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Accountable Care Organization Implementation Experiences and Rural Participation: Considerations for Nurses

Matt Thomas Bagwell, PhD, MPA, **Angeline Bushy, PhD, RN**, and **Judith Ortiz, PhD**

Research Associate (Dr. Bagwell), University of Central Florida, College of Health & Public Affairs, Rural Health Research Group, Orlando, Fla; Professor and the Bert Fish Endowed Chair (Dr. Bushy), University of Central Florida, College of Nursing, Daytona Beach, Fla; Associate Professor and the Director of the Rural Health Research Group (Dr. Ortiz), University of Central Florida, College of Health & Public Affairs, Orlando, Fla

Abstract

Background—Little is known about how accountable care organizations (ACOs) participate with rural health providers. This pilot study examines ACO participation with rural health clinics (RHCs).

Methods—Telephone interviews with 8 ACO administrators were conducted to determine the early implementation experiences of these organizations and their participation with rural health providers, such as RHCs, using qualitative content analysis, ACO characteristics and emerging themes from the ACO executive responses were identified.

Results—Three predominant themes emerged: (1) ACOs are growing in size and number, and have various organizational structures; (2) there is an expanding emphasis on preventive primary care and chronic disease management for patients; and (3) there is a need for improved information technology (IT) integration with clinical services and financial systems.

Conclusion—Seven of 8 participants reported that their ACO was planning to expand into rural areas and partner with rural providers.

Recently, federal initiatives have focused on improving access to care for residents in underserved remote rural areas across the U.S. (1-2). The Patient Protection and Affordable Care Act (PPACA) is the most recent initiative, which, in part, focuses on both urban and rural residents with the intentions of improving access to healthcare, delivering quality services, and curbing health care costs (3). An important element of the PPACA are Accountable Care Organizations (ACOs), of which a few models came into being in 2011 (4-5). According to CMS, ACOs are defined as:

> Groups of doctors, hospitals, and other health care providers, who come together voluntarily to give coordinated high quality care to their Medicare patients. The goal of coordinated care provided by an ACO is to ensure that patients, especially

Corresponding Author: Dr. Bagwell, University of Central Florida, Rural Health Research Group, College of Health & Public Affairs, P.O. Box 162369, Orlando, FL, USA 32816-2369 (Matt.Bagwell@ucf.edu).

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> the chronically ill, get the right care at the right time, while avoiding unnecessary duplication of services and preventing medical errors (5, para. 1 & 2).

Ultimately, the goal is to share the cost savings of the Medicare program among the ACO participants (5-6). In spite of these initiatives, limited access to healthcare and primary care provider shortages persist along with shortages in in rural areas (1-2).

Estimates indicate nationwide there are more than 740 ACOs, and the number is growing, serving approximately 23 Million lives in the U.S (7). The majority of these ACOs are enrolled in the Medicare Shared Savings Program (SSP), according to Punke and Gamble (8-9). In general, the ACO model of care delivery presents potential opportunities to address challenges related to rural health care access, improve patient care quality, and share cost savings with ACO providers (10).

As ACO models are adopted nationwide, there is a need to understand how and to what extent ACOs will emerge in rural areas. Given the information deficit, this pilot study focuses on: (a) the early implementation experiences of ACO executives; and (b) how rural healthcare providers may be participating with these newly established, Medicare SSP ACOs. Rural participants can include rural-based individual or groups of independent practitioners, such as Rural Health Clinics (RHCs). This study examines the implications of ACO development, particularly, for nurses in advanced practice roles who sometimes are administrators as well as other primary care clinicians who are employed by small rural practices or larger rural organizations that may be considering ACO participation.

Methodology

Qualitative data for this pilot study were obtained via a telephone interview with 8 administrators of newly established ACOs located in the U.S. Department of Health and Human Services' (DHHS) Region 4. An interview guide was developed based on a review of the literature along with feedback from content experts on ACOs and rural health care delivery systems (11). The guide consisted of 2 groups of open-ended questions: the 1st focused on the participants' self-described characteristics of his or her respective ACO, and the 2nd addressed participants' perspectives on integrating rural health providers into his or her ACO. Prior approval for the study was obtained from the University of Central Florida institutional review board.

At the time of the study (November 2012 - March 2013), there were 55 Medicare-enrolled ACOs identified in DHHS Region 4 (states in Southeastern US: Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee). Initially, all of the administrators in the 55 ACOs were contacted by mail with an invitation to participate in a telephone interview to discuss their ACO related experiences; subsequently, followed up with 3 email invitations; and, finally, a telephone call. Data saturation was achieved with 8 administrators who participated in these interviews. Informed consent was provided to, and obtained from, all participants. No financial compensation offered to participants. The interviews ranged from 15 to 25 minutes in length. All participants completed the entire interview.

To establish data reliability the interviews were audio taped, then transcribed verbatim. Qualitative analysis techniques included iterative readings and analysis of the transcribed interviews (11-12). The interviews were a source of rich data that served to answer: What were SSP ACO executive administrator experiences with rural healthcare providers' participation? Common themes were identified in the narratives and corroborated with another researcher, who both listened and participated in content analyses.

Results

ACOs Characteristics & Rural Participation

There were 3 women and 5 men who self-identified their role as chief executive officer (n=3), executive director (n=2), chief operations officer (n=1), chief financial officer (n=1) or chief medical officer (n=1). Five administrators indicated they possessed business expertise, 2 had medical expertise, and 1 had legal expertise. The Medicare population of the respective ACOs ranged from 10,000 to 30,000 patients; geographically located in various areas of Region 4. All participants indicated their ACO had been in existence for < 12 months. Five of the respective ACOs included rural providers (63%) and 3 (37%) did not have any rural participants at the time of the interview.

Three respondents self-identified their ACO model as an integrated delivery system (IDS) (37.5%). Another described their ACO as an integrated delivery network (IDN) (12.5%), with anchor partners that included a hospital and healthcare system. One ACO network consisted of a primary care medical group as its anchor (12.5%), along with a partner hospitalist group. Another ACO (12.5%) was described as a small group of rural medical clinics, independent practices, or independent primary care providers (PCPs) which maintained individual, in-house billing and payment systems for each provider, clinic, or group.

To address federal PPACA regulations, the governance boards of all the ACOs were comprised of physicians, healthcare administrators, other types of health providers, and at least 1 Medicare beneficiary health consumer. Interestingly, there were no nurses reported as serving on any of these committees. All but 1 out of the 8 participants reported that his or her ACO was hoping to expand in terms of integrating additional rural care providers.

Discussion of Themes

This section examines 3 themes which emerged from the participants' comments: 1st, the projected growth in the number and size of their respective ACOs; 2nd, the expanded emphasis on preventive primary healthcare and chronic disease management with populations; and 3rd, the need for improved integration of information technology (IT) systems with clinical services and financial systems.

Projected Growth of ACOs

All informants reported their ACO deliberately started small but were eventually planning to expand in provider numbers, scope of service and, in some cases, the geographic catchment area along with the number of patients to be served. One respondent, Gina explained that her

ACO was an “early adopter” and that there was a growing national trend for providers of all types to integrate into an ACO. She reported this particular ACO also received grant dollars which helped to defray start-up costs. When asked specifically about their ACO expansion, Gina elaborated:

> We’re reaching out to places, rural places and asking them if they want to join. If they want to be a part of it, there’s a way to better coordinate care for the communities we serve, urban and rural - through contracting and partnership with other rural health care providers in various specialties.

The newly formed ACOs for the most part were interested in providing care to rural clients by integrating rural providers. Seven of 8 administrators reported that their ACO were making efforts to integrate rural healthcare providers and organizations, as a strategy to identify rural patient populations. However, 1 respondent, Ben, indicated that there were no rural areas within the ACO’s service sector, thus, it was unlikely that rural providers would integrate with that particular ACO.

Emphasis on Population Primary Health Care & Chronic Disease Management

Respondents indicated the focus of an ACO should be population health, which emphases health promotion, illness prevention, and chronic disease management. All indicated their respective ACOs provided services predominately to Medicare and Medicaid recipients, although some patients were dual eligible beneficiaries. While the overall health status of the ACO patient population varied from 1 organization to another, participants repeatedly stated that the rural patient population typically had at least 1, and often more multiple chronic conditions (i.e., comorbidities). Most common medical diagnoses encountered in the ACOs included diabetes, chronic obstructive pulmonary disease (COPD), congestive heart failure (CHF), hypertension, and various types of cancer. Economically speaking, medical comorbidities mandate more extensive treatment, more costly interventions and more time on the part of the provider to meet the patient’s health care needs, for both prevention and disease management.

Since these ACOs had been in existence for <1 year, and even though all reported having an electronic medical record (EMR), population specific data had not yet been extrapolated or interpreted. Respondents emphasized the importance of obtaining accurate and complete data followed with a detailed data analyses and meaningful interpretation of the data. Data were deemed essential for an ACO to learn about population disease patterns, develop cost effective evidence based quality interventions, and ultimately measure patient care outcomes. The administrators indicated their respective ACOs were investing resources to develop patient registries or population health management systems to identify disparities and gaps in care for the various populations. According to respondent Cecelia: “You cannot address your patients with gaps in care unless you actually know who they are.” Adam, another respondent, elaborated on the importance of IT systems to plan and deliver quality cost effective services, which are used in his ACO:

> The [IT] system is a population health management patient engagement tool that allows providers to pull information both from their EMR, their billing systems, lab data, pharmacy data, claims data and really identify by patient population what are the gaps in care; who's not showing up for care and who do they [i.e., care managers] need to go after to work with. These [IT] systems serve 2 functions. One, let's go find our gaps in care. Two, let's report out to Medicare how we're doing on quality metrics that they've assigned to us … and assess if we are doing it for less.

With respect to population focused illness prevention and management of chronic diseases, respondents described that their ACOs were beginning to offer health promotion and illness prevention education programs in the community. Three ACOs offered health coaching services to individuals identified at risk for developing a chronic condition and offered care coordination services to those diagnosed with 1 or > chronic condition. Overwhelmingly, ACOs in this study were participating in assessment surveys with other community partners to collect relevant data in an effort to target and coordinate health promotion education and chronic disease management among populations within the service area, exemplified by a comment from Dotty:

> We had to implement, for both clinical and operational purposes, the comprehensive care coordinator program… You identify your patients with gaps in care… You identify frequent fliers to the emergency room… You identify the folks that have been readmitted more than 2 times in the course of a 12 month period… I think it's [i.e. comprehensive care coordinator program] a new version of case management… [That is to say] care coordinators serve different functions. They certainly serve a function of case management … we are looking at what has been done by some of the pioneer ACOs … from the patient-centered medical home models to see the possible benefit … I will also say, the comprehensive care coordinator program is really more like health coaches. It's important to have a clinician on the line [when a provider is] talking to a person who's got chronic disease conditions with several comorbidities [and] who's out of compliance. But for folks who might just need education, or just need some support, or whose [clinical and outcome] indicators really don't show gaps in care, one might utilize the services of health coaches which some pioneer ACOs and patients in our medical home models have found to be very helpful… What's important is personal connection between that health coach and the patient.

Respondents reiterated the complexity of managing medical care for patients diagnosed with comorbidities. Particular concern centered on patients from rural settings who often delayed seeking care for a health problem or an illness; thus tend to be sicker when they finally access medical care. There is a critical deficit of accurate and meaningful rural data to accurately understand population health in particular comorbidities within a community or ACO catchment in order to develop, implement and evaluate evidence-based care (13).

Effective Integration of Information Technology (IT) systems

While all study ACOs had an EMR system in place to collect data, respondents stated their next step was identifying processes and individuals who were able to analyze the data and extrapolate population specific findings to his or her respective ACO market areas. These administrators indicated they were identifying strategies for operational IT enhancements and appropriate systems that could yield relevant fiscal and clinical outcome data. Accurate population related health information is either absent or incomplete, especially in rural areas; however, these data are essential in understanding the impact of population lifestyle behaviors, high cost/low benefit interventions, along with the risks and benefits of integrating rural health care providers into ACOs.

Data analytics were reported to be a work in process yet this kind of information is critical for an ACO to accurately determine population health needs, disparities, gaps in care and outcomes (14). Data are also needed to determine the appropriate provider mix in the ACO, as well as the types of programs and services that are needed to effectively meet the needs of patient populations. Respondents emphasized their ACOs were “not up to speed” with respect to analyzing EMR compiled data, exemplified by a comment by Frank:

> We are working on [data analytics], but are not there yet. From an operational, clinical, and technology standpoint, the 2 biggest things that we [our ACO] are in process of implementing are the technology tools necessary to report quality data and detect gaps in care.

Incomplete or the lack of precise rural performance measures was of particular concern for reporting ACO quality measures to CMS. Further, provider inexperience with pay-for-performance programs suggests there will be challenges in collecting, analyzing, and reporting rural provider performance data.

Understanding potential and actual financial risks for an ACO associated with the integration of rural populations was a repeated concern in the interviews. Specifically mentioned is the financial risk to an ACO in terms of smaller rural patient populations, living in outlying regions of the market area coupled with cost burdens attributable to higher rates of chronic diseases and more comorbidities. Interviewees were particularly interested in delineating precisely what constitutes the critical mass of patients required for delivering cost effective services to rural populations in particular. Moreover, the integration of EMR systems within a single compatible IT network could lead to more appropriate care coordination at lower costs, and enable analysts to more accurately quantify the costs, risks, and benefits of integrating rural providers into ACOs. In other words, the compatibility of EMR hardware and software systems among ACO network providers is not a reality and must be addressed. The lack of EMR systems compatibility is best illustrated by Cecelia’s explanation:

> From a clinical IT perspective integrating 12 different EMRs systems, it has definitely put us behind schedule. The inability to interface hinders rural health providers from collecting, merging, and analyzing essential data; and consequently, reporting on cost and quality metrics of care services rendered … a federal requirement of ACO participation.

Major efforts on the part of all of the participating administrators centered on collecting, compiling and analyzing the extensive amount of data obtained from the EMRs of ACO providers, which is of vital importance for decision-making through evidenced-based measurement of quality, outcomes, and cost of rendered services.

Discussion: Considerations for Nurses

The experiences and insights of nurses are needed on planning and delivering healthcare to rural patient populations enrolled in ACOs. Nurses in rural areas often are in the role of primary care provider and administrator. These nurses must be well informed about the risks and benefits of participating in an ACO. At this time, there is a paucity of evidence-based publications that focus on nursing care services within an ACO network, especially in rural settings.

Nurses must also be well-informed on emerging ACO initiatives related to quality assurance, illness prevention, health promotion, and chronic disease management in order to advocate for as well as educate the patients for whom they care. In terms of education, nurses must understand the importance of precise data entry into EMRs, which ultimately are used to assess care outcomes and the quality of rendered services in all practice settings, rural as well as urban.

With respect to administration, nurses should have a basic understanding of financial incentives and risks associated with ACO participation. Rural nurse administrators considering participation in an ACO must be attuned to the risks and cost-benefits of such partnerships. Nurses in advanced practice roles, along with physicians in rural settings, are in key positions to influence policies and procedures within an ACO network by serving on ACO governance committees.

With regard to policy, it is vital that nurses be knowledgeable about their roles in planning, delivering, and evaluating health promotion and illness prevention interventions for patients. As ACO implementation moves forward, nurses must be informed on the risks, opportunities, rewards, and challenges of participating with ACOs. Rural nurses, especially, must play an active leadership role in developing policies that impact the communities for which they care. It is essential that nurses are included in the ongoing implementation and development of ACOs in rural areas; moreover, nurses should also serve and provide their insights on ACO governance boards.

Conclusion

Since nurses are a critical element of the healthcare delivery system, it is paramount that they are included in the discussion about ACOs as these growing models are an integral component of PPACA legislation (3, 7-10, 15). This article informs rural nurses, nurse executives and clinic managers on initial ACO implementation experiences in the Southeastern United States. This pilot study found that 7 of 8 participants reported that their ACO was planning to expand into rural areas and partner with RHCs and other rural health providers.

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References

1. Bolin, JN.; Bellamy, G. Rural Healthy People 2020. 2013. Available at: http://sph.tamhsc.edu/srhrc/docs/rhp2020.pdf. Accessed: January 31, 2016
2. Shi, L.; Singh, DA. Delivering Health Care in America: A Systems Approach. 6th. Jones and Bartlett Publishers; Boston, MA: 2015.
3. Patient Protection and Affordable Care Act, 42 U.S.C. § 18001. 2010. Available at: https://www.gpo.gov/fdsys/pkg/BILLS-111hr3590enr/pdf/BILLS-111hr3590enr.pdf. Accessed: January 31, 2016
4. Centers for Medicare and Medicaid Services (CMS). Medicare billing information for rural providers and suppliers. 2013. Available at: https://www.cms.gov/Outreach-and-Education/Medicare-Learning-NetworkMLN/MLNProducts/downloads/RuralChart.pdf. Accessed: January 31, 2016
5. Centers for Medicare and Medicaid Services (CMS). Accountable Care Organizations. 2013. Available at:http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/ACO/index.html?redirect=/ACO. Accessed: January 31, 2016
6. American Hospital Association (AHA). Accountable care organizations: AHA Committee on Research synthesis report. Available at: 2010. http://www.aha.org/research/cor/accountable/index.shtml. Accessed: January 31, 2016
7. Muhlestein, D. Growth and dispersion of accountable care organizations in 2015. Health Aff. 2015. Available at: http://healthaffairs.org/blog/2015/03/31/growth-and-dispersion-of-accountable-care-organizations-in-2015-2/Accessed: January 31, 2016
8. Punke, H. Where are the new Medicare ACOs? A regional breakdown. Becker's Hospital Review. 2013. Available at: http://www.beckershospitalreview.com/accountable-care-organizations/where-are-the-new-medicare-acos-a-regional-breakdown.html Accessed: January 31, 2016
9. Gamble, M. Total number of ACAs tops 520. Becker's Hospital Review. 2014. Available at: http://www.beckershospitalreview.com/accountable-care-organizations/total-number-of-acos-tops-520.html Accessed: January 31, 2016
10. MacKinney A, Mueller KJ, McBride TD. The march to accountable care organizations—How will rural fare? Journal of Rural Health. 2011; 27(1):131–137. doi:10.1111/j.1748-0361.2010.00350.x. [PubMed: 21204980]
11. Polit, D.; Beck, C. Essential of nursing research: Appraising evidence for nursing practice. 7th. Wolters Kluwer; Philadelphia, PA: 2010. Chapter 10: Qualitative designs and approaches; p. 258-283.
12. Polit, D.; Beck, C. Essential of nursing research: Appraising evidence for nursing practice. 7th. Wolters Kluwer; Philadelphia, PA: 2010. Chapter 17: Analysis of qualitative data; p. 462-513.
13. Barry, M. Evidence-based practice: How to change for the better. The American Nurse. 2014. Available at: http://www.theamericannurse.org/index.php/2014/05/01/evidence-based-practice-how-to-change-for-the-better/Accessed: January 31, 2016
14. Miller, J. ANA, Federal agency collaborate to promote health information technology and improved patient outcomes. The American Nurse. 2014. Available at: http://www.theamericannurse.org/index.php/2014/11/04/ana-federal-agency-collaborate-to-promote-health-information-technology-and-improved-patient-outcomes-2/Accessed: January 31, 2016
15. Vogus TJ, Singer SJ. Unpacking Accountable Care: Using Organization Theory to Understand the Adoption, Implementation, Spread, and Performance of Accountable Care Organizations. Medical Care Research and Review. 2016:1–6. SI. doi:1077558716640410.