

Perspectives from the Field:

How Risk-Bearing Accountable Care Organizations Are Approaching Technology Enablement and What It Means for the Future

OVERVIEW

Digital health and artificial intelligence (AI) adoption are accelerating across the health care system, yet their impact on costs and value remains uncertain. Drawing on qualitative interviews and multi-stakeholder convenings with accountable care organizations (ACOs), other accountable providers, technology developers, and policy experts, this analysis examines how risk-bearing organizations are approaching and implementing emerging technologies. Early adoption efforts are concentrated in patient risk identification, clinical workflow support, and administrative functions, while broader transformation is constrained by fragmented data infrastructure, misaligned payment incentives, limited evidence on real-world impact, and evolving governance challenges. Findings suggest that organizations accountable for both quality and total cost of care provide an important environment for assessing whether digital health and AI can generate meaningful value beyond efficiency gains. Policy recommendations focus on advancing interoperability, strengthening value-based payment models, accelerating rapid-cycle evidence generation, and establishing practical governance frameworks to support safe, scalable, and outcomes-focused technology adoption.

BACKGROUND

Digital health investment and AI adoption have accelerated rapidly in recent years. U.S. digital health funding reached \$14.2 billion in 2025, with AI-enabled companies capturing 54 percent of total funding, while clinician use of AI has expanded sharply across physician and nursing workflows.^{1,2} Yet, the rise of digital health has not automatically translated into lower costs or system-wide savings. Recent analyses suggest that under fee-for-service payment and in concentrated markets, AI is more likely to increase total spending in the short- to medium-term—even when it improves access, administrative and operational efficiency—because gains can be converted into more billable services or higher margins rather than lower prices.³

At the same time, federal and state policymakers remain committed to advancing the “triple aim” of better health, better care, and lower costs. In this context, risk-bearing accountable care organizations and other organizations operating under shared-savings, capitated, or full-risk arrangements are especially well positioned to approach technology not as a tool to increase fee-for-service (FFS) billing, but as an instrument for improving outcomes and lowering total cost of care. Because these organizations are financially accountable for population-level performance, they have stronger incentives than FFS entities to adopt digital tools only when those tools can be integrated into care delivery and translated into measurable value.³

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This paper reflects insights gathered through 13 qualitative interviews and three multi-stakeholder convenings involving accountable care organizations (ACOs), physician groups, technology developers, health system leaders, policy experts, and other stakeholders engaged in technology-enabled care transformation. Together, these discussions provided a broad cross-section of perspectives on the opportunities and challenges of deploying digital health and AI tools in risk-bearing care models.⁴

Our goal is not to assess specific technologies or products, but rather to understand how organizations accountable for cost and quality are approaching technology adoption, the barriers they face, the lessons emerging from early implementation efforts, and the structural conditions likely to influence future adoption and impact.

Early Adoption and Implementation Learnings from the Field

Risk-bearing ACOs are piloting and implementing digital technologies with targeted, lower-risk applications that address operational pressures, support workforce retention, and extend the capacity of existing care teams. These first-wave applications often include administrative automation, documentation support, predictive analytics, and AI-enabled outreach or patient engagement tools.

Organizations are making deliberate investment choices that align with current business operations, strategy, and infrastructure. Products that do not fit existing electronic health record (EHR) workflows are less likely to be adopted, and many organizations prefer shorter contracts or phased implementation while the market evolves. As one ACO leader noted, “best-of-breed today may not be in 24 months.”⁴ This observation reflects a pragmatic effort to avoid locking into tools before enough evidence about durability, workflow fit, or return on investment exists. In many cases, organizations rely on functionality already available through their existing EHR vendor, or on short-term contracts with third-party vendors, rather than building capabilities in house or committing to a long-term platform investment. This approach lets them learn which capabilities matter most while preserving flexibility to build or scale more durable solutions later.

Organizations are prioritizing investments that align with current operational needs. In practice, the first applications of AI are often administrative or workflow-oriented because they reduce burden on clinicians and staff, improve throughput, and help organizations manage workforce constraints. This does not make them the most transformative uses of AI; it makes them the most feasible first applications in a market where downstream cost effects remain uncertain.

Current applications of technology in risk-bearing accountable care organizations can be grouped into three broad categories:

- **Risk prediction and patient identification:** organizations combine claims, EHR, and other data to identify rising-risk patients and target outreach earlier. In many settings, these tools build on existing risk-tiering approaches but are increasingly augmented by AI-enabled data integration, more timely clinical inputs, and automated workflows that help care teams act on the insights faster. The key value proposition is not simply better prediction; it is improved ability to identify patients earlier and connect them to the appropriate interventions in time to matter.
- **Clinical workflow support:** organizations are using ambient documentation, chart synthesis, message drafting, and triage support to reduce clinician burden and improve throughput. These uses can support workforce retention and free time for more complex care, but their total cost effects depend on whether the freed capacity is used to improve care coordination or simply expand visit volume and corresponding fee-for-service billing.
- **Administrative and care-team extension:** organizations apply technology to scheduling, medication follow-up, transitional care outreach, and other administrative tasks. These applications are attractive because they reduce friction for staff and may help stabilize operations, but they should be evaluated not only for labor savings but also for whether they support better care transitions, stronger follow-up, and improved patient outcomes.

Key Challenges in Scaling Technology-Enabled Care

Risk-bearing ACOs face a set of persistent, interrelated challenges that impede broader adoption and care integration of digital health tools. Across organizations, these barriers reflect structural constraints in how care is delivered, financed, and supported—shaping where and how technology is deployed. The following sections outline the key challenges organizations identified in moving from potential to performance.

Limited and incomplete data for effective care decisions remain a major constraint.

Limited and incomplete data for effective care decisions remain a major constraint. Organizations described two distinct data problems that limited their ability to deploy technologies that require ingesting large volumes of information. The first is a shortage of usable, timely, and actionable data for clinical decision-making and care coordination, including real-time admission-discharge-transfer feeds and the specific information organizations need at the point of care. Information blocking—practices by providers, health IT developers, or health information networks that unreasonably interfere with the access, exchange, or use of electronic health information—and limited interoperability due to lack of standardization contribute to the inability to share, ingest unstructured information, and translate data across systems. Even where exchange is technically possible, variability in how data are understood relative to coding and transmission limits their reliability and usability for clinical and operational decision-making.

The second challenge is fragmented data and information technology (IT) infrastructure for reporting and payment. Rather than drawing on a single integrated data system for collecting, storing, and analyzing information, organizations often invest separately in systems for quality reporting, risk

adjustment, billing, and related administrative tasks simply to receive payment. This fragmentation forces organizations to maintain parallel infrastructures rather than a unified set of data sharing pathways that could serve both clinical and payment functions. Progress will depend not only on broader adoption of data exchange standards, but also on sharper expectations for usable, high-quality data and investment in the infrastructure needed to apply it consistently across care delivery and payment.

Misaligned payment structures, workflows, and coordination are another challenge shaping investment in technologies. Operating within constrained staffing and financial environments, organizations tend to gravitate toward technologies that fit the structures in which care is already delivered rather than those that would transform it. Many initial AI use cases therefore focus on

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workforce support, documentation, and operational efficiency. Emerging evidence suggests that this use of AI can contribute to increased utilization, coding intensity, and revenue capture.³ A recent *Health Affairs* analysis argues that AI may accelerate health care inflation by increasing the volume and intensity of coding and claims as well as supporting downstream service growth, even when it improves clinical or administrative processes.⁵ Those uses may be rational and necessary, especially when organizations are trying to preserve clinician capacity, but they do not automatically translate into improved care redesign or lower total cost of care unless paired with payment models and workflows that encourage follow-through on the information generated.

Uncertainty from limited evidence on cost and quality also inhibits scaling. While adoption of digital tools and AI is accelerating, organizations still lack actionable evidence on which technology-enabled interventions reliably improve outcomes and reduce total cost of care at scale. Several interviewees emphasized that predictive accuracy alone is not enough; the binding constraint is the capacity to act on predictions and the evidence that specific interventions improve outcomes.⁴ This uncertainty pushes organizations toward use cases with clearer near-term returns and away from investments that would require care model redesign. A majority of interviewees also highlighted a growing tension between the pace of technological change and the pace of evidence generation. Traditional evaluation approaches remain critical for assessing effectiveness and value, but they are often poorly aligned with technologies that evolve through frequent updates, iterative deployment, and continuous refinement. As AI becomes more deeply integrated into care delivery, organizations and policymakers will increasingly need rapid-learning approaches capable of generating actionable evidence in near real time while maintaining appropriate safeguards for quality, safety, and accountability.

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Lack of best practices around AI governance creates additional friction. In the absence of clear, consistent frameworks for evaluating safety, accountability, and clinical integration, organizations face uncertainty about how to deploy AI and digital tools at scale.⁶ Governance is time-consuming, resource-intensive, and dependent on workforce and patient trust, which can push organizations toward enterprise-grade, lower-risk solutions and slower adoption. One accountable care leader described how fragmented governance led to uncoordinated technology adoption, with individual teams pursuing one-off solutions without system-wide alignment.⁴

Policy Implications

The challenges above point to four policy levers for advancing technology-enabled accountable care: data, payment, evidence, and governance. The binding constraint is no longer basic technical feasibility. The more important questions are whether information is actionable, whether investment is

financially sustainable, whether evidence keeps pace with adoption, and whether governance can be standardized in ways that support safe and efficient scale. Progress will depend on aligning these four domains around use cases where technology can generate measurable value for patients, providers, and payers.

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Recommendations: Data Must Support Real-Time, Longitudinal Care

Policy must move from high-level standards to operational semantic precision. United States Core Data for Interoperability (USCDI), Fast Healthcare Interoperability Resources (FHIR), and the Trusted Exchange Framework and Common Agreement

(TEFCA) have established a common foundation that continues to improve over time,⁷⁻⁹ so the core barrier is no longer technical capability but whether exchanged data are reliable, timely, and actionable at the point of care. Closing that gap requires more comprehensive expectations for how data elements are defined, coded, and interpreted across settings. This effort can build on existing standards through open-source development layered on USCDI and TEFCA, along with more coordinated federal alignment to ensure consistency in real-world implementation. To make exchanged data reliable and usable at the point of care, the Assistant Secretary for Technology Policy, the Centers for Medicare & Medicaid Services (CMS), and HL7 Da Vinci Project should:

- Align federal and private-sector efforts around interoperable, FHIR-based exchange, including bulk-FHIR-enabled Application Programming Interfaces (APIs) and TEFCA adoption across all payer types, with standard operating procedures (SOPs) aligned across use cases.^{10,11}
- Accelerate digital quality measurement using clinical and multi-source data, moving away from legacy Electronic Clinical Quality Measure (eCQM) reporting and manual abstraction that create duplicative burden.¹²
- Require integration of claims, clinical, and patient-generated data, recognizing that claims processing lag limits claims to retrospective identification of utilization trends, while clinical feeds, such as admission-discharge-transfer notifications and patient-generated data can support decisions closer to real time.

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Recommendations: Accountable Care Organizations Need Payment Models That Support Scaling, Outcomes Improvement, and Cost Sustainability

Technology-enabled accountable care will scale more effectively when payment models create stable financial incentives for organizations to invest in tools that improve outcomes and lower total cost of care. Under current arrangements, technology adoption often concentrates where it supports FFS operations rather than where it enables care redesign. CMS's [ACCESS model](#) is an important test of outcome-aligned payment for technology-supported chronic care,^{3,13} but the broader policy challenge is to create payment structures that reward sustained performance, not just discrete activities. To that end, CMS and other payers should:

- Expand prospective and population-based payment arrangements that provide financial certainty and create room for upfront technology investment
- Support flexible resource use across the care continuum, including partnerships with technology vendors and specialists when those partnerships improve care coordination and outcomes
- Align regulatory and operational requirements so organizations do not face unnecessary transition costs when moving toward interoperable, technology-supported care delivery

Stakeholders consistently noted that technologies that can serve multiple endpoints across many use cases are especially attractive for adoption.

Whole-person care requires evidence on technology-enabled care models, not just individual point solutions.

Recommendations: Evidence Must Shift from Product Pilots to Scalable Care Models

Whole-person care requires evidence on technology-enabled care models, not just individual point solutions. That evidence is also needed more rapidly than traditional program-evaluation timelines allow, since adoption pressure already outpaces evidence on effectiveness. One accountable care leader described how early AI and digital health efforts are still largely exploratory, with organizations using pilots to understand feasibility and risk, but only beginning to transition toward structured disease-specific models that can generate scalable, generalizable evidence.⁴ To close that gap, health systems, researchers, and policymakers should:

- Conduct rapid-cycle evaluation approaches that generate actionable evidence more quickly than traditional timelines
- Prioritize evidence on integrated care models rather than isolated tools, supporting learning networks and public-private partnerships to disseminate best practices

Recent analyses also suggest that the most important question is not whether an AI product works in isolation, but whether it changes patterns of utilization, coding, referral, and follow-up in a way that improves outcomes and lowers total cost of care under real-world payment arrangements.³ Evidence generation should therefore examine both clinical outcomes and spending effects, not one without the other.

Recommendations: Governance Must Enable Safe and Scalable Adoption

Clear, standardized governance frameworks are needed so digital health tools are safe, effective, and trusted.⁶ Organizations need visibility into the tools in use, standardized evaluation and risk mitigation, and clear lines of accountability. Policymakers can establish standardized governance expectations for digital health tools across health systems and ACOs, while also reducing the burden on individual organizations by investing in shared infrastructure such as evaluation tools, registries, and inventory systems.

At the same time, governance should be designed with realism about the current regulatory environment. The absence of a mature, comprehensive AI regulatory regime means that organizations often must make deployment decisions ahead of formal regulatory clarification. That reality increases the importance of practical governance standards that can be implemented now and refined over time.

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Future Directions: From Technology Adoption to Technology-Enabled Care Transformation

Risk-bearing ACOs vary widely in their technology infrastructure, analytic maturity, and ability to operationalize digital tools. These differences will continue to shape the pace and scale of adoption. However, the interviews and convenings suggest that the next challenge is not simply accelerating technology adoption. Rather, it is creating conditions under which technology can support meaningful care transformation and generate measurable value for patients, providers, and payers.

AI Raises New Urgency Around Existing Structural Challenges

The findings in this paper suggest that AI does not introduce an entirely new set of challenges. Instead, it magnifies many of the structural barriers organizations already face.

First, AI increasingly depends on timely, longitudinal, and interoperable data. Existing challenges related to data fragmentation, inconsistent standards, and limited access to actionable information become even more consequential as organizations seek to deploy AI-enabled tools across care delivery workflows.

Second, AI increases pressure for more rapid approaches to evidence generation. Traditional evaluation approaches remain necessary, but they may not be sufficient for technologies that are updated frequently and implemented iteratively. Future research should explore rapid-learning approaches capable of assessing quality, utilization, spending, and patient outcomes in near real time.

Third, governance is emerging as a foundational capability for technology-enabled care. Organizations will need practical frameworks for evaluating tools, monitoring performance, managing risk, and ensuring accountability as AI becomes integrated into routine clinical and operational decision-making.

What Comes Next

The findings presented here represent a snapshot of how ACOs are approaching technology adoption today. Because ACOs bear financial responsibility for total cost of care, they provide one of the most important testing grounds for determining whether digital health and AI can improve outcomes without simply increasing utilization and spending. Future progress will depend less on the technologies themselves than on developments in data infrastructure, payment policy, evidence generation, and governance. Together, these areas will shape whether emerging technologies contribute primarily to greater utilization, coding intensity, and revenue—or to meaningful improvements in health, care quality, and affordability.

References

- ¹ Landi H. JPM26: Digital health funding hit \$14.2B in 2025, with AI companies taking the lion's share of dollars. Fierce Healthcare. January 12, 2026. Accessed July 16, 2026.
<https://www.fiercehealthcare.com/digital-health/jpm26-digital-health-funding-hit-142b-2025-ai-companies-taking-lions-share-dollars>
- ² Olsen E. AI adoption surges, but providers worry about deskilling. Healthcare Dive. June 2, 2026. Accessed July 16, 2026.
<https://www.healthcaredive.com/news/healthcare-ai-adoption-accelerates-provider-worries-deskilling-wolters-kluwer/821653/>
- ³ Kocher B, Zhao B, Duffy E. Thinking about the Impact of Artificial Intelligence on U.S. Health Care Costs and Spending Growth. NEJM Catalyst Innovations in Care Delivery. July 15, 2026. doi:10.1056/CAT.25.0509
- ⁴ Authors' analysis of 13 qualitative interviews and three multi-stakeholder convenings. 2026.
- ⁵ Brailer D. Why AI Will Accelerate Health Care Inflation. Health Affairs Forefront. Published online June 11, 2026.
doi:10.1377/forefront.20260605.244987
- ⁶ Parker V, Economou N, Silcox C. AI Governance in Health Systems: Aligning Innovation, Accountability, and Trust. Duke-Margolis Institute for Health Policy; 2024. Accessed July 16, 2026.
<https://healthpolicy.duke.edu/publications/ai-governance-health-systems-aligning-innovation-accountability-and-trust>
- ⁷ United States Core Data for Interoperability (USCDI). ONC Interoperability Standards Platform. April 14, 2026. Accessed July 16, 2026.
<https://isp.healthit.gov/united-states-core-data-interoperability-uscdi>
- ⁸ Shanbhag A, Bender J. Application Programming Interfaces in Health IT. ONC Blog. June 11, 2020. Accessed July 16, 2026.
<https://healthit.gov/blog/21st-century-cures-act/application-programming-interfaces-in-health-it/>
- ⁹ Advancing Nationwide Interoperability with TECA. ONC - Office of the National Coordinator for Health Information Technology. Accessed July 16, 2026. <https://healthit.gov/policy/teca/>
- ¹⁰ Health Technology Ecosystem. Centers for Medicare & Medicaid Services. April 15, 2026. Accessed July 16, 2026.
<https://www.cms.gov/priorities/health-technology-ecosystem/overview>
- ¹¹ Home - Bulk Data Access IG v4.0.0-ballot. HL7 International. Accessed July 16, 2026.
<https://build.fhir.org/ig/HL7/bulk-data/en/>
- ¹² Get Started with eCQMs. eCQI Resource Center. July 12, 2026. Accessed July 16, 2026.
<https://ecqi.healthit.gov/ecqms/about-ecqms>
- ¹³ ACCESS (Advancing Chronic Care with Effective, Scalable Solutions) Model. Centers for Medicare & Medicaid Services. Updated July 7, 2026. Accessed July 16, 2026.
<https://www.cms.gov/priorities/innovation/innovation-models/access>

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