

A framework for linking purchasing to quality and its governance in health systems

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Acknowledgments

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ABBREVIATIONS

DFF	direct facility financing
IOM	Institute of Medicine
LMIC	low- and middle-income countries
PFM	public financial management
PHC	primary health care
RBF	results-based financing

INTRODUCTION

Each year, nearly 9 million people in low- and middle-income countries die of preventable conditions, even though almost 60% had access to services (Kruk et al. 2018). In health systems around the world, the diminishing returns of access to health services have sharpened attention to quality and how health systems function, from management and financing to supply chains and organization (Kruk and Pate 2020).

This paper explores the relationship between the health financing function of *purchasing* and the *governance of quality* in health systems. Both are multifaceted phenomena that require clear definition for the discussion that follows:

- *Purchasing* refers to the allocation of pooled funds to health service providers (Kutzin 2001).
- The *governance of quality* (or “quality governance”) is the ecosystem of policies, processes, and behaviors that direct “health system resources, performance, and stakeholder participation toward the goal of delivering [high-quality] health care” (Cico et al. 2016).

This paper reviews and synthesizes ideas and evidence related to quality measurement, assurance, improvement, and governance for health services and systems; strategic health purchasing; and the links between purchasing and quality. Building especially on two previous characterizations of how purchasing can shape quality (Mate et al. 2013; Cico, Laird, and Tarantino 2018), it offers an enhanced framework that more holistically situates purchasing within the ecosystem of quality governance and highlights the numerous channels through which purchasing might influence quality. The paper then explores those channels as they relate to the four main types of purchasing policies: benefits policies (what to purchase?), supplier policies (from whom to purchase?), coverage policies (on whose behalf to purchase?), and payment policies (how to purchase and how much to pay?). Also described are links between purchasing and non-purchasing quality interventions, as well as ways purchasing can leverage quality-related information generated throughout the health system.

The paper has two objectives: first, it aims to increase awareness about the importance of coordinating purchasing decisions with other quality governance efforts. The framework and analysis can be especially useful to health purchasers—including but not limited to ministries of health and government-financed health insurance agencies—that are considering ways to contribute to their country’s service quality agenda. The work is also relevant to quality-minded health officials, advocates, and development partners, whose strategies should be carefully aligned with purchasing policies.

Second, the paper seeks to identify the kinds of information purchasers can leverage as they attempt to use purchasing to bolster quality in the health system. This catalog of information types, which are presented through a series of tables throughout the paper, provides the foundation for a rapid assessment tool that enables purchasers to take stock of existing and emerging systems for measuring quality in their health system.¹ Such a landscaping can be a valuable input to deliberations about how a purchaser can strategically promote quality improvement and reinforce quality governance.

This work adopts a definition of quality in health systems first articulated by the Institute of Medicine (IOM) in the United States, following a review of more than 100 characterizations of quality in the

¹ See Chaitkin, Michael, Ileana Vilcu, and Matt Boxshall. 2022. *Rapid Landscaping Tool for Quality-Related Measurement Systems and Health Purchasing*, Version 1 (for piloting). Washington, DC: ThinkWell. https://thinkwell.global/wp-content/uploads/2022/11/SP4PHC_Purchasing-Quality-Tool_Pilot-Version.pdf

literature: “quality of care is the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge” (Institute of Medicine 1990). This definition underpins subsequent descriptions of quality as the extent to which health services are safe, effective, efficient, timely, integrated, equitable, and people-centered (Institute of Medicine 2001; WHO 2006; WHO, OECD, and World Bank 2018).

The IOM’s definition crystallized an understanding of quality that evolved from decades of research and practice. In the 20th century, approaches to control and improve quality were initially developed for manufacturing in high-income countries. These were subsequently adapted to service industries, including health care. Seminal contributions, still widely applied, include Shewhart’s statistical methods for quality control (Shewhart 1939), Deming’s Plan-Do-Study-Act cycle (building on Shewhart’s work) for learning and improvement (Deming 1993), and Juran’s “trilogy” of quality planning, control, and improvement processes (Juran 1986).²

Measurement is central to these and other approaches, all of which rely on the generation, analysis, and use of information to assure and improve quality. The dominant paradigm in health care quality assessment focuses on measuring the “structures” and “processes” of service delivery and the “outcomes” they produce (Donabedian 1966). There is also longstanding recognition that quality must be evaluated in terms of both service provision—what interventions are delivered, when, with what skill, and under what conditions—and the experience of services—whether people and communities feel respected, understood, and supported by the health system (i.e., whether the health system is responsive to people’s needs and preferences) (Murray and Frenk 2000; Roberts et al. 2004; Tunçalp et al. 2015).

As they seek to improve quality, whether through purchasing or other means, countries face important choices about how best to measure it. When their health systems have not routinely gathered or reliably maintained data to gauge even the most basic dimensions of quality, many countries have over-relied on measuring only inputs (“structures”) or on ad hoc, resource-intensive methods to measure care processes, such as direct observation (Das and Hammer 2014; Zeng, Gheorghe, and Nair 2016; Kruk et al. 2018). In some cases, including as part of performance-based financing schemes, countries implement elaborate quality measurement and verification activities in parallel to the (imperfect) incumbent systems. This tendency reflects the unfortunate reality that many health systems lack good enough data to measure (let alone reward) quality. In a sense, countries and development partners make an inter-temporal trade-off between immediate purchasing aims and the longer-term maturation of existing and emerging information systems.

But is this the right trade-off? After all, capable information systems are considered a prerequisite for strategic purchasing (Cashin et al. 2018), implying considerable investment should be made in them prior to introducing sophisticated purchasing approaches. Moreover, as will be discussed further below, the evidence suggests that the more impatient approaches to purchasing for quality are neither as impactful nor cost-effective as once hoped, highlighting the value of considering alternatives. Finally, though it may be fragmented, disorganized, incomplete, or unreliable, health systems already produce *some* quality-related information. In those settings, improving data generation and use, building on

² These and other contributions form the backbone of the twin practices of *quality assurance* (or control) and *quality improvement* in health care. Quality assurance (QA) is the retrospective detection and redress of problems in care delivery, while quality improvement (QI) is a more prospective and proactive effort to continually strengthen care delivery (Goldstone 1998). Quality improvement is sometimes also referred to as continuous quality improvement (CQI) or total quality management (TQM).

existing systems and practices, will be a lengthy—and necessary—journey. An important early step will be to take stock of who is producing what information and for what purposes.

The remainder of this paper lays a foundation for such a stocktaking from the perspective of health purchasers. In the following section, the paper explains why purchasing and other quality-related interventions are best considered from a systems-level perspective. Next is a review of the theory and evidence that link purchasing to quality and offer an enhanced framework for the direct and indirect channels for purchasing to affect quality and its governance. Those channels are then explored in detail and the types of information that might inform quality-minded purchasing policies are catalogued. The paper concludes with a brief description of a rapid landscaping tool ThinkWell developed for purchasers to take stock of the systems and practices that generate quality-related information in their health systems. The tool was subsequently piloted in four countries—Burkina Faso, Kenya, the Philippines, and Uganda—with results expected to be published in late 2022 or 2023.

A SYSTEMS PERSPECTIVE ON QUALITY AND ITS GOVERNANCE

While the traditional definition of quality focuses on what occurs within service delivery organizations and environments, there are numerous entry points, across many parts of health systems, to influence quality. In any social, economic, and cultural context, a range of government, market, and professional forces influence both the availability of health service inputs and whether they are effectively converted into quality services (World Bank 1993; Leatherman and Sutherland 2007).

Diverse governance instruments and related activities are available to amplify, redirect, and mitigate these forces according to health system objectives. They include policies and strategies, regulation, private sector engagement, mobilization of political will, collection and use of data, cultivation of a culture of continuous improvement, promotion of knowledge sharing, and linkage of financing to quality (Tarantino et al. 2016).

On their own and in combination, these instruments can target any aspect of the structures and processes of care, as well as reinforce—or undermine—each other. Consequently, research and guidance related to quality emphasizes the need for multiple, coordinated interventions that operate across all levels of the system and carefully balance the quality-shaping forces (WHO 2006; Leatherman and Sutherland 2007; Tarantino et al. 2016; WHO 2018; WHO, OECD, and World Bank 2018).

A systems orientation to quality also allows for additional ideas about how quality in a health system can change. A provider-centric approach might focus on the quality of services delivered by individual clinicians or care organizations. In contrast, a systems approach would also consider the average level of service quality accessed by the population. Consider a small fictional country where half the population receives high-quality services at one set of clinics and other half receives low-quality services at a different set of clinics. It is intuitive that boosting the performance of the second group of clinics would improve overall quality in the health system. The low quality of those clinics might stem from a lack of resources, knowledge, skills, or motivation; it might pertain to misunderstanding the patient's needs (e.g., diagnosing any febrile child with malaria), recommending a riskier or less effective service (e.g., delivering via C-section when no heightened risk is indicated for vaginal delivery), or administering the service unskillfully, hurriedly, or disrespectfully. Any of these deficits might be targeted in quality improvement efforts.

But what about interventions that enable the poorly served half of the population to access services in the better clinics? Would such measures be seen to improve quality in the health system? In many settings the answer will be contentious, and implementation may be fraught with political, ethical, and practical challenges. Nonetheless, the scenario highlights that there may be ways to increase what share of services are delivered with high quality *in addition to* intervening directly in structures and processes of low-performing service providers.

In summary, a systems orientation reveals the ways policy interventions, whether related to financing or other governance instruments, can affect quality. An intervention can influence quality either directly, by causing changes to the structures and processes of care delivery, or indirectly, by reinforcing another intervention that itself acts on the service environment. An intervention can also operate on either the supply side (which services are produced, and how capably), or the demand side (who accesses services from which providers, at what cost), or both. The next section briefly explains purchasing and why it matters to quality.

LINKING PURCHASING TO QUALITY

Purchasing is the allocation of pooled funds, including via transfers or payments, to health service providers (Kutzin 2001). It is a core health financing function and an important means of shaping health system performance (Roberts et al. 2004; WHO 2000, 2010). From the perspectives of national and subnational health authorities, social security agencies, private health insurers, and other organizations that fund or “buy” health services on behalf of populations, purchasing encompasses the policies and practices that determine what services and underlying inputs are funded (*what to purchase?*), who is entitled to access services (*for whom to purchase?*), which providers receive funding in exchange for delivering services (*from whom to purchase?*), and how providers are remunerated (*how to purchase and how much to pay?*).

Purchasing occurs in all health systems. Often, purchasing functions are implicitly embedded in one or more government organizations that use their budgets to pay health worker salaries, procure drugs and consumables, and finance and maintain facilities and equipment. These organizations may not even think of themselves as “purchasers” per se. In some countries, the government explicitly tasks a specialized agency³ with some or all purchasing functions. Different institutional arrangements lend themselves to more passive or more strategic approaches to purchasing. Strategic purchasers deliberately link the allocation and flow of funding to providers with health system objectives related to population health needs and provider performance (Preker and Langenbrunner 2005; WHO 2010; Cashin et al. 2018).⁴

No matter the institutional arrangements, prevailing approaches to purchasing inevitably affect service quality. By default, some governments passively purchase health services by allocating rigid, historically based budgets that poorly reflect health system objectives and prevent providers from effectively responding to population needs (Cashin et al. 2017). Other provider payment methods can also undermine quality. For example, there is ample evidence that fee-for-service payments induce overprovision of services (Guida, Gyrd-Hansen, and Oxholm 2019). Moreover, where payments are not conditional on appropriate medical indications, patients may be subjected to ineffective or even unsafe services (Thiboonboon et al. 2017). Conversely, bundled methods, such as capitation and case-based payments, can induce providers to under-provide services or reduce quality (Langenbrunner, Cashin, and O’Dougherty 2009; Klein et al. 2020).

Mindful of these challenges, much of the literature and guidance focuses on the potentially positive links between purchasing and quality. Purchasing is considered by many to be the financing function likeliest to influence provider performance, including quality.⁵ Given a particular funding level and pooling arrangements, how effectively health resources are used depends on purchasing (World Bank

³ This can take many forms, including a parastatal health insurance agency, social security administration, or designated unit within a ministry of health.

⁴ There are many resources for governments and other actors striving to purchase more strategically. Examples include guidance and tools for strategic purchasing in general (Figueras, Robinson, and Jakubowski 2005; Preker and Langenbrunner 2005; Mathauer, Dale, and Meessen 2017; Cashin et al. 2018); provider payment (*how and how much to pay*) (Langenbrunner, Cashin, and O’Dougherty 2009; Özaltın and Cashin 2014; Cashin 2015; JLN 2017; OECD 2016); priority setting and benefits package design (*what to buy*) (World Bank 1993; *Disease Control Priorities* 2015; Glassman et al. 2017; Norheim, Emanuel, and Millum 2019); and provider selection, including private sector engagement (*from whom to buy*) (Harding and Preker 2003; Preker et al. 2007; Thomas et al. 2016).

⁵ Notably, the health financing function of revenue collection, which determines the availability of funding for the health system, may be more important in the poorest countries, where quality suffers largely due to insufficient human and other resources.

1993; Leatherman and Sutherland 2007; Kruk et al. 2018; WHO, OECD, and World Bank 2018). Likewise, quality improvement is consistently included among the possible aims of strategic purchasing, along with increased access, efficiency, equity, and financial protection (Gottret and Schieber 2006; Preker et al. 2007; Langenbrunner, Cashin, and O’Dougherty 2009).

Incentives are central to how purchasing shapes provider behavior. How financial incentives can improve quality has been examined through the lenses of economics and behavioral psychology (Conrad and Perry 2009), including to identify multiple pathways through which incentives can affect the processes of care (Duran et al. 2020). Seeing this potential, some argue that value-based care models, which link health care payments to rigorous (and often sophisticated) measurement of outcomes and costs, can dramatically boost health system performance and quality (Porter 2010; WEF 2017; Leapfrog to Value Initiative 2019).

However, across countries of all income levels, effects have been mixed of the widespread attempts to directly incentivize improved provider performance through results-based financing (RBF)⁶ (Cashin et al. 2014b; Zeng, Gheorghe, and Nair 2016; Henrion et al. 2018; de Walque et al. 2022). This is one reason the influential *Lancet Global Health* Commission on High Quality Health Systems in the SDG Era (Kruk et al. 2018) subordinated financing approaches to other system-level interventions it deemed to be more important, promising, or both. Despite some success stories, externally driven RBF schemes in low- and-middle-income countries (LMICs) may not always be designed appropriately for their context or anticipate how health workers and officials will respond to new incentives (Henrion et al. 2018; Turcotte-Tremblay, Gali Gali, and Ridde 2020). Additionally, even where incentives meaningfully improve performance, their implementation may not be cost-effective (Salehi et al. 2020), raising affordability and sustainability concerns.

This mixed record suggests there may be benefits to re-examining the channels through which purchasing policies can influence quality. Two available frameworks come closest to meeting this need. One describes the instruments available to health insurers that can support quality improvement, at least theoretically: selective contracting, provider payment mechanisms, benefit package design, and direct investment (Mate et al. 2013). Building on the first, another elaborates the mechanisms, roles, and responsibilities of purchasers in the governance of quality (Cico, Laird, and Tarantino 2018). Both echo, though do not directly draw on, earlier work focused specifically on promoting quality through purchasing contracts (Velasco-Garrido et al. 2005).

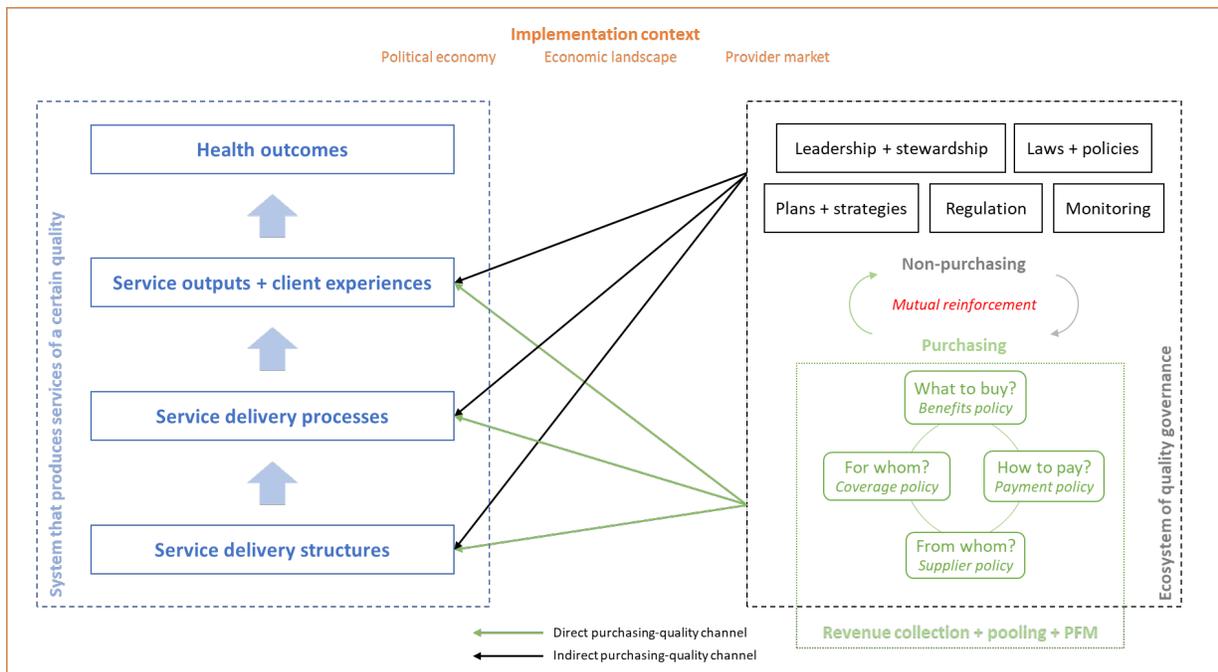
AN ENHANCED FRAMEWORK

This paper builds on previous efforts and offers an enhanced framework for how purchasing can potentially build (or undermine) the quality of health services and efforts to improve it (Figure 1). The framework improves on others in several ways. First, it more systematically situates purchasing within the ecosystem of quality governance (depicted in the black dotted box on the right), in which numerous governance functions collectively shape quality via service delivery structures, processes, outputs, and client experiences (blue boxes on the left). The non-purchasing governance functions (black boxes within the ecosystem) are elaborated in Cico and coauthors (2016). The framework also conveys the dynamic interactions among purchasing and non-purchasing functions (curved green and grey arrows within the ecosystem) and shows that purchasing can influence quality both directly (straight green

⁶ RBF is one of several conceptually overlapping terms for the many health financing approaches that link incentives to performance indicators (Fritsche, Soeters, and Meessen 2014). Mentions in this paper refer primarily to RBF schemes whose incentives target health facilities, individual health workers, health officials, or consumers, and not to those focused on conditions for disbursement of aid to governments.

arrows) and indirectly (straight black arrows) by enabling or reinforcing other quality-related governance functions.

Figure 1. Framework for how purchasing and the broader quality governance ecosystem influence service quality



Source: Authors, building on Donabedian (1966), Preker and Langenbrunner (2005), Preker et al. (2007), Cico et al. (2016), Mate et al. (2013), Cico, Laird, and Tarantino (2018), Kruk et al. (2018), and WHO, OECD, and World Bank (2018).

These features have several advantages, including:

- Better reflecting how individual interventions, purchasing or otherwise, are unlikely to yield major quality improvements on their own.
- Prompting deeper consideration of how purchasing might interact with and contribute to how other aspects of the quality governance evolve over time, in addition to more directly influencing the processes of care.
- Signaling to quality- and financing-oriented reformers—often separate groups of stakeholders within and beyond governments—that they need to align their efforts to achieve quality aims.

The interplay between purchasing and non-purchasing quality governance functions is especially important. If well aligned, interventions can be mutually reinforcing and more likely to improve quality by both creating the conditions for and motivating providers to deliver good-quality services. Related, every policy also presents risks that others can help to manage. Conversely, if purchasing and non-purchasing policies are designed independently or at cross-purposes, they are unlikely to yield quality gains.

Second, the framework explicitly recognizes that purchasing is part of the broader health financing system that also collects and pools revenue and is subject to public financial management (PFM) rules and processes. This enables more thorough examination of purchasing policies from the perspective of a government in its capacity as health system steward, in addition to its vantage point as a purchaser. It also encourages more systematic consideration of how other aspects of health financing can constrain or enable purchasing, even though they are not always considered part of the quality governance

ecosystem. A holistic approach is especially important where there are multiple purchasers or where purchasing functions are fragmented across government agencies or levels.

Finally, the framework incorporates features of the implementation context that may influence whether the governance of quality is effective, including political economy, the economic landscape, and the service provider market. The nature of the provider market is especially important for purchasing. For example, in many LMICs, primary health care services are delivered by a range of formal and informal, organized and individual, public and private providers. In these settings, it may be more challenging to implement coherent and fair purchasing policies than in more homogenous provider markets. Similarly, where there is minimal provider competition, some market-oriented purchasing policies may be of little use.

Information is at the heart of both quality governance and strategic purchasing. As discussed above, quality assurance and improvement rely on robustly measuring the structures, processes, and outcomes of health services. Meanwhile, strategic purchasing requires routine information about provider performance, including quality. All health systems generate information related to quality, though not always in ways that can be easily or effectively used by purchasers. These deficiencies may tempt purchasers to introduce new quality measurement systems rather than invest in those that already exist, which can be unnecessarily costly or even counterproductive.

The sections that follow explore the direct and indirect channels by which policies regarding what to purchase (benefits policies), from whom (supplier policies), for whom (coverage policies), and how (payment policies) can influence service quality. They also highlight possible sources of information that purchasers can leverage, including a range of tools, measurement systems, and other mechanisms that can inform purchasers about some aspect of quality. These sections draw extensively on Mate et al. (2013), RESYST (2014), and Cico, Laird, and Tarantino (2018), with other sources noted where relevant.

WHAT TO PURCHASE: BENEFITS POLICIES

Purchasers may lead or participate in government processes to craft and update benefits policies, which define the package of services the covered population is entitled to, as well as specify how service access is rationed, such as through referral systems and cost-sharing (Kutzin et al. 2017). Benefits policies vary, including how explicitly they define entitlements and whether they are universal or designed for specific subpopulations, such as the poor, women of reproductive age, or children (Giedion, Bitrán, and Tristao 2014). Some of the common information types used in benefits policy design and implementation relate to quality (Table 1).

Table 1. Quality-related information types relevant to benefits policies

Clinical safety
Clinical effectiveness
Cost-effectiveness
Population health needs
Cost of entitlements relative to budget envelope
Availability, rigor, and adoption of clinical guidelines
Patient-linked utilization and outcome data

Quality considerations can inform what services to include in benefits packages. Packages can privilege high-value services and discourage or exclude those that yield minimal health benefits. They can also evolve over time to incorporate quality-enhancing technologies and phase out services that do not meet heightened quality standards. Package design also matters for health needs where patient choice is central to quality, such as for family planning. In contrast, benefits packages that include or privilege low-value services might subvert quality improvement, as would the indiscriminate addition of new technologies.

Additionally, packages that are misaligned with budgets can harm quality. When benefits outstrip available resources, or when funds are disproportionately concentrated in certain levels of care (e.g., hospitals), some entitlements are in practice false promises. Such over-promising can induce providers to demand unofficial payments, which undermine access and equity. It can also lead to supply shortages and low health worker motivation due to delayed or non-payment of salaries, a severe consequence of implicit rationing (Kutzin et al. 2017). In contrast, more explicitly defined packages that reflect resource constraints increase the social legitimacy of rationing (Giedion, Bitrán, and Tristao 2014) and provide citizens a clearer basis for holding the health system and providers accountable for entitlements. They also help governments to better manage the inherent trade-offs among service, population, and financial coverage, the three dimensions of universal health coverage (WHO 2010).

Whether benefits policies enhance or undermine quality depends on their coordination with several other non-purchasing interventions. Lists of entitlements are often complemented by detailed guidelines or protocols that specify how services should be delivered, referral pathways and criteria, and more. As will be discussed below, payment policies can reinforce these efforts. The health information system is also a key enabler. For example, implementing effective gatekeeping and referral policies requires the ability to track clients through every touchpoint with the health system.

FROM WHOM TO PURCHASE: SUPPLIER POLICIES

Supplier policies govern whom health purchasers pay for services and inputs (Langenbrunner, Cashin, and O’Dougherty 2009). Table 2 summarizes the types of quality-related information that purchasers might factor into their supplier policies.

Table 2. Quality-related information types relevant to supplier policies

Accreditation and other provider credentials (organizational and individual)
Internal implementation of quality assessment, assurance, or improvement programs or practices
Participation in purchaser, government, or other external quality assessment, assurance, or improvement programs or practices
Adherence to clinical guidelines
Service availability, volume, safety, continuity, and timeliness
Provider performance: health outcomes
Quality of health products and technologies
Participation in purchaser or government information systems

Previous purchasing-quality frameworks rightly include selective contracting as a key supplier policy instrument. In theory, selectivity can create incentives for potential suppliers to meet purchaser standards, including for quality. Participation in a financing scheme and access to the covered population’s demand for services can be alluring for providers.

However, not all purchasers are able or willing to be selective about providers. Laws and norms shape supplier policies; in some countries, “purchasers may be required to have funding agreements with all public providers regardless of their performance” (Montenegro Torres and Baeza 2005). Moreover, efforts to channel scarce public funds to private providers can be politically, technically, and ethically fraught. Finally, the nature of supplier markets also constrains purchasers’ options. For example, in many rural areas there is only one clinic or hospital in part because there are deterrents to private entry, such as a low-income local population or undesirable living conditions. More general features of a country’s markets, such as the cost and process of establishing a new business or non-profit organization, or the ease with which private entities can raise capital, constrain the private supply of health goods and services from which purchasers can choose (Harding and Preker 2003).

Where selective purchasing is possible, purchasers determine eligibility based on various criteria, including accreditation and other provider credentials, adherence to clinical guidelines, and ongoing monitoring. In some cases, purchasers also include more specific conditions for contract renewal related to the availability, volume, safety, continuity, and timeliness of services (Velasco-Garrido et al. 2005). Selective purchasing requires capabilities within government, sometimes complemented by third-party actors, to set standards and assess provider qualifications, readiness, and performance. Ideally, purchasers will have access to robust information systems that capture a range of operational and clinical data.

Selective contracting often relies on imperfect proxies for quality, raising important questions about whether, for example, accreditation and other provider credentialing, in and of themselves, improve quality. In many contexts, accreditation standards are weak or focus too much on the availability of service inputs and too little on care processes (Kruk et al. 2018). These concerns underscore that the availability of well-equipped and qualified providers is a necessary but insufficient condition for high-quality care (Tarantino et al. 2016; WHO, OECD, and World Bank 2018).

Even if credentialing does not directly improve quality, there are still good reasons to link it to eligibility for contracting. The routine assessment of providers against explicit standards is a key aspect of the regulation function of quality governance, and using financing to generate greater interest and participation in evaluation programs can help strengthen those programs, bolster public trust, and cultivate a “culture of quality” (WHO, OECD, and World Bank 2018). Normalizing provider evaluation can also contribute to fostering regimes of industry and professional self-regulation, which feature prominently in how more advanced health systems govern quality (Braithwaite, Healy, and Dwan 2005; WHO 2006). Consequently, even if there are near-term arguments for trying to incentivize better quality more directly, doing so should not come at the expense of investing in accreditation and other aspects of quality governance that countries will need in the long run. Managing adverse effects will also be essential given that accreditation programs can be vulnerable to corruption and conflicts of interest (Cico et al. 2018).

Beyond contracting eligibility, there are other ways in which supplier policies can promote service quality, even where purchasers cannot selectively contract with a subset of available providers. Governments that directly fund their own services can choose which levels of the health system will control budgets and be responsible for service quality, with their options shaped both by PFM rules and the extent and nature of decentralization (ThinkWell and WHO 2022a, 2022b). In particular,

designations of accountability centers must be carefully aligned with payment policies and PFM processes so that subnational health officials or facility managers can make the necessary operational and resource allocation decisions to achieve quality aims (Cashin et al. 2017). For example, Tanzania added frontline facilities to the chart of accounts and initiated direct facility financing (DFF) as part of efforts to better match resources to service needs (Mtei 2020; Piatti, O’Dougherty, and Ally 2020). Purchasers unable to selectively contract can also look to other strategies to motivate improvement, such as provider benchmarking. Even without the incentive of contracting eligibility, providers may be motivated to outperform their peers or their prior selves if furnished with clear and actionable data (Montenegro Torres and Baeza 2005). Of course, purchasers can financially reward high performers in other ways too (see discussion of payment policies below).

How purchasers select suppliers and distributors of health technologies can also affect providers’ ability to deliver high-quality services. The availability and effectiveness of health technologies factor into whether health services yield desired outcomes. If nothing else, purchasers (and other procurement agencies) should avoid buying from suppliers of substandard or counterfeit commodities, which can endanger patients. To procure from desired sources, the purchaser and other health officials may also need to lobby for exemptions from broader public procurement rules, such as those that privilege domestic suppliers or prohibit prepayments. Where procurement is decentralized to subnational authorities or individual facilities, purchasers can still develop and enforce quality-minded formularies, working closely with relevant regulatory bodies (e.g., the national drug authority) to define and monitor product quality.

Finally, supplier policies can influence quality, particularly in the experience of care, when purchasers empower members of the covered population to choose their providers and allow payments to follow patients. This form of consumer choice can motivate providers to proactively recruit and retain clients, at least where this is some level of competition. Purchasers can also steer utilization to higher-quality providers by providing information and incentives to care seekers (e.g., by reducing or waiving co-payments for services received at designated providers). Notably, in many LMICs, primary health care providers compete as much or more with hospitals than each other for visits, often losing out to hospitals due to real or perceived differences in quality. This underscores the importance of coordinated policies for client choice, portability, and empanelment; gatekeeping and referrals; and payment and cost-sharing rates across levels of care.

FOR WHOM TO PURCHASE: COVERAGE POLICIES

Coverage policies are closely linked to the pooling function of health financing and determine who can access services the purchaser buys. Typically, all citizens (and sometimes other residents) are entitled to seek services provided directly by ministries of health and subnational governments. This might reflect a constitutionally enshrined right to health or health care. Where there are other coverage schemes, eligibility may be universal or conditional. Some schemes tie membership eligibility to premium contribution, while others base it on factors such as age, sex, income, place of residence, or health condition. It’s also important that purchasers do not always play a role in setting coverage policies, so other policymaking bodies may also be interested in relevant quality-related information (Table 3).

Table 3. Quality-related information types relevant to coverage policies

Relationship between people’s coverage or scheme membership and the quality (actual and perceived) of services and providers they access
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The primary way coverage policies can influence quality is by affecting, sometimes in undesirable ways, who can access better and worse providers. For example, while all citizens can usually visit a government facility, those covered by another coverage scheme may gain access to superior facilities operated either privately or by the scheme itself,⁸ leading to disparities in access to higher-quality services. Membership in a coverage scheme can also reduce the financial barriers the poorest face to seeking care at all from formal providers. It's important to note that pro-poor, membership-based schemes do not automatically improve equity. Providers may try to divert poorer patients, who are on average higher risk and therefore costlier to treat, and the administrative requirements for enrolling and accessing benefits may be out of some people's reach. Indirectly, coverage policies may also determine a purchaser's ability to shape provider behavior because purchasers acting on behalf of larger populations and with sizable funding pools have greater market power.

Quality-minded purchasers can communicate directly with the covered population to increase awareness and cultivate demand for high-quality services. For example, purchasers can disseminate information about provider performance to steer demand to better facilities and equip communities to hold local providers accountable. Purchasers can also educate people about their entitlements and obligations, so they know what to expect when seeking care. Finally, purchasers can solicit feedback from the population regarding their satisfaction and provider performance more generally. This can also be a channel for the public to report discrepancies between promised entitlements and actual provider offerings. Ideally, there will also be credible channels for addressing public grievances. Feedback from the covered population can inform purchasers' strategies to promote better quality (Table 4).

Table 4. Quality-related information types generated by population feedback mechanisms

Client satisfaction
Client-reported ratings of provider performance
Availability and accessibility of entitlements

HOW TO PURCHASE AND HOW MUCH TO PAY: PAYMENT POLICIES

Payment policies dictate the basis for resource allocation or payments to providers, as well as determine payment rates and adjustments. There are diverse approaches to provider payment, reflecting varying political will, capacity, and priority health objectives across countries and over time. As catalogued in Table 5, a purchaser might make use of several types of quality-related information, drawn from a range of sources, in payment policy design and implementation.

⁷ Risk selection—often referred to as “cream-skimming”—refers to behaviors by which providers favor low-risk patients and try to avoid financial responsibility for those whose care is expected to be costly. Some provider payment methods are especially vulnerable to cream skimming, such as capitation (Barros 2003).

⁸ Historically, social security institutions in Latin America commonly owned and operated their own provider networks that were exclusively accessible to their members, who were typically employed in the formal sector.

Table 5. Quality-related information types and sources relevant to payment policies

Information types	Needs and costs related to infrastructure, in-service training, and quality-improvement programs
	Inputs and readiness (structures)
	Clinical practices and outputs (processes)
	Outcomes
	Client satisfaction
	Timeliness and integrity of data collection and reporting
	Socioeconomic and demographic distribution of access and utilization
Information sources	Claims data
	Provider self-reporting
	Independent monitoring
	Routine data systems
	Special verification
	Scheduled and surprise visits or audits

Multiple payment approaches can coexist in a country, and the extent to which they motivate or constrain provider behavior depends on numerous factors, such as the relative market power of multiple purchasers, the coherence of payment incentives, and the autonomy and capacity of providers to respond to the incentives and manage the risks of different payment systems (Langenbrunner, Cashin, and O’Dougherty 2009). The effectiveness of payment approaches also depends on how well incentives penetrate multilayered payees. For example, a central government might carefully structure funding flows to subnational budget holders (e.g., district health offices) based on quality or other policy objectives. Whether those objectives are met will depend on how the budget holder, in turn, distributes funds to facilities and personnel and otherwise manages their performance. Similarly, the behavioral response within service delivery organizations to payments will stem largely from the incentives their managers create internally for care teams and individual health workers.

Payment policies can powerfully affect quality in both positive and adverse ways. Importantly, none of the most implemented provider payment methods *on its own* encourages quality improvement, and some create incentives that undermine it. Line-item, input-based budgets only incentivize budget execution and, when insufficient to deliver promised services, often lead to quality-harming rationing (Kutzin et al. 2017). Close-ended payment methods such as capitation and global budgets can encourage providers to underserve patients or inappropriately refer them elsewhere. In contrast, open-ended methods like per diems and fee-for-service payments merely incentivize lengthier hospital stays and greater service volumes, respectively. The latter may be desirable where coverage is low but can also lead to unnecessary or even harmful service provision (Langenbrunner, Cashin, and O’Dougherty 2009).

Purchasers seeking to encourage quality improvement through payment policies have many options across numerous policy design issues. First, purchasers can strive to counteract how specific payment methods adversely affect quality. In countries with predominantly budget-financed health systems, efforts to ease the harmful constraints of historical, input-based budgeting often include changing the budget structure and transitioning to program-based budgeting. This approach, at least in theory, better links resource allocation to health needs and gives budget-holders greater autonomy to optimize resource use, including improving quality (Barroy, André, and Nitiema 2018; Dale et al. 2018).

Where purchasers contract with providers, they increasingly use multiple methods in blended or mixed payment systems that seek a balance of incentives, for example, by offsetting capitation's cost-cutting incentives with fee-for-service payments for high-priority, high-value services (Cashin et al. 2014b; Cashin 2015). This approach can improve the timeliness of delivery, including for important preventive, promotive, and screening services.

In some contexts, blended payment systems include strategies to shore up service availability and quality. For example, in Croatia and Estonia, purchasers make line-item or lump-sum transfers to ensure providers can cover essential operating expenses (e.g., space, cleaning, utilities) and maintenance (e.g., physical infrastructure, information system hardware and software). These complement capitation, fee-for-service, and performance-linked payments (Kasekamp 2018; Strizrep 2018). In Argentina, provinces pay higher service fees to rural providers to ensure their solvency given lower average patient volumes (Sabignoso et al. 2020). Purchasers can also make direct investments in quality, including large-scale support to infrastructure and systems development, in-service training, and facility-level quality improvement programs.

Second, purchasers can directly incentivize or enable good quality by tying a portion of provider revenue to quality indicators, including through bonus payments and differential payment terms. OECD (2016) describes several dimensions to payment incentive design, including options for:

- Recipients: individual health workers, provider organizations, and government entities.
- Indicators: inputs and readiness (structures), clinical practices and outputs (processes) outcomes, patient satisfaction, and data collection and integrity.
- Standardization: same indicators for whole country or tailored to local realities.
- Monitoring: purchaser, providers (self-reporting), and independent monitors.
- Measurement: routine data systems, special verification, and scheduled or surprise assessments.
- Targets: absolute, improvement over time, and relative to others.

Direct incentives can reinforce other quality governance instruments, including by conditionalizing reimbursement on compliance with protocols and penalizing providers for behaviors such as inappropriate referrals and medical errors. Purchasers can also calibrate relative reimbursement rates to discourage unnecessarily risky services (Özaltın and Cashin 2014). For example, generous payments for C-sections compared to those for regular deliveries may be driving C-section rates in Kenya well beyond recommended levels (Connor 2020). Even if individual C-sections are performed capably, a medically inappropriate share of women may be steered to a riskier service.

Country experiences provide reasons for both optimism and caution with respect to performance-linked payments. For example, Argentina's *Programa Sumar* successfully reduced disparities in access to high-quality maternal and newborn services, contributing to improved outcomes (Cashin, Charchi, and Pervin 2017; Sabignoso et al. 2020), while results were mixed in various European efforts to link payment to performance (Cashin et al. 2014a). A performance-based financing (PBF) scheme in Burkina Faso also had mixed effects on service readiness, utilization, and perceived quality (De Allegri et al.

2018), while doing little to improve equity (Mwase et al. 2020). The program also had several unintended consequences, including gaming by providers and conflicts of interest for district assessment teams (Turcotte-Tremblay, Gali Gali, and Ridde 2020). Meanwhile, there is only minimal (and nonetheless conflicting) evidence about PBF's cost-effectiveness relative to other strategies to improve provider performance, including service quality (Salehi et al. 2020; Diaconu et al. 2021). In fact, evidence is emerging that simpler approaches to directly financing facilities, without the resource-intensive incentive and verification schemes typical of PBF, may be as or more effective (Khanna et al. 2021; Witter et al. 2021; de Walque et al. 2022).

In countries considering new or reformulated payment policies to encourage quality, it is important to carefully examine existing and emerging practices to determine a promising way forward. This includes the current payment and incentive landscape, into which performance-linked payments should be as integrated as possible. Any changes to payment policies should be mindful of providers' full financial and operational environment. In China, where drug sales accounted for more than half of primary health care (PHC) providers' income, efforts to curtail excessive prescribing led to increases in unnecessary (and costly) intravenous treatments, diagnostic tests, and inpatient admissions (Li et al. 2020).

Purchasers should also take stock of what data are already routinely collected, and by whom, that relate to the quality issues of interest, and of what systems are in place or planned for improved quality measurement and monitoring. Available indicators may relate to any or all of the quality structures, processes, outputs (including patient satisfaction), and outcomes. In contexts with weak or fragmented routine data systems, it may be tempting to invest in parallel systems for provider monitoring and performance verification. This can enable more immediate implementation of performance-linked payments—with mixed results (Henrion et al. 2018)—but its contribution to the longer-term strengthening of quality governance may be limited. In fact, capable routine data systems are among the most important enablers of strategic purchasing (Langenbrunner, Cashin, and O'Dougherty 2009; JLN 2017) and quality governance (Cico et al. 2016; Tarantino et al. 2016). Consequently, it may also be useful to directly incentivize the generation and timely submission of reliable data by providers (OECD 2016), rather than tying incentives to what the data show.

As experiences in OECD countries attest, performance-linked payment programs are likeliest to succeed “when they are aligned with and reinforce overarching strategies” (Cashin et al. 2014b). In addition to clinical outcomes, purchasers should consider linking payments to a wider range of quality governance functions, especially if there are concurrent non-purchasing interventions to strengthen those same functions. Differential payment rates based on tiered accreditation should reinforce initiatives to improve the rigor and independence of routine provider assessment. Reimbursements conditional on adherence to clinical guidelines should reinforce efforts to ensure guidelines are complete and evidence based, to increase health worker access to and understanding of guidelines, and to improve documentation of each patient encounter. And so on.

Such approaches recognize that quality governance and purchasing strategies evolve over time, both due to deliberate investments in governance and operational systems, and in response to changes to health system priorities, purchaser-provider negotiation dynamics, and emerging population health needs. Efforts are ongoing to characterize how health purchasing can and should develop over time (Cashin et al. 2018; WHO 2019; SPARC 2021).

MOVING FORWARD

Countries whose health systems fail to deliver high-quality services will struggle to meet their development goals or achieve universal health coverage. There are numerous ways to enhance the governance of quality in health systems, including through purchasing. Health purchasers are well positioned to contribute to national quality strategies via their careful decisions regarding benefits, supplier, coverage, and payment policies, as well as their important relationships with providers, citizens, and other parts of government (RESYST 2014).

If carefully designed, purchasing can both directly shape quality and strengthen other functions of quality governance. All aspects of purchasing policies can contribute to a country's quality agenda, including:

- Benefits policies that privilege safe and effective services, respect consumer choice, and mutually reinforce clinical guidelines, protocols, and pathways.
- Supplier policies that use information about provider readiness and performance as a basis for funding or payment eligibility.
- Coverage policies that ensure equitable access to high-quality services.
- Payment policies that minimize incentives for quality-compromising practices and reward improvements to the structures, processes, and outcomes of care, including client satisfaction.

Information is essential to any effort to strategically use purchasing policies to improve quality.

Relevant information may be highly fragmented across numerous and poorly coordinated health system actors. Consequently, purchasers looking to strengthen their approach to quality or engage in these issues for the first time will need to take stock of what quality-related information already exists. The types of information catalogued in this paper can be summarized in a handful of domains:

- Provider readiness: information related to whether providers are competent and equipped to deliver services (e.g., training, accreditation, licensing, and certification).
- Management and care processes: information related to whether providers effectively convert health system inputs into services that are safe and appropriate.
- Utilization and outcomes: information related to the levels and distribution of service coverage, volumes, and outcomes.
- User experience: information related to client and community satisfaction with services.

An accompanying rapid assessment tool has been developed for purchasers and their partners to explore these domains in detail.⁹ Users are first guided to capture the definition of quality and quality-related objectives in their health system. Then, for each information domain, the tool supports users to take stock of which actors have mandates (formal or otherwise) to generate information, how routinely, and with what resources. Users will also explore how quality-related information is shared and used, as well as capture perspectives from providers and other stakeholders on the value and burden of collection and reporting. Finally, the tool prompts users to reflect on findings for each domain and identify opportunities to leverage information in purchasing policies. Findings from applying the tool can inform efforts to align purchasing with broader investments in quality governance and the design of mutually reinforcing purchasing policies.

⁹ See Chaitkin, Michael, Ileana Vilcu, and Matt Boxshall. 2022. *Rapid Landscaping Tool for Quality-Related Measurement Systems and Health Purchasing*, Version 1 (for piloting). Washington, DC: ThinkWell. https://thinkwell.global/wp-content/uploads/2022/11/SP4PHC_Purchasing-Quality-Tool_Pilot-Version.pdf

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