

## RESEARCH ARTICLE

# Relationships Between Accountable Care Organizations and Skilled Nursing Facilities: What Are the Critical Process Elements?

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## Abstract

Accountable care organizations (ACOs) have an incentivized contractual agreement to ensure that attributed Medicare patients receive cost-efficient, high-quality care. It is hypothesized that relationships between ACOs and skilled nursing facilities (SNFs) may correlate with positive patient outcomes for cost and quality. Contractual elements are defined as specific processes and procedures measured by outcome metrics. Readmissions, length of stay (LOS), and episodic cost of care are potential outcome markers to assess the quality of SNF care delivery. This study aimed to define critical relationship provisions between ACOs and SNFs that influence patient health outcomes. Qualitative data collected through key informant interviews with leaders from ACOs, health systems, and community SNFs within each community revealed three themes around Data, Education and People as critical process elements within an ACO/SNF relationship.

The presence of a value based ACO and Centers for Medicare and Medicaid Services contract was hypothesized to influence meaningful improvements addressing LOS, Emergency Department (ED) utilization, and hospital readmission rates. An ACO/SNF contractual relationship within a preferred network was also hypothesized to correlate with operational process and procedural changes resulting in reduced LOS, improved hospital and SNF readmission rates, and decreased ED utilization. A systematic literature review explored relationships between ACOs and SNFs, examined elements and provisions of contractual relationships, and identified potential correlations to positive outcomes, defined as reduced readmission rates and post-acute savings per beneficiary, when care is delivered at a SNF with an ACO relationship. Additional research is needed to understand the specific contract provisions positively associated with reductions in patient-level costs, readmissions, and LOS.

**Keywords:** ACO; SNF; Nursing Home; Skilled Nursing; Relationship; Quality; Outcomes; Value-Based Care; Post-Acute Care; Medicare

## Introduction

Accountable care organizations (ACOs) have incentivized Centers for Medicare and Medicaid Services (CMS) contractual agreement to ensure that attributed Medicare patients receive cost-efficient, high-quality care [1]. It is hypothesized that relationships between ACOs and skilled nursing facilities (SNFs) may correlate with positive patient outcomes for cost and quality. Contractual elements are defined as specific processes and procedures measured by outcome metrics. Readmissions, length of stay (LOS), and episodic cost of care are potential outcome markers to assess SNF care delivery quality.

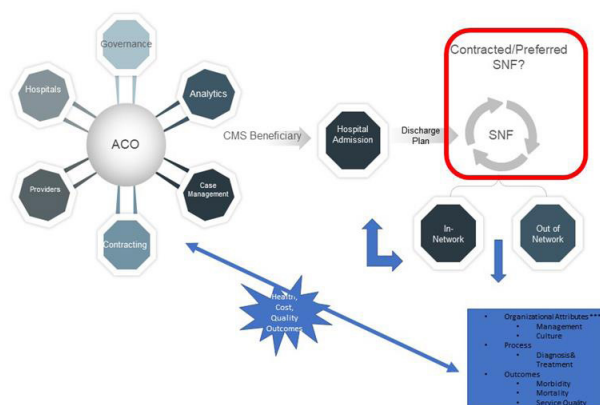


Figure 1: Conceptual model of SNF transitions. Adapted from Glickman, et al. [10]

This study aimed to define critical relationship provisions between ACOs and SNFs that influence patient health outcomes. A value-based ACO and CMS contract, which defines accountability for a specific population and includes metrics examining cost and quality, was hypothesized to lead the ACO to develop processes and procedures resulting in meaningful SNF improvements, including LOS, Emergency Department (ED) utilization, and hospital readmission rates (Figure 1). An ACO/SNF contractual relationship within a preferred network was also hypothesized to correlate with operational process and procedural changes resulting in reduced LOS, improved hospital and SNF readmission rates, and decreased ED utilization.

## Methods

### Systematic Literature Review

A systematic literature review explored relationships between ACOs and SNFs, examined elements and provisions of contracted relationships, and identified potential correlations to cost of care, SNF care quality, and health outcomes. The current literature demonstrates limited positive outcomes, defined as reduced readmission rates and post-acute savings per beneficiary, when care is delivered at a SNF with an ACO relationship.

### Key Informant Interviews

To gain understanding on the important provisions to include in an ACO/SNF relationship, a qualitative study was conducted in which data were collected from ACO health systems nationwide through key informant interviews (KIIs) with leaders from ACOs, health systems, and community SNFs within each community. Understanding the management of ACO patients, with preferred SNFs, supported the hypothesis that the presence or absence of specific procedures would influence utilization outcomes. This study was approved by the institutional review boards of the principal investigator's (PI's) employer (a national population health company [NPHC]) and the University of North Carolina at Chapel Hill [2].

ACOs were selected based on their relationship with the NPHC and the presence of a contractual ACO relationship with CMS participating in an ACO program. The KII process aimed to determine the important components that define relationships between ACOs and SNFs, examine how ACOs are developing preferred SNF networks, and identify specific outcome measures of utilization within successful post-acute ACO/SNF contracts. Key informants were identified from 6 ACO health systems (designated A–F) initially defined as having an ACO partner relationship with the NPHC. Of 15 initial partnerships in place, the 6 health systems were chosen based on maturity (initial entry into value-based care/population health or >1 year of experience in a population health/value-based contract), geography (urban or rural based on general geography and span of network), and size (number of beneficiaries) (Table 1). All of the health systems had at least 15,000 attributed Medicare fee-for-service lives.

Key informants for each ACO were chosen by segregation into 3 role types:

- **ACO and Population Health Administrators:** the “doers and the implementers” (leadership who are actively engaging with the SNFs in their community representing the ACO). These are NPHC employees who work locally with each ACO/health system partner.
- **Health System Policy Makers/ACO Leadership:** client/health system leadership responsible for setting the strategy and direction for ACO policy. These are the decision makers for ACO/SNF contracting and work closely with the ACO and population health administrators.
- **SNF Leadership in the Health System/ACO Community:** representative leaders at local SNFs where ACO patients are discharged. This could include facilities in a preferred network if there is one defined for the ACO.

General relationship barriers and facilitators and best practice relationship process recommendations were solicited from all 3 groups. For each chosen health system, a minimum of 1 member from each category was interviewed.

ACO	Size (No. of Covered Beneficiaries)	Location (Rural or Urban)	Maturity (No. of Years as an ACO in Value-Based Care and CMS Program)
A	18,000	Rural	1 as Next Generation ACO
B	20,000	Rural	3 as Next Generation ACO
C	21,000	Urban	3 as Track 3 ACO
D	20,000	Urban	5 as Track 1 ACO
E	18,000	Urban	1 as Next Generation ACO
F	25,000	Rural	5 as Next Generation ACO

Table 1: ACO selection and summary descriptors

Interview questions spanned several categories: risks and benefits of post-acute relationship development; network development strategies, including barriers and facilitators and specific relational questions discussing ACO/SNF process elements as well as financial incentives; and needed physician and provider education as well as patient and family education. Key informant opinions were solicited to define what specific processes and procedures were most critical to successful ACO/SNF relationships. Informed

consent was obtained from key informants at the time of the interview (face-to-face or via conference call). All notes or phone recordings were transcribed after each interview. Transcript-based interview content analysis was coded using *NVivo 12 Plus* qualitative analysis software, in which transcripts and field notes were carefully read and systematically coded to identify emerging themes. The content analysis utilized an inductive approach, which revealed themes and identified patterns through a multiphase coding process. The documents were coded, and a code book was created from relevant themes related to the research questions under investigation, based on the collective knowledge, perceptions, and experiences of the researchers and informants [3].

The PI performed primary coding of all interview transcripts. Another investigator (second coder) not directly involved with the research strategy or design independently reviewed and recoded 20% of the transcripts to validate the original coding and code book. After all interview transcripts were coded, the reports were systematically reviewed to identify themes. The study included only ACOs that were in a contractual arrangement with the NPHC and SNF leadership from facilities that received ACO patients. Other ACOs were excluded because the primary focus of this work was on the relationship between ACOs and SNFs and the PI had access to the supporting clinical data and claims files for those affiliated ACOs. Selection of key informants was facilitated by company staff known to have working knowledge regarding ACO/SNF network strategies.

The KIIs sought to identify SNF characteristics that influence quality and may therefore influence patient outcomes. System complexity is a confounder, influencing SNF choice. For example, during the first initial interviews, key informants mentioned education about SNF quality as a criterion for partnership. This estimation of SNF quality was initially defined by the key informants to be evidenced by star ratings and public CMS data, but some key informants also cited the importance of SNF clinical care capabilities (i.e., could the SNF admit a patient on a wound vac or who needed intravenous infusions as a decision-making determinant for hospital/SNF transitions?). While not tied directly to the relationships between ACOs and SNFs, this finding spoke to the complexity of the hospital discharge process resulting in admission of the patient to the SNF, and more specific questions were then asked to delineate opinions on education directed at the referring physician and hospital team, patients and families, or both for subsequent interviews [4].

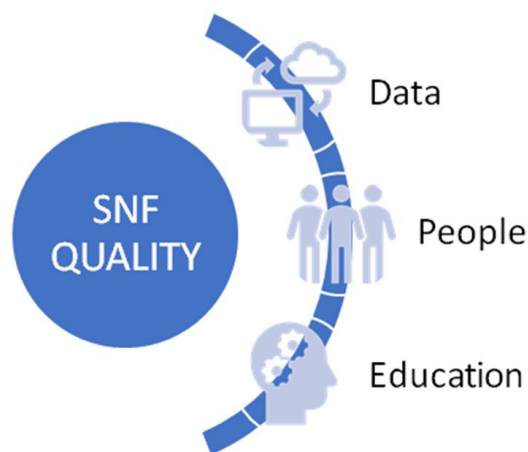
Selection of ACOs nationwide allowed the data to be analyzed in a way that enabled a comparison of relationships within and across ACO networks and summarize the practices being used to promote relationship building and support participation in ACO/SNF collaboratives. In addition, barriers and facilitators related to the development of ACO processes within the ACO/SNF relationship were explored for each ACO. This approach allowed the development of a deeper analysis of themes across ACO/SNF networks and enabled comparison by different factors, such as organization size, geographic location, and maturity of efforts into value-based care.

## Results

KII questions were reviewed and pretested, with the first coded pretest performed on September 13, 2018. Forty-seven KIIs were conducted between September 24, 2018 and December 19, 2018 across 6 ACOs nationally.

### In-Depth Qualitative Analysis: Key Findings

An in-depth analysis was conducted to go beyond the descriptors that comprised development of the code book. Each ACO in the study cohort had some level of existing post-acute care network development efforts. Many ACOs began this work at the health system level prior to engagement with the NPHC as a partner, and all ACOs continued and accelerated their SNF/ACO network building and implementation as a result of the operational partnership. The following interconnected themes of data, people, and education all influence and contribute to the overarching theme of quality governing SNF care delivery (Figure 2). These organizational efforts emerged during the interviews and are presented below.



**Figure 2:** Three prevalent themes were elicited from key informant interviews to reveal important provisions to include in an ACO/SNF relationship: importance of data, emphasis on education, and importance of people

## Theme 1: Importance of Data

Data communication and exchange was repeatedly cited by the key informants in all categories to be critical to facilitate and improve the quality of care delivery inside the SNF. The theme of data emerged as both a barrier and a facilitator to the ACO/SNF relationship (Table 2). ACO processes around SNF data and exchange of that LOS and readmission data with SNFs influenced the development of preferred versus non-preferred relationships.

Highlight	Key Informant Comments
Data communication and exchange was repeatedly cited by the key informants in all categories to be critical to facilitate and improve the quality of care delivery inside the SNF.	“The benefit of having data from across settings and facilities is crucial... We are able to share back that information and be able to display and have that transparency back to the skilled facilities ...”
All ACOs creating preferred and non-preferred SNF networks shared data, often by scorecards and through community collaboratives	

Table 2: Theme 1: Importance of Data

Health system leadership repeatedly cited that the ACO/health system relationship afforded them access to data on post-acute cost and utilization that was not previously available to them when working alone prior to contracting with the NPHC.

“The benefits of having data from across settings and facilities are crucial... We are able to share back that information and be able to display and have that transparency back to the skilled facilities about variation... We use the data to identify the most common type of patients that are returning to the hospital.” (Key Informant ACO A2, Administrative Director, Population Health, 2018)

Local ACO leadership emphasized data and visibility as a key component of the ACO/SNF relationship.

One health system leader emphasized that SNFs are now held accountable for care, and partnership between the ACO and community SNF is beneficial:

“The [ACO] brings them a lot of data... Often, they don’t know anything about these patients leading up to the SNF admission, so they [the SNF] don’t really know what that patient’s readmission risk is when they leave the hospital... They didn’t really have that piece of information... I think we can provide them with that sort of rounding out the picture of the patient...” (Key Informant ACO F2, Chief Transformation Officer, 2018)

This key informant further acknowledges that the use of comparison performance data can help SNFs in the local communities show positive outcomes:

...“We [the ACO] also bring benchmarking... We’re now going to compare you to the SNF down the street ...and you’re either doing far better or you’re doing far worse... We can help... We can also help drive quality through best practice sharing.” (Key Informant ACO F2, Chief Transformation Officer, 2018)

SNF leadership key informants emphasized that data were a critical component of the ACO/SNF relationship and cited data and information exchange as a true benefit.

Leaders also acknowledged the importance of data use and availability at a transition of care. It is in the transition from hospital to SNF that there are often missing or incomplete data and this directly influences patient outcomes as well as experience. Many ACO/SNF collaborations within this study cohort involved ACO staff working with SNF staff to perform quality improvement projects together to improve SNF quality of care delivery. One key informant referenced the importance of this work and specifically called out data as a critical component to quality improvement planning. Utilization data informed an improvement network effort in palliative care, which, if successful, will be shared across all facilities across the ACO/SNF network.

## Theme 2: Emphasis on People

The theme of *people* in the ACO/SNF relationship was defined by the key informants across 3 main categories: case management for transition of care from hospital to SNF, rounding and clinical care delivery inside the SNF, and education around staffing and SNF capabilities by the care team within the facility. The theme of people was almost universally a facilitator for the ACO/SNF relationship (Table 3). SNF key informants repeatedly expressed resource constraint, and they felt that the addition of ACO staff led to positive influences on coordination of care. The presence of ACO staff was thought by the key informants to moderate and strengthen the quality of care delivery inside the SNF.

Highlight	Key Informant Comments
The theme of people in the ACO/SNF relationship was defined by the key informants across 3 main categories: case management for transition of care from hospital to SNF, rounding and clinical care delivery inside the SNF, and education around staffing and SNF capabilities by the care team within the facility.	... [O]ne of the things we found is that having system [ACO] resources dedicated to the SNF... and then help supporting the management of those patients in the SNF can truly make a difference.
Almost universally, the key informants across all 3 interview categories emphasized the benefit and importance of onsite ACO staff for patients who transition into a SNF.	

Table 3: Theme 2: Emphasis on People

Almost universally, the key informants across all 3 interview categories emphasized the benefit and importance of onsite ACO staff for patients who transition into a SNF.

“A way to really control quality is to have your own SNFists that are working within the ACO, so that you are evaluating their metrics, closely following their quality to make sure that they are delivering high-quality care to our patients.” (Key Informant ACO A1, Market Medical Director, 2018)

“I think that every member of the ACO should have some case management background evaluation and follow-up at the skilled nursing facility, in a perfect world... I think a nurse case manager should follow every patient... I think every patient would benefit from being touched...”(Key Informant ACO A2, Chief Medical Officer, 2018)

Role type may or may not be a defining influence on quality care delivery, as long as patient needs are communicated and met.

...[A]nother thing that we’re [the ACO] thinking about is having the person at the bedside who is working with the patient [in the hospital] follow them in the actual post-acute setting... I think it would be welcomed by patients to know that someone who knew everything about them in the hospital is now seeing them [in the SNF] and talking to the care team there... to really better coordinate care. (Key Informant ACO C2, Chief Medical Officer, 2018)

“I think having somebody in the facility is the very best thing to do... The struggle is we have so many facilities and so few bodies... We just don’t have the staff to have somebody in every [SNF] facility every day... You have got to look at the volume... [ask] where are our [ACO] patients?... and get folks there [to the SNF]... Having eyes in the facility on the patients and having those established relationships with the [SNF] staff... is the very best thing.” (Key Informant ACO D1, Senior Director, Clinical Operations, 2018)

Community SNF leaders viewed ACO people resources as a relationship benefit and a facilitator of the ACO/SNF relationship. When asked what the ACO could do to facilitate improved quality and delivery of care inside the SNF, collaboration on performance improvement projects was identified as well as the onsite presence of a care manager: Rounding by clinical staff affiliated with the ACO was repeatedly mentioned as a good investment of ACO resources. Within the same ACO system, the community SNF leadership also agreed that a contract benefit to ACO/SNF partnership was a consistent presence of ACO-affiliated staff inside the SNF.

### Theme 3: Importance of Education

The theme of *education* in the ACO/SNF relationship was defined by the key informants across 3 main categories: patient and family education, physician education, and SNF/ACO partnership management. Education emerged as both a barrier and a facilitator to ACO/SNF relationship development (Table 4). Implementing processes and procedures to provide education to patients and families as well as referring providers to increase awareness of SNF capability and service was cited by several key informants as a facilitator to building relationships between ACOs and SNFs. Many SNFs cited ACOs as providing value through education.

Highlight	Key Informant Comments
The theme of education in the ACO/SNF relationship was defined by the key informants across 3 main categories: <ul style="list-style-type: none"> <li>• Patient and family education</li> <li>• Physician education</li> <li>• SNF/ACO partnership management</li> </ul>	[Physicians] should take a little bit more ownership and accountability of where they send patients... At my organization, they totally defer to discharge planners to make those decisions...
Key informants acknowledged significant gaps in education for patients and families as well as physicians and emphasized that those challenges influenced the ACO’s ability to influence process and ultimately health outcomes as SNF networks are developed.	

Table 4: Theme 3: Importance of Education

Barriers to relationship development were cited as key informants acknowledged significant gaps in education for patients and families as well as physicians and discharge planners on SNF capabilities and patient experience. They emphasized that those challenges hindered the ACO’s ability to influence process within the SNF and therefore led to limited influence on LOS and readmission rates as SNF networks are developed.

For patients and families, the sub-themes of SNF capabilities and patient choice were repeatedly mentioned. ACO market leadership, responsible for creating and implementing post-acute networks, emphasized the importance of communication of quality metrics to help patients and families make informed decisions.

“Patients and families need to understand that the overall goal is to improve the care experience...the patient’s quality, safety and satisfaction... If we’re able to do that by partnering with the SNFs and putting a little more pressure on accountability for performance, then patients will be better off for it.” (Key Informant ACO A1, Senior Director of Clinical Operations, 2018)

Transparency in cost and accuracy of public information to help families with informed decision making were additional concerns for ACO market leadership.



... “[T]here has got to be better visibility into the cost pricing and quality of services in any given market, which would include a skilled nursing facility so patients understand... How does my decision either to go to facility A or B, or to go to facility A or go home with some home health services or to go to inpatient rehab, and then go the skilled nursing facility for 3 weeks and then come home with nursing services... how will that impact me financially and, is there really measurable quality of life ... measurable quality of care? Is there a benefit to me [the patient] when making this decision? I don’t think patients have the information they need to make informed decisions... So then it’s left a lot to anecdotes and branding.” (Key Informant ACO B1, Senior Director of Market Operations, 2018)

SNF leadership did not always agree with the market implementation teams. The financial incentives for SNFs to keep census high and maintain admissions are strong drivers for their marketing efforts. One SNF leader cited the following as most important to include in patient and family education:

“...report card scores, satisfaction surveys, word of mouth... Families should look at geography... How easily will there be family and friends able to visit them? Also... touring and meeting that facility and checking it out for yourself to see if it’s a good fit.” (Key Informant ACO E3, SNF Vice President, 2018)

Physician education recommendations, on the other hand, were strongly slanted toward ownership and accountability as well as data-driven decision making. Many key informants acknowledged that referring physicians needed to have more active responsibility in selection of a SNF for their patients, rather than defer or delegate this to a discharge planner or other hospital team member. This was also cited as a barrier by several key informants.

“[Physicians] should take a little bit more ownership and accountability of where they send patients... At my organization, they totally defer to discharge planners to make those decisions.” (Key Informant ACO A2, Administrative Director, Population Health, 2018)

Many market leaders felt that accountability for cost and utilization was more squarely the responsibility of the referring physicians. The recommendation that physician education include a real systemic understanding of SNF capability and a deeper appreciation of the real-life nuances in this setting of care was emphasized by one post-acute health system physician leader.

“...[Hospital] physicians and nurses have no understanding whatsoever of the capabilities of a SNF. They think that you can admit an acute heart failure patient and get daily labs in a timely fashion and change their medications daily and provide sitters and do everything that the hospital does and that’s not true ... It’s very difficult... They [physicians] don’t understand... If there’s an acute event... the patient’s going to be sent out... Or even if there’s an event that we’re not so sure is an acute event ...the patient is going to get sent out [to the ED] and so I think that just that understanding of how little a patient is seen by medical staff [in the SNF]... It’s definitely not a hospital-level medical setting.” (Key Informant ACO C2, Post-Acute Chief Medical Officer, 2018)

The presentation of data to referring providers on local SNF performance was also a recurrent sub-theme. One system leader emphasized connecting choice of SNF to patient outcomes.

“They’ve [physicians have] been so [blinded]... They don’t want to see the effect, that any of these choices affect what they perceive as quality of care... but if the ACO can say, “Hey, Doc, you know, we’re working closely with facilities A, B, C, and D... That’s why we want you to send your patients there,” I would hope they would understand... and if we can show that data, saying those SNFs are having better outcomes... getting the patient home... the patient has less chance of readmission... If the patient has less time in the SNF facility, their home is where they want to be, and where you want them to be... If we can communicate those things, I think that’s where we’ll get the buy-in with physicians.” (Key Informant ACO B2, Compliance Officer, 2018)

SNF community leadership also repeatedly emphasized that ACO physician education on SNF capability and competency is critical to the delivery of quality care.

“Some physicians don’t understand what skilled nurses can and can’t do... We hit that roadblock where the expectation is that we do certain medical treatments here that really are not provided in this setting, or that we do one-on-one care here that is not provided in this setting. So, being able to educate physicians on what the true meaning of a skilled nursing facility is, and what our services actually encompass, I think would actually be a benefit.” (Key Informant ACO C3, SNF Community Administrator, 2018)

One ACO health system leader cited the failure of team function as a larger driver than physician knowledge or education when considering SNF admissions for ACO patients. This leader felt that the discharge planning process gave too much power to the hospital discharge team members and felt that they had more accountability than the physician in determining the ultimate referral destination SNF for a patient.

Another physician leader shared a similar sentiment discussing both a lack of knowledge and the common occurrence of communication breakdown.

“Physicians and referring clinicians to the SNFs need to know that SNFs are not magical places where everything gets better... That’s what we tell people in the hospital... “Oh, we’re going to send you to a SNF and you’ll be able to walk again. And you’ll be all better.” ...There needs to be more realistic conversations. ...Physicians are very focused at whatever their inpatient stay is... And so, the ability to have a prognosis and to say, “You know, really, your mom’s not going to walk again”—very few doctors would make that prognosis or have that discussion.” (Key Informant ACO C2, Post-Acute Chief Medical Officer, 2018)

SNF leadership also emphasized that the education of patients and families around SNF care and capability was particularly important. Often, there is a misunderstanding of staffing ratios and proficiency in the post-acute SNF setting versus the acute inpatient hospital.

Partnership management between ACOs and SNFs spanned several domains within the KIIs. Key Informants had opinions on network and evaluation criteria, the possibility of developing future financial incentives, metrics, and the roles of policy and leadership. Education continued to emerge as an embedded and underlying theme, critical to the development of relationships and the creation of processes for relationship implementation that defined the overall structure of the ACO/SNF interaction.

The role and responsibility of the ACO leader was designated as primary. Many key informants shared this opinion:

“The ACO leader has to be the one who sets the overall strategy. And the strategy has to start with someone defining the network, understanding the capabilities of each of the skilled nursing facilities, collecting the data, pulling together those within collaboration network that they’re going to be working with... that’s the outside piece. But the inside piece is also critical... You’re not going to get anywhere with [the ACO/SNF collaboration] without that work... If your [ACO] inpatient hospital team and your discharge planners are not on board ... that ACO leader really has to straddle the inpatient and outpatient world to make [any] effect.” (Key Informant ACO 1, Market Medical Director, 2018)

Further comments on the relationships between SNFs and ACOs emphasized the critical nature of developing this relationship.

Metrics and criteria for partnership were universally discussed, emphasizing the importance of data and data exchange. Critical and measurable components to the contract relationship between ACOs and SNFs were repeatedly listed across all interview categories as guidelines and metrics around LOS, readmission rates and measurement of transfers back to the hospital, and ED utilization. Key informants also discussed star ratings and the systemic conflicts related to their measurement and use.

... “[Y]ou know, of course, people look at the star ratings I don’t feel the star ratings are [a] good measurement. I mean they are a nice-to-have; you know you want to make sure they’re at least 3 stars or above, and they have to be 3 stars or above in order for you to sign a waiver contract but those could change... There’s places that are not evaluated yet that are new, but are very good that if you just strictly went with that star rating [you may miss] ... you have to look at the length of stay ... you have to look at readmissions, you have to look at ED visits. And... you have to look at how quickly somebody sees that patient from when they come into that facility and what the nurse to patient ratio is. So, what is the care in that facility, and do they have [staff] doing care coordination?” (Key Informant ACO C2, Director of Population Health, 2018)

## Discussion

There is clear evidence from both the KIIs and the qualitative research data to suggest that the themes of data, people, and education are all important elements to define best practice relationships between an ACO and a SNF. Specific operational processes and procedures were developed and implemented within each ACO network that could be categorized around each of these themes, and each ACO directed these activities locally within their individual SNF networks. The presence or absence of these specific processes further defined the inclusion or exclusion of a SNF as preferred or not within each ACO network. Post-acute network development and SNF partnership management remain growing and evolving functions for ACOs nationwide. The 4 remaining ACOs included in this cohort were more mature in their ACO/SNF relationship development than the 2 ACOs that were new to their CMS contract and exited the program in early 2019 due to financial insufficiencies [5].

This research sought to elucidate ACO best practices around post-acute care contracting specific to SNF relationships. The organizational burden for the SNF relationship sits squarely on the ACO leadership, who cited communication, data, and education challenges across their respective health systems as critical when creating preferred provider SNF networks. The emergence of people as a theme for the key informants was validated in recent literature. Mileski, *et al.* [6] performed a study that investigated the applicability and effectiveness of quality improvement initiatives in decreasing the rate of avoidable 30-day, SNF-to-hospital readmissions. The principal conclusion by Mileski, *et al.* [6] was that the most common facilitator was the incorporation of staff at the SNF and “...collaboration in case management by teams of practitioners working with the patient will cause any barriers to care to be quickly identified, to mitigate readmissions overall...” (p. 221).

Many key informants cited the timeliness of information exchange between hospital and SNF as an influence over quality of care delivered within a SNF [7]. Communication between the ACO and SNF may accelerate if an ACO patient was directly admitted to a SNF under an approved waiver that is a benefit of the ACO contract with CMS, therefore eliminating the 3-midnight requirements in the hospital prior to SNF admission. Readmission rates could be used as a proxy for quality of care delivery within the SNF. Readmission within 30 days of hospital discharge is very common, affecting 20% of Medicare beneficiaries, and SNFs are the most common setting for post-acute care in the United States [8]. Medicare patients discharged to a SNF have a 25% likelihood of 30-day readmission and in some studies, up to 67% of readmissions were rated as potentially preventable.<sup>8</sup> In a recent study by Mendu, *et al.* [8] a survey of SNF readmissions showed that patients felt that their readmission to the hospital was avoidable 34% of the time, and that inadequate SNF treatment contributed to the majority of those readmissions.

Mileski, *et al.* [6] described several barriers to successful improvement in SNF readmission rates. They cited a lack of leadership engagement, which acted as a barrier to success when leaders did not see a compelling reason to invest time and energy into quality improvement initiatives to reduce readmissions. ACO C had a senior clinical leader onsite weekly to engage and solidify commitment and relationship with SNF staff. Mileski, *et al.* [6] also pointed out that “lack of staff education was a noted barrier to success because staff lacked the knowledge to care for the patients most likely to be readmitted to acute care settings” (p. 221). ACO C provided, through education at the SNF, more immediate metrics to measure improvements and more accurate criteria in tracking data. ACO C leadership also proactively addressed the implementation barriers experienced by many SNFs as they struggled to adopt new processes and procedures by placing people onsite weekly and ensuring clear communication processes.

Further study will be required, including risk adjustment, to draw any definitive conclusions between best practice ACO processes and effect on patient LOS. Additional study is also warranted to see whether the best practice processes and procedures used by ACOs around data, people, and education indeed influence readmission rate outcomes [9].

The PI’s employment by the NPHC introduces a bias into the data collection, as she has professional relationships with all ACOs included within the study cohort. However, this research does address the gap in the literature which seeks to specifically define best practice process elements within ACO/SNF relationships that may result in improved patient health outcomes. Specific delineation of these best practices contributes new theory toward ACO/SNF relationship development and ultimately may influence SNF selection when ACO leaders are designing and creating preferred networks. Additional research is needed to understand the specific contract provisions positively associated with reductions in patient-level cost, readmissions, and LOS [10].

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## References

1. (2020) Centers for Medicare and Medicaid Services. Overview of Shared Savings Programs.
2. Maly MB, Lawrence S, Jordan MK, Davies WJ, Weiss MJ, et al. (2012) Prioritizing partners across the continuum. *J Am Med Dir Assoc* 13: 811-6.
3. Winblad U, Mor V, McHugh JP, Rahman M (2017) ACO-affiliated hospitals reduced rehospitalizations from skilled nursing facilities faster than other hospitals. *Health Affairs* 36: 67-73.
4. Lage DE, Rusinak D, Carr D, Grabowski DC, Ackerly DC (2015) Creating a network of high-quality skilled nursing facilities: Preliminary data on the postacute care quality improvement experiences of an accountable care organization. *J Am Geriatrics Soc* 63: 804-8.
5. McWilliams JM, Gilstrap LG, Stevenson DG, Chernen ME, Huskamp HA, et al. (2017) Changes in postacute care in the Medicare Shared Savings Program. *JAMA Int Med* 177: 518-26.
6. Mileski M, Topinka JB, Lee K, Brooks M, McNeil C, et al. (2017) An investigation of quality improvement initiatives in decreasing the rate of avoidable 30-day, skilled nursing facility-to-hospital readmissions: A systematic review. *Clin Interventions in Aging* 12: 213-22.
7. (2019) Centers for Medicare and Medicaid Services. Next Generation ACO Model Skilled Nursing Facility (SNF) Three-Day Rule Waiver.
8. Mendu ML, Michaelidis CI, Chu MC, Sahota J, Hauser L, et al. (2018) Implementation of a skilled nursing facility readmission review process. *BMJ Open Quality* 7: e000245.
9. Herbold JS, Larson A (2016) Performance of skilled nursing facilities for the Medicare population.’
10. Glickman SW, Baggett KA, Krubert CG, Peterson ED, Schulman KA (2007) Promoting quality: The health-care organization from a management perspective. *Int J Qual Health Care* 19: 341-8.