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Process Evaluation of a Community Asset Mapping Protocol for Diabetes Prevention and Management

Andrea Peterson
University of Nebraska Medical Center

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**Process Evaluation of a Community Asset Mapping Protocol for Diabetes Prevention and
Management**

Andrea Peterson

Master of Public Health – Health Promotion

David A. Dzewaltowski, PhD – Committee Chair

Marisa Rosen, PhD, MPH – Committee Member

Regina Idoate, PhD – Committee Member

Abstract:

Prediabetes and type 2 diabetes mellitus (DM) are highly prevalent conditions with new diagnoses occurring each year (Centers for Disease Control and Prevention, 2022a). Type 2 DM negatively impacts many aspects of life, to include social, financial, cultural, and everyday living. Asset mapping is a useful tool to build upon existing resources to help community members identify and expand services based on understanding the interconnected systems that influence type 2 DM prevention, screening, education, and care management. An Asset Mapping Protocol was created and piloted through a rural community coalition in Nebraska. The protocol includes an activity for community stakeholders to identify and discuss assets for diabetes prevention, screening, and care management and why they are valuable to their community. A process evaluation was completed to assess the usefulness and effectiveness of the activity. A mixed-methods assessment was completed by participants with a follow up qualitative interview. A fidelity checklist was also completed based on a recording of the coalition members completing the activity. While limited participation in the follow-up assessments provided few results, the data provided insight into protocol adjustment and future direction. Recommendations include clarifying the activity instructions, providing greater details between coalition meetings, incorporating additional interview feedback focusing on minority community resources, and strengthening community health needs assessments. Additional research in rural communities that addresses the reduction in rates of type 2 DM is necessary.

Chapter 1. Introduction

Diabetes Mellitus (DM) is a chronic condition that affects the blood glucose levels of an individual (Centers for Disease Control and Prevention [CDC], 2022a). There are several types of DM including Type 1, Type 2, Gestational, and prediabetes (CDC, 2022a). In the United States, approximately 10% of the population are affected by type 2 DM with 1.4 million new cases being diagnosed each year (CDC, 2022a). Diabetes can lead to various chronic diseases that contribute to poor overall health and increased difficulty in managing health outcomes, such as heart disease, high blood pressure, neuropathy, chronic kidney disease, eye disease, skin infections, sleep apnea and an increased risk for memory care illnesses like dementia or Alzheimer's (Mayo Clinic, 2022). Additionally, one in three people in the U.S. are living with prediabetes, a condition that increases the risk for developing type 2 DM (CDC, 2022a). There are a myriad risk factors associated with the development of type 2 DM and prediabetes, including stress which can negatively impact an individual's ability to manage their blood sugar (Surwit et al., 2002). Stress can be caused by many factors, including, but not limited to, financial strain from diabetes management and treatment, lifestyle changes, and diabetes-related social challenges.

Additional risk factors for diabetes can be seen through the lens of the socioecological model. Whittemore et al., discussed how type 2 DM prevention and management can be addressed through the socioecological model (2004). Starting with the intrapersonal level, genetic predisposition and personal understanding of diabetes and associated risk factors (knowledge, skills, attitudes, and self-motivation) contribute to preventing and controlling diabetes. The second level of the socioecological model, the interpersonal level, includes roles of close relationships, social support, stress, and the ability for these relationships to influence

positive or negative management of diabetes risk factors. The third level is institutional, which involves organizations (schools, churches, employment) and how they can influence diabetes risks or management. Organizations can provide incentives to help reduce risk factors, like employee weight loss programs, healthy school lunches or church support groups for people living with diabetes. The fourth level of the socioecological model focuses on community support. Communities influence diabetes risk by providing community support through initiatives like installing exercise equipment in parks, creating safe exercise areas, or increasing the number of healthy restaurants or offerings within the community. The final level of the socioecological model is public policy. Policies can influence diabetes through increasing programs that screen for diabetes or advocate for diabetes advancements. Overall, focusing on all levels of the socioecological model has shown to be more effective for sustainable changes (Whittemore et al., 2004).

Over the years, several interventions, programs, and policies have been developed to combat the rise of type 2 DM and prediabetes in the United States. For example, diabetes education through mobile applications has attempted to reach the intrapersonal level of the socioecological model by increasing resources and education to individual users (Fu et al., 2017). Interpersonal-level interventions have focused on group classes that provide social support and build relationships between people at risk or living with diabetes (Odgers-Jewell et al., 2017). Classes are often provided through an institution and can be expanded upon to reach the organizational level of the socioecological model (Odgers-Jewell et al., 2017).

Community-level interventions are necessary to help improve overall health by reducing type 2 DM development and chronic diseases. Communities have been shown to increase the number of physical activity locations (gyms, parks, exercise equipment) to help lower the blood

glucose levels of community members, especially those at risk for type 2 DM or working on managing their type 2 DM (Avery et al., 2012). At the policy level, interventions addressing the social determinants of health related to type 2 DM include improving accessibility and equity of type 2 DM related health information by lowering the standard reading level (Hill-Briggs, 2020). Other policy changes at the national level through the Affordable Care Act (ACA), passed in 2010, mandated the implementation of Community Health Needs Assessments (CHNAs) by local tax-exempt hospitals, local health departments, and other partners (Lopez, Dhodapkar, and Gross, 2021).

CHNAs offer an opportunity for communities to utilize both primary and secondary data to understand gaps in health outcomes and focus on addressing what is missing from a community. Secondary data sources tend to include the Behavioral Risk Factor Surveillance System (BRFSS), the Youth Risk Behavioral System (YRBS), and vital statistic records, for example, while primary sources can come through locally driven surveys, interviews, and focus groups with local leaders and key stakeholders (CDC, 2022e; CDC, 2022f; Health Care Without Harm, 2017).

Many recent CHNAs throughout the county have found that top community priorities include addressing obesity, nutrition, type 2 DM and reducing risk factors for chronic disease. The University of Mississippi Medical Center conducted a CHNA in 2018 where they found healthy food access, diabetes, and obesity to be the three leading health issues of Mississippi. The top three priorities of the community were addressing obesity/physical activity, cardiovascular disease, and type 2 DM (The University of Mississippi Medical Center, 2018). Lee County, Florida had a CHNA completed in 2020 and found that the top third and fourth concern of the community to be nutrition, physical activity and weight, and diabetes respectively

(Lee Health and Florida Dept. of Health in Lee County, 2020). Lastly, King County, Washington completed a CHNA in 2022 where the community and stakeholders identified a top need as chronic disease management, especially for diabetes (King County Hospitals for a Healthy Community, 2022). There is a high need for community level interventions to address the rise of type 2 DM.

In conjunction with CHNAs, communities will use the data to create a Community Health Improvement Plan (CHIP) in which local leaders and key stakeholders determine how to impact population health outcomes through policy change and program development and implementation (NACCHO, 2020). One process used by many local hospitals and health departments for assessing community needs and engaging in community planning is known as the mobilization for action through a planning and partnership (MAPP) model (NACCHO, 2020). The MAPP model focuses on four assessments: community themes and strengths, local public health systems, community health status, and forces of change.

While the community themes and strengths assessment does provide some review of existing community assets, the overall goal of the MAPP process is to find areas for improvement of overall community health (Community Tool Box, n.d.). Understanding the assets within a community can help local leaders and key stakeholders improve local population health outcomes, such as prediabetes and type 2 DM through tailored interventions and policies. Asset mapping is an effective tool that can complement the CHNA/CHIP process. Asset mapping aims to understand what health-based resources are currently available within a community and why those resources are valued. The asset mapping process encourages participants to play an active role in their community and provide feedback (McKnight & Kretzmann, (1990). Emery and Flora (2006) developed a framework known as Community

Capitals to guide asset mapping, particularly in low-resourced areas. The Community Capitals Framework focuses on different resources, categorized as natural, cultural, human, social, political, financial, or built (Emery & Flora, 2006). The Community Capitals Framework allows researchers the ability to look at unique resources available within a community and uses a spiraling-up technique where participants can recognize how assets or capitals build upon one another instead of focusing on the gaps or needs of a community (Emery & Flora, 2006). Using the different capitals as a guide for community resources, community engagement efforts can be tailored to enhance assets identified as valuable to community members.

The involvement of community members is important to both planning and implementation of community programs because those members have a stake in the future of their community (US Department of Housing and Urban Development, 2012). The identification of strengths and capacities of community citizens helps set agendas, problem-solve, and rebuild relationships among people and organizations (Ammerman & Parks 1998). Previous research studies show that identifying assets through community members encourages the understanding of strengths and values within their own community (Andrews et al., 2012). Community members can work together in groups to enhance the understanding of which assets exist and how those assets can be improved (Mosavel, Gouch and Ferrell, 2018). An asset mapping project looking at childhood obesity determined that when community assets were identified through community individuals, organizations and associations, communities could work together toward the common goal of ending the obesity problem (Brown and Stalker, 2020). Prior studies also mention how the use of asset mapping can strengthen the understanding of why resources are beneficial to communities (Scarborough, Hill and Wichan, 2017).

Developing an asset mapping protocol can help community coalitions to work together and better assess what resources exist in their community. Members of different community organizations can work together to improve their community to address community-specific concerns. Additionally, the asset mapping technique utilizes existing resources and involves community organization collaboration, which helps reduce the financial strain caused by the constant implementation of new programs. Understanding what resources exist and how the community can best utilize them can reduce unnecessary spending by communities (Briggs & Huang, 2017). For small towns, especially rural communities, budgets are often limited for public health programs. Focusing on existing resources within communities and expanding upon them to enhance services can stretch existing budgets.

While research exists about asset mapping, conceptual frameworks, the Community Capital Framework, as well as type 2 DM, and prediabetes, most of these topics have stayed independent of one another, suggesting additional research is needed to understand the confluence of these topics to improve population health outcomes. Moreover, geographic location and population density play a large role in chronic disease prevention and control (Brundisini et al., 2013). Research focusing on the utility of these methods in rural communities is necessary to understand how to address chronic diseases such as type 2 DM. The provision of additional methodology to supplement the CHNA/CHIP process can happen through the creation of a protocol for rural type 2 DM asset mapping. The additional process would allow communities to conduct their own asset map and/or apply the research discovered within this project to similar communities.

The aims of this study were to 1) develop a protocol for utilizing the Community Capitals Framework to map community assets for the prevention of prediabetes and management of type

2 DM in rural communities, and 2) Evaluate the protocol, post-implementation with the Diabetes On Track project, through a process evaluation with stakeholders to determine helpfulness for understanding community resources.

Chapter 2. Background and Literature Review

Type 2 Diabetes Mellitus (DM) is a disease that occurs when the body can no longer regulate insulin that helps control blood glucose (CDC, 2022c). There are many harmful and debilitating effects of living with type 2 DM, which can include an increased risk for additional chronic diseases such as heart disease, kidney disease, nerve problems, oral health issues, vision impairment, and adverse mental health (CDC, 2022c). Living with DM can take a major toll on financial, social, and human capital due to the cost of medications, access to health services and support, adverse health outcomes, and the ability to control a lifelong, incurable disease (The American Diabetes Association, 2018).

Currently, over 37 million adults in the United States are diagnosed with DM, and 90-95% of these cases are individuals with type 2 DM, which accounts for almost one in ten individuals being diagnosed (CDC, 2022b). Before being diagnosed with type 2 DM, some individuals have been diagnosed or screened as having prediabetes (CDC, 2022b). Almost 96 million adults in the United States have been classified as having prediabetes, where their blood glucose is higher than normal limits. Without proper intervention, prediabetes can lead to the development of type 2 DM (CDC, 2021).

Through early intervention, screening, and lifestyle changes, individuals can reduce their risk of developing type 2 DM or prediabetes. Engaging with health care providers and seeking routine preventative care can help with early diagnosis to increase awareness and understanding of the disease (CDC, 2022a). Positive changes in diet, exercise, and stress levels can lead to a

reduction in weight and blood glucose levels, thereby decreasing the risk of developing type 2 DM (CDC, 2022a). Due to the large percentage of the population diagnosed with DM and prediabetes, there is a strong need for early intervention, prevention, education, and management at the community level. There is an ever-pressing need to identify resources available for communities to help prevent, treat, and control type 2 DM.

Focusing on community resources to better manage and prevent type 2 DM is essential for addressing social determinants of health-impacting diabetes. Hill-Briggs, et al., discusses the many social determinants that can affect type 2 DM risk and management (2020). These factors include socioeconomic status, built environment and safe neighborhoods, food access and availability, social interventions, healthcare access and cost (Hill-Briggs, et al., 2020). Many of these factors are considerably more challenging to address in rural communities due to a lack of resources, reduced access to services, workforce retention, educational attainment, and high rates of poverty (Rural Health Information Hub, 2022).

When studying populations, it is important to understand what classifies a community to better direct resources and narrow the focus of interest. To understand community resources, one must first define community. A community can be defined as groups of people within a specific geographical location or as groups of people with shared health factors (Guttmacher, et al., pp. 4, 2010). Tailoring of community interventions to rural communities helps address the unique needs of their geography.

Asset mapping is an effective tool that can be utilized to address type 2 DM care and management through an understanding of currently available resources within a community. Existing asset mapping research was conducted by Florian et al., (2016) on type 2 DM populations, in which photovoice and asset mapping were used to determine assets helpful in

type 2 DM control. Through an asset map and community member participation, a better understanding of existing resources was achieved, and areas or issues that inhibited diabetic control were identified (Florian et al., 2016). Florian et al., (2016) mentioned how spirituality and faith improved self-motivation to achieve diabetes health. Alternatively, the perceptions of safety and crime, even if there is no evidence of high rates of crime, can inhibit individuals from seeking outdoor physical activity or utilizing food options that are within walking distance. While this article does a great job of discussing how asset mapping is an ideal tool for understanding community resources for people with diabetes, the research was only conducted within Boston, Massachusetts, and does not translate well to rural areas, especially the Midwest. The article also mentions a limitation in that only one interview session was completed with a small group of participants. Future research is recommended to include interviews with multiple groups and more individuals. (Florian et al., 2016).

Another research article, by Estrada et al., (2018), discusses the use of asset mapping to improve communication among community members to promote health and reduce health disparities. It discusses how by focusing on culturally appropriate community engagement and workshops, rural community members can better access health-related communication, which included motivation to interact with other community members. The researchers were able to create a map of resources that were identified as important for health communication and support. While this research aids in background information for rural asset mapping, it still falls short of specifically addressing type 2 DM-related assets and focuses more on cultural capital (Estrada et al., 2018).

Community-partnered participatory research was conducted using an asset map in Los Angeles, California, to better assess what resources exist within the community, as well as areas

that are detrimental to the health of its members. A conceptual framework was used to initiate the asset map and guide the project. While this research found useful information regarding assets of a community to reduce adverse health outcomes, it was broader in scope and did not focus on one specific health condition, nor was it conducted in a rural location. Additionally, the resulting asset map was a combination of information received from participants and research conducted by the authors (Brown et al., 2016).

Whittaker et al., discusses using the Community Capitals Framework utilized by Emery and Flora (Emery & Flora, 2006) to better adapt programs for maternal and child health in rural areas. Seeking maternal and child health in rural areas has similar themes for people with diabetes who need medical care, support, and resources. Further discussion shows issues with accessing healthcare providers and clinics, greater health disparities among minority populations in rural areas, and a focus on community-driven support and services to meet the needs of the rural community (Whittaker et al., 2021). Other social determinants of health specific to rural residents within the Midwest are identified as food insecurity, transportation, provider/clinic shortages, and both greater and different disease statuses when compared to urban communities (Dauner & Loomer, 2021). In the application of the Community Capitals Framework by Emery and Flora (2006), the ability to build upon the assets and capacities of a community, especially in rural communities, is discussed. Assets and capacities are built upon by first identifying capital within categories and then learning how it leads to other area interactions. Emery and Flora (2006) focused primarily on social capital and how it creates a spiraling-up to other capitals, which enhances existing assets within the community and shows community members that they are an asset to their community (Emery & Flora, 2006).

Chapter 3. Methods

Project Design, Setting and Participants

Diabetes On Track Project

The Diabetes On Track project, a coordinated program with the University of Nebraska Medical Center, the Nebraska Medicine team, and two rural communities of Nebraska, focuses on understanding type 2 DM prevention, screening, and care management within rural communities. The goals of the Diabetes On Track project include enhancing community partnerships, improving interprofessional collaboration, recognizing community resources, and improving the pathway for type 2 DM care (Rosen, M., personal communication, August 2022). The Diabetes On Track project began meeting with one of their rural community partnerships in Nebraska in August 2022. The project has formed a local coalition that meets monthly and discusses ideas to help improve type 2 DM resources within the community. During the coalition meetings, an investigation into existing resources and assets was conducted to include social networking, place-based mapping, and asset mapping activities. These activities followed the Community Capitals Framework and focused on improving and understanding what assets exist in the community from individual perspectives. The Asset Mapping Protocol used with the Diabetes On Track project built upon background information about the Community Capitals Framework to guide the activity and questions for further discussion prompts.

Participants

For the purpose of this study, one of the rural Nebraska communities partnered with the Diabetes On Track project was selected to pilot the Asset Mapping Protocol. The community will be referred to as the rural community in Nebraska. The United States Department of Agriculture (USDA) defines the community in Nebraska as rural, containing approximately

25,000 people (United States Department of Agriculture, n.d., United States Census Bureau, 2021). According to the 2010 United States Census, the racial makeup of the city is approximately ninety percent white (90%, N=25,000) and thirteen percent Hispanic or Latino (13%, N=25,000). Less than thirty percent have a bachelor's degree or higher in education (30%, N=25,000). The median household income is about \$52,000, and almost 14% (N=25,000) of the population lives in poverty (United States Census Bureau, 2021). The rural community contains many schools, including a community college and offers a variety of health clinics, restaurants, shared community spaces, and events.

The coalition team coordination with the Diabetes On Track project, included community members from the rural community in Nebraska. Coalition team members lived or worked in the rural community. A few organizations the coalition members represented included the local health department, health services within the community, local health clinics, community service organizations, university offices, local and county government offices, senior living and care organizations, wellness facilities and social services. Coalition meetings average 18-20 coalition members attending in person and two to three members attending via remote access (i.e., Zoom meetings).

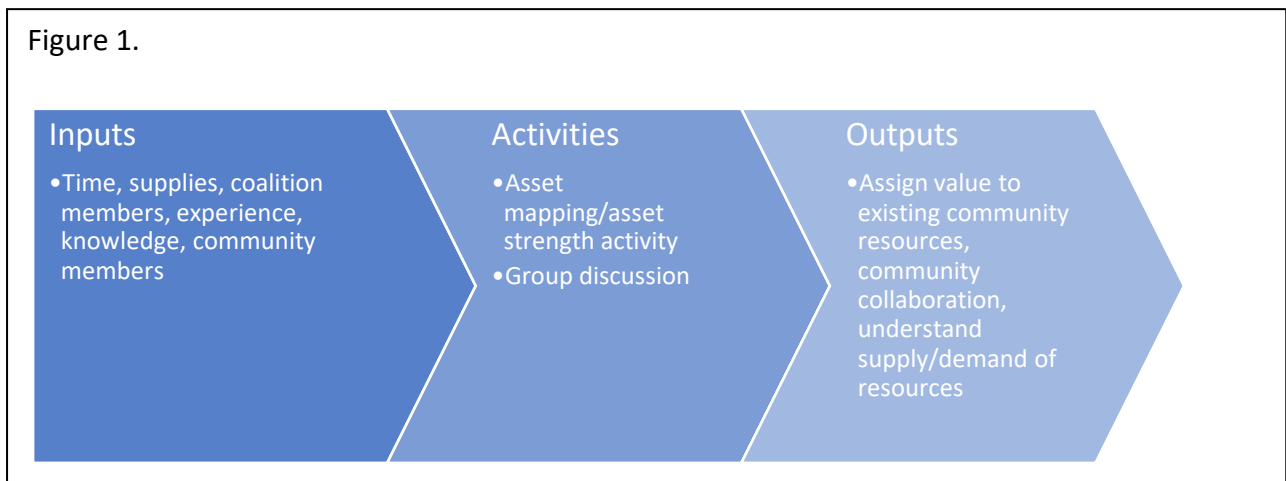
Evaluation Design

A process evaluation using a sequential mixed methods design was conducted after implementation of the coalition meeting activity. The evaluation was conducted to assess the asset mapping implementation and evaluate its effectiveness in identifying strengths, challenges, and fidelity to the protocol. The process evaluation provided insight into how the activity was implemented and if the goals of the activity were met.

Aims of the process evaluation were:

1. Understand how the activity was implemented and the degree that instructions were delivered (implementation fidelity), which provides knowledge on successes or failures of the activity that may affect the project's outcomes or goals.
2. Assess how participants interacted and responded during the activity, which allows for evaluation of how the activity was designed and delivered.
3. Understand contexts or bias that may have been a factor in the delivery of the activity that could impact the project outcomes or adaptability to future locations of the project.

A logic model was created to determine how to evaluate what assets exist in the community related to type 2 DM screening prevention/education, and care management (Figure 1).



The activity was recorded via Zoom and saved to a secure location. IRB determined the project to be under the auspices of quality improvement and exempt.

Assessment Instrument

A post-activity mixed methods assessment was distributed via email by the local health department on November 9, 2022, accompanied by additional information for the next coalition meeting. The assessment was distributed to all participants who attended at least one coalition

meeting with the Diabetes On Track project. The assessment requested the name of the participant, the number of coalition meetings attended, ten Likert-scale questions on levels of agreement to statements about the activity, one qualitative question asking about strengths and weaknesses of the activity, and an option to provide additional feedback via an interview. Quantitative Likert-scale questions included identifying the value the activity provided to participants in understanding assets, the ability to identify community resources and their strength for type 2 DM prevention and care management, the motivation behind seeking certain community resources and how organizations in the community can help supply type 2 DM related services to the community. Additional questions asked about the diversity of the coalition group, choices to participate with the coalition, trusting the coalition and Diabetes On Track team and if the activity was understandable and enjoyable. The assessment was created using Microsoft Forms and was open for submissions November 9 through November 16, 2022 (Appendix C).

Qualitative Interview Guide

A voluntary qualitative interview was offered through Zoom meetings and recorded for the ability to transcribe patterns and themes. Seven questions were asked that focused on the understanding of the activity and the perspective of the participant. To demonstrate understanding of the activity, the first question asked participants to explain the activity's purpose in their own words. Participants were also asked to review if the instructions were clear, and, if not, how, or where they could be improved. The interview inquired about definitions and terms used during the activity and ease of understanding. Comfortability and diversity were also assessed. Lastly, the interview requested ideas for clarifying the activity and for understanding

the role the participant's organization provides to the activity. The interview occurred on November 21, 2022, and was recorded to allow for analysis (Appendix D).

Fidelity Checklist

A fidelity checklist was also utilized to perform a process evaluation on the implementation of the activity. To assess fidelity, the activity was recorded (via Zoom meetings) for review to analyze with a fidelity checklist, found in Appendix B. The checklist asks if the activity accurately describes the activity, accurately follows the facilitator guide, allows for adequate time of the activity and discussions, reduces bias, and prompts for additional conversations when needed using available prompts. After reviewing the video footage, the checklist was completed and calculated for percent fidelity versus percent non-fidelity to the protocol.

Asset Mapping Protocol

The Asset Mapping Protocol followed ideas established by the Community Capitals Framework to expand upon human, social, and built capital, as previously identified in an earlier coalition meeting. The protocol of the asset mapping activity can be found in Appendix A. The activity focused on encouraging community members to look from the perspective of someone living with type 2 DM or at risk/living with prediabetes.

The asset mapping activity focused on coalition member participation to review previously identified place-based locations. Coalition members discussed the value of these locations to the type 2 DM community. By discussing the values, participants were asked to focus on accessibility for the community.

An asset mapping activity was completed by the community coalition members on October 25, 2022, to better assess the values and strengths of resources. The activity also built upon discussions of resources identified in previous coalition meetings through place-based and

social network mapping. A member of the Diabetes On Track Project team acted as facilitator for the activity. During the activity, six small groups of 3-4 people were organized (Appendix A). Each group was provided a different community perspective; either as someone at-risk or living with prediabetes or someone diagnosed and living with type 2 DM.

The definition provided to the participants for someone at-risk for diabetes or living with prediabetes is someone over the age of 45, overweight, an immediate family member who was diagnosed with diabetes, history of gestational diabetes, not physically active (less than 3 days per week), A1C level of 5.7-6.4%, and not yet diagnosed as diabetic (CDC, 2021).

The definition provided to the participants for someone living with type 2 DM was defined as someone with a diagnosis of type 2 DM, an A1c level greater than 6.5%, consistently higher blood glucose levels, and someone who may or may not be using medication to control the disease (CDC, 2022d). These definitions were provided to the coalition group and were available for reference during the activity.

By counting off one through six, six groups were created to focus on one of three parts that make up the type 2 DM prevention and care pathway (screening, education/prevention, and care management). Groups one and two focused on screening services; groups three and four focused on prevention and education services, and groups five and six focused on care management. The odd groups discussed the perspective of an individual living with at-risk/prediabetes, and the even groups discussed the perspective of an individual living with type 2 DM. Each group was given a piece of paper with a circle on it to represent one-half of a Venn Diagram. A PowerPoint slide containing questions for the groups to discuss, and brainstorm was also provided. These questions related to the place-based and social network maps previously

completed at prior coalition meetings and included broad examples to help with answering the questions. The questions included:

- 1) What makes these places strong and valuable resources to the community?
- 2) How does the location of these services serve the population?
- 3) What motivates people to use these assets/resources?
- 4) What three places identified earlier offer the greatest resources and assets to the community?

The coordinating groups (one and two, three and four, five and six) then regrouped and spent time communicating and comparing answers to the questions. They were also tasked to answer:

- 1) Are the top three places identified as having the most assets similar among the two groups?
- 2) How does accessibility factor into these assets?

Answers were written on a separate paper to act as the coordinating middle section of a Venn Diagram. Once completed, the three groups representing the three different positions along the type 2 DM prevention and care pathway, formed a larger group to facilitate further discussion. For the large group discussion, the group was asked to share findings from each of their positions on the type 2 DM prevention and care pathway, as well as answer a few questions related to organizational collaboration.

Discussion prompts included:

- 1) How can the different organizations within the coalition work to increase the supply and production of diabetic services and resources?
- 2) How do the different organizations of the coalition meet the demands or needs of community members with diabetes?

3) Where can collaboration be built upon to improve the production of diabetic services?

As the conversation continued, additional prompts related to the Community Capitals

Framework categories were referenced as needed.

Equipment

Equipment utilized during the community coalition meetings included PowerPoint presentations and handouts with place-based locations of the rural community in Nebraska. Several community members participated remotely using Zoom meetings. The meeting was recorded, and a follow-up assessment of the asset mapping activity was conducted through Microsoft Forms and sent via email. The follow-up qualitative semi-structured interview was conducted through Zoom meetings.

Analysis

Data were gathered through Microsoft Forms directly and transferred to Microsoft Excel for data analysis. A stacked bar graph was chosen to best display the frequency of Likert-scale matrix questions (Figure 2). An additional bar graph shows the average agreement score with standard deviation to Likert-scale questions (Figure 3). The frequency of themes mentioned in the qualitative question is shown via a bar graph (Figure 5). A deductive approach was used to thematically code qualitative data collected through the assessment instrument and interview. Qualitative data collected through the instrument was analyzed using Excel while the interview was transcribed and thematically coded.

Chapter 4. Results

The number of coalition meetings attended was important to assess the level of understanding of previous activities. Likert-scale questions in a matrix-style format were chosen

to be visually representative and the best choice to allow participants to share attitudes in a quantifiable manner.

Quantitative Data

A total of eight assessments were completed via Microsoft Forms for a response rate of 36% (N=22). Quantitative data were analyzed via Microsoft Excel and can be viewed in a stacked bar graph (Figure 2). The greatest difficulty with the asset mapping activity was unclear instructions, reported by at least four (50%, N=8) of respondents. Only three (37.5%, N=8) found the asset mapping activity instructions clear, with an average response falling between disagree and neutral for understanding. Additionally, only 25% (N=8) of respondents found the asset mapping activity enjoyable, with the average response neutral.

Seventy-five percent (75%, N=8) of respondents indicated positive responses in which they agreed or strongly agreed with the choices and options of contributing to the coalition, trust in the coalition and Diabetes On Track team, understanding the strengths of different types of services, diversity of participants, and how organizations can contribute to resources in the community. The other twenty-five percent (25%, N=8) of respondents indicated they were neutral on the topic, with the average selection being between neutral and agree.

The final three questions asked about understanding what motivates people to seek services, the identification of strengths along the type 2 DM prevention and care pathway and if the activity was valuable to the understanding of these resources and services. The responses to these questions were neutral on average (N=8). Average responses with standard deviation are visually seen in Figure 3.

A fidelity checklist was completed based on a recording of the coalition meeting from October 25, 2022. The checklist and associated findings can be viewed in Appendix B. Review

of the video had some missing activity at the beginning, resulting in adding an *unknown* category to the checklist. Results from the checklist found that eight out of eleven questions, or 74%, confirmed that the activity was completed with fidelity. Due to review of the activity by video recording, there were some unknown questions about whether the facilitator followed the protocol. These results showed that three out of eleven (36%) of the questions were unconfirmed or unsure of protocol fidelity. For the entirety of the fidelity checklist, there were not any *no* answers, resulting in zero infidelity toward the protocol.

Figure 2.

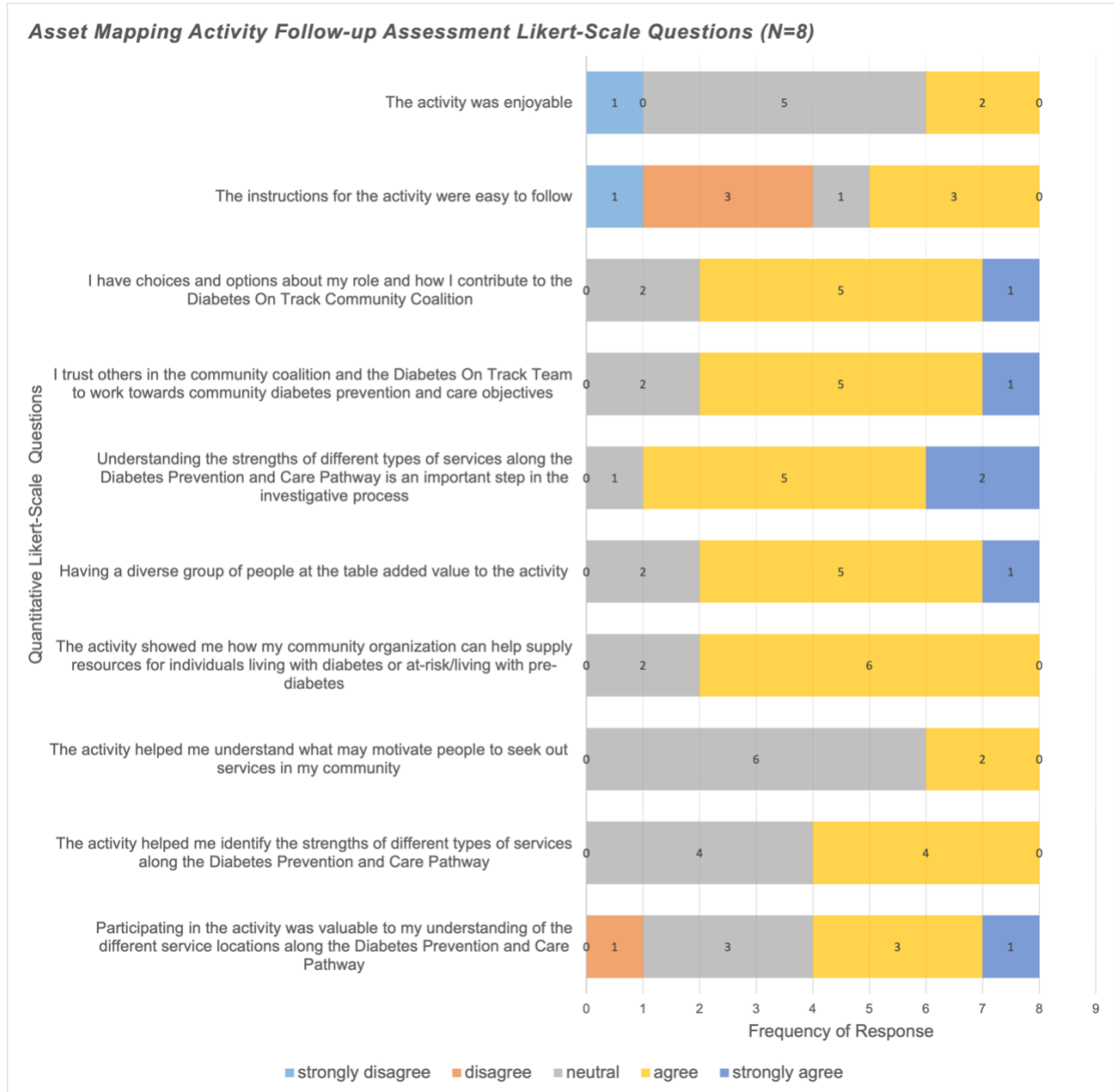
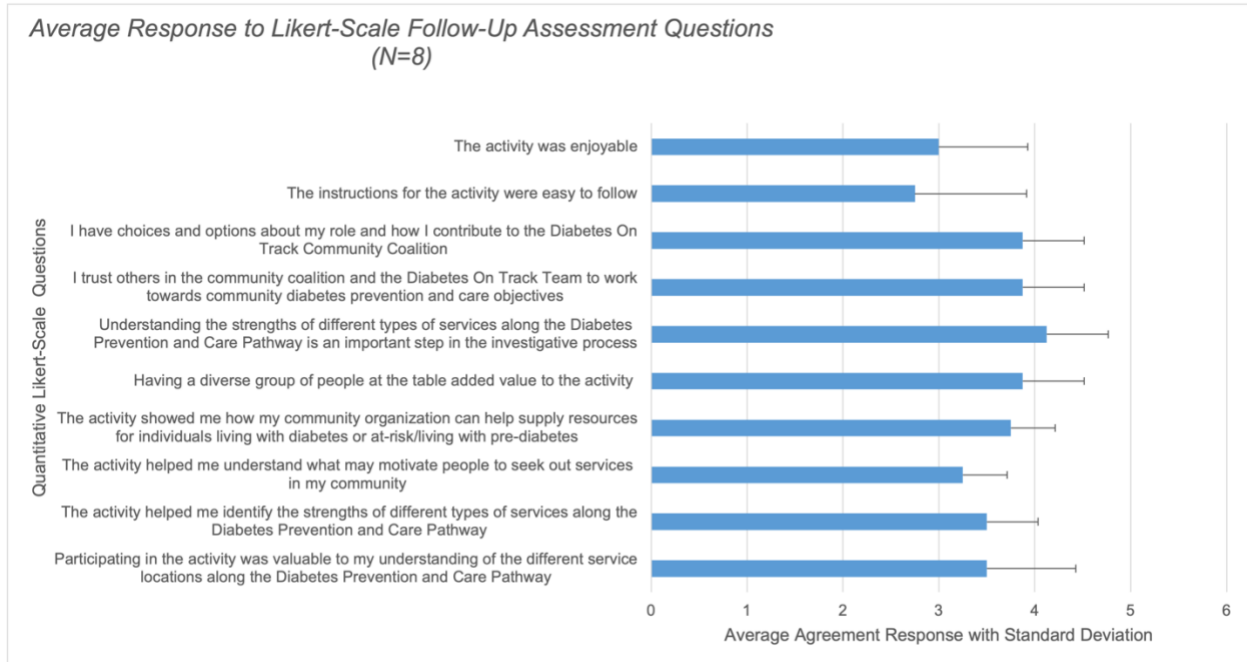


Figure 3.



Qualitative Data

One qualitative question was included on the follow-up assessment, which asked participants to indicate strengths and weaknesses of the activity. Seven out of eight assessment responses contained feedback to the open-ended question (N=8). Figure 4 provides a synopsis of the results from the question. After reviewing the data, five topics were noted as common themes or patterns from the responses. The common theme for strengths included encouraging new ideas for care management or organization input. The common themes for weaknesses of the activity included a lack of personal experience in coalition work, length of activity, inconsistent meeting attendance/participating remotely and unclear instructions.

Two assessment participants agreed to complete a follow-up interview to better understand the assessment results and feelings of the activity. One participant provided her contact information, and the semi-structured interview was conducted on November 21, 2022.

Unfortunately, the other participant who agreed did not provide contact information and attempts were unsuccessful. An interview guide was used, referenced in Appendix D.

Qualitative data points gathered from the interview included the ability to describe the purpose of the activity in the interviewee's own words. The interviewee felt her voice was heard throughout the activity and that the group was adequately sized for discussions (3-4 people).

The interviewee provided some recommendations for improvement. She felt that the locations on the chart were lacking places for the minority community. She stated,

"I'm in minority health. For Spanish speaking individuals, who don't speak English, there isn't much stuff out there prevention wise, or if they are already diagnosed, classes or if you already have diabetes, do this or don't do that. There isn't a lot of that out there for Hispanic people or the Hispanic/Latino community that we have here in [rural Nebraska community]."

She also felt the asset strength circle/Venn diagram activity was overall confusing so recommended clarifying the instructions. The interviewee had missed the previous meeting, which caused a lot of confusion at the beginning of the asset mapping activity/meeting three. She recommended a summary email after each meeting to provide follow up information and/or documents to review prior to the next meeting to better prepare herself for the third meeting and the activity.

The interviewee identified herself as a community health worker and noted many of the coalition participants, including herself, have limited health knowledge, which made it difficult to understand some of the ideas and terms used during the activity. For example, the interviewee stated, *"I am not a doctor or nurse. I wasn't sure why Walgreens or pharmacies are called managed care organizations (MCO). I understand MCOs as [health clinic in rural Nebraska*

community] for diabetes prevention.” She felt that as both a community member and representative of a community organization, her personal knowledge was limited on what resources or locations were available in the [rural Nebraska] community.

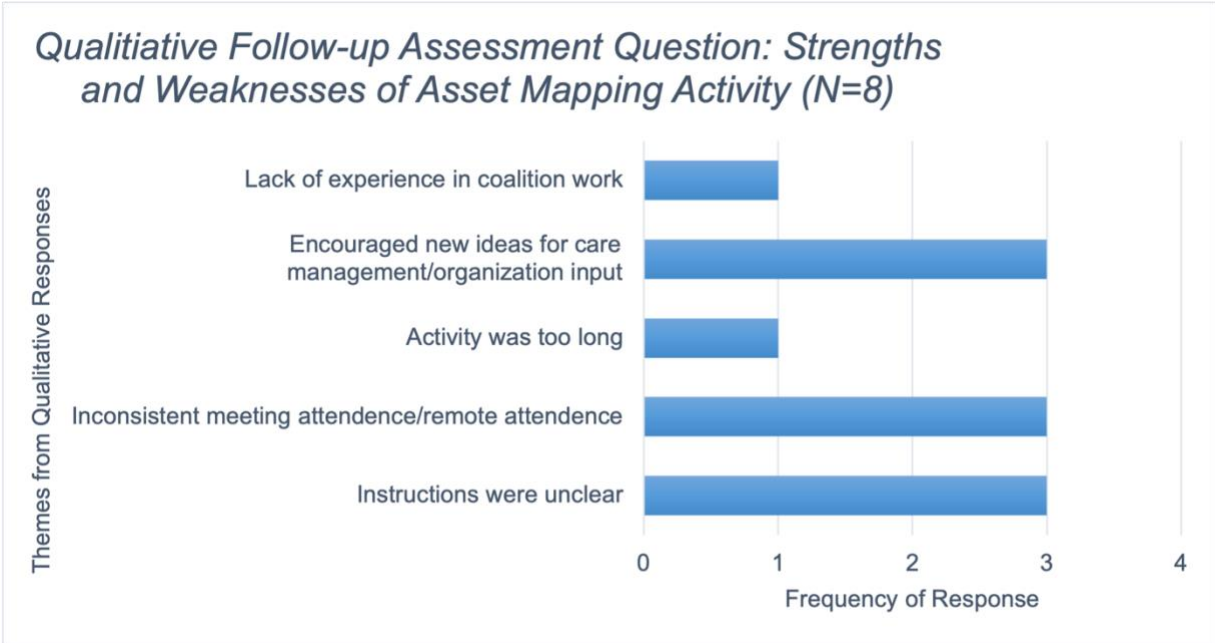
Figure 4.

Strengths and Weaknesses Identified in Qualitative Follow-Up Assessment

Strengths	Weaknesses
“Strengths-all of us there are interested in helping”	“...I have missed the last 2 meetings”
“The activity brought our attention back to the care management services available...”	“Because not all members are able to attend all meetings, it would have helped to have clearer instructions and definitions”
“The strength of the exercise is that it helped several attendees realize what more their organization could do to help those at risk”	“Weaknesses were that the instructions to the activity were unclear which led to unproductive discussion. Definitions need to be clearly defined to get all the members of the coalition on the same page which will make the activity more productive”
[Zoom Participants] “We were included and it worked!”	“Sometimes it is too complicated or not explained thoroughly”
	“We were remote so participating through zoom so some limitations but that is part of being remote”

	“Weakness-I personally don't have much experience yet in this field”
	“Too long”

Figure 5.



Chapter 5. Discussion

Research focusing on the utility of these methods in rural communities is necessary to understand how to address chronic diseases such as type 2 DM. The provision of additional methodology to supplement the CHNA/CHIP process can happen through the creation of a protocol for rural diabetes asset mapping

A protocol was developed for an asset mapping activity for piloting in a rural Nebraska community. The community coalition was created through participants that volunteered from various community organizations. Discussion prompts were developed based on the Community Capitals Framework (Emery & Flora, 2006). The participants identified unique resources

available within their community, with a particular focus on natural, human, social, financial, and built resources within the Community Capitals Framework. The Community Capitals Framework was utilized through the participants' identification of place-based mapping and an understanding of the value of community resources for type 2 DM prevention, screening and care management (Emery & Flora, 2006). Following the activity, participants were able to recognize how assets or capitals built upon one another. Participants recognized how their own organizations could provide capitals for type 2 DM prevention as reported in the asset mapping activity assessment, with 75% of respondents (N=8) agreeing.

The control and management of type 2 DM and prediabetes can be improved through the utilization of asset mapping and conceptual frameworks, such as the Community Capital Framework. The provision of these additional methodologies to supplement the CHNA/CHIP process is possible through a protocol for rural type 2 DM asset mapping.

The study utilized the Asset Mapping Protocol, which could be adapted to meet the needs and enhance CHNAs in the future. Following the MAPP model, rural communities can develop assessments for needs and utilize this protocol (or similar) to incorporate understanding assets in the community (NACCHO, 2020). As evidenced through the interview process, involving community stakeholders to better assess assets and resources in the community can help local health departments build upon existing capitals to target priorities identified in the CHNA process. Enhancing coordination among local organizations, especially in rural communities, can help adequately meet the needs of community members and work toward sustainable programs. Adding an interview component to CHNA tools and asset mapping activities can also engage underrepresented groups. A common theme among previous research is to incorporate more perspectives from underrepresented groups (Brown et al., 2016) and acknowledge that some

resources may not be as valued or recognized by certain community groups due to language barriers or cultural differences (Estrada et al., 2018). The interviewee of this study's Asset Mapping Protocol felt strongly about enhancing the resources available for Spanish-speaking individuals within the rural Nebraska community. With community involvement, utilizing the data received through this project can be used to develop strong diabetes-related health programs.

Accessibility was a major discussion point during the asset mapping activity at the coalition meeting. The interviewee discussed how their group focused on parks, due to parks being free and accessible for all ages, which promotes exercise that contributes to reducing risk for type 2 DM. Suarez-Balcazar et al. (2021), discussed how accessibility was a major factor for the determination of assets that are valuable or important to the community. Identifying accessible resources falls under utilizing the Community Capital Framework to better assess natural and built capital within a community.

Overall, the positives of encouraging community members to look at common or shared values for resources toward improving type 2 DM prevention, screening/education and care management were achieved (75%, n=8). The asset mapping activity encouraged community involvement through organizations and attempted to identify motivational factors. Evidenced-based literature shows that identifying assets through a community-based participatory research program encourages community members to understand the strengths and values of their community (Andrews et al., 2012). The use of asset mapping encouraged community members to visually see and understand that there are underutilized or unknown resources that are valuable to the community (Florian et al., 2016). Assessment data had an overall neutral to positive agreement for identifying assets (87.5%, N=8), working together as a coalition (100%, N=8),

identifying strengths (100%, N=8) and what motivates community members to utilize resources (100%, N=8).

The interviewee confirmed previous research promoting asset mapping by stating she was unaware at the beginning of the activity how certain locations within the rural Nebraska community are considered beneficial for type 2 DM services. However, after completing the activity and reviewing the list of locations, she began to understand how locations such as pharmacies, yoga studios and senior centers can provide a service for screening, prevention/education, or care management of type 2 DM.

The interviewee agreed that the size of the groups chosen for the activity (3-4 people) provided an adequate size for discussion and allowed her to voice her opinions during the activity. Previous research shows that asset mapping activities performed in teams provided a positive experience. Working in groups strengthened the understanding of assets and allowed ideas to build upon one another (Mosavel, Gouch and Ferrell, 2018).

Even though there was only one interview participant, valuable feedback was provided during the interview that included the addition of resources for minority communities. Along with a review of the activity post-implementation, the process evaluation was in line with previous process evaluations. A more improved understanding of participant views in a rural community was achieved (Estrada et al., 2018). Researchers encouraged use of community organization representatives to adequately assess the assets and resources due to their personal connection to the community (Estrada et al., 2018).

Using the findings from the assessment and interview, future work should be directed to refine the Asset Mapping Protocol to create clearer instructions. To help with member attendance and engagement, recommendations include the addition of preparatory emails prior to future

meetings and follow-up coalition meeting emails. The interviewee shared that she missed meeting number two, where place-based locations were identified. Thus, building upon those locations and further discussing them as assets during the third meeting made it difficult to understand. Instead, she felt that if a summary of the meeting she missed had been provided to participants, she could have reviewed the summary prior to the third meeting. She also stated that her understanding of definitions and knowledge of certain locations, especially managed care organizations, were limited. She felt receiving a preparatory email for the asset mapping activity at meeting three would have been helpful at encouraging her learning process. Alternately, a longer meeting combining asset identification with the Asset Mapping Protocol activity may have been helpful for creating consistency.

While the Asset Mapping Protocol encouraged the understanding of asset mapping through the identification of strengths of services, participants voiced confusion with the instructions as reported by a lack of enjoyment (25%, n=8) and unclear instructions (only 37.5% reporting instructions were clear, n=8). Refinement of the protocol should be completed prior to any future use to ensure understanding. To determine accuracy following the protocol, a fidelity checklist was implemented. The checklist was completed, and the results were calculated for percent fidelity versus percent non-fidelity to the protocol. While technical video issues caused difficulty in fully assessing the implementation of the asset mapping activity, the activity was still implemented with 72% fidelity.

Other areas for future work include increasing the timeframe for additional assessment data to strengthen the results. Due to time constraints and delay with the Diabetes On Track project and University of Nebraska Medical Center deadlines, there was limited time for data collection and follow up assessments. This can be compared with Florian et al., where their study

was limited due to a small sample size, especially with interview data (2016). Lack of participation and small samples sizes are common themes among prior research with asset mapping, which makes it difficult to generalize results to the whole of the community (Baker et al., 2007; Brown et al., 2016; Cutts et al., 2016; Suarez-Blacazar et al., 2021). However, utilizing the single interview data provided valuable information that allowed for more in-depth understanding of a community member's perspective. To tailor interventions to meet the needs of the community, future efforts should be directed toward more interview participants and continued engagement with project staff.

Conclusion

In conclusion, community coalition teams and collaboration with community organizations are essential for addressing the need for resources and services for type 2 DM prevention, screening, and care management in rural communities. Improving the type 2 DM care pathway can be achieved by using community member participation to build upon and enhance existing resources. Asset mapping provides an opportunity for community members to share what makes certain resources valuable, and an asset mapping protocol ensures the ability to complete this task efficiently. While the Asset Mapping Protocol was not as successful as researchers had hoped during the implementation phase, conducting a process evaluation post-implementation provided valuable feedback for future direction.

To create a protocol that is strong and adaptable to other rural communities outside the piloted community, feedback provided by participants is necessary to improve the strength and viability of the activity protocol. The protocol was piloted using a community coalition group in a rural community in Nebraska, to provide feedback and allow for a better understanding on how to best approach assets in a community. Continuous process improvement and evaluation is

necessary to develop a strong protocol that can be implemented in many rural communities targeting the improvement of type 2 DM screening, prevention, education, and care management.

Appendix A.

Asset Mapping Activity: Understand asset strengths within the community to better determine how to improve the production of diabetic services

- This activity seeks to understand why there is a demand for certain services and resources in the community and how those resources can be better supplied by different organizations.
- Community members are tasked to imagine seeking services to improve health related to diabetes. These services sought after are often provided by organizations represented within the coalition.
- What are the strengths of local assets within the community that can be built upon to strengthen the diabetes care pathway?

Purpose: To determine why community members seek diabetes care prevention and services at different settings across the community. To improve organizational collaboration along the diabetes pathway.

- A. Build upon the place-based mapping and social network discussion
- B. Reframe the thought process to expand upon what is an asset and determine what makes it an effective resource for diabetes health prevention, management, and education
- C. Understand why certain resources are of demand, the motivation toward using these resources and how to improve the production and supply of these resources

Materials Needed:

- A. 9 pieces of paper with circles on them
 - a. Two Prevention boards:
 - i. At risk/prediabetic community member (blue colored)
 - ii. Diabetic community member (red colored)
 - b. Two Screening boards:
 - i. At risk/prediabetic community member (blue colored)
 - ii. Diabetic community member (red colored)
 - c. Two Care management boards:
 - i. At risk/prediabetic community member (blue colored)
 - ii. Diabetic community member (red colored)
 - d. Three boards for the central ideas to be combined (purple colored)
- B. PowerPoint with information
 - a. Examples of *values* or *ideas*
 - i. This screening location is valuable because it is closest to my work
 - ii. This clinic is valuable because it provides free help to manage my diabetes
 - iii. This park helps prevent diabetes because it is safe and well-lit to encourage exercise
 - b. Definitions of at-risk, prediabetes and diabetes health status
 - i. At-Risk: over the age of 45, overweight, immediate family members with diabetes, history of gestational diabetes, not physically active (less than 3 days per week), A1C level below 5.7%.

- ii. Prediabetic: Higher than normal blood glucose/sugar levels, A1C level of 5.7-6.4%, not yet diagnosed as diabetic, immediate family history with type 2 diabetes, history of having gestational diabetes, having polycystic ovarian syndrome, not physically active (less than 3 days per week)
 - iii. Diabetic: Diagnosed as having diabetes, A1C level greater than 6.5%, consistently high blood glucose levels, may or may not be taking medication to control it
- C. Handout with Place-based mapping information/assets previously identified at prior coalition meetings.

Description/Instructions:

“This large group will be divided into three smaller groups to better understand why assets and resources identified at previous meetings are strong and valuable to the community. Additionally, we seek to know what motivates individuals concerned with diabetes health to use them. These services are often supplied by the many organizations within this community coalition, and we look to understand how organizations can continue to improve the production of these services.”

1. The large group will be divided into 3 smaller groups that represent different services on the Diabetes Prevention and Care Pathway – Screening, Prevention & Education, and Care Management. Each of these groups will then be divided into 2 smaller groups to represent 2 unique community perspectives: 1) Community members at risk of prediabetes or who have prediabetes and 2) Community members who have Type 2 Diabetes.
2. To form the groups, have coalition members count off numbers 1-6. Small groups will consist of 3-4 people. The groups should be arranged as follows:
 - a. Screening Services
 - i. Group 1: at-risk/prediabetic community member discussing screening assets
 - ii. Group 2: diabetic community member discussing screening assets
 - b. Prevention and Education Services
 - i. Group 3: at-risk/prediabetic community member discussing prevention and education assets
 - ii. Group 4: diabetic community member discussing prevention and education assets
 - c. Care Management Services
 - i. Group 5: at-risk/prediabetic community member discussing care management assets
 - ii. Group 6: diabetic community member discussing care management assets
3. Each group will be given a piece of paper with a circle and instructed to discuss three questions (*see 2a – 2c below*). Participants will answer these questions based on the assigned perspective of their group using materials from the place-based map and discussion from the prior meeting. Participants will be instructed to write answers and ideas related to the following questions on the piece of paper with the circle. (*Each circle is one-half of a Venn diagram where each half of the group (pathway) will answer the questions, then come together to discuss similarities of both.*)
 - a. What makes these places strong and valuable resources to the community?

- b. How does the location of these services serve the population?
 - c. What motivates people to use these assets/resources?
 - d. What three places identified earlier offer the greatest resources and assets to the community?
4. A slide will be shown with sample examples of what would make something valuable along with definitions of being at risk, prediabetic and diabetic perspective.
5. After each group has discussed their assigned perspective for their assigned position within the Diabetes Prevention and Care Pathway, the two perspectives will join and review their ideas for that specific type of service:
 - a. Groups 1 & 2 will discuss the assets around places individuals go in the community for SCREENING services from the perspectives of community members who are either risk/prediabetic or diabetic.
 - b. Groups 3 & 4 will discuss the assets around places individuals go in the community for PREVENTION & EDUCATION services from the perspectives of community members who are either at risk/prediabetic or diabetic.
 - c. Groups 5 & 6 will discuss the assets around places individuals go in the community for CARE MANAGEMENT services from the perspectives of community members who are either risk/prediabetic or diabetic.
6. Each of the combined groups are instructed to communicate and compare three places and their assets that bubbled to the top in small group discussions using questions 6a and 6b (below) for prompts to the discussion. The larger group should write the places and assets that both community perspectives can benefit from on the sheet of paper that contains the purple circle. The places and assets in the purple circle will indicate why these community assets and resources are priorities of the community.
 - a. Are the top three places identified as having the most assets similar among the two groups?
 - b. How does accessibility factor into these assets?
7. The three groups will now return to one large group and will share findings from their assigned perspectives and position on the diabetic pathway.
 - a. How can the different organizations within the coalition work to increase the supply and production of diabetic services and resources?
 - b. How do the different organizations of the coalition meet the demands or needs of community members with diabetes?
 - c. Where can collaboration be built upon to improve the production of diabetic services?
 - d. Can follow additional prompts for discussion:
 - e. Natural Capital:
 - i. *Why are these types of assets important for diabetes prevention or management?*
 - ii. *How does the location of these assets serve the population? Are they evenly distributed among the community?*
 - iii. *Are the existing natural capitals of high quality?*
 - f. Cultural Capital:
 - i. *What cultural assets appear to reach the largest audience? Do they support the greatest health change?*
 - ii. *Are there adequate cultural assets in the community?*

- iii. *Why are these important for diabetes health?*
- g. **Built Capital:**
 - i. *Why are these assets beneficial to the community?*
 - ii. *Can the community build more?*
 - iii. *Does transportation or safe walking/biking spaces exist to get to these assets?*
- h. **Financial Capital:**
 - i. *Does the public understand where to find free/non-profit based care?*
 - ii. *Do leaders know where to seek additional information for grants and public health incentives?*
 - iii. *Is there a need for community supported funding for health foods/physical exercise?*
- i. **Human Capital:**
 - i. *Are these assets easily attainable?*
 - ii. *Why is human capital important? What strengths do they provide to the community?*
 - iii. *Do you see leaders/council members/health administrators in the community?*
 - iv. *Are you motivated by leaders/advocates in your community? Do you provide self-motivation?*
- j. **Political Capital:**
 - i. *Do you feel political impact is important on diabetic health?*
 - ii. *Do you feel local governments find diabetes health as a priority for the community?*
 - iii. *How could public health diabetes care be improved through political advocacy?*
- k. **Social Capital:**
 - i. *Where do group organizations meet and/or network?*
 - ii. *What support groups exist within the community for managing diabetes?*
 - iii. *What community events exist to increase awareness and access for screening and education?*
 - iv. *Does the community feel engaged by local businesses? Other community members? Leaders?*

Appendix B.

Activity Fidelity Checklist

- 1) Facilitator describes activity sufficiently with detail on the demand of diabetic health services and the supply of services by organizations within the coalition (5 minutes)
 - a. Yes___ No___ Unknown_X___
- 2) Facilitator displays instructions via PowerPoint and discusses examples/definitions without bias
 - a. Yes_X_ No___ Unknown___
- 3) Facilitator hands out paper and explains circle activity
 - a. Yes ___No___ Unknown_X___
- 4) Facilitator provides map of assets/resources identified by coalition at previous meetings to each group
 - a. Yes___ No___ Unknown_X___
- 5) Activity is given appropriate time (10 minutes)
 - a. Yes_X_ No___ Unknown___
- 6) Facilitator brings the six groups together to now form three groups and adequately explains part 2 of the activity
 - a. Yes_X_ No___ Unknown___
- 7) Part 2 of activity is given appropriate time (10 minutes)
 - a. Yes_X_ No___ Unknown___
- 8) Facilitator brings the three groups back to one large group and begins discussion on three different phases of the diabetic pathway
 - a. Yes_X_ No___ Unknown___
- 9) Facilitator discusses additional prompts related to the Community Capitals Framework without bias
 - a. Yes_X_ No___ Unknown___
- 10) Part 3 (group discussion) of activity is given appropriate time (5-10 minutes)
 - a. Yes_X_ No___ Unknown___
- 11) Participants are given an assessment to fill out after completing the activity
 - a. Yes_X_ No___ Unknown___

Number of Yes 8 / 11 = 72 % fidelity

Number of No 0 / 11 = 0 % non-fidelity

Number of Unknown 4 / 11 = 36 % unknown fidelity due to video evidence

Appendix C.

Diabetes On Track Coalition Meeting Follow Up Assessment

The following is a short assessment to help the UNMC Diabetes On Track team understand the value of the coalition activity - Discussing Strengths of Community Resources for Diabetes.

The coalition participated in this activity during the October 25, 2022 Diabetes On Track meeting. The activity centered around understanding the strengths and assets of service locations in the [rural community in Nebraska] where screening, prevention/education, and care management occur. The group was divided and asked to think about the strengths of these service locations from the perspective of either someone living with type 2 diabetes, or someone with pre-diabetes or at-risk for developing diabetes. Answers were recorded using different colored circles and the group was then brought back together for a larger discussion.

We appreciate your time and feedback.

1. Please provide your first and last name:

2. How many [rural community in Nebraska] coalition meetings have you attended?
 - A. 1
 - B. 2
 - C. 3 (all)

3. Please provide your level of agreement with the following statements:

Question	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Participating in the activity was valuable to my understanding of the different service locations along the Diabetes Prevention and Care Pathway					
The activity helped me identify the strengths of different types of services along the Diabetes Prevention and Care Pathway					
The activity helped me understand what may motivate people to seek out services in my community					
The activity showed me how my community organization can help supply resources for individuals living with diabetes or at-risk/living with pre-diabetes					
Having a diverse group of people at the table added value to the activity					

Understanding the strengths of different types of services along the Diabetes Prevention and Care Pathway is an important step in the investigative process					
I trust others in the community coalition and the Diabetes On Track Team to work towards community diabetes prevention and care objectives					
I have choices and options about my role and how I contribute to the Diabetes On Track Community Coalition					
The instructions for the activity were easy to follow					
The activity was enjoyable					

4. Please describe the strengths and weaknesses of the activity:

5. If you would like to participate in a short 30-minute zoom interview, please provide your contact information (email and phone number) to best reach you.

Appendix D.

Diabetes On Track Asset Strength Assessment Follow Up – Interview Guide

Introduction

Thank you for agreeing to meet with me and for providing additional feedback regarding the activity you completed on October 25, 2022. My name is Andrea Peterson, and I am a Master of Public Health student at the University of Nebraska Medical Center. I am working with the Diabetes On Track project team to gain knowledge about how to map the assets or resources within rural communities. This interview will also contribute to my completion of the requirements of the Master of Public Health degree.

I have asked you to participate in this interview to talk about your responses to the initial survey assessment regarding the October 25, coalition meeting. The goal is to better evaluate whether the activity was helpful and/or valuable in providing information about assets in the community. I also seek to learn how the activity can be improved to make it better for other rural communities and coalition work on diabetes prevention, screening, and management. Through your input, you can provide greater insight into how the activity was or was not helpful. You can also help improve the process in which we gather information related to assets and understand their value within the community.

I will be recording, transcribing, and analyzing all interviews. As part of the research process, I will code interview data into themes and patterns. I will then share findings with my capstone committee and the coalition facilitator to enhance the coalition experience. The facilitator will also share common themes and findings with the coalition team during the next meeting. Due to survey assessments and interviews containing names, personal identifiers will be attached to the data, but only visible to the Diabetes On Track project team. All recordings and subsequent information will be kept confidential.

During the interview today, please reflect on the coalition group activity you completed on October 25th: Groups were created and assigned into two perspectives, either the perspective of someone living with diabetes or of someone living with pre-diabetes/at-risk for diabetes. We discussed how diabetes related services are supplied by community resources and organizations based on the demand or need from community members living with diabetes or living with pre-diabetes/at-risk for diabetes. From your assigned perspective, you were then asked to review specific places that were considered valuable to community efforts in the provision of diabetes prevention, screening/education, and care management services. Each group then discussed four questions pertaining to the diabetes care pathway from their assigned perspective:

- A. What makes these places strong and valuable resources to the community?
- B. How does the location of these services serve the population?
- C. What motivates people to use these assets/resources?
- D. Based on the discussion, are there three places that could be building blocks for Diabetes On Track?

Once complete, the groups were paired with a differing perspective (living with diabetes versus living with pre-diabetes/at-risk) and compared their answers for the three questions. After each provision of diabetes care group conversed, the entire group returned together to further review findings and broaden the discussion.

Based on the activity above, you completed a survey assessment and stated you would participate in a follow-up interview to better assess your thoughts regarding the activity. The following questions help assess your views and attitudes, thank you again for participating.

Questions

1. In your own words, please describe what you understood to be the purpose of this activity.
2. Do you feel that your voice was heard during the asset strength activity, as described above, on October 25th?
3. Thinking back to the asset strength activity, as described above, were the instructions clear? If not, how could the instructions have been improved to make the activity more understandable and/or more clear?
 - a. Were there any terms or activities that you think could have been better defined?
4. What could the facilitator, Dr. Marisa Rosen, have done differently to improve identifying community locations and their importance in providing diabetes services to meet community needs?
5. Was anything lacking in the activity to help identify the public's demand for the diabetes related services within the community (screening, prevention/education, and care management services)?
6. Did the size of the group influence the discussion?
 - a. If yes, how so? Was the group too small or too large?
7. How do you feel the activity could be improved to better include your role as a community organization/member?

Thank you for participating in this follow up interview to help improve the process for evaluating assets and strengths of the community. Your feedback will assist in adapting the activity to make it better for other communities and enhance the coalition process.

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