Medical care organizations can, but do not, improve healthcare quality.

## Healthcare Intermediaries

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edical care organizations (MCOs), such as health maintenance organizations and preferred provider organizations, have become popular in recent decades because of their ability to lower consumers' healthcare costs while increasing providers' throughput. These organizations function as healthcare intermediaries or, in a technical language, as platforms in the two-sided market for medical care, with the two sides being healthcare providers looking for patients and patients looking for healthcare providers. This function currently has negative implications for the quality of medical care, but it can be utilized to improve that quality.

This article explains how to do it. It begins with describing various factors — both legal and economic — that affect the quality of medical care under the MCO framework. This discussion singles out a serious economic anomaly that the law of medical malpractice aggravates instead of rectifying. This anomaly is the virtual absence of incentives on the part of MCOs and their doctors to compete with each other over the quality of medical care. The article offers a semi-regulatory law reform proposal that would unlock that competition.

## TWO-SIDED MARKET

MCOs are not just health insurers, as many take them to be. They are also, albeit less conspicuously, healthcare intermediaries. An individual pays the MCO in advance for medical care that he may require in the future. The MCO provides medical care to the individual when the need arises. This is how it functions as a health insurer.

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The MCO provides this care by paying affiliated doctors and other healthcare providers who deliver care to the MCO's insureds. The doctors' affiliation to this plan is contractual. They contract with the MCO to set the prices it will pay them for the delivery of medical care to the MCO's insureds. The MCO pays the doctors by using the money collected from the insureds (either directly or, as typically is the case, through the insureds' employers). This is how the MCO intermediates between doctors and patients — a characteristic identifying it as a platform in a two-sided market. It is here where my account of MCOs' economically perverse incentives begins.

PLATFORM ECONOMY To understand these incentives, consider the simplest example of a platform in a two-sided market: a videogame console such as Sony's PlayStation or Microsoft's Xbox. These platforms effectuate transactions between the sellers of videogames (such as Bungie or EA Sports) and gamers. In this example, buyers and sellers cannot transact without the platform (no matter what transaction costs they are willing to expend). To play FIFA-07, a soccer enthusiast cannot just purchase the program from EA Sports; he needs Sony's or Microsoft's console to run the program. Without the platforms, game-programmers would not have buyers. A platform developer thus needs to design a platform that attracts many gamers and thereby induces gameprogrammers to develop games that port to its platform.

In other two-sided market scenarios, buyers and sellers theoretically are able to transact with each other, but their transaction costs are too high to make it happen. A seller, for example, may be willing to sell its product for, say, \$100 to an individual buyer. The buyer, however, would not buy the proda profit by collecting a fee from both buyers and sellers. For example, it may charge a \$10 access fee to each buyer in exchange for its undertaking to the buyer to sell her the product for \$60. To be able to deliver the product for that price, the platform needs to secure the appropriate contract with the seller. Making and executing such contracts is much cheaper than making and executing a collective agreement that embodies 1,000 buyers' undertaking to buy 1,000 products for \$60,000. The platform, therefore, generates economy of scale that benefits both the seller and the buyers of the product.

By using its expertise in the market for this and similar products, the platform also generates information. It reliably informs buyers about the products' availability, variety, and prices. It reliably informs sellers about the buyers' demand for the products. When a product's potential buyers and sellers do not have this information, they often decide not to transact. These failed transactions could have been mutually beneficial to buyers and sellers.

For the right price ("the access fee"), the platform can remove the coordination and asymmetric-information obstacles for such buyers and sellers. The fee is a fraction of the buyers' and the sellers' combined saving in transaction costs. In

> essence, the platform pockets the agreed-upon part of its end-users' saved expenditures on acquisition of information and coordination.



### THE MCO PLATFORM

This is what MCOs basically do. They sell plan members (the insureds) the right to receive medical care from doctors who contract to act as care providers under the plan's conditions. This right is sold in the form of insurance: a patient's entitlement to medical care depends upon need. To avoid moral hazard (overuse of medical care), an MCO also introduces a system of co-payments and deductibles. This system requires a patient to

pay a fixed fee (say, \$30) for each delivery of a medical service listed in the plan. The fee is paid to the service's provider in addition to the payment that she recovers from the MCO. The co-payment becomes part of the price that the affiliated doctor receives for service.

The MCO also stipulates in advance the deductible amounts by which it will reduce its payment toward a patient's medical bills. The economic effect of these deductibles is similar to that of co-payments. Both are part of the access fee that the plat-

uct because \$100 is too expensive. He would only be willing to pay, say, \$70 for the product - a price the seller would gladly accept as well if she had at least 1,000 buyers rather than just a few. In the 1,000-buyers scenario, the seller might even be happy to sell the product to each buyer for \$60. There may be 1,000 or more potential buyers for the product, but they are dispersed and consolidating them would be too expensive.

A cost-efficient platform, however, may still effectuate the product's sales. To be cost-efficient, a platform needs to make form — the MCO — charges the buyer (the patient) for consuming medical care at an attractive price that the buyer agreed to and paid in advance. To make those prices attractive, the MCO negotiates them with doctors and other "in-network" healthcare providers. To obtain the seller's position on the platform and the consequent access to the numerous buyers that the platform consolidates, doctors commit themselves to service the MCO's plan members for discounted prices. Doctors recover those prices directly from the MCO (patients' co-payments are only a modest addition to those prices).

Price discounts to which doctors commit themselves are the fee that they pay for the access to the MCO's platform. The access fee that a patient pays is a more complex figure. This figure equals the difference between the patient's payment to the MCO and the "direct insurance value" of the medical services covered by the MCO's plan. This value equals the price of insurance negotiated directly between patients and doctors in a hypothetical collective bargain.

cares about. The platform cares about the price structure only when it affects the aggregate price level. When the price structure drives away paying users or reduces the number of chargeable transactions, the platform restructures the price. The possibility of increasing the number of paying users and chargeable transactions also induces the platform to restructure its access fees. To increase the number of paying users and chargeable transactions, the platform may even decide to decrease the price level per transaction. For example, in order to attract 95 additional end-users to each side of the platform, a platform with five end-users on each side would be willing to decrease its \$100 price level per transaction to any amount above \$5.

pursuit of quality Crucially to the quality of medical care, platforms do not care much about the quality of the traded goods. For a platform, the good's optimal quality is one that attracts the greatest possible number of paying users and chargeable transactions. This incentive for maximizing the

# The current MCO system entices employers to contract with the cheapest MCOs and encourages bad doctors to join MCO practitioner pools.

Finally, a patient always needs to pay a lot more if he goes out of network. This requirement encourages patients to patronize healthcare providers with whom the MCO has struck agreements. The consequent increase in the number of patients encourages healthcare providers to join the MCO's network.

**SETTING PRICES** The aggregate access fee that a platform recovers from its end-users (e.g., game-makers and gamers, doctors and patients) determines the platform's price level. To generate profit, a platform's price level always needs to be a positive amount. A platform's price structure, on the other hand, can distribute the price level unevenly between endusers. A platform targeting the price level of, say, \$100 per transaction may charge this whole amount to the end-users on Side A and let the end-users on Side B access it for free. A nightclub, for example, may require men to pay a \$100 admission fee while women can enter at no charge. An end-user's access fee can even be a negative sum; nightclubs may provide women with free drinks on Ladies' Night while men pay a steep cover charge just to enter.

For each platform, both the price level and price structure for individual participants are determined by the end-users' bargaining positions. The regular supply-and-demand economy is at work. To the extent the market permits it, each end-user wants to modify the price structure by reducing the access fee that he individually pays the platform. Both sides of the platform thus collectively attempt to reduce its price level.

The aggregate price level is the only thing that the platform

economy of scale explains platforms' specialization in mass consumption goods. Acting upon this incentive, platforms tend to effectuate transactions with goods that only have the average or below-average quality.

There is nothing intrinsically wrong with those transactions. When buyers know exactly what they buy and sellers know exactly what they sell, the trade is mutually beneficial. Problems emerge, however, when the information pertaining to the transaction is asymmetrical.

Consider a scenario in which information about the good's quality is known only to the sellers. The platform's opposite side — the buyers — do not have this information. They do know, however, that the sellers have the information; and the buyers may expect to receive it through the platform. Unfortunately, neither the sellers nor the platform can credibly communicate this information to the buyers. Every potential buyer knows that sellers always speak favorably about the goods they want to sell. There is also nothing special in the platform to make the sellers' assurance credible. On the contrary: the platform is interested in simply increasing the number of paying users and chargeable transactions, and the buyers know it well. Information about the good's quality consequently remains asymmetrical.

In a world without transaction costs, this would not be a problem. Any user facing informational asymmetry would be free to assume the worst about the traded good and do what is good for her. The sellers and the platform would consequently have to find ways for making credible assurances about the good's quality. Failure to do so would transfer prospective buyers to competitors. Regrettably, however, a world without transaction costs is not ours. Transaction costs are part and parcel of any economic reality. Economic analysis, therefore, should focus on the users' platform-selecting and disembarkment expenses. Those expenses are decisive. When they are low, informational asymmetry is not a big problem. When they are high, informational asymmetry constitutes a serious problem that the market cannot resolve.

With MCOs, these expenses are substantial. By and large, a person's membership in an MCO's plan is determined by her employment benefits package. This is how most people come to occupy the buyers' side on MCOs' platforms. Those platforms are selected predominantly by people's employers. A person's employer may select an MCO by evaluating the quality of its medical services against its price. In a more realistic scenario, however, the employer shortlists the cheapest MCOs that appear to be of acceptable quality.

In either scenario, employees cannot expediently participate in the MCO's selection. The collective-action problem blocks their participation in that important decision. Employees are numerous and dispersed, as well as diverse in their job-related motivations and incentives. For that reason, they cannot consolidate into a collective entity that speaks with one voice in order to bargain with MCOs. Nor can they adequately negotiate the MCO's identity and plan conditions with their employers. There is, therefore, no counterbalance to the employer's incentive for shortchanging employees' healthcare. (A slight hope that unionization will do the trick would likely be dashed away by the new set of agency costs.)

An employee also cannot easily switch from one MCO to another. To move privately to a new MCO, she needs to obtain information about the quality, scope, and price of medical services that it offers. Subsequently, the employee needs to evaluate this information. Among other things, this evaluation needs to account for the employee's medical needs, both present and future. Together with the high price of private medical insurance, all this makes the contemplated switch costly and uncertain at once.

MCOs know all this very well. Their strategy, therefore, is to attract as many large employers as possible in order to have as many people as possible on the buyers' side of the platform. This strategy diversifies the risks that MCOs insure against. The randomized assembly of an MCO's patients will include those whose medical needs will be modest relative to their payments to the MCO, and those on whom the MCO will have to spend a lot. Most patients, however, will incur medical expenses that fall in the average.

**POOLING DOCTORS** Another part of the MCO's strategy is to find doctors willing to deliver medical care at attractively discounted prices. The MCO finds those doctors by offering them a massive and steady supply of patients. The MCO also works to increase the number and variety of participating doctors. Making both sides of its platform densely populated increases the MCO's profit.

An MCO's selection of doctors consequently becomes as

randomized and perfunctory as its recruitment of patients. To shield itself from liability for medical malpractice, an MCO only needs to verify its doctors' formal credentials (education, training, and work experience). Subsequently, the MCO needs to formalize the doctors' price-discount commitments, fix their status as independent contractors as opposed to employees (for whose actions the MCO would be legally responsible), and start reaping the platform's benefits.

The MCO platform consequently allows bad, average, and good doctors to pool with each other. Stellar practitioners with an independent and virtually endless supply of patients would not provide discounted services to MCOs because those doctors have no economic incentives for joining the platform. Bad doctors do have such an incentive. For them, pooling with good and average doctors is an attractive business strategy.

On the MCO "all aboard" platform, this pooling reaches its extreme because patients are generally unable to distinguish between good, average, and below-average doctors. Bad doctors exploit this asymmetrical information, as well as the fact that average and even good doctors are still better off staying on the platform than opting out. For them, the optimal strategy is to benefit from the platform's massive supply of patients and streamline the provision of medical care.

The quality of care that these pooled doctors deliver would thus likely fall, given the incentives of the system. Altruism, good conscience, self-image, and the doctors' culture of "doing the right thing" would temper this patient-unfriendly incentive. This mitigating effect, however, cannot be expected to eliminate the pooling of doctors and its harmful consequences. The intermediated healthcare system would therefore give a patient less than what she paid for.

In this system, only a few doctors would be able to separate themselves from others by establishing strong professional reputation among patients. After establishing this reputation, however, the doctors would have every incentive to leave the platform. The pooling problem will consequently persist.

## RACE TO THE BOTTOM

Medical malpractice law does not solve this problem. On the contrary, it exacerbates it. The law requires doctors to provide patients with customary care. This level of care is defined by the standards evolving within the relevant medical profession or specialty. This insider criterion tells a doctor that she would not assume liability for malpractice if she aligns with what other doctors do. Doctors therefore can collectively reduce the level of care and reduce their malpractice risk. By placing doctors on the same platform, the intermediated healthcare system facilitates this race-to-the-bottom dynamic.

**MCO AS MONITOR** MCOs are best positioned to select and monitor doctors for quality of their services. The law, however, gives MCOs every incentive not to do it. An MCO's liability for medical malpractice crucially depends on its contracts with the negligent doctor and the injured patient. When the MCO has an employment contract with the doctor, it becomes vicariously liable. When the doctor acts as an independent contractor, however, vicarious liability does not attach. The MCO,

therefore, can disassociate itself from its doctors' malpractice by making contracts that establish and unequivocally communicate to the patient the doctor's independent-contractor status. The MCO may still assume institutional liability for negligently credentialing the doctor, but it can easily avoid that liability. To achieve this result, the MCO only needs to ask about and verify its doctors' education, training, and other relevant credentials. Absence of selection and monitoring incentives on the part of the MCO thus further induces the pooling of good, average, and bad doctors.

**POOLING PATIENTS** Courts try to decide cases correctly, but do not always succeed. Every liability system therefore needs to shape its rules in a way that accounts for the inevitable presence of adjudicative errors. The medical malpractice system generally fails to do so. This system gives a patient an inalienselected doctors. This competition could help an honest patient to obtain quality care for a price that does not subsidize the opportunistic tort plaintiffs.

## RECOMMENDATIONS FOR REFORM

There is a misalignment between MCOs' incentives and the social good. The law therefore needs to step in and fix the incentives. Making MCOs institutionally liable for their doctors' malpractice would force the MCOs to closely monitor doctors and exercise care in their selection. MCOs should assume this liability irrespective of their doctors' formal status as employees or independent contractors. Malpractice victims should have a right to recover compensation from their MCOs.

This institutional liability should be based on a menu of agreements. Any doctor working through an MCO's platform

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able right to recover full compensation from his doctor in the event of injury that results from the doctor's negligence. This compensation may be a skyrocketing amount. The patient and the doctor cannot make a contract that eliminates or downsizes this entitlement. The doctor's liability for malpractice is fixed by the law of torts, which the patient and the doctor cannot unmake.

This regime allows opportunistic patients to exploit the presence of adjudicative errors by suing non-negligent doctors for malpractice. As a result, the cost of medical care increases for all patients. Doctors' pricing decisions account for opportunistic lawsuits and the ensuing payouts. Unable to differentiate between honest and opportunistic patients, doctors make those decisions for all patients and subsequently charge the same treatment price (to the patient or the MCO).

After finding a good doctor, an honest patient may want to, but cannot, separate from this pool by undertaking not to sue the doctor or, more realistically, by making a contract that caps her prospective entitlement to compensation. By making any such agreement ineffectual, the law effectively forces an honest patient to subsidize the opportunists.

**SUPPRESSING COMPETITION** By doing all this, the medical malpractice system suppresses three competitive dynamics. First, it motivates MCOs to operate predominantly as financial institutions without competing with each other over the quality of medical care. Second, it dilutes doctors' incentives to compete with each other professionally. Third, it does not allow patients to compete with each other by utilizing offers to remove or reduce the malpractice liability threat from and the MCO itself would have to offer a patient an agreement under which the MCO assumes full liability for the doctor's malpractice. In addition to this baseline agreement, the MCO and the doctor should be allowed to offer the patient any limited-liability agreement, as well as an agreement that removes the malpractice liability completely (except for intentional torts). To protect consumers, the law also should require that MCOs supplement each agreement on their menus with a simple plain-language explanation of the agreement's basics.

Under this arrangement, medical services would be priced differentially. An agreement imposing full liability on the MCO would likely be most expensive. An agreement that completely removes liability from both the MCO and its doctors would presumably be the cheapest. The in-between category of limited-liability agreements, also appropriately priced, would be virtually unlimited. A good example of such an agreement is a healthcare plan that limits the member's right to recover compensation for pain and suffering and other non-economic damages. This limitation may be absolute or it may cap non-economic damages by specifying the maximum amount of compensation.

This menu of agreements would substantially attenuate the asymmetrical information problem. The price-difference between the full-liability agreement and other agreements on the MCO's menu is a fairly straightforward factor. This factor would credibly communicate the MCO's internal assessment of its doctors' quality and propensity to commit malpractice. When the full-liability agreement is considerably more expensive than other agreements on the menu, the MCO's assessment of its doctors' malpractice propensity would be partic-

ularly unflattering to the doctors and the MCO. For example, an MCO that offers a full-liability agreement for \$10,000 and a no-liability agreement for only \$1,000 signals patients that 90 percent of the non-discounted price goes toward the expected medical liability payouts. Based on this information, prospective patients can safely assume that joining this MCO's plan would make them unsafe. These patients would consequently start looking for a better MCO.

As an empirical matter, the general incidence of iatrogenic injuries associated with malpractice ranges between 1 percent and 2 percent. Normally, therefore, the price-difference between the MCO's full-liability and no-liability agreements must not exceed 2 percent. The price difference between the full-liability agreement and partial liability agreements can thus be expected to be below 2 percent. Also, there should be a very little price difference between the MCO's full-liability agreement and an agreement stipulating that the patient would only be able to recover economic damages. Note that compensation for pain and suffering, lost consortium, and other non-economic damages is generally much higher than what the tort victim usually receives for his economic losses.

A substantial price difference between the full-liability agreement and other options offered by the MCO would therefore indicate a substantial prospect for medical malpractice. This factor would constitute bad signaling that steers away honest patients and marks the MCO as a convenient target for opportunists. MCOs therefore would try to avoid such signaling as much as they can. They would disengage from bad doctors and would narrow the pricing gap between the agreements on their menus.

**PATIENT SIGNALS** This system would also elicit credible signaling from the patients. A patient normally would not accept an agreement that altogether removes liability for medical malpractice from both the MCO and its doctors. By assuring the provider ex ante that malpractice liability is not a threat, the patient exposes himself to an increased risk of mistreatment.

The rate of injurious malpractice, presently ranging between 1 percent and 2 percent, attaches to medical patients generally. Those patients did not turn their doctors into moral hazards by telling them in advance that they are free to commit malpractice. An honest patient, however, may well accept a limited-liability agreement that allows her, in the event of malpractice, to recover compensation for economic damages alone.

Alternatively, the patient might sign an agreement that limits her future recovery for non-economic damages to a specified amount. The patient would accept such an agreement for two reasons. First, she would pay less for her medical plan and would not subsidize opportunistic patients. Second, the patient would avoid signaling the MCO that she might sue it opportunistically. This signaling would shield the patient from defensive medicine that potentially opportunistic patients, opting for the full-liability agreement, would receive.

These predictions are good not only for risk-neutral patients but also for patients who are averse to risk. A riskaverse patient would prefer better treatment at an affordable cost over a full-liability agreement that exposes him to defensive medicine and forces him to subsidize the opportunists and their attorneys.

STRICT INSTITUTIONAL LIABILITY An alternative to this proposal is an imposition of unmodifiable institutional liability upon MCOs. This regime, however, is unlikely to induce MCOs to compete over the quality of medical care.

Under this regime, an MCO would simply add the appropriate liability insurance requirement to its credentialing checklist and incorporate an indemnification provision in its agreements with doctors. Premiums that different doctors pay for liability insurance generally do not track their individual performance and propensity to commit malpractice. Liability insurers, indeed, are not as well positioned as MCOs to evaluate and predict doctors' performance.

Under the menu-of-agreements regime, MCOs would still be able to shift their liability prospect to insurers. But they would have to compete with other MCOs who would selfinsure more efficiently by utilizing their superior expertise and informational advantage. These more efficient MCOs need the contractual flexibility of the menu-of-agreements regime. By helping these MCOs to improve their market performance, this regime would make good doctors, honest patients, and society at large better off.

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