

**National Committee on Vital and Health Statistics (NCVHS)
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Topic: The Rochester Model

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Introduction

As you know, nearly one-third of Americans (73 million) have High Blood Pressure (HBP), and the incidence of the disease has not changed significantly in the past ten years. High blood pressure is thought to contribute to one out of every seven deaths and nearly half of all cardiovascular disease-related deaths in the United States. While many have advocated for systematic, population-focused interventions to improve blood pressure control, a formula for success has remained elusive. In Rochester New York there has been momentum towards a community collaborative to address HBP, and that collaborative has achieved some success that we would like to share with you today.

Over the past two years, the Monroe County community, which includes Rochester, New York, has been engaging in a multi-stakeholder collaborative to improve outcomes for people with high blood pressure. This report describes the process to date, and hopefully will stimulate conversations about mechanisms to encourage collaboration within communities throughout America. It should be noted that due to its descriptive nature and the early stage of the project, we do not present results or outcomes that can be subjected to quantitative and/or statistical analysis.

Beginning in 2005, the Rochester Business Alliance (RBA), the regional Chamber of Commerce, created the RBA CEO Healthcare Initiative to address the rising costs of healthcare (and related issues) which includes Kodak, Xerox, Bausch & Lomb, Wegmans, Paychex, RIT and Jasco Tools. Together, these seven companies have over \$40 billion dollars of annual revenue and over 200,000 employees worldwide. Each company provided healthcare experts from their own organizations who work collaboratively to assist the CEO Healthcare Initiative. This group of experts is called the RBA Healthcare Planning Team (RBAHCPT). Paul Speranza, vice chairman, general counsel for Wegmans is the facilitator of the CEO group and the chairman of

the RBAHCPT. Wegmans is a privately held regional food retailer that has been selected by Fortune Magazine as one of the top five employers in America for the last eight years and has been a consistent leader in fostering employee satisfaction and wellness. The Healthcare Initiative has been very successful in its first five community projects including assisting the creation of a regional health information organization, assisting the community with greater utilization of generic drugs and creating a community-wide wellness program called eat well/live well. The RBAHCPT also includes representatives from LiDestri Foods, Excellus, MVP, the University of Rochester Medical Center, Rochester General Health System, Unity Health System, RBA and Finger Lakes Health Systems Agency. Sandy Parker, the CEO of the RBA and Paul Speranza led the effort to create the CEO Healthcare Initiative which Danny Wegman, CEO of Wegmans chairs.

After considerable investigation, and a series of community conversations, the RBAHCPT determined that the most likely method to successfully reduce healthcare costs was to focus on transforming healthcare delivery from a pure visit-focused approach to one that also includes population management. In 2009, recognizing that this transformation required more than simply reforming the payment system, the RBAHCPT decided to focus on reducing the cost of and improving the clinical outcomes for those with HBP as an initial venture into redesigning the care process. HBP was selected because of community feedback, the existence of well-accepted evidence-based guidelines, the availability of cost effective treatments, and the direct correlation between improved recognition and treatment and decreased morbidity and mortality of the condition. As the employers examined the costs of care in the community, they recognized two additional factors. First, the costs of care for the uninsured, the underinsured and the Medicare population influenced the business community's cost of care. Second, trying to redesign care for their employees only would not work. Based on practitioner feedback, an all-player approach would be needed. To accomplish their goal, the RBAHCPT recognized that an employer centric group would have difficulty successfully bringing together the multiple stakeholders needed to achieve their goal. A community based organization, with a track record in bringing disparate groups together to a common table would be required; one that had experience in addressing the disparities in care and outcomes that exist in Monroe County.

To address the identified need to create a community wide focus, in 2009, the RBAHCPT selected the Finger Lakes Health System Agency (FLHSA) to be its partner for the project. They selected FLHSA because of its track record of enlisting all major stakeholders to address complex access and utilization issues such as planning for regional geriatric services, reducing the incidence of lead poisoning in Monroe County, addressing childhood obesity, and more recently, creating and empowering Latino and African-American coalitions to provide explicit feedback to community-wide projects, their access to healthcare data not available to the business community and the fact that they had 1,200 volunteers.

Under the unique, collaborative leadership of the RBA and the FLHSA, a powerful multi-stakeholder coalition that includes employers, hospitals, providers, health insurers, organized labor, community organizations, the United Way, minority consumer coalitions, and representatives of local, state and federal government, was organized and empowered to identify and improve the recognition and care of people with HBP in Monroe County. There is no healthcare collaborative like this anywhere else in America. Integrating FLHSA's ongoing

African-American and Latino Health Coalitions to identify and address disparities of care brings frequently overlooked populations to the table as full partners in the planning process.

Using Wagner's Chronic Disease Model as a guide, the newly developed implementation team focused on creating multi-stakeholder workgroups to focus on the perceived components of a successful transformational program: creating clear measurable goals for the project; increasing community awareness; promoting life style change, especially among those at greatest risk of the untoward consequences of HBP; creating community and employer workplace wellness programs to support and encourage behavior change; redesigning care in primary care offices to create a data driven approach to caring for the entire population diagnosed with HBP in participating practices; and aligning both consumer and practitioner incentives to improve blood pressure diagnosis and treatment. In the process, disparities in care would be measured and reduced.

What is now being called the "Rochester Model" is a transformational community-wide collaborative effort to engage consumers/patients into making correct lifestyle choices and assist them in correct decision making regarding healthcare choices, while concurrently helping medical practices more successfully help their patients reach evidence-based BP targets.

Key Collaborative Goals

- Improve the rate of control for people with high blood pressure to 85% from the current baseline of 63% (consistent with established national recommendations and guidelines).
- Realize an incremental annual decrease of 5% over five years in hospital admissions for heart attack, heart failure and stroke in Monroe County.
- Realize an incremental annual decrease of 5% over five years in the initiation of kidney dialysis.
- Increase the recognition of high blood pressure risks, causes and strategies for management.

Collaborative Core Strategies

- Produce and expand a voluntary community-wide **high blood pressure data base**.
- Train local practitioners in "**practice improvement facilitation**" techniques to assist practices in improving high blood pressure control for their patients, examine practice systems and processes, and utilize clinical best practices.
- Implement **community engagement** strategies to emphasize grass roots interactions and relationships in locations including churches, community based organizations, workplaces, senior centers and fraternal organizations among many others.
- **Track performance** on an ongoing basis through standard and recurring data and medical analytics.
- Conduct **demonstration projects** in worksites and community locations to test learning and behavior strategies that teach participants to optimally manage their high blood pressure.

- Design and implement **communication strategies** targeted to people with high blood pressure or at risk of developing it to improve recognition and adoption of healthy habits known to improve the condition.
- Examine the **design of employee health plans** and make recommendations to change elements to encourage and reward active high blood pressure self-management.
- Deploy **Health Advocates** in the community to work directly with people who have difficult-to-control high blood pressure on management strategies, lifestyle changes and observance of clinical recommendations.

Session 1

Understanding Consumer/Patient Decision-Making Needs

1. What kinds of decisions do consumers/patients seek to make regarding their health and healthcare?

We believe the theoretical underpinning of this question is not what decisions consumers seek, but rather what motivates consumers to seek information that can make them healthier. Perhaps even more important is the question of what motivates consumers to actually make correct choices regarding their health.

We are lucky to have in Rochester (at the University of Rochester) some of the leading experts in behavioral change theory (Ed Deci, Nana Bennett, et al) and have strategically placed them at the table as advisors to the collaborative through our Behavioral Change Workgroup. At their direction, we have developed a training curriculum for community health advocates that can provide peer support for those with high blood pressure. Using recognized principles of Self Determination Theory, these health advocates are presenting information about health and well being (in the workplace, churches, and other venues) in a way that allows consumers to make their own choices based on internal motivating factors.

2. What are effective ways of disseminating information to support decision-making in ways that are understandable, actionable and useful?

Without the ability to generate consumer activation towards a goal, simply disseminating information will be unsuccessful. The traditional thought has always been “We will give you the information, and if you don’t act upon it is your problem.” We believe that in order to make information actionable and useful, it has to be perceived as meaningful to the consumer and also be presented in a context of a community member being called upon to “do their part” on behalf of a larger community trying to change itself. This addresses the relatedness component of self-determination theory.

With that said, the Rochester Model is not addressing high blood pressure as the “flavor of the month,” but instead is using high blood pressure as a conduit of how a community can come together to achieve a common and well defined goal. The work on the ground becomes the introduction of tools (or information) that can assist the consumer, as well as framing information as a community-wide quality improvement program rather than a contest. By removing competitive barriers (between business, non-profits, insurers, health systems, etc.)

through a collaborative spirit, we are finding that community members are motivated to “do their part” by engaging and using the tools offered to them.

Examples from the Rochester Model

A Community Awareness Workgroup was created and conducted a community-wide survey that oversampled the African American and Latino community because of perceived existing disparities in care. The survey was administered in person to 400 people primarily at bus stops to oversample the minority population, and to 1580 people through an internet survey advertised by the project’s member organizations in June 2010. The results of the survey surprised many.

The primary result was that regardless of the age, ethnicity and socio-demographics of the populations surveyed, > 80% understood that: 1) HBP is a silent killer, 2) knowing one’s blood pressure is important, 3) lifestyle changes are integral to successful treatment, and 4) medication is available and reduces the consequences of the disease. In addition, respondents voiced a desire to change their life style. The barrier was not awareness; **it was, instead, the inability to be successful at lifestyle change.**

Based on these results, a Behavior Change group was created. Using the experience of local experts in behavior change and motivational psychology, the behavior change group focused on four pillars; building competence, encouraging a sense of autonomy (the power to choose what is needed to change), creating a sense of community relatedness so all can celebrate each other’s successes, and building a common set of values to which all involved subscribe. The project’s core values are transparency, honesty and respect. Each intervention considered by the other workgroups is vetted by the Behavior Change Workgroup to ensure that principles of behavior change are embedded in the interventions that are selected and launched.

3. What do consumers currently use, and how do they access it?

Understanding that consumers are influenced by multiple touch points and through a variety of external (and internal) motivators we believe that the success of our collaborative will rest upon a unified message at all levels in the community. This includes (but is not limited to) the workplace, places of worship, doctor’s offices, public gathering places, and the media. Most importantly, as we are told by our Behavior Change Workgroup experts, it is not only the message that is important, but also the activation of the consumer to make a positive change. We believe that this is best accomplished by clearly presenting the message AND then facilitating the consumer to act on the message.

Examples from the Rochester Model

The Community Engagement Work Group and the Healthy Worksite Action Team have designed and implemented interventions to identify those with undiagnosed HBP, and create programs that encourage competence, autonomy and relatedness in the targeted population by focusing on the communities shown to be at most risk: the elderly, African-Americans, Latinos, and the socioeconomically disadvantaged. In addition, with the strong support of the business

community, workplace wellness has been incorporated into the community engagement work plan. To accomplish these goals, the work groups have elected to focus on a series of demonstration projects.

The demonstration projects are underway in three worksites of varied demographics and locale, and in two churches with primarily African-American congregations. The projects utilize a train-the-trainer model in which employees and congregants (peers) with a particular interest in health and wellness participate in a thorough educational curriculum and participate in a training program that allows them to serve as HBP ambassadors in their workplace or community group. As peers, trainers are not required to have certification or experience in healthcare fields. These high blood pressure “ambassadors” then interact on a recurring basis with colleagues who may have high blood pressure or who otherwise wish to learn more about the condition or preventing it, about modifying health behaviors, about setting reachable goals and about tracking success. At the outset and conclusion of the demonstration projects, participants are being surveyed about their own risks, knowledge, behaviors and goals. The purpose of these qualitative surveys is to assess whether participants were able to successfully set and reach goals as part of an overall plan to manage their blood pressure. In addition, each location has been furnished a blood pressure kiosk so that participants (and non-participants) can easily monitor their own readings confidentially and get quick feedback as their numbers change over time. The coordinators of the demonstration project have access to de-identified data and reporting from the kiosks that will enable aggregation of results over the full course of the projects. The key lessons of the demonstration projects will be to evaluate whether a peer health ambassador or coach model can successfully motivate sustained health behavior change.

4. What are key barriers to supporting consumer/patient decision-making?

We believe the key barrier to supporting consumer/patient decision-making (in addition to the need for activating the patient) is the difficulty in avoiding the “flavor of the month” approach, rather than creating a sustainable effort that continuously focuses the community on a unified goal of being healthier. This requires on-going collaborative effort – including trust, give and take – from all involved agencies, and, most importantly, sustainable ongoing funding so the work can continue as long as necessary (which we believe is most likely for a lifetime). The Rochester Model is designed to be a road map of how a community becomes healthier, with high blood pressure serving as just the first car down that road.

Examples from the Rochester Model

The Wegman Family Charitable Foundation generously provided initial funding to begin the process of creating an implementation plan, and with the completion of that implementation plan, provided a second infusion of dollars to initiate the implementation. Based on the depth of the community’s response and the enthusiastic support from the health systems and community organizations, in September 2010, the Wegman Family Charitable Foundation contributed additional dollars to the effort.

Since that time part of that support has focused on developing a plan to attract sufficient additional funding to maintain the project indefinitely. Through the work of the Rochester

Business Alliance Executive Committee, the three representative healthcare systems in Monroe County, and the two largest insurers in our geographic area, the collaborative has been able to implement a sustainable funding model that will go into effect in January 2013. This will occur through a transactional assessment against hospital discharges which then spreads the cost amongst all employed residents of Monroe County that is the equivalent to \$3.00 per person per year.

Session 2 **Measures and Data to Support Decision-Making**

1. What data is needed to support these measures?

Data to drive an endeavor such as this needs to send a unified message regarding the desired community goals, as well as how each individual community member's decision-making process fits into those goals. Thus, physicians may see their role from one perspective, while the business community may see it from another. Additionally, individual communities within our community (suburban, urban, ethnic, those at blood pressure goal, those who aren't) need to understand where they fit into the larger picture, and what their "piece of the puzzle" looks like.

This all comes together as a "rallying point" where the entire community understands the final goal line (in this case, the percentage of the community with blood pressure under control), and how each person's individual decision-making can play a part in reaching it.

To do this, we need to utilize de-identified population-based data on the percentage of patients to goal on blood pressure values, then carefully segregate that by ethnicity, socioeconomic status, zip code, age, and other relevant demographic factors. Doing this allows us to show the entire community where the disparities lie, where resources should be allotted to reduce disparities, and how the work of the collaborative should be focused to reach our core goals.

Coupled with this unifying message, is delivering the tools to reach that goal (discussed in Session 1) in a manner that is culturally appropriate and resonates with the individual community member as he or she participates in the larger goal of the community.

Examples from the Rochester Model

Here is an example of how the community-wide blood pressure database is used to structure the message and resources for physicians:

The Best Practice Work Group has focused on recruiting primary care physician (PCP) practices to participate in the HBP project, and on identifying the barriers to successful achievement of Blood Pressure targets in patients who are followed in primary care practices. The Work Group focused recruitment on the three major health systems' primary care networks which employ approximately 40% of Monroe County PCPs. Presented as an offer to participate in a county-wide, multi-stakeholder quality improvement project, all three system's primary care leaders enthusiastically agreed to participate. Together these three groups will

provide data on 151 internists, 59 family physicians and 33 mid-level practitioners. Because the high-risk populations for complications of HBP were found to be the elderly, minorities and the socioeconomically disadvantaged, the two federally funded neighborhood health centers serving those constituencies were also recruited. The neighborhood health centers and two of the health systems had already migrated to electronic health systems, simplifying the data collection and practitioner reporting components of the program. These practices account for 36% of Family Physicians and 38% of Internists in Monroe County. Together, these practitioners care for 290,000 patients or 49% of the estimated 2008 Monroe County Population of 586,000 over the age of 18. To ensure that people in the targeted ZIP codes will be included in the project, we employed geo-coded mapping using a program from MapInfo™ to display the sites of medical practices recruited to the project.

The second component of the program, identifying the barriers to successful achievement of blood pressure targets in the high-risk population, resulted in a two-pronged improvement approach. The first prong involved the creation of a community-wide blood pressure database that included data from the three systems aggregated for a community report, but also shared through the health systems' and health centers' quality improvement projects at the individual, practice and system levels. Accurate, meaningful peer comparison data has been found to be a powerful motivator of physician-level change.

The Best Practice group had to define how blood pressure should be measured to be entered into the database. Because this is a community-wide project, there was no paid staff to verify blood pressure, and the entries were generally made from EHR data that was recorded from office visits the Best Practice Workgroup decided to use the most recent blood pressure in the designated timeframe entered into the patient record, be it paper or EHR. There was considerable discussion around the use of home blood pressure measurements, and averaged blood pressures from multiple office visits, but these data were not available from the EHR systems in use and would have significantly increased the costs of the chart reviews conducted on the records from the participating health system that does not have EHR.

The database, as constructed, provides the important information found in Figure 1. The data collected includes the number of patients entering the practice in the past 6 months with a diagnosis of HBP (a measure of the Community Engagement Work Group's success in encouraging those with HBP who were not already in care to seek care), the number of patients seen in practices within the past 3 years carrying a diagnosis of HBP, the # and % of patients carrying a diagnosis of HBP not seen in the past 13 months, and the # and % of those who are in care and have reached their target blood pressure.

As seen in Figure 1, 10% of patients with HBP seen in primary care practices have not been seen in the past 13 months. This group provides a QI opportunity to identify, notify and encourage those patients to come into the office to assess their success in treatment. In addition, the database provides baseline control data. For those who had been seen within the past 13 months, 63% had their most recent 2010 BP recorded as <140/90. This result is similar to what Egan et al reported as the national average of 67% for adequate BP control for people in treatment for HBP. Inserted into the community dashboard, this data lets all the stakeholders know that more is needed to reduce the untoward complications of HBP. Even more important,

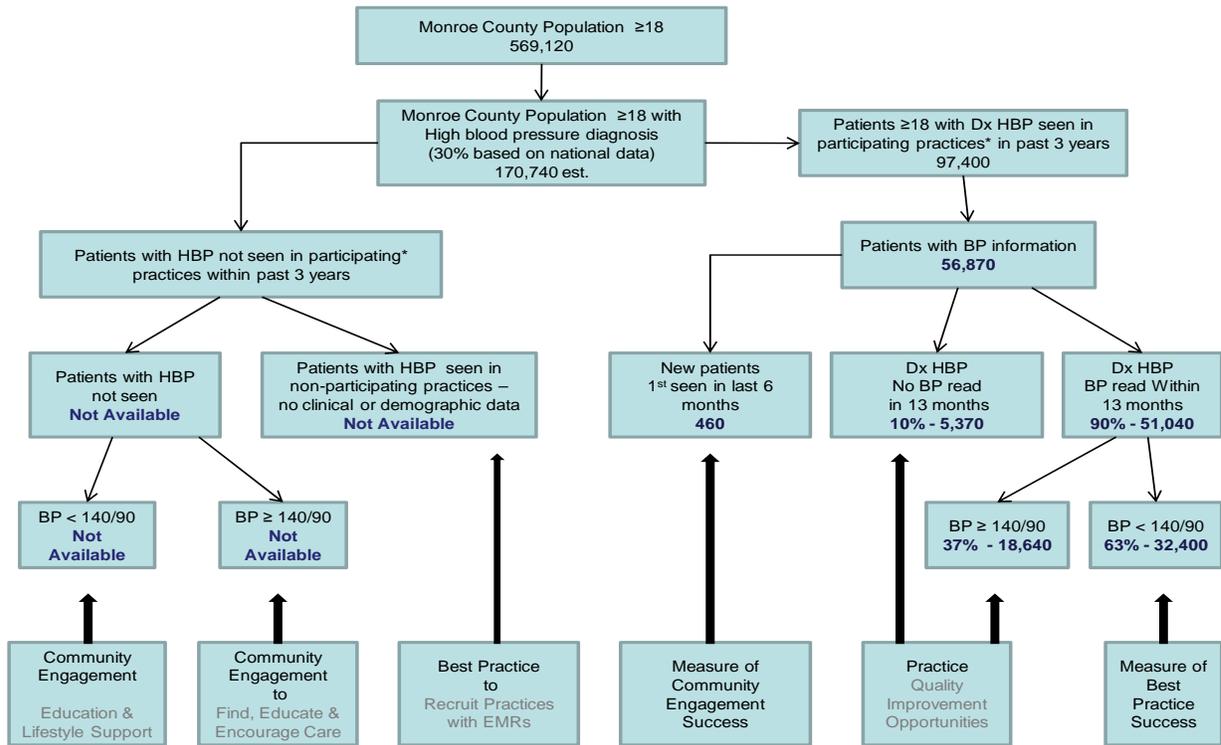
it creates the basis from which to compare systems, practices and individual practitioners to stimulate competition to improve results. In addition, the category “Patients with HBP seen in non-participating practices” represents an opportunity to identify non-participating practices, recruit them to the project, and increase the number of patients for whom there is socio-demographic and BP data available.

Although peer comparison data creates a powerful motivator for change, the Best Practice Work Group determined that more is needed to achieve the desired result of improving the control rate to 85%. As a result, the second prong of the Best Practice Work Group is built around the literature’s suggestion that “Clinical Inertia” is responsible for much of the difference between what can be achieved and what is achieved. Clinical inertia simply states that although people with high blood pressure come to practitioner’s offices and have their blood pressure taken and are found to be $\geq 140/90$, they leave the visit without a plan for improvement being created. Although there are many good reasons why the practitioner has chosen to ignore the blood pressure or has focused on more pressing issues, the fact is that an important medical problem is left unaddressed. To address clinical inertia, an Education Work Group was established with an ASH-designated specialist as chairman. The work group defined three core tasks:

- Increasing practitioner knowledge of guideline recommendations through dissemination of information through presentations by national experts, creating a speakers bureau for area grand rounds and conferences, and attending system primary care meetings.
- Training a group of individuals to conduct practice improvement meetings with primary care practices interested in improving their BP control rates. Using models of adult learning, practice visits focus on eliciting practitioner and staff ideas of how to redesign care to share responsibility and engage the entire staff in reaching quality improvement goals. This is a core component in supporting the redesign of chronic disease care to more effectively utilize the practice team to define the key steps in helping identify those with HBP, ensuring that information regarding a patient’s beliefs, adherence to therapy, and concerns with care are solicited by staff in advance of the visit with the primary care practitioner. After the visit, staff can reinforce therapeutic changes, ask about the patient’s agreement with and understanding of the recommended treatment, and encourage questions or thoughts to be shared. Empowering the practice team is an explicit goal of the redesign process. This group will include MD’s as well as other health practitioners including NP’s, PA’s, and nurses.
- Identifying PCPs within systems and health centers interested in serving as clinical hypertension experts by studying for and passing the ASH Program in Hypertension.

Results shown in Figure 1 will be refreshed twice yearly and reported in aggregate to the community.

Figure 1



November 1, 2011

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The final piece of the multifaceted intervention is to ensure that health plan and employer benefit design supports and encourages therapeutic success. The Plan Design Work Group solicits ideas from community organizations and the practice community and negotiates benefit changes with the health plans and employers.

In addition to the community wide blood pressure database, the collaborative has created a set of measurements and metrics as lead and lag measures documenting success of our community engagement. The metrics and measures group defined the primary and secondary goals of the project and the specifications for each goal. The measures use 2009 and 2010 as the baseline periods.

Briefly, the project's primary measures (lag measures) are:

- The rates and numbers of hospital admissions for heart attack, heart failure, and stroke, and the initiation of dialysis among adults residing in Monroe County, NY. The Collaborative goal is to achieve a 5% incremental annual decrease for 2011 through 2014.
- The proportion of adults in Monroe County, NY with high blood pressure who achieve a blood pressure less than 140/90 based on the most recent office-reported blood pressure. The collaborative goal is to reach 85% of patients with a last recorded

BP of <140/90 by 2014. Based on the registry data sample for the second half of 2010, the baseline has been established as 63%.

- The costs of healthcare per person with HBP/year. This measure is based on aggregated health plan data that is in the process of being collected. Once the cost of care/person/year is determined, a more specific target will be defined.

Secondary measures (lead measures) include:

- The number and percent of adults who know their blood pressure and know whether it is normal, pre-hypertensive or high.
- The number and percent of adults with hypertension or pre-hypertension who have developed a management plan in partnership with a healthcare provider.
- The percentage and rate of adults who get their blood pressure checked regularly.
- The percentage and rate of people with HBP under a doctor's care.
- Attitudes that prevent individuals from seeking care or implementing strategies for management of elevated blood pressure
- The number and percentage of practicing general internists and family physicians (and secondarily, general cardiologists, endocrinologists and OB/GYNs) actively engaged in the high blood pressure quality and process improvement program.

2. How is this data currently sourced?

The hospitalization rates for heart attack, heart failure, and stroke among adults residing in Monroe County, NY are obtained from the SPARCS database maintained by the New York State Department of Health. The SPARCS database contains patient level detail on patient characteristics, diagnoses, and treatments for every hospital discharge in New York State. The number of people initiated on dialysis is obtained from the IPRO/ESRD Network of New York database. Through an agreement with the two major health plans in the area to aggregate commercial, Medicare Advantage, and Medicaid HMO medical claims, FLHSA will explore the feasibility of developing measures of the costs of care for treatment of HBP and associated morbidities for individuals with HBP.

The project team is responsible for generating a community report detailing ongoing progress towards achieving the two primary goals and the six supporting goals. Emphasis is placed on improving results for the primary and secondary goals. The first report will be distributed in the first quarter of 2012.

3. What are key data deficits and gaps?

We constantly struggle with how individual choice can be influenced and how that can be measured over time. The Rochester Model is striving to make our measures meaningful to consumers/patients while attempting to show the value of a community context through our consumer reporting. We believe that successful integration of our work into the lives of Monroe County residents will be evidenced through a higher percentage of the population with high blood pressure under a physician's care (with a shared treatment plan), and will ultimately be hailed a success through reaching our goal of 85% of the population with blood pressure values under 140/90.

Since our collaborative is in its infancy, we believe the key data deficits will become clearly evident as our project matures and will provide valuable data for other communities undertaking such an endeavor.

4. Why are some “Beacon Community” efforts “working” and others not?

Rochester is not a Beacon Community, and as such, we cannot compare our work to their efforts. We do believe that the unique collaborative we have developed could warrant future consideration for similar Beacon type projects.