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Research Report

The Evolution of the Health Workforce in Next Generation Accountable Care Organizations

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BACKGROUND

Since implementation of the Affordable Care Act, Medicare has been experimenting with alternative payment models in order to incentivize new value-based approaches to care that improve quality of care and health outcomes at lower cost.[1] Private payers and Medicaid programs are also increasingly engaging in alternative payments, with accountable care organizations (ACOs) being one of the prominent value-based payment models.[2] Instead of being paid on a strictly fee-for-service basis, ACOs must demonstrate they have met quality goals and lowered cost of care for their patient population in order to share in any savings.[3] Today, approximately one in ten U.S. citizens (32.4 million) is covered by an ACO, 29% of whom are in a Medicare ACO.[4]

The Next Generation ACO model is the latest Medicare ACO version to be implemented with the first cohort of 18 beginning in 2016.[5] The model is designed to address some of the limitations noted by participants in the earlier Shared Savings and Pioneer models by creating greater gain share incentives (though with a potential for greater losses), increasing flexibility in design through waivers related to telehealth, home visits, and skilled nursing facility (SNF) requirements and by giving the ACOs a list of assigned beneficiaries in advance versus attributing them retroactively.[5,6]

Many studies have focused on assessing whether ACOs help lower cost and improve quality of care[7,8], but relatively few have focused on how workforce roles have shifted to achieve goals. The question of how the workforce is changing matters because it could be a key component in determining success or failure of delivery system transformations. We know that there is significant variation in care models, and the workforce configurations they require, across ACOs.[9] Most ACOs have focused on identifying their high-risk population and targeting care coordination efforts toward that population, in addition to redesigning primary care to a team-based model. However, team configurations and staffing

ratios vary, as does the configuration of care team members and whether they interact with patients in person, in the home, or telephonically.[10] This variation could explain some of the differences in ACO outcomes, yet to date no studies have examined the comparative effectiveness of these workforce models.

The Next Generation Model targets organizations with a long history of care coordination and population health.[11] The objective of this study is to explore how leaders of Next Gen ACOs are thinking about alternative workforce models, and in particular, emerging roles that may be critical to this latest evolution of value-based care. We also specifically explore the use of the Next Gen waivers that aim to increase use of telehealth, home visits, and reduce hospital stays prior to admission to a SNF, and ask whether leaders believe that the waivers are facilitating the use of new types of health workers. These exploratory questions are intended to lay the groundwork for subsequent survey research that could quantify workforce change occurring in ACOs and relate them to outcomes.

METHODS

Our study design is exploratory and qualitative. In the spring of 2017, there were 18 Next Generation ACOs. We invited leaders of all 18 to participate in the study. Seven sites ultimately agreed to participate. Two organizations indicated they were no longer a Next Gen ACO, three declined to participate, and we received no response from five. Three of the participating sites were earlier Medicare Shared Savings Program ACOs, three were Pioneer ACOs, one had also participated in the Group Practice Demonstration Project, and another as a Beacon Community.

Data was collected using semi-structured telephonic interviews. The interviews were conducted by the first author, lasted approximately one hour, were recorded, and transcribed. The interview schedule covered seven core areas as follows: 1) key elements of the Next Gen care model in place at the organization; 2) how the workforce has evolved (new functions and new occupations) as a result of being part of a Next Gen ACO; 3) how new functions are financed in the Next Gen ACO; 4) whether the

new functions are primarily directed toward high-risk patients or other populations; 5) whether the Next Gen ACO is engaging in telehealth, home visits, or increasing coordination with skilled nursing, home health agencies, or other community partners; 6) barriers encountered when redesigning the Next Gen care model; and 7) future plans for new or expanded workforce functions.

Both investigators reviewed transcripts and independently coded them for recurring themes, with the aim of identifying similarities and differences across narratives in the sample. We then combined our analysis to identify a list of key themes that emerged from the seven organizations.

FINDINGS

ACO informants all referred to the importance of: (1) developing a team-based primary care model and (2) risk stratifying the population to target care coordinators and other team members to those who need more intensive care management services.

Transitioning to team-based care was described as a continuation of earlier efforts to move to a patient centered home model, which they characterized as a paradigm shift away from the solo practitioner model. An important component of this shift to a team-based approach to care, as described by informants, is that providers now have staff available who are responsible for visit planning and screening for care gaps prior to the visit, as well as, identifying patients who have not utilized services over a given period of time and whose risk profile suggests they might benefit from care management or other available care team services. A medical officer from one ACO described the change as follows:

> *When I started in practice here, before all these model changes, our department assistant was very much involved in facilitating whatever we needed in terms of caring for the patients that were there that day. Now, and I still have the same department assistant, she's been there for 30 years, she's not really doing any of that work whatsoever any more. It's all about handling the work of the patients who are not there in the clinic. So that role has definitely become much more focused, not less important, but more focused.*

Similarly, Next Gen ACOs are establishing care management teams to address gaps in care for patients with complex needs who have multiple hospitalizations or emergency room visits, or who otherwise have been identified as being high risk patients. These team members take on a variety of tasks designed to help patients better engage in their health care, improve coordination between providers and during transitions of care, and address other complex medical and social needs that left untreated can lead to avoidable and costly complications.

To support these new care teams, Next Gen ACOs are implementing three main types of changes in team functions and roles: 1) expanded roles for existing team members, such as medical assistants and registered nurses, 2) increased hiring of existing health professionals, such as behavioral health specialists and clinical pharmacists to support high risk patients, and 3) integrating emerging professions to support value-based care, such as community paramedics and extensivists. (See Table 1).

Expanded Roles

ACO leaders reported that an important element of the transition to team-base care is empowering team members to practice at the top of their profession. New quality and documentation requirements, along with efforts to address gaps in care, have led them to emphasize delegation of tasks to other team members, and what one informant described as an "interdisciplinary blurring of professional margins that is so important in collaborative team care." This is leading to expanded roles for team members to support a greater focus on prevention and care coordination that may have otherwise fallen through the cracks. Informants pointed to cultural barriers around task delegation being a challenge for some providers, but also reported that it can lead to greater provider satisfaction. Examples of expanded roles and task shifting in the context of team-based models include the following:

- MAs assisting with pre-visit planning, identifying gaps in care, screening for depression, sometimes acting as scribes during the patient encounter, engaging in care plan development, and initiating standing orders for preventive care.
- Cooperative agreements with clinical pharmacists where they can independently manage patients with hyperlipidemia, hypertension, or diabetes.
- RNs who are also certified diabetes educators managing insulin or who do health coaching or patient education
- Primary care providers providing a large array of behavioral health services in areas with limited behavioral health providers.

An ACO leader described the rationale as follows:

> *Because of the requirement to meet the quality metrics and close gaps in care…the average physician is spending much more time documenting, closing gaps in care. Really, the development of the care coordination infrastructure that grew up around this whole movement was necessary because the providers couldn't do it all.*

New Hires

ACOs also report reliance and hiring of existing health professionals to support high risk patients. In some sites, providers have embedded behavioral health, social workers, diabetes educators, patient navigators, and/or clinical pharmacists in their primary care teams – though sometimes these additional team members are shared among multiple "teamlets" or only available to providers with large concentrations of high-risk patients. Many of the practices report using team huddles in the morning to discuss patient care plans and to begin to arrange follow-up care, including in some cases "warm hand-offs" to behavioral health providers or care managers for immediate same day follow-up.

An ACO leader described the available support staff in his particular practice as follows:

At the clinic where I practice, I have basically the full team there. One of our care coordinators is a diabetes educator, which is immensely helpful, one does pure care coordination. We have MTM [medication therapy management] pharmacy. I've got a social worker there.

Using tools such as motivational interviewing and action planning, care coordinators and case managers seek to understand the patients' goals as a way to better engage the patient in their care and to gain important insights into the particular challenges the patients face. They either address the needs directly or connect patients with other medical or community resources. Often, they help address food security, transportation needs, health literacy, and other social determinants of health, in addition to helping patients better manage particular health challenges such as diabetes or congestive heart failure. Typically, these services are targeted toward the high risk patients (top 3-5% of population in terms of cost) and are provided to patients, in-person or telephonically. An ACO leader offered an example related to this role:

(We ask) what are the patient's goals? Usually they're associated with some sort of a barrier that is preventing them from being, and I'll say this word, but I don't necessarily like the word, "compliant" with ... their medical plan of care. If you take care of those particular barriers and really address what is bothering that particular patient, they tend to become more interested or can participate in that medical plan of care.

ACO leaders see behavioral health providers, such as **licensed professional counselors (LPCs)** and l**icensed clinical social workers (LCSWs),** as important parts of the coordination team in recognition of the role depression and other behavioral health issues play in health care utilization. They report using them to provide short term counseling services and connect patients with psychiatrists or other counseling services for ongoing behavioral health needs. One site moved from waiting for providers to refer to behavioral health, to having LCSWs do outreach to high risk patients to screen for behavioral health needs, and then directly referring patients for behavioral health services if indicated. Several of

the sites reported having difficulty recruiting for behavioral health specialists in their market and that this limited their ability to expand this important role.

Clinical pharmacists were mentioned by most ACOs as critical to addressing the needs of high-risk patients with complex medications and/or medication adherence challenges. These pharmacists conduct a comprehensive medication management review to ensure that the patient is on the correct drug for the stated indication at an appropriate dose without interactions with other medications. They also help patients who cannot afford medications or have other issues that make it difficult to adhere to the prescription by connecting patients with medication assistance programs to help cover costs, or moving them to a lower cost drug, and/or one that is easier to manage (e.g., fewer doses, no need for refrigeration), or providing patient education.

Community health workers (CHWs) have been around since the 1960's in community settings, but two of the ACOs have started pilots using CHWs as health coaches to help address social determinants of health, such as transportation needs, access to medications, or challenges with setting up appointments and actually going. At one of the sites, patients were screened by an RN to assess if social determinants of health were contributing to high cost and if the patient was willing to have a CHW come to their home for a visit. CHWs are typically recruited from the community and receive several weeks of in-house training on motivational interviewing, how to connect patients with area resources, documentation, etc. CHW work is not reimbursed by insurers and that is a huge strategic issue that could limit expansion of this role, one site reports.

Data analysts who build and track robust risk stratification models were cited as playing an important role in ensuring resources are targeted to the right patients. Next Gen ACOs want to identify their highest risk patients - the top 3-5% of patients in terms of cost of care - and assign care coordination staff to that population to help patients better navigate the system and address gaps in care. Many of the ACOs have hired in-house data analysts, although in some cases they have contracted

with outside consultants that bring their own robust risk stratification models. Informants report that risk stratification is becoming increasingly nuanced. For example, leaders at one site found that many patients who were admitted to the emergency room (ER) for a potentially avoidable admission only came once. As a result, they changed their model to track those who used the ER frequently, even if the admissions were not avoidable per se. Now, if a patient is admitted three times or more, the primary care team is notified and a team member is activated to determine whether there are programs that would benefit the patient. Others are empowering personnel, such as primary care providers and medical assistants, to screen for social determinants and flag patients for care management.

Importantly, ACO leaders also report that the operational teams have had to learn how to use the information the data analysts generate to redesign care. Some ACOs send periodic lists of high risk patients to primary care providers, who then engage in periodic team huddles to discuss patients' care management plans. Some send reports on high risk patients with five or more medications directly to clinical pharmacists, who then develop a comprehensive medication management profile, check to be sure the patient is on the correct drug for the stated indication, flag any medications that should not be taken together, and identify less complex or costly medication options if medication adherence is an issue. ACOs also report they are developing systems to notify primary care teams when patients are discharged from the hospital as part of the focus on improving transitions of care.

One site initially asked for permission from primary care providers to refer high-risk patients to their extensivist clinics. They report that they concluded this strategy was too slow, and they now engage patients directly and notify the providers later. They also report using predictive analytics to identify "rising risk" patients who are likely to become high risk without intervention. They then assign diabetes educators or other care coordination staff to help patients better manage chronic conditions before complications occur. This involves keeping the care team aware of the resources that can be

implemented as part of the ACO, so that if a patient continues to miss appointments due, for example, to lack of transportation, the provider will be reminded of available transportation resources.

ACO leadership is another important component of the new workforce described by informants. Most of the participating sites reported investing in ACO leadership – both in-house expertise and external partners. Much of this has been iterative, with new leadership and management positions being established as part of earlier experiences with patient-centered medical homes, earlier Medicare ACO participation, including MSSP and Pioneer models, and other risk based contracts. Next Gen is generally seen as part of the transition to value-based care and simply one more opportunity to develop operational expertise in risk based contracts. This has led to new leadership positions being developed that focus on risk contracting, population health, and data analytics. One site reports having established a leadership position focused on coordinating coordinators.

Two of the health systems interviewed report contracting with organizations that helped manage the ACO, including setting policies and contracting directly with Medicare, and are actively helping the health systems identify other risk based contracting opportunities. One contracted with an organization that provides consulting to help accelerate the move to population health and provide guidance on the best management structure and population based approaches to care, such as staffing ratios and needed roles. They also offer assistance with data analysis and risk stratification models. Several of the organizations that are developing in-house ACO expertise and general risk based contracting expertise hope to market their expertise to others in the future, thereby generating an

additional revenue stream to support their own move to value-based care. One leader provided insight into this strategy as follows:

> *[The health system] spun off [a company to do risk management] for, not only [our health system], but other potential clients, so that it became another, sort of, revenue stream. We've got physician executive oversight. We've got director-level input, from managing the team, and various members of the team interacting with the different elements of care coordination. Mangers, and things like that…None of these things were in place in 2010. Seven years ago, none of these roles existed.*

Emerging Occupations

New jobs are emerging in a few of the Next Gen ACOs, although this did not appear to be universal. In sites that were creating new jobs, the positions usually involve new functions and they hired incumbent workers such as MAs, LPNs, physicians, and paramedics to fulfill them. New jobs identified by informants were as follows:

- ***RN population health managers*** were reported as a key job at one site. While this nursing role is similar to the care manager role described above, these professionals do not see patients directly, but are responsible instead for developing patient rosters, identifying gaps in care, and participating in developing care redesign models and educating provider teams.
- ***Encounter specialists*** were reported by two of the ACO sites. They are medical assistants in significantly expanded roles. Instead of the traditional role of rooming patients and taking vital signs, medical assistants participate in team huddles to develop the care plan, remain in the room during the patient encounter to document the visit (similar to scribes), assist with care plan reinforcement, and schedule any follow-up appointments.
- ***SNFists*** are primary care physicians that function like hospitalists, doing rounds and helping to coordinate care, but in a skilled nursing facility (SNF) setting versus a hospital.
- **Community paramedics** are being hired by one ACO that reported being approached by the local Fire Chief and the City Manager, "who had heard a lot about ACOs and wanted to help." They had

noticed an increase in the number of medical emergency calls relative to fire or rescue so they were thinking about what other role they could play in the safety of their community. The team ended up creating what is called a post discharge fire fighter visit. The ACO now shares discharge instructions with the fire department. EMTs go to the patients' home and reinforce the care plan, ensure appointments have been scheduled and that the patient has set up medications, go through key symptoms to be worried about, check on food security, confirm medical appointments, and do a hazard assessment in the house. They will also do welfare checks if the patients do not answer the phone. The ACO reports that patients will sometimes listen to fire fighters more than to nurses, particularly about safety issues such as picking up scatter rugs. EMTs have done over 1,000 visits to date and the ACO reports they have avoided readmissions because of this community partnership.

- **ED Navigators** are being hired by one ACO. They are taking paramedics and training them to work in the emergency room to help divert away from ER admissions - when appropriate - by scheduling patients for next day urgent care, referring to case management or urgent specialist appointments, or scheduling diagnostic tests. They help ensure the patients are able to make the appointment and support transitions of care. The site reports that patients love it because it helps to avoid out of pocket costs. Use of ED navigators also helped to avoid 5% of admissions. Recruiting paramedics for this new role has been a challenge, though.
- **Extensivists** are another new type of job that was cited by one ACO. They are primary care physicians that focus exclusively on complex patients who typically need 45 minutes for each visit, as opposed to the typical 15 minute visit. They identified a provider who enjoys taking care of highly complex patients and placed him in a clinic with a pharmacist, a health navigator, a behavioral health specialist (LCSW), and an encounter specialist (role discussed above) to ensure that the team has the resources and time to focus on these patients with complicated medical, social, and behavioral health needs.

Transitioning to Value-based Care Models Takes Time

All of the ACO leaders reported that workforce changes of this magnitude take time. As one informant put it, "*Organizations who haven't started this journey, I think, are in very, very big trouble, because I don't know if there is a way to get through it quickly."* When discussing key workforce roles to support the Next Generation ACO, informants said these changes began during earlier ACO or patient-centered medical home (PCMH) or other valued-based initiatives. Many began as pilot projects that have since been expanded or refined based on what they learned over the years. For example, one site leader explained that their care advisor role went through several iterations starting with embedding a nurse in every clinic as part of their move to become a PCMH, to then having the nurse fill a health coach role for patients as part of the MSSP ACO. Now, in the Next Gen ACO, they have moved to having same number of nurses, but they are responsible for covering several practices. Another site had been moving to team-based care and using disease registries dating back to earlier PCMH efforts, and that in subsequent years they learned to identify their high risk population for care management as part of the Pioneer ACO.

They point out that the change process requires workforce development and that it takes time to train staff on the new models. One site leader indicated they give care managers two years to receive certification on a series of competencies, such as motivational interviewing, action planning, disease states, documentation, and navigating the electronic health record.

Another site leader started in the Pioneer ACO by initially focusing on transitions of care. They also invested time and resources going to visit recognized leaders in population health and accountable care around the country to learn from their efforts. They are now focused on developing a comprehensive team-based primary care model, supported by an extended care team available on-site for warm hand-offs. Nevertheless, he indicated, they are still less than halfway through transitioning all

of their primary care practices to the new model. Each provider and their care team must participate in a 16-week course in preparation for moving to the team-based care model.

It appears, therefore, that despite having a long history of care transformation, Next Gen ACO sites are still refining and expanding their workforce roles. Many of the site leaders pointed to future changes they would like to implement or further expand, such as embedding behavioral health in primary care, doing more home visits, modifying their primary care redesign to a teamlet approach with shared care coordinators and other resources, integrating clinical pharmacists in outpatient settings, and/or making it easier for low risk patients to get care. This view that change takes time and involves transforming culture was a common theme across our informants, as evidenced in the following comments by informants:

> *It takes time to bring people on board and do certain things. These vendors come out and say, "Hey, why don't you buy this from us and it'll be great." You're going to buy it from them and it's not going to be great because nobody's going to buy into it.... It's the mindset and the skillset…That might work in the small factories, but it doesn't work in any integrated health system with hundreds of providers or thousands.*

> *I was thinking about these questions today - it makes you reflect back over the last decade or 15 years and you realize, wow, a lot has changed since I've been practicing here.*

> *There's lots of great ideas and lots of great things going on throughout the country, that we would love to replicate in our market but there's only so much that you can do at one time. That's a barrier.*

The challenge of financing workforce investments

All of the ACO leaders indicated workforce investments were funded by the health systems, usually in the hopes of shared savings. Most viewed these new roles as a strategic investment in the transition to value-based care, and have made the new resources available to all patients – not just those in Next Gen. They reported that shared savings helps to cover costs, but they are investing in more care coordinators than they would need for their ACO population alone. One of the sites that was

applying the new care model to all patients "*slowed down [their workforce investments] because financing was a little tricky to think through."* They now have an expectation that providers increase productivity (and thereby revenue) as a result of the team-based model. *"We give them six or eight months…to kind of come up to speed and get into the new model before we start measuring their results."*

Many of the site leaders noted that the ACO payment model limits workforce investments as you have to wait 18 months to find out if the investments led to any shared savings. They point out this is a very different way of doing business than typical hospital administrators are used to. Several reported trying to negotiate care coordination fees up front with payers to cover some of their new workforce. One ACO leader summarized the challenge of making the business case for workforce transformation as follows:

> *An internal barrier is that it is really hard for traditional roles to think about value-based care from a financial perspective. How does money we get in 18 months apply to the work we are doing today? That's a hard conversation. How do we predict how much money that's going to be so we know what to book today for the services we're doing even though we won't be paid for 18 months. I think that's a bit of a stretch for a lot of minds here.*

Respondents indicated value-based care represents a very different way of "doing business" for partners, as well. They pointed out that the fact that SNFs and home health agencies still operate under fee-for-service incentives makes it challenging to incorporate them into value-based payment arrangements, despite some successes (described below). For example, some expressed frustration about their inability to get patients to go to high value SNFs, since patients can go to any SNF they choose. Some also noted that SNFs push back because they are concerned about losing potential billing.

SNF Waiver used Widely; Limited Uptake of Telehealth and Home Visit Next Gen Waivers

In response to feedback from Shared Savings and Pioneer ACOs, CMS put in place new waivers that allow telehealth visits for non-rural patients, remove a requirement for a three day hospital stay for SNF admissions, and enable home visits post discharge from the hospital. ACO leaders reported that the SNF Waiver has indeed been widely used to improve care coordination between hospitals, SNFs, and primary care. Some Next Gen ACOs have embedded staff on site at SNFs or have care managers, nurse practitioners, or hospitalists who visit sites and engage in care team meetings. One ACO, as reported above, has engaged "SNFists" – primary care physicians that function like hospitalists, doing rounds and helping to coordinate care in a SNF. Another reported that they have implemented electronic consults (e-consults) for SNF patients to help determine if a patient needs to be admitted to the hospital. Several sites indicated they had actually seen their SNF costs go up in Next Gen, or that savings were minimal, stating that they are studying whether the SNF waiver is actually leading to reductions in hospital readmissions, or shorter lengths of stay at the SNF facilities. Understanding the economics has taken time, as one ACO leader reports:

[We] had to develop a considerable amount of resources, probably an additional 1.5 FTE's, just to understand the regulations and implement things like the SNF waiver. I would say half of the waivered stays in skilled nursing derived from observation, or one or two day hospital stays. So really, we are not saving as much as one would like. What's very interesting about that is we've seen our SNF costs in the Next Gen population go up. We're trying to figure out if that's bad or good - meaning did we pull it away from in-patient?

In contrast, very few of the site leaders reported making use of the telehealth and home visit waivers, though some had filled out the necessary paperwork. One reason cited relates to the complexity of these two waivers. They again pointed to the challenge of developing services just for Next Gen patients, while others are not eligible. Others were unclear about which types of providers could do the home visits, how to fit telehealth or home visits into already full schedules, and how to pay

for the staff time. Several informants pointed out that they will likely revisit use of these waivers in the future, but are focused on other things now. Typical ACO leaders' comments on waivers were:

On telehealth: *We did [apply for the telehealth waiver], but we haven't really started using it yet. There was some initial work that was being done with urgent care around using telehealth, but have an issue in our EMR and that is being able to quickly identify which one of our patients who are in, asking for services, are actually part of the Next Generation ACO… The (other) big challenge is personnel; if you're seeing patients pretty constantly, you don't have any time in your day to do a Telehealth visit.*

On home visits: *We really looked at it [home visit waiver] and we had a lot of issues understanding what was going to be covered and what wasn't going to be covered…The more that we read into that, there were some limitations about the people who could actually perform the visit. There were some issues about the orders and so we decided not to pursue that one at this time.*

DISCUSSION

A central emerging theme articulated by ACO leaders we interviewed was that transforming the workforce to support value-based care takes time and they are still significantly evolving their care models. This, we should remember, is the viewpoint of a set of ACOs leaders that, as a group, represent some of the most experienced provider organizations in the area of risk management in the country. They have been engaged in multi-year efforts to redesign care that are building off of earlier patient centered medical home activities and other value-based initiatives. Importantly, nearly all of them indicated that Next Gen was just a step in their ongoing transition to value-based care.

Leaders reported they had not yet adopted, or in some cases fully expanded, key care redesign strategies, such as integrating behavioral health into primary care, hiring more medical assistants or community health workers, implementing telehealth, conducting home visits, or coordinating more with skilled nursing facilities or home health agencies. They reported that factors delaying these redesign efforts include the sheer number of changes required (described as 'bandwidth issues'), unclear regulations, shortages of certain professions, cultural barriers to task delegation within teams, and/or

financial constraints. Add to this the mixed results of earlier value-based payment models and it does appear that successfully transforming care is a lengthy process.[12]

Several of the sites turned to outside experts to accelerate their efforts and some are looking to turn their growing expertise into a revenue stream through consulting. Nearly all of the informants indicated their leadership team believes value-based care is the future of health care and view participation in the Next Gen ACO as another important step along the way. Having a leadership team that believes value-based care is the future presumably creates the space for investments in the larger transformation goal beyond one-year funding cycles. Despite financial losses as part of past transformation efforts, many framed those experiences as key learning opportunities, rather than reasons to stop. In this context, consistent with commentaries by quality of care experts, some ACO leaders acknowledged that health systems may be still be underinvesting in their transformation.[13]

Nearly every ACO leader discussed the importance of team-based care, care management, and care coordination services in the context of high risk and rising risk patients. They recognized that successfully identifying which patients would most benefit from interventions could be the key to whether new value-based payment models are able to lower the cost of care, reduce hospitalizations, and improve quality.[12,14] Our findings suggest that defining the optimal risk stratification models is still a work in progress in these ACOs, as is the process of determining the most appropriate models of care for high cost patients. Furthermore, electronic health records and other claims data do not traditionally capture social determinants of health data which makes it challenging to fully identify high risk and rising risk patients who could most benefit from care coordination and case management services.[15]

This study builds on prior research showing that ACOs are interested in addressing social determinants of health.[16] Indeed, we found that most of the new and expanded roles, ranging from care managers to clinical pharmacists to community paramedics, center on addressing housing,

transportation, and other social determinants of health needs of high risk patients. This is a logical step given the growing recognition of the tremendous role a patient's zip code and other social factors play in health outcomes and cost of care.[17] Health systems and providers engaged in value-based care models such as Next Gen ACOs are, in theory, increasingly empowered to take the time to inquire about patients' housing status and other social support systems and to connect patients with available community resources as needed. These ACOs are also changing the settings in which complex patients receive care, including special extensivist clinics and home visits.

Our findings also reconfirm that while the general goals of increased care coordination and team-based care are key elements of ACOs[9], there is significant variation in approaches even among Next Generation ACOs. This raises the question of whether particular workforce strategies to support care coordination and team-based care are more effective than others. The literature to date does not address the effectiveness of different models. A recent survey of ACO providers shows wide variation in viewpoints regarding whether ACOs lead to enhanced care coordination.[18] Another study found that relatively few ACOs had established high level care coordination processes.[19] Yet another, concludes that investing in care coordination for high risk patients may be unwarranted given that there is little evidence this is reducing cost.[20] But these and other studies of ACOs do not analyze which factors lead to greater success in care coordination.

The American Hospital Association[21] and others[19] have begun to collect important data on care coordination activities related to value base care, although they do not yet include specific workforce related questions about the health professions involved, task delegation, mode of interaction with patients, level of integration with primary care providers, or staffing ratios. An important area of future research would be the systematic collection of data on these matters by such surveys. This would allow the development of workforce-related variables and ultimately research into the relationships between staffing configurations in value-based care, and quality and cost outcomes. Given the continued federal

incentives for organizations to adopt value-based care,[22,23] combined with: (1) the variation in workforce strategies to support value-based care and (2) the mixed results to date for most value-based care models, it is essential that we build the capacity for comparative effectiveness research in this area. Ultimately, health care organizations need to make the business case for workforce transformation compatible with the new payment systems that reward value.

Table I: The Evolving Health Workforce in NexGen ACOs

PERSONNEL	NEW FUNCTIONS
EXPANDED ROLES OF EXISTING STAFF	
• **Medical Assistants** • **LPNs** • **RNs**	• Pre-visit planning, • Identifying gaps in care, • Screening for depression, • Acting as scribes during the patient encounter, • Engaging in care plan development, and • Initiating standing orders for preventive care.
NEW HIRES	
• **RN care coordinators** • **Social workers as case managers** • **Behavioral health counselors (licensed professional counselors (LPCs) and licensed clinical social workers (LCSWs)** • **Diabetes educators** • **Patient navigators** • **Clinical pharmacists**	• For top 3-5% high risk patients use motivational interviewing and action planning to understand the patients' goals • Address patient needs directly or connect patients with other medical or community resources, eg food security, transportation needs, health literacy, and other social determinants of health • Services provided to patients in-person or telephonically
• **Clinical pharmacists**	• Medication management review • Connecting patients with medication assistance programs • Provide patient education.
• **Data analysts**	• Build and track risk stratification models and help providers use them • Some outsource these jobs
• **ACO leadership positions**	• Focus on risk contracting, population health, and data analytics and coordinating coordinators. • Some outsource these jobs
• **Community Health Worker**	• Health coaches that focus on social determinants of health, such as transportation, access to medications, or challenges with setting up appointments. Includes home visits. • Typically recruited from the community and receive several weeks of in-house training on motivational interviewing, how to connect patients with area resources, documentation, etc.
NEW OCCUPATIONS	
• **RN Population Health Managers**	• Develop and manage patient rosters to identify gaps in care, • Participate in the development of care redesign models • Educating provider teams about community needs
• **Encounter Specialists**	• Medical assistants develop care plans, remain in the room during the patient encounter to document the visit (similar to scribes), assist with care plan reinforcement, and schedule any follow-up appointments.
• **SNFists**	• Primary care physicians that function like hospitalists, doing rounds and helping to coordinate care, but in a skilled nursing facility (SNF) setting versus a hospital.

• **Community Paramedics**	• Post discharge fire fighter home visit to patients post discharge from the hospital to reinforce care plan, check for home safety such as trip hazards, broken smoke detectors.
• **ED Navigators**	• Often paramedics that work in the emergency room to help divert away from ER admissions - when appropriate - by scheduling patients for next day urgent care, referring to case management or urgent specialist appointments, or scheduling diagnostic tests
• **Extensivist**	• Physician that focuses exclusively on complex patients who need 45 minute visits. Includes support from pharmacist, a health navigator, a behavioral health specialist (LCSW), and an encounter specialist

References

[1] Epstein A, Jha A, Orav E, et al. Analysis of early Accountable Care Organizations defines patient, structural, cost, and quality-of-care characteristics. Health Aff. 2014; 33(1): 95-102. Retrieved from: http://content.healthaffairs.org/content/33/1/95.full.pdf+html

[2] Burwell S. Setting value-based payment goals — HHS efforts to improve U.S. health care. N Engl J Med. 2015; 372:897-899. Retrieved from: http://www.nejm.org/doi/full/10.1056/NEJMp1500445

[3] Chen C, Ackerly D. Beyond ACOs and bundled payments: Medicare's shift toward accountability in fee-for-service. JAMA. 2014; 311:673–674.

[4] Muhlestein D, Saunders R, McClellan M. (2017, June 28). Growth of ACOs and alternative payment models in 2017. [blog post]. Retrieved from: http://healthaffairs.org/blog/2017/06/28/growth-of-acos-and-alternative-payment-models-in-2017/

[5] Centers for Medicare & Medicaid Services. Next Generation ACO Model. Retrieved from: https://innovation.cms.gov/initiatives/Next-Generation-ACO-Model/

[6] Dawe C, Lewine N, Miesen M. (2016, April 15). Today's most attractive national ACO model is offered by…CMS. [blog post]. Retrieved from: http://healthaffairs.org/blog/2016/04/15/todays-most-attractive-national-aco-model-is-offered-bycms/

[7] McWilliams JM, Hatfield LA, Chernew ME, et al. Early performance of Accountable Care Organizations in Medicare. N Engl J Med. 2016; 374:2357-2366.

[8] Song Z, Rose S, Safran D, et al. Changes in health care spending and quality 4 years into global payment. N Engl J Med. 2014; 371:1704-1714.

[9] Sandberg S, Erikson C, Yunker E. Evolving health workforce roles in Accountable Care Organizations. AJMC. 2017; 9-14. Retrieved from: http://www.ajmc.com/journals/ajac/2017/2017-vol5-n2/evolving-health-workforce-roles-in-accountable-care-organizations/p-3

[10] Erikson CE, Pittman P, LaFrance A, Chapman SA. Alternative payment models lead to strategic care coordination workforce investments. Nurs Outlook. 2017; 65(6):737-745. Retrieved from: https://www.ncbi.nlm.nih.gov/pubmed/28576295

[11] Mills C, Gusland C, Champagne N. Next Generation ACO Model: Should we take the plunge? Retrieved from: http://www.milliman.com/insight/2016/Next-Generation-ACO-Model-Should-we-take-the-plunge/

[12] Nichols L, Cuellar A, Helmchen L, et al. (2017, Aug 14). What should we conclude from 'mixed' results in payment reform evaluations? [blog post]. Retrieved from: http://healthaffairs.org/blog/2017/08/14/what-should-we-conclude-from-mixed-results-in-payment-reform-evaluations/

[13] Blumenthal D, Chernof B, Fulmer T, et al. Caring for high-need, high-cost patients — An urgent priority. N Engl J Med. 2016; 375:909-911

[14] Peterson G, Geonnotti K, Hula L, et al. Association between extending CareFirst's Medical Home Program to Medicare patients and quality of care, utilization, and spending. JAMA. 2017; 77(9):1334-1342. Retrieved from: http://jamanetwork.com/journals/jamainternalmedicine/article-abstract/2646774

[15] Institute of Medicine. Capturing Social and Behavioral Domains in Electronic Health Records: Phase 1. Washington, DC: The National Academies Press; 2014. Retrieved from: https://doi.org/10.17226/18709

[16] Fraze T, Lewis V, Rodriguez H, Fisher E. Housing, transportation, and food: How ACOs seek to improve population health by addressing nonmedical needs of patients. Health Aff. 2016; 35(11): 2109-2115. Retrieved from: http://content.healthaffairs.org/content/35/11/2109.full.pdf+html

[17] Alley D, Asomugha C, Conway P, Sanghavi D. Accountable health communities — Addressing social needs through Medicare and Medicaid. N Engl J Med. 2016; 374(1): 8-11. Retrieved from: http://hbex.coveredca.com/stakeholders/plan-management/PDFs/CMS-Accountable-Communities-NEJM-2016-January.pdf

[18] Schur C, Sutton J. Physicians in Medicare ACOs offer mixed views of model for health care cost and quality. Health Aff. 2017; 36(4): 649-654. Retrieved from: http://content.healthaffairs.org/content/36/4/649.full.pdf+html

[19] Peiris D, Phipps-Taylor M, Stachowski C, et al. ACOs holding commercial contracts are larger and more efficient than noncommercial ACOs. Health Aff. 2016; 35(10): 1849–1856. Retrieved from: http://content.healthaffairs.org/content/35/10/1849.short

[20] McWilliams J, Chernew M, and Landon B. Medicare ACO program savings not tied to preventable hospitalizations or concentrated among high-risk patients. Health Aff. 2017; 36(12): 2085-2093. Retrieved from: https://www.healthaffairs.org/doi/full/10.1377/hlthaff.2017.0814

[21] American Hospital Association. Survey of care systems and payment. Washington, DC: American Hospital Association; 2015. Retrieved from: https://www.ahadataviewer.com/Global/survey%20instruments/AHASOCS2015q.pdf

[22] American Medical Association. Quality Payment Program (QPP) specifics. Retrieved from: https://www.ama-assn.org/practice-management/quality-payment-program-qpp-specifics

[23] Centers for Medicare & Medicaid Services. Better care. Smarter spending. Healthier people: Paying providers for value, not volume. Retrieved from: https://www.cms.gov/Newsroom/MediaReleaseDatabase/Fact-sheets/2015-Fact-sheets-items/2015-01-26-3.html