Using Data to Impact Community Health and Drive Action
The use of data is central to population health improvement. Data analysis helps providers and public health professionals to identify, understand and act on problems facing communities, and to measure the effectiveness of interventions.

The 2017 Practical Playbook National Meeting, *Improving Population Health: Collaborative Strategies That Work*, will feature insights, tools, methods, and examples related to identifying what data to gather, how to locate and collect it, and how to share it with other relevant stakeholders to generate interest and support. This strategy brief shares information that will enrich attendees’ understanding of and ability to put National Meeting content into use.

Among the resources used to develop this piece were interviews with key subject matter experts in the field: Jeffrey Engel, MD, Executive Director, Council of State and Territorial Epidemiologists; Joshua M. Sharfstein, MD, Associate Dean, Johns Hopkins Bloomberg School of Public Health; Mina Silberberg, PhD, Vice-Chief for Research and Evaluation, Duke Division of Community Health; and Brian Castrucci, MA, Chief Program and Strategy Officer, de Beaumont Foundation.

Read on to learn about common challenges and barriers to implementation and strategies to successfully share data across sectors in order to positively impact community health.

**COMMON CHALLENGES**

All partnerships have potential stumbling blocks. Identifying and preparing for potential pitfalls can help to limit their impact on a project. Below are problems most likely to occur in partnerships between public health and health care, as well as potential solutions.

**Patient Privacy:** Protecting patient privacy is a critical concern for health care providers. Patient privacy laws and regulations, such as HIPAA, have clarified acceptable methods of sharing personal health information. Under state and local laws, health care organizations are required to share data with health departments for reportable diseases and conditions. Health departments are often authorized to collect other data as part of their mission to protect the health of the public, and when not within the scope mandated under state and local laws, data sharing agreements may be necessary. Whether through legal requirements or agreements, health care providers can share data, giving public health representatives timely, accurate data for addressing community health problems. Public health departments and health systems are essential partners in sharing health
information, and can be powerful partners in acting on the data.

**Workforce Readiness:** It is important to recognize that effective data-sharing may require financial, technical, or workforce resources, including nurses, IT staff, and office staff. Never ask for data without first establishing how it will be used and analyzed. By identifying the absolute minimum amount of data needed for an initiative, one may be able to decrease the amount of resources needed to implement new data-sharing protocols. Be aware, however, that everyone must be trained on how best to execute any potential partnerships, and that can take added time.

**Technology:** When different organizations want to share data, they may need new technology to do so, which may precipitate software glitches and interoperability problems. Additionally, relying solely—or too heavily—on a health care institution’s electronic medical records (EMRs) to provide all the data you need to support your goal can make analyzing the data difficult, since there is little standardization in how people input data into EMRs. This creates the potential for inaccurate or incomplete data sets.

**STRATEGIES FOR SUCCESS**

Data-sharing works best when approached strategically. Use the following approaches to maximize your chance of success.

**Establish Trust:** Sharing data requires trust. Beginning a relationship with another organization by asking for their data, without first establishing how it will be used and safely stored, may scare away a potential partner. Instead, begin the relationship by agreeing on a goal, how you will measure it, and what data you will gather to track progress.

**Identify a Champion:** Find a champion within a partner organization to help you traverse the challenges that arise in establishing a data-sharing agreement. Ideally, this champion is known and well-respected by “front-line implementers” of your project. They don’t have to be individuals in high-level management, but they do need to have enough influence to help ensure the project stays on course.

**Lead with Your Goal:** Instead of focusing your conversations solely on the data to be shared, focus on – and agree upon – the goal or problem you are trying to solve. This approach will help you narrow in on the exact data and strategies you need to address the problem, as well as secure partners. It's important, before you start large data collection efforts, to thoroughly flesh out your plans and
ask questions. Why are you collecting this data? How will it be used? It’s possible these answers will change your overall approach.

**Share Compelling Stories:** Remember, most health workers entered the field to help people improve their overall health. Sharing stories helps both partners illuminate the need and precedence for taking on a complicated project. For instance, don’t begin by asking your potential partner for data on asthma; instead, start by telling them a story about the impact of asthma on children’s health or school performance, and then illustrate how data helped address the problem at hand. Try including numbers to bolster stories to help stakeholders see a return on investment for sharing data. In addition, stories can help raise the political will to support your endeavor. If you show council members data that confirms an obesity problem in your community, you are more likely to garner funding for an obesity prevention program.

**Agree Upon the Problem:** Be sure both organizations have concisely, accurately, and robustly identified and agreed upon the problem(s) before crafting a solution. For example, a healthcare system might assume that the problem underlying poor diabetes control is lack of health literacy, while community members may understand it to be lack of access to healthy foods and recreation.

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**A POTENTIAL TOOL: THE DIGITAL BRIDGE**

The Digital Bridge is a bi-directional data-sharing tool for providers, laboratories, hospitals, and public health departments. It is designed to improve information exchange between health care and public health representatives. To do this, the Digital Bridge has introduced electronic case reporting (eCR), a tool that improves the timeliness, accuracy, and completeness of information sharing. When used, public health departments benefit because they receive real time reports from practitioners when patients with certain conditions show up in their EMRs. The **conditions** are those that are reportable by law in the jurisdiction, diseases such as food-borne illness. Providers also benefit because they receive alerts when these conditions must be reported, or if there is a local outbreak of concern. This information sharing is as close to real-time as possible, so primary care providers can be on the lookout for any epidemic cases while public health departments can accurately track disease spread.

According to Jeffrey Engel, MD, Executive Director of the Council of State and Territorial...
Epidemiologists, studies often show that national notifications of diseases are under- or poorly-reported to public health. “The reporting of cases is not timely – they are often reported to public health when there’s already an outbreak or an epidemic. Public health routinely is not notified in time to implement an intervention that prevents outbreaks. Timely information exchange is going to improve outcomes in population health by preventing spread because early cases will now be identified more quickly, accurately and completely.”

To effectively design and implement this initiative, public health, health care, and health information technology representatives came together under a project called The Digital Bridge, funded by the de Beaumont Foundation and the Robert Wood Johnson Foundation. The kick-off began in June 2016, and strategy, implementation, and technical issues are being addressed throughout 2017. Implementation sites have been selected nationwide with full operational capacity expected by early 2018.

Once implemented, the Digital Bridge will be accessible to any provider using select proprietary EMR platforms (e.g. Epic or Cerner), in partnership with a public health department. Communities utilizing health information exchange organizations will also be able to participate with the potential to scale up more rapidly. Using eCR will also help providers and public health departments comply with the reporting requirements under Meaningful Use Phase 3.

Overall, the Digital Bridge is designed to promote more accurate, timely data-sharing. Visit www.digitalbridge.us to learn more.

LEARN MORE
To learn more best practices for sharing data, as well as other strategies for creating successful cross-sector partnerships, attend Improving Population Health: Collaborative Strategies That Work, the Practical Playbook National Meeting in Washington, D.C. from May 31 to June 2, 2017. For more information and to register, visit www.practicalplaybook.org/section/national-meeting-2017.