

ACCOUNTABLE CARE SYSTEMS FOR COMPREHENSIVE HEALTHCARE  
REFORM

REVISED DRAFT FOR REVIEW COMMENTS ONLY

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## **Introduction**

Proposals to reform the US Healthcare System are more likely to succeed if they focus not only on the financing of care but also on the delivery of care – and on the interactions between the two. Policy changes in financing, payment, benefit design, technology assessment, outcome assessment, and public reporting all must work through one common pathway: the delivery system – the hospitals, physician practices, and other entities that provide care to patients. We may do little good and potentially much harm to expand insurance coverage to all Americans without changing the delivery system’s ability to deliver high quality care at the lowest possible cost.

Given the above, we face a major public policy conundrum. In brief we essentially have a 19<sup>th</sup> century craft-oriented delivery system trying to provide 21<sup>st</sup> century medical science and technology. If this “disconnect” persists, it will be difficult for other elements of healthcare reform to have a significant or lasting impact on the quality or cost of care. The “architecture” of health care reform must, somehow, build a foundation of brick or stone out of the gravel that constitutes the current delivery system.

If comprehensive health care reform is to succeed, the U.S. will need accountable care system (ACSs). By “accountable care system,” we mean an entity that is able and willing to do two things: first, implement organized processes for improving the quality and controlling the costs of medical care; second, be held accountable for results.

While the optimal form of delivery organization is unknown, we discuss seven capabilities that any accountable care system (ACS) should have to improve quality and control costs. We suggest five different models of ACS’s and their advantages and disadvantages relative to achieving the desired capabilities. We focus on models of

physician organization, but include models that involve affiliation between the physician organization and hospitals and/or health insurance plans. We consider the relative “robustness” of these models to differences in payment method and to treating different types of medical conditions. We conclude with some recommendations on how comprehensive healthcare reform might deal with the barriers to creating ACS’s.

## **DESIRED CAPABILITIES**

The Institute of Medicine, in Crossing the Quality Chasm,<sup>(1)</sup> states that health care organizations should have the capability to: 1) redesign care processes; 2) make effective use of information technologies; 3) manage clinical knowledge and skills; 4) develop effective teams; 5) coordinate care across patient conditions, services, and settings over time and; and 6) incorporate performance and outcome measurements for improvements and accountability. We add a seventh capability, the ability to adapt to change.

### Ability to Redesign Care Processes

Redesigning care processes means examining the processes an organization uses to provide care and changing them to provide higher quality care in a cost-effective manner. For example, a group might use organized care management processes (CMPs) such as maintaining registries listing patients with certain chronic diseases, providing reminders of needed services to physicians at the point of care, providing data-based feedback to physicians, providing self-management education to patients with chronic

diseases, and providing a nurse care manager for the sickest and most vulnerable patients.<sup>2,3</sup>

#### Ability to Effectively Use Information Technologies

Clinical information technologies such as electronic medical / health records, electronic interchange of information among physicians, hospitals, laboratories, and pharmacies, e-mail between patients and physicians, and Web-based tools to assist patients in self-management provides the needed infrastructure for providers and patients to learn from each other and to provide data for measuring and improving quality. This requires a well-designed electronic medical record, the ability to communicate electronically across sites of care, and staff with the training and time to make the technology work, to devise processes to improve quality, and to make good use of the data the technology provides.

#### Ability to Manage Clinical Knowledge and Skills

An organization should proactively work to match the skills of its staff to the things it needs to do to provide high quality care and to help staff to learn new skills as needed. In addition, because the flood of new information is too great to be managed adequately by individual clinicians, the organization needs ways to make this information available to physicians and other caregivers - where and when it is needed. Further, as better practices are identified they should be readily shared with others.

#### Ability to Work in Teams

It has long been obvious that inpatient care is provided by teams of physicians and other staff, though these teams have not necessarily functioned effectively or even thought of themselves as teams. Outpatient care has been dominated by the “visit

model,” in which medical care is taken to be whatever happens between an individual patient and physician during the patient’s visit. This model is not ideal for making sure that patients receive all indicated preventive care, for helping patients with chronic diseases learn to manage their illness, or for providing assistance to patients between office visits. The team or “micro-system” - the *organizing* principle for the delivery of healthcare in the 20<sup>th</sup> century – can serve as the tool for implementing organized care processes to improve care that go far beyond the patient visit model.<sup>4,5</sup> There is a growing evidence based management literature on the characteristics of effective teams.<sup>6,7,8</sup>

#### Ability to coordinate care across providers, services, and settings over time

As the percentage of Americans with chronic illness and multiple chronic illnesses grows, the need for the delivery system to manage patient care across multiple settings and providers over time increases. The central function missing is that information and knowledge about the patient’s condition is not shared among those caring for the patient. Relevant information is frequently incomplete, late or missing altogether resulting in delays in care, repetition of tests and procedures, and overall waste and inconvenience. Implementation of Electronic Health Records (EHR’S) and Electronic Medical Records (EMR’s), in physician practices is a necessary but insufficient condition for care coordination. Also needed are informed “receptors” of the information; that is, healthcare teams that know how to use the information as part of an overall organized system of care for the patient. In addition, effective partnerships are necessary with other provider organizations that may become involved in the patient’s care.

## Ability to incorporate performance and outcome measurements for improvements and accountability

Provider organizations should be “learning organizations”<sup>9</sup> that measure their performance, experiment with ways to improve, and modify their processes based on their experience. Small-scale, rapid cycle testing, modifying, and retesting can be effectively used in large and small provider organizations.<sup>10</sup> The ability to improve requires the ability to measure performance as well as leaders and staff with skills and time to manage improvement efforts.

There is growing demand that evidence of improvement be made public and transparent. ACS’s will be expected to be accountable for the care of the population of patients for which they are responsible. They need to provide reliable and valid information on quality and cost of care to be used for the purposes of public reporting to inform choice as well as a basis for differential payment based on performance. Further, an accountable care system must have enough patients to ensure that statistically reliable and valid measurement of important medical processes and/or outcomes can be done.

## Adapt to Change

Delivery organizations must also be able to adapt to change. There is a vast literature both inside and outside of the health sector on managing change with emphasis on the importance of leadership and culture.<sup>11</sup> They are particularly relevant in a highly decentralized system such as the U.S. where the ability to provide more cost/effective care (i.e. high value) depends on the leadership of thousands of individuals and organizations and a culture that emphasizes teamwork over individual autonomy, admits

and learns from mistakes, is data driven, is willing to be held accountable, and values working in partnership with others.

## **ACCOUNTABLE CARE SYSTEM MODELS**

One way to provide greater value in healthcare delivery would be for all physicians, hospitals and other care-giving entities to be part of Accountable Care Systems (ACS) that are responsible for the entire continuum of care – outpatient, in-patient, home health, rehabilitation, and long-term care. This does not mean that all of these types of would necessarily be owned by any given ACS.. A variety of ownership, contractual arrangements and alliances could exist but in all cases the ACS would be accountable for the quality and cost of care for its patients across the continuum of care.. The ACS is, thus, an umbrella concept under which a number of specific models might prove viable. We discuss five – the Multi-Specialty Group Practice (MSGP); the Hospital Medical Staff Organization (HMSO); the Physician-Hospital Organization (PHO); the Interdependent Physician Organization (IPO); and the Health Plan Provider Organization or Network (HPPO/HPPN).

Two important caveats should be noted. First, most physicians work in very small practices that would likely not have the resources to develop the capabilities to be an ACS. In an ACS-based health care system, these small practices would either merge into large (new or already existing) multi-specialty group practices, or would participate in an ACS that facilitates clinical integration among small practices without merging them into a single group. We recognize that many physicians and patients may prefer smaller practices. In a system in which ACSs compete based on the quality and cost of their care, “ the market would decide” whether “virtually integrated” systems including

small physicians practices could succeed in competition with systems in which physicians are merged into large group practices. Second, specialist physicians are increasingly creating medium-sized and even quite large single specialty groups. A single specialty group could not serve as an ACS taking accountability for the full spectrum of patients' care, but could be important components of an ACS or, alternatively, could be an important source of care to which an ACS would frequently refer.

#### The Multi-Specialty Group Practice (MSGP)

Between 17 and 26 percent of approximately 718,000 practicing physicians in the US are associated with a multi-specialty group practice of 100 physicians or more – including institutionally employed physicians.<sup>12</sup> This figure increases to 35 percent if groups of 20 or more physicians are included.

The potential advantages of the MSGP were recognized as early as 1932 when their formation was suggested by the Committee on the Cost of Medical Care.<sup>13</sup> MSGP's vary in size and form ranging from independent MSGP's that work with several hospitals and health plans in a given area to those that have an exclusive relationship with a hospital system but may still accept patients from multiple health plans (e.g. The Henry Ford Medical Group, the Mayo Clinic, Intermountain Healthcare, and the Geisinger Clinic) to those that are exclusive with both hospitals and a health plan such as Kaiser-Permanente. A multi-specialty group that is linked to a hospital/health system that also owns a health plan is commonly referred to as an integrated or organized delivery system.<sup>14</sup> MSGP's have the potential to add value because of the opportunity they have to deliver coordinated care to a defined group of patients. They typically have the resources

to redesign care processes, take advantage of economies of scale to implement electronic medical records, form healthcare teams, obtain data based feedback on performance gaps, and make the changes needed to improve care.<sup>15,16</sup> There is a small but growing body of evidence that MSGP's do make greater use of recommended care management processes and electronic information technology<sup>17,18</sup>; and provide higher quality of care on selected preventive and process measures involving recommended screening tests and diabetes and asthma management than smaller, looser forms of practice<sup>19,20</sup> The MSGP would appear to have particular advantages in caring for patients that require care over time and for payment based on entire episodes of illness, related bundled payment arrangements, and capitation.

MSGP's also have some potential disadvantages. Their size and bureaucracy can make them difficult for patients to negotiate and can make it difficult for patients and staff to feel that their environment is "human scale."<sup>21,22</sup> They are very difficult and expensive to create. Though they can afford to employ highly skilled leadership, their governance may be complex and time-consuming due to their size and to possible conflict among multiple specialties and parts of the organization. With financial incentives and the demand for greater external accountability it is likely that the MSGP model will grow to some extent as some existing small practice units aggregate into larger groups. But it is unrealistic to expect that large numbers of MSGP's can be formed over a short period of time. Instead the relevant question becomes how some of the valued characteristics and capabilities of MSGP's – use of teams, ability to generate data on performance etc. – can be adapted for use by other practice models? In brief, how might other models "mimic" MSGP's? We suggest four possibilities.

## Hospital Medical Staff Organization (HMSO)

Nearly all of the 718,000 practicing physicians in the US are members of hospital medical staffs. The hospital medical staff model has been based on an exchange relationship in which in return for hospital admitting privileges, physicians agree to serve on hospital committees and review the quality of care provided through the creation of a self governing medical staff organization structure. This arrangement has been fraught with conflict and challenges because of divergent cultures and incentives among hospitals and physicians.. Many physicians and hospitals view each other as competitors particularly with the growth of specialty hospitals.<sup>23</sup> In addition, most physicians have historically viewed the hospital as their “workshop”<sup>24-26</sup> and have a general disdain for becoming involved in such a large bureaucratic organization. Nevertheless, outside of the local county medical society, the hospital medical staff is the one setting in which largely fee-for-service physicians come together, exchange information, and form referral relationships. Recent data suggest that most physicians have primary relationships with a single hospital thus making it possible to form a stronger partnership entity between physicians and their primary admitting hospital.<sup>27</sup> Further, hospitals have the capital to support adoption of EMR’s and EHR’s, generate performance and accountability data, and assist with providing quality improvement support. If payment policies were implemented based on bundled payments for specific medical conditions (e.g. CABG, Stroke, Diabetic care, Asthma care) for given episodes of illness that included both inpatient care and outpatient care, there would be incentives for hospitals and physicians to work together. Others have proposed this but for inpatient care only.<sup>28</sup> If annual Medicare payment updates were based on Medicare costs for the patients of physicians

on their primary hospital medical staff, rather than on national Medicare costs, the medical staff would have an added incentive to work together.

This model would have potential advantages for both chronic illnesses with acute episodic “flare ups” as well as acute episodes of hospitalization that require some degree of follow-up care before the patient’s return to health. However, the HMSO faces challenges including reconciling the diverse interests of physicians who seldom speak with a common voice; a long standing conflicting relationship between many hospitals and their physicians; and legal obstacles to gainsharing that would need to be addressed. Even if the “aligned” payment mechanisms were in place, this model would make heavy demands on the persuasive powers and conflict management skills of hospital and physician leaders.

#### The Physician Hospital Organization (PHO)

A variation of the MSGP model is the PHO. There are approximately one thousand PHO’s in the U.S. though most appear to be relatively inactive at this time.<sup>29</sup> Assuming an average hospital medical staff size of 350, and that approximately three-quarters of these physicians would qualify and accept the conditions for PHO membership, then approximately 37% (262 x 1,000 / 718,000) of physicians in the US may currently belong to a PHO. Few PHO’s at present command much attention from their member physicians. But under comprehensive healthcare reform, changed incentives might lead to more PHO’s evolving into entities that would effectively manage the quality and cost of care.<sup>30</sup> PHO’s would establish cost and quality criteria as standards of eligibility for membership and evaluate performance for continued membership on an annual basis. Payment would flow to the PHO based on its collective performance. This

model has the advantage of not needing to have all medical staff physicians involved and also creates incentives for those physicians not eligible one year to become eligible in future years as they improve their performance. In effect this represents an “internal tiering” of the delivery system but exercised by hospital and doctors themselves rather than by health plans and purchasers. Also, because it is not open to everyone, the PHO might be better able to transfer knowledge and manage change than the open ended HMSO model.

PHO’s, however, also face many of the same challenges as the HMSO described above. Many of the first generation PHO’s failed. Further, state or federal “any willing provider” laws would pose challenges to the PHO model. Also, PHOs must be significantly clinically integrated to avoid running afoul of anti-trust law.<sup>31</sup>

#### The Interdependent Practice Organization (IPO)

A fourth model is proposed for those physicians who want to continue practicing in smaller settings. It is estimated that 48 percent of all office-based practicing physicians are in solo or two person partnerships and 89 percent of all office-based physicians are in practice arrangement of 10 physicians or less.<sup>32</sup> Thirty eight percent are members of an IPA. We call this model the *Interdependent* Practice Organization to distinguish it from the *Independent* Practice Associations (IPA) that exist today. Most of the existing IPAs are in California and were formed to bear risk and negotiate commercial capitation contracts. They are, for the most part, loosely organized collections of relatively small physician practices.

The proposed IPO model would have strong leadership, and governance, and enough patients collectively across individual practices to support investments in the

seven capabilities discussed above. Given sufficient incentives, some existing IPAs might become IPOs by strengthening their governance structure, developing a stronger shared culture and leadership, and working to create the needed capabilities. These are difficult goals, however, for organizations composed of many small practices.

#### Health Plan-Provider Organization / Network (HPPO/HPPN)

The fifth model is similar to the IPO but based on partnerships between health plans and physician practices. They would likely draw from the same pool of physicians as those who might also consider the IPO model. Purchasers, policy makers, and providers alike realize that insurance plans have accumulated considerable cost, quality, and utilization data on millions of patients over many years. As a result, they have the incentive to bring pressure from employers to analyze the data not only for developing insurance products but to encourage more cost effective healthcare delivery on the part of their provider networks. Indeed, the over 100 current private sector pay-for-performance demonstrations are based largely on health plan use of administrative claims data even with all of its limitations. In addition, health plans such as United Health Care, Wellpoint-Anthem, Aetna, and Cigna have developed capabilities in disease management, electronic information technology implementation, and quality improvement systems that could potentially be used effectively in collaboration with providers. Also, some health plans have even “deeper pockets” than many hospitals. As a result, some physicians and physician practices may partner with health plans rather than their local hospital in assuming risks under various payment mechanisms and external reporting requirements. Health plans can become “aggregators” of smaller physician practices and become the unit of accountability for performance.

But, while health plans can marshal data and provide technical assistance to providers they cannot actually manage the care or make the necessary organizational changes in physician practices needed to improve performance. The necessary leadership is not likely to be provided by the health plan's medical directors located at the central headquarters, or even regional offices. So the likely success of this model will depend on local physician leadership within the small practices and such leadership is likely to be highly variable.

Table 1 provides a preliminary assessment of each model in relation to the seven core capabilities.

### **Accountable Care System Models and Payment Methods**

Table 2 provides a summary of the extent to which the Accountable Care System models might align with episode-based and capitation-based payments. Payment should aim at providing incentives for the ACS's to continually improve the coordination and quality of care and to control costs across the full spectrum of services, even if there is no common ownership. For example, the MSGP-based ACS may not own a nursing home but by contracting with certain nursing homes that provide high quality cost-efficient care the incentives contained in episode-based payment can be met. The HMSO, PHO, and organized delivery system MSGP models are well-structured to accept episode-based and capitation-based payment. The IPO model is less well structured to accommodate these forms of payment because of their likely weaker ties to hospitals. But assuming that the IPOs are large enough to generate statically reliable performance data and with necessary leadership they too could negotiate episode-based and capitated arrangements whereby the payments would be divided contractually between the physicians, hospitals, and other

entities providing care. In the HPPO / HPPN model the health plan itself becomes the payer and could use episode-based and capitation-based payment to incent its network of hospitals and physicians to work together to meet cost / quality targets.

Episode-based payment, and capitation payment under various combinations are based on the premise that there is an *entity* that can be held *accountable* for the care delivered to an identifiable group of patients. While this will be relatively easy to determine for patients with acute illness and for those who have been with a particular practice or delivery system for several years, it will be more difficult to assess for those with chronic illness seeing many different providers or for those who frequently switch providers. While various algorithms can be developed for assigning specific portions of patient care to specific providers, recent evidence suggests that such assignment is often inaccurate.<sup>33</sup> This may be somewhat less of a problem if, as would be true for an ACS, the goal is to assign patients to a system that includes many physicians rather than assign patients to an individual physician. Alternatively, patients could be given incentives to designate a particular ACS as the place where, at least for a defined period of time, they would first go to seek care.

### **Accountable Care System Models and Different Medical Conditions**

Ideally, the ACS models would have the ability to treat a wide range of medical conditions including single chronic illness, multiple chronic illness, major acute care, minor acute care, preventive care, and palliative care. While the MSGP model might be best able to treat patients with multiple chronic illness, it is not clear that any of the models (including the MSGP) are necessarily superior in treating patients with the other types of medical conditions. This is a major area for further research, particularly in

developing and testing new “care platforms” and micro-system models designed to treat different medical conditions. Episode-based payment and capitation could create the necessary incentives for all models to perform well in treating chronically ill patients but possessing the capabilities to do so may still vary

## **BARRIERS AND RECOMMENDATIONS**

Accountable Care Systems of whatever form require three “I’s” to succeed – *information* for purposes of improving performance in comparison with standards and benchmarks; *infrastructure* that provides the capabilities to act on the data and information; and *incentives* to do so.<sup>34</sup> From the delivery system perspective, comprehensive healthcare reform must address the barriers to meeting these three requirements and go beyond them to create “facilitators” for their achievement.

### Providing the Information

Consistent with the recent recommendations of the Institute of Medicine, we recommend the creation of a national performance measurement system encompassing a portfolio of quality and cost measures that cover the continuum of care.<sup>35</sup> CMS and other payers would use this measurement system in developing their value-based payment system. Such a system could be overseen by the Agency for Health Research and Quality (AHRQ), the National Quality Forum or a newly and separately created entity. These measures would be used for both public reporting of quality and cost data and for payment based on performance at a given point in time and for improvement over time. The measurement set would be updated periodically consistent with the advances

in quality and cost measurement and the development of new technology and treatment modalities.

Currently, only 25% of physician office practices have some components of the electronic medical record or electronic health record and about 9% of hospitals have computerized patient order entry of drugs.<sup>36</sup> To facilitate the production of reliable data and information reform proposals could include incentives for electronic information technology adoption through expanding the CMS' Quality Improvement Organization's (QIO's) capability to provide information technology implementation assistance; providing either direct grants and/or low interest loans; or, CMS and commercial payers could consider directly rewarding providers for using electronic information technology in caring for their patients and in public reporting.

#### Building the Infrastructure

Most physicians and physician organizations today lack the "system" capabilities needed by patients, particularly those with chronic illness. The culture of individual physician autonomy, in addition to lack of incentives, hinders the development of these capabilities. This is particularly true for physicians practicing in solo, partnerships, and small group practice settings and this will not change any time soon. Most large ACS's have been built over a long period of time.

However, steps can be taken to help develop the needed capabilities. We recommend creation of a National Center for Evidence-based Medicine and Management that provides the best available evidence on clinical and managerial practices to improve quality and cost performance.<sup>37,38</sup> AHRQ or a similar organization would conduct and disseminate on a quarterly basis meta analyses and synthesis reports on both the EBMed

and EBMgt literatures for use by ACS's. This would be an extension of AHRQ's current Evidence-based Practice Center reports. At the same time, as recommended by the National Academy of Engineering / Institute of Medicine report on "Building a Better Delivery System", Congress should provide funding to create a network of evidence-based medicine / management centers.<sup>39</sup> These centers would bring together a multidisciplinary group of clinicians, engineers, researchers, and managers to continually identify better practices that improve value and rapidly spread these to ACS's throughout the country.

While these two recommendations will help in the short run to improve knowledge capability we also recommend investment in the future by creating incentives for health professional schools to incorporate required content in systems engineering, process improvement methods, communication and conflict management skills, leadership development, change management, and teamwork. Brief, focused experiential modules can be implemented in the clinical years of medical and other health professional education and then reinforced in the residency experiences. We recommend that CMS provide payment incentives for schools to incorporate such content into their curriculum and field experiences, or, alternatively, withhold a portion of payment for those who do not. The AAMC could also require evidence of such content in their accreditation process. The reformed value-added 21<sup>st</sup> century health delivery system will require a very different type of clinical and managerial leadership to succeed. We need to begin investing in that leadership now.

#### Providing the Incentives

Currently there is no or little reward for physician to improve the quality or control the cost of care in that payment is divorced from performance or results. Further, there is little incentive for physicians to join organizations that can help them produce better patient outcomes at the same or lower cost.

Consistent with the recent MEDPAC testimony to Congress we recommend that Medicare make fundamental changes in payment to reward providers based on the value (outcomes achieved / cost) of care delivered.<sup>40</sup> Whether or not overall expenditure targets are set for the sustainable growth rate (SGR), CMS should be given the authority to reward providers differently based on the results achieved. Under budget neutrality, money would be initially redistributed from those doing less well to those doing better. But future payment should also allow for *improvement in performance* such that those who do less well initially still have opportunities to be rewarded for improving their results. Much remains to be learned about “pay for performance.”<sup>41-44</sup> In particular, the conditions for which such payments would be made need to be carefully selected to include those where reliable, valid, risk adjusted measures exist. As progress in outcome and risk adjustment measurement grows, the list of conditions for result based payment should also increase.

In addition to changes in overall payment that rewards greater value, we recommend experimentation with bundled payments for hospital and physician services for selected conditions (e.g. CABG, hip and knee replacements) which require inputs from both physicians and hospitals, and for which outcomes are visible, well measured, and risk adjusted. Bundled payment will create incentives for hospitals and physicians to work together and encourage the development of ACS’s such as the HMSO and PHO

models. Higher bundled payments should go to those hospitals and physicians treating more severely ill patients; as indicated by the existence of comorbidities and related risk adjusters.

We also suggest that incentives be created for consumers to select the highest value added ACS's for care based on available data. For example, consumers might have no co-insurance or deductibles for selecting providers in the top tier across cost and quality performance metrics; moderate deductibles and co-insurance for those in the middle; and higher deductibles and co-insurance for those in the lowest third. Alternatively, premium rates could be adjusted to take into account the selection of higher value added ACS's.

CMS should also expand its initiatives on reporting hospital and nursing home quality data to reporting quality and cost data for physician practices. This could be phased in over time moving from voluntary reporting to eventual mandatory reporting as use of EMR spreads throughout the physician practice community. Common standardized reporting definitions and formats and measures must be implemented to make this feasible. Over time, private plans should follow CMS's data reporting methodology. The independent entity noted above should ensure the accuracy and reliability of the data. It could then oversee the development of an annual National Value Scorecard (NVS) with regional and local disaggregated scores for hospitals, physician practices, nursing homes and home health agencies. The impact of the previously discussed payment reforms and incentives is likely to be stronger when combined with external reporting of quality and cost performance data.<sup>45</sup> Development of such a scorecard will create incentives for solo physicians and those in small partnerships and

small groups to come together to share the cost of data collection and reporting and to improve their performance .

## **CONCLUSION**

The barriers to creating organizations that can deliver on the promises of comprehensive health care reform are formidable. It will not be easy to get from where we are to where we want to go. But we foresee a co-evolution in which payment systems that move away from fee-for-service toward rewarding improved value for populations of patients coupled with greater availability and transparency of cost and quality performance data will encourage the development of ACS's which, in turn, will be better positioned to accept results-based payment to the benefit of all involved.

The diagnosis of what is wrong with the U.S. health system has been known for decades. It is chronic fragmentation. We have assumed for decades that this condition is treatable; that it is reversible; and that it is not a terminal illness. But we have yet to come up with a treatment plan. In this paper we have suggested some key elements of a possible treatment plan highlighting the importance of delivery system reform. The question is whether the patient (i.e. U.S. Health System) is yet sick enough to take the medicine?

Exhibit 1. Accountable Care System Models and Core Capabilities

<u>Accountable Care System Models</u>	Redesign Care Processes	Teamwork	Care Coordination	<u>Core Capabilities</u>			
				Performance Accountability	Information Technology	Knowledge Management	Change Management
(1) Multi-Specialty Group Practice (MSGP) <sup>a</sup>	High	High	High	High	High	High	Medium
(2) Hospital Medical Staff Organization (HMSO) <sup>b</sup>	Medium	Medium	High	High	High	Low to Medium	Low to Medium
(3) Physician Hospital Organization (PHO) <sup>c</sup>	Medium	Medium	High	High	High	Medium	Medium
(4) Interdependent Provider Organization (IPO) <sup>d</sup>	Low	Low	Low to Medium	Medium	Low	Low	Low
(5) Health Plan Provider Organization / Network (HPPO/HPPN) <sup>e</sup>	Medium	Low to Medium	Low to Medium	Medium to High	Low to Medium	Low to Medium	Low to Medium

<sup>a</sup> 17-26 percent of practicing physicians in groups of 100 plus including institutionally based; 35 percent in groups of 20 plus

<sup>b</sup> Almost all 718,000 practicing physicians

<sup>c</sup> Estimated 37 percent of practicing physicians; see text

<sup>d</sup> 48% of office-based in solo or 2 person partnership; 89% in arrangements of 10 physicians or less; 38% members of IPA's

<sup>e</sup> 38% members of IPA's

Exhibit 2. Accountable Care System Models and Alignment with Method of Payment to the System to Encourage Cost/Effective Care

<u>Delivery System Models</u>	<u>Payment Methods</u>	
	Episode-Based Payment	Capitation
(1) Multi-Specialty Group Practice (MSGP)	Aligned if there is close relationship with a hospital	Potentially Aligned
(2) Hospital Medical Staff Organization (HMSO)	Highly Aligned	Aligned
(3) Physician Hospital Organization (PHO)	Highly Aligned	Aligned
(4) Interdependent Provider Organization (IPO)	Aligned if there is a close relationship with hospital	Potentially Aligned <sup>1</sup>
(5) Health Plan Provider Organization / Network (HPPO/HPPN)	Aligned if there is agreement between hospital and physician network	Potentially Aligned <sup>1</sup>

<sup>1</sup> Depending on hospital acceptance of the capitated payment

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