# **SPECIAL REPORT**

Achieving Accountable Care Through

Data and Analytics:

: Trends, Practices, and Opportunities in 2013





# **CONTENTS**

I. INTRODUCTION	-
II. BACKGROUND	-
III. METHODOLOGY	2
IV. COMPOSITION OF SURVEYED ACOS	2
V. HEALTH IT INFRASTRUCTURE OF SURVEYED ACOS	3
COMMON COMPONENTS	3
DATA, MEASUREMENT, AND REPORTING	4
HEALTH INFORMATION EXCHANGE	2
PERCEPTION VS. REALITY: VALUE OF HEALTH IT	Ę
VI. THE ROAD AHEAD: CHALLENGES AND OPPORTUNITIES	Ę
VII. CONCLUSIONS	7
VIII. APPENDIX: LIST OF SURVEYED ACOS	8

#### I. INTRODUCTION

Recent health care reform initiatives in the United States have ushered in a new paradigm of value-based, patient-centric care that strives to avoid the pitfalls of the inefficient and fragmented fee-for-service system of the past. In the aftermath of the landmark passage of the Patient Protection and Affordable Care Act in 2010, new models of care delivery, such as accountable care organizations (ACOs), are emerging around shared risk, responsibility, and care coordination to improve quality and contain per-capita costs across the continuum. Since the Centers for Medicare & Medicaid Services (CMS) initially rolled out pilot ACO programs two years ago, various models of accountable care have proliferated through federal payment mechanisms focused on Medicare populations and within the private sector. By integrating providers across disparate settings into a unified network, ACOs are critically dependent upon utilizing clinical, claims, financial, and administrative data to continuously monitor, measure, analyze, and understand physician performance and patient outcomes at individual and population levels. Although the field of accountable care is still nascent, it is clear that successful and sustainable ACOs must evaluate, plan, and implement health information technology with precision to reflect these underlying needs. This issue brief summarizes research conducted by eHealth Initiative (eHI) and Accenture investigating the growing field of ACOs, and identifying their health information technology (health IT) capabilities and needs.

#### II. BACKGROUND

As health providers and payers converge to form ACO partnerships, many hospitals and physician groups are adopting and upgrading Electronic Health Record systems (EHRs) to not only qualify for federal Meaningful Use incentives, but also to expand their health IT capabilities and functionalities. Leading organizations agree that the adoption and deployment of health IT should not be treated with a plug-and-play panacea mindset but rather a phased, structured approach over time with an emphasis on interoperability and integration. A robust health IT infrastructure allows ACOs to derive actionable value out of information collected from various data sources to build a complete, secure, and up-to-date record of a patient's health and medical history that is easily accessible, shared, and updated over time. At the individual patient level, health IT can enable care providers within an ACO to work in concert to capture and act upon data as a patient consults primary care physicians or specialists, receives tests and treatment, fills prescriptions, and returns home for post-discharge monitoring. By combining and analyzing data, ACOs can measure and compare their internal metrics with nationally recognized best practices, standards, and evidence-based guidelines to improve the quality of care across the continuum. At the aggregate level, data can be used for clinical decision support (CDS), risk stratification, and predictive modeling to support analytic efforts targeting quality, safety, efficiency, cost, and utilization of care.

### III. METHODOLOGY

A qualitative, mixed-methods approach was employed to paint a comprehensive picture of the ACO landscape across the country. A survey instrument of 27 questions was designed in collaboration with eHI's multi-stakeholder Accountable Care Council to be sent to known ACOs. The survey was launched in November 16, 2012 and distributed through mailing lists, phone calls, and meetings. It was closed on February 6, 2013. In total, eHI contacted 326 ACOs to complete the survey, of which 37 responded (see appendix). To complement survey findings with more descriptive information, eHI conducted four informant interviews with leading organizations representing payer, provider, and quality improvement stakeholder groups.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> These organizations were: Sharp Healthcare, Telligen, Humana Inc., and Aetna



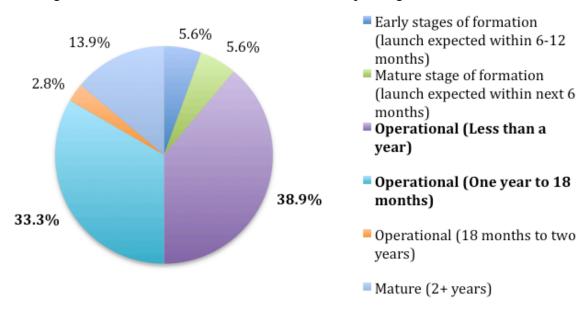


Figure 3: Accountable Care Effort Status of Surveyed Organizations

#### IV. COMPOSITION OF SURVEYED ACOS

As can be seen above in Figure 1, eleven percent of ACOs responding to the survey reported that they were still in formation, 75% had begun operations in the past two years, and 14% had been operational for two or more years. All of the ACOs reported coverage of at least 5,000 patients, and 58% cover more than 15,000. Additionally, all of the ACOs report covering Medicare patients, 50% cover commercially insured populations but only 18% cover Medicaid populations. ACOs are predominantly administered by physicians (54%). Thirty-two percent reported less than 100 physician participants, and 39% reported between 101 and 500. Common participating healthcare providers within an ACO include primary care physicians (100%), specialists (73%), hospitals (43%) and home health organizations (36%). Surveyed ACOs were largely financed through a shared savings model (75%), though some also used pay for performance, fee-for-service, and risk capitation.

ACOs report advanced connectivity;

84% use a certified EHR, compared to the national average of 35% among hospitals in 2011.



#### V. HEALTH IT INFRASTRUCTURE OF SURVEYED ACOS

### **Common Components**

Survey findings reflect the commonly shared opinion that it is best to adopt and deploy a basic technology platform first, followed by a second layer of additional capabilities over time. Basic elements of a platform as reported by ACOs include a certified EHR (84%), quality reporting (87%), and data warehouses and patient portals (68%). Despite the recognized need for health information exchange, only 58% use a master patient index and just 19% use a record locator service. Health IT is used by ACOs primarily for care coordination (90%), care transition management (79%), and case management (86%). Results suggest that 41% of ACOs have yet to use electronic patient reminders and outreach, and as many as 62% do not use shared decision support for care coordination purposes. These findings suggest that EHR-based solutions which standardize the documentation of care (e.g. CPOE, billing, and scheduling) are implemented first, followed by data-based solutions (e.g. CDSS and analytics) which standardize the delivery of care with advanced functionalities. However, it is this second set of solutions that will be most critical to achieving accountable care objectives in the long-run if providers are to glean actionable insight from patient data.

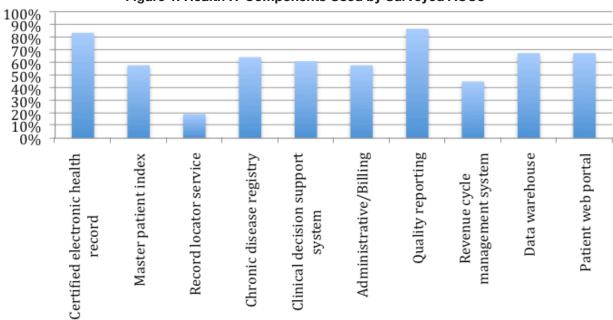


Figure 1: Health IT Components Used by Surveyed ACOs

Provider groups that partner with payers may have a considerable advantage in successfully managing an ACO as compared to smaller independent physician groups or hospitals forming an ACO alone, given that many payers already have a longstanding history with deriving value from large data sets. Moreover, their experience with risk management may pay dividends in the long run as ACOs become more sophisticated and require the integration of quality and cost metrics for real-time surveillance of performance. "With on-demand reporting capabilities already in place for providers to holistically manage a patient population with clinical and claims-based data, there is little difference in the approach towards health IT and care for Medicare Advantage or commercial populations," notes Marcia James, Director of Provider Engagement at Humana. "However, ACOs have introduced a new challenge in taking on risk for commercial populations that are more mobile; it's inherently more complicated from a care coordination, risk management, and data integration perspective if patients go beyond an ACO network." As ACOs mature through various phases of development, operation, and sustainability, it is critical for them to take a structured approach to installing and/or upgrading health IT platforms. "The underlying objective of accountable care is to



reinvent the relationship between a health plan and delivery system through collaboration, sharing of information and programs, and a series of payment reforms that will create a new business model to provide high-quality care in an efficient and effective manner," observes Charles Kennedy, CEO of Aetna Accountable Care Solutions.

## Data, Measurement, and Reporting

Fifty-two percent of ACOs report using batch transactional data feeds, with 36% using real-time feeds and 40% using summary feeds to obtain data. As functionalities evolve, it will be critical for ACOs to further incorporate real-time data feeds into practice to allow for accurate monitoring, reporting and clinical decision support at the point of care. The vast majority of ACOs (83%) incorporate Physician Quality Reporting System (PQRS), HealthCare Effectiveness Data and Information Set (HEDIS), Consumer Assessment of Healthcare Providers and Systems (CAHPS), and Meaningful Use measures to monitor quality, efficiency and satisfaction. Half of the reporting ACOs also derive their own measures, though few incorporate Bridges to Excellence (4%) or Physician Consortium for Performance Improvement (9%) measures. Informant interviews suggest that commercial ACO models largely adhere to CMS quality measures as well as other nationally recognized sets developed by the National Quality Forum and National Committee for Quality Assurance which focus on patient safety, quality, and chronic care. However, because these quality measures lack a common data dictionary or definitions of quality, misunderstanding and misinformation can arise when measures from multiple sets are used in tandem. This is especially true when multiple payers traditionally using different measure sets join together to manage a larger shared population (as occurred during the CMI Innovation Center pilot in Ohio). Bill Spooner, CIO and Senior Vice President of Sharp HealthCare, notes that "the universal measurement of quality is becoming an increasingly difficult procedure as providers are now measuring the same process twice for CMS: once with Meaningful Use measures to qualify for EHR incentives and a second time to measure performance with the set of 33 different indicators for the Medicare Shared Savings Program." Echoing these thoughts, Kathleen Barberio, Senior Director of Client Services at Telligen, elaborates that "a single measure may have different underlying specifications depending on the program in question. It's hard to invest in systems, measure data, and report performance when you don't even know what should be coded and measured all the time. Quality measures need to be better aligned, and providers, analysts, and informaticists need to be educated and trained about the nuances of each measure set and corresponding codes."

## Health Information Exchange

As evidenced by limited use of patient/disease indices and record locator services, only 47% of ACOs currently participate in a Health Information Exchange (HIE). Of these, 78% participate in a private or enterprise HIE, 68% participate in a community-based HIE, and 44% participate in a state or public HIE.

However, this number may change as ACOs mature; 27% plan on participating in an HIE in the near future. ACO patients or their authorized representatives are reportedly able to access information that revolves around basic care coordination needs through a patient web portal (PWP) or personal health record (PHR), such as lab/test results (61%), medication information (57%), scheduling/appointments (54%), and clinical reminders (46%). Few ACOs provide direct access to publicly reported quality information (7%) or outcome-based performance (10%) through these mediums.

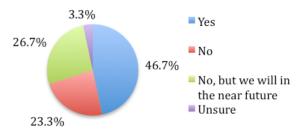


Figure 2: Participation in Health Information Exchange



### Perception vs. Reality: Value of Health IT

Reported perceptions of health IT functions largely mirror how ACOs actually use technology. Organizations see great value in care coordination programs and administrative/scheduling features to improve overall access. Accordingly, ACOs rate continuity of care records (CCRs), electronic documentation and CDS as significant to support quality improvement efforts. Access to timely clinical information and evidence-based CDS was reported to be critical to support financial management. However, as noted above, very few ACOs report utilizing CDS at the time of the survey. Furthermore, although ACOs value care coordination, few appear to be engaged in significant patient outreach and communication efforts; less than a third of ACOs send educational material, care plans, or appointment reminders by email or text in advance of a visit. Some ACOs, notes Ms. Barberio, have taken extra steps to add care coordinators and case managers to their staff and embed them within individual practices to address coordination and transitions of care. From a risk management perspective, ACOs clearly recognize the value of health IT for care transitions (86%) and coordination (76%), but only 52% have applied health IT to reduce variations in care delivery. Overall, ACOs report general levels of satisfaction with health IT infrastructures supporting claims, prescriptions, administrative, clinical, financial, demographic, and laboratory data.

#### VI. THE ROAD AHEAD: CHALLENGES AND OPPORTUNITIES

To facilitate the culture change associated with accountable care, providers need to be engaged early and often to support the development and operation of value-based care. Cost (16%), technology (20%), and clinical integration (20%) were major challenges faced by organizations creating ACOs. However, in what might be a reflection of the early stages of development and operation of many responding ACOs, certification, reimbursement, and compliance were not perceived as primary challenges. Although Medicaid participation is low among ACOs, it will be critical to observe how new and existing organizations prepare and react to state-based expansion of Medicaid programs in 2014. It is expected that cost-containment will be of greater importance among Medicaid ACOs, and it is unclear if health IT use will differ significantly to address financial management needs or sustainability issues. Of the ACOs surveyed, only 45% currently use revenue cycle management systems.

Although it is still too early to definitively report how ACOs have impacted quality, patient/provider satisfaction, and efficiency, some ACOs are reporting increased coordination (46%) and use of evidence-based care (30%). Despite higher operating costs among one third of ACOs, respondents seem to have targeted objectives carefully by reducing hospital readmissions (35% of ACOs), ER visits (29%), and/or hospital admissions (26%). Approximately 25% of ACOs reported improvements in patient satisfaction, engagement, and compliance, and one quarter of ACOs indicated improvements in provider satisfaction. However, to truly manage population health effectively,

A common theme among ACOs is the need for patience, collaboration, and an open wallet.

ACOs must redouble their efforts around prevention and wellness, particularly given the rising burden of chronic disease. With more than 70% of healthcare expenditures attributed to chronic care, it is critical for ACOs to successfully manage chronic conditions and at-risk patients by further integrating home health care, long-term care, and pharmacists. With only 65% of ACOs using chronic disease registries, further investments are recommended to track conditions such as diabetes at a population level. Qualitative research reveals consensus around the need for increased patient engagement, particularly in chronic care. While 68% of ACOs provide screening reminders to patients and providers, only 39% ACOs report initiating wellness communication through health IT to help manage risk, and just 36% of ACOs distribute wellness information to patients via PWPs or PHRs. As ACOs develop more advanced functionalities, it is recommended that they adopt and use integrated patient portals at a higher rate to effectively communicate with patients and offer them access to relevant information.



The trends described above may be attributed to the early stages of development of many reporting organizations. As Dr. Kennedy observes, it is only in the third or fourth year of operation that many ACOs begin to apply analytics and risk stratification to broader applications. This may explain why most of the ACOs surveyed perceive the primary benefit derived from analytics to be around basic priorities such as reducing gaps in care (84%), improving clinical outcomes (72%), or lowering hospital readmission rates (72%). Contrastingly, only 40% of ACOs observed major benefits in using analytics to improve patient safety, increase operational efficiency, or identify high-risk procedures. To support ACO efforts, health IT solutions should not only successfully manage episodes of care, but also make it easier and more convenient to achieve efficient care, improved health, and better patient experience across the continuum.

Barriers to using health IT within ACOs are generalizable to the greater arena of healthcare; major reported challenges continue to be interoperability (52%), workflow integration (48%), and data collection (35%). However, other traditional concerns were not perceived as threats, such as privacy and confidentiality (17%), limited return-on-investment (14%), and fraud (0%). It is expected that these trends will change over time as the field matures. Some organizations will be unable to fully integrate their systems and be forced to reinvest in new health IT solutions, while others are expected to be confronted with new challenges in privacy and confidentiality as ACOs and HIEs face evolving paradigms of health information exchange and data ownership. Some providers have expressed concern about the accuracy of analytics and algorithms, and the extent to which their organizations protect their liability should protected health information be breached. Informant interviewees across the board observed the need for a structured approach to ACO implementation and cautioned against rapid adoption and integration of health IT without fully understanding the business requirements. The proliferation of health records, technologies, and systems within a single organization or network can severely hamper support of accountable care activities, and the lack of clear options in an immature market can lead to many organizations investing resources into the wrong health IT solutions for their needs. Rather than take a best-in-class approach by purchasing individual leading products for different practices and applications, Dr. Kenney suggests that ACOs would do well to heed the challenge of interoperability by considering packages from a single vendor.

The primary reported barrier to using analytics was a lack of clinical integration (30%) and trained staff (30%), while 17% noted that their current infrastructure simply did not support analytic tools. Reflecting upon these findings, Ms. Barberio commented, "we need to get to a place without silos of data where information can be integrated together and used in a coordination fashion to reduce over-utilization, underutilization, missed opportunities, and gaps in care. Only then will ACOs be able to actively manage and reduce risks – and it's going to take another 4-6 years before many organizations are able to realize this vision. Although large, integrated, and academic-based systems have more resources to understand and solve these problems than some of the smaller ACO groups, we desperately need the workforce to evolve to the changing needs of value-based care." Other informant interviewees agreed, noting that workflow and productivity can be substantially restricted by health IT implementation and use if providers are not adequately trained. Similarly, some ACOs have recommended the need for change management to complement large-scale organizational transitions.



#### VII. CONCLUSIONS

Although the field of accountable care is still generally in the early stages of development and disruption, it is clear that successful and sustainable organizations must evaluate, plan, and implement their health information technology with precision to reflect underlying ACO needs. This study has revealed that ACOs are adopting a variety of approaches towards implementing health IT and analytics to achieve their objectives. New technology can create disruption and change in any practice, no matter how large or small. As such, ACOs should prioritize their health IT needs and identify how analytics should be applied to care, management, population health, and administration. User experience and design are paramount, and if and when at all possible, ACOs should make an effort to include providers in all aspects of consideration. Finally, ACOs need to implement solutions that are flexible enough to scale up as functionalities advance and provide a robust architecture to deliver a variety of services. Ultimately, accountable care should begin and end with relationships – not only among and between providers and patients, but also with technology vendors and developers to ensure that processes, results, and workflows are user-centric.



#### **VIII. APPENDIX: LIST OF SURVEYED ACOS**

Some of the organizations listed below responded more than once on behalf of individual ACOs within their network. While only a subset of the greater ACO landscape, we believe the survey accurately reflects characteristics of generally small to medium-sized ACOs. Although we achieved a response rate of 11%, we believe that many ACOs were unable to complete the survey due to their early stages of formation and/or operation.

- Aetna Accountable Care Solutions
- Arizona Priority Care Plus ACO
- Atlantic Health ACO
- AtlantiCare Health Solutions
- Beacon Health Partners, LLP
- Blue Shield of California ACO
- Catholic Medical Partners
- Coastal Carolina Quality Care, Inc
- Concord Elliot ACO LLC
- · Cornerstone Health Care
- Crystal Run Healthcare
- Dean Clinic
- Franciscan Northwest Physicians Health Network
- Humana Inc
- Indiana University Health ACO
- Iowa Health System
- John C Lincoln ACO

- Kansas City Metro Physician Association
- MedChi Network Services
- Mercy Health Select
- Monarch HealthCare
- Montefiore Medical Center
- Mountain States Health Alliance
- National ACO, LLC
- Pendulum Healthcare Development Corporation
- Physicians ACO
- Primary Care Alliance
- PriMed, LLC
- ProMedica ACO
- Rio Grande Valley Health Alliance, LLC
- Seton Health Alliance
- St. Thomas Medical Group ACO
- Texas Health Resources
- The Polyclinic

