Hospitals and Schools as Hubs for Building Healthy Communities

Stuart Butler

Carmen Diaz

Stuart Butler is a Senior Fellow in the Economic Studies Department at the Brookings Institution.

Carmen Diaz co-authored this report while a Research Assistant at the Brookings Institution. She is currently the Innovation Project Manager at Sibley Memorial Hospital in Washington, DC. This report does not represent the views of Sibley Memorial Hospital or the Johns Hopkins Medical Center.

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Introduction

Practitioners and policymakers have become increasingly aware in recent years that achieving good health and economic vitality in neighborhoods requires the close collaboration of a variety of sectors. The growing focus on social determinants of health, for instance, stems from the understanding that there are many "upstream" factors that influence health, from housing conditions to poverty and education, and that community development in lower-income communities can help improve residents' health.[1] On the other side of the same coin, we know that a person's health condition can be an important factor in their success at school and in the workplace, influencing their ability to move up the economic ladder. An analysis of spending patterns across countries shows that the United States is an outlier in spending on medical care compared with social services, yet with little or no advantage seen in health outcomes.[2] This suggests that improvements in general health may be achieved more effectively by spending outside the medical sector. Research on the balance of health and social spending at the state level suggests the same conclusion.[3]

Thus it is important to find ways for different sectors—such as housing, education, and health—to collaborate more effectively, to be more flexible in the sharing of resources, and to achieve the broad goals of each sector. Collaboration does not occur in a vacuum; it is much more of an organic process. In communities and particularly in lower-income communities, institutions often provide a crucial focus for collaboration and are active agents in the process. We can describe this function as carrying out the role of a "hub."

A hub in this sense means an organization or institution that is a focal point in a community and helps blend together a range of stakeholders and services that improve the health and economic mobility of residents. It does not necessarily lead activities or function as the sole focal point—often it is a partner with other institutions. But through partnerships and its own services it enables organizations and people with particular skills, assets, and connections to work more effectively together to improve the neighborhood. A hub might be a school. It could be a hospital, church, or housing project. It could be a community-based organiza-

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[1] Health Affairs, "Culture of Health." Center on Social Disparities in Health et al., "Making the Case for Linking Community Development and Health."
[2] Squires and Anderson, "U.S. Health Care from a Global Perspective."
[3] Bradley et al., "Variation in Health Outcomes."

tion. In a particular neighborhood, there are likely to be multiple hubs with different characteristics that partner with each other, such as a clinic linked with a school.

In this report we feature two such institutions that potentially can play a major role in helping to enhance health and long-term economic mobility in a community: hospitals and schools. We make six broad recommendations involving a number of steps. These are addressed to federal, state and local governments, as well as hubs and their partners. The focus of the report is not on the primary mission of each institution—treating illness and educating children—but rather how they can play a collaborative role as a hub for a range of services. The purpose of the report is to suggest ways to create the best policy environment for these hubs to fulfill their enormous potential.

Why did we pick these two particular institutions? It is not that others are unimportant, but that we believe that with an improved policy environment hospitals and schools could play a much larger role in improving the health and economic mobility of many communities.

Hospitals. We focus on hospitals, together with schools, because—with appropriate public policy changes and other steps—many hospitals have the potential to become backbone hub organizations in their communities. There are many reasons to look at hospitals in this way. For one thing, the scale of operations and economic impact of a typical hospital make it a prominent anchor institution, with the capacity to improve local conditions beyond health. Hospitals are large employers and purchasers, for instance, so in partnership with other institutions they can help

strengthen core health and social services.[4] Many engage in economic development and health improvement projects in their communities, often with other important hubs such as community development corporations and community-based organizations. A hospital, for example, might provide mental health services and cooperate with a housing authority to reduce emergency room visits; it might partner with schools to help address asthma and improve school attendance. Hospitals also have sophisticated data systems that might be used as a "data warehouse" for storing and processing nonhealth data for partners in a community. Thus, hospitals potentially have the resources to make a significant difference, not just directly by providing health services, but also, as many now do, through a variety of nonmedical ventures that can improve health through such activities as housing development and improvement.[5]

Hospitals are, of course, only one part of the health system servicing a community. Moreover, other parts of the health system tend to be closely connected with the chronically ill and with others in the community, such as school nurses, local clinics, and accountable care organizations (ACOs). It's also true that, in general, hospitals have not developed the infrastructure and external networks that would constitute a hub function. But there are many exceptions. Some hospital systems, such as Montefiore in New York City and several Catholic systems including Trinity Health, and Dignity Health, have developed elaborate programs to work closely with community organizations, housing, and social services.

Hospitals today also have incentives that encourage them to look outside their walls and pay great-

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[4] See Norris and Howard, "Can Hospitals Heal America's Communities?"
[5] See Trust for America's Health and Robert Wood Johnson Foundation, "National Forum on Hospitals."

er attention to community health services and the social factors that affect health.[6] Most are subject to Medicare readmission penalties, for example, and nonprofit hospitals are now required to catalog local health conditions and develop plans of action to address them.

Thus, hospitals in the future could play a much greater role in improving health and economic conditions in communities. This report examines both the potential and the challenges for realizing this greater role in the future and the actions that could enhance the activities of hospitals as partners and hubs.

Schools. In contrast to hospitals, schools have traditionally been a central institution in most neighborhoods, linking children and their parents together and playing a key social role. In principle they are well placed to help address a range of needs. For instance, teachers and school nurses will likely see the effects of problems related to challenges at home; families generally trust these professionals, and they may be the first responders available to tackle them—if they have the appropriate time and resources.

As existing, trusted, and familiar institutions in communities, schools can be an ideal location for organizing and assembling partnerships to address a variety of local needs. These include health care: most schools can provide some health services directly, such as through school nurses or school-based health centers (SBHCs). Community schools[7] and some other schools already organize teams to function as case managers for a range of factors that might be called "social determinants of education." Such teams work with families and other organizations to address a range of issues, including housing and family problems as well as encounters with the criminal justice system. Meanwhile, organizations such as the Health Schools Campaign[8] provide training and support to parents who develop school wellness teams focusing on school policy and practice to promote healthy eating and physical activity. Indeed, schools are increasingly seen as critical institutions for improving children's health.[9] Some schools, such as Briya Public Charter School in Washington, DC, pursue a two-generation approach, focusing on the needs of parents as well as children, by providing in-house social and educational services during the school day, such as parenting classes and literacy programs, and sometimes partnering with clinics for health services.[10]

Like hospitals, however, schools face a number of limitations and challenges in fulfilling their full potential as community hubs.

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[6] For example, see Butler, "Hospitals as Hubs to Create Healthy Communities."
[7] Jacobson, "Community Schools."
[8] Health Schools Campaign, website.
[9] Robert Wood Johnson Foundation, "Achieving Healthy Schools for All Kids in America."
[10] Butler et al., "Using Schools and Clinics as Hubs to Create Healthy Communities."

Challenges for Hospitals and Schools as Hubs

As part of a Brookings Institution project supported by the Robert Wood Johnson Foundation, we interviewed a range of individuals engaged in efforts to improve collaboration across sectors, and we have studied several institutions. In a series of meetings, we also brought together experts and practitioners to explore the role of hospitals and schools as hubs, the challenges they face, and policy steps that could help improve their effectiveness.

In the discussions of challenges, we found three broad areas of concern for both hospitals and schools.

Data Collection and Value Measurement

Collecting good data and sharing it between organizations are crucial to effective collaboration for three reasons. The first is epidemiology: data are needed to define and understand a population's needs and risk factors. Second, data are needed to develop the evidence base to select appropriate interventions that are likely to succeed. Assembling good information on the health, housing, education, and other conditions of a person or household or group is essential for coordinating assistance. Organizations need to share data if they are to be effective in tackling the multiple needs of a community. And third, it is essential for evaluation, which is necessary to ensure resources are used efficiently and to make possible continuous improvement. To measure success, it is important to be able to identify the impact on other sectors of initiatives in any one sector, and so calculate a true return on investment (ROI).

Regrettably, pervasive shortcomings and barriers can interrupt the collection and sharing of important information. For instance, in the health sector, social and other risk factors are often not included in personal health records, making comprehensive epidemiology difficult. The National Academy of Medicine and other organizations concerned with social determinants of health have called for incorporating broader background questions in electronic health records.[11]

Data are also often not collected by government agencies or private organizations in a standardized way that makes sharing easy, and agencies and organizations are often reluctant to share data. With health and education data, this reluctance can be due in part to concerns about privacy requirements emanating from the Health Insurance Portability and Accountability Act (HIPAA)

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[11] For instance, see Institute of Medicine of the National Academies, "Capturing Social & Behavioral Domains."

and the Family Educational Rights and Privacy Act (FERPA). Many experts argue that, especially with HIPAA, there are ways to share information that maintain appropriate privacy. But uncertainty about the law and regulations often inhibits sharing, especially by smaller organizations and institutions. In addition, despite data system improvements in the health system, data continue to be entered in different ways—sometimes electronically, sometimes on paper. Requirements for data to be collected differ, and what one facility or agency considers important data may not be important to another, often making it difficult to acquire data from different systems or to calculate the full ROI.

Data collection itself can be problematic. Building and maintaining the capacity to collect data are a normal part of a hospital's activities and those of larger schools. But it can be a challenge for smaller institutions; collecting and analyzing data can be costly and require skills that are not readily available. This can make it difficult for a larger hub to have an effective partnership with a small organization in the community.

When data are difficult to collect and share, it makes it hard, for example, to coordinate support for a young student because accessible data normally do not make it easy to "follow the child," such as when they change schools or have an encounter with a health care facility or the juvenile justice system.

On the larger scale, there are considerable limitations in our ability to measure the true ROI of a hub or partnership because it is rare for adequate research to be conducted to show the broad impact—or "value-added"—of an initiative in one sector. In the health sector, there is a growing body of research analyzing the impact on health quality and costs of efforts to address health-related housing issues (for example, reducing falls or eliminating mold),[12] but that captures only part of the value of intersector activities and initiatives. For instance, if a hospital engages in an initiative to reduce obesity among schoolchildren or mental illness among the homeless, the ripple effect can be very wide, including higher graduation rates and better future earnings, reduced use of social services, and better results from job training for the homeless.

But these broad impacts are not usually fully calculated to assess the full ROI of the hospital initiative. Moreover, a hospital's accounting system does not capture the full value that the hospital activities generate in the community unless there is a direct positive benefit to the hospital. Indeed, a hospital's accounting system measures only the cost associated with activities that generate medical benefits. The same is true of schools. A school nurse or social worker may have a long-term positive impact on the family of a student, but that impact is typically not measured. There are many impacts that could be measured, such as reductions in school absenteeism, greater family stability, and improved economic mobility. But as we note in this report, there are troubling deficiencies in our ability to measure the full ROI, ranging from inadequate data to the costs faced by cutting-edge organizations in conducting such analysis.

Budget and Payment Problems

Deficiencies in measuring ROI exacerbate the underlying "wrong pocket" problem commonly associated with intersector collaboration—the situation in which one institution or sector incurs the

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[12] See, for example, Green & Health Homes Initiative, website; and National Center for Healthy Housing, "Research."

cost of an activity but a significant benefit accrues to another institution or sector. This problem is accentuated by different agencies considering their problems, costs, and measures of value to be unique to their sector. Not adequately recognizing and measuring these broader benefits makes it difficult for a level of government to budget efficiently by investing adequately in one sector or institution to generate benefits elsewhere. With little ability to measure ROI for community activities, institutions have trouble establishing and justifying budgets for this work. The result is a suboptimal pattern of investment in hubs that incur costs in organizing services or partnerships that benefit the broader community.

Siloed program budgets and payment systems add to this problem. Public budgets are generally designed within agencies and committees of jurisdiction that focus on specific policy areas. Thus, the rules governing payments and the use of money by recipients are normally focused on that area. It is usually very difficult for a school or hospital functioning as a hub to obtain permission to use funds for services outside their core activities or to incur overhead costs associated with partnerships that benefit the broader community. Payment streams to hospitals do not typically cover a hospital's nonmedical activities or personnel costs that create value in the community by acting as a hub and improving social determinants of community health—although this is beginning to change with the advantage of value-based care and associated delivery models, such as ACOs. Such payment problems arise in examples such as hospitals working with local housing associations to stabilize homeless people with mental illness or employing social workers to help patients obtain social welfare benefits that might contribute to their long-term health. Similarly, in the case of schools, even though teachers, school nurses, and other school staff

may be well placed to work with local households to address social and health problems that limit a family's ability to move up the economic ladder, school budgets rarely cover the cost.

To be sure, there is some progress in addressing this general problem, in the form of waivers and pilot programs used by federal and state governments, but much more needs to be done to deal with rigid budgets that inhibit collaboration and the work of hubs.

Inflexible Business Plans

The ability of potential hubs such as hospitals and schools to fulfill their potential is also limited by the perceived functions of the institutions themselves. Hospitals and schools do have "business plans," even if a school would not typically use that term. In part, this limited vision of the business plan simply reflects the budget and payment system. Even if the leadership of a hospital or school envisions a community role beyond the traditional core functions of the institution, the chief financial officer is likely to resist proposals seen as "mission creep" for which there is no revenue stream. Even hospitals that have a religious mission and an explicit commitment to the broader economic and social health of their community typically justify expenditures as the philanthropic part of their business plan rather than a true business investment.

Envisioning hospitals and schools as hubs does require institutions to view their business model differently and to explore different revenue streams. For hospitals, among other things, it is important to continue the evolution from a culture of billing to a culture of value and return on investment. If we think of a hospital not as a place that is paid to treat people when they are sick,

but as an institution that improves community health (and so reduce hospital admissions) by promoting health in tandem with other services to enhance economic stability and mobility, then we must think differently about the functions and revenue streams of hospitals. That's very difficult if the current business model is based on fee-for-service payments for strictly medical services. Managed care institutions, where payment is related to maintaining overall health rather than delivering specific services, have more incentive to explore a variety of social determinants as part of the business plan. But even capitated managed care institutions need a modified plan and other sources of revenue if they are to have the incentive to help organize a variety of services and partnerships to achieve nonhealth improvements in the community.

Fashioning new business models and partnerships is difficult. Often the staff's current skill sets are not well aligned with a new role as a hub. That is why it can make sense to turn to intermediaries to supplement those of the institution, at least for transition.[13] In some cases these can be "embedded" intermediaries that operate within the institution. An example of this in the hospital sector is Boston-based Health Leads, which has embedded medical student volunteers working with patients and their hospital physicians to refer discharged patients to social services. Communities In Schools creates a team in a school to work with school administrators to develop a plan to support students. In other cases, intermediaries can supplement in-house skills. For instance, Washington Adventist Hospital in suburban Washington, DC, partners with Seedco, a nonprofit organization specializing in economic

development, to organize a range of support services for discharged patients.[14]

Hubs also need to be sensitive to their role in the community and how they are viewed. Schools are typically viewed as "of" the neighborhood, potentially making it more likely they would be trusted with a leadership role. That is less true of most hospitals, where the families served typically come from a wider area, so that their role may usually be best seen as a participant or partner hub rather than a leader. In addition, aligning corporate headquarters' strategies with the community knowledge and goals of a local institution can be difficult in this era of consolidating health systems.

Creating a different business model and corporate culture in these sectors also requires a change in the vision and culture of government agencies, which establish operational and budget rules that essentially determine the business models of many community institutions, including schools and hospitals. Thus, government at several levels needs to reassess its vision of community improvement and its attitude toward the potential of schools, hospitals, and other institutions in achieving that goal. If it does so, government has important tools to encourage the adoption of different business models. In their use of pilots and waivers, for instance, government agencies have been taking some important steps to encourage hospitals and schools to explore new business models and payment arrangements. Sometimes these are sticks rather than carrots. Readmission penalties in the Medicare program, for instance, have triggered many hospitals to undertake partnerships and hire staff with social

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[13] Singh and Butler, "Intermediaries in Integrated Approaches to Health and Economic Mobility." See also Singh, *Dying and Living in the Neighborhood*.
[14] Butler et al., "Hospitals as Hubs to Create Healthy Communities."

service skills to address housing, transportation, and other problems that can contribute to readmissions—and so avoid a reduction in payments. Meanwhile community benefit requirements (for nonprofit hospitals), including those of the Community Health Needs Assessment (CHNA), are pushing hospitals to address the general health of their communities and to develop or explore partnerships with community organizations. So far, there are fewer pressures on schools to explore their broader community role.

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For this project, we assembled an advisory group of researchers, policy experts, and practitioners to suggest policy steps and other actions that would create an improved environment in which hospitals and schools could play a much greater role as hubs in communities. In addition, we asked advisory group members to comment on drafts of the report.

While the recommendations reflect suggestions raised in the conversations, they are not a consensus of the advisory group, and the recommendations do not necessarily reflect the individual or institutional opinions of any advisory group participant.

The authors of this Brookings report, not advisory group members, are responsible for the recommendations.

See the Appendix for a list of the advisory group members.

Recommendations

After discussions within the working groups and with other experts, we have arranged our recommendations into three categories, reflecting the opportunities and challenges facing hospitals and schools that could be effective hubs: improving the collection, sharing, and use of data; adapting the business models of schools and hospitals; and addressing budgetary and payment issues. We make six broad recommendations, each with multiple specific actions.

Improve Data Collection and Sharing

Recommendation 1: Improve the collection, use, and sharing of data among sectors to facilitate partnerships.

Rethink Business Models

Recommendation 2: Make greater use of intermediaries.

Recommendation 3: Widen the skill sets of school and hospital leaders and key staff.

Recommendation 4: Make use of the community obligations of nonprofit hospitals and financial institutions, as well as the community focus of the new education statute, to help launch creative, coordinated partnerships.

Recommendation 5. Make greater use of waivers, demonstrations, and other steps to foster hubs and other partnerships.

Increase Budget Flexibility

Recommendation 6: Take steps to facilitate the braiding and blending of public and private resources from multiple sectors and sources.

Improve Data Collection and Sharing

> **Recommendation 1:** *Improve the collection, use, and sharing of data among sectors to facilitate partnerships.*

Institutions and hubs are often hampered by inadequate data and the limited ability to share information because of privacy regulations, a lack of channels to share data, and other obstacles. Several steps could be taken to improve this situation.

- **The federal government, states, counties, and cities should accelerate steps to establish "data warehouses," health information exchanges (HIE),[15] and other forms of integrated data systems. Hospitals should ex-**

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[15] See HealthIT.gov, "Health Information Exchange (HIE)."

plore their potential to be data warehouses for a range of data needs in a community.

Some cities are making good progress in creating vehicles to collect information from several sectors and to make it available to organizations seeking to coordinate services. An example is Dallas through its use of the Information Exchange Portal.[16] HIEs were created to allow a more seamless transmission of patient information between providers and patients, replacing the error-prone method of faxing and manually delivering patient forms. HIEs allow providers to exchange information on patients through a safe electronic system, through which they can standardize patient data and improve efforts to coordinate care.

Many hospitals are part of HIEs, as are many federally qualified health centers (FQHCs) for underserved populations. Indeed, hospitals are good candidates to play an information warehouse role for other institutions dealing with education, juvenile justice, social services, and other sectors: they have the capacity and the analytical skills, and they are used to handling sensitive personal information. When data systems are used to identify and address community health needs, a nonprofit hospital's financial contribution is considered a community benefit for the purposes of meeting Internal Revenue Service (IRS) requirements. Taking full advantage of that opportunity, however, requires both a more expansive vision of the business model of a hospital and steps to align payments to hospitals with ex-

panding their data role (see discussion below of business models and budgeting).

- **The federal government, states, counties, and cities should address governance and interoperability issues to improve the safe flow of data with personal information among government agencies and between government and the private sector.**

In addition to the technical and privacy issues associated with data sharing between agencies and nongovernment organizations, government agencies at all levels need to address often complicated governance questions concerning the sharing of information among government agencies.[2] Several states in conjunction with the Office of the National Coordinator for Health Information Technology (ONC) are taking steps to address these issues, as are some counties such as Allegheny County (Pittsburgh) in Pennsylvania.

Several organizations and branches of government are focused on this issue. Examples include Medicaid Information Technology Architecture of the U.S. Department of Health and Human Services (HHS)[18] and the Administration for Children and Families' work on interoperability.[19] In addition, the federal government has been developing and implementing a national information exchange model (NIEM),[20] designed to be a community-driven, standards-based platform to exchange information within states and federal agencies. Harvard's Strategic Data Project[21]

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[16] PCCI, "The Dallas Information Exchange Portal."
[17] Kingsley, "Multi-Agency Integrated Data Systems (IDS)."
[18] Centers for Medicare and Medicaid Services, "Medicaid Information Technology Architecture (MITA)."
[19] U.S. Department of Health and Human Services, "Interoperability."
[20] National Information Exchange Model, website.
[21] Harvard University, "Strategic Data Project."

and the University of Pennsylvania's Actionable Intelligence for Social Policy[22] project are examples of efforts outside government to address governance and interoperability issues. The Data Quality Campaign[23] is also providing assistance to organizations on the sharing of personal information.

- **Jurisdictions and communities should also make greater use of improved systems for data, to allow communities, schools, and hospitals easier access to cumulative neighborhood data to gain a better understanding of community needs and opportunities.**

In addition to collecting and sharing information to organize customized services for individuals, hubs and partner organizations also need detailed demographic, health, and other information to build a picture of the community and design strategies to address issues and take advantage of opportunities. Such data does not include personal identifiers, and thus does not raise privacy issues. Projects such as the National Neighborhood Indicators Partnership,[24] based at the Urban Institute, and the KIDS COUNT[25] data center are making such data more available. Armed with such data, hospitals, schools, and other institutions can be a more effective hub and partner. Moreover, these data can help nonprofit hospitals advance their community benefit strategies. Such community information would also make it easier for states and school districts to carry out their obligations

under new federal state and local "report cards,"[26] under the new Every Student Succeeds Act (see below), which are design to achieve greater equity and to address barriers to student success.

- **To help address the information gaps associated with the "wrong pocket" problem, states, counties, and cities should develop better techniques to measure the multisector community "social return on investment" (SROI) of health and other community initiatives. This work could perhaps be conducted in cooperation with local universities and other research institutions.**

The general lack of research on the intersector impacts of community initiatives is a major impediment to calculating the true ROI from an initiative. Without these broader impact measures, such as the effect of improved health on high school and college graduation rates and workplace earnings, it is impossible to know the true return associated with an investment in community health. Improving ROI measurement would help determine the potential results of coordinating services through a hub.

There is a growing recognition of the need to calculate the "social return on investment," and the American Public Health Services Association, among others, has helped promote the importance and the methodology of SROI.[27] Other countries, such as the United Kingdom, are building SROI methodology into their analysis of a range of public in-

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[22] University of Pennsylvania, "Actionable Intelligence for Social Policy."
[23] Data Quality Campaign, website.
[24] National Neighborhood Indicators Partnership, website.
[25] See Butler and Grabinsky, "Building a More Data-Literate City."
[26] See Education Trust, "The Every Student Succeeds Act."
[27] See American Public Human Services Association, "Social Return on Investment."

vestments.[28] In United States, some government-connected organizations are beginning to carry out this kind of analysis, such as the Washington State Institute for Public Policy[29] and EPISCenter[30] in Pennsylvania, and many in the health sector now recognize the importance of using SROI to make a better business case for investing in health initiatives that have multisector impacts.[31]

Nevertheless, this broader impact analysis is still in its infancy, and the data needed to address the wrong pocket problem is insufficient, making the case for budget reforms more difficult. Thus, much more work needs to be undertaken by research institutions, in conjuction with governmental jurisdictions, hospitals and schools and a range of other community organizations and hubs.

- **Private philanthropy and federal and state agencies should provide sufficient support for community-based organizations and hubs to develop the data collection and analytics capability needed to (a) improve operations and the ability of organizations to partner with schools or hospitals and (b) prepare for evaluation.**

Developing the capacity to collect and analyze data is a significant problem for many innovative community-based organizations.[32] Although there are exceptions such as the federal government's Beacon Community Program,[33] funders are generally more inclined to support direct services than build a

sophisticated data capacity. Yet weaknesses in data capacity hamper efficiency and limit the activities of organizations. These weaknesses also reduce the organizations' ability to demonstrate their effectiveness in order to justify support, as well as makes it more difficult for them to be effective partners in ventures organized by a hub.

Greater public and private support is needed for this important infrastructure. Providing support directly to an organization may be the best approach. But funding hubs and other intermediaries to provide data services to smaller organizations may sometimes be a better alternative since that can achieve economies of scale and increase the available technical expertise. Some intermediaries, such as the Family League of Baltimore,[34] are already beginning to provide data support for local organizations they fund or assist. Thus, if a hospital or school undertakes data warehouse functions, it may make sense for these hubs to take on part or all of the data functions for local community organizations in some instances by embedding staff in the organization. In these cases, public and private funders may need to reassess how they define "overhead" in grants and payments to hubs, as noted below in the discussion of aligning budgets and payments.

- **Congress should review HIPAA (health care) and, especially, FERPA (education) statutes and guidance to improve the ability of appropriate intermediaries and hospital- or school-led community part-**

[28] For instance, see Social Value UK, "The SROI Guide."
[29] Washington State Institute for Public Policy, website.
[30] Pennsylvania State University, website.
[31] See Trust for America's Health and Robert Wood Johnson Foundation, "National Forum on Hospitals."
[32] Butler et al., "Using Schools and Clinics as Hubs."
[33] HealthIT.gov, "Beacon Community Program."
[34] Family League of Baltimore, website.

nerships to share information. States also need to review their privacy laws. Government agencies should also help organizations to better understand how information can be appropriately shared.

Privacy rules can be important protections. But these rules also inhibit data sharing, including health and especially student information, and so can make coordinated action more difficult. The major statutes governing privacy in these areas should be reviewed. But, that said, often the law is not as restrictive as many organizations believe, so much can be done to address privacy-related obstacles to sharing by training and better education. Thus, the federal government should provide improved training procedures for the use of privacy-protected information by appropriately designated individuals in partnering organizations, including making greater use of the Privacy Technical Assistance Center[35] and the Department of Education's data-sharing toolkit for communities.[36] The federal government's Office of National Coordinator (ONC)[37] should continue to provide guidance to educate stakeholders on compliance and legal risk. The ONC should also help design safe harbors and better consent requirements as part of "yes, unless" culture-specific forms to help foster partnerships involving patient information that will avoid compliant problems and legal risk. Using the best available advice on governance, states should structure strong data-sharing agreements that preserve important privacy principles while making it easier for agencies and organizations to share information.

States also need to review their privacy rules and help organizations navigate them. In the case of HIPAA, the federal statutes are a "floor" and so some states have more stringent requirements.

In addition, hospital-community and school-based partnerships should design simpler patient and family consent forms, including opt-out default consent, to enable more patient information to be appropriately shared, as is being done in Maryland among hospitals using the state-wide health information exchange, known as the Chesapeake Regional Information System for our Patients, or CRISP.[38] Hospitals and school districts can also help train individuals in partnering organizations on how to assure privacy in the use of data.

Rethink Business Models

As noted earlier, the traditional business models of hospitals and schools, and their funding streams, do not readily accommodate an inter-sector hub role. The general lack of good data on the broad value-added created by a hospital or school functioning as a hub—in particular the typical absence of good SROI calculations—makes it very difficult to establish the true ROI. This in turn makes it harder to make the case for the budget and payment changes needed to support new functions that will increase total value-added.

This general problem manifests itself somewhat differently for hospitals and for schools. In altering the business model of a hospital to enable it to function as a hub, the issue is generally one of

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[35] Privacy Technical Assistance Center, website.
[36] U.S. Department of Education, "Data-Sharing Tool Kit for Communities."
[37] HealthIT.gov, "About ONC."
[38] CRISP, website.

altering the range of services provided by a hospital to achieve the overall goal of better health. Based on the evidence on social determinants of health and on the health benefits of social programs, this suggests that improving overall health would require moving some resources from traditional medical care activities into other sectors, such as housing and social services. But rather than arguing that hospitals should simply accept reduced revenue and the diversion of their resources to nonmedical organizations—unlikely to be popular in the hospital sector—the hub model allows a hospital to imagine a more diversified set of activities and revenue sources in the future. In this model, the hospital's budget directly or indirectly finances the delivery of nonmedical as well as medical services that contribute to the health and well-being of the community. Seen in this way, altering the range of services organized and provided by hospitals could maintain total revenue by diversifying functions, even if payments for traditional medical services are reduced.

For schools as hubs, the challenge is more one of financing and providing non-instructional services in addition to academics, and so expanding the scope of the business model.

Thus, defining a business model is not just a design or "culture" issue. Budget and payment reforms are essential to align funding with the potential of refined hospital and school business models that will improve the health and education and the economic vitality of neighborhoods, such budget reforms are discussed in the next section. But many education and health care leaders also need to consider new ways of thinking about the role of schools and hospitals, and how they might develop more effective partnerships with other in-

stitutions by "importing" skills from intermediaries. Envisioning an expanded hub role also requires schools, and particularly hospitals, to be sensitive to the need to build trust in the community. Hospitals, for instance, are often seen by many community organizations as remote yet powerful institutions, and a lack of trust arising from little or no history of partnerships often hampers new partnerships and the acceptance of hospitals as benign partners. So progress will often require many trust-building steps to develop successful new partnerships and business models.

Recommendation 2: *Make greater use of intermediaries.*

Intermediaries are organizations or individuals that provide specialized skills or "connecting" functions that facilitate partnerships, helping to smooth collaboration and add skills that may be lacking in one of more of the partners. Intermediaries include such connectors as parish nurses, school nurses, and community health workers. It can be an organization providing specialized information services, such as data services, or enrolling discharged patients in social service programs. Or an intermediary can be a sophisticated organization that helps organize or link together a wide range of services and activities, such as community development financial institutions or integrated service organizations such as Family League of Baltimore of the Harlem Children's Zone.[39] Intermediaries are playing an increasing role in health care institutions that are building community partnerships, and in schools that are tackling health, social welfare, and other problems that are holding back their students.[40] For an institution functioning as a hub, refining its business model to use intermediaries, either as embedded staff or as connector organi-

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[39] Harlem Children's Zone, website; and Singh and Butler, "Intermediaries in Integrated Approaches to Health and Economic Mobility."

zations, can make the hub much more effective as a focus for combining services in a community.

- **Hospital and school leaders should explore and use models of "embedded" and "external" intermediaries.**

    Individuals with the skill sets associated with intermediaries can be part of the regular staff of an institution, as are many school nurses or the multiskilled teams in community schools. In other cases, individuals from an intermediary institution may be embedded in a hospital or other hub, employed and funded by the intermediary. Examples include Health Leads,[41] Communities In Schools,[42] and other organizations that provide nonmedical professionals, such as legal services workers and social service to hospitals or schools to link discharged patients or students with social services and other programs. Another example is Grand-Aides.[43] These are nurse extenders who make home visits to create a relationship with the patient and family and work to improve health and medical outcomes. Every visit by a Grand-Aide is supervised with a nurse available remotely on video, permitting interaction of both the Grand-Aide and nurse with the patient/family. Grand-Aides have been found to reduce unnecessary emergency department visits for children in Medicaid by 74 percent.[44] A Grand-Aides school program might place an aide in schools without a school nurse and have video supervision provided by a school nurse in a neighboring school.

In other cases, the intermediary may be an external body operating under a contract with the hub. An example of this is the partnership between Washington Adventist Hospital, near Washington, DC, and Seedco,[45] an organization that seeks to advance economic opportunity and provides Adventist with specialized social welfare and other services for some of its discharged patients. In some cases—the Family League of Baltimore is an example—the intermediary carries out critical functions, such as data collection and reporting, that otherwise would have to be covered by the school budget.

- **Hospitals should make greater use of intermediaries by taking greater advantage of waiver opportunities in federal programs that allow state-based innovations. The federal government should make many of these waivers permanent and universal rules.**

    Taking full advantage of Medicaid's Managed Care 1915(b)[46] and 1915(c)[47] Home and Community-Based service waivers, states and health institutions should push forward with making greater use of social workers and other professionals to provide services after discharge and to enable elderly and discharged patients to avoid readmissions and remain in their communities.

    Cities, counties, and states should work with hospitals and schools to assure that such

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[40] Stuart et al., "Schools as Community Hubs."
[41] Health Leads, website.
[42] Communities in Schools, "About."
[43] Grand-Aides, website.
[44] Garson et al., "A New Corps of Trained Grand-Aides."
[45] Seedco, website.
[46] Centers for Medicare and Medicaid Services, "1915(b) Managed Care Waivers."
[47] Centers for Medicare and Medicaid Services, "1915(c) Home & Community-Based Waivers."

partnerships are understood and can be launched easily, and help support and evaluate such partnerships as models for wider use. Philanthropy has often helped launch and cover the cost of such embedded intermediaries and could expand support. Medicare and Medicaid could also make the waiver-based flexibility in their hospital discharge rules a permanent and universal feature. In addition, to simplify and promote the use of such intermediaries, the federal government and states should work with hospital systems to explore a common standard for access and address liability issues.

Jurisdictions should also explore ways of modifying certification to foster innovative use of intermediaries when using waivers and in other situations. For instance, for paraprofessionals such as Grand-Aides and community health workers, states should provide certification for new services provided by these intermediaries, based on approved standardized curricula and performance on tests.

• **States and the federal government, as well as local health and educational institutions, should strengthen and sharply expand the system of school-based nurses and SBHCs. They should also make greater use of FQHCs to link students and their families to health services in their communities. Schools should also expand access to specialized instructional support personnel (SISP), such as nurses and psychologists.**

SISP and SBHCs function as embedded intermediaries to provide crucial nonacademic services within schools, and they are an excellent example of collaboration between schools and the health system in which the school functions as a hub. Yet SBHCs face challenges because there is often a misalignment of missions between health and educational institutions involved, in addition to funding streams that often do not align with the objective of collaboration. SISP positions are part of structured partnerships between local health institutions; schools face similar challenges in employing such professionals as they do with SBHCs. For instance, when SISP are employed directly by districts, they are often the first personnel to be cut from public schools since they do not provide (exclusively) academic or instructional services to students.

Several steps can be taken to strengthen the role of SBHCs and thus the role of schools as community hubs.[48] In addition, school partnerships with FQHCs, and even directly with hospitals, should be encouraged—especially since many SBHCs are already FQHCs.

A particularly important step would be to elevate school-based health care as a CHNA priority, with clear mentation strategy steps to ensure that resources are identified—both hospital-community benefit expenditures and other funds—to enable comprehensive and sustained school clinic operations. It is also crucial to clarify the use of hospital-community partnerships under the CHNA. In some cases, for instance, a hospital-SBHC partnership might not qualify as a community benefit for tax purposes because the partnership might be considered a core business activity. Clarifying this would encourage more hospitals to provide financial support, technical assistance, and information services to these centers.

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[48] Price, "School-Centered Approaches to Improve Community Health."

Steps discussed earlier to facilitate information sharing would be very valuable to these intermediaries. In addition, local universities and businesses could help by providing data technology and other assistance to facilitate collaboration. Furthermore, these centers, as well as the network of school nurses, would be assisted considerably by the steps discussed earlier to make it easier for schools and hospitals to share health, education, and other relevant data with SBHCs and school nurses, and by making full use of the recent change in Medicaid's free care rule (see discussion below in Aligning Budget and Payment Systems).

Recommendation 3: *Widen the skill sets of school and hospital leaders and key staff.*

Realizing the full potential of schools and hospitals as hubs requires leaders in these institutions to have a broad vision and set of skills, to manage the delivery of less traditional services, and to work with partners and intermediaries. But the training of leaders is still narrow, and this holds back the potential for these institutions to function as hubs.

- **Medical schools, nursing schools, schools of public health, schools of education, and schools of social work should institute "rotations" for students to take classes across various schools in a university, and they should explore combined degrees.**

  Professional schools can help broaden the skills of future leaders in one discipline by including classes in other disciplines. A few schools are currently adopting this approach. The Curry School of Education at the University of Virginia, for instance, has a youth and social innovation major,[49] designed to equip graduates with a broad knowledge of social, health, and other factors affecting youth. In addition, the Kaiser Permanente medical school,[50] opening in 2019, is planning to include a training focus that forges closer relationships between physicians and health systems, and the communities they serve.

  Introducing such rotations and new degrees or majors would allow students to obtain "leadership" professional credentials in areas that supplement their primary field. Professional credentialing and licensing boards and college accreditation boards should adapt course requirements to allow such rotations—in many instances that will involve reducing the number of required courses to allow more electives in these other fields. Educational leaders need to be trained to use evidence-based approaches involving different sectors so that they can develop partnerships with broad benefits. It is also important to sensitize medical students to the dynamics of community organizations through internships and other forms of direct experience, such as Vanderbilt's medical school partnership with the Siloam Family Health Center[51] in Nashville.

- **Schools and school districts should train teachers and other school staff to become "spotters" of potential health and social problems among their students and student households.**

  Some jurisdictions are using integrated data systems to help predict risk factors in poor

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[49] University of Maryland, "Youth & Social Innovation Major."
[50] Kaiser Permanente, "Educating the 21st Century Doctor."
[51] Ibid.

health and other problems. For instance, Allegheny County, Pennsylvania uses predictive risk models to help child welfare workers identify possible abuse and neglect. San Francisco and other California jurisdictions use such models as early warning systems to identify patterns among young people that might lead to dropping out of school or potential criminal activity so that professionals can intervene to prevent problems. Similarly, the Urban Institute–based National Neighborhood Indicators Partnership[52] and local groups such as DC Kids Count[53] use data to develop comprehensive pictures of neighborhoods that help identify general conditions that are associated with problems for families and individuals.

Schools are a good location to identify children who may be at risk, given neighborhood patterns and identifiable risk factors. And since they interact with students on a daily basis, teachers and some other staff are well positioned with appropriate training to identify possible health and other problems of students that require attention. But they need to be trained in how to discuss these issues with parents. Expanding intersectoral networks would help support more "warm referrals" to SISP or to other institutions that are better equipped to deal with nonacademic issues. Some intermediaries, such as the Healthy Schools Campaign[54] and the American Federation of Teachers, help teachers to be more aware of broader issues and patterns that relate to health and social problems, such as chronic absenteeism. But professionals and

leaders who develop the skills and devote time need to be appropriately compensated so they will stay in the school setting. They also need to have the backup of appropriate professionals to deal with health and other conditions—they should not be required or held accountable for diagnosing, treating, or managing care for the many challenges facing children and their families.

• **School districts should explore using school buildings and land as mixed-use facilities, especially in areas of declining enrollment, allowing the buildings and school grounds to be more effective hubs in communities.**

The school building can provide a neutral space in which to invite students, their families, and other individuals to gather for activities that are not strictly related to academics. The creative use of school buildings and grounds can help encourage family and community engagement and education, provide access to clinical services, and address other basic needs of the community members.

Many schools have made innovative use of their facilities in this way. For example, the Henderson-Hopkins charter school[55] in Baltimore designed its security and corridor system such that members of the community can access exercise facilities and other services during school hours. In Washington, DC, one KIPP[56] charter school included a dog-walking area as part of its playing field. The result is increased

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[52] National Neighborhood Indicators Partnership, website. See also Dews and Saxena, "See the Immigrant Demographics Presentation That Audrey Singer Gave to the White House."
[53] See Butler and Grabinsky, "Building a More Data-Literate City."
[54] Health Schools Campaign, website.
[55] Henderson-Hopkins, website.
[56] KIPP DC, website.

community activity that enhances safety around the school and fosters social encounters that help strengthen community bonds. Meanwhile Community in Schools[57] encourages its site co-ordinators in schools all over the country to take advantage of the school facilities to support their student population with programs, such as in-school food pantries, that contribute to student health and improve neighborhood connections.

> **Recommendation 4:** *Make use of the community obligations of nonprofit hospitals and financial institutions, as well as the community focus of the new education statute, to help launch creative, coordinated partnerships.*

The Affordable Care Act (ACA) revised the conditions that nonprofit hospitals must satisfy to qualify for federal tax-exempt status. This extended the general community benefit obligations of hospitals seeking to maintain their tax-exemption by requiring such hospitals to complete a CHNA every three years. A CHNA means the hospital must review health conditions in its community and develop a plan to address concerns.[58]

In addition to placing these requirements on non-profit hospitals, the IRS applies requirements on regulated financial institutions, as part of the 1977 Community Reinvestment Act (CRA). The CRA requires financial institutions to analyze and help address the credit and economic development needs of local communities, particularly lower-income communities. The CRA and the community benefit requirements on hospitals, such as the CHNA, actually have similar regulatory structures and goals.[59]

Meanwhile, the 2015 Every Student Succeeds Act (ESSA), the new statute governing federal K–12

programs, contains provisions to encourage states and schools to examine community conditions that contribute to problems in failing schools. In effect, ESSA encourages a greater focus on what might be called social determinants of education.

These requirements, separately and together, can help foster collaboration and strengthen hospitals and schools as hubs.

- **The IRS should provide guidance to hospitals on developing a wide range of community partnerships as a means by which hospitals can implement their community benefit spending activities. It should do this by referring hospitals to information from the Centers for Disease Control and Prevention (CDC), HHS, and other agencies familiar with how to foster and report community building.**

Hospital community benefit spending activities are undertaken in response to identified community health needs. CHNAs play a key role in identifying community needs; under existing IRS policy, these needs also can be identified through hospitals' partnership activities. Many sources of information are relevant in identifying the health needs of communities. Because partnerships with nonprofit and government entities can serve as the source of such information, the IRS should help explain to hospitals how such partnerships can be developed and used as a source of information for identifying needs.

In developing such assistance and guidance, the IRS should highlight certain types of partnerships that can yield important information

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[57] Communities In Schools, website.
[58] Rosenbaum, "Hospitals as Community Hubs."
[59] See NACEDA and Community Catalyst, CRA vs CB flyer.

about community health needs, including schools, economic development programs and agencies, public health agencies, programs focused on housing supports, early childhood development, and food and nutrition. Further guidance on community partnerships should emphasize their importance.[60] IRS guidance should also emphasize the appropriateness of using a broad definition of community health improvement that covers nonclinical activities aimed at general community health.

In developing additional guidance, the IRS should draw on the information and experience of HHS and the CDC in developing programs and services designed to address the social determinants of health. Indeed, a helpful step would be to establish a working group from HHS and the Departments of Education, Housing and Urban Development, Treasury and other departments (See Recommendation 6) to collect research and case examples of successful inter-sector partnerships; this would be a valuable resource for issuing guidance on community-based partnerships.

In addition, IRS guidance on community health improvement partnerships should provide illustrations showing how hospital community benefit spending might advance health needs identified through the CHNA process. The IRS should also consider revising its current policy regarding "directly offsetting revenue" to permit hospitals to report as community benefit expenditures the restricted grants they receive, in order to further community health improvement activities.

Such guidance could encourage more hospitals to function as community health hubs, with an increase in activities aimed at improving health on a community-wide basis. It would also help align IRS policy more closely with policies governing financial institutions under the Community Reinvestment Act (CRA).

• **The federal government should make use of the "report card" provisions of the ESSA to encourage school districts to examine social and health determinants of student success.**

ESSA, which reauthorized federal school programs, contains provisions requiring each state and school district to publish report cards on the performance of its schools. While most of the required information centers on academic performance, the cards must also provide data on nonacademic indicators that could undermine effective schools, such as chronic absenteeism, bullying, and crime on school grounds—patterns well understood to be linked to health and social conditions in student homes and neighborhoods. In developing regulations and guidance on these provisions, the federal government should encourage states and school districts to include data from non-education agencies and nongovernment sources to present a fuller picture of conditions in school communities. This information could help trigger new partnerships to address factors influencing student performance and, in the future, perhaps lead to a school equivalent of the CHNA—requiring schools to work with other institutions to address social and health factors school performance.

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[60] See Rosenbaum, Sara et al, "Improving Community Health through Hospital Community Benefit Spending: Charting a Path to Reform*."*

- **The federal government should encourage localities to develop partnerships and foster coordination by organizations and institutions covered by the CRA, CHNA, and ESSA, such as by allowing "crossover" credits for institutions covered by these requirements.**

As noted above, nonprofit hospitals can obtain credit from the IRS against their CHNA community benefit obligations by engaging in health-related investments and activities in the community. Meanwhile, financial institutions can gain IRS credits against CRA obligations for economic investments. The U.S. Department of Education districts will now require states and school to explore ways in which they can address conditions that lead to low-performing schools. Each of these requirements is designed to encourage creative activities to improve the health, economic, and social conditions in a community.

But these efforts often lack coordination because each institution is complying with separate rules governing its own sector. Moreover, there is little encouragement under these separate rules for institutions in one sector contributing to the community efforts of another. For instance, it generally is difficult for hospitals to obtain CHNA credit for strictly economic activities in a community or for financial institutions to obtain CRA credit for strictly health promotion and prevention activities, such as investing in a more walkable or bikable city. It's true that some financial institutions already fund community development financial institutions (CDFIs) that invest in FQHCs. CDFIs are private financial institutions that provide credit and financial services to underserved communities. Moreover, on some occasions, health systems have played a crucial

economic development role. For instance, the Dignity Health system is an important investor in housing and community development. Dignity even provided financial assistance to families to help them remain in their homes during the Great Recession when financial institutions were cutting back on loans and mortgages. Yet as a hospital, Dignity was unable to claim and use CRA credits for this.

The federal government should give greater incentive for such crossover activities between sectors. Ideally the community objectives of the CRA, CHNA, and ESSA should be combined, and the activities of the best-placed institution supporting an objective should be recognized in federal requirements, regardless of its sector.

One way to do this would be to widen the definitions of activities that qualify under the IRS and Department of Education rules. For instance, helping to prevent chronic absenteeism in schools might be recognized as a CHNA activity. A more comprehensive approach would be for the federal government to encourage such coordination and crossover activities by allowing any of these institutions to meet its IRS or Department of Education obligations and apply that to its own sector requirements by an activity that would qualify if it were in another sector. Thus, a nonprofit hospital might qualify for CRA "credits" and use these against its own community benefit obligations for activities that improved the financial well-being of the community. Likewise, financial institutions could obtain CHNA credits for such things as supporting the operations of an SBHC and apply these credits against CRA requirements. Thus, the credits would be interchangeable for the purposes of complying with IRS community benefit obligations and addressing ESSA obligations.

- **Hospitals should examine their role as a leading economic anchor in the community and work with local government and other institutions on plans to drive inclusive economic growth and, ultimately, improve community health and well-being.**

Hospital systems are becoming increasingly aware of their significant economic role in communities and the potential for them to affect social determinants of health by leveraging their hiring, purchasing, investing, and other operational assets more intentionally. For example, some health systems, such as Dignity Health, have allocated a portion of their long-term investment and savings portfolios for community development loans—either directly or via financial intermediaries like community development financial institutions. Other institutions, such as University Hospitals in Cleveland, Ohio, have prioritized inclusive, local hiring and purchasing in order to create jobs and opportunities for surrounding low-income and minority neighborhoods.

Carrying out such an anchor mission, notes Kaiser Permanente, "requires substantial culture change in corporate practices within healthcare institutions."[61] Leadership commitment is crucial at all levels of a hospital system, as is a commitment to develop metrics on the economic impact of hospitals. In addition, incentives need to be developed that empower managers and mid-level staff to prioritize this long-term work alignment around purchasing, hiring, and investment. The Democracy Collaborative, a nonprofit focused on equitable, inclusive, and sustainable development, has created the Hospitals Aligned for Healthy Communities toolkit series,[62] which outlines policy and practices that health systems have adopted as they move in this direction. In addition, the National Association of Chronic Disease Directors is helping state health departments and school districts to understand how schools and hospital can utilize Medicaid, the CHNA requirements, and other opportunities to develop school-hospital partnerships to help manage chronic health conditions.[63]

> **Recommendation 5:** *Make greater use of waivers, demonstrations, and other steps to foster hubs and other partnerships.*

Federal agencies often have authority to grant waivers from the rules associated with a program to provide more flexibility for states and localities to engage in innovative approaches that do not lead to additional budget costs to the federal government. In some programs, such as Medicaid, the federal government has used its waiver authority extensively to encourage innovation and permit the use of resources for some social welfare approaches to improving health. In addition, the Office of Management and Budget has issued "uniform guidance" that makes it administratively easier to obtain flexibility in the use of federal funds.[64]

Pilot projects launched by the federal government or states also permit a number of ideas to be explored and evaluated. A number of important pilot programs have used waivers involving more than one cabinet department, such as cooperation between the Department of Housing and Urban Development (HUD) and HHS to coordinate housing

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[61] Norri and Howard, "Can Hospitals Heal America's Communities?"
[62] Democracy Collaborative, "Hospitals Aligned for Healthy Communities."
[63] National Association of Chronic Disease Directors, "Opportunities for School and Hospital Partnership."
[64] See Grants.gov, "Uniform Administrative Requirements, Cost Principles, and Audit Requirements."

and medical services to promote the health of the elderly and the homeless.

However, many agencies are generally hesitant to grant waivers that span more than one program. Even in the health sector, the federal government has generally been reluctant to allow funds from different programs to be grouped together in a waiver in which budget neutrality applies to the cumulative effect.

Waivers and demonstration pilots are an important tool to test cross-sector collaboration, and they should be used aggressively to encourage the launch and evaluation of hubs and other partnerships.

- **The federal government should make the broadest possible use of its pilot and waiver authority to encourage intersectoral collaboration and hubs.**

  In general, the federal government has made wide use of its waiver authority under such programs as Medicaid (in particular the 1115 demonstrations[65]) and the provisions of the ACA, such as the creation of the Center for Medicare and Medicaid Services' Innovation Center (CMMI). Pilot programs have also helped test novel approaches, although sustained funding for promising pilots is often a challenge.

  The federal government should in general make greater use of waivers, including waivers that would encourage different agencies to work together to create the environment for community-based partnerships. For example, more could be done to use waivers

and pilots to encourage greater collaboration across programs administered by different departments and the use of professional staff with skills outside those traditionally reimbursed. While Medicaid has become more open to reimbursing social services that contribute to health outcomes, as we learn more about the social determinants of health, it is important for the program's administrators to be even more open to reimbursing nonmedical staff for their services.

The federal government should make the greatest possible use of waiver authority in statutes. It does not always do so. A recent example is the Obama Administration's interpretation of Section 1332 waivers of the ACA, which give states the power to apply for very broad waivers to achieve the purposes of the act in novel ways. The administration decided the federal budget neutrality requirement must apply to each health program area involved, rather than to the combined impact of the state proposal; this has reduced state interest in using the provision. The new administration should re-interpret Section 1332 to permit waivers that preserve budget neutrality across health programs.[66]

Where the legal authority to grant such waivers remains limited, Congress could enact legislation to permit broader budget-neutral waivers using nonhealth as well as health programs to achieve improvements in community health. For instance, Congress could amend the ACA statute to apply the Section 1332 budget neutrality requirement in a proposed state waiver to cover the combined budgets of health and nonhealth programs,

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[65] Centers for Medicare and Medicaid Services, "About Section 1115 Demonstrations."
[66] Bipartisan Policy Center, "Improving and Expanding Health Insurance Coverage Through State Flexibility."

such as housing and social services, if the effect is to improve community health outcomes and insurance coverage.

- **CMMI should expand its efforts to encourage community-based strategies to address health. Other agencies should step up their efforts to foster cross-sector approaches to improved economic mobility.**

  CMMI has helped foster partnerships between health organizations and providers of community-based services, such as through its recent initiative to launch the Accountable Health Communities (AHC) model.[67] The AHC initiative is an important step forward, although in this early phase it is arguably too restrictive in the initiatives it permits. The AHC can and should be used with other steps to increase hospital-community cooperation in the approved initiatives. These steps include integrating social needs information into electronic medical records and making maximum use of the CHNA's community partnerships. Moreover, as some observers note, CMMI could achieve much greater impact if it incorporated social determinants more extensively in other innovation models.[68]

  Other agencies should expand their innovation models and collaborate with CMMI in encouraging local efforts to reach health and economic mobility goals. A current example is the Promise Neighborhoods[69] initiative in the Department of Education, which provides grants to encourage a variety of community organizations and educational institutions to coordinate efforts to improve the educa-

tional and social progress of young people in neighborhoods, emulating the Harlem Children's Zone. The secretary of education should make full use of Sections 4624 (Promise Neighborhoods) and 4625 (full-service community schools) of ESSA to foster school-community partnerships. Under ESSA, states can make more use of Title I funding to integrate community resources for at-risk children. In addition, there are grants in Title IV for engaging with communities.

Other federal departments should examine how they might create bodies similar to CMMI, administratively or by proposing legislation, to test innovative funding and organizational structures that could further the goals of the department. CMMI was established by statute as part of the ACA, with significant funding to help finance pilots around the country. Still, short of legislation of that kind, departments might establish high-level divisions to work with each other, including CMMI, on a variety of interdepartmental efforts to encourage intersector partnerships and hubs at the local level.

- **States, school districts, and private philanthropy should help initiate, sustain, and evaluate innovative models of schools and school districts partnering with medical systems, housing authorities, teacher unions, and other institutions to address the social determinants of health and education success.**

  In some counties and cities, school systems are working with a variety of agencies and private organizations or nonprofit groups in

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[67] Centers for Medicare and Medicaid Services, "Accountable Health Communities Model."
[68] Perla and Onie, "Accountable Health Communities and Expanding Our Definition of Health Care."
[69] U.S. Department of Education, "Promise Neighborhoods."

health, housing, and other sectors to address social determinants of health and education. Examples include Oakland Unified School District in California, the McDowell County initiative in West Virginia, and Vancouver, Washington. Such examples illustrate both the potential of school-based strategies and the barriers to implementation.

In Vancouver, a community schools initiative was created to address the growing problem of chronic absenteeism and intergenerational poverty. The school district gave the housing authority a seat at the table, which was an unusual step for a school district. Vancouver's initiative was successful in letting the school-based group nominate families to receive housing authority vouchers instead of leaving it to the discretion of the housing authority. The experience in Vancouver underscored the importance of identifying which local community organizations are important potential partners and which ones should lead the effort.

In another example, McDowell County approached the American Federation of Teachers (AFT) to help address the long-term challenge of teacher recruitment and retention. The union found that local community conditions were a major factor, such as intergenerational drug use and poor access to health and social services. To tackle these issues, the AFT forged a series of union–community business partnerships and focused on such things as improved housing.

States and private philanthropy can help launch such efforts by supporting hub organizations that seek to map the assets of partnering groups, share data, and facilitate rela-

tionships. Nevertheless, initiatives like these require creative initiatives and sustained support. While philanthropy and short-term support from the outside can achieve an effective startup, states and localities need to explore ways to use program funds creatively, such as by braiding or blending money from different programs (see next section).

- **States and the federal government should encourage experimentation with new forms of funding, such as social impact bonds (SIBs).**

Increased flexibility in service payment systems is important for fostering new types of partnership, but so is providing startup capital for hubs and other partnerships. Raising the capital required poses two types of challenges for jurisdictions. One is that the initial capital requirements—before services can flow—compete with other budget priorities and thus encounter resistance. The other is that new ventures are risky, making it politically difficult for a jurisdiction to authorize the use of funds.

Private philanthropy can help address these challenges in some instances, and foundation-supported ventures are a common feature of social policy experimentation in the United States. But some jurisdictions are also turning to the private capital markets as an additional way to reduce the risk and the competition for public investment funds. The research work of the Urban Institute and other institutions is encouraging states and local government to experiment with "pay for success" contracts using private finance.[70] These contracts involve SIBs, in which private investors finance a public-private part-

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[70] Urban Institute, "Pay for Success."

nership to undertake a new social project to achieve a defined outcome. The investors are reimbursed and receive a return from the government only if the outcome is achieved.

The experience with SIBs is still short and limited, and their potential is debated.[71] But they have been used for innovative approaches to such issues as reducing homelessness, reducing prison recidivism, and testing home-based neonatal care for low-income mothers.[72] The federal government should encourage further experimentation with and evaluation of such novel forms of capital. One way that the federal government could help would be to set aside some funds to assist with feasibility studies and evaluation and to underwrite part of the repayment for interesting examples. There is legislation before Congress—which passed the House in 2016—that would do this.[73]

- **HHS and state departments administering Medicaid and the Children's Health Insurance Program (CHIP) should review and revise payment systems, reimbursement rules, and budgets to encourage and evaluate school-based and other community programs that improve health and reduce direct medical costs.**

Medicaid and CHIP are critical sources of revenue for SBHCs, yet barriers to reimbursement remain and do not always align with fully achieving the potential of the centers. For instance, while state Medicaid agencies are increasingly implementing innovative payment incentives tied to the location

of services provided, it appears that most Medicaid agencies cannot identify SBHCs in their claims data because they do not have an assigned place-of-service (POS) code. The Centers for Medicare and Medicaid (CMS) should establish such a code for SBHCs. The current POS code for schools is tied to school-based health services eligible for Medicaid administrative claiming and generally not appropriate for SBHCs.

In addition, SBHCs are often limited in the types of services they can bill because Medicaid does not recognize them as comprehensive primary care entities. Each state Medicaid agency has the authority to assign a set of billable codes for specific locations of service, but the misperception that SBHCs provide school-administered services required under the Individuals with Disabilities Education Act (IDEA) means some Medicaid agencies limit the types of services SBHCs can bill. CMS should issue guidance on a set of billable codes for SBHCs.

Addressing services provided to students outside IDEA is particularly important. Until recently, schools and school nurses faced limits on health services they could provide because of the "free care rule." This rule meant that Medicaid funds could not be used to pay for services that are made available without charge to everybody in the community. For example, Medicaid could not be billed for hearing or eye tests for Medicaid recipients unless all other students were billed for that service. Fortunately, in late 2014, CMS eliminated this rule. But there is still uncertainty in many states and school districts re-

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[71] Gustafsson-Wright et al., *The Potential and Limitations of Impact Bonds*.
[72] See Chhabra, "Will 2016 Be a Social Impact Bond Growth Year?"
[73] See Abello, "Congress Might Make Social Impact Bonds Easier on Cities"; and GovTrack, "H.R. 5170."

garding this change for state Medicaid programs and reimbursements to schools. For instance, before districts can take advantage of the increased flexibility in financing student health services, many states will need to formally integrate the federal policy change into statutes that modify the Medicaid state plans.

The federal government needs to provide greater guidance for states and school districts to support school-based health services. It can also help in other ways. In January 2016, for instance, HHS and the Education Department launched the Healthy Students, Promising Futures[74] initiative to encourage state education and health leaders to collaborate more strategically to promote student health. Many states and their technical assistance providers would benefit from comparative national data and more explicit guidance from HHS on complex topics, such as billing when risk factors, not medical necessity, are the basis for eligibility; billing for interventions, such as behavioral and mental health, where groups of students are involved; and joining with managed care entities under state contracts.

Increase Budget Flexibility

Funding is the lifeblood of service organizations, and aligning funding streams with desired goals is essential for collaboration and enabling hubs to function as effective coordinators. Regrettably, revenue streams are not aligned in this way. As noted earlier, in some cases statutes or regulations restrict the use of money, preventing, for example, organizations from spending health care dollars on

nonmedical services that more effectively achieve some aspects of community health. In other situations, the complexity and elaborate administrative steps make it difficult or impossible to use funds flexibly for innovative local approaches, such as hubs. A byproduct of the general "wrong pocket" problem is that government at all levels often does not invest funds efficiently to generate the highest value-added across sectors.

To tackle these problems, government needs to experiment with some promising approaches.

Recommendation 6: *Take steps to facilitate the braiding and blending of public and private resources from multiple sectors and sources.*

An important strategy to align a variety of budgets with an agreed multisector goal is to create bodies or procedures that either coordinate the use of different budget streams (known as "braiding") or combine funds from multiple sources (known as "blending"). Doing this is no easy task. Braided or blended money still requires reports and evaluations to be sent to each agency responsible for the funds. So to encourage the creation of hubs that can use program resources in creative partnerships, the government needs to experiment with procedures that promote flexibility in the use of government funds, but in ways that preserve accountability and assure that the populations intended to be supported by programs are still appropriately served. An effective approach to this may combine procedures to coordinate agency spending with new bodies or new procedures closer to communities.

- **Federal and state agencies should create bodies that link decision makers from mul-**

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[74] U.S. Department of Education, "Healthy Students, Promising Futures."

tiple agencies to coordinate strategies and budgets to help schools and hospitals become more effective hubs in the community.

When collaboration at the local level involves funds from multiple agencies, it is often impeded because the various agencies controlling funds, setting eligibility criteria, and establishing strategy literally do not talk to each other. To improve the environment for hubs to function and to help partnerships across sectors to flourish, government agencies need to better coordinate their activities to reach shared goals. That in turn requires leadership in government to establish procedures to foster coordination and to signal to staff in each agency that collaboration and joint planning should be part of the agency culture.

There are examples of good collaboration, such as the HUD and HHS efforts to improve joint policies for the elderly. On a larger scale, the Reagan administration launched several "cabinet councils"[75] designed to focus multi-agency efforts on administration priorities, such as economic recovery and national security; to reinforce the importance of these councils, the president routinely chaired them. Other administrations have adopted some version of this approach in some areas. Some states have established similar bodies, often reporting directly to the governor. For instance, many states have created "children's cabinets"[76] to bring together top officials to coordinate services for children across departments. Virginia's Children's Services Act created a pool of funds for high-risk children that were

previously managed under several different funding streams and departments; the pool is now managed by an interagency council.[77]

The federal government could establish similar bodies to coordinate agency strategy and budgets to support schools, hospitals, and other institutions as hubs in communities. For example, the federal government should appoint a council comprised of senior officials from the Department of Education, HUD, HHS, and the Department of Justice to focus on supporting effective hospital and school-based partnerships to improve health and social conditions, to reduce mental health–related and substance abuse–related interactions with the juvenile justice system, and to achieve other community goals. State-level councils could mirror this coordination at the state and local levels, as they have done with children's cabinets.

• **States should establish versions of Maryland's county-level Local Management Boards[78] that can braid together multiple public and private financial resources to support community-based health improvement initiatives.**

The state of Maryland has created, by statute, bodies at the county level that are permitted to a degree to braid or blend state, federal (subject to federal rules and waivers), and even nongovernment funds and contract with grantees at the local level to deliver health, education, family support, and other services for children and youth, using money from multiple programs. These bodies, known as Local Man-

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[75] Smith, "Reagan Setting Up 6 Cabinet Councils to Shape Policy."
[76] See Rennie Center for Education Research and Policy, "Towards Interagency Collaboration."
[77] Clary and Riley, "Pooling and Braiding Funds for Health-Related Social Needs."
[78] Trust for America's Health, "Blueprint for a Healthier America 2016." Maryland's Local Management Boards, "Making a Difference for Children and Families, 1990–2010."

agement Boards (LMBs), can be government agencies or approved nonprofit organizations. The Family League of Baltimore is an example of a nonprofit LMB. LMBs contract with community-based organizations, which are local level grantees, to implement programs and strategies. The LMB is held accountable for the use of funds and for assuring appropriate reporting and evaluation. The local level grantee has the advantage in that it can receive funds from multiple sources without shouldering the full burden of applying and reporting to each source. Similar bodies could be used for broader objectives, such as promoting education and other social determinants of health.

Adopting a version of an LMB would involve a number of considerations. Since the LMB has a crucial fiduciary role, it is essential to be sure that a chosen organization is certified as having the necessary capacity and internal controls and monitoring; DC Trust—an LMB in the District of Columbia serving at-risk youth—collapsed in bankruptcy due to mismanagement.[79] If LMBs are to carry out data collection and reporting functions for local organizations, the LMB is essentially shouldering additional overhead that otherwise would be part of their grantees' budgets. Thus, the funding for the LMB itself needs to reflect this additional "back office" function. The Family League of Baltimore, for instance, provides data, evaluation, and reporting services to many of its grantees, but often is not fully compensated for this. For versions of LMBs to be appropriately financed, their services on behalf of community grantees might need to be viewed as essentially a public good and appropriately financed by a state or the federal government.

The form of LMB would not necessarily need to be a new institution. It could be an existing hub or other service provider that agrees to take on these additional responsibilities. Some hospitals, in particular, might be well positioned to carry out these functions as part of a revised business model, given their data and reporting capacities, provided they are appropriately compensated for these functions.

• **Modeled on such Administration initiatives as performance partnership pilots (P3), federal departments should pilot hub-based initiatives that address social determinants of health and create other community value, such as increased savings, reductions in violence, and economic improvement.**

Performance partnership pilots, created with a federal appropriation in 2014, gave authority to the Departments of Labor, Health and Human Services, and Education, to establish up to 10 pilots.[80] These pilots will enable states, localities, and other jurisdictions to pool a portion of their discretionary funding to improve outcomes for disconnected youth, blending money from several programs into a single stream of money with streamlined reporting and other requirements.

HHS, with other federal agencies such as HUD, should develop similar blended grant programs to make financing more flexible for hospital or school partnerships that address social determinants of health and create community value, such as improved school attendance and reductions in homelessness.

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[79] Davis, "Mismanagement Has Bankrupted a D.C. Nonprofit, Endangering Programs."
[80] See youth.gov, "P3 Fact Sheet."

Appendix: Advisory Group Members

For this project, we assembled this advisory group of researchers, policy experts, and practitioners to suggest policy steps and review drafts of this report.

While the recommendations reflect suggestions raised in the conversations, they are not a consensus of the advisory group, and the recommendations do not necessarily reflect the individual or institutional opinions of any advisory group participant.

The authors of this Brookings report, not advisory group members, are responsible for the recommendations.

Advisory Group Members

Name	Affiliation
Laudan Y. Aron	Urban Institute
Katherine Barmer	Adventist Health Care
Caroline Battles	Ascension
Pablo Bravo	Dignity Health
Sana Chehimi	Prevention Institute
Bechera Choucair	Trinity Health
Anne De Biasi	Trust for America's Health
Wendy Ellis	Milken Institute School of Public Health, George Washington University
Andrew R. Feldman	Brookings Institution
Arthur (Tim) Garson	Health Policy Institute, Texas Medical Center
Zachary Goodling	Adventist Health Care
Ashley Harding	KIPP DC
Reuben Jacobson	Coalition for Community Schools
Sallie Keller	Virginia Bioinformatics Institute, Virginia Tech
Chris Kingsley	Better Measured
Cindy Mann	Manatt Health
Alexandra Mays	Healthy Schools Campaign
Donna J. Mazyck	National Association of School Nurses
Stephanie Mintz	Briya Public Charter School
Debra Montanino	Communities In Schools
Anand Parekh	Bipartisan Policy Center
Chelsea Rae Prax	Federation of American Teachers
Olga Acosta Price	Milken Institute School of Public Health, George Washington University
Sara Rosenbaum	Milken Institute School of Public Health, George Washington University
John Schlitt	School-Based Health Alliance
Prabhjot Singh	Arnhold Global Health Institute, Icahn School of Medicine at Mount Sinai
Indu Spugnardi	Catholic Health Association of the United States
Julie Trocchio	Catholic Health Association of the United States
Sandra Wilkniss	National Governors Association
David Zuckerman	Democracy Collaborative

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