

**Accreditation Preparation &
Quality Improvement
Demonstration Sites Project**

Final Report

**Prepared for NACCHO by the
Ingham County Health
Department, MI**

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Brief Summary Statement

The Ingham County Health Department serves about 600 low income mothers and their families through its Public Health Services (PHS) unit with the intent of improving birth outcomes and maternal and child health. We believe we reach about half the mothers who need our services.

Economic changes are increasing the number of low income and uninsured mothers and their family members who need services from the Health Department. But cuts to state and local government are threatening to reduce public health staffing levels. Local public health needs to increase caseloads to reach more of those who need us, while becoming more effective at earning reimbursement for its services so that we can continue to provide them.

Background

The Ingham County Health Department (ICHD) has served the public health needs of the community of Ingham County since its establishment in 1938. Located in Lansing, Michigan ICHD is charged to protect and promote the public's health through the prevention and control of environmental hazards, diseases, and health problems in vulnerable populations.

Over 300 Health Department employees work to provide services to a diverse population. ICHD is only one of a few local health departments in the state that offers a full array of public health services to the community. These services are categorized in three divisions. Our Community Health Care Services division with its many Federally Qualified Health Centers and programs serves as a health care home for over 20,000 medically underserved individuals. Our Health Plan Management Services (HPMS) division administers 16 County Health Plans operating in 53 out of 83 counties in the state. HPMS also operates the Ingham Health Plan, a health coverage program for the uninsured in Ingham County. HPMS also houses many traditional public health programs like Environmental Health and Health Promotion, and non-traditional programs like the Office for Young Children, which provides childcare expertise. Finally, Public Health Services provides community and home-based services focused on maternal and infant health.

Ingham County's PHS unit is unusually innovative. Two main programs form the heart of the unit's services: The Maternal Infant Health Program (MIHP) and the Maternal Infant Outreach Program (MIOP). In MIHP Public Health Nurses deliver clinical services in-home that are billed to Medicaid on a fee-for-service basis. The Department receives state block grant funds for MIOP in which paraprofessional Public Health Advocates provide a range of psycho-social services for infants and families. But the Department has a host of other programs for mothers and babies including Early On which serves special needs babies and infants, Children's Special Health Care Services which serves children with severe medical problems and other programs for lice, lead, tobacco, the Native American community and more.

Coordinating the work of the Nurses and Advocates employed by these different programs is difficult. The programs have different rules and operate on different time frames. Clients can be referred to more than one of the programs. Without good coordination inconsistency and duplication can result. Additionally, an important role of PHS staff is to be flexible generalists, able to participate in community collaborations and to advise and support clinical providers, social workers, sanitarians and others. Unfortunately, this work competes with casework, reducing productivity.

Furthermore, the PHS unit is facing many challenges. Because of the economy, the number of low income mothers who need services is increasing. At the same time, there has been a long struggle to reduce infant mortality and low birthweights in the County which has not met

with much success. In our community infant mortality rates have been stagnant around 7 per 1,000 and low birthweight rates around 10 percent for a decade.

At the very moment when we should be expanding our services to see more clients and focusing on improving the quality of the services and outcomes, we have been hit by serious budgetary and staffing problems. County general fund revenue and State block grant funds have not kept up with the cost of providing PHS services. And the Department lost a grant that supported three PHS staff.

Goals and Objectives

1. Public Health Services will increase its caseloads to reach and assist more low-income women and their families. Advocate caseloads will rise to 40 and Nurse caseloads to 60.
2. Public Health Services will increase the number of billable services it delivers to increase their revenue. PHS as a whole will deliver 450 units of billable services with revenues of at least \$8,000 per month.

Self-Assessment

The Ingham County Health Department piloted NACCHO's LHD Self-Assessment Tool for Accreditation Preparation in May 2008. We broke into ten teams. One team tackled each of the ten essential services.

One of the things revealed by the self assessment is that the staff who worked on the assessment felt Department does not do enough to try to improve quality. The Ingham County Board of Commissioners sets productivity goals for the Department and we report data that that indicate whether or not we attain those goals. However, at the time of the self assessment we had no staff trained in quality improvement and had never undertaken a systematic study of the factors affecting our attainment of any of the goals. Thus simply learning about and engaging in QI became a goal in and of itself.

The Deputy Health Officer of the Public Health Services (PHS) unit, Dr. Renee Canady, had already decided that she wanted to improve quality in PHS, so this became our focus area for QI.

Highlights from Self-Assessment Results

| Standard/ Indicator # | Standard and Significance |
|--------------------------|--|
| IX.C.2 | <p>LHD monitors program performance measures and analyzes data to document the progress toward goals and grant/funding requirements</p> <ul style="list-style-type: none"> • The Board of Commissioners set goals and hold us accountable for measuring progress. But team members felt there had been no discussion in years of what our goals should be or of whether our measurements were valid. We gave ourselves a 1. |
| IX.C.3 | <p>LHD evaluates the quality of clinical and preventive population based programs, identifies the need for change and uses a Quality. Improvement process to apply the evaluation findings</p> <ul style="list-style-type: none"> • Team members felt there were no examples of doing this. We have qualified staff but they have not been asked to do this work. We gave ourselves a zero. |
| VII.A.1-4 | <p>LHD staff have an understanding of access to care issues their community</p> <ul style="list-style-type: none"> • ICHD has built relationships with partners in the community around the issues of access to care. The Department has facilitated many dialogues with various stakeholders, and played an important role in creating a health coverage model for the community called the Ingham Health Plan. |

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| | <p>LHD staff are competent in program planning and community development methods</p> <ul style="list-style-type: none"> The Department has people on staff whose specific job is community development. <p>LHD engages a diverse set of community partners, representing communities of color, tribal representatives and specific populations, to identify program gaps and barriers</p> <ul style="list-style-type: none"> Team members acknowledged that ICHD has done much to help create and provide support to entities in the community to meet specific population's needs, for example the Neighborhood Network Centers, and minority health focused organizations. They also felt that the Department could do more to sustain these existing groups, and engage the Native American community more effectively. <p>LHD, in partnership with community partners, interprets qualitative and quantitative information on program gaps, developed through surveys, focus groups, interviews or other means of primary data collection.</p> <ul style="list-style-type: none"> ICHD gathers data from many sources to measure programming needs in the community. The Health Department works with many partners such as the Neighborhood Network Centers who canvass their neighbors for health information. Staff engages the coordinators of these centers in a monthly dialogue about the needs of the residents in their neighborhoods. Employees also staff community boards such as the Board of Health and the Community Center Board to evaluate existing programs and services, and investigate important public health issues in the community. Staff also works with the Power of We Consortium which brings together many agencies and organizations to address the need for improved services and programs. |
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Quality Improvement Process

AIM Statement: Our team wrote a very lengthy statement capturing what they wanted to accomplish and what their goals were. Not all of it fits the narrow definition of an AIM statement so we provide an excerpt:

Excerpt from Aim Statement:
 Utilizing a team approach, services to clients will be increased. Caseloads will be close to 40 for Advocates and 60 for Nurses. The amount of revenue generated through MIHP and Medicaid billing will increase.

PLAN: We began by brining the entire PHS unit together with our QI consultant, Jim Butler. We listened while PHS staff described the challenges they face. We hoped genuine dialog would help build commitment to QI. They agreed that a smaller team should continue the work by conducting a cause and effect analysis. The small team consisted of two Public Health Nurses and two Public Health Advocates.

The QI Team asked themselves why caseloads and billing are low and concluded the referral process was the ultimate cause. They identified 12 steps in the Nursing referral process alone! Since referred clients can be assigned to both a Nurse and an Advocate, clients may have two charts. Duplication, lack of coordination and low client satisfaction are the result.

The referral process also affects billing. For example, Nurses may wind up spending time delivering services to their clients that are not billable that could have been delivered by an Advocate if the cases were better coordinated.

Several different ideas for improving the referral process were suggested. One idea was to install an electronic database. The County's Management Information Systems was engaged to begin developing requirements for such as database. In its search for ideas the Team made field trips to other local health departments including Kalamzoo and Grand Rapids.

Eventually, though, one member of the team (Rachel Hedin) realized that a fundamentally improved process was required, regardless of technology. She suggested to the group that there should be a single process for assigning referrals, and that assignments should be made to teams of Nurses and Advocates who would coordinate the care of clients.

Here is an excerpt from a document the Team wrote called "Proposed Organizational Development":

We propose adoption of a Communities of Practice model for the program in Public Health Services... CoP teams will be comprised of a Public Health Nurse and Public Health Advocates. These teams will work in collaboration to provide coordinated care for families... Within the CoP teams, a PHA will receive all initial referrals from the Community Referral Coordinator. CoP teams will hold weekly case conferences to discuss an appropriate plan for care for meeting the family's needs. Utilizing the team approach, services to clients, and consequently caseloads and billing will be increased.

DO: We expected that implementing the new referral process would be challenging. One reason is that assigning referrals is a somewhat statusful position. Under the old system referrals were made separately to Nurses and Advocates. To unify the systems, someone would have to relinquish that role. Furthermore this process would change the structure of the PHS unit and how employees think of themselves. Instead of being divided into separate groups of Nurses and Advocates, with Nurses having somewhat higher status, the unit would now be grouped into teams of Nurses and Advocates with Advocates performing some roles Nurses used to, so that Nurses could maximize their time with clients.

The new process was discussed at two PHS unit meetings and finally officially rolled out on November 3rd. In fact there was very little resistance to the changes. PHS staff seemed to be relieved that the Department was taking their struggles seriously and seemed ready to work together in a new way.

CHECK: Baseline and ongoing data on caseloads was easily obtained from the units records. Nurses and Advocates write monthly reports on their caseloads which are compiled by lead staff. The Department's Billing and Reporting unit was able to provide Medicaid billing data by running a report which only took a few moments. It was important to us to avoid adding cumbersome data collection and compilation work to PHS staff so that they could focus on productivity. We immediately ran into unexpected challenges. So many changes were happening in PHS that there were many other things affecting caseloads and billing. For example, some staff who had low caseloads were being held accountable for increasing them. And PHS was making staff reduce a backlog of cases waiting to be closed, pushing caseloads down.

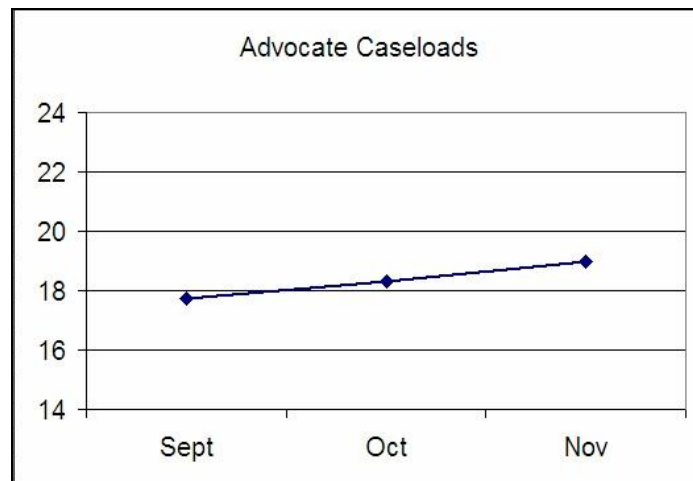
ACT:

Results

Between September and November Advocate caseloads rose from 17.8 to 19 while Nurse caseloads were unchanged at 33. During the same period the number of billable services rose from 358 to 362. These are all near long term averages and no significant deviation has yet been observed.

Instead of measuring total revenue in this test, we counted the units of billable services because it will take time for the billing process to work to finally determine what revenue will be.

While these results are not a strong endorsement of the new referral process, we believe that continuous application of QI will lead to ongoing improvements.



Lessons Learned

The biggest challenge we faced was that the situation in PHS was more difficult than we had expected. For this reason the solution was more sweeping than we had expected it to be. As our QI Consultant, James Butler, told us, our project turned out to more like a Business Process Redesign than QI.

We learned that QI is best suited to stable processes where one cause of variation can be manipulated to test its effect. In our project, our intervention completely overhauled the referral process in PHS. This means that it is likely that the sources of variation in caseloads and billing have changed because of our intervention. While our outcome was encouraging, there is much more we must do to understand how to maximize caseloads and billing.

However, as a result of completing on PDSA cycle the PHS staff are committed to QI and are engaged in using it to achieve the goals we initially set. The most exciting part of the entire project is that the solution we tested came from the staff themselves who were the ones with the deepest understanding of what needed to change.

Next Steps

In the future we will continue to use the QI system we have established to increase our control of the variation in caseloads and billing. There are key questions we want to explore:

- 1) What mix of clients within a team optimizes caseload? For example, different programs serviced by PHS have different rules. When Nurses and Advocates work together, can they work around some of the restrictions?
- 2) Some clients are fee-for-services, while others are covered by block grant or contract dollars. What mix of clients within a team optimizes revenue?

We will be applying for an RWJ Evaluating the Impact of Quality Improvement Grant to keep this work going. Wish us luck!

Conclusions

Our two main conclusions are:

- 1) Public Health needs to engage in QI on an ongoing basis. As we worked on our project we were shocked at the number of opportunities for improvement we encountered that had been there for years, and yet no one had acted on them.
- 2) QI is not the same thing as establishing goals and measuring progress toward them. It takes time to learn how to tie the variation in the parameters you are measuring to the process changes you are making. We would encourage LHDs to invest in repeated learning about QI in order to get the most out of it.

Appendices

Appendix A: QI Storyboard

Appendix B: "Proposed Organizational Development" created by the Public Health Services unit