Optimisation of Healthcare Contracts: Tensions Between Standardisation and Innovation

Comment on “Competition in Healthcare: Good, Bad or Ugly?”

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Abstract
An important determinant of health system performance is contracting. Providers often respond to financial incentives, despite the ethical underpinnings of medicine, and payers can craft contracts to influence performance. Yet contracting is highly imperfect in both single-payer and multi-payer health systems. Arguably, in a competitive, multi-payer environment, contractual innovation may occur more rapidly than in a single-payer system. This innovation in contract design could enhance performance. However, contractual innovation often fails to improve performance as payer incentives are misaligned with public policy objectives. Numerous countries seek to improve healthcare contracts, but thus far no health system has demonstrably crafted the necessary blend of incentives to stimulate optimal contracting.

Keywords: Healthcare, Competition, Contracts, Innovation, Performance

Introduction
Health systems can be conceptualised as a mesh of interlinked, interdependent markets. There are distinct markets for primary care services, hospital care, medical devices, pharmaceuticals, labour markets for healthcare human resources and positions, and markets for medical and nursing education. Each market involves supply and demand. Given this diverse array of market forces, Professor Goddard duly notes that the real issue is not whether competition should (or should not) exist in healthcare, but rather to identify the particular circumstances and forms in which competition can exert beneficial effects.

In a competitive market, the relationship between sellers and buyers typically takes the form of a contract. Healthcare contracts seek to specify the characteristics of service provision and the level of reimbursement. The contract is an instrument through which market participants seek to determine performance and value. A number of conditions are necessary for the stipulation and enforcement of contracts. These include the specification of anticipated performance or “deliverables,” the identification of clear loci of responsibility, and the availability of penalties such as non-payment or non-renewal of the contracting relationship.

Professor Goddard’s editorial considers many key elements of competition, but we believe that comment is warranted on the interaction between competitive markets and contracting practice. As Professor Goddard notes, competition is not a binary phenomenon. In each developed country, governments play some role in healthcare financing and provision, while even in state provision countries (e.g., National Health Service [NHS] in the United Kingdom) payment per patient exists and some competition is present. All systems must address problems relating to equity and performance, while a fundamental problem is development of improved instruments to observe quality and value. The design of contracts (either by the state or by competing insurers) is of fundamental importance in addressing these problems.

Innovation in Contracts
This paper shall consider contracts in the market for health services, in which a private insurer or public purchaser writes contracts with provider organisations or clinicians. The underlying principles apply to primary care and hospital services. Provider organisations often serve as an intermediary between purchasers and clinicians, when purchasers negotiate contracts at the organisational level and managers seek to improve performance of clinicians through contracts and other organisational change instruments. The three archetypal forms of contract for healthcare services are fee for service, capitation, and global budget, and various combinations of these have been implemented to offset associated perverse incentives.

Empirical evidence consistently illustrates the impact of contracts on performance. Numerous studies illustrate that activity-based payment can increase throughput, while paying clinicians by salary tends to reduce the number of treated patients. The bulk of health spending relates to service provision, and contracts that encourage provision of care in a prudent manner may temper cost escalation. Furthermore, contracts that reward high quality care may, in principle, save lives and improve patients’ quality of life.

Innovation in contracts is evident in many health systems.

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In the English NHS, a monopsonistic purchaser system, authorities negotiated the Quality and Outcomes Framework with primary care providers in an effort to enhance clinical quality and value. In the United States, a major public policy objective is development of contracts that discourage unnecessary care, while rewarding high quality care and value. In the marketplace of Massachusetts, USA, the Blue Cross Blue Shield health insurance company sculpted the Alternative Quality Contract, a forerunner of “accountable care” contract mechanisms that are becoming more prevalent across the United States.4

In the Netherlands during 2010, the government approved the concept of bundled-payment on a national basis for the care of certain chronic conditions including diabetes. Services are specified according to recommendations in national clinical guidelines. Insurers contract with a care group that is responsible for managing care, in many cases involving sub-contracting of services to clinicians such as dietitians and ophthalmologists. In the case of diabetes, early evaluation suggests this bundled payment contract may have improved adherence to key care processes and boosted performance transparency, but this raises anti-trust concerns and may impinge on patients’ freedom of choice, while researchers have found no effects on spending.7

As noted, health systems can be viewed as a mesh of interdependent markets. The structure and conduct of the insurance market has ramifications for the contracts written with providers. Arguably, innovative contract forms may evolve more rapidly in a pluralistic payer environment such as the Dutch or US systems. By contrast, in a centralised, single-payer system, the emergence of new contract designs may be less dynamic. In a single payer environment in which all providers are treated the same, a change for one provider impacts all providers. In a competitive payer environment individual contracting may be the norm, leading to variation in contract design. In turn, this may lead to learning about the optimal attributes of contracts, and ultimately to evolution and improvement.6,7

According to proponents of competition, better performance may emerge from pressure on purchasers to develop innovative contract mechanisms. But competition can damage performance when purchasers lack incentives to encourage value in service provision. The insurance market must be astutely regulated, to transmit the right incentives to the provider sector. Accordingly, contractual evolution might not improve system performance. In multi-payer systems where the effectiveness of risk equalisation is limited, such as in Ireland and Israel, insurers may flourish by risk-selecting profitable patient subpopulations, as noted by Professor Goddard, and this dilutes incentives to craft improved contracts for providers.8 Risk adjustment is also increasingly used in provider-payer contracts to adjust payment to reflect patients’ risk profile. This is important when using capitation or global budget forms of contract, such as the Alternative Quality Contract.6

In a multi-payer system, beneficial waves of contractual innovation may be more likely when effective preconditions for competition between payers are in place, to compel payers to serve as prudent purchasers of care on behalf of enrollees. According to the “managed competition” framework, insurers can flourish by crafting effective contracts with care providers, in order to extract value from the provider market. If these preconditions are met, arguably innovation in contracts can occur more rapidly and effectively than in a single payer environment. Authorities in countries such as the Netherlands seek to transition to such an incentive framework, but to our knowledge, no country has demonstrably achieved such incentives.8

**Standardisation of Contracts**

Despite the potential benefits of contractual innovation, in many circumstances it is appropriate to temper the degree to which payers can innovate. In the United States, annual spending on healthcare administration is approximately $361 billion per year, twice the national spend on heart disease and three times the spend on cancer. Around half of this expenditure is considered unnecessary by the Institute of Medicine, and this waste is partly due to lack of standardisation in contracting. According to one study, US physicians spend an average of 43 minutes a day interacting with health plans about contractual issues such as the content of medical formularies and procedure authorisation. Moreover, physician offices must employ coders to process and monitor diverse reimbursement arrangements across different contracts. Provider credentialing systems are a part of many contracting systems, but these systems exhibit much redundancy as providers must furnish almost identical information to many organisations, and physicians and their staff typically spend a total of 23 hours working on credentialing related tasks annually. It may be possible to significantly reduce administrative costs through standardisation. The potential benefits of standardisation have been demonstrated in multiple industries. In the retail sector, Walmart forced suppliers to adhere to its computer standards in order to process transactions, and this led to widescale standardisation of retail information systems.

Contract standardisation constrains the number of dimensions on which payers can innovate, and may temper the number of ways in which insurers compete. In the United States, a coordinated, national credentialing system may save almost $1 billion annually for providers. Furthermore, providers could save up to $2 billion annually from standardisation of electronic transmission of contract billing information and other administrative data. In a pluralistic payer environment, government agencies may be the only purchaser with sufficient power and scale to compel standardisation of contracts.8

The decision of whether to enforce standardisation for a contractual process or metric should be determined on a case by case basis. It may be appropriate to standardise basic administrative procedures (such as use of ICD-10, and recording of patient characteristics), but the freedom to redesign contracts in various ways may result in learning and evolution. To reach optimal contracting, this inherent tension between standardisation and innovation must be reconciled.

**Other Considerations**

An ideal contract in one setting may be inappropriate elsewhere, as contracts must be tailored for local

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circumstances and needs. For example, the introduction of universal healthcare coverage in Massachusetts was facilitated by an established and forceful regulatory culture, and by comparatively little consumer demand for the high-cost sharing, low-benefit insurance products that are increasingly prominent elsewhere in the United States. In other states, it has been more difficult to implement contracts modelled on the Massachusetts system. Nonetheless, a subset of contractual innovations in a pluralistic environment such as the United States might be of use in other settings. For example, the application of the "diagnosis-related group" classification system was pioneered in the United States, and this has been adapted for use in many other settings.

The perverse incentives associated with multi-payer systems are well-documented, and a fragmented payer market dilutes the influence of each payer on provider behaviour. Moreover, contractual innovation is not confined to the private sector or to multiple payer systems. The Center for Medicare and Medicaid Innovation in the United States, for instance, is a public sector unit conducting trials in innovative contracting mechanisms.

Of note, optimisation of contracts requires new tools to observe value, and to strengthen payers vis-à-vis providers. Research is underway into novel tools to measure performance, such as partly automated machine learning tools to assess quality of decision-making in medical encounters. A new generation of performance measurement tools may lead to major improvement in both competitive and single-payer systems, although there may be important differences between systems in the rate of adoption of such innovations. Ultimately, learning and evolution in contracts is important for the advancement of healthcare systems. Further evidence is needed on whether single-payer or multi-payer systems can offer the optimal framework for this goal.

**Ethical issues**
Not applicable.

**Competing interests**
The authors declare that they have no competing interests.

**Authors’ contributions**
Both authors contributed equally to the development and revision of this paper.

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**Endnotes**
[1] This conceptualisation implies that in a single-payer system with individual contracts for providers, the evolution of contracts may proceed at an intermediate pace relative to the principal two system typologies.

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