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Original Investigation

More Than Money: Motivating Physician Behavior Change in Accountable Care Organizations

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Policy Points:

- For accountable care organizations (ACOs) to be successful they need to change the behavior of their physicians. To stimulate this change, a broad range of motivators are being used, including ways to see a greater impact on patients (social purpose) and opportunities to be a more effective physician (mastery), in addition to personal financial incentives.
- From our analysis of case studies, it does not appear that the full range of motivators is being deployed by ACOs, which suggests an opportunity to develop more sophisticated and wider-ranging portfolios of motivators for greater impact.

Context: There are approximately 800 accountable care organizations (ACOs) in the United States. In order to achieve the ACO goals of reduced cost, improved outcomes of care, and better population health, it is critical to change how physicians within ACOs deliver care. While knowledge of ACO development and evolution is growing, relatively little is known about the motivational drivers that are being used to effect change among participating physicians.

Methods: We synthesized 9 well-established and empirically tested theories of motivation into an overarching framework of 6 motivator domains. This framework was then used to explore the types of motivators that leaders use to stimulate change within 4 case study ACOs. We explored the organizational characteristics, strategies, and motivators for changing physicians' behaviors through in-depth interviews and document review.

Findings: The case study ACOs more strongly emphasized nonfinancial motivators for changing physician behavior than financial incentives. These

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motivators included mastery and social purpose, which were used frequently across all case study sites. Overall, the ACO case studies illustrated variability across all motivational domains. While there was evidence of changing motivators as a result of the ACO, the case study ACOs found it difficult to comprehensively change the use of motivators, in part due to dispersed managerial attention and the complexity and diversity of programs and contracts that fragmented efforts to improve.

Conclusions: Motivating behavior change within ACOs goes beyond financial incentives. ACOs are using a broad range of motivators, including creating ways to make a greater impact on patients and opportunities to be a more effective physician. Overall, it does not appear that ACOs are deploying the full range of available motivators. This suggests an opportunity to develop more sophisticated and wider-ranging portfolios of motivators to drive behavior change.

Keywords: accountable care organizations, motivation, physician incentives.

Accountable care organizations (ACOs) are a new form of health care organization in which a network of health care providers is given a financial incentive to reduce total costs of care while meeting certain quality benchmarks for a defined patient group.[1] The largest ACO program to date is the Medicare Shared Savings Program (MSSP) covering 4.24 million lives,[2] accompanied by Medicaid and commercial ACO contracts that are state or locally specific. In the MSSP, ACOs that meet quality metrics while staying within predetermined expenditure targets generally share in savings on a 50-50 basis with the Medicare program. The Pioneer Medicare ACO program is similar, although ACOs share not only in savings but also in losses. Commercial ACO contracts vary in how they share risk and reward for performance against financial benchmarks and their own set of quality metrics. In total, nearly 800 ACOs took responsibility for the care of more than 23 million lives by the end of 2015.[3]

ACOs require primary care physicians (PCPs) to change how they deliver care to patients. This is particularly true for the growing number of patients with chronic illness that account for approximately 75% of all US health care expenditures.[4] Although the evidence is not yet clear on how care needs to be changed, many changes are being tried, including greater use of interdisciplinary health care teams, patient engagement activities such as motivational interviewing and shared

decision making, care coordination programs, and greater use of electronic health records (EHRs). ACOs are implementing these initiatives to help achieve the needed gains in performance and cost containment. Learning how ACOs motivate physicians to make such changes is, therefore, of great importance.

Beyond motivating change for success under an ACO contract, ACO leaders have the potential to shift health care's motivational paradigm for longer-term impact. By focusing on both reducing cost and improving quality, ACO leaders have an opportunity to reshape the dynamics of physician motivation away from a volume-driven financial incentive under fee-for-service payment and toward a broader range of motivators, including greater mastery of medicine and clinical practice, satisfaction in working in a team environment, and greater social purpose in meeting patient needs.[5]

The literature and popular media about the new ACO models have, to date, been focused on the elements of financial incentives and, particularly, on the distribution of any shared savings.[6-9] This is understandable since the contracting terms stipulating financial incentives has been a significant component in establishing ACO programs and are especially novel for Medicare. Financial incentives at the ACO contract level, however, may not be replicated or translated down to the level of individual providers delivering care. While mechanisms that trigger financial motivation are important, they are not the only way to motivate change,[10] and new approaches are being sought.[11] Indeed, wider issues of physician burnout and low morale, which are becoming increasingly pertinent,[12] are unlikely to be solved by emphasizing only financial incentives.[13,14]

This exploratory study aims to develop our understanding of ACOs and, potentially, other related organizational or financial arrangements by developing an overarching conceptual framework for considering motivation based on existing empirically tested theories. Using this framework, we explore the use of motivators for achieving changes in physicians' behaviors through 4 ACO case studies.

Developing the Conceptual Framework

Motivation is complex and our understanding of it is still evolving. Our thinking has been shaped by conceptual frameworks from research in psychology, organizational behavior, and industrial psychology, such

as Herzberg's 2-factor theory[15]; Alderfer's existence, relatedness, and growth framework[16]; and, more recently, Pink's theory of drive that focuses on mastery, relatedness, and purpose.[17] These theories have been debated and tested by many across the academic disciplines and within multiple industries, including health care.[18-20] Each theory has attempted to categorize motivation into a number of domains, often 3.

We reviewed 9 such theories and identified a number of similarities among them. By mapping the domains within each theory and aggregating overlapping concepts, we reduced the 9 theories into a new aggregated framework with 6 domains. Our new framework of 6 domains represents the full range of financial and nonfinancial motivators: mastery, autonomy and power, relatedness, social purpose, potential demotivators or "hygiene" factors, and financial motivators. Table 1 gives a definition of each domain and examples of mechanisms that could be used to trigger motivation. Table 2 illustrates the mapping of the 9 well-established theories to the 6 domains that form this new framework. This new framework is not specific to the health care context and could apply to any work environment.

Study Design

We designed our qualitative study to explore how this new framework could be applied to the health care context and specifically to ACOs since they need to stimulate change in behaviors from their PCPs. Four case study sites from across the United States were purposefully selected to illustrate a range of ACOs. All sites were participating in a Medicare ACO program; 3 sites also operated an ACO or ACO-like contract with another payer besides Medicare. The case studies varied across a number of dimensions: 2 had earned shared savings through their Medicare ACO contract, while 2 had not; 1 was large, covering 45,000 patients, 2 were medium size, and 1 had fewer than 10,000 patients; and 1 attempted significant changes to its operations and care strategies, while the rest attempted only minor to moderate changes in response to becoming an ACO. A description of the characteristics of each site is shown in Table 3.

This study was given exempt status by the University of California, Berkeley, Committee for Protection of Human Subjects.

We performed site visits and qualitative interviews between January and May 2015 with 10 face-to-face or telephone interviews over 3 to

Table 1. Motivational Domain Definitions and Example Health Care Mechanisms[a]

Domain	Definition	Example Mechanisms Applied to Health Care
Mastery	Comprehensive knowledge of or skill in work; being good and getting better at what you do	• **Competent** and confident in delivering basic care safely and consistently • **Mastery** of a specific skill (eg, improving outcomes for patients at the individual and collective level through learning and experience, feedback, and performance data) • **Advancement** in career • **Recognition of performance** through awards, status, job titles
Autonomy and power	Control over your own work and environment; power to control the work of others	• **Personal autonomy in work** including flexibility in how care is delivered • **Control** over work of other team members • **Personal influence** over organization strategy and decision making
Relatedness	Belonging to a team or organization; contributing to shared goals	• **Affiliation** to identified group/team • **Peer support and meaningful interpersonal relationships** • **Recognition of citizenship/membership** within identified group/team • **Pride** in identified group/team/organization
Social purpose	Having a positive impact on customers (patients) and coworkers	• **Helping patients and doing the right thing** • **Helping, supporting, and protecting coworkers,** especially junior team members or employees

Continued

Table 1. *Continued*

Domain	Definition	Example Mechanisms Applied to Health Care
Hygiene factors	Avoiding demotivation by reducing stress and anxiety, improving work-life balance, and making work easier	• **Good work-life balance** • **Reduced workplace stress and anxiety** or reduced fear of the future (ie, future regulatory or industry changes) • **Professional protection** (eg, reduced liability risk) • **Job security/organizational viability** • **Ease of doing work** (ie, work enabled by tools, processes, and teamwork) • **Basic financial security**
Financial motivators	Direct or associated financial reward for performing tasks, behaviors, or achieving performance targets	• **Salary linked to performance or status** • **Additional financial reward** (eg, shared savings distribution, other performance-related bonuses)

[a]Data derived from authors' analysis of published literature.[15-17,21-24]

Table 2. Mapping of Motivational Domains to Existing Theories

Theory	Mastery	Autonomy and Power	Relatedness	Social Purpose	Hygiene Factors	Financial Motivators
Maslow's hierarchy of needs	Self-Actualization & Esteem		Belonging		Safety & Physiological	
Herzberg's 2 factors	Motivators				Hygiene	Motivator & Hygiene
Alderfer's ERG	Growth		Relatedness		Existence	
McClelland's 3 needs	Achievement	Power	Affiliation			
Intrinsic/extrinsic	Intrinsic				Extrinsic	
Self-determinism	Competence	Autonomy	Relatedness			
Prococial behavior			Purpose			
4 drive theory	Comprehend & Acquire		Bond		Defend	Defend & Acquire
Pink's drive	Mastery	Autonomy		Purpose		

Table 3. Characteristics and Care Management Strategies of the Case Study Sites[a]

	Case Study A	Case Study B	Case Study C	Case Study D
Characteristics:				
Type of Medicare ACO program and year of start	Pioneer, 2012	MSSP track 1, 2013	MSSP track 1, 2013	MSSP track 1, 2013
Earned Medicare shared savings	√		√	
Number of patients at start of Medicare contract	20,000-25,000	<10,000	15,000-20,000	45,000-50,000
Other ACO or "at-risk" contracts	√		√	√
Pre-existing provider network or new network for the ACO	Pre-existing	New	Pre-existing	Pre-existing
Major hospital[b] **within ACO network**	Yes	No	Yes—but considered to be hands-off	Yes
PCP employment status	Majority employed PCPs	Mix of employed and independent PCPs	Mix of employed and independent PCPs	All employed PCPs
Geographic region	(not disclosed)[c]	East Coast	West Coast	South
Care initiatives deployed at time of case study:				
Care coordination and transition of care program	√ (pre-ACO)	√	√ (pre-ACO)	√ (pre-ACO)

Continued

Table 3. *Continued*

	Case Study A	Case Study B	Case Study C	Case Study D
Care gap analysis and focus on the annual Medicare Wellness Visit	√	√	√	√
Enhanced EHR or rollout of a common EHR	√ (pre-ACO)		√ (for some pre-ACO, others new)	√ (pre-ACO)
Expanding access to primary care and the range of services delivered in the outpatient setting		√	√ (for some pre-ACO, others new)	√ (pre-ACO)
Clinician education, enhanced decision support tools, defined evidence-based care pathway templates		√	√ (for some pre-ACO, others new)	√ (pre-ACO)
Top of their license multidisciplinary teams			√ (for some pre-ACO, others new)	√ (pre-ACO)
Authors' judgment of the scale of change attempted from activities prior to start of ACO	Minimal	Significant	Moderate	Minimal

Abbreviations: ACO, accountable care organization; MSSP, Medicare Shared Savings Program; PCP, primary care physician.
[a]Data derived from authors' analysis of qualitative case study data.
[b]Major hospitals do not include rural hospitals or outpatient clinics.
[c]The geographic region for Case Study A is not disclosed to maintain its anonymity.

4 days at each site. Each site generated a short list of potential interviewees to fit prescribed categories, including strategic and administrative staff in their headquarters, physicians, and other clinical staff. Potential interviewees were asked whether they would take part and were given the opportunity to refuse. Two potential interviewees did not respond to the request, which was considered a refusal to participate. Across all case study sites, we conducted 38 interviews with 41 interviewees, mostly on a one-on-one basis (20 interviewees were strategic leaders and administrators, 12 were PCPs, and 9 were other clinical staff).

Interviews followed a semi-structured format covering: environmental context of ACO; what they were doing differently as part of the ACO; and motivators for achieving this change, including nonfinancial motivators and financial motivators such as compensation and shared savings distribution. The semi-structured interview guide is provided in Appendix 1.

Interviews were recorded, with the consent of the interviewees, and transcribed. Public information about the ACO (eg, their company website and reported data from the Centers for Medicare and Medicaid Services) and documents provided by the ACOs (eg, internal reports and board presentations) complemented data collected through interviews. We used Atlas.ti software for the analysis and took an integrated approach to coding, with broad code types representing the 6 domains and subcodes developed inductively from the data.[25] Coding was performed by a single coder (the lead author) with sample interviews independently coded by a second coder (the coauthor). Initial inter-coder reliability was 75%; after discussion, agreement was reached on 100% of the text passages with the addition of second codes on the disputed passages. These most frequently involved categorizing a statement as mastery or social purpose.

We created and shared a profile of each case study with key leaders at each ACO. ACO leaders checked for factual accuracy and validated the analysis of motivators. We then analyzed and synthesized themes across the case studies.

Strategic Changes as Part of the ACO

Each ACO had developed and implemented a strategy to reduce the need for care, thereby reducing cost while improving the quality of care

as measured by performance on metrics such as blood pressure levels, blood sugar levels, immunization rates, preventable hospital admissions and readmissions, and emergency department visits. Across the ACOs there were many similarities in their strategic approach and the care initiatives attempted, as shown in Table 3. Care strategies deployed by the case studies were broadly consistent with initiatives aimed at achieving the Institute for Healthcare Improvement (IHI) Triple Aim of improved outcomes, reduced costs, and better population health and with findings from other studies of ACOs.[26-29]

While the strategies deployed were similar, the scale of change this represented for each site was different given the care strategies deployed prior to becoming an ACO. In our judgment across the 4 case study sites, 3 sites attempted minor to moderate change from existing strategies while 1 (Case Study B) attempted significant changes, which included changes to their EHRs, care teams, and reporting processes. This judgment was based on interviewees' recollection of what was different before and after starting the ACO contracts and our assessment of the relative scale of change they described compared to the other case studies.

Use of Motivators by Domain

We used data collected from interviews to rank each ACO against the domains of our aggregated framework based on 4 criteria:

1. The frequency of domain mentions based on the count of coded segments within the interview transcripts;
2. Whether mentions predominantly referred positively or negatively to the motivator as they were used by the case study site (eg, a negative mention: "The change management is not just about showing them data . . . this is a big challenge for us" and a positive mention: "So that was some of the alignment [of performance and pay] and that's been huge for us; that's the first time in that group that we've been able to say, 'It's not just volume'"). Positive mentions increased the ranking and were attributed a "high" score, while negative mentions reduced the ranking and were attributed a "low" score;
3. The degree of effectiveness suggested, if any, with highly effective motivators resulting in a "high" score; and

Table 4. Ranking of Motivator Domains by Case Study, with the Number of Mentions Given in Parenthesis[a]

Domain (in order of highest rank overall to lowest)	Case Study			
	A	B	C	D
Mastery	1 (60)	1 (29)	1 (36)	1 (63)
Social purpose	2 (20)	2 (19)	5 (21)	2 (19)
Financial motivators	5 (34)	5 (21)	2 (38)	3 (31)
Hygiene factors	4 (18)	3 (27)	3 (38)	3 (30)
Relatedness	3 (25)	3 (17)	5 (23)	5 (18)
Autonomy and power	5 (16)	5 (9)	4 (23)	6 (14)

[a]Data derived from authors' analysis of qualitative case study data.

4. Whether there was any degree of sophistication to the use of motivators (ie, motivators that were specifically related to the ACO patient cohort or specific to an individual clinician were considered sophisticated) with highly sophisticated motivators resulting in a "high" score.

For the 4 criteria, a judgment of high, medium, or low was formed for each domain at each case study site. High, medium, and low were scored as 3, 2, and 1, respectively. These scores were then summed and the rankings constructed based on the scores. Rank 1 corresponds to the highest score. Equal scores between domains were given a joint ranking.

Senior leaders at each case study site validated the overall rankings and the judgment against the 4 criteria. A summary of the rankings for each case study site is given in Table 4. Mastery and social purpose were the most frequently and most positively mentioned across all case study sites and, hence, were the highest ranked. Financial motivation was the third most emphasized motivator domain, above hygiene factors, relatedness, and autonomy.

The Use of Financial Motivators

As shown by the rank ordering in Table 4, financial motivators were generally mentioned less frequently by these case study ACOs than several nonfinancial motivators, although there were variations across

the sites. For example, of the two case study sites that had achieved shared savings (A and C), one ranked financial motivators high (rank 2) and the other low (joint rank 5).

Most case study sites had made moderate changes to their compensation plan in order to incorporate the new ACO metrics and care strategies. None felt it was necessary to make radical changes, especially those who already had performance metrics incorporated into their compensation plans. The 2 case study sites with the least involvement of a hospital system (B and C) were the 2 that relied most heavily on direct fee-for-service reimbursements with none or little proportion of compensation linked to performance or "citizenship," such as recognition of time taken to teach others, to participate in organizational management activities, or to recruit new members to the network. The 2 ACOs with strong ties with hospital systems (A and D) had the majority of their physicians on a salaried compensation plan with a proportion of their plan based on performance against specific quality metrics, "citizenship" behaviors, and other strategic initiatives.

In addition to their standard compensation plan, 1 case study (C) introduced an additional payment to its physicians. This financial incentive was targeted at achieving the ACO's goals by driving up adherence to the change agenda. For example, PCPs were paid a bonus based on attendance at semiannual forums, participation in training activities, and collaboration with the team of care coordinators. The semiannual bonus was calculated based on the degree of adherence to the change agenda using a point-scoring scheme and the size of their ACO panel. This made the financial incentive for change more timely and therefore more sensitive. One clinical leader reported: "It's a bit more real-time as well, because it's what I do this month [that] affects ... the next 6 months, whereas with the ACO there's a bit longer lag." Leaders considered this additional bonus to be very effective in motivating change. One administrator stated: "What we found is that extra payment has paid off multiple times because it's avoided readmissions, it's avoided care that wasn't necessary for the patients, so the patients have saved money, they've had a higher quality. It's been tremendous for us." No interviewees raised concerns about using a direct financial motivator or whether it would crowd out other motivators.

Although payment of shared savings, based on cost savings and dependent on quality performance, is a key concept in the economics of

ACOs, there was a mixed response to our questions concerning shared savings. Only 2 of the 4 case study sites (A and C) had so far received any shared savings from their Medicare ACO contract, although another (D) had received pay-for-performance bonuses from commercial ACO-style contracts.

Of the 2 that achieved Medicare shared savings, Case Study C repaid its hands-off parent hospital system for its previous investment and then distributed the rest to all member physicians on the basis of the size of its Medicare ACO panel. Administrators expressed an interest in distributing the money based on performance against the quality metrics, and thereby align payment with performance; however, they did not have sufficiently granular data to robustly determine performance at the individual physician or even practice level. The other site that achieved shared savings (A) split the money in proportion to the number of patients between the member organizations. Each member organization in the network had autonomy over what was then done with its share. The two largest member organizations transferred the extra money into the existing compensation pool for their salaried physicians or reinvested in further improvement initiatives. No additional payment reached the physicians despite receiving a shared savings payment as an ACO. An administrator stated: "The financial returns, I would say, for the most part, are coming to the health system, but then those dollars are being reinvested into activities around patient care redesign." In this ACO, shared savings were not being used as a principal motivator for change at the PCP level because organizational performance within the contract was seen as unpredictable, and the compensation plan was already designed to incentivize PCP behaviors.

At the 2 sites that did not receive shared savings (B and D), there were feelings of disappointment but not necessarily surprise. The lack of additional money from shared savings made it harder to justify the business case for continuing to invest in infrastructure and improvement projects. There was a sense that at some point the economics of ACOs would have to turn in their favor; otherwise, they would exit the program, which would fundamentally call into question their ability to adopt population health-based techniques. As one nurse noted: "It definitely did have an impact on the morale, at least when the physicians first found out that we weren't getting any of the savings. I think they were a little annoyed and irritated. 'Why do we have to make these changes if we're not going to get anything out of it?'" For these ACOs, any

early expectations of the financial rewards for changing behavior were not met, which had an impact on the availability of additional financial motivators.

Overall the unpredictability of performance within the ACO programs led all case study sites to consider the financial incentives to be a gamble and as a result did not consider shared savings as an effective motivator for change. One primary care physician at site A summarized it as: "Spend some money, take some time, and if it works you'll get that money back and if it doesn't [it's a] 'thanks for donating' kind of a concept."

The Use of Nonfinancial Motivators

A clear consensus across all ACOs was that it was more than money that motivated change. While the money was an important element, an executive board member summed it up as: "I know we need to align the dollars. I get that piece of it [but] I think there's a more powerful lever. And that is appealing to people's intrinsic interest in contributing, being part of something, knowing they're making a difference."

Our open-ended questions explored nonfinancial motivators using the aggregated framework as a guide. Interviewees from all case study sites mentioned all the domains; however, motivating mechanisms and emphasis within their portfolio of motivators varied. As shown in Table 4, the strongest themes across all sites were of mastery, and in 3 sites social purpose was second. Being a better physician and having a greater impact on patients were the greatest motivators for engaging with change initiatives as part of the ACOs.

Mastery

The domain of mastery was most heavily emphasized by all case study sites. This domain is very broad when applied to physicians and includes the intrinsic joy of learning and using knowledge, teaching others, and seeing personal improvement through performance data. On the negative side, it includes the fear of being a poor performer in contrast to an existing positive self-image.

Transparency of performance data was an enabling mechanism for mastery and was emphasized by the case study sites in response to

their ACO contract. This transparency went beyond the direct feedback given to a physician but not shared openly, which has, at best, moderate impact on physician performance.[30] Most of the sites already shared some performance data with physicians prior to becoming an ACO; 1 site (B) created a new process, since they were a new network of providers. Sites A and D shared data at the individual physician level, while sites B and C shared data at the clinic level. Leaders considered transparency to be a vital part of performance improvement and, where possible, aimed to give complete transparency of performance to the individual physician level. One administrator said: "We send [a monthly report] to them directly, and send it to their quality person. It lists all their docs, all the names, all the numbers rolled up, all the numbers rolled down." A clinical leader described how this transparency impacted performance: "I think the model in primary care is to be as transparent as possible. I believe that physicians get to see what their colleagues are doing. So that's a stimulant for behavior change over and above dollars, it's just not to be the laggard or the outlier." Transparency was used to promote a positive self-image or to stimulate action by putting an existing positive self-image at risk.[31]

Other sites reported performance data to the clinic level but did not have sufficient confidence in the robustness of the data to report at the individual physician level. This approach is in line with the literature regarding the impact of feedback on physician performance; specificity of feedback is important if feedback is to stimulate performance improvement.[30]

With transparency of performance data in place, a wide range of mastery-based motivators were unlocked. Physicians had greater awareness of how they were performing and whether they were improving, which helped them to understand their competency and to focus improvement efforts. With comparable quality metrics, a clinical leader at site D described how they embraced "'coopetition,' which is the concept of friendly competition" whereby physicians strived to outperform their peers while they all simultaneously improved. Another physician at the same site described this as a way to encourage self-reflection and improvement: "Saying, 'Wow, that section seems to be, like, really getting a handle on this really well.' And the underlying, but unspoken message is, 'What are you guys doing?'"

Recognition of good performance was attempted by the different sites in different ways and could be varied within the ACO. One site had a

culture of "lean" process management and through daily huddles were recognizing successes both big and small. A senior leader said: "Celebrations aren't once a year, or once every 6 months, they're everyday." Another site struggled to implement a formal recognition process because administrators lacked confidence in the validity of the metrics and the robustness of the data collected. In the absence of sufficiently specific evidence of good performance, leaders were not willing to praise some at the risk of demotivating others.

Opportunities for learning on the job were also a motivator for engagement in the ACO program and for behavior change. Site B developed a program for their specialists to teach physicians how to manage moderate to complex chronic conditions in the community without a need for specialist interventions. The sessions were very well received by physicians, as an administrator described: "Giving them some nuggets, some tips, some medication, and here's [some] tidbits, and here's the best drug to use in this case and that case. They loved it. The docs, they love it, they couldn't wait. 'When's our next one? Who's coming next?'"

Transparency of performance data also triggered a fear of failure. Physicians acted to reduce the risk of failure and ensure that they were competent in their role and maintained their confidence as a high achiever. This fear of failure was engaged at the organization and individual level. One administrator from site A noted: "All that data is fabulous because people get scared by it. They're going, 'Oh, my gosh. We're gonna fail. We can't fail!'"

Social Purpose

Social purpose was the second most emphasized domain in all but 1 site (C). While this domain is recognized in many existing motivation frameworks, it appears to be particularly prominent in motivation within health care settings.[18] In the health care context, "social purpose" is characterized as the joy and satisfaction of doing the right thing to help patients and, in some cases, coworkers.

Having an impact and, importantly, being able to see the impact of their work on patients was a driver for changing behaviors across nearly all sites. Closely related to concepts of mastery, one physician at site A noted: "If we can as a system help you take better care of your patients and do the right thing ... you're going to be happier at work and you're more able to do the right thing." Clinical leaders,

PCPs, and nurses commented on the specific needs of the Medicare population served by the ACO and said that better preventive care and management of chronic conditions would enable these patients to have a higher quality of life. One physician at site B said that, through the ACO measurement and connected EHR, "You can see the difference you're making in a patient's life."

Physicians also anecdotally saw the impact of the enhanced care services that they delivered as part of their ACO. Even though site C ranked lowest on the social purpose motivator overall, an administrator from site C noted: "It's really cool to hear anecdotal stories from docs. They're like, 'Oh, I had this one patient for 10 years and I never thought that I would ever see them smile and now they're smiling.'"

Some considered the ACO metrics to be a helpful and consistent way to understand the impact ACO initiatives were having on patients. However, not all the contractual performance metrics were considered closely linked to real patient outcomes. For example, one PCP reflected that a patient could experience a significant improvement in their health by reducing their blood glucose levels from extremely high to high and, while this outcome was relevant to the patient, it would not count toward the ACO's metric. This was because the threshold for meeting the metric was absolute and did not take into consideration the initial starting level or improvements made throughout the year.

The case study sites did not mention any attempts to quantify or communicate the social impact of care delivered as part of the ACO care strategy or to understand the emotional and social value of avoided care that was no longer needed due to the actions of the ACO (ie, an admission avoided due to early intervention by a care coordinator).

Site C's changes to the physician payment since becoming part of the ACO were so salient at the time of our interviews that they dominated the conversation and, thus, may have mitigated discussion of social purpose as a motivator that otherwise may have emerged.

Relatedness

Of the nonfinancial motivators, relatedness was moderately emphasized within the ACO context. Relatedness is the sense of belonging to a team or organization and contributing to shared goals. Physicians have many groups to which they identify and relate.[32,33] Physicians may relate to being an employee or leader of an organization, to their class

from medical school, to their local peer group, and to their professional association. For physicians, being in an ACO could be a new identity to add to this existing list of identities. Physicians seemed, however, unlikely to identify themselves principally as members of an ACO; instead they continued identifying with the hospital system or with an independent clinic. One administrator at site D was very clear on this point: "If you asked most of our physicians if they were in an ACO, they'd probably say, 'What? We're in an ACO?'" despite communications from the ACO headquarters regarding their membership. This may be because the ACO is only 2 years old and seen as just another contract entered into by the headquarters or health system, rather than a distinct entity with a separate identity.

Although organizational identification with the ACO was weak, ACO leaders are trying to tap into existing affiliations and identities. Peer pressure was actively used to effect change, according to one clinical leader: "If they don't make improvements, then we bring them in front of their peers." This self-policing effect was associated with the broader organizational culture and was not specific to the ACO.

One administrator summarized their no-nonsense approach this way: "We wanna work with you, but if you're not gonna work with us, we'll replace you." Establishing "hard edges" to enforce performance standards and behaviors had an impact on the remaining providers within the ACO. Senior leaders thought that this helped to focus physician attention on delivering strategic goals, while also promoting their estimation of the ACO as being a high-performing club to aspire to. One site (C) determined that they were not yet ready to define any "hard edges" due to insufficiently robust performance data.

Autonomy and Power

Similar to relatedness, the autonomy and power domain had variable use across the case study sites. There was perceived to be a tension between emphasizing and restricting autonomy. One clinical leader at site D noted: "Here's the dilemma ... on the one hand, you have autonomy, and the other side of the coin is variability. Because with autonomy, often comes variability, and most of the time variability is the enemy of quality." Many interventions used by the ACOs limited the physician's autonomy by requiring standardized processes. Conversely, however, there was opportunity for physicians to serve as leaders of a

broader team with greater powers of delegation and control over clinic work processes.

An important example of autonomy involved the provider's decision as to whether to participate in an ACO. In 3 of the 4 case study sites (A, B, and C), all or some of the providers had to opt in. These were mostly providers who were associated with, but not owned by, the lead hospital-based system or who were in a connected independent practice association. An administrator from site A described the conversation regarding joining the ACO: "One of the first things I needed to tell them was that they could choose to participate or not and that we weren't gonna force them to. As soon as we said that, then they started becoming very interested because of course, if we're giving them a choice, there must be something good there because we're not forcing them to do it." One case study site (C) used the point of opting in to establish a list of requirements for membership: acceptance of the common EHR, use of secure email, citizenship behaviors, and attendance at related trainings and meetings. Opting in to the ACO set the tone for subsequent engagement with the physicians, including their role in influencing strategy and deciding how to distribute any shared savings. Site D, which had only system-affiliated physician practices within its ACO and no independent clinics, did not give its physicians a choice to opt in. Instead, they were automatically enrolled following a management decision.

Embracing teamwork within the clinic setting was perceived to be a challenge for some physicians, especially those toward the end of their careers whose medical education and experience reinforced their perceptions of themselves as the sole decision maker and deliverer of care. One physician from site D noted: "There's a very strong sense of physicians having trained at a time when they were in control, they were the ones calling the shots, a very strong sense of autonomy." There was an indication that a culture of autonomy was particularly strong within primary care. Delegating to other nonphysician staff and embracing the new role of the care coordinator was, therefore, a tricky transition for some. Others embraced a broader team and grew very attached to their new care coordinators. A clinical leader from site C recounted: "One of the doctors said, 'If you try to take my case manager away, I will make the uprisings in Egypt look like nothing.'"

Striking a balance between standardization and autonomy was seen in the implementation of evidence-informed protocols for common conditions. A physician at site B noted: "Evidence-based medicine is

good, but you need a little bit of freedom within that if somebody falls outside of the guidelines." Where autonomy may have been restricted, flexibility was encouraged in other ways. Site A gave system-level autonomy to its members by defining the target outcomes and letting providers within the ACO decide locally what they would do to achieve the target. An administrator explained: "We asked them to concentrate on the [ACO] population, but develop it however it made the most sense within their system." Some administrators wanted to engage physicians in decisions so as to extend their power where this was appropriate and to give them a greater sense of ownership over the ACO, its strategies, and its performance. For example, an administrator at site B noted: "They'll come up with their own ideas on how to better their reports, and then it becomes their ACO and not somebody else's ACO."

Hygiene Factors

The presence of hygiene factors reduces demotivation and dissatisfaction but does not directly motivate behavior.[34] Improving hygiene factors can make the aggregated effect of motivators more positive; for example, by helping reduce workplace stress, employee turnover, and burnout.

All case study sites indicated an intention to improve hygiene factors for their physicians. The main theme within this domain was making work easier for physicians through the use of technology and expanded teams to offset the burden of new reporting requirements. A clinical leader at site B explained: "Physicians and these clinics should not work harder, we should work smarter."

Making work easier or smarter was a combination of improving existing working procedures and minimizing the impact of new requirements on physicians such as reporting performance data. To make work easier for physicians, some sites offered new tools within their EHR such as protocol templates. One site started to offer psychiatric consultations via video conference. There was heavy emphasis on technological functionality and particularly the benefits of a common EHR platform. For some physicians, EHR access was a reason for joining the ACO, believing that the benefits of the common platform would extend beyond the ACO patient cohort. A physician at site C revealed: "Frankly, a lot of the interest of those doctors to join the Medicare ACO was the EPIC acquisition. . . . [It's] very well subsidized and not only the implementation, but also in the monthly maintenance."

There was limited reference to reducing the stress of work or anxiety of caring for complex patients. Although interviewees agreed that ACO initiatives, in theory, should reduce the risk of litigation, they had yet to see an impact on the volume or severity of litigation claims which cause stress to the physician against whom they are made.[35]

Overall, the impact of hygiene factors was not clear and views differed across the different types of people interviewed. Leaders talked of doing what they could to limit the burden on physicians, for example. A clinical leader at site A said: "All that money that we're getting from any sort of value-based purchase or reward system, we are reinvesting in the support system so that docs don't have to do all the work themselves." However, at the same site, a physician noted: "I would say it [the ACO] made it more tedious to some degree . . . basically having to jump through some hoops that normally I wouldn't have taken the time for, but because you're being graded on that, you have to do it." There was little reference to improving the culture, work environment, or work-life balance of the primary care teams at any of the sites.

Discussion

Balance Between Financial and Nonfinancial Motivators

Respondents from all 4 case study sites discussed examples of motivating mechanisms that fit within the 6 domains of the aggregated framework. They each had implemented a range of mechanisms and placed a different emphasis on the different domains. Most of these motivators were not new to the physicians, but interviewees described a greater emphasis on the nonfinancial motivators as a result of the ACO. Both mastery and social purpose were emphasized more than the financial motivators for change. Three of the sites (A, B, and D) emphasized nonfinancial motivators consistently higher than financial incentives, including 1 (A) that received shared savings from their Medicare ACO contract. Site C considered financial and nonfinancial motivators to be more in balance with each other.

The heavy emphasis on mastery supports the view that there is a strong professional drive among physicians.[36] One administrator for site C commented: "Who better to push themselves than themselves?" The ACO contract appears to be acting as a catalyst for more effectively

deploying the social purpose motivators. The emphasis on social purpose is consistent with the general ACO program objective of promoting good patient experience and outcomes of care.

Overall, greater autonomy was not often mentioned as a motivator for change, and ways to compensate for the loss of autonomy were considered to appease those physicians who would otherwise resist the change initiatives. While striking the right balance may be difficult, encouraging empowerment or "directed autonomy"[37] as part of adopting ACO initiatives may be an opportunity to effect change and improve physicians' work satisfaction.[38]

Barriers to Using Motivators Effectively

Throughout the interviews, issues relating to the effective use of motivators were raised both when prompted and unprompted. For some, these issues were a source of frustration that prevented faster implementation of their change agenda, while others were more accepting of these issues because their ACO contracts were relatively new (ie, 2 or 3 years old), or they accepted that variations would exist between contracts from different payers. Three main issues emerged around performance data and metrics, fragmentation, and the tension between fee-for-service and population-based approaches.

First, the lack of physician-level performance data and poor timeliness of receiving data hindered individual-level performance transparency that could trigger mastery and social purpose domains. A physician at site B noted: "Because it doesn't get down to the individual doctor, it's very difficult for that doctor to make the connection to his performance or her performance."

Second, ACO leaders and physicians were frustrated by the lack of harmonization in metric definitions across their ACO and existing pay-for-performance contracts. This had the result of diluting attention and made prioritization of efforts and alignment of performance to motivators more difficult. The 3 ACOs operating with multiple contracts (A, C, and D) tried to buffer their physicians from any change and complexity with regard to the array of measures that were being measured. A senior leader at site A described: "We've always taken the philosophy that internally, we would have one set of metrics, one set of definitions. So even when payers have different agreements with us, we don't pass that same thing through to the providers." A physician at site C reported that

they had said: "Let's look at all of the measures that we have to report on that are publicly reported and let's pick the most—for each of the measures—pick the most stringent requirement and that's the goal."

Third, we found that the case study sites were experiencing a tension between trying to shift to a population health–based approach while still being paid on a predominantly fee-for-service basis. An administrator at site B noted: "99% of the organization's top-line revenue comes from fee-for-service. While the stuff we're doing reduces fee-for-service." Concurrent contracts, based on fundamentally different financial incentives, were seen to dampen the effectiveness of motivators because the ACO was seen as a threat to personal and organizational income. A physician at site B reflected that from a physician's perspective, "the more people I see in the office, the more money I make. The more people that get readmitted to the hospital, hey, guess what, that's more money for me, too." The comfort with and certainty of the fee-for-service model had the effect of counteracting motivators for change. Some physicians were not prepared to take the risks involved in embracing their ACO's agenda, which would reduce their fee-for-service income in the short term, in the hope of making some shared savings at a later date. A physician at site C reflected: "That's a gamble. I'm not a gambler, I'm a doctor. And I could just bring the patient in, the extra time, and get my fee."

Study Design Limitations

Our case studies were intended to illustrate the range of motivators that ACOs are using to motivate change to meet the goals of better care, better population health, and lower costs, but with such a small sample the case study ACOs cannot be considered to be representative of all ACOs in the United States. When considering motivations, the unit of analysis was the ACO—not the individual employee or physician—and differences between employed and contracted physicians were not examined. Specialty care was also not considered within the case studies. As with all qualitative research, there is the potential for positivity bias and recall bias from interviewees. It is expected that these biases are likely to be broadly consistent across case study sites. Lastly, although care was taken to address specifically the strategies and motivations relating to the ACO contract, all providers and administrators operated in an environment of plurality of contracts and overlapping initiatives. In some cases, the work of the ACO could not be distinguished from the more general work of the organization.

Conclusions

There are 3 major conclusions. First, our overarching framework for conceptualizing motivation provides an organizing principle for examining the motivation for changing physician behavior within ACOs. Second, using this aggregated framework we found that financial motivators were not used or emphasized as frequently as may have been expected. For example, few changes were made to compensation and only 1 site had added a new financial incentive to promote change. Third, beyond financial incentives, ACOs are focusing on mastery and social purpose motivators, but have the potential to develop more sophisticated and wider-ranging portfolios of motivators that fit their organization's culture and have capabilities for a greater impact on the cost and quality of patient care.

The findings suggest a number of implications for policymakers and ACO contract designers, practitioners, and researchers. Financial incentives are only 1 motivator domain available to effect change, and too great a focus on the money saved or distributed through a shared savings arrangement may crowd out other motivators.[39] Policymakers and ACO contract designers could help to promote greater use of nonfinancial motivators through timely transparency of performance data and communication of the quantifiable and qualitative impacts on patients as a result of an ACO. Additionally, and as others have highlighted before,[9,40] policymakers should encourage harmonization of quality metrics across plans and programs to remove barriers to the effective use of a range of motivators.

For current and prospective ACO leaders, our aggregated framework and case studies illustrate the wide range of available motivators that they could use to fit the culture and strategic needs of their ACO networks. Considering how to expand their use of motivators could help them address the needs of their ACO to effect change.

For researchers, further study and validation of the conceptual framework will help administrators and policymakers use physician motivation to achieve the goals of the IHI Triple Aim. In particular, further research could advance our understanding of the link between the use of different motivators and their impact on financial and quality performance, as well as help explore how the portfolio of motivators may vary with the type of patient group being served. For example, motivation

may differ for physicians when caring for elderly patients with life-limiting chronic conditions than when caring for commercially insured, working-age, predominantly well patients.

The findings from our 4 case study sites suggest that the overarching motivational framework can be used to provide a nuanced understanding of the challenges of motivating behavior change. It can serve as a basis for further work as ACOs continue in their efforts to achieve the Triple Aim of improved outcomes, reduced costs, and better population health. In particular, how nonfinancial incentives might best support value-based financial payment initiatives such as pay-for-performance, gain sharing, bundled payments, and capitated payments merits concerted attention.

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Appendix 1

Semi-Structured Interview Guide

Background of respondent	Tell me about your role here.
Context of ACO	What was your experience of payment reform and risk sharing before you started the ACO?
Characteristics of ACO	How would you describe the characteristics of your current ACO(s)?
	What are the strategic objectives/goals for each of your ACO(s)?
Care strategy	What do you do differently for your ACO patients than for your non-ACO patients, if anything?
	Are there any differences between patient care for Medicare ACO and other ACO-style contracts?
Motivators	Can you tell me about how the ACO motivates its members to achieve the strategic goals of the ACO?
Financial motivators	What are the mechanisms that enable you to financially motivate your members?
	How do you compensate the different parts of your network?
	How do you plan to share any "shared savings" among your network?
	How was the split between different categories decided?
	Are any metrics specific to a patient cohort, setting, or activity?
Nonfinancial motivators	In what (nonfinancial) ways are you trying to motivate your members to achieve the strategic goals of the ACO?
Effectiveness	Which motivators have you found most effective?
Future trends	How might you develop these motivators in the future?
Anything else	Anything else that we haven't touched on, but would be important to note?