Improving Public Health Quality through a Team Referral Approach. Ingham County Health Department. 300 Staff, 280,000 Population. Marcus Cheatham and Rona Harris.

Ingham County Health Department

PLAN
Identify an opportunity and Plan for Improvement

1. Getting Started
When the Ingham County Health Department completed the National Accreditation self assessment, we discovered that the Department does not do enough to improve quality. 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.

Ultimately, we want to improve client outcomes, but before we can do that we have to get control of our own business processes. Therefore, the projects' goals were: 1) To increase PHS caseloads, and 2) to increase the billable services that PHS provides.

Excerpt from Aim Statement:
Utilizing a team approach, services to clients will be increased. Caseloads will be close to 40 for Advocates and 40-80 for Nurses. The amount of revenue generated through MIHP and Medicaid billing will increase.

2. Assemble the Team
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.

3. Examine the Current Approach

Excerpt from Analysis of Current Workflow:

1. The intake secretary receives a referral form from an external agency.
2. The referral is entered into a client database.
3. Client information is entered into Card File which assigns client numbers.
4. The same information is entered into Word so that labels can be printed.
5. The chart and index card are given to the Chief of Nursing who assigns the case.
6. The chart is returned to the secretary who enters Nurse's name into Card File.
7. The secretary gives the chart back to the Chief who passes it to the Nurse.
8. The Chief enters the Nurse information into the caseload notebook.
9. The Chief informs a Nurse of a new case by putting a card in their in basket.
10. The Nurse retrieves the chart from the secure chart file area.
11. The Nurse may also be informed that additional resources have been assigned to the case.
12. The Nurse contacts the client.

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.

4. Identify Potential Solutions
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.

5. Develop an Improvement Theory

Excerpt from Proposed Solution:

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.

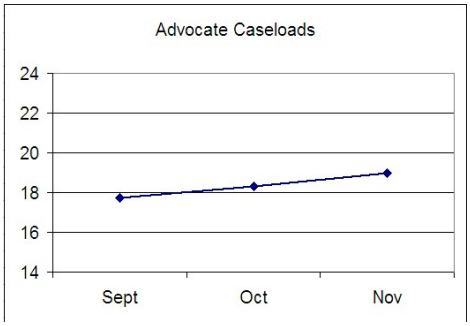
DO
Test the Theory for Improvement

6. Test the Theory
We knew we could test the new referral process because data on caseloads and billing were readily available in the Department's systems. After careful planning we launched the new process on November 3.

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 unacceptably low caseloads were being held accountable for increasing them. And PHS was making staff reduce a backload of cases waiting to be closed, pushing caseloads *down*.

CHECK
Use Data to Study Results of the Test

7. Check the Results
Between September and November Advocate caseloads rose from 17.8 to 19 while Nurse caseloads were unchanged at 33. During the same period billable services rose from 358 to 362. These are all near long term averages.



ACT
Standardize the Improvement and Establish Future Plans

8. Standardize the Improvement or Develop New Theory
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. We 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 due to understand how to maximize caseloads and billing.

9. Establish Future Plans
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!