



The Power of Information /
**New Directions in
Health System Reform**

Post-Summit Proceedings

In late 2007, Avalere Health hosted a national policy summit of leading healthcare and health information experts on “The Power of Information/New Directions in Health System Reform.”¹ The Avalere Summit brought together many of our nation’s leading experts on health information and health policy to develop specific, prioritized reform goals that, if adopted, would fundamentally restructure U.S. healthcare. The Summit produced a set of concrete recommendations on how to begin improving the health system through increased use of health information. The findings are summarized in this report.



Summit Participants

Linda Bergthold
Health Policy Consultant

Robert M. Califf, M.D.
Duke Translational Medicine Institute

Sophia Chang, M.D., M.P.H.
California HealthCare Foundation

Carolyn Clancy, M.D.
AHRQ, Department of Health
and Human Services

Alan Davidson
Google, Inc.

Suzanne F. Delbanco, Ph.D.
Independent Consultant

Carol C. Diamond, M.D., M.P.H.
The Markle Foundation

John P. Glaser, Ph.D.
Partners HealthCare

Donald W. Kemper, M.P.H.
Healthwise

Bob Kerrey
The New School

John Lumpkin, M.D., M.P.H.
The Robert Wood Johnson Foundation

Mark McClellan, M.D., Ph.D.
The Brookings Institution

Mark E. Miller, Ph.D.
Medicare Payment Advisory Commission

Jeremy Nobel, M.D., M.P.H.
Harvard School of Public Health



Avalere Health Foreward

This paper reflects the Summit proceedings, background research, and participant discussion. The Summit launched a new dialogue on how information should be leveraged to address critical prioritized reform goals. The results of the one-day meeting establish a new framework for needed reforms through the use of information.

The Summit revealed many opportunities to drive both near- and long-term changes in how information is currently maintained and used to ultimately realize the vision for U.S. health system reform. Consequently, Avalere Health identifies, in the discussion on each prioritized reform goal, several key considerations to advancing the dialogue. Avalere Health suggests these specific considerations to further engage our health system community in this discussion and spark actions that will begin to implement the Summit vision.

The Charge of the Summit

Each of the Summit's participants is recognized as a national leader in his or her fields. Together, they brought a rich cross-section of public- and private-sector expertise from virtually every part of our health system, including consumers, physicians, provider institutions, healthcare delivery systems, health insurers, employers, researchers, federal and state payment systems, state health systems, public health programs, health information technology (HIT), and health system reform including expertise on cost, quality, and access issues.

During the Summit, the group was asked to identify three specific, high-priority health system reform goals that transcend access, cost, and quality objectives, and to specify how health information could and should be used to advance the identified goals.

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Overview

More timely, accurate, complete, and usable information for preventing and treating illness and disease is increasingly recognized as a necessary component to improve the U.S. health system. Most comprehensive health reform proposals today include health information and HIT as core components. There is near-universal agreement that increased use of electronic health information should be the foundation underlying fundamental system reform. However, there has been less discussion of proposals that may address the specific roles and uses of information to advance goals of access, cost control, and quality improvement. This last point—the role of the information itself—is the background against which Avalere Health launched the Summit.

The Summit defined three key healthcare goals that can and should be advanced today through the better use of current health-related information: put people first, enable systematic quality care, and pay for value.

The Importance of Health Information

Is there any step or process throughout the health system that is not heavily dependent on information? Whether it is insurance, treatment, or research, little can occur in healthcare in the absence of substantial amounts of information. Consider the critical role of information in:

- Accelerating the pace of expanded medical knowledge;
- Framing epidemiological studies that help determine causal links of illness, successful treatments, and best practices; and
- Developing reporting systems that support public health surveillance, health program oversight, and regulatory compliance.

Information is also often the catalyst for identifying and solving deeply embedded challenges of our health system. For example, information on the degree of geographic practice variation across similar sets of patients and providers prompted increased emphasis on best practices and evidence-based medicine. Similarly, the landmark report “Crossing the Quality Chasm” quantified the annual number of avoidable deaths attributable to errors, fostered systemic changes in hospital procedures, and created the impetus to improve the way we implement and measure medication prescribing and dispensing processes.

Physicians rely on multiple sources of information, including patients, medical journals, and their peers. Despite growing volumes of such information, physicians are often challenged to access, use, and apply the information. Each of the three traditional objectives of reform—improved access, controlling costs, and improving quality—depends not just on having timely, secure, patient-level and practice-level information but on understanding the information and acting on it. Whether it is understanding the availability of community health resources, the effect of new technologies on healthcare spending, or the ability of a new treatment to improve a patient’s quality of life, each policy goal depends on the existence of actionable, timely, contextual, and relevant health information.



Reform Priorities and the Role of Information

By way of preamble, each of the Summit participants embraced the premise that successful reform of our health system depends critically on a robust foundation of health information—from the creation of data at the point of care to its use by clinicians and patients, to the ongoing improvement of knowledge creation and dissemination. Properly deployed, with appropriate protections for privacy and security, health information has the potential to change how the U.S. healthcare system operates. The group identified three specific, high-priority reform goals that could be immediately advanced through the use of improved health information:

- **Put people first—help individuals enable self-care and make better healthcare decisions.**

Pertinent health information, presented in a trusted environment, can position consumers to make better health decisions, better evaluate their care options, seek out quality providers and treatments, and make cost-effective choices about their care.

- **Enable systematic quality care—create a reliable, predictable, and measurable delivery system for high-quality care.**

Meaningful, comparative information will permit patients, clinicians, and payers to seek, deliver, and pay for proven, effective care.

- **Pay for value—link payment and incentives to the value of health services being delivered, including prevention.**

Easily accessible, comprehensive information on the cost and quality of services will promote a healthcare system driven and rewarded by value.

“Information can lead to fundamental changes.”

Summit attendees noted that each of these three goals implies a cascading series of fundamental and necessary changes to today’s health system; that each is heavily dependent on the appropriate use of health information; and, for any one of these reforms to be successfully achieved, *all three* ought to be advanced. Each reform goal is discussed in greater detail in the attached briefs.

Summit Recommendations

In addition to identifying specific reform goals, Summit participants also identified three unifying themes that cut across their suggestions: better use of existing information; creation of new information; and better transmission and communication of information.

Better Use of Existing Information

Major strides can be achieved today if we do more with what we know. We must make health information more accessible to more people and organizations, and our health systems can and should do much more with the information that is currently available. A critical first step is helping physicians and patients better adopt today’s best practices and evidence-based medicine.

Currently, our healthcare system collects huge quantities of information, even if our ability to store, transmit, and retrieve the information is limited. Clinical data, captured at the point of care, is currently used for the provision of care to the patient. At some level today, and perhaps more so in the future, we have to apply this information—with appropriate protections including de-identification of patients—to measure and improve the quality of care that providers deliver and to improve the health of populations.



Clearly, the successful provision of care depends critically on the clinician and patient sharing information freely with each other. This exchange is highly dependent on establishing a trusted environment for the exchange, built on a strong foundation of information policies that protect patients' privacy and security. To fully understand, prevent, and treat illness and disease, population-based data should be available to authorized health system stakeholders seeking to improve care, quality, and value. The panelists emphasized the importance of using the full array of currently available health information to improve today's care decisions, support the imminent health system needs of the baby-boom generation, and meet increased demands on our already stressed health system.

“The problem isn't more and better protocols;
the problem is the ones we do have, have not been adopted.”

Creation of New Information

To permit the most effective use of information, data should be captured at the patient level and also at the practice level, and we must enhance our ability to efficiently maintain needed information. A robust, secure, interoperable HIT infrastructure is an essential and expected foundation for a trusted, dynamic information model. New and better information will also require changes in behavior across all authorized stakeholders, with a broad range of appropriate incentives.

Better Transmission and Communication of Information

Panelists also agreed that we must improve our skills in converting raw data into information, knowledge, and subsequent changes in behavior. Data must be analyzed and conveyed in a privacy-protected manner so that it is meaningful and actionable for patients, clinicians, and payers alike. The requisite technical infrastructure combined with a trusted framework for privacy and security will enable appropriate access to needed information when and where it is needed.

In developing new models for communication, the participants stressed the need to consider lessons from models of social change, social marketing, robust public awareness campaigns, and community-wide activities to reach people where they “live” (e.g., grocery stores, salons and barber shops, employers).

Avalere's Questions for Consideration

- Given the expectation that a robust HIT infrastructure is needed to efficiently and comprehensively advance these reform goals, what are critical near-term policies and actions that must be advanced?
- How do we establish the needed privacy, security, and data stewardship framework, using identifiable and de-identified data, for a health system that is intentionally maintained and improved through health information?
- How can we engage all the needed stakeholders to support and use today's information in a more systematic and meaningful way?

The Summit results recommend a new conversation for health system stakeholders, one focused on the role of information in accelerating long-overdue reforms of our health system.



Put People First

The Priority Goal

Summit participants defined “Put People First” as the top priority reform for the U.S. health system. The goal is based on participant consensus that healthcare should be patient-centric, outcomes-driven and should engage patients in managing their health and healthcare. Engaging individuals in their care as informed consumers would be a fundamental shift from the current healthcare system. Today, patients are viewed as somewhat passive recipients of services rather than engaged partners in critical decisions. A reformed system must enable enhanced self-care and help people make better healthcare decisions. As individuals gain access to available information, they will engage in their health and the health system to make better, more timely, and more cost-effective health decisions.

“The greatest untapped resource in the health system is the patient.”

The Role of Information

Without information, we cannot “Put People First.” More informed individuals can better understand their health and know when to seek care or question a particular recommendation. Relevant information will position consumers to take more ownership of their health, evaluate their care options, and make appropriate choices about their care. To enable this reform goal, patients and their caregivers need specific information about their health status, the circumstances surrounding their current health system, the specific treatment or treatment options, the quality of their providers, the costs of services, and expected outcomes. Information can only be useful to patients if it is accessible and comprehensible. For patients and consumers of all ages, cultures, and levels of education, information must be provided in a culturally appropriate manner.

Providers play a critical role in supporting this priority goal. They are often the translator and advocate for the patient. Research reveals that they are also the most trusted source of information. The first reform priority is thus heavily dependent on ensuring providers both generate and have access to the information they need to support patient needs and on advancing another priority Summit goal: enabling systematic quality.



Summit Recommendations

In the short term, the health system should provide meaningful information to consumers and patients alike, and should promote targeted messaging and public health campaigns on the prevention of chronic illness, similar to anti-smoking campaigns. Individuals, in collaboration with their providers of care, should receive information that helps them manage their health and prioritize their treatments, particularly if they have multiple chronic illnesses. These near-term information activities must deliver knowledge in an accessible manner and also meet recognized health literacy challenges.

In the longer term, we must provide comparative information on health quality and resources (e.g., availability of quality and cost information about providers, treatments, and community services) to both consumers and providers. Such comparative information is needed by patients to help navigate their care options and the healthcare system, and to support patient engagement with the assistance of their trusted care providers.

Impact on Diabetes and Cardiovascular Services

The general public will have access to consistent information on maintaining healthy lifestyles with particular focus on nutrition, weight management, and obesity prevention. Providers will be able to share successful health practices with each other and with patients in an accessible way. Patients will be able to access guidance and decision support to help prioritize multiple treatment and behavior recommendations consistent with their severity of illness. By example, many patients and clinicians would welcome insights into the question: “Is it more important to take my daily aspirin, monitor my glucose, stay active, or keep to my diet?” Over time, evidence-based guidelines will emerge on the combination of diabetes and cardiovascular disease, and there will be established methods for delivering information in a culturally and information-appropriate way.

Avalere’s Questions for Consideration

- How do we help providers help patients, particularly in a world that is still largely paper driven? What information tools do they need to support a more active and engaged patient?
- How do we reform reimbursement structures to link payment to provider performance, and thus align the provider incentives with the care and quality-of-life goals of the patient?
- How do we translate complex clinical and performance information for the broad range of patients and caregivers? Do we start with target patient populations that might have the greatest benefit like chronically ill patients?



Enable Systematic Quality Care

The Priority Goal

Summit participants defined “Enable Systematic Quality Care” as the second prioritized goal. More broadly, the desired goal is development of a reliable, predictable, and measurable healthcare delivery system. Such a system can only emerge with the development of standardized information, and the generation and diffusion of medical knowledge. However, today’s healthcare system is unable to identify, consistently replicate, or measure high value or quality services. Information that does inform quality care (e.g., evidence-based medicine, clinical guidelines) is not adequately or consistently disseminated, let alone broadly applied by providers.

Physicians often lack insights into their own treatment patterns. More timely feedback on performance including outcomes of care would increase physicians’ ability to improve their treatment. This reform goal is tightly related to the two other reform goals: it supports a common understanding of value and quality services, it works to ensure continuous quality improvements, it allows individuals to make more informed choices, and it supports a healthcare system that consistently pays for these services.

The Role of Health Information

The availability and application of consistent information is critical if we are to enable systematic quality care. Participants underscored the need to harness raw data to create better information, to increase knowledge, and ultimately to improve the diffusion of knowledge. To leverage the information, existing and new sources of patient-level and practice-level information must be analyzed and measured. De-identified data resources, when feasible, can be leveraged, and standards and rules regarding privacy and security for collection, storage, use, and transmission must be developed.

With enhanced information, the care delivery system and individual providers would have the tools necessary to support a systematic approach to delivering high-quality care, relying on the public health sector’s “rapid learning model.” This model builds an explicit and continuous feedback cycle, in which information is provided to systems of care on ways to improve the cost, quality, and/or efficiency of their services. In this fashion, changes to the system are implemented, resultant outcomes are measured (generating more information), and providers, organizations, and care delivery systems subsequently reevaluate their care processes based on newer insights.

This rapid learning approach not only requires enhanced information and better diffusion, but also engaged stakeholder participation from patients, providers, and payers alike. Increased availability, consistency, and access to this type of clinical information, and a better understanding of its implications, will foster transparency and generate improvements across the care delivery setting. This reform in particular recognizes the importance of arming the individual provider with the needed information, knowledge, and tools to provide quality service.



Summit Recommendations

Participants developed several short- and long-term recommendations that would begin to move healthcare toward a more reliable, predictable, and measurable delivery system. In the short term, patients, providers, and payers must work to make available information more accessible for better decision-making, both generally, and more specifically, at the point of care. As a care system, stakeholders need to use the substantial amounts of information we currently have, do more with what we know, and make valid information more accessible to the public. In part, we must also measure more systematically what we already know and work to develop information that is accurate, complete, consistent, and accessible to enable reliable measurement.

“Practice-level or provider-level data is available and has numerous applications.”

In the long term, Summit participants agreed that all stakeholders should work toward the use and distribution of information including needed standards and information-sharing rules that protect privacy and security. We must also tie knowledge diffusion to how people are willing and able to access information (e.g., through a wide range of communication methods). This will be a critical step to ensure we develop mechanisms to maintain continuous quality improvement.

Impact on Diabetes and Cardiovascular Services

A systematic quality environment for patients with both diabetes and cardiovascular disease and their providers would have consistent information derived regularly from each interaction between a patient and the health system. The information would be comparable across providers and care settings, with variations based on patient characteristics and preferences. There would be consensus guidelines regarding the combination of diabetes and cardiovascular disease that are translated and accessible for providers and patients through multiple information channels. Care communities’ understanding of best practices would evolve over time consistent with the evolution of available information and knowledge. The parts of the system that deliver care or supplies to diabetes and cardiovascular patients would routinely assess their effectiveness in improving patient outcomes, and would regularly refine the care and service delivery processes to reflect new learnings.

Avalere’s Questions for Consideration

- Which current incremental reforms may help move us ahead toward these fundamental reform goals (e.g., pay-for-performance, comparative effectiveness, the medical home)?
- What current population-level information, if used and applied consistently, would have the greatest impact on improving quality of care? How could we begin to create and use this information and what safeguards need to be in place?
- As we develop more systemic use of health information, what responsibilities and accountability need to be established for data stewardship?



Pay-for-Value

The Priority Goal

Summit participants agreed that our healthcare system must “Pay-for-Value,” and that a reformed U.S. health system must tie payment and incentives to the value of health services being delivered, including preventive services. All public and private stakeholders alike should be able to recognize and understand “value” services and increasingly be able to compare the quality and price of those services. This reform goal is tightly related to the two other reform goals; it creates an environment in which individuals can make more informed choices with respect to value. It also builds on a system that enables systematic quality by ensuring continuous improvement in quality is integral and connected to the payment system.

Today’s health system, however, is greatly challenged to identify quality cost-effective services, let alone establish a payment system that promotes these services. All payers, including individuals, should be able to engage the system with an understanding of value. If more transparent information on the quality and cost of services existed, payers throughout the system could drive a market that rewarded high-quality, cost-effective services through greater demand and enhanced payment.

The Role of Health Information

Paying for value could address the fundamental absence of information on quality and cost in today’s health system. If we definitively knew what constituted the best care, do we doubt that health plans and individuals would recognize and reward such care through a “redefined” payment system?

All health system stakeholders would benefit from the provider- and system-level information necessary to assess the value of care being delivered. Importantly, the information should span individual healthcare services to permit the development of consistent definitions and measures of quality that evolve beyond a single office visit or treatment. In addition, to assess value, pricing information must accompany quality information and represent comparable services across providers and care settings. Finally, consistent system-level information must be available to allow payers at the community, regional, and national levels to compare value.

“If we know what 'value creating' services are, we can catalogue what they are, who is doing them, and how much they cost.”



Summit Recommendations

In the short term, the health system should quickly establish current consensus on “value” in today’s health system. This would not occur for all aspects simultaneously, but rather occur where it will make the greatest difference (e.g., chronic care). With this consensus, public and private stakeholders must measure variation in value by region and provider, begin to identify top performers (e.g., physicians, hospitals, plans, communities), and disseminate information to plans and other key stakeholders. Over the longer term, we must design reporting structures that continue to define and evolve the definition of value (e.g., comparative effectiveness) across the health system continuum and determine how best to pay-for-value.

Impact on Diabetes and Cardiovascular Services

A reformed U.S. health system would pay appropriately for a wide array of proven valued diabetes and cardiovascular health interventions and strategies. Health plans, employers, providers, and individuals will know which preventive services—lifestyle, screening, prophylactic, and treatment services—will yield the best outcomes. Increasingly, these best practice, valued services will be tailored to the unique characteristics of each individual. Additionally, systematic evaluation of quality and cost-effective services in all regions throughout the United States will become the norm. Individuals will be able to look up community services and providers who best meet their diabetes and cardiovascular needs and understand what they charge for their services. Providers will be able to benchmark their practices, and employers and plans will be able to purchase services based on value.

Avalere's Questions for Consideration

- For chronic or complex illnesses or diseases, how do we begin to shift the current fragmented payment system to one that pays for value across the entire episode of care, and not necessarily limited to a single interaction with a single provider or a single setting of care?
- How do we ensure that providers have the needed benchmarking and feedback tools to understand the value of their services?
- Do we begin our efforts by focusing on those patient populations who have the greatest gaps in quality needs and who may experience the greatest quality and efficiency benefits (e.g., patients with chronic illness)?

Prepared by Avalere Health
Shannah Koss
Sheera Rosenfeld



Avalere Health LLC
1350 Connecticut Ave., NW
Suite 900
Washington, DC 20036
t: 202.207.1300

www.avalerehealth.net