Joseph P. Addabbo Family Health Center

NEW YORK, NEW YORK

Joseph P. Addabbo Family Health Center (Addabbo) is a Federally Qualified Health Center with approximately 230 personnel and soon-to-be seven sites, serving members of the New York City community. With a mission "to be the leading preventive and comprehensive primary health care center in New York," Addabbo leverages the social determinants of health (SDH) with particular focus on youth development and family socioeconomic stability to break the poverty cycle. Addabbo efforts also include planting trees in the city to improve air quality and livability, offering WIC services, establishing a community garden to improve nutrition, organizing a Farmers' Market where community garden participants can sell their crops and residents on nutritional assistance programs can access healthy foods with the help of an electronic benefits transfer machine, partnering with a local jail to facilitate re-integration of inmates into the community, providing a variety of after-school teen and family programs, fostering an emergency preparedness coalition for the area and leading a comprehensive multimillion dollar effort to prevent and reduce youth violence.

The Joseph P. Addabbo Family Health Center (Addabbo) started out as a free pediatric clinic in 1981. Congressman Joseph P. Addabbo supported its expansion and evolution to a Federally Qualified Health Center (FQHC), though he did not live to see the grand opening in 1987 of the community health center (CHC). Since then, Addabbo has grown to a CHC with 230 personnel, six sites, and a budget of nearly $25 million under the leadership of its executive director, Dr. Peter Nelson. With a mission "to be the leading preventive and comprehensive primary health care center in New York," Addabbo served about 27,200 urban residents from the Queens and Brooklyn communities through 152,100 patient visits in 2010. This CHC predominantly serves African-Americans and Hispanics, but also provides services to many Caucasians, Native Americans, and Asian or Pacific Islanders. Sixty-five percent of patients are covered under Medicaid, 17 percent self-pay, and 14 percent have third-party insurance. Almost nine out of 10 fall at or below 200 percent of the Federal Poverty Level (FPL).

Addabbo has been addressing the social determinants of health (SDH) through a variety of efforts that focus on education, housing, social inclusion, safety and security, hope for a better life, improving the local environment and jobs. The Women, Infant & Children (WIC) Supplemental Food Program has been at this CHC for 17 years and is a federal program designed to provide food to low-income pregnant, postpartum and breastfeeding women, infants and children until the age of five. Addabbo in partnership with a social service agency named Claddagh Inn established a community garden about 20 years ago to

mitigate the level of chronic disease and improve nutrition in a food desert area and continues today. Furthermore, the CHC organized a Farmers' Market 12 years ago where community garden participants can sell their crops to earn extra income and residents on nutritional assistance programs can access healthy foods with the help of an electronic benefits transfer machine. The farmers' market would afford Addabbo with the opportunity to have "mini-health fairs" where they would check blood pressures, answer health questions and refer potential patients to their medical clinics if indicated. These efforts increase their patient population and help support efforts that leverage the SDH.

There are very few trees on the peninsula and Rockaway is on the flight path to Kennedy International airport. These factors contribute to the poor air quality in this urban area and exacerbate asthma in affected individuals. In 2007 Addabbo partnered with New York City Mayor Michael R. Bloomberg and New York Restoration Project (NYRP) Founder Bette Midler in the Million Trees NYC initiative to plant and care for one million trees throughout the City's five boroughs in the next decade. The goal of this effort is to expand New York City's urban forest by 20 percent to improve air quality. Addabbo helped find locations to plant trees in the Rockaways where the trees were most needed and would be cared for.

A new effort starting summer of 2010 is to provide a medical home and access to social resources for recently released inmates of Rikers Island (NYC's main jail complex) in order to facilitate their transition back to the community. This new effort will assure continuous medical care for those in need and assist in housing and other benefits to allow the inmate a smoother transition back into their communities. The hope is that it will reduce recidivism.

This peninsula has only three roads in or out and two are prone to flooding, so in 2009 an emergency preparedness program called Ready Rockaway began and is ongoing. It is comprised of residents and professionals in the field of emergency preparedness from Addabbo Center and Peninsula Hospital Center who hope to educate residents about what to do in various kinds of emergencies and will assist in organizing a coordinated regional emergency preparedness plan.

The Rockaway Peninsula is a relatively isolated strip of land in the borough of Queens in New York City, composed of a mixture of neighborhoods separated by economic and racial lines. The area includes high density public housing, nursing homes, and half-way facilities. There is a high incidence of violent crime, substance abuse, social isolation of families, as well as a large number of children who have emotional and behavioral problems with few resources for help. In 1999 Addabbo lead a comprehensive effort to reduce violence in the community called PRYSE that will be discussed in more detail shortly.

Dr. Nelson, Addabbo's CEO, has been at Addabbo for 15 years and believes strongly in the benefit a focus on improving socio-economic and environmental conditions will bring. He sees the potential of these efforts to break the poverty cycle in low income communities. The challenge is in finding sustainable funding. For example, Hunter College students designed a wellness center for the

Rockaways, but so far the community health centers hasn't been able to secure the $10 million needed to build the facility.

At Addabbo, most ideas for potential programs and designs of efforts for leveraging SDH primarily originate in the office of the CEO in consultation with the Chief Medical Officer. There is neither a program planning department nor a grant writing department. These jobs are performed by the staff members who will be most involved with the effort, as designed by Dr. Nelson with support from the executive board. Dr. Nelson believes that most programs need to be self-sustaining or increase the patient base thus increasing funds to support efforts that leverage the SDH. Dr. Nelson considered creating a self-sustaining department that would focus on the development, management, and financing of efforts to leverage the SDH and work with other Addabbo departments. However, the CHC has yet to secure the funding necessary to start such a department. In all, Addabbo directed approximately 6.7 percent of its 2010 budget towards programs that leverage the SDH.

Addabbo had attained experience with many smaller projects that leverage the SDH (youth intervention, education, safety) before engaging in a larger one. One such large effort was when Addabbo led a coalition of community-based organizations in 1999 in response to a request for proposals put out by the federal grant-making program, Safe Schools/Healthy Students (SS/HS) initiative. The guidelines for SS/HS required collaboration among the local school system, law enforcement agencies, health and mental health agencies and other community-based organizations. Although the groups knew each other, this was the first time they would work together in a coalition. Accordingly, Addabbo gathered the support and commitment of 10 subcontracting and funded partners, more than 25 volunteer partners, and 12 legislators and their representatives to propose the Project for Rockaway Youth in Safety and Education (PRYSE) – a comprehensive effort that would deal with youth violence in the Rockaways and promote a safe, healthy and nurturing environment for students and families. The master plan called for each partner to perform a specific set of program activities that would contribute to achieving the final goal to provide at-risk students with alternatives to violence and substance abuse, to enhance community cohesion and increase health and safety throughout the Rockaways.

Initially the Addabbo PRYSE project was not selected as a winner when awards were first announced in 1999. However, in response to the tragic school shootings in Columbine, the Colorado Congress increased funding for SS/HS. In this second round, PRYSE was selected in 2000 to receive $8.4 million over three years to serve as a resource for community empowerment, development, and health. PRYSE ran from June 2000 to May 2003.

Project Management and Partnerships – PRYSE was designed as a package of both specific, grant-funded social and health services and a coalition of community-based organizations and residents engaged in voluntary community-building activities. Addabbo served as the PRYSE project manager and had primary responsibility for organizing and administering the project on a day-to-day basis. There was

a PRYSE Steering Committee, composed of representatives of both funded and unfunded agencies; community residents and other stakeholders, which met monthly and served as an advisory board to project management. A broader PRYSE Coalition included both members of the Steering Committee and also community representatives affiliated with or interested in PRYSE. The Coalition met regularly throughout the year, while other PRYSE committees met either monthly or as needed. Having a somewhat decentralized project structure appeared to have helped limit the management and fiscal burden on the CHC and enabled wider reach across the community, regardless of whether an individual was a CHC patient or not.

Among the ten funded PRYSE partners were the community school district; Bank Street College, Baruch College CUNY, Community Mediation Services, F·E·G·S Health and Human Services System, NYPD – 100th and 101st Precincts, Queens District Attorney's Office, Rockaway Development and Revitalization Corporation and Rockaway-Inwood Ministerial Coalition. Non-funded partners included the Action Center for Education and Community Development; Queens Borough Public Library, NYC Commission on Human Rights, the Major's Office of the Criminal Justice Coordinator, Administration for Children's Services, the NYC Department of Juvenile Justice, The Rockaway Chamber of Commerce, the Ocean View/Ocean Bay Tenants Association, and the Caribbean Women's Association.

Programs – The goal was to provide at-risk students with alternatives to violence and substance abuse, to enhance multicultural appreciation, community cohesion and increase health and safety throughout the Rockaways. To focus on youth, safety, health, and education, PRYSE created or expanded some 40 social and health programs in the Rockaways, serving an average of over 10,000 children and families each year. Many of the activities operated in Rockaway's two high schools, three middle schools, and 10 elementary schools. Funded activities include tutorial programs to enhance academic success, employment-related training and events to increase youth opportunities for meaningful work, and physical fitness activities for improved health in young people. PRYSE funded programs emphasized strengthening families and unifying the broader community as one important path to improving health and safety of minors. The NYPD ran the Safe Corridors Program that had officers patrolling the routes youth most commonly took home after school from their middle and high school. Unfunded PRYSE partners contributed in a variety of ways, for example organizing multi-cultural events and providing media expertise. The Queens Borough Public Library held reading readiness programs as well as improving literacy programs. For brief descriptions of the many individual programs, please see the Project Evaluation Report at http://www.sshs.samhsa.gov/media/sshs_media/pdf/PRYSE_Final_Evaluation_Report.pdf.

Under PRYSE Addabbo sponsored the following programs: Career Day, where clinic staff organized many open houses to share employment and career opportunities; Drama Therapy at two Rockaway schools, where a coordinator and social workers worked together to provide counseling, support and referrals to youth and their families; the Clergy and Health Advocate Training program, which invited and

trained clergy members in crisis counseling, signs and symptom recognition, and general health education; Health Advocate training for local adult and youth residents to serve as sources of reliable information; the Rockaway Health Alliance to engage in health care related advocacy, outreach and education to Rockaway residents; and a Community Resource Center to provide assistance with a wide range of needs, including after school teen and family programs, counseling, and parenting classes.

Staffing – The range and contributions of funded and unfunded partners allowed Addabbo to manage and participate in PRYSE with relative ease. Besides having its director of mental health act as the PRYSE Project Manager (0.33 FTE), Addabbo staff commitment included a director of outreach (1.00 FTE), Community Resource Center personnel (2.5 FTE plus one volunteer Parent Advocate), a health educator (1.00 FTE), and two part-time educational outreach workers. Activities conducted by PRYSE partners other than Addabbo were managed by the respective organizations, who would in turn work with and report to the PRYSE Project Manager.

Partnerships – PRYSE had to learn to understand and deal with divisions along race, language, religion, income, institutions, and geography to form an effective coalition. They did this through coalition communication, having a master plan, frequent evaluation of efforts and adjustment as needed. At times the participants experienced frustration or disappointment, but the PRYSE coalition sustained itself and gained in number, strength, and purpose.

Impact – Baruch College conducted a formal evaluation of PRYSE though telephone surveys. Formal evaluation was focused on those activities funded by the federal SS/HS grant. The evaluation examined general perceptions as well as data on community trends in crime, education, and health. The Executive Summary of Baruch's report found the following positive results: a drop in the crime rate; more children and teens participating in afterschool activities; an increase in parent involvement in schools; the percent of fourth graders reading at or above grade level increased from about 25 percent before the start of PRYSE to over 40 percent by the spring of 2003; and there was noted success in solving community problems collaboratively among the many stakeholders. Rockaway residents reported an increase in trust of their neighbors, and the percentage of adults who see the problem of smoking, drinking, and drugs getting worse declined from over 45 percent to under 35 percent. Unfortunately the survey found mixed results regarding safety in the schools. The overall perception about PRYSE was that it was a success. The PRYSE activities that were not funded by the federal grant, while not part of the formal evaluation, were deemed to have contributed much to the coalition building, community organizing, and outcomes of the project.

Funding & Sustainability – PRYSE was funded by an $8.4 million grant from the federal Safe Schools/Healthy Students initiative. With the help of the PRYSE Steering Committee, PRYSE received $3.4 million in additional grant funds leveraged by the work of the PRYSE Steering Committee from a variety of sources, including the federal Community Access Program; New York State Department of

Juvenile Justice, New York City Housing Authority, JP Morgan Chase, the Independence Community Foundation and the Children's Aid Society. In 2003 the SS/HS grant expired and was not renewed for PRYSE. Most PRYSE efforts were terminated while some parts of the program that needed little or no funding were sustained. Examples of continuing efforts include the Annual Rockaway Walks program (a structured walking program) and the Action Center's Health Education Literacy Project (H.E.L.P.) now ongoing in partnership with PFIZER. It was hoped that a lasting benefit of PRYSE was the creation of an ongoing coalition of community residents and leaders, service providers, educators, and law enforcement personnel that is experienced in working collaboratively on solving community problems. Sadly, without the continued funding, the program services were not sustainable. The community trends identified in the evaluation report by Baruch College are encouraging, but the consensus among participants and community members was that PRYSE had only begun to find its footing and realize its potential when the three-year grant ended.

As Dr. Nelson put it, "when about 70 percent of your health is determined by your environment and your decisions about your environment and life conditions, and only 30 percent is determined by what we call the medical health systems; it becomes obvious where we need to direct more attention and money. I think this is the most important step that American health care needs to take in order to improve the health of the population."

Beaufort-Jasper-Hampton Comprehensive Health Services

RIDGELAND, SOUTH CAROLINA

Beaufort-Jasper-Hampton Comprehensive Health Services (BJHCHS) is a Federally Qualified Health Center with more than 200 personnel and 16 sites. In leveraging the social determinants of health (SDH), the organization is inspired by its philosophy of "health is a right, not a privilege," as well as an understanding of health as the product of a patient's total environment. BJHCHS efforts to date include . inspecting the homes of elderly patients for safety and providing assistance to prevent falls, improving lunch programs at local schools, encouraging healthy cooking, promoting accessible opportunities for physical activity, providing substance abuse and behavioral health services to help residents obtain and hold jobs and to encourage youth to pursue post-secondary education, and working with county agencies that define policy and control local resources, such as land for community gardens and walking trails. BJHCHS has also been successful in improving water quality and environmental health and safety. The community health center has eliminated parasitic worm infections among local children by prescribing and providing septic tanks and deep wells, has helped organize water systems and fire protection for two counties, and has worked with state government to change policy and mandate better sanitary services.

On Capitol Hill in the late 1960s, Beaufort and Jasper Counties were at the forefront of a national debate on public health, malnutrition, and poverty. Out of that debate came the founding of one of the oldest community health centers with support from the Office of Economic Opportunity: Beaufort-Jasper-Hampton Comprehensive Health Services (BJHCHS). A news report had drawn negative attention to the poverty and disease that affected the area and awakened politicians who were eager to address the situation. In 1970 BJHCHS began to deliver comprehensive health services from four facilities to the socially and economically deprived residents living the Lowcountry of South Carolina. Since then, BJHCHS has grown into a Federally Qualified Health Center with more than 200 personnel and 16 sites, including schools and a nursing home. With a budget of around $13.9 million, BJHCHS served approximately 17,900 rural residents through 80,900 patient visits in 2010, including migrant farmworkers. The CHC predominantly serves African-Americans, but also provides services to many Caucasians and Hispanics. Slightly over half of BJHCHS's patients are uninsured, one-fifth have Medicaid coverage, and the remaining are split between Medicare and private insurance. Virtually all fall at or below twice the Federal Poverty Level.

BJHCHS Efforts to Leverage the Social Determinants of Health

With an organizational philosophy of "Health is a right, not a privilege," BJHCHS has been working to provide quality, affordable, accessible and comprehensive health care services to the South Carolina Lowcountry community. What inspires the health center to leverage the social determinants of health (SDH) is its understanding of health as a product of a patient's total environment, including living conditions. For example, what good is it to cure worms in children who present at the center only to return to unsanitary living conditions? Over the years BJHCHS has been involved in a number of SDH activities that act to include the patients' environment in their treatment, first under the leadership of its founding director, a community activist, and since 1980 the current Executive Director who has been with the organization basically since the beginning.

Since its inception, BJHCHS has been focusing on what people had identified as the most pressing needs of their communities. In the 1970s, it was environmental action and home health services. BJHCHS began to train and employ community members to take part in two programs: a team of at least 11 family health workers to go into people's homes and provide basic hands-on services, including identifying home repair needs; and an environmental action team (about 10 FTE) that would provide BJHCHS physicians with the power to change the physical circumstances affecting patients. They could "prescribe" such things as window screens, wheelchair ramps, or even home repairs. A number of BJHCHS environmental action activities grew out of the historical lack of potable water and sewage systems in the Lowcountry. A description of the team's efforts follows.

Environmental Health Team Activities

Testing in the late 1960s had revealed that at least 50 percent of preschool children in Beaufort County were suffering from parasitic worms, "in some cases so pervasive that they were literally starving to death" (Lefkowitz 77). In the early 1970s BJHCHS was still treating at least five to seven pediatric cases of soil-transmitted helminthes (ascaris, hookworm, and whip worm) each week.

The CHC staff knew that the best way to treat and prevent helminthes, and other diseases caused by poor water sanitation, was to improve water sanitation in and around the children's homes. So doctors started prescribing septic systems to their patients. Families contributed to the installation of a septic system for their homes based on a sliding fee schedule, and the remainder was subsidized through OEO grants. Some years the team would put in up to seventy septic systems.

As this activity went on, the team noted water sanitation issues among residents living in clusters of 2 to 5 mobile homes. To improve sanitation they needed running water rather than the shallow wells they were using, but they could not afford to do it on their own or for each mobile home. BJHCHS established a plan for providing a pumping and distribution system that would enable all of the families living in such

clusters to receive water from a "cluster well" that would serve as an equivalent to a typical single family well system. Doing so required the addition of electricity and a warranty and maintenance agreement by BJHCHS that was affordable for the families involved.

For building the cluster wells BJHCHS relied on its environmental health team which already had the knowledge, equipment, and the staff workforce for this task. It turns out that building cluster wells involves a number of the same steps as installing septic systems. Therefore, the team could provide the well for a relatively low cost. While BJHCHS installed electricity to run the pump of the cluster well, the team would also take the extra step to help the same residents have some electricity inside their homes. The program eventually installed about 1,000 such systems in Beaufort and Jasper Counties. Furthermore, BJHCHS worked with the South Carolina Department of Health and Environmental Control (DHEC) and changed policy to mandate better sanitary services.

Once these families had running water, BJHCHS took the time to address another issue: many of these homes did not have proper bathrooms. The team installed 2882 bathrooms, complete with a commode, sink, toilet, and shower with funds from the local United Way, labor from students of a local technical high school, and guidance from the South Carolina Health Department.

In 1986 the health center lost OEO funding and turned to the U.S. Department of Agriculture's Farmers Home Administration (FmHA). FmHA had money to finance municipal water systems in rural areas, but it did not want to support the smaller, community-based systems that BJHCHS proposed, thinking that little communities would not be able to pay back the loans. The clinic partnered with the National Demonstration Water Project (NDWP) to sue FmHA and eventually received special grant funding. The resulting water systems and fire protection for a number of communities lowered insurance rates and removed a significant health treat at the same time. Today, thousands of families are connected to county-wide water systems.

The septic system installations continue to this day, though there have been changes to the funding and operations of the program. The environmental health team had to be disbanded when OEO funding was lost. However, some of these team members started their own company instead and now compete for contracts through Beaufort, Jasper, and Hampton counties, including offering a sliding scale for their fees based on the client family's income. BJHCHS, with funding from United Way of the Lowcountry, continues to prescribe septic systems and awards contracts for installing them. In 2010, the clinic had 16 septic systems installed and another 16 are anticipated for 2011.

All in all, the work of BJHCHS has successfully eliminated the parasitic worm problem in the area, and significantly improved the health and quality of life for people in the Lowcountry.

In the 1980s, the clinic noted that many elderly patients developed health problems because of an environmental or social situation. With early home intervention many of their visits to the emergency department or hospitalization could have been avoided. With the help of partners, BJHCHS developed and trained geriatric coordinators (GC) who would assist physicians in case management, inspect the homes of patients for safety and assist in addressing any problems, such as missing smoke detectors, sewer smell, and lack of cooling ability in the summer.

Since 2000 the health center has been involved in the Lowcountry Diabetes Initiatives, a regional collaboration among 26 partners to eliminate health disparities associated with minority populations diagnosed with diabetes and hypertension. Many residents of Beaufort, Jasper and Hampton counties suffer from diabetes resulting from poor eating habits and limited physical activity. BJHCHS conducts programs that create and promote opportunities for physical exercise and provide healthy cooking demonstrations that help residents promote healthy nutrition in the home.

More recently BJHCHS has become involved in a community-wide project to address health issues from multiple fronts, including the social determinants of health such as education and employability, and community resources. A description of the program follows.

Pathways in STEP (Sheldon Township Empowerment Program)…Recapturing the Legacy

Sheldon Township is a community composed predominantly of African Americans and characterized by poverty, isolation, and restricted access to services. The community is unincorporated and has no political leverage to obtain the most basic of services such as water and sewer service, sidewalks, or street lighting. Obesity, physical inactivity, stress and poor eating habits are widespread, and hypertension is by far the most frequent diagnosis. When the call for proposals from the Kresge Foundation Safety-net Enhancement Initiative inspired BJHCHS to take action, the health center formed a consortium with a local school district and the state department of Health and Environmental Control Region 8 and won a $75,000 planning grant in 2009.

Previously funded and pre-defined programs for the community were led by those providing the funding on what they felt were the best courses of action. These efforts were unsuccessful as community members seemed to have felt little or no sense of ownership for the programs. This time, however, it would be different. The consortium began to facilitate a community process with more than 70 residents of Sheldon Township and other community organizations to design a project that would address the community's health and well-being. The resulting proposal won a second grant ($750,000 over three years) in 2011 from the Kresge Foundation to implement a program that would address the community's most prevalent health issue, hypertension, and barriers to overcoming the health issue including employment and community economy, education, and inclusion in county and state policy and resources. The overall goal of "Pathways in STEP (Sheldon Township Empowerment Program)…Recapturing the

Legacy" is to engage the residents of Sheldon in assuming responsibility for their own health and well-being.

The effort consists of three major interrelated programs: Community Leadership, Medical Advisory Council, and School Based Healthcare. These three programs work together to provide accessible opportunities for physical activity for residents without transportation, promote healthy living among youth by improving lunch programs at local schools, enable residents to obtain and hold jobs by addressing substance abuse and behavioral issues, enable and encourage youth to pursue post-secondary education by providing mentoring and anger management programs, and work with Beaufort County agencies that define policy and control resources that can impact the Sheldon Township such as land for gardening and walking trails.

A Medical Advisory Council consisting of five BJHCHS staff lead by the BJHCHS Medical Director, a physician, pediatrician, family care practitioner, and a school nurse who also functions as the head of the School Based Healthcare program and other providers of healthcare services who are stakeholders in the health of Sheldon Township will monitor the Township's health . The Community Leadership is composed of 12 community members, and BJHCHS is providing space and administrative support to this group by providing a Community Program Coordinator and a Community Liaison funded by the Kresge grant. The Beaufort County School District is providing space for BJHCHS to provide healthcare services to the entire community through local schools. Additionally, the school district is making their community communications infrastructure available to reach all community residents with announcements and important program information. The South Carolina Department of Health and Environmental Control Region 8 is responsible for gathering health and environmental information relevant to Sheldon Township as well as providing community health education programs specific to hypertension prevention and management.

Outcomes and Impact – The project participants recognize that the real payoff of the entire effort will come several years after the conclusion of the grant funding. To demonstrate improvement in the short-term and approximate long-term impact in terms of the prevalence of hypertension in the community, the effort will conduct periodic evaluations of all its programs and services based on health data collected from electronic health records as well as community surveys and self-reports.

Another long-term impact that participants in Pathways in STEP seek is a significant paradigm shift in how the community, healthcare providers, and policy makers regard the healthcare delivery process and the health and well-being of Sheldon Township. The Kresge Foundation Grant is intended to begin a process of empowerment that will transform how the community envisions their role in their health and well-being.

The coalition and community members plan for Pathways in STEP to continue well beyond the three year Kresge grant. As the Director of Special Project puts it, in order for the residents of Sheldon Township to address the social determinants of health that impact their health and well-being, leadership within the community needs to emerge, current barriers to better health and well-being need to be identified, plans made by the residents in the community to systematically address those barriers and action by the community need to occur. Changing county and state policy and resource allocation to address the needs of Sheldon Township will be a relatively slow process, and time will be required for the course of action taken by the community to result in change. Furthermore, additional funding will be required to match the community's requirements as they evolve.

How BJHCHS Does It All

The health center's "infrastructure" for leveraging the SDH to improve the health of patients and the communities served can be described as follows:

SDH Program Management and Staff – The CEO and the Medical Director, along with BJHCHS Senior Staff and a supportive Board of Directors, evaluate specific community health disparities as an ongoing process, and the Director of Special Programs assists in defining and guiding the goals and objectives for SDH programs. In the past until OEO funding was lost in 1986, the BJHCHS environmental health team consisted of about 10 full-time staff members who would handle sanitary and home repairs. Today this type of work is conducted by awarding contracts to local businesses. In the current approach to identify the impact of the SDH in Sheldon Township, a Community Coordinator has the backing of a consortium that includes BJHCHS, the South Carolina Department of Health and Environmental Control, and the Beaufort County School District. The Community Coordinator also has access to a Medical Advisory Council composed of medical providers with a stake in the health of Sheldon Township. The community is responsible for identifying its needs and managing its own health. The community leadership council and scholars of a leadership institute assess and respond to the impact of the many social determinants of health that are barriers to the community's health and well-being.

Developing SDH Programs – The process of identifying and including social determinants as a part of addressing the health of an entire community starts with insight into the community. With more than 40 years of providing healthcare to the underserved population in Beaufort Jasper and Hampton Counties, BJHCHS is uniquely positioned to understand the social fabric of the community segments it serves. From the early septic tank/cluster well programs of the 1970s and 80s to the current Sheldon Township Pathways in STEP program, understanding the environment where health issues occur has always been an integral part of BJHCHS' work and a key for success in leveraging the social determinants of health.

BJHCHS is always aware of and discusses the disparities and needs of particular communities during specific staff meetings. The health center also has a relationship with a grant development organization that is kept informed of BJHCHS' priorities. When the grant development organization becomes aware of an opportunity for funding, BJHCHS is notified and the CEO and senior staff decide on the relevance of the opportunity. With approval from the Board of Directors, the appropriate people in the health center and community partners are identified and their support is requested. Once the process begins to progress towards a proposal, a consortium is formed with appropriate community partners to create the proposal and manage it when it gets funded. For small levels of funding for special projects, proposals are made directly to community agencies and foundations once the project is approved internally.

SDH Program Funding and Sustainability – Early funding battles that questioned the health center's SDH activities taught BJHCHS the importance of diversifying its funding sources by securing funds apart from the federal government in order to ensure its continued viability. In addition to its federal grant, BJHCHS has secured funding from other sources including community agencies and foundations, private foundations, and public grants.

Partnerships and Networks – Identifying other community organizations that can assist in the healthcare delivery mission has always been a natural part of the process at BJHCHS as it is with other community health centers. That process is also significant for the success of leveraging the social determinants of health in a complex environment. BJHCHS uses partnerships with agencies and community members to assess the impact of the SDH on the communities served and design effective programs. For that purpose, BJHCHS participates in numerous networks and partnerships, including the Hampton County Healthcare Consortium, the Sheldon Township Pathways in STEP program, South Carolina Eat Smart Move More, Together for Beaufort Program, and the Body Mass Index studies that includes all students in the third, fifth and eighth grades in Beaufort and Jasper County School Districts, to name just a few. One of the longest-standing partners of the health center in its SDH efforts is the South Carolina Department of Health and Environmental Control (DHEC), which was a partner in the Septic Tank/Cluster Well program in 1970s and remains an important partner today as a consortium member for the Sheldon Township Pathways in STEP program. Pathways in STEP as a project also established a Leadership Council composed of community members and consistent meetings that provide a space for new ideas, the discussion of community needs, and development of new community leadership.

Community Health Partners

LIVINGSTON, MONTANA

Community Health Partners of Montana (CHP) is a Federally Qualified Health Center (FQHC) with over 100 personnel and seven sites. CHP works "to enhance community health and wellbeing through innovative programming, strong partnerships, and improved outcomes with a vision for 100% access and zero disparity." The organization's efforts to leverage the social determinants of health (SDH) focus on providing educational programming within the clinic walls. To help adults and children reach their potential and to elevate them out of poverty, CHP is providing affordable computers to families, helping residents earn a GED, promoting childhood literacy through Reach Out and Read, placing adults in subsidized employment, providing workplace training, offering teen and adult parenting classes, and providing a preschool program and a weekly physical exercise opportunity for children. CHP has also initiated a dialogue with community partners about providing affordable housing, and has been instrumental in the creation of a local foundation to identify and monitor the community health and wellbeing drivers and to then support dynamic community action.

Community Health Partners of Montana (CHP) is a Federally Qualified Health Center serving low-income rural community residents of the rural, sparsely populated, mountainous counties of Park and Gallatin, Montana, since 1998. With just over 100 personnel, a budget of $5.8 million, and seven sites, including medical and dental clinics and an educational site, CHP served about 10,600 community residents through 39,000 patient visits in 2010. The CHC predominantly serves Caucasians but also provides services to many Latinos, Native Americans, and others. Two-thirds of patients are uninsured, 13 percent have Medicaid coverage, 14 percent have private insurance, and 65 percent fall at or below twice the Federal Poverty Level (FPL).

CHP works to enhance community health and well-being through innovative programming, strong partnerships, and improved outcomes with a vision for 100 percent access and zero disparity. CHP's commitment to leveraging the social determinants of health (SDH) grew out of the leadership of its founding CEO, Laurie Francis, who taught that enhancing community health and wellbeing goes way beyond providing access to health care services. Thus, the board's strategic plan has placed a special value on addressing root causes of poor health and encourages ideas from all staff levels at CHP. This translates to a focus on integrating health literacy, employment and academic endeavors at all ages to help community members escape poverty and live healthier lives. As noted in its 2009 Annual Report, "Every bit of CHP's programming is intended to address this injustice. The symptoms of societal inequities are

treated through preventative medical and dental care. Educational programming intervenes in generational poverty and socioeconomic barriers, freeing children and adults to realize their potential". For this purpose, CHP engages in partnerships with local health agencies, educational institutions, profit and nonprofit agencies and the public health department, many of which contribute time and money through their involvement.

Livingston is a closely knit rural town located in Park County situated on the Yellowstone River 50 miles north of Yellowstone National Park. The town is geographically isolated, with limited access to larger libraries, sports facilities, cultural events, or academic enrichment opportunities. Livingston's original economic base was tied to the Northern Pacific Railway, which shut down in 1986 and resulted in high unemployment, a reduced tax base, closure of many businesses, a lack of employment opportunities and lowered incomes throughout the community. The repercussions of these changes to the county's economic and social health are present today. The residents recognize poverty and low educational attainment of adults are factors that place Livingston's children at risk for academic failure and continue the cycle of poverty. These same factors contribute to the high prevalence of depression and suicide in the communities CHP serves. This is an issue that has been important for CHP to address. CHP over the years has expanded integrated behavioral health services at their clinics and nurtured partnerships to mitigate this burden, and participated in a study that links low literacy to depression.[1]

Aware of the long-range benefits and improved health outcomes resulting from a higher education level, CHP's strategy incorporates programs to promote literacy, GEDs, and other learning advances. In 1998, the organization introduced the Reach Out and Read (ROR) program to its clinics, where it began to promote children's literacy by using medical visits as a platform to educate about and provide access to books. As CHP doctors and nurses began to counsel parents about the importance of children's literacy, they noted that the parents were most uncomfortable with their own reading skills. With approximately 40 percent of Livingston residents having limited literacy skills, CHP immediately recognized an opportunity for the health center to address this issue. The observations from within the clinic fueled the development of "Learning Partners", a CHP department established in 1999 to address adult literacy. The Learning Partners (LP) suite is located in an area within CHP's Livingston site that can be entered from the clinic or privately from an outside entrance. LP began with a volunteer literacy tutor and developed into a department with six employees, working as 4.3 FTEs. Together they manage the LP programs with the assistance of 10-30 volunteers, while the department head is responsible for grant writing and monitoring to fund and preserve LP programs.

Through a strong partnership with the public school system, the health center further expanded its initial selection of LP programs to the Adult Basic Literacy Education (ABLE) program, one-on-one tutoring,

[1] Francis, L., Weiss, B. D., Senf, J. H., Heist, K., & Hargraves, R. (2007). Does Literacy Education Improve Symptoms of Depression and Self-efficacy in Individuals with Low Literacy and Depressive Symptoms? A Preliminary Investigation. *Journal of the American Board of Family Medicine.* http://www.jabfm.org/cgi/content/full/20/1/23.

English as a Second Language (ESL) courses, and GED preparation and testing. LP eventually began to also offer a math class because of consistent demand, as well as basic computer skills training, parenting and early childhood programs, and jobs-related programs. For its GED preparation and testing program, LP administers assessment tests and provides personalized independent study plans for students interested in earning their GED. Many courses are offered online, and LP proctors the GED exam twice monthly for its participants. In all, LP graduates between 30-40 GED students each year; in comparison, the local high school graduates 120 students each year. LP then supports its graduates in taking the next step, which may include job training, online college courses, resume preparation and job application.
In 2005, a combined parent support class and preschool preparatory program named Even Start Family Literacy Program was added to LP. It was funded in large part from 2005-2011 by the U.S. Department of Education and served families of young children who were referred through the clinic or other community agencies. Using a "Parents as Teachers" model, LP hosted at the Livingston clinic site an early childhood center for children ages 0-3 and a parenting education program four days a week, with monthly home visits. The parenting education program included an unstructured component (parent and child play) and structured parenting skills classes on communication, discipline techniques, and a behavioral health group run by a master's level counseling student. The Even Start program's funding came to an end in July 2011. As this program was too valuable to lose, the staff redesigned the parent and early childhood program to focus on implementing best practices and has made efforts to find new funding. Recently new funding was received to continue this newly designed parent early childhood program, which will now expand to a second CHP site as well.

In 2007, researchers at CHP Livingston and University of Arizona studied the work at Learning Partners and published an article on whether providing literacy education to individuals with both depression symptoms and limited literacy might improve their self-efficacy. The study suggested that in individuals with low literacy scores and depressed symptomatology, improvement of literacy skills resulted in reduced symptoms of depression and improved self-efficacy scores. CHP uses this study and its own observations to continue its programs at LP.

An ongoing program supporting youths who started their parenting journeys as teens, was initiated in 2008. This program is sponsored by the Montana Children's Trust Fund and focuses on providing wrap around services (parenting support and education, early childhood home visiting, access to medical, dental, behavioral health care, referral to community resources) to these families to reduce child abuse and neglect.

Computer skills are an absolute necessity today, yet many individuals and families in these communities cannot afford to purchase a computer. In 2010, an LP volunteer with a background in education and IT had an idea for a new program, now called Connected Learning. He suggested that he could recycle and rebuild old unused computers that could then be sold to those who need them. His idea would also reduce the number of computers contributing to waste. Under this self-sustaining program, the original owner is

charged a fee to "recycle" the computer ($30-$40) and the CHP/LP volunteer then begins the process of rebuilding the computer by wiping the hard drive clean, formatting the computer and installing the operating systems that would be needed. The computer and monitors are sold to needy families for the cost of $30-$50. The volunteer helps train the new owner on how to use their new computer and assists the buyer in obtaining internet connection at home when available and affordable. In 2010 alone, the program sold about 30 computers.

One of the goals of the LP department is to help reduce unemployment in the community. Job opportunities in the two counties CHP serves are limited, so whenever CHP sees potential to enable first-time or advanced employment in their community the health center takes part. CHP obtained a small grant for targeted skilled training and used it to train personal care attendants (PCA). PCA jobs appear to be a great entry level job into the flourishing health care market in an area with a growing elderly population. Another job related CHP/LP program came about as a result of the federal stimulus program. CHP received a Subsidized Employment Program American Recovery & Reinvestment Act grant (SEP ARRA) in March 2009 and used it to subsidize a job placement program based out of LP. The grant directed LP to identify recently unemployed people and find them jobs in settings where there was potential to continue work beyond the 6 month grant-subsidized period. Potential jobs might be in transportation, food service, ranching, and the health sector. LP prepared the unemployed individual for future employment by providing job coaching, help in preparing a resume, one time assistance funds and case management support. Eighteen people went through the job placement program and were employed for six months. Half of these 18 remained employed after the subsidized period. Four of the 18 participants were placed with CHP (HR assistant, Dental Assistant, Medical Assistant, Billing Assistant) of which two remain employed at CHP, while one went on to Dental Hygiene training and one has moved on to other employment.

The need for jobs and job training continues even though the SEP ARRA funding has ended. CHP is considering starting a Certified Nurse Assistant (CNA) program that would train the CNAs to work in multiple kinds of environments and situations in order to support the needs of the patients and families. To help employed workers maintain and advance in their current job, CHP is also interested in adding new classes, including courses on workplace communications and personal finance.

In terms of funding, a federal grant helps with approximately 45 percent of Community Health Partners' total costs, while patient revenue, private grants, and donations supply the remainder of the funds. CHP estimates that 3.4 percent of its 2010 operating budget was directed specifically towards LP programs.

CHP current CEO Lander Cooney stated, "Throughout the country, children and adults facing barriers to education, income generation, health care and equal opportunity, are significantly less healthy and have shorter lives than those with greater advantages. Every bit of CHP's programming is intended to address this injustice. The symptoms of societal inequities are treated through preventive medical and dental care.

Educational programming intervenes in generational poverty and socioeconomic barriers, freeing children and adults to realize their potential. Through prevention, treatment and intervention, clients and families achieve the levels of health and well-being they deserve – that we all deserve."