding may improve QoC and increase use of PHC. |
| Fiji    | • Largely publicly financed and provided health care, but with growing private sector:  
          • Several waves of deconcentrate services to increase access and improve QoC.  
          • Significant investment in HRH to strengthen access to and availability of services. | • Patients need to have referral letter from PHC to access referral care. (Patients in rural areas also receive support for travel.)  
          • Recent reforms closed OPD at main hospital and extended services at PHC centres to reduce bypassing.  
          • Lead to a 150% increase in utilisation of these PHC facilities, but decrease in the average length of consultation. | • An increasing level of collaboration between the public and the private sectors.  
          • Contracting of private providers in public clinics. | • Several reforms have been brought to aim at increasing QoC, including decentralisation and Division of Health Systems Standards. |
### Table 2. Summary of findings of analysis of Health Systems in Transition reviews for Fiji, Indonesia, the Philippines and Thailand (contd)

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| Indonesia | • *Jaminan Kesehatan Nasional* (JKN) aims to achieve UHC (2010). JKN covers entire population (merging schemes for public, private and informal workers). The government subsidises premiums for the poor or near poor.  
  • JKN covers PHC to tertiary care from public and accredited private providers, with minimal co-payments. Private sector participation is low due to low JKN rebate. | • JKN patients need to have referral letter from PHC to access referral care (except in an emergency) or pay costs.  
  • Non-JKN patients can bypass and paying fees; also enables patients to avoid long queues at hospitals but increases OOP expenditure.  
  • Patients commonly bypass PHC centres (*puskesmas*) due to quality issues. | • There is no real coordination or integration between PHC and referral care.  
  • Lack of record keeping hampers communication. | • 2014 survey demonstrate low level of QoC in public and private sectors.  
  • Literature focus only on the QoC in PHC. |
Table 2. Summary of findings of analysis of *Health Systems in Transition* reviews for Fiji, Indonesia, the Philippines and Thailand (contd)

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| Philippines  | **PhilHealth** was established in 1995 as the national health insurance corporation, with five schemes for both contributory (employed, self-employed) and non-contributory members (poor, elderly).  
2010 reform aimed to achieve UHC by reducing or eliminating co-payments for the poor (called balance billing).  
Benefit package originally only included inpatient care, but was been expanded to outpatient for some members in 2015. Offered in both public and private.  
Inadequate coverage of medicines (currently OOP is 62% of THE, of which 82% is related to medicines). 2017 reforms may address this.                                                                 | In theory patients should first present to PHC centre (barangay or rural health centre), but in practice there no gate keeping mechanism exists nor any financial incentives to stop self-referral. Self-referral to tertiary and specialised care is thus common practice.  
Main reasons for bypassing are: dissatisfaction of the QoC at PHC and lack of supplies at PHC.  
Bypassing of PHC facilities overburdens tertiary facilities. E.g. there is a significantly high over use of tertiary facilities for ordinary illnesses.                                                                 | Fragmentation of responsibility for service delivery across government led to lack of integration between PHC and referral care.  
Note 2017 reform aims to clarify roles and responsibilities of government departments at national, provincial and local levels.                                                                                                                                                                                                 | QoC differ according to the socio economic and geographical area in which the health facility is located.                                                                                                                                                                                                                       |

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25 Based on legislation passed in September 2017, PhilHealth, or the Philippine Health Insurance System, will soon become the Philippine Health Security Corporation.
Table 2. Summary of findings of analysis of Health Systems in Transition reviews for Fiji, Indonesia, the Philippines and Thailand (contd)

<table>
<thead>
<tr>
<th>Country</th>
<th>UHC reforms</th>
<th>Changes to referral system</th>
<th>Impact on referral system function</th>
<th>Impact on QoC</th>
</tr>
</thead>
</table>
| Thailand     | • Achieved UHC in 2002, with three schemes: Civil Service Medical Benefits Scheme (CSMBS) covering civil servants; Social Health Insurance (SHI) covering private sector employees; and Universal Coverage Scheme (UCS) covering 75% of the population.  
• There are separate benefits packages but they all cover outpatient and inpatient care, from both public and accredited private providers.  
• Progressive increase in integration of PHC and specialist services, often through co-location. | • Patients need to have a referral letter from the PHC to access referral care or pay costs.  
• UCS members can access PHC free of charge from facilities that are part of a contracting unit of primary care (CUP), including PHC centres and district hospitals.  
• SHI members can access PHC at their registered hospital. Network includes OPD in larger public and private hospitals.  
• CSMBS members have access to any public facility for PHC.  
• Bypassing of PHC has reduced: ratio of patients accessing hospital-OPD/PHC unit was 1.2 in 2003 and 0.8 in 2011. | • There is strong integration between providers of PHC (and referral care) through the CUP mechanism which builds relationship between PHC and district hospitals, which provide both primary and secondary care.  
• Continuation of care is achieved through this integration. | • Indicators such as child immunisation have improved; mortality following hospitalisation has decreased; and hospital standardised mortality has decreased, suggesting improvement of overall QoC.  
• Also, an increase of number of hospitals that are accredited. |

CSMBS: Civil Service Medical Benefits Scheme; CUP: contracting unit of primary care; GP: general physician; JKN: Jaminan Kesehatan Nasional; OOP: out of pocket; OPD: outpatient department; PHC: primary health care; QoC: quality of care; SHI: Social Health Insurance; THE: total health expenditure; UCS: universal coverage scheme


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**Health System in Transition (HiT) review (18 countries)**
- The Fiji Islands (2011)
- The Philippines (2011; 2018)
- Mongolia (2013)
- Malaysia (2013)
- New Zealand (2014)
- Lao People’s Democratic Republic (2014)
- The Republic of the Union of Myanmar (2014)
- Solomon Islands (2015)
- The Kingdom of Cambodia (2015)
- Bangladesh (2015)
- Republic of Korea (2015)
- The Kingdom of Thailand (2015)
- The Kingdom of Tonga (2015)
- People’s Republic of China (2015)
- The Republic of Indonesia (2017)
- The Kingdom of Bhutan (2017)
- Japan (2018)

**HiT policy notes (four countries)**
- The Republic of the Union of Myanmar (2015)
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  - #2 How can health equity be improved in Myanmar?
  - #3 How can the township health system be strengthened in Myanmar?
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