Quick Summary

Integrating health care data with data from other sectors is essential for fostering a more holistic and accurate understanding of individual and community health and well-being. This paper provides guidance for those in non-health care sectors (e.g. housing, social services, community-based organizations) on effectively engaging and advancing conversations with health care stakeholders about sharing data. It focuses on the specific stakeholder of hospitals/health systems and addresses the following components:

1. General background on hospitals/health systems
2. Important drivers and concerns of hospitals/health systems (e.g. financing, incentives, accountability, etc.)
3. The value for hospitals/health systems of exchanging data with other sectors

This paper is intended to provide context and background for your approach to local health care leaders and point to areas of potential action or opportunities to partner with health care. In the introductory paper to this series, we provide a basic method for engaging stakeholders in your community who may share your interest in collaborating and sharing data. We invite you to consider how to approach health care colleagues using the framework and guiding questions in the introductory paper.

Similar papers on other sectors are available at www.dashconnect.org/value, along with a growing list of curated resources and a space to share your feedback on whether this approach worked for you.
Discovering Value in Your Multi-sector Collaboration

Health care providers are increasingly recognizing that social and economic conditions have a significant impact on health. With changing financial incentives intended to encourage improved health outcomes and cost savings instead of simply providing more treatment, hospitals and delivery systems are placing a greater emphasis on establishing relationships with community partners. Efforts may include working with community-based organizations to orient care around a person’s full set of social and well-being needs, not just their health care needs. For example, hospitals may partner with social service agencies to incorporate data on social determinants of health into their work processes to help reduce readmissions, or they may engage community organizations to design programs that help uninsured patients access needed services, improving both outcomes and costs. Similarly, organizations in other sectors are exploring how to harness, link, and analyze various health care data sets to understand and address health disparities at the community level. Integrating health care data with data from other sectors helps address the holistic needs of individual patients while informing the development of population-level programs and policies that can improve outcomes across a spectrum of sectors.

ACKNOWLEDGMENTS

This paper was written by the DASH National Program Office. The following individuals provided expertise and feedback for this report: Rahel Berhane, MD, Medical Director at Children’s Comprehensive Care Clinic; Stephen Brown, MSW, LCSW, Director of Emergency Preventive Medicine at the University of Illinois Hospital and Health Sciences System; Adam Perzynski, PhD, Associate Professor of Medicine and Sociology at Case Western University; and Mark Shen, Senior Vice President of Network Development at Ascension Texas.

ABOUT DATA ACROSS SECTORS FOR HEALTH (DASH)

DASH, a national program of the Robert Wood Johnson Foundation led by the Illinois Public Health Institute in partnership with the Michigan Public Health Institute, aims to align health care, public health, and other sectors to systematically compile, share, and use data to understand factors that influence health and develop more effective interventions and policies. DASH and its partners in All In: Data for Community Health are creating a body of knowledge to advance this emerging field by identifying and sharing opportunities, barriers, lessons learned, promising practices, and indicators of progress for sharing data across and beyond traditional health sectors.
The challenges of the United States’ health care system have been well-documented. Despite improvements in life-saving treatments and state-of-the-art technology, millions of Americans remain uninsured, disparities in health outcomes persist, and costs are unsustainable.

- The U.S. spends more than $3 trillion each year (close to 18% of gross domestic product) on health care.\(^1\) Families bear the burden of these costs, not only through insurance premiums and out-of-pocket expenses, but also through taxes. In 2015, American households paid an average of 19% of their income on health care, with uninsured and low-income households bearing disproportionate burdens.\(^2\)

- Health expenditures in the United States are far above those of other countries.\(^3\) They increasingly consume large portions of federal, state, and employer budgets.

- Most of a person’s health or well-being is determined by factors outside of the health care system, including socioeconomic status, genetics, the environment, and social circumstances.\(^4\)

- There is mounting evidence that US under-investments in social services relative to health may be contributing to the country’s poor health performance.\(^5\)

- High-need patients are typically among the sickest, with multiple conditions and the most complex health needs. A small fraction of the population drives the majority of health care spending.\(^6\)

- Individuals with chronic illness and/or behavioral health conditions usually experience uncoordinated care resulting in lower quality care, poorer health outcomes, and higher health care costs.\(^7\)

These statistics and trends point to a need for transformative changes that prioritize prevention and wellness over “sick care.” This requires moving beyond health care to address other factors in the broader community context that have an impact on health, including social, economic, and environmental influences. If you work in a sector outside of health care, you have access to relationships, knowledge, and data that are valuable to the health care sector and their landscape as incentives change.

**HEALTH CARE’S MAIN ACTORS**

At a most basic level, clinical health care can be described as having five main actors:

- **Patients/Consumers**: Individuals receiving medical care.

- **Providers**: Hospitals, health systems, physicians, physician networks, health clinics, home health, nursing homes, hospices, pharmacies, etc. that provide a range of health care services.

- **Purchasers**: Medicare, Medicaid, employers, individuals, charities, and other entities that pay for health care.

- **Payers**: Insurance companies and managed care organizations that act as intermediaries, arranging for the payment of health care services.

- **Suppliers**: Pharmaceutical companies, medical device manufacturers, information technology vendors, etc. that supply goods and services to the health care system.
Changing Markets, Changing Regulations

The institutional structure within which hospitals are situated is dramatically evolving. Where hospitals were once standalone community-based institutions, they are increasingly part of “integrated delivery systems” or “health systems” that combine traditional “acute care” settings (e.g. emergency departments) with outpatient clinics (e.g. primary care practices), employing or contracting with an extensive network of physician practices.

Integration has allowed health care delivery institutions to gain bargaining power with payers, and more physicians are working in large integrated delivery systems to avoid the uncertainties of independent contracting and private billing. Health systems integration is intended to realize cost savings from economies of scale, provide health care institutions with a competitive edge, and improve health outcomes from more patient-centered care.

Public and private hospitals alike are prohibited by law from denying a patient care in an emergency. The Emergency Medical Treatment and Labor Act (EMTALA) passed by Congress in 1986 explicitly forbids the denial of care to indigent or uninsured patients based on a lack of ability to pay. This may result in costs for that care that are not covered by any revenue.

Recent regulatory changes are causing some hospitals to shift their focus towards improving community health outcomes. The Affordable Care Act of 2010 requires tax-exempt hospitals to complete a community health needs assessment (CHNA) and implementation strategies. About half of all hospitals in the U.S. are tax-exempt and have instituted “Community Benefits” or “Community Engagement” departments that are responsible for developing the CHNA and implementation plan. The Community Benefit Insight tool provides data to the public on community benefit spending among tax-exempt hospitals in the U.S.

CASE STUDY: ADDRESSING THE ROOT CAUSES OF HOSPITALIZATIONS

Cincinnati Children’s Hospital Medical Center

When Cincinnati Children’s Hospital Medical Center realized that children living in the Avondale neighborhood were spending disproportionately more nights in the hospital for asthma events, they joined forces with social workers, school nurses, legal aid advocates, pharmacists, families and others in the community to develop a data-driven action plan to address this issue. The hospital integrates electronic health records and geographic information systems data to identify “hot spots” of poor child health and better understand and address underlying root causes that are leading to hospitalizations. Hospital staff meets regularly with community partners to review pediatric asthma admissions and discuss which supports can be provided to prevent asthma attacks, reduce hospitalizations, and improve transitions from the hospital back into the community. Learn more »
CHNAs represent an important opportunity to improve the health of communities by giving hospitals the specific information they need to do so. CHNAs can help improve coordination with other organizations that make up the fabric of the health and health care system. Some hospitals are starting to recognize that they cannot improve community health outcomes alone, and thus may need to partner with other local health systems and community-based organizations and adopt a collective impact model that brings these organizations together around a common agenda.

The Affordable Care Act requires CHNAs to take into account input from “persons who represent the broad interests of the community served by the hospital facility, including those with special knowledge of or expertise in public health.” Community partners can work with hospitals to ensure that the CHNA process goes beyond just checking a box to comply with the law and results in tangible benefits to communities. One way they can do this is by advocating for a “Community Health Scorecard,” which empowers community-based organizations to hold hospitals and health systems accountable by setting joint health outcome goals by both the community and health system(s).

What Do Hospitals/Health Systems Care About?

Survey feedback from hospital CEOs highlights these concerns and themes:8

- Improving quality, safety, and patient satisfaction
- Aligning primary care physicians
- Engaging physicians in improving quality
- Maintaining a good reputation in the community
- Adapting to new payment models (moving from volume to value)
- Maintaining their level of revenue
- Decreasing their costs, including uncompensated care

A recent BUILD Health Challenge report summarizing feedback from hospital and health system executives found that their motivation to form partnerships to improve community health stems not just from financial considerations, but also from a commitment to their organizational missions.9 Access to real-time data from other sectors improves their understanding of the root causes of health needs in their communities and helps them gain insight into how to address some of the above issues, such as improving quality, costs, and outcomes and strengthening community connections.

HOSPITAL FINANCING

Hospitals are traditionally reimbursed based on the care they provide to patients; they bill insurance companies and payers based on a negotiated rate (in the case of private sector insurance) or a formulaic rate (in the case of Medicaid or Medicare). The multiple layers of reimbursement structures are intricate and hospitals are continually positioning themselves to maximize revenues in this complex environment.

Traditionally, most health care organizations use a fee-for-service model, receiving payments based on the number of services, treatments, and tests they perform. Under this type of payment model, the more care hospitals/health systems provide, the more money they are paid. There are still strong economic incentives for volume (providing more care), not value (better quality for lower cost). However, the share of health care paid using a fee-for-service model is shrinking.
BACKGROUND

We think our job is to ensure health and survival. But really it is larger than that. It is to enable well-being.

—DR. ATUL Gawande

Value Based Payment (VBP) is an alternative to this model, where purchasers of health care (government, employers, and consumers) and payers (public entities and private insurers) hold the health care delivery system at large (physicians and other providers, hospitals, etc.) accountable for both quality and cost of care. When applying value-based models, participating hospitals and health systems are responsible for a set group of patient/participants, and are evaluated on their individual health outcomes as a group. Value-based approaches reflect a belief that episodic payment models encourage unnecessary and duplicative services, and discourage a focus on the long-term health of patients.10

In 2017, 41% of payments to health systems came from traditional fee-for-service models (down from 62% in 2015), while the rest came from a full value-based care arrangement (34%) or a fee-for-service/value-based care hybrid (25%).11 As more hospitals/health systems shift to value-based care, health care executives are placing greater emphasis on sharing data with organizations that contribute to a patient’s whole care, including those traditionally outside of the health care sector.

HOSPITAL INCENTIVES AND ACCOUNTABILITY

Quality Benchmarks

Almost all hospitals publicly report data about their quality and patient experience to the Centers for Medicare and Medicaid Services. This data is published on the Hospital Compare website. A portion of hospital reimbursement from Medicare is tied to how well they do on these standardized measures, or “HEDIS measures,” such as rates of infection, timeliness of clinical care, and patient experience.

Hospitals also have to complete a periodic accreditation process by an external organization that assesses their compliance across a number of different domains. Failure to pass accreditation prohibits hospitals from being reimbursed by federal agencies. Health plans also evaluate hospitals’ quality scores — and of course their costs — when making a determination about whether to include them in their network of providers.

Federal, state, and private insurance plans have begun to financially penalize hospitals for failing to meet quality benchmarks (e.g.

CASE STUDY: PROVIDING PATIENT-CENTERED CARE

Children’s Comprehensive Care Clinic

Families of children with medical and behavioral complexity often experience difficulties navigating the health care system and coordinating between all the specialists involved in their care. To improve care coordination for children with complex chronic conditions in Austin, TX, Children’s Comprehensive Care Clinic developed a patient-controlled mobile application that brings together individuals and entities involved in the care of a child, with the family at the center. A common technology platform is used to integrate data from schools, EHRs, payers, health information exchanges, and the patient and display it in a user-friendly application. The patient or their parent controls who has access to information, relegating them as an active participant in their care team, and the care team uses the information to reduce duplicative work and gaps in care. Learn more »
when too many patients are readmitted within 30 days of discharge). Increasingly, new reimbursement strategies have hospitals in some communities becoming responsible for the care of an entire patient cohort, i.e., a subset of the population in their community. Incentives to keep people healthy and out of the hospital are becoming stronger. Seeing physicians in their offices is much less expensive than being treated in the emergency department.

**Hospitals have a clear interest in understanding and managing risks that can be traced to social determinants of health, but they are seldom equipped to address such circumstances.**

Hospital leaders are wrestling with this changing environment for reimbursement and care quality. Hospitals have huge brick-and-mortar facilities that require capital and operating funds, and they are often one of the larger employers within a community. They often serve as anchor institutions in their communities, or place-based entities that can use their local social and economic capital to improve the wellbeing of residents in the neighborhoods in which they reside. Hospital/health system leadership may be interested in investing in the community as a way to recognize their anchor mission.

**EHR Incentives**

Medicare and Medicaid electronic health record (EHR) incentive programs have driven hospitals to adopt and pour substantial resources into the implementation of EHRs. EHRs allow hospitals to make real-time, patient-centered records available instantly and securely to authorized users. The digital format of EHRs allows information to be shared with all of the providers involved in a patients’ care across multiple health care organizations.

Protected health information like EHR data is regulated by the Health Insurance Portability and Accountability Act (HIPAA), which provides data privacy and security provisions for safeguarding patients’ medical information. Not surprisingly, hospitals may have concerns about navigating the complex rules, regulations, and policies surrounding health care data sharing, so community partners may benefit from consulting with a public health lawyer who can conduct a legal review of the state and federal regulations that may apply and propose solutions that are HIPAA-compliant. The Network for Public Health Law provides free technical assistance from public health attorneys experienced in these issues. Steps can also be taken to alleviate privacy concerns by removing unnecessary data elements or aggregating data so that individuals cannot be identified.

---

**HEALTH CARE DATA 101 GUIDE**

DASH’s Health Data 101 Guide, published in March 2018, serves as a starting point for non-health sector professionals who want to further investigate the health care data available in their local communities and consider how to best leverage it to tackle priorities identified by multi-sector partnerships.

The guide answers questions such as:

- Who collects and uses health care data?
- What are some common types of health care data?
- How is health care data stored and what systems are used to store it?
- What are typical uses of health care data?
- How can different organizations access health care data?
- What data are available in my local community?
Hospitals have a clear interest in understanding and managing risks that can be traced to social determinants of health, but they are seldom equipped to address such circumstances. Public health departments, government agencies, non-profits and community-based organizations have valuable stores of expertise, information and data flows that can help fill this void and are of tremendous value to health care providers. This next section describes key drivers of value for hospitals/health care systems and outlines opportunities for action for data sharing initiatives to improve health care providers’ impact, effectiveness, efficiency, and capacity.

**Impact/Effectiveness**

- Performance on standardized quality, safety, and patient experience measures matters significantly to hospitals and is often tracked closely. It can affect both revenue and reputation, two top priority issues for hospitals.

- Hospitals — especially those that have a significant portion of their revenue tied to quality or value-based contracts — will appreciate the ability to target high-cost, high-need patients with effective interventions. Information systems that are able to securely identify individual patients over multiple systems is the key to implementing multi-sector care coordination systems.

- Hospitals do not consistently excel at conducting outreach to patients while they are at home (before or after a hospitalization). This can sometimes lead to adverse health events that result in costly readmissions. Community partners can provide support to patients to prevent hospitalizations and follow up with them after they are discharged to improve their transition from hospital to home.

**Efficiency**

- Each hospital has its own unique mix of payers and payment incentives, based on its corporate status, location, competition, community, and relationships. It is important to understand the unique nature of a hospital’s patient population and payers in order to understand their openness to new relationships and partners.

- Hospital staff (physicians and nurses, and especially those within the emergency department) could benefit from data and information from social service sector about the service utilization and conditions of incoming patients that could improve patients’ care.

- The ability to reduce duplication of services and improve coordination of care is important, especially for hospitals that experience crowding and overflow of patients. Interchange of data about services provided to individuals in multiple settings provides a much more complete understanding of the patients seen in health care settings.

**OPPORTUNITY FOR ACTION:** Review your programs and data systems to understand and be able to describe how you can identify, reach, and coordinate services for local consumers of all levels of need.
Capacity/Infrastructure

- The competitive aspect of the market matters; hospitals often compete against each other for patients, physicians, and staff. How they are viewed by their current and prospective employees/workforces, the community, and health plans are all factors that will resonate with hospital leadership.\(^\text{13}\)

**TIP:** To better assess the market forces that hospitals are operating under, one useful tool is Catalyst for Payment Reform’s market assessment.

- Hospitals tend to have multiple ongoing projects and initiatives, and the bandwidth of leadership and staff can be difficult to cultivate. To the extent that multi-sector collaboratives can be a hub for other social sector partners, hospital leadership may appreciate the “common table” and ease of access to partners that can help provide supporting services (e.g., housing, food, etc.).

- Although most data are clinical and administrative, electronic data systems in most hospitals are highly sophisticated and there is considerable opportunity for collaboration and integration of data from other entities.

- It’s critical to identify “champions” to reach out to who are in leadership positions that allow them to see the benefits of data sharing at a systems-level. Consider starting with local- and state-level health systems. Hospitals that are part of a national system may have a data strategy that is controlled at the corporate level, making it more difficult to identify local champions.

- Understanding the roles and responsibilities within a hospital or health system is helpful in identifying who to reach out to. For example, the executive suite collectively may be interested in value-based payment. The community benefits/community engagement department may be responsible for developing a CHNA and implementation plan. The chief financial officer may be interested in investing in the community to achieve the organization’s anchor mission.

**OPPORTUNITY FOR ACTION:** Review your internal priorities and external relationships and any technical or legal constraints. Compare this information with what you know about your potential partners, considering the possibility of coordinated relationships with other local organizations with an interest in partnering with the health care institution.

What’s Next?

This information is meant to introduce you to issues faced by the health care sector when assessing the value of sharing data. The next step is to continue your own research, reach out to people in this sector, and begin to identify mutually beneficial opportunities that you can work on together. A step-by-step guide to this process is available at www.dashconnect.org/value.
References


