Introduction

The term “health” embodies a multi-faceted concept, particularly from a community perspective. An individual’s health is measured by the presence and/or severity of illness; whether or not they engage in behaviors that are a risk to their health, and if so, the length of time the behavior has occurred. It can also be measured by asking individuals to report their personal perception of their overall health. The health of an entire community is measured by collecting and compiling individual data. Commonly used measurements of population health status are morbidity (incidence and prevalence of disease) and mortality (death rates). Socioeconomic data is usually included as it relates to the environment in which individuals live. A particular population’s level of health is usually determined by comparing it to other populations, or by looking at health related trends over time.

Everyone in a community has a stake in health. Poor health is costly to people trying to maintain employment, and employers pay for it via high rates of absenteeism and higher health insurance costs. Whole communities can suffer economic loss when groups of citizens are ill. As a result, everyone benefits from addressing social, environmental, economic, and behavioral determinants of health.

Community Health Improvement Plan

A comprehensive community health needs assessment can provide a better understanding of a population’s health needs. Provisions of the Patient Protection and Affordable Care Act (ACA) requires all 501(c) (3) health systems operating one or more hospitals, as well as federally qualified health centers (FQHC’s) to complete one every three years. All public health districts are required to complete health needs assessments every five years. The purpose is to provide the health continuum in a community with a foundation for their community health planning and to provide information to policymakers, provider groups, and community advocates for improvement efforts, including the best ways to direct health-related grants and appropriations.

While conducting a community health needs assessment can help provide clearer focus on a population’s health needs, a community health improvement plan (CHIP) constructs a long-term, systematic effort to address public health problems based on the results of the community health assessment and the community health improvement process (Centers for Disease Control, 2015). The plan can be utilized by all entities on the public health continuum – hospitals, healthcare providers, health departments, social service agencies, etc. – to help focus efforts around specific goals aimed at improving the health of the community. These plans should identify, strengths, weaknesses, opportunities and threats, as well as include a shared vision and metrics for success. The plan should also align with broader efforts at the state and federal level.

Figure 1: Healthy People 2020
The U.S. Department of Health and Human Services established four overarching health goals for the year 2020:

1. Attain high-quality, longer lives free of preventable disease, disability, injury, and premature death.
2. Achieve health equity, eliminate disparities, and improve the health of all groups.
3. Create social and physical environments that promote good health for all.
4. Promote quality of life, healthy development, and healthy behaviors across all life stages.

To achieve these goals a comprehensive set of objectives were established (Healthy People 2020), with 26 leading health indicators arranged into 12 topics used to set priorities and measure health over a 10-year period. These indicators, selected on the basis of their ability to motivate action, the availability of data to measure progress, and their importance as health issues for the public, influenced the development of Partners for a Healthier Ross County’s 2016 Community Health Needs Assessment.

**Partners for a Healthier Ross County**

Established in 1996, the Partners for a Healthier Ross County (Figure 2) is a collaborative, community-based group whose efforts are aimed at improving the quality of life for residents of Ross County. After almost 20 years of each participating agency conducting their own community health assessment and subsequent plans, the group is collaborating in 2016 to complete Ross County’s first collaborative assessment and strategic plan. The coalition, organized with a memorandum of understanding (MOU), is structured with a steering committee and senior advisory council (Figure 3). Both have representation from the following agencies: Adena Health System; Child Protection Center of Ross County; Chillicothe City Schools; Chillicothe Gazette; Hope Clinic of Ross County; Hopewell Health Center; Ohio Department of Job and Family Services; Ohio State University Extension; Ohio University – Chillicothe; PACCAR; Paint Valley ADAMH Board; Pioneer Center, Recovery Council; Ross County Health District; Ross County YMCA; Scioto Paint Valley Mental Health Center; Unioto School District; United Way of Ross County; and the Veterans Administration Hospital.

For the 2016 assessment and strategic plan, Partners used the data-driven Mobilizing Action for Planning and Partnership (M.A.P.P) process developed by the National Association of City and County Health Officials (NACCHO) and the Centers for Disease Control (CDC). This six-phase process includes a four part community health needs assessment, as well as an in-depth analysis of current community trends, gaps, and resources with which to comprehensively evaluate the current state of health in Ross County and to prioritize key public health issues. This data was then used to develop the community’s first collaborative community health improvement plan.

Utilizing the values of commitment, engagement, communication, and respect, it is the vision of Partners for a Healthier Ross County that **all people within the region are empowered and inspired to reach their fullest physical and mental potential in a clean and safe environment through positive community collaborations.** By working through strategic initiatives that improve the physical, mental, emotional, and socioeconomic well-being of Ross County residents, this will be achieved.
This 2016 Community Health Needs Assessment and Community Health Improvement Plan were completed through a comprehensive process of data collection, evaluation and planning utilizing the M.A.P.P. process (Figure 4). M.A.P.P. (Mobilizing Action through Planning and Partnership) is a six-phase community health planning process developed by the National Association of City and County Health Officials (NACCHO) and the Centers for Disease Control (CDC). The data and plan in this report reflects only Ross County, Ohio and was collected from a variety of sources including public health databases, a public health survey, as well as interviews and focus groups of community agency members.

Both qualitative and quantitative data were collected from primary and secondary sources. Data was collected in a total of four categories (Figure 4): Community Themes and Strengths; Local Public Health System; Community Health Status; and Forces of Community Change. This information was then compiled and evaluated by the Partners Steering Team, focus groups, and the Partners Senior Advisory Council in order to finalize specific health-related priorities and develop the related community health improvement plan. Both the published assessment and plan are intended to inform decision makers and funders about the challenges Ross County faces in improving community health, and the priority areas where support is most needed. The community health improvement plan is also intended to be used as a planning tool for community organizations to align their agency efforts and programming with the broader goals set to improve health in Ross County.
ASSESSMENT DATA SUMMARY

The four assessments yielded data for the primary causes of death, as well as data and public opinion on the primary health issues in the Ross County community. The prevalence of death and disease and the corresponding behaviors and environmental factors were then aligned to help prioritize the issues Partners for a Healthier Ross County would focus on and use to develop a community health improvement plan. Figure 5 provides a summary.

**Top Causes of Death**
- Heart disease
- Cancer (all forms)
- Unintentional injury (all forms)
- Pulmonary/respiratory disease
- Stroke

**Top Health Issues**
- Addiction
- Obesity and diabetes
- Depression and anxiety
- Lung cancer/respiratory issues (COPD, Asthma)
- Infant Mortality

**Top Health Behaviors**
- Drug and alcohol use
- Mental health management
- Tobacco use
- Poor nutrition
- Limited primary care use

**Top Environmental Factors**
- Economics/poverty
- Basic needs access (housing, food, and transportation)
- Safety (crime and violence)
- Healthcare access (preventative services and education)
- Air quality

The top causes of death in Ross County are heart disease, cancer (all forms), unintentional injury (all kinds of injury), pulmonary and respiratory disease, and stroke. The health issues contributing to these leading causes of death include addiction (unintentional injury), obesity and diabetes (heart disease and stroke), depression and anxiety (unintentional injury), lung cancer and respiratory issues (cancer and pulmonary/respiratory disease), and infant mortality (unintentional injury).

Health behaviors that directly correlate to these top health issues include drug and alcohol use (addiction, depression and anxiety), mental health management (depression and anxiety), tobacco use (lung cancer and respiratory), poor nutrition (obesity and diabetes), and limited primary care use (all health issues).

In addition, the top environmental factors contributing to the primary health issues were identified through the data collection, public survey, and a focus group. Those factors identified were: economics and poverty; access to basic needs such as housing, food, and transportation; safety from crime and violence; access to healthcare, including preventative services and education; and finally, air quality.

This information was aligned in a prioritization grid (see Community Health Needs Assessment page 41) to demonstrate multi-correlation to issues. Data and public that was impacting health in more than one area was prioritized on the list, as was information that was missing. For example, mental and behavioral health issues impact more than just unintentional injury, as they were also linked to obesity. Air quality data was missing from the report, as there is currently no ambient air quality monitoring conducted in Ross County.

Once the information and data were prioritized in this manner, an online survey was set up for members of the committee to vote on what they believed to be the top health issues for Ross County. The list in Figure 5 was the result. These issues were then utilized as the building blocks with which to begin the work of developing a community health improvement plan.
Strategic Planning Process

A strategic planning workshop was held on September 9, 2016 at the PACCAR Medical Education Center. A total of 25 members of the Partners senior advisory council and steering committee, as well as the community attended the event. Participants were broken out into groups of five to focus on root cause analysis of each of the five priority health issues: addiction; obesity and diabetes; depression and anxiety; lung cancer and respiratory issues; and infant mortality.

Groups were provided education on the strategic planning process, including instruction on the use of, and process of, the 5 Whys Method (cite reference) as well as the use of Lean Sigma tools to document findings as part of the process. They also received education on developing strategic questions around these, and instruction on walking through root cause analysis and told about other resources to guide the process of identifying strategic questions for each of the issues prior to breaking out into groups.

Tools

Each of the groups was provided a guide (Figure 6) to assist them in developing strategic questions around their issue. The guide included multiple pieces of information from the completed community health needs assessment:

- SWOT analysis from the Forces of Change assessment
- Community health status such as top causes of death, disease prevalence, and county health rankings
- Community themes such as public survey data and prevalence of disease and health issues and behaviors
- Inventory of health services in the public health continuum and the GIS mapping of their locations in the community

The planning guides served as reference for the groups (Photo 2) as they moved through the 5 Whys process of determining a root cause for the health issue they were focusing on. A Fishbone Diagram was provided for the group to document their work as the process moved forward and to summarize issues for development of strategic questions. Photo three provides an example of the Fishbone Diagrams that were completed.

After completing the root cause analysis and summarizing on the diagrams, the groups utilized the information to formulate strategic questions (Photo 4) around the issue. Photo four provides an example of the some of the strategic questions that were formulated.
Strategic Planning Process Continued...

Questions

The final segment of the strategic planning workshop had the groups reconvene and present the strategic questions that emerged as a result of the root cause analysis process. The questions were aligned (Photo 5) to identify overlap in concepts and indicators, as well as alignment with the overall vision of Partners for a Healthier Ross County. The process resulted in two primary questions that emerged:

- How do we as a public health community ensure access and improve navigation to all points of the public health continuum?
- How do we as a public health community impact the culture of acceptance around unhealthy choices and environments?

These questions were driven by several common themes that were identified in each group, including the culture that surrounds the health issues, predominantly the Appalachian culture’s habit of not utilizing medical services until they are ill or not accessing it at all. The issue of mistrust with medical and social service providers also surfaced. These issues were considered alongside the inventory of health services available in the community, and the high ranking of 30 out of 88 counties the community has with clinical and social services per the County Health Rankings (2016).

Also discussed was the visibility of available health services, both within the community as well as within agencies. Social capital issues and a culture of “silos” prevalent in the community also emerged as a primary issue. Limited infrastructure with which to integrate and improve interworking relationships among public health agencies was a key issue discussed. In addition the group reviewed specific elements of the root cause analysis around several total key concepts, including:

- cross-system collaboration
- integrated systems of support, navigation to services, and data collection
- visibility of services
- expanding access points to services
- health communication

These concepts were used as the basis for developing primary goals. This task was given to the steering committee for further development at another round of meetings. This effort resulted in the final goals, objectives, and metrics outlined in Figure 7.

Figure 7: Community Health Strategic Questions, Goals, Objectives, and Metrics
Community Health Improvement Plan Development

The community health needs assessment and subsequent strategic planning yielded two key primary findings for consideration. First, since most of the agencies have been operating in silos for many years, there is no centralized or integrated system to measure use of services across the continuum. Often, agencies also do not know about all of the services other agencies are providing, so there are missed opportunities for referrals among agencies. In addition, although infrastructure like the 211 directory is there for referral and navigation, it is not operating as effectively and as efficiently as needed.

Second, the process identified that opportunity exists to improve data collection systems for public health issues, as well as establish groups or subcommittees around the issues. For example, the community has committees or councils developed around addiction (Ross County Heroin Partnership Advisory Council), depression and anxiety (Paint Valley ADAMH Board), and there is also a committee that focuses on the social support needed to decrease infant mortality (Ross County Social Services Council) as well as other social issues. However, there is currently no organized group around lung or respiratory issues (no local chapter of the American Lung Association) or obesity. This lack of infrastructure must first be addressed in order to establish more specific goals and metrics for measurement and improvement.

The goals, objectives, and metrics developed as part of the strategic planning workshop and follow-up meetings provided the foundation for the community health improvement plan. The steering committee worked further to look at timelines. In addition, possible barriers to implementing the plan were also identified. Each strategic question was broken out with specific goals, objectives, metrics, deliverables and responsible partners.

Strategic Question 1

The first strategic question centered around access and navigation to services available within the public health continuum for the community. The strategic planning process identified opportunity to improve integration of service agencies that increases referrals, contacts and navigation to services along the continuum. Although there is a centralized clearinghouse of information, the local 211 directory, both community and agencies using the system have been declining. Complaints about information availability and consistency were also noted during the data collection. In addition, limited data concerning the use of services has been tracked and centralized. Partners for a Healthier Ross County agreed during the strategic planning process that improving both visibility of services available on the continuum, as well as the infrastructure for referral and navigation to the services will increase use of services in the community.

Two goals were established to improve access and navigation on the continuum. The first focused on improving infrastructure and metrics for measuring the use of the continuum. The second goal aims to improve the visibility of the public health continuum among the participating agencies through improved communication. Table 1 provides a detailed outline of the goals, and the objectives necessary to achieve the goals. Deliverables, responsible parties, and timelines are also outlined. The project timeline is set to start in January 2017 and end on December 31, 2019.

Table 1: Strategic Question 1, Goals, Objectives, and Timeline
Strategic Question 2

The second strategic question centers on impacting the culture of acceptance around unhealthy choices and environments. The strategic planning process identified an opportunity for agencies to improve health messaging, by first understanding the health literacy rates among those in the community, given that there is a low educational attainment, income, and higher levels of poverty. In addition, there were also opportunities to improve infrastructure as it relates to dedicated resources, such as committees to design and deliver consistent health messages. Although there are some committees that are already in existence – such as the Ross County Heroin Partnership Advisory Council, the Paint Valley ADAMH Board and the Ross County Social Services Council – there are opportunities to create other groups to help promote messages and collect data around smoking cessation, lung cancer screening and air quality.

Two goals were established to improve messaging and the infrastructure with which to drive the messaging. The first goal is focused on measuring the health literacy of the community to create consistent messaging. The second goal aims to improve the infrastructure of the groups that drive the messaging, as well as improve alignment of programming and data collection using the five health priorities identified as part of the strategic planning process. Table 2 provides a detailed outline of the goals and the objectives necessary to achieve the goals. Deliverables, responsible parties, and timelines are also outlined. The project timeline is set to start in January 2017 and end on December 31, 2019.

Future State

The community health improvement plan developed by the Partners for a Healthier Ross County is aligned with the group’s overarching vision of “all people within the region being empowered and inspired to reach their fullest physical and mental potential in a clean and safe environment through positive community collaborations.” Specific metrics around each goal and objective have been established to measure the success of the plan. The group will utilize County Health Rankings to measure the broader improvement of health factors and outcomes, as well as quality of life and environmental indicators. Partners’ aims for more than a 10% improvement in rankings over the next 3 years and more than 30% over the next six years (Figure 8). This is based on current improving socio-economic data and plans to improve health communication, accesses and navigation along the continuum.

Table 2: Strategic Question 2, Goals, Objectives, and Timeline

<table>
<thead>
<tr>
<th>GOAL 2: Develop improvement strategies and metrics for collaborative and agency alignment around each of the five health priority issues.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design and implement health literacy measurement initiative across community health centers.</td>
</tr>
<tr>
<td>Create communication campaign around the five health priorities.</td>
</tr>
<tr>
<td>Evaluate agency population outcomes.</td>
</tr>
</tbody>
</table>

Figure 8: Community Health Improvement Plan Future State Metrics

<table>
<thead>
<tr>
<th>Year</th>
<th>Outcomes</th>
<th>Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>81</td>
<td>69</td>
</tr>
<tr>
<td>2015</td>
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<td>2022</td>
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<td>45</td>
</tr>
</tbody>
</table>
Structure

The community health improvement plan for Partners for a Healthier Ross County will be structured using the plan and the community health needs assessments as primary drivers for a total of five sub-committees built around each of the five priority health areas. Given that three of the areas – addiction, depression and anxiety, and infant mortality – groups in the community already addressing many of the issues, work will be done to align and/or integrate the plan with the programming of these groups. The two areas that do not already have groups developed – obesity, diabetes, lung and respiratory - will have committees formed by members of Partners to ensure that resources are identified and developed around these issues. Figure 9 provides an outline of this structure.

Project Communication

The Partners for a Healthier Ross County will utilize multiple means to make the completed plan visible and accessible to participating partners, as well as the broader community. First, a project charter will be utilized to summarize and simplify the components of the plan. The community health needs assessment and community health improvement plan process incorporated several Lean Sigma tools that assisted in data collection and analysis. A project charter (Figure 10) and Gantt were utilized to guide the Partners through the first five phases of the M.A.P.P. process so they are familiar with it as an incorporated tool. Corresponding rolling action item lists or RAILS will be utilized to help each of the five subcommittees break the goals and objectives out into more detailed activities with aligned timelines to ensure each of the objectives continue to move forward.
Second, both the community health needs assessment and the community health improvement plan will have a communication plan developed around them by the Partners’ steering committee in order to ensure that they are visible, accessible, and understood. The Senior Advisory Council members and members from the steering committee will inform community leaders, civic groups, agency leaders and government officials regarding the plan and its activities. In addition, the documents will be published and be made accessible via websites for each of the participating agencies. Those agencies using social media will also promote the availability of the assessment and plan. Adena Health System, a participating agency, has also committed resources from its communication department to create a website for Partners to house the assessment and plan, and links to services across the continuum, associated news, and relevant updates.

**Next Steps**

The Partners for a Healthier Ross County will begin integrating the community health improvement plan into established community efforts and use it to build the missing pieces of infrastructure needed to ensure that activities to improve the health of the Ross County community are focused, communicated, documented and measured to benchmark long-term success. Communication of the finalized plan, as well as integration of it into established work groups, will begin in November 2016, with new work groups convening in January 2017.

Partners for a Healthier Ross County believes community-based projects have the best opportunity to make a real difference in the health of individuals and their families, and those providing care. Visions for future community support in all of the priority areas will require identifying suitable leadership, raising awareness among stakeholders, determining how to involve them, and agreeing on the areas of, and how each group will collaborate. In addition, different strategies will be used depending on the capability of participating agencies to address the issue.

**REFERENCES**