2016
Community Health Needs Assessment
St. Mary-Corwin Medical Center
At a Glance: Community Health Needs Assessment
St. Mary-Corwin Medical Center

Area Served

Pueblo County

Priorities

Wellness—Obesity and Diabetes

Behavioral Health, including Access to Care and Insurance

Chronic Lung/Respiratory and Related Cardiovascular Disease

Partners

Centura Health at Home, First Seventh-Day Adventist Church of Pueblo, Pueblo City-County Health Department, Pueblo Latino Chamber of Commerce, Pueblo Triple Aim Corporation, Colorado State University Extension Office, Pueblo Salvation Army, Bessemer CF & I Steelworks Museum, Integrated Community Health Partners (ACO), African Methodist Episcopal Church and Pueblo Human Relations Commission, Milagro Church, Southern Colorado Family Medicine, Pueblo Step-Up/Pueblo Healthy Communities
Executive Summary

The Patient Protection and Affordable Care Act, enacted March 23, 2010, added new requirements for nonprofit hospitals to maintain their tax-exempt status, including a requirement to conduct a Community Health Needs Assessment (CHNA) once every three years to gauge the health needs of their communities and to develop strategies and implementation plans for addressing them. This CHNA was conducted in compliance with these new federal requirements and as an opportunity for St. Mary-Corwin Medical Center to fulfill our commitment to our organizational mission to “extend the healing ministry of Christ by caring for those who are ill and by nurturing the health of the people in our communities.”

CHNA Methodology and Process

Service Area Definition:
To define our community for the CHNA and to analyze demographic and health indicator data, we used the STARK-Law service areas, defined as the lowest number of contiguous ZIP codes that account for 75% of a hospital's inpatient admissions. We used the main counties within the STARK-Law service area to analyze our health driver and health outcome data, as health outcome data was generally not available at the ZIP code level.

Qualitative and Quantitative Data Collection:
We began the data collection process by selecting quantitative indicators for analysis. Community Commons, a population health indicator data platform, was utilized throughout the quantitative data collection process. This platform compiles data from the US Census, the Behavioral Risk Factor Surveillance System, the CDC, the National Vital Statistics System, and the American Community Survey, among others. Specific health indicator data were selected, including community demographic information, behavior and environmental health drivers and outcomes indicators, as well as coverage, quality, and access data. These indicators were selected because they most accurately describe the community in terms of its demographics, disparities, population, and distinct health needs.

Additionally, we sought to engage our community in the qualitative data collection process. Once health needs were prioritized, we determined groups and individuals appropriate for focus groups, being sure to solicit input from underserved or minority groups within the communities we serve. These focus groups helped identify particularly important needs as seen by our communities, help us identify gaps in knowledge, and understand current external efforts around health needs that could be improved by healthcare participation.

Prioritization Process:
St. Mary-Corwin Medical Center created a CHNA subcommittee to review the qualitative and quantitative health data, prioritize health needs in our communities, and to develop implementation strategies to address the prioritized needs. This subcommittee was made up of both hospital staff and community stakeholders including representatives from local public health departments. We prioritized health needs in our community using the Centura Health prioritization method, adapted from the Hanlon Method for Prioritizing Health Problems. First, members of the hospital subcommittee individually rated each identified need against the size of the problem, the seriousness of the problem, and how much the need already aligned with Centura Health and the community’s existing efforts. Based on the criteria rankings assigned to each health need, we calculated priority scores using the formula: \[ D = C(A + 2B) \], where:

- \( D \) = Priority Score
- \( A \) = Size of health need ranking
- \( B \) = Seriousness of health need ranking
- \( C \) = Alignment ranking
After calculating priority scores for each identified health need, we gave the need with the highest score a rank of 1, with the next highest score receiving a rank of 2, and so forth. This helped us identify the health needs in our community.

**Prioritized Need: Wellness—Obesity and Diabetes.**

This is a priority because of the prevalence of direct effects and indirect effects of obesity and diabetes on comorbidities such as cardiovascular, hypertension, and would care among the population in Pueblo. The CHNA sub-committee unanimously found that we have the capacity to effect change in the current adult population and upstream with resources currently available in the community. Addressing food insecurity by developing multiple sources of access to healthy food, particularly in zip codes 81004 and 81003, two local food deserts/swamps, along with an aggressive food prescription program supported and tracked by local providers, plus upstream education of school-aged children will be the primary initiatives for the next three years.

**Prioritized Need: Mental Health.**

This need is a priority because the prevalence of mental health issues due to generational poverty and increasing unemployment and disability rates. The CHNA sub-committee discerned that positively impacting mental health will satisfy the increasingly vocal demand for these services in the community and will also impact the work force and therefore economic development positively in the long-run. There are no legal barriers to providing better mental health options in Pueblo. To address this need, St. Mary-Corwin Medical Center will, over the next three years, work with local partners to bolster protective elements in our community: awareness of health consequences of early childhood trauma, provision of Mental Health First-Aid training throughout the community, and expanding a continuum of care consisting of complementary therapies that empower citizens to manage their own conditions through better coping mechanisms.

**Prioritized Need: Chronic Lung/Respiratory Disease.**

This is a new priority because the CHNA sub-committee determined that Pueblo has particular environmental factors emanating from the local steel mill and low health literacy regarding home hygiene related to healthy air throughout the community. The resources are readily available to influence a downward trend in COPD and asthma-related illness among adults and children. Hospital initiatives will include foci on testing for the genetic Alpha marker that predetermines COPD and partnering with the local DOTS program sponsored by the Fire Department, EMS, police and code enforcement to help families find resources to make their home air quality safer.

**Implementation Planning Process:**

The first step to developing our implementation plans was to present evidence-based practices focused on addressing the above prioritized needs to our hospital subcommittees. Next, we completed an environmental scan to determine which established efforts at St. Mary-Corwin Medical Center and our community we could leverage or build upon to meet the health needs. We then used the PEARL test to determine if a program or strategy would be effective and appropriate.

To create our implementation plan, we modified the CHAPS Action Plan, provided by CDPHE. For each health priority we created SMART goals, strategies, and metrics.

During the Implementation Planning process, members of the CHNA sub-committee met in small groups with community partners to gage their capacity to participate in particular health improvement activities by
gathering, measuring and interpreting outcomes data that will show impact of the activities over the next three years. Between August 2015 and early January 2016, nine meetings were held to arrive at consensus on which activities to retain from previous years and to define appropriate new activities that are achievable, given available community capacity, funding, and partner buy-in.

**Implementation Plan Review and Approval:**

The final implementation plans were presented to and approved by the St. Mary-Corwin Medical Center Board on May 26, 2016.
Our Mission
We extend the healing ministry of Christ by caring for those who are ill and by nurturing the health of the people in our communities.

Our Vision
Centura Health will fulfill a covenant of caring for our communities with excellence and integrity to become their partner for life.

Our Core Values
Compassion
  Respect
  Integrity
  Spirituality
  Stewardship
  Imagination
  Excellence
Introduction

Centura Health, St. Mary-Corwin Medical Center and Our Community

Background on the Community Health Needs Assessment

The evolving health care landscape has provided health systems throughout the country the opportunity to work with partners in their communities to improve and promote population health. The Patient Protection and Affordable Care Act, enacted March 23, 2010, added new requirements for nonprofit hospitals to maintain their tax-exempt status. One such provision requires nonprofit hospitals to conduct a Community Health Needs Assessment (CHNA) once every three years to gauge the health needs of their communities and to develop strategies and implementation plans for addressing them. This CHNA was conducted in compliance with these new federal requirements.

In addition to Affordable Care Act (ACA) compliance, the implementation of the CHNA furthers Centura Health’s and St. Mary Corwin Medical Center’s mission and vision. As the region’s largest health care provider, Centura Health fulfills our mission to extend the healing ministry of Christ by caring for those who are ill and by nurturing the health of the people in our communities. We honor our commitment to provide outstanding care within our hospital walls and to move upstream to positively impact our patients’ lives.
Our Goals for the Community Health Needs Assessment

The CHNA process gave St. Mary Corwin Medical Center the opportunity to work closely with our community to identify existing and emerging health needs, understand community assets and gaps, and to implement strategies to improve health. This approach continues to strengthen partnerships between St. Mary Corwin Medical Center, our local public health departments, community leaders, and stakeholders. Our goal is to build our organizational capacity in population health best practices and to better position St. Mary Corwin Medical Center to provide sustainable, whole-person care to our patients and communities. The CHNA process provided valuable information to guide us in integrating our community health work with our hospital and strategic plans.

With this focus, we bring new dynamism to our historical legacy of addressing community needs. We are moving from the older model of simply caring for the sick to delivering and supporting the full spectrum of health, wellness and prevention resources the community depends upon in a world in which both acute and chronic health needs are prevalent and overwhelming. We specifically looked at factors that we know impact the social determinants of health. We recognize the important role that social factors such as housing, education, and employment play in affecting a wide range of health risks and outcomes and contributing to the disparities we see across race/ethnicity and geography. Health can be impacted by where we live, and we know that communities with unstable housing, high rates of poverty and crime, and substandard education have higher rates of morbidity and mortality. We looked at specific indicators representative of the social determinants of health in our prioritization process. Through the CHNA we sought to bring awareness to the importance of the social determinants, and work to promote and create social and physical environments that promote health equity and improve population health.

We seek to create efficiencies in our processes, community partnerships, and delivery of care. We have continued to build upon existing relationships between St. Mary Corwin Medical Center and the Pueblo County Public Health Department. Together, we have taken great strides to create a model to which hospitals and health care systems around the nation can look to address their own community’s needs. By following the model of activating primary care networks, advancing evidence-based practices, and providing training for care teams and community providers, St. Mary Corwin Medical Center is continuing to strengthen opportunities for good health and addressing the social determinants of poor health in the communities we serve.

To more fully integrate a population health mindset throughout the Centura Health system, we leveraged existing data resources, internal expertise, and the strength of our network to design a system-wide CHNA process. This helped to assure key stakeholders’ increased knowledge of public health and to engage internal systems in population health data to help to explain the drivers of emergency room and inpatient visits. The knowledge we gained from the CHNA process helped our hospitals more effectively lay out their strategic plan for addressing the needs in their communities. Over the course of the year, this CHNA process facilitated collaboration within our family of hospitals, helping us build a stronger system in which our hospitals benefit from powerful learning networks and relationships, rather than function as separate entities.
St. Mary-Corwin Medical Center: Our Services and History

For more than 130 years, St. Mary-Corwin Medical Center has been pioneering health for communities across Southern Colorado. Today, St. Mary-Corwin is a full-service, 408-bed hospital (staffed for 135 beds) specializing in orthopedics and joint replacement, cancer care, emergency services, innovative cardiovascular treatments, breast care, robotic-assisted surgery and women’s services. St. Mary-Corwin is part of the Centura Health network, Colorado and western Kansas’ health care leader with an integrated network of 17 hospitals, two senior living communities, health neighborhoods, physician practices and clinics, home care and hospice services and Flight For Life® Colorado.

St. Mary-Corwin Medical Center is a proud recipient of seven Five-Star Ratings from Healthgrades, the leading online resource helping consumers make informed decisions in order to find the right doctor, the right hospital and the right care. The Five-Star Ratings indicates that St. Mary-Corwin’s clinical outcomes in treatment of heart failure, hip fracture, pneumonia, sepsis, respiratory failure, diabetic emergencies, and gallbladder removal surgery are statistically significantly better than expected when treating the condition or performing the procedure being evaluated. In regards to general surgery, not only does St. Mary-Corwin perform at a Five-Star level, it outperforms other hospitals in the nation and as a result is recognized with the 2016 Healthgrades Excellence Award™.
Commitment to Our Community

At St. Mary-Corwin Medical Center, our work outside of medical care is born out of the second part of our mission, “to nurture the health of the people in our communities.” From access for the uninsured, to strengthening community partnerships to build vibrant and healthy neighborhoods, St. Mary-Corwin Medical Center is a partner for life.

As a private, non-profit hospital, our dedication is solely to fulfilling our organizational mission by living out our core values and protecting the health and wellbeing of our communities. Our community benefit activities are integral to our religious mission and are the basis of our tax-exempt status. Throughout Centura Health, these community benefit activities include improving community health by providing services to low-income patients and connecting patients with services after discharge, community building, such as economic development and community health programs, subsidized health services like hospice, home care, research to advance the field, financial and in-kind contributions to the community, and community benefit planning.

In fiscal year 2015, St. Mary-Corwin has provided over $26,244,264 in total community benefit. Community services addressed chronic health issues through screenings at health fairs and free sports physicals for high school athletes, plus innovative farm stand/food prescriptions to remediate adult food insecurity and complications of obesity and diabetes. Working upstream, our professionals created continuums of care for chronically ill patients through free small-group therapy offerings for mindfulness meditation and chronic pain management. Other offerings included disease-specific support groups and fall prevention workshops. For youth, we led health camps with intensive experiential learning about maintaining healthy bodies, healthy physical activity and beneficial nutrition.
Our Community

To define our community for the Community Health Needs Assessment and to analyze demographic and health indicator data, we used the STARK-Law service areas. The STARK-Law service area is defined as the lowest number of contiguous ZIP codes that accounts for 75% of a hospital’s inpatient admissions. These ZIP codes have a combined population of 188,587.

The demographic makeup of these communities is as follows:

Race: 82.85% White; 2.67% Black; 0.7% Asian; 1.87% Native American
Ethnicity: 36.84% Hispanic/Latino, Non Hispanic: 63.16%

Education Level: In our community, 30.5% of the population has an Associate’s Degree or higher. CO average is 44.7%

Unemployment Rate: 5.6%, CO average is 4.0%
Population with Limited English Proficiency: 4.5%, CO average is 6.7%
High School Graduation Rate: 71.4%, CO average is 77.6%
Population Living in Households with Income Below 200% of Federal Poverty level: 40.2%, CO average is 29.6%
Population Demographics in St. Mary-Corwin Medical Center’s Service Area

Race

- White: 82.85%
- Black: 2.67%
- Asian: 0.70%
- Native American/Alaska Native: 1.87%
- Other: 11.91%

Ethnicity

- Non-Hispanic: 63.16%
- Hispanic: 36.84%

Associate’s Degree or Higher

- St. Mary-Corwin Service Area: 30.5%
- State Average: 44.7%

High School Graduation Rate

- St. Mary-Corwin Service Area: 71.4%
- State Average: 77.6%

Limited English Proficiency

- St. Mary-Corwin Service Area: 4.5%
- State Average: 6.7%

Unemployment Rate

- St. Mary-Corwin Service Area: 5.6%
- State Average: 4.0%

Households Below 200% of Federal Poverty Level

- St. Mary-Corwin Service Area: 40.2%
- State Average: 29.6%
Our Approach to the Community Health Needs Assessment

To assess community needs, we created a hospital subcommittee to solicit and consider input from individuals representing broad interests of our community. Our hospital subcommittee was made up of key stakeholders and individuals who represented our community.

Our subcommittee:
- Reviewed the quantitative data and provided insight;
- Prioritized health needs using the Centura Health Prioritization Method;
- Identified implementation strategies to maximize impact on a specific health need; and
- Coordinated and collaborated implementation strategies across prioritized needs.

Each subcommittee member was provided with a written description of his/her role. Our group met five times of the course of the assessment. Approximate time spent by each subcommittee member was ten hours.
Stage 1: Scanning the Data Landscape

The CHNA was conducted through a collaborative partnership between St. Mary-Corwin Medical Center, Pueblo City-County Health Department, and community stakeholders.

We used the main counties within the STARK-Law service area to analyze our health driver and health outcome data. Health outcome data was generally not available at the ZIP code level. St. Mary-Corwin Medical Center’s main service area encompasses Pueblo county, which was the data used for this process.

The subcommittee used both quantitative and qualitative data to gain a full understanding of our community and specific health needs. We began the data collection process by selecting quantitative indicators for analysis. Community Commons, a website and data platform that houses population health indicator data, was utilized throughout the process.

In this process, certain health indicator data were selected, including community and population demographic information, behavior and environmental health drivers and health outcomes indicators, as well as coverage, quality, and access data. These indicators were selected because they most accurately describe the community in terms of its demographics, disparities, population, and distinct health needs. These areas address the social determinants of health, quality of life, and healthy behaviors, all things that we know impact community health. To be sure we were measuring all determinants of health, we conducted a full legal and environmental scan of issues and policies impacting health in our community.
Table 1. Health Indicator Data: The health needs in the table below were analyzed during the prioritization process. See Appendix B for the full dataset.

<table>
<thead>
<tr>
<th>Health Need</th>
<th>Indicator</th>
<th>Community Value</th>
<th>Colorado Value</th>
<th>Healthy People 2020 Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asthma</td>
<td>Percentage of adults 18 and older who self-report that they have ever been told by a health professional that they had asthma</td>
<td>16.6%</td>
<td>12.9%</td>
<td>N/A</td>
</tr>
<tr>
<td>Breast Cancer</td>
<td>Cases per 100,000 females per year, age adjusted</td>
<td>126.1</td>
<td>125.3</td>
<td>N/A</td>
</tr>
<tr>
<td>Cervical Cancer</td>
<td>Cases per 100,000 females per year, age adjusted</td>
<td>7.3</td>
<td>6.2</td>
<td>7.1</td>
</tr>
<tr>
<td>Colorectal Cancer</td>
<td>Cases per 100,000 population per year of colon and rectum cancer, age adjusted</td>
<td>43.3</td>
<td>36.9</td>
<td>38.7</td>
</tr>
<tr>
<td>Diabetes</td>
<td>Percentage of adults aged 20 and older who have ever been told by a doctor that they have diabetes</td>
<td>8.1%</td>
<td>6.1%</td>
<td>N/A</td>
</tr>
<tr>
<td>Heart Disease</td>
<td>Death rate due to coronary heart disease per 100,000 population</td>
<td>144.1</td>
<td>137.4</td>
<td>N/A</td>
</tr>
<tr>
<td>Homicide</td>
<td>Rate per 100,000 population</td>
<td>5.9</td>
<td>3.7</td>
<td>5.5</td>
</tr>
<tr>
<td>Infectious Disease</td>
<td>Chlamydia rate per 100,000 population</td>
<td>550</td>
<td>422.8</td>
<td>N/A</td>
</tr>
<tr>
<td>Infectious Disease</td>
<td>HIV Rate per 100,000 population</td>
<td>114.1</td>
<td>265</td>
<td>N/A</td>
</tr>
<tr>
<td>Lung Disease</td>
<td>Death rate due to chronic lower respiratory disease per 100,000 population</td>
<td>64.3</td>
<td>48.4</td>
<td>N/A</td>
</tr>
<tr>
<td>Maternal, Infant, and Child Health</td>
<td>Infant mortality rate per 1,000 births</td>
<td>6.1</td>
<td>5.5</td>
<td>6</td>
</tr>
<tr>
<td>Maternal, Infant, and Child Health</td>
<td>Teen birth rate per 1,000 female teens</td>
<td>57.5</td>
<td>36.5</td>
<td>N/A</td>
</tr>
<tr>
<td>Maternal, Infant, and Child Health</td>
<td>Percentage of low birth weight births</td>
<td>9.3%</td>
<td>8.8%</td>
<td>7.80%</td>
</tr>
<tr>
<td>Mental Health</td>
<td>Percentage of adults who lack social or emotional support</td>
<td>19.5%</td>
<td>16.9%</td>
<td>N/A</td>
</tr>
<tr>
<td>Obesity/Overweight, Physical Activity and Nutrition</td>
<td>Percentage of adults 18 and older who self-report a Body Mass Index (BMI) greater than 30.0</td>
<td>26.3%</td>
<td>20.2%</td>
<td>N/A</td>
</tr>
<tr>
<td>Oral Health</td>
<td>Percentage of adults who did not receive a dental exam in the past year</td>
<td>42.2%</td>
<td>31.1%</td>
<td>N/A</td>
</tr>
<tr>
<td>Oral Health</td>
<td>Percentage of adults with poor dental health</td>
<td>16.4%</td>
<td>10.0%</td>
<td>N/A</td>
</tr>
<tr>
<td>Prostate Cancer</td>
<td>Cases per 100,000 males per year, age adjusted</td>
<td>138.3</td>
<td>147.6</td>
<td>N/A</td>
</tr>
<tr>
<td>Substance Abuse</td>
<td>Adults reporting heavy alcohol consumption</td>
<td>14.8%</td>
<td>17.6%</td>
<td>N/A</td>
</tr>
<tr>
<td>Suicide</td>
<td>Rate per 100,000 population</td>
<td>20</td>
<td>17.2</td>
<td>10.2</td>
</tr>
<tr>
<td>Unintentional Injury</td>
<td>Death rate due to unintentional injury (accident) per 100,000 population</td>
<td>48.4</td>
<td>45.1</td>
<td>36</td>
</tr>
</tbody>
</table>
Stage 2: Delving into the Data to Identify Priorities

Our St. Mary-Corwin CHNA Subcommittee received a health indicator data presentation compiled by the CHNA Steering Committee. The Subcommittee identified and prioritized community health needs using the Centura Health prioritization method as detailed below. They identified the most pressing needs in the Pueblo community based on health indicators, health drivers, and health outcomes.

Our subcommittee defined a health need as a poor health outcome and its associated health driver, or a health driver associated with a poor health outcome where the outcome has not yet arisen as a need. To fit the definition of a health need, the need must be confirmed by more than one indicator and/or data source, and must be analyzed according to its performance against the state benchmark or Healthy People 2020.

Process to Identify Priority and Non-Priority Health Needs

The Centura Health prioritization method was adapted from the Hanlon Method for Prioritizing Health Problems. First, members of the hospital subcommittee individually rated each identified need against the size of the problem, the seriousness of the problem, and how much the need aligned with Centura Health and the community’s existing efforts. The criteria rating rubric for this step is shown below, along with the scores assigned to each need:

Table 2. Centura Health CHNA Prioritization Method: Sample Criteria Rating

<table>
<thead>
<tr>
<th>Rating</th>
<th>Size of Health Problem</th>
<th>Seriousness of Health Problem</th>
<th>Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 or 10</td>
<td>&gt;25% /rate much higher than Colorado benchmark</td>
<td>Very Serious</td>
<td>Alignment with CHNA, CHIP, community groups, hospital and system strengths</td>
</tr>
<tr>
<td>7 or 8</td>
<td>10%-24.9% /rate somewhat higher than Colorado benchmark</td>
<td>Relatively Serious</td>
<td>Alignment with 3 of the following: CHNA, CHIP, community groups, hospital and system strengths</td>
</tr>
<tr>
<td>5 or 6</td>
<td>1%-9.9% /rate slightly higher than Colorado benchmark</td>
<td>Serious</td>
<td>Alignment with 2 of the following: CHNA, CHIP, community groups, hospital and system strengths</td>
</tr>
<tr>
<td>3 or 4</td>
<td>.1%-9.9% /rate same as Colorado benchmark</td>
<td>Moderately Serious</td>
<td>Alignment with 1 of the following: CHNA, CHIP, community groups, hospital and system strengths</td>
</tr>
<tr>
<td>1 or 2</td>
<td>.01%-09% /rate slightly lower than Colorado benchmark</td>
<td>Relatively Not Serious</td>
<td>Some alignment with 1 or two of the following: CHNA, CHIP, community groups, hospital and system strengths</td>
</tr>
<tr>
<td>0</td>
<td>&lt;.01% /rate lower than Colorado benchmark</td>
<td>Not Serious</td>
<td>No Alignment and/or no community gap in need being addressed</td>
</tr>
</tbody>
</table>

Guiding Considerations

Size of Health Problem should be based on baseline data collected from the community.

Does it require immediate attention? What is the economic impact? What is the impact on quality of life? Is there a high hospitalization rate? Is there public demand?

Is this health need being addressed by our last CHNA? Is this health need addressed in our last CHIP? Is this health need addressed by a local public health department’s CHIP? Is this health need addressed by a strong local community organization?
Based on the criteria rankings assigned to each health need above, we calculated priority scores using the formula: \( D = C[A + (2B)] \), where:

- **D** = Priority Score
- **A** = Size of health need ranking
- **B** = Seriousness of health need ranking
- **C** = Alignment ranking

After calculating priority scores for each identified health need, we gave the need with the highest score a rank of 1, with the next highest score receiving a rank of 2, and so forth. This helped us identify the health needs in our community.

Once our community’s health needs were rated by the criteria above, we used the ‘PEARL’ test to determine the feasibility of addressing those needs. The questions we considered in the PEARL test included:

- **Propriety** - Is a program for the health problem suitable?
- **Economics** - Does it make economic sense to address the problem? Are there economic consequences if the problem is not carried out?
- **Acceptability** - Will a community accept the program? Is it wanted?
- **Resources** - Is funding available or potentially available for a program?
- **Legality** - Do current laws allow program activities to be implemented?

In addition to the PEARL test questions, we also considered Centura Health’s Mission and Values when considering health needs to prioritize and address. The final question we considered was whether our activities and strategies to address the health need align with our organizational mission to extend the healing ministry of Christ by caring for those who are ill and by nurturing the health of the people in our communities.

St. Mary-Corwin identified 3 needs as priority areas for which we have the ability to impact. These include:

- **Wellness**: Obesity and Diabetes
- **Behavioral Health**
- **Chronic Lung/Respiratory Disease**.

**Stage 3: Engaging our Community to Understand and Act**

We sought to engage our community in the qualitative data collection process. Once health needs were prioritized, the hospital subcommittee worked together to determine groups and individuals appropriate for focus groups, being sure to solicit input from those in the communities we serve who know the experiences of the underserved, minority, and aging populations best through personal experience or close work with them.

Next, the group identified questions to ask the focus group to gain a better understanding of obesity/diabetes, behavioral health, and chronic lung/respiratory disease. Specifically, we wanted to identify focus areas, gaps in knowledge, needs not met, or current external efforts around the above three prioritized needs that could be improved by health care participation.

Community engagement produced qualitative data for prioritized health needs. The CHNA subcommittee
partnered with the county health department to recruit six focus groups to learn why low-income males, ages 24-34, rarely access health care, because admission rate for them in Pueblo is four times that of Colorado (PCCHD Chronic Health Conditions and Access to Care in Pueblo County, February 2015) for emergent conditions caused by obesity, diabetes or respiratory distress. Our ultimate outcome is messaging that promotes engagement and ownership of routine healthcare by males, FWA 24-34.

Six focus groups consisted of students, inmates, or new fathers. A male facilitator recorded each 45-minute session using scripted guidelines and four questions: 1) What are your biggest health concerns? 2) What do you do now to take care of yourself? 3) What sources have you used in the last 12 months to get health information? 4) Can you share your experiences in getting health care and the services you need in Pueblo?

Top reported concerns were: medical care costs, lack of healthy eating/obesity, personal impact of a loved one dying from poor health, and substance abuse. Most cited weight maintenance as most important, with stress reduction and risk modification second. Hobbies, good communication and good mental health ranked third in importance. One participant said, “...if you’re in an age group for a certain risk factor, going with your regular screenings.”

Last year, the men sought medical information from the internet (24%), doctors (16%), friends (9%) or billboards (7%). Barriers to access in Pueblo were societal norms (35%), environmental (21%), lack of education (15%), risky behaviors (14%), or inappropriate use of services (11%). One man said “the culture of being a man...men think they see their grandpa or dad, how they act and so the younger generation act like that too.”

Stage 4: Developing the Implementation Plan

Once our community's health needs were identified and prioritized, we began the process to develop an implementation plan to address obesity/diabetes, behavioral health, and lung/respiratory disease. The first step was to present evidence-based practices focused on addressing all three priorities to our hospital subcommittee. Next, we completed an environmental scan to identify those established efforts in Pueblo we could leverage or build upon to meet the health needs. We then used the PEARL test to determine if a program or strategy would be effective and appropriate.

On September 17, 2015, the CHNA hospital leads from each Centura Health hospital attended a panel at Porter Adventist Hospital. The panel featured local experts on mental health, healthy eating, and active living initiatives:

- Shannon Breitzman, Branch Director, Injury, Suicide and Violence Prevention, CDPHE
- Doug Muir, Director of Behavioral Health Service Line, Porter Adventist Hospital
- Sarah Kurz, VP of Policy and Communication, Livewell Colorado
- Kim Patton, HRSA, Acting Deputy Regional Administrator, Mental Health
- Reg Cox, Senior Minister, Lakewood Church of Christ
- Andrea Bon-Wilson, Psychological and Behavioral Counselor, Cardiac Rehabilitation and Health Wellness, HELP for Diabetes Program, St. Anthony Hospital

The panelists spoke about available resources and programs in their communities that are available, impactful, and gaining traction locally, regionally, and/or statewide that address mental health and/or healthy eating and active living. They also spoke to current programming gaps in programming that health care systems or hospitals can help to address.

To create our implementation plan, we modified the Colorado Health Assessment and Planning System (CHAPS)
Our Approach to the Community Health Needs Assessment

Action Plan, provided by Colorado Department of Public Health and Environment. CHAPS is a standardized process used by local public health departments to meet the community health needs assessment and planning requirements. For each health priority we created specific, measurable, achievable, realistic, and time bound (SMART) goals, strategies, and metrics.

Social-Ecological Model

The social-ecological model recognizes the complex interplay between individual, relationship, community, and societal factors. Individuals are responsible for making and maintaining lifestyle choices, such as healthy eating and active living. However, the ability to make these choices is determined largely by the social environment we live in (i.e., community norms, laws, policies). Barriers to healthy eating and active living are shared by the community, and removal of the barriers makes behaviors attainable and sustainable. The overlapping rings in the model illustrate how factors at one level influence factors at another level. Therefore the most effective approach to impacting health outcomes is a combination of efforts at the individual, interpersonal, organizational, community, and public policy levels.¹ See Figure 2.

The following are examples of factors in the socioecological model for the areas of priority for this Community Health Needs Assessment. To achieve long-term health outcomes among our communities, changes at every level of the model will both support people making the healthy choices and removing the barriers to making the healthy choices. The model makes it such that a person can leave the physician’s office and their community – people and environment – will support the person in the changes recommended by the physician. It also makes it possible for healthy choices to be supported in diverse communities or various income and race/ethnicity. Here are some examples from our CHNA.

Healthy Eating:

Individual: Eat nine servings of fruits/vegetables daily
Interpersonal: When friends gather, there are fruits/vegetables served
Organizational: At work and in schools, vending machines and cafeterias offer fruits/vegetables
Community: Stores that sell fruits/vegetables are in all communities (e.g., food pantries, convenience stores and grocery stores)
Public policy: Women, Infants and Children Program for lower income moms can be used to purchase all healthy options within a store

Active Living:

Individual: Exercise for 150 minutes/week
Interpersonal: Friends and neighbors go for walks together as a part of their routines
Organizational: At work and in schools, there are daily opportunities to get up and move for longer periods of time (e.g., breaks and recess)
Community: There are places to walk in communities that support people safely walking where they would typically go (e.g., sidewalks to stores)
Public policy: Complete Streets policies guide cities and states to create sidewalks and bike lanes along with roads

¹http://www.cdc.gov/violenceprevention/overview/social-ecologicalmodel.html
Figure 2. The Socio-Ecological Model

Public Policy

Community
Cultural values, norms

Organizational
Environment, ethos

Interpersonal
Social network

Individual
Knowledge, attitude, skills
Health in St. Mary-Corwin Medical Center’s Community

Identified Health Needs

• A community health need is defined as either: A poor health outcome and associated health drivers or
• A health driver associated with a poor health outcome, where the outcome itself has not yet arisen as a need

We used specific criteria to identify health needs in our communities, ensuring that identified needs fit the above definition confirming the need by more than one indicator and/or data source. We determined that the indicators related to each health need performed poorly against either the Colorado state average or the Healthy People 2020 benchmark. We used the Centura Health Prioritization Method to determine our prioritized needs.

The health needs identified in this CHNA included:

• Obesity/Diabetes
• Chronic Lung/Respiratory Disease and Heart-Cardiovascular Disease
• Behavioral Health

Prioritized Health Needs Wellness—Wellness—Obesity Diabetes

The USDA Food Access Research Atlas and County Business Patterns 2012 reports that 17% of Pueblo’s population, vs. 6.4% in Colorado population, are low income with low access to healthy food. Behavioral Risk Factor Surveillance System (BRFSS) and National Center for Chronic Disease Prevention state that 81.5% of Pueblo’s adult population eat less than 5 fruits/vegetables daily. This health need is a priority for our hospital because poverty, paired with limited healthy food, created a food desert in zip 81004, which is where our hospital is located. This lack of healthy food frustrates physician and limits patient efforts to connect nutritional advice with behavior change to lower BMI and maintain healthy blood sugar levels. Resources available to address obesity/diabetes in Pueblo are local farms, comprehensive food bank, free school breakfast/lunch programs, free cooking classes and SNAP/WIC programs. The current hospital initiative is the SMC Farm Stand, beginning its third season to supply zip 81004 with healthy food.
low-cost produce accessible by foot or public transit. Overlaid on the Farm Stand is a food prescription program underwritten by agencies improving the health of high-risk OB patients, mental health clients on psychotropics, and obese and/or diabetic patients who often are malnourished. ICHP, a local ACO, affirmed prevention of increased BMI in their 2015 patients. Health Solutions hypothesizes a minimization of diabetes caused by psychotropic drugs for patients in 2016.

**Chronic Lung/Respiratory Disease**

BRFS measures asthma as 3.7% higher than state average, partly due to dust and pollutants from over a century of steel mill production. Country Health Rankings 2010-2015 reveal that Pueblo’s physical environment has slipped from 9th to 41st since 2010, an alarming negative health indicator. This health need is a priority because preventable hospital visits (40% per 1000 Medicare enrollees for ambulatory-sensitive events per Dartmouth Atlas of Health Care 2012) involve respiratory ailments that contribute to our unimproved mortality ranking (51st out of 56 ranked counties). The current hospital initiative to sponsor the Steel City Lung Symposium and to partner with the American Lung Association are helpful; however, more robust interventions are needed to ensure reversal of the trend through adoption of safer home and industrial environments.

**Behavioral Health**

Behavioral health is a priority because stressors such as high unemployment (5.6% compared to Colorado’s 4%), high disability (16.3% compared to Colorado’s 9.9%), living in households with income below 200% of the federal poverty line (40.2% per American Community Survey) and social isolation (20%, BRFSS) drives mental health hospitalizations to nearly double the state rate (Colorado Health and Hospital Assn., 2010-12). Resources available to address this issue are one in-patient unit with limited Medicaid beds, and Crossroads, Inc., which treats addiction-related mental health issues and out-patient clinics at Health Solutions. The State Hospital reserves only 8 beds for Pueblo County, resulting in a long wait list. Currently, Southern Colorado Family Medicine has one full-time therapist for Medicaid patients and 12 psych liaisons to triage and refer patients in the hospital emergency department. Opportunities for creative strategies will be necessary for hospital implementation over the next three years.

**Access to Care**

In addition to the above prioritized health needs, Centura Health and St. Mary-Corwin Medical Center recognize that access to care is a critical factor to assess, screen, and provide treatment that improves and maintains health. We have a primary duty to ensure we address barriers to access and link our communities to the care they need.

Access to care has been an historical priority for Centura Health. Our founders recognized a community need for health care services and built the first hospitals to meet that need.

While not a driver of health outcomes, improving access to care is critical to addressing mental health and obesity needs identified in the CHNA process. As a nonprofit, faith-based hospital, St. Mary-Corwin has a mission to understand all potential factors that prevent members of our community from accessing needed mental and physical care. Rising healthcare costs can prevent community members from seeking or continuing with needed care. Additionally, recent Medicaid expansion has greatly increased the number of patients seeking specialty care. Increased demand has led to access barriers for our Medicaid populations who are typically the most vulnerable, underserved members of our community.

Centura Health continually promotes programs and services to ensure that individuals in our communities can access needed care. Throughout Centura, we provide Community Health Advocates (CHA) to serve uninsured individuals or those without primary care doctors to enroll them into coverage and link them with providers. Our goals are to increase the number of community members who with designated primary care medical homes and...
to decrease the number of uninsured. We identify uninsured patients in our Emergency Departments, community-based partner organizations, at local events where CHAs guide them through the insurance enrollment process and navigation to appropriate sources of care. Once covered, our Advocates refer them to providers to begin their high quality, consistent medical care.

More recently, we proactively redesigned core services and facilities to create low-cost healthcare options, including urgent care and neighborhood health centers, closer to patients’ homes. St. Mary-Corwin deploys two CHAs in the emergency department and two in the wider community for enrollment of uninsured persons. One CHA successfully initiated Healthier Living Colorado classes for patients with life-limiting co-morbidities to increase health literacy and daily living competencies.

According to the Centura data set, Pueblo has 75.9 primary care physicians per 100,000 persons, which is slightly better than the benchmark of overall Colorado access to primary care, which is 79.2 persons per primary care physician.

Access to Mental Health Services

Inadequate access to mental health services is a concern in our service area. Centura Health recognizes this gap and works with mental health providers to increase integration of mental health services into hospitals, clinics, and neighborhood health centers. At St. Mary-Corwin, Health Solutions embeds a full-time therapist for Medicaid patients. In-house staff consists of 2 consulting psychiatrists and 12 LCSWs, LPCs and LMFTs who provide mental health services to our patients and communities.

Other mental health initiatives include complementary therapies to help patients learn coping skills for stresses of addiction, anxiety, pain, or cancer. Approved by Catholic Healthcare, we provide free auricular acupuncture, Mindfulness, Tai Chi, grief support, chronic pain support with 12-step, massage, yoga and prayer. Mental Health First-Aid training is offered to clergy, healthcare professionals, public school and early childhood teachers.

Other Issues Impacting Health across the State and in Our Community

Smoking

The Colorado Clean Indoor Air Act is a state law limiting smoking in indoor areas and within 15 feet of building entryways. The law does not extend to outdoor areas. Many cities and counties in Colorado have enacted ordinances to make their smoking laws more stringent than state law. In many cases, cities and counties have extended their restrictions to widen the perimeter of restricted entryways and extend no smoking laws to outdoor areas like downtown areas, parks, transit waiting areas, and dining patios. Some counties have also chosen to apply all of their existing smoking laws to the use of electronic cigarettes. The city of Pueblo has implemented a ban on smoking on hospital sidewalks and on hospital grounds.

SNAP and WIC Accepted at Farmer’s Markets

Many Coloradans purchase their fresh fruits and vegetables from their local farmers’ market. Farmers’ markets are an excellent way for people to access nutritious, locally grown products. Ideally, farmers’ markets would be accessible to all Coloradans, regardless of income levels. Supplemental Nutrition Assistance Program (SNAP) payments are accepted at numerous farmers’ markets across the state. Women, Infants, and Children (WIC) payments are accepted only at 7 farmers’ markets across the state. No farmers’ markets accept SNAP payments in Pueblo County, nor do any accept WIC payments.

Colorado’s Lack of Affordable Housing

The average cost of rent in Colorado is growing three times faster than the national average. For a Coloradan to
afford a median-priced rental in the state, the resident must make thirty-five dollars an hour, which is four times as much as Colorado’s minimum wage.

High “Self Sufficiency Standard”

The cost of living in Colorado has risen 32% from 2001 to 2015. Between 2001 and 2005, health care went up by 86%, food by 63%, child-care by 48%, and housing increased by 27%. The state’s minimum wage is insufficient to support families anywhere inside the state, and is only sufficient to support one-person households in Otero, Bent, and Custer Counties. 76% of workers in the most common occupations do not earn wages sufficient to support their families.

Homelessness

Sturm College of Law at the University of Denver has conducted an extensive report addressing Colorado’s homelessness issues. Closely related to the issue of a shortage of affordable housing in many Colorado towns is a failure to address the needs of homeless residents. In Colorado’s 76 largest cities, there are 351 city ordinances in Colorado that criminalize life-sustaining behaviors for the homeless. These laws disproportionately impact homeless residents. Sturm College of Law at the University of Denver’s report estimates that six Colorado cities spent at least $5 million enforcing fourteen anti-homeless ordinances between 2010 and 2014, and this is a conservative estimate. These funds could be better used to fund programs to rehabilitate and support the homeless, many of whom suffer from behavioral health issues.

Marijuana Legalization – Effect on Tourists

Out-of-state visitors to Colorado emergency rooms for marijuana-related symptoms accounted for 163 per 10,000 visits in 2014, up from 78 per 10,000 visits in 2012, according to research published by Dr. Howard Kim, a Northwestern research fellow and emergency medicine physician. The 109% increase far outpaced the 44% increase among Colorado residents since the state’s recreational marijuana sales began Jan. 1, 2014.

Access to Care for Undocumented Individuals

Due to current laws and regulations, it is difficult for undocumented individuals to get health insurance. Also, families with both documented and undocumented individuals are apprehensive of applying for coverage even when they are eligible, out of fear that the undocumented members

Figure 1. The Determinants of Health

<table>
<thead>
<tr>
<th>Health Outcomes</th>
<th>Length of Life</th>
<th>Quality of Life</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Behaviors (30%)</td>
<td>Social and Economic Factors (40%)</td>
<td></td>
</tr>
<tr>
<td>Clinical Care (20%)</td>
<td>Health Factors</td>
<td></td>
</tr>
<tr>
<td>Physical Environment (10%)</td>
<td>Access to Care</td>
<td></td>
</tr>
<tr>
<td>Access to Care</td>
<td>Quality of Care</td>
<td></td>
</tr>
<tr>
<td>Air and Water Quality</td>
<td>Housing and Transit</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>Employment</td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td>Family, Social Support</td>
<td></td>
</tr>
<tr>
<td>Community Safety</td>
<td>Tobacco Use</td>
<td></td>
</tr>
<tr>
<td>Diet and Exercise</td>
<td>Alcohol and Drug Use</td>
<td></td>
</tr>
<tr>
<td>Sexual Activity</td>
<td>Source: Robert Wood Johnson Foundation</td>
<td></td>
</tr>
</tbody>
</table>
of their family will be reported to immigration authorities. However, there are currently strong legal protections against using information received through health insurance against an undocumented individual. Centura Health and other community organizations must educate the community regarding these rules to encourage more undocumented individuals to apply for coverage.

Preventable Motor Vehicle Accidents

Colorado is only one of fifteen states in the country with secondary safety belt laws – meaning that law enforcement drivers can only cite drivers for not wearing seat belts if they are stopped for another violation. Colorado safety belt usage is lower than the national average at 82.4% compared with 87% nationally. Also, it is not mandatory by law for motorcycle riders to wear helmets. Currently, it is legal for anyone over the age of 18 to use a phone while driving.

Education

Coloradans with less education are more likely to live in poverty. A 2012 report shows that only 4.5% of Coloradans with a bachelor’s degree or higher lived in poverty, while 26.9% of Coloradans without a high school diploma or GED are living in poverty. Furthermore, the unemployment rate for Coloradans with a bachelor degree is 3.9%, which is significantly lower than the state average of 8%. 10.6% of Coloradans without a high school diploma or GED are unemployed. Education is strongly associated with higher earners. Coloradans with a bachelor’s degree had a median income of $47,782, while those with only a high school education or GED had a median income of $28,486.

Civil Commitment Statute - Statewide

According to Colorado law, a person can be involuntary committed for psychiatric evaluation if they pose an “imminent danger” of harm to themselves or others. Spurred by the Aurora movie theater shooting in July 2012, there has been a contentious debate over this current law because it does not fall in line with 43 other states in which there is a lesser standard to involuntarily commit a person that poses a behavioral health risk to the public. Proposed bills to change this standard have been rejected as policymakers have shown hesitation to encroach on civil rights. Despite civil rights concerns, there are concerns that the current involuntary commitment standard is insufficient. Researchers at the School of Social Welfare at the University of California at Berkley reported in 2011 that broader commitment criteria are strongly associated with lower homicide rates.

Shortage of Mental Health Professionals

There is a shortage of mental health professionals in many Colorado counties. Colorado ranks near the bottom in psychiatric beds per capita. Also, Colorado ranks in the bottom half in per capita state and federal spending on mental-health. Despite the Affordable Care Act’s mandate that commercial insurers create “parity” between mental health care services and physical care services, insurers are still able to reimburse hospitals at a higher rate for physical healthcare than mental healthcare. Low funding and low reimbursement rates are leaving providers unable to invest in improving their behavioral health services.
Lack of Integration between Primary Care and Behavioral Healthcare

There is high demand for integration between behavioral health services and primary care. A 2014 study found that only 12% of patients who were referred to behavioral health therapy actually completed the treatment. Policy makers believe that if behavioral health treatment is integrated into primary care, the social stigma behind receiving behavioral healthcare will be eroded and patients will actually receive the treatment they need. There have been statewide attempts to integrate primary care and behavioral health services. Currently, the State is focusing on integrating the Accountable Care Collaborative efforts with the Colorado State Innovation Model and Behavioral Health Organization efforts. The goal of these efforts is to result in integration of physical and behavioral health services for Medicaid patients.

Also, Colorado has the seventh highest suicide rate in the nation. In the month before their deaths, a majority of people who have committed suicide were found to have visited a primary care physician. Increased integration of primary care and behavioral healthcare can result in improved detection tools and support for primary care physicians to identify mental illness and those at risk for suicide.

Bike Friendliness

Bike friendliness is an important function to encourage active lifestyles. Also, bike friendliness means creating roads that are cognizant of bicyclists, which leads to the reduction of unnecessary bike and car accidents. Colorado is currently named by The League of American bicyclists as a top 10 state for bike friendliness. Policies and laws can be enacted to increase bike friendliness and bike safety. The cities of Denver and Arvada received a silver rating from the League of American Bicyclists. In Denver, only 8% of its arterial streets have bike lanes, but the city possesses many bike-friendly ordinances.

1 http://www.gaspforair.org/gasp/ordinance/ordinance_index.php
2 https://www.ams.usda.gov/local-food-directories/farmersmarkets
11 http://www.denverpost.com/ci_12498806
12 C.R.S. 27-65-105
14 https://www.colorado.gov/pacific/sites/default/files/PCO_HPSA-mental-health-map.pdf
15 http://extras.denverpost.com/mentailillness/
Conclusion

Evaluation

Progress since our last CHNA

Priorities of the 2013 CHNA:

- Wellness—Obesity and Diabetes
- Teen and Unintended Pregnancy
- Access to Health Care

Complying with CHNA 2013, SMC created a Farm Stand/ Food Prescription program in partnership with 16 farmers, 2 clinics and our largest ACO. The aim was to provide access to healthy food for zip 81004, an impoverished food desert and to alleviate effects of obesity and diabetes. After two seasons, approximately 5000 bags of affordable fresh produce, or at least 15,000 servings, were consumed, with over 4000 of those servings strategically prescribed and tracked by physicians. With Medicaid expansion, 80,000 (50%) of the Pueblo County population is enrolled in Medicaid and has covered access to care in the hospital and two safety net clinics. With the Pueblo City-County Health Department, we improved communication and health education to females, so that unintended births to mothers aged 20-24 decreased from 53.5%-48.5%; among mothers aged 15-19, the unintended pregnancy rate decreased from 41.6 to 38 births per 1000.

Evaluating our Impact for this CHNA

To understand the impact we are having in our communities, we remain dedicated to consistently evaluating and measuring the effectiveness of our implementation plans and strategies. We will complete bi-annual assessments of core metric progress measures. St. Mary-Corwin Medical Center will also track progress through annual community health improvement plans and community benefit reports.

Community Health Improvement Plans

The CHNA allows St. Mary-Corwin Medical Center to measurably identify, target, and improve health needs in our communities. From this assessment, we will generate annual Community Health Improvement Plans to carry out strategies for the advancement of all individuals in our communities. These plans detail the specifics of implementing the strategies from the CHNA, including the prioritized needs, partnerships in the community to address those needs, goals, initiatives, and progress to date.

Community Benefit Reports

As mentioned previously, a vital aspect of our non-profit and religious hospital status is the benefit we provide to the communities. Each fiscal year, we publish our annual community benefit report that details our communities by county, their demographics, the total community benefit that we provided, and the community benefit services and activities in which we engaged. These reports are an important way to visualize the work we do in our communities and to show the programs and services we offer along with the number of people reached through them. We will continue to use
these reports to track our progress with the CHNA implementation strategies because they clearly demonstrate the number of people reached through our programs and services and the resources spent to achieve our goals.

**Community Feedback**

We welcome feedback to our assessment and implementation plan. No written feedback from the community was received on our last Community Health Needs Assessment.

For comments or questions, please contact:

Rev. Linda Stetter, Director of Mission Integration and Spiritual Care  
St. Mary-Corwin Medical Center, 1008 Minnequa Ave, Pueblo, CO 81004  
LindaStetter@Centura.org  
(719) 557-5246

Any feedback provided on our plan is documented and shared in future reports.

**Thank You and Recognition**

Our Community Health Needs Assessment is as strong as the partnerships that created it. It is through these partnerships that we were able to ensure we were leveraging the assets in our communities, getting the voices of those who are experiencing challenges with their health and social determinants of health and making a plan to which both the community and hospital are committed. Thank you to the following people who committed their time, talent and testimony to this process.

Rev. Linda Stetter, Director of Mission Integration and Spiritual Care, St. Mary-Corwin  
Marie Caselnova, Director, Centura Health at Home  
Ron Cothran, Elder, First Seventh-Day Adventist Church of Pueblo and SMC Respiratory Services  
Shylo Dennison, Mid-Level Obesity Stakeholder Convener, Pueblo City-County Health Dept. PCCHD  
LaRae Eggleston, VP of Business Development, St. Mary-Corwin  
Sandra Guitierrez, CEO Pueblo Latino Chamber of Commerce  
Rev. Matt Guy, Executive Director, Pueblo Triple Aim  
Lois Illick, Family & Consumer Agent, CSU-Pueblo Extension Office  
Julie Kuhn, Food Access Council Convener, PCCHD  
Cindy Lau, Regional Planner, Violence Prevention, SMC Health Foundation  
Envoy James Mertz, Pueblo Salvation Army  
Victoria Miller, Bessemer CF & I Museum  
Donna Mills, Director, Integrated Community Health Partners (ACO)  
Rev. Dr. Margaret Redmond, African Methodist Episcopal Church and Director, Pueblo Human Relations Commission  
Deric Stowell, Master Gardener, Milagro Church  
Lynn Strange, MD, Director of Southern Colorado Family Medicine  
Helen Upton, Pueblo Step-Up/Healthy Communities
Appendix A: Data Sources

American Community Survey, 2008-12
Colorado Health and Hospital Association, 2010-12
County Health Rankings, 2008-2010
County Business Patterns, 2012
Dartmouth Atlas of Health Care, 2012
National Center for Education Statistics, 2012-2013
National Center for Education Statistics, 2008-2009
Behavioral Risk Factor Surveillance System, 2006-2012
Behavioral Risk Factor Surveillance System, 2005-09
Behavioral Risk Factor Surveillance System, 2006-2010
Behavioral Risk Factor Surveillance System, 2006-2012
Behavioral Risk Factor Surveillance System, 2011-2012
Federal Bureau of Investigation Uniform Crime Reports, 2010-12
Health Resources and Human Services Administration, Health Professional Shortage Areas, 2014
National Center for Chronic Disease Prevention and Health Promotion, 2012
National Center for HIV/AIDS, Viral Hepatitis, STD and TB Prevention, 2012
National Center for HIV/AIDS, Viral Hepatitis, STD and TB Prevention, 2010
National Environmental Public Health Tracking Network, 2008
National Vital Statistics System, 2006-2010
Small Area Health Insurance Estimates, 2012
State Cancer Profiles, 2007-2011
Area Health Resource File, 2012
US Department of Health & Human Services, Health Resources and Services Administration
USDA Food Access Research Atlas, 2010
Appendix B: First Round of Data

Centura Health Data Approach

**DEMOGRAPHICS:** Community & Population

**HEALTH DRIVERS:** Behaviors & Environment

**HEALTH OUTCOMES:** Morbidity & Mortality

**ACCESS:** Coverage & Quality Care

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Service Area Definition

- Stark versus County

- The *Stark* Law-defined service area is defined as the lowest number of contiguous *zip codes* that accounts for 75% of a hospital's inpatient admissions
  - Demographic data was gathered for Stark service areas
- County level data used for health drivers, outcome, and access data
  - Keep it consistent when we prioritize. Outcome data not available at zip code level
Appendix B: First Round of Data

Data Sources

- American Community Survey
- Behavioral Risk Factor Surveillance System
- National Center for Education Statistics
- National Vital Statistics System
- State Cancer Profiles
- Bureau of Labor Statistics

St. Mary Corwin Hospital

**DEMOGRAPHICS: COMMUNITY & POPULATION**

Centura’s Communities

St. Mary Corwin Community

Service Area Population: **188,587**

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Population in Age Range</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age 0-4</td>
<td>11,777</td>
<td>6.43%</td>
</tr>
<tr>
<td>Age 5-17</td>
<td>31,644</td>
<td>16.78%</td>
</tr>
<tr>
<td>Age 18-24</td>
<td>17,222</td>
<td>9.13%</td>
</tr>
<tr>
<td>Age 25-34</td>
<td>24,291</td>
<td>12.88%</td>
</tr>
<tr>
<td>Age 35-44</td>
<td>22,608</td>
<td>11.99%</td>
</tr>
<tr>
<td>Age 45-54</td>
<td>26,544</td>
<td>14.08%</td>
</tr>
<tr>
<td>Age 55-65</td>
<td>24,738</td>
<td>13.12%</td>
</tr>
<tr>
<td>Age 65+</td>
<td>29,756</td>
<td>15.83%</td>
</tr>
</tbody>
</table>

Source: American Community Survey, 2008-12
Appendix B: First Round of Data

### Race and Ethnicity

**White**
- Service Area: 82.85%
- Colorado: 84.15%

**Black**
- Service Area: 2.67%
- Colorado: 3.99%

**Asian**
- Service Area: 0.7%
- Colorado: 2.71%

**Native American/Alaska Native**
- Service Area: 1.87%
- Colorado: 0.97%

### Hispanic Population

<table>
<thead>
<tr>
<th></th>
<th>Service Area</th>
<th>Colorado</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Population</td>
<td>188,587</td>
<td>5,042,853</td>
</tr>
<tr>
<td>Non-Hispanic</td>
<td>63.16%</td>
<td>79.37%</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>36.84%</td>
<td>20.63%</td>
</tr>
</tbody>
</table>

### Population

**Population with Limited English Proficiency**

- **Service Area**: 4.5%
- **Colorado**: 6.7%

**Unemployment Rate**

- **Service Area**: 16.3%
- **Colorado**: 9.9%

### Income

**Children Eligible for Free/Reduced Price Lunch**

- **Service Area**: 59.7%
- **Colorado**: 41.6%

**Population Living in Households With Income Below 200 Percent of the Federal Poverty Level**

- **Service Area**: 40.2%
- **Colorado**: 29.6%
Appendix B: First Round of Data
Appendix B: First Round of Data

**General Health**

- Poor General Health
  - Service Area: 17.3%
  - Colorado: 12.8%

**Obesity**

- Obesity Adults
  - Service Area: 26.3%
  - Colorado: 20.2%

- Overweight Adults
  - Service Area: 34.5%
  - Colorado: 35.3%

**Health Outcomes**

- Asthma
  - Service Area: 16.6%
  - Colorado: 12.9%

- Diabetes
  - Service Area: 8.1%
  - Colorado: 6.1%

**Health Outcomes: Beginnings**

- Teen Birth Rate (Per 1,000)
  - Service Area: 57.5
  - Colorado: 35.6

- Low Birth Weight Percentage of Births
  - Service Area: 9.3%
  - Colorado: 8.8%

- Healthy People 2020
  - Percentage: 7.8%

**Heart Health**

- Service Area
  - Percentage of Adults With Heart Disease: 3.1%
  - Percentage of Adults With High Blood Pressure: 30.8%
  - Percentage of Adults With High Cholesterol: 38.9%

- Colorado
  - Percentage of Adults With Heart Disease: 2.7%
  - Percentage of Adults With High Blood Pressure: 23.1%
  - Percentage of Adults With High Cholesterol: 33.5%
### Cancer Incidence by Type

<table>
<thead>
<tr>
<th>Type</th>
<th>Service Area</th>
<th>Colorado</th>
<th>Healthy People 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breast</td>
<td>126.1</td>
<td>125.3</td>
<td>40.9</td>
</tr>
<tr>
<td>Cervical</td>
<td>7.3</td>
<td>6.2</td>
<td>7.1</td>
</tr>
<tr>
<td>Colon and Rectal</td>
<td>43.3</td>
<td>36.8</td>
<td>38.7</td>
</tr>
<tr>
<td>Lung</td>
<td>49.1</td>
<td>48.4</td>
<td>N/A</td>
</tr>
<tr>
<td>Prostate</td>
<td>138.3</td>
<td>147.6</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Source: State Cancer Profiles, 2007-2011

### Years of Potential Life Lost Due to Premature Death

**Service Area:** 8,766  
**Colorado:** 6,073

Source: County Health Rankings, 2009-2013

### Uninsured Adults Ages 18-64

<table>
<thead>
<tr>
<th></th>
<th>Population</th>
<th>Population Without Medical Insurance</th>
<th>Percentage Uninsured</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Area</td>
<td>107,143</td>
<td>20,723</td>
<td>19.34%</td>
</tr>
<tr>
<td>Colorado</td>
<td>3,256,899</td>
<td>635,874</td>
<td>19.52%</td>
</tr>
</tbody>
</table>

Source: Small Area Health Insurance Estimates, 2012
Appendix B: First Round of Data

### Uninsured Children Under Age 19

<table>
<thead>
<tr>
<th></th>
<th>Population</th>
<th>Population Without Medical Insurance</th>
<th>Percentage Uninsured</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Area</td>
<td>44,594</td>
<td>3,663</td>
<td>8.21%</td>
</tr>
<tr>
<td>Colorado</td>
<td>1,276,087</td>
<td>121,166</td>
<td>9.5%</td>
</tr>
</tbody>
</table>

Source: Small Area Health Insurance Estimates, 2012

### Mental Health Hospitalizations (Per 100,000)

<table>
<thead>
<tr>
<th></th>
<th>Service Area</th>
<th>Colorado</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pueblo County:</td>
<td>4535</td>
<td>2868</td>
</tr>
</tbody>
</table>

Lack of Social or Emotional Support

Age-Adjusted Percentage

<table>
<thead>
<tr>
<th></th>
<th>Service Area</th>
<th>Colorado</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colorado</td>
<td>19.5%</td>
<td>16.9%</td>
</tr>
</tbody>
</table>

Source: Colorado Health and Hospital Association, 2010-11

### Oral Health

#### Adult Dental Care Utilization

<table>
<thead>
<tr>
<th></th>
<th>Service Area</th>
<th>Colorado</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Area</td>
<td>42.2%</td>
<td>31.1%</td>
</tr>
</tbody>
</table>

Percent with No Dental Exam in the Past Year

#### Poor Dental Health

<table>
<thead>
<tr>
<th></th>
<th>Service Area</th>
<th>Colorado</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Area</td>
<td>16.4%</td>
<td>10.0%</td>
</tr>
</tbody>
</table>


### Quality Care

#### Mammograms

<table>
<thead>
<tr>
<th></th>
<th>Service Area</th>
<th>Colorado</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Area</td>
<td>62.1%</td>
<td>60.5%</td>
</tr>
</tbody>
</table>

Percent Female Medicare Enrollees in last Two Years

Source: Dartmouth Atlas of Health Care, 2012

### Access to Primary Care

<table>
<thead>
<tr>
<th></th>
<th>Service Area</th>
<th>Colorado</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Area</td>
<td>75.9%</td>
<td>79.2%</td>
</tr>
</tbody>
</table>

Number of Primary Care Physicians per 100,000 population

Source: Area Health Resource File, 2012

### Diabetes Management

<table>
<thead>
<tr>
<th></th>
<th>Service Area</th>
<th>Colorado</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Area</td>
<td>84.1%</td>
<td>83.4%</td>
</tr>
</tbody>
</table>

Percentage of Medicare enrollees with diabetes who had a Hemoglobin A1c Test in past year

Source: Behavioral Risk Factor Surveillance System, 2006-2010

### High Blood Pressure Management

<table>
<thead>
<tr>
<th></th>
<th>Service Area</th>
<th>Colorado</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Area</td>
<td>24.0%</td>
<td>26.5%</td>
</tr>
</tbody>
</table>

Percentage of Adults not taking their blood pressure medication

Source: Dartmouth Atlas of Health Care 2011
### Appendices:

#### Appendix B: First Round of Data Analysis

**Access: Quality Care**

<table>
<thead>
<tr>
<th>Metric</th>
<th>Service Area</th>
<th>Colorado</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pneumonia Vaccination</td>
<td>70.8%</td>
<td>74.5%</td>
</tr>
<tr>
<td>Preventable Hospital Events</td>
<td>40.0</td>
<td>38.2</td>
</tr>
</tbody>
</table>

*Behavioral Risk Factor Surveillance System, 2006-2012*  
*Source: Dartmouth Atlas of Health Care, 2012*

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**Centura Health Data Approach**

- **Demographics**
  - Community
  - Population

- **Health Drivers**
  - Behaviors
  - Environment

- **Health Outcomes**
  - Morbidity
  - Mortality

*Centura Health*