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Institutional Solutions to the Asymmetric Information Problem in Health and Development Services for the Poor☆

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Summary. — The world's poorest pay for professional services and thus are in a "market," whether the services are provided in the public or private sectors. The associated problems of unequal information are particularly acute in undergoverned countries, where state regulation is weak. We systematically review the evidence on solutions to these problems in a variety of professions. Payments by clients are more likely to have a positive effect on quality if they are made through locally-managed organizations rather than directly to individual practitioners, particularly if those organizations have an institutionalized history of other—regarding values and incorporate client participation.

Key words — institutions, path dependency, health, veterinary, education, agricultural credit

1. INTRODUCTION

In most professional services the parties to a potential transaction are unequal in the knowledge needed to make a good decision. It is a well-established principle of economics that markets which suffer from such *asymmetric information* are imperfect, with the consequences of exposing the uninformed to potential exploitation, depressing the prices that purchasers are willing to pay for a service, and discouraging many transactions that would otherwise be desirable to sellers or buyers, with the typical consequence that service quality is reduced (Akerloff, 1970).

Health markets pose a heightened version of the problems of asymmetric information. Where patients are not able to judge the quality of inputs, competition can lead to a combination of exploitative "rent-seeking" (i.e., revenue gouging) by unscrupulous providers and "a race to the bottom" (also known as a "market for lemons") in which prices are driven down at the expense of quality (Akerloff, 1970; Arrow, 1963, 1985). If purchasers could know the quality being offered, they could forego counterfeit, substandard and ineffective goods and services, while paying more for better quality ones, thereby providing stronger incentives for good performance. Good quality providers would also be advantaged by measures to overcome information asymmetries, as they would be able to better market their services (Brhlikova *et al.*, 2011; McLeod & Wilsmore, 2002). These features apply most strongly to curative medicine (where the benefits are "private" to the purchaser) and less to the "public goods" of prevention and health promotion (where the benefits are not limited to the immediate recipient and it is harder to exclude non-payers, with the consequence that governments of necessity are more involved). We therefore focus most intensively on quality and trust issues around "private" goods.

In order to overcome the market imperfection imposed by asymmetric information some kind of mechanism is needed to give consumers an accurate picture of what they are buying. Formal theorists in economics have concluded that markets in these goods have great difficulty achieving an efficient market unless providers are legally liable for their work (Dulleck & Kerschbamer, 2006; Dulleck, Kerschbamer, & Sutter, 2011). Effective enforcement of liability, together with other aspects of state regulation commonly are weak in Low and Middle Income Countries (LMICs) characterized by standards of governance at or below the global medium (which we refer to as "undergoverned") (Kaufmann, Kraay, & Mastruzzi, 2006). [1] Nonetheless many of these countries *do* find ways to overcome their information asymmetry problems. [2]

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Alternatives to the enforcement of liability might be the provision of services by a well-organized public sector, other government regulations, industry standards, monitoring by a well-known and trusted franchise (such as a church), professional norms, the impact of international donors or international non-governmental organizations (INGOs), or even "outcome-contingent" contracts (where the buyer does not pay until the outcome of the service is known).

When such mechanisms are socially embedded they are "institutions". Social scientists who study development are clear that institutions are critical to economic trajectories (North, 1990) and that optimal ones do not necessarily emerge by themselves (Conning & Udry, 2007). These institutions encompass formal and informal societal and organizational arrangements, incentives, rules, norms, and values that shape the behavior of market actors. Sometimes a mechanism, such as decentralization, has come to be socially valued for its own sake. Such valuation is what makes it an institution, and this institutionalization frequently is essential in making the mechanism effective. A better understanding of these institutions and their effectiveness in different contexts can provide important insights into how best to influence market participants to act in the public interest.

Although the health market is considered the quintessential example of asymmetric information (Arrow, 1963), it is far from the only one. Other service sectors that similarly impact the welfare of the poor in LMICs and that also are troubled by asymmetric information problems include veterinary medicine, education, agricultural credit, and the civil service.

In this article we review what is known about institutional solutions to the asymmetric information problem throughout the preceding range of professional services in poor undergoverned countries. The organizing "lens" through which we *first* report on these usually separate literatures is that of human health, but the lessons are much broader and only half the evidence we cite is specific to health. We cover a range of sectors, because we want to stress both that the literature of each makes unique contributions and that the regularities in the evidence come out powerfully only when examined comparatively.

The questions guiding our systematic search and review of the empirical literature are as follows:

- ***What institutions have been used to mediate relationships among service providers and recipients?***
- ***How are these institutions helping to assure recipients of the quality for which they believe they are paying?***
- ***What is the evidence of the effectiveness of such institutions in different LMIC contexts, particularly "undergoverned" ones?***

We are most interested in institutions that enable individual components or a service market as a whole to deliver *effective* products and services that are *accessible* to and used by the poor. The effectiveness question involves quality (both how to ensure that the services provided meet minimum standards and how to provide incentives for improvements) and trust (how to assure the purchasers of a product or service that they are getting the quality they are being promised) (Gilson, 2006). Accessibility questions concern the arrangements in place for the needs of the poorest to be met and can lead into issues about resources, insurance, and subsidy schemes. It is not feasible to address both of these broad areas in a single article, so we focus on the institutions that impact effectiveness (and therefore information asymmetry) and discuss accessibility only as they affect it.

2. INSTITUTIONS

North (1990) stipulates that institutions set the "rules of the game" for the markets within which organizations operate. Institutional sociologists use a more inclusive definition of institutions—those regularities in behavior that are valued for their own sake, i.e., have become "institutionalised" (Powell & DiMaggio, 1991). For us "institutions" encompass both—at the market level, there are "macro"/contextual "rules of the game", whereas at a more "micro" level there are formal policy instruments applied to govern the operation of specific parts of the market, and less formal values that produce and are reproduced by the ways in which particular organizations behave ((Kherallah & Kirsten, 2002), following Williamson, 1985).

Figure 1 illustrates our causal model linking institutions to professional service outcomes. A particular society will be characterized by its prevailing economic, political, and social features. Many of these "macro" attributes are not subject to change in the short-term—for example because of resource constraints, international and local distributions of power, or cultural values. Such temporarily "fixed" features set the context within which services for the poor are operating at present and constrain the "paths" along which they are likely to develop.

There is a considerable range of "micro" mechanisms which exist or might be introduced at the sectoral or organizational level that could be used to overcome the acute information asymmetry problem stemming from a "macro" context of mixed market, poverty, and weak governance—the one on which this article focuses. In order to unpack the "micro" institutions that might be used, we distinguish between (i) *competence* or capacity to meet a need, (ii) *effort* applied, and (iii) assurance of *accountability* for the outcome, *as well as* (iv) ways in which all of these are *signaled* to other parties in a prospective transaction.[3] Competence refers here to the possession of the technical skills and knowledge required to provide an effective service or intervention. Effort is the exertion of mental or physical energy—for instance to determine what is wrong with a patient and to deliver an appropriate care package. (Analytically, effort includes, but cannot be reduced to, the incentives that often induce it.) Accountability reflects the idea that "progress towards goals, commitments, or responsibilities are assessed, and those responsible for action in these areas are held to account in some public fashion" (Collins, Coates, & Szekeres, 2008) (Brinkerhoff, 2004).

Competence and effort clearly are important to positive outcomes, but potential clients will not pay for them if they do not know they exist. Thus "signalling," through the provision of an observable and credible cue is important as a way of communicating and assuring the presence of quality features that recipients may be seeking.

These "micro" governance mechanisms may gradually become valued for their own sake (i.e., become "institutionalized") if the context permits them to function well, in which case they will achieve a still stronger level of influence on provider and client behavior.

Finally, it is provider and client interactions, as shaped by the prevailing "macro" and "micro" institutions, which determine the outcomes of the professional service.

This model drives the structure of this article. After setting out our methods in the next section, in Section 4 we discuss the socio-economic background and the "macro" institutions that provide the context for service provision. The subsequent three Sections 5–7 then present the different sets of "micro" mechanisms driving provider competence, effort, and accountability, respectively. In Section 8 we return to the ways in which path dependence has shaped "micro" choices in particular countries,