Partnering with Managed Care Organizations to Share Data for Community Health Improvement

How the health department and managed care organizations in Allegheny County formed a unique data sharing partnership to improve cardiovascular health outcomes
Introduction

For public health departments, forging partnerships with managed care organizations (MCOs) has not traditionally been top of mind, but this practice is changing. Health departments are increasingly recognizing that MCOs can be critical allies in working collaboratively to share key data and understand health outcomes and health care service utilization in their communities. The Allegheny County Health Department is one example of a public health agency that has forged successful partnerships with MCOs in order to work towards shared population health goals.

The health department has long acted as a neutral convener, leading an Advisory Coalition that brings together over 75 organizations spanning multiple sectors with the goal of systematically transforming the health of the county’s 1.2 million residents. When Dr. Karen Hacker came into her role as Director of Allegheny County Health Department in 2013, she met with leadership from hospitals and MCOs, inviting them to join the Advisory Coalition and collaborate on the development of the Plan for a Healthier Allegheny, the county’s community health improvement plan. The coalition was committed to an approach that recognized how social determinants contribute to community health outcomes, so forming an alliance to share data was a natural next step.

When the opportunity arose to apply for a grant from Data Across Sectors for Health, Allegheny County Health Department leveraged its existing partnerships to collaborate on a project to build a connected data warehouse that would combine data from multiple sectors and export it to a modeling platform called “FRED” to better understand the factors impacting cardiovascular outcomes of county residents.

UPMC Health Plan, one of the MCOs involved in the Advisory Coalition, was the first health care payer to partner on the DASH project and agreed to contribute their health care data as part of the initial proposal. Motivated by the opportunity to access aggregated, community-level data that could aid them in achieving their population health goals, two additional MCOs—Highmark and Gateway Health Plan—joined the effort. Highmark owns Gateway Health, and all three MCOs offer commercial, marketplace, CHIP, Medicaid and Medicare products. Roughly 60% of Allegheny County residents are covered by one of these MCOs, and de-identified data from their insurance claims are now being used to help the health department understand cardiovascular risk factors and test the impact of various interventions. The story behind this innovative data sharing collaboration is documented in this brief.

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- Karen Hacker, MD, MPH, Director, Allegheny County Health Department
- Barry Martz, MBA, Senior Director, Data, Analytics, & Knowledge Management, UPMC Health Plan
A History of Sharing Data

Claims data are an important source of information for public health surveillance. Accessing claims data from MCOs can help health departments understand the prevalence of certain health conditions (e.g. diabetes, hypertension, high cholesterol, or heart disease) among private and public health plan enrollees.

Health department epidemiologists can then analyze those conditions in terms of demographic characteristics (e.g. age, geographic location, gender) and socioeconomic factors (income, education, job status) to develop a more complete understanding of the factors that impact health. Ultimately, these analyses can be used to target interventions and policies more effectively for greater health impact.

MCOs also track health outcomes at the population-level, collecting data about enrollees to manage health care costs, monitor utilization, and improve quality. Health departments can offer MCOs a unique perspective by building their knowledge and understanding of the complex interplay of social factors that are driving chronic diseases and increasing health care costs.

Martz, Senior Director at UPMC Health Plan, commented, “The DASH project reminded me how many other sources of information are out there that can be useful for understanding what kinds of services our members need. Information on walkability scores, air quality scores, and other social determinants can help us understand more about the specific neighborhoods our members live in and the factors that contribute to their health that we wouldn’t necessarily see through our own data.”

Allegheny County Health Department has numerous strategic relationships with agencies across the county including nonprofit organizations, research organizations, and other governmental agencies such as human services, economic development, and transportation.
Allegheny County Health Department has established data sharing agreements with many of these partners and layered these data sources with the aggregate claims data. This data analysis approach helps MCOs in particular explore how social determinants impact health outcomes and generate new strategies to improve their care coordination and population health goals.

**A Collaborative Approach**

Establishing relationships with MCOs can sometimes be challenging for health departments. A few key factors helped the health department gain buy-in from payers in Allegheny County. First, many of the major MCOs in the region are integral parts of integrated delivery and financing systems and therefore have a unique population-level focus on improving health outcomes and lowering costs. Second, and perhaps a bit more unique, the MCOs engaged in the DASH project are locally-based in Pittsburgh, PA rather than having their operations at a regional or national level, which made it easier for Dr. Hacker, the Director of Health, to find and access the right staff within the MCOs, meet in-person, and establish trusting relationships. Dr. Hacker emphasized that as a health department director, a crucial aspect of her job is fostering connections with health care organizational leadership. Leveraging relationships of her board members, Dr. Hacker was introduced to medical directors at the MCOs — key decision-makers that could connect her to staff in their organizations that would provide access to data needed.

Martz from UPMC Health Plan reflected, “We are lucky that we have a great executive leadership team that set the tone of thinking of our members not just as enrollees in our health plans, but as members of our own communities. Hearing that message from leadership made us feel comfortable and confident moving forward with the health department.” From the beginning, the health department treated the MCOs as equal partners and active participants, not just as a mere data contributor. The MCOs were invited to stakeholder meetings so that they could shape the course of the project and provide input on creating shared data definitions.

**THE IMPACT OF SOCIAL DETERMINANTS OF HEALTH ON CVD RISK**

These maps show how MCO claims data and other data sources were used to model cardiovascular disease (CVD) risk factors and identify census tracks where social determinants of health (SDOH) like education, poverty, and unemployment contributed to excess CVD risk.
Making Shared Decisions About Data

To expedite the approval process, data analysts from the participating MCOs requested that the data sharing agreement sent from the health department be as specific as possible. This agreement provided the attorneys with all the details they needed to determine what data they could legally agree to share. Martz noted, “Most MCOs have dedicated analytics groups and are fairly sophisticated in terms of their data, so approaching them with a specific ask, framing it in a way that is mindful of the organization’s resources and time commitments, goes a long way.”

While recognizing that each MCO faced varying internal approval processes, the health department nudged the MCOs to finalize the legal agreements in a timely fashion so that the team was positioned to meet the DASH project deliverables. As a former health services researcher, Dr. Hacker had prior experience working with MCOs, so she was familiar with the data terminology, the different types of claims data, and the analyses that would be best-suited to account for the data’s limitations.

Anticipating challenges, the health department strategically utilized data definitions that had previously been used in health services research. Hacker explained, “I’m a big believer in using resources that already exist rather than inventing them. The forms we sent to the MCOs included exactly how we wanted the data, what the definitions were, and it was literally just ‘fill in the blanks.’ MCO staff reviewed the content before we asked them for the final data extract.” For health department directors that don’t have direct experience working with claims data, she recommends partnering with local universities or health researchers for guidance on the process.

The health department also made clear that the data from all three MCOs would be de-identified and aggregated to analyze health outcomes at the population-level. This allayed any concerns that the data would be shared in a way that would reveal sensitive information to competitors. All three MCOs agreed to share their data publicly, as long as it remained aggregated with data from other MCOs. Recognizing that their individual market penetration in certain areas is limited, the partner MCOs found it valuable to view the combined claims dataset because it allowed them to better understand population-level health trends within the county.

Rather than inviting MCO leadership to all the project team meetings, Dr. Hacker engaged them in discussions around key decisions, such as how the project results would be disseminated to the community. Health department staff found it most effective to meet one-on-one with leadership at each MCO office so that they could communicate input on the project more transparently without divulging proprietary information to their competitors in a group setting.

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TIPS TO GET TO YES

1. Start with physician leadership
2. Engage MCO leadership and data analysts differently
3. Treat MCO representatives as collaborative partners
4. Be specific about which data elements you need
5. Make clear that claims data will be de-identified before it is shared

Tips to Get to Yes

Allegheny County Health Department and UPMC Health Plan shared some elements that were instrumental to their success collaborating on the DASH project, which may be useful for other communities interested in taking a similar approach.

- **Start with the physician leadership:** Health department leaders should build relationships with MCO medical leadership before engaging data analysts in order to gain high-level support and endorsement for the project to advance.
- **Engage MCO leadership and data analysts differently:** Data analysts participated in regular project meetings whereas MCO leadership were requested to participate at key decision points.
- **Treat MCO representatives as collaborative partners:** The MCOs appreciated being viewed as more than just a data source, but rather as key collaborators and decision-makers who could bring valuable insight to shape the course of the project.
- **Be specific about which data elements you need:** Bringing a concrete ask outlining specific data types and definitions alleviated MCOs’ concerns around the time burden required for developing the legal agreements and data extracts.
- **Make clear that claims data will be de-identified before it is shared:** MCOs were more than willing to disseminate their data publicly, as long as it was de-identified and merged with data from other MCO partners.
Next Steps

The DASH project opened the doors for the health department and their MCO partners to collaboratively identify new opportunities and look for “win-wins” to bridge their shared interest in improving health outcomes for county residents, especially the most vulnerable sub-populations. UPMC Health Plan continues to work with the health department to analyze a trove of data on the social, economic, and environmental factors that influence health.

Following the DASH project, the health department has met independently with MCOs in Allegheny County and these meetings have surfaced concerns beyond cardiovascular disease like opioids and asthma — leading causes of emergency department admissions and contributors to high costs.

Dr. Hacker recounted a recent meeting with UPMC Health Plan where they analyzed the data from the DASH project to focus their efforts moving forward. She stated, “Through the work from DASH, we identified a particular municipality of 19,000 people that is of great concern to us in terms of CVD outcomes, violence issues, and opioid issues, and that happens to be where UPMC has a hospital. We walked out of that meeting agreeing to focus our attention on directing interventions in that community.”

Now that they have established some of the infrastructure and groundwork to systematically share data, the health department hopes that they can utilize their relationships with MCOs to engage additional health plans in addressing the goals of the Plan for Healthier Allegheny.