THE UNIVERSITY OF ARIZONA
Mel & Enid Zuckerman
College of Public Health

ARIZONA
DEPARTMENT OF
HEALTH SERVICES

TITLE V MATERNAL AND CHILD HEALTH NEEDS ASSESSMENT

Community Perspectives Final Report

December 2025 • University of Arizona • Arizona Department of Health Services

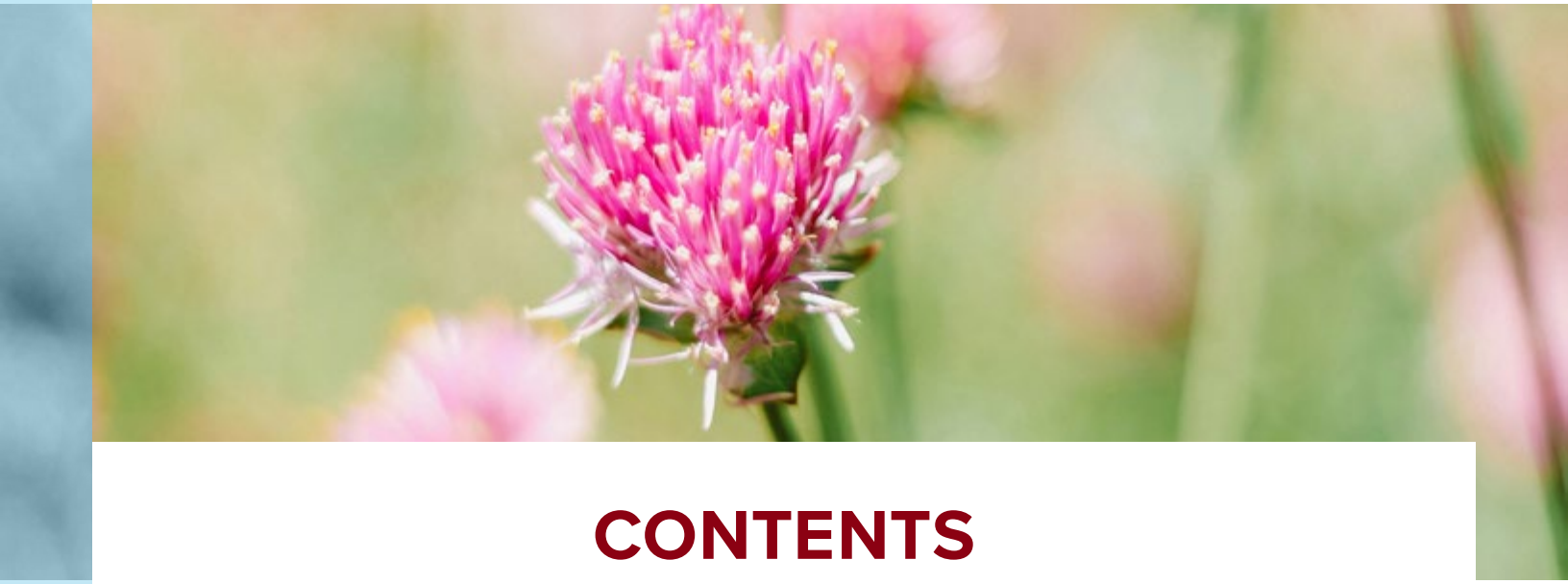
NEEDS ASSESSMENT TEAM:

Dr. John Ehiri, Dr. Sheila Soto, Dr. Martha Moore-Monroy,
Dr. Kelly N.B. Palmer, Kathryn Tucker Ortiz y Pino,
Tania Felix Parra, Rodrigo Valenzuela Cordova,
Michelle Perez-Cornado

IN COLLABORATION WITH

ARIZONA DEPARTMENT OF HEALTH SERVICES

This study was supported by the Arizona Department of Health Services, Arizona, USA, through Interagency Service Agreement (ISA) No: CTR069432 (J. Ehiri, PI). The views expressed in this publication are those of the needs assessment team and do not necessarily reflect the official policies or positions of the Arizona Department of Health Services.



CONTENTS

ACKNOWLEDGMENTS

We thank the many individuals who have assisted us in conducting the qualitative assessment component of the Title V Maternal and Child Health Needs Assessment. We are grateful for the support and guidance provided by the Arizona Department of Health Services (ADHS) and the Title V Maternal and Child Health (MCH) Needs Assessment Steering Committee, who contributed to the design of the assessment. We would also like to thank the following members of the University of Arizona (UA) Primary Prevention Mobile Health Unit for their assistance with data collection: Angela Holman, Alicia Hernandez, Eduardo Mendoza, Uriel Quintana, Lazaro Ruiz, and Andrea Contreras. We also could not have done this work without our student interns and Community-Based Organization (CBO) partners, including Kathleen Pryor, Research Administrator; Azaria Suero-Davis, a Nutrition Sciences student employee; public health students Alicia Hall, Gabriella Matney, and Natalya Merida Brito; and the Coalition for African American Health and Wellness. Their support facilitated the engagement and inclusion of communities across the state of Arizona. Many thanks also to all those who participated in the assessment, sharing your time and perspectives. We have attempted to accurately present your lived experiences and ideas in the following pages. Any omissions or errors are entirely our responsibility.

– The University of Arizona Qualitative Needs Assessment Team

1. BACKGROUND

This report summarizes the results of the qualitative research activities conducted as part of the Arizona Title V Maternal and Child Health (MCH) Needs Assessment led by the Arizona Department of Health Services (ADHS). The results will inform the ADHS strategic MCH goals and objectives for 2025-2030. Title V is a federal block grant program that focuses on enhancing the health and well-being of mothers, infants, youth, and families of children with special healthcare needs across the nation. Title V is the only federal program exclusively focusing on improving MCH health outcomes. Title V MCH agencies must conduct a comprehensive data-driven MCH community needs assessment process *(Boulton et al., 2020)* every five years to identify and prioritize the state's most critical MCH needs for the Title V block grant funding. ADHS is the agency responsible for leading the Title V assessment in Arizona. The Arizona Title V Steering Committee provided oversight for the process, working in collaboration with ADHS. The ADHS statewide MCH Needs Assessment included rigorous qualitative and quantitative data collection and involved two tribal partners, two consulting agencies, and the University of Arizona (UA).

The UA conducted the qualitative component of the assessment using a variety of methods, including the River of Life (an arts-based listening session) *(Wang et al., 2021)*, Group Concept Mapping *(Trochim, 1989; Rosas & Kane, 2012)*, and Community Forums *(Anderson et al., 2019)*. The overall findings from all the community assessment data collection activities are in the final Arizona Title V *(Health Resources and Services Administration [HRSA], 2023)* MCH Needs Assessment report. This document focuses solely on the process and results of the qualitative data collection.

2. PURPOSE

The purpose of the overall Title V MCH assessment is to identify the critical health care needs and inform the development of strategies to improve health outcomes. Title V qualitative assessment complements the quantitative results by providing a space for community members, healthcare providers, and agencies to share their perspectives and information on the community context.

3. METHODS

We used three approaches, the **(i)** River of Life *(Wang et al., 2021)* planning tool, used at statewide meetings and in communities through the Mel and Enid Zuckerman College of Public Health (MEZCOPH) Primary Prevention Mobile Health Unit (MHU) to identify issues in maternal, child and adolescent health for the state of Arizona; **(ii)** group concept mapping, was used to explore issues relevant to Black/African American communities prioritized for this study; and **(iii)** community forums helped prioritize issues for different counties throughout the state. Building on the work of state and county health departments and their partners, and under the guidance of the Steering Committee, we employed community-relevant recruitment and engagement methods to ensure representation from historically underrepresented communities. The Steering Committee compiled a list of high-priority communities that should be consulted, including health service providers, community members, and service users.

The assessment team, comprising faculty, staff, and students from the University of Arizona's Mel and Enid Zuckerman College of Public Health, worked on the assessment from June 2024 to May 2025.

ETHICAL APPROVAL

Ethical approval for the study was obtained from the Institutional Review Board (IRB) of the University of Arizona, USA (STUD 00005052).

RIVER OF LIFE

Goals:

1. Gather information about maternal, child, and adolescent health needs for the state
2. Build contacts for the focus group sessions

Participants

Between August 2024 and June 2025, the team conducted 11 data collection sessions across the state (see TABLE 1). The primary attendees of the statewide meetings were community health workers (CHWs) *(Ingram et al., 2017; Kangovi et al., 2020)*, healthcare providers, and individuals working for community organizations. We also partnered with the MHU team to reach all corners of the state, with a particular focus on underrepresented, rural, border, and minoritized and stigmatized communities. The MHU played a critical role in engaging historically marginalized groups by leveraging their strong reputation as a safe, trusted source of information and care, and by addressing time and transportation barriers to participation. The MHU was instrumental in meeting people where they are. The number of participants in the ROL data collection events ranged from 3 to 70, including individuals and groups. To ensure optimal diversity of opinions, respondents could participate in only one data collection activity.

TABLE 1. River of Life Data Collection Sites

NAME AND LOCATIONS	PARTICIPANTS	FORMAT	# ENROLLED
Arizona Rural Women's Health Symposium, Flagstaff	Health care workers, community organizations, and community members from across the state	In-person	70
Statewide Mobile Unit Sites – Adult-focused	Community members, unhoused, clients of the food banks, users of governmental agencies throughout Arizona	In-person	69
Health Start CHWs	English and Spanish-speaking community health workers for the Health Start program	Online	8
CHW Coalition	CHWs and CHW allies in Southern Arizona	In-person	16
Mobile Health Unit – Youth-focused	Youth engaged in the border community	In-person	10

Procedure

We used the ROL method during the first phase of data collection (see FIGURES 1 and 2). The River of Life *(Wang et al., 2021)* (ROL) is an interactive and inclusive arts-based method, essentially a type of listening session that bridges differences in socioeconomic status, educational attainment, literacy (in terms of health and general knowledge), culture, and language. This arts-based strategic planning approach is grounded in the principles of community-based participatory research *(Strand et al., 2024)* and action. The ROL is facilitated and led by the participants. The ROL creates a comfortable and equitable space for diverse groups to share perspectives and discuss health goals and objectives. The ROL methods support data collection in large and small groups (see FIGURES 1 and 2). At the end of each session, a QR code would direct participants to a Qualtrics questionnaire that collected basic geographic, sector-represented, and occupational information.

ROL Process:

- Participants are divided into groups of 3 to 10.
- Each group receives a large flipchart and markers. They are asked to draw a river.
- The research team provides instructions for the activity. A key advantage of the ROL activity is that it is facilitated by the participants reflecting on its nature as a CBPR method.
- Each group identifies its goals and objectives for maternal, child, and adolescent health in the communities where they reside and/or serve.
- They were asked to identify the available assets and barriers and draw symbols representing them, such as trees, bridges, or rocks. To avoid duplication of data and ensure optimal diversity of opinions, respondents could participate in only one ROL activity

FIGURE 1. River of Life Process

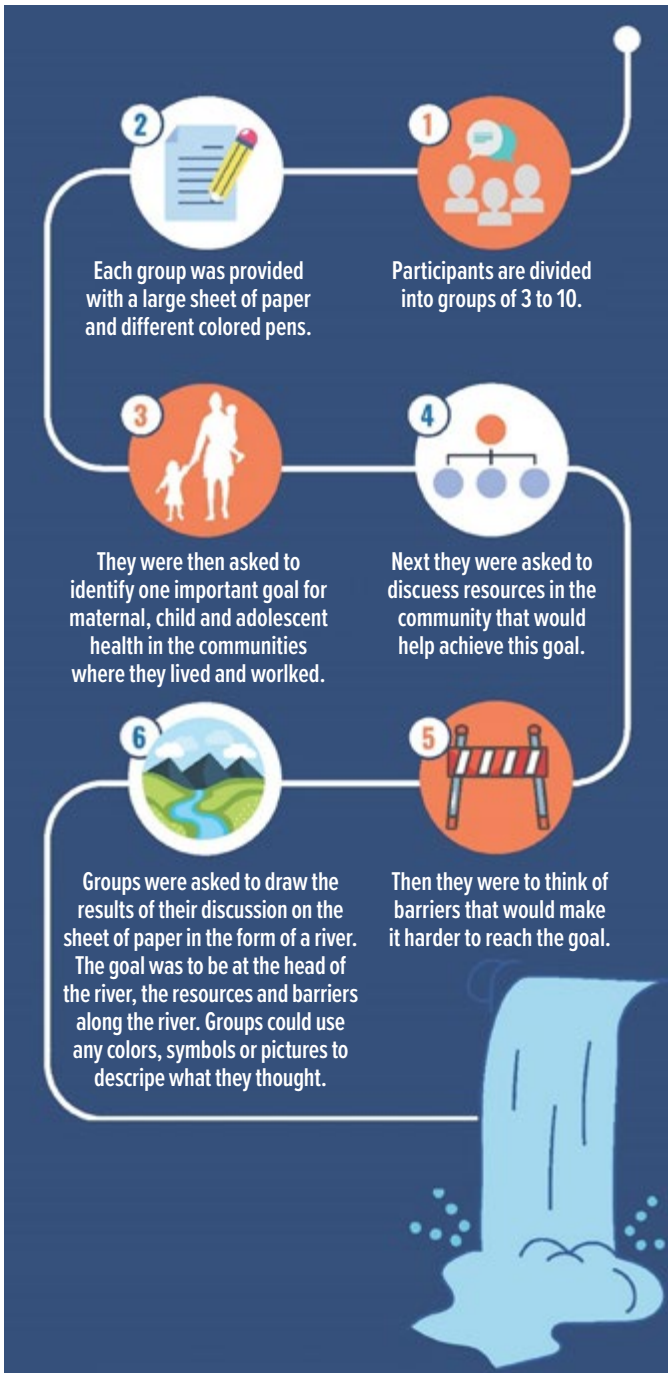


FIGURE 2. River of Life Activity: Example Drawings

GROUP CONCEPT MAPPING

The UA team used Group Concept Mapping (GCM) *(Rosas, 2017; Kane & Rosas, 2018)* to engage Black Arizonans. GCM is a participatory mixed-methods approach that promotes stakeholder engagement in identifying barriers to programmatic intervention and policy implementation, as well as strategies to address those barriers early on *(LaNoue et al., 2016)*. Furthermore, it bases the selection of strategies for practical application on the experiences and preferences of participants and encourages equitable participation by all vested constituents *(Cook & Bergeron, 2019)*. The GCM process (FIGURE 3) in this study consisted of five steps: (1) Brainstorming; (2) Sorting; (3) Rating; (4) Approval of labels; and (5) Ground-truthing. GCM facilitates statewide and broad participation of diverse populations and reduces participant burden while offering flexible and convenient participation compared to other data collection methods.

FIGURE 3. Group Concept Mapping Process

Participants

In Step 1, participants included adults 18 years of age or older residing in Arizona. The brainstorming activity included residents who had a vested interest in improving the MCH of Black Arizonans, regardless of race, ethnicity, or gender. For Step 1, we recruited broadly across the state via community events, social media groups, organization listservs, community organization websites, and flyer distribution to local businesses and organizations. A flyer was developed by a Master of Public Health student as part of an internship, utilizing culturally relevant imagery and content, and then shared with community members working in Black Maternal and Child Health to solicit feedback before distribution.

For Steps 2-5, we invited community members representing various organizational and individual interests in MCH via email invitations that explained the project's purpose, outlined the participants' roles, and provided instructions on how to register if interested. Those interested and willing to participate enrolled in the subsequent GCM data collection using a link generated by GroupWisdom. On the web-based platform, GroupWisdom, the team completed the Brainstorming, rating, and sorting steps of the GCM process, as well as label approval. We also used REDCap for the Ground-truthing steps *(Kane & Rosas, 2018; Harris et al., 2009; Harris et al., 2019)*. The MCH Title V Needs Assessment objective and instructions for each step were included in the GroupWisdom and REDCap platforms *(Kane & Rosas, 2018; Harris et al., 2009; Harris et al., 2019)*. A research administrator and a student performed a quality check of the data after each step, accepting or rejecting the data accordingly. The research administrator contacted participants with rejected data to clarify instructions, answer questions, and provide a new link to complete the data collection step.

Step 1: Brainstorming

Participants generated statements in response to the prompt, "What is needed to help improve maternal and child health for Black Arizonans?" The prompt was co-developed with community members who work in Black maternal and child health, from a list of prompts, and community members selected their top 3 choices. The assessment team chose the final prompt based on the top-ranked prompts. Participants were encouraged to enter as many statements as desired. A real-time running list of statements from all participants was visible on the platform. Brainstorming data collection also took place at in-person events, such as community fairs and church services, using a one-page paper version of the brainstorming data collection form. We collected anonymous statements and demographic information regarding their race and ethnicity, gender, county of residence or employment, and the capacity in which they were completing the brainstorming activity (e.g., parent, social worker, medical professional, etc.). After the brainstorming step, two team members reviewed the statements to ensure the removal of duplicate statements and to separate complex statements encompassing more than one strategy into separate statements. We edited grammatical errors while maintaining the authentic voices of participants. The team reached a consensus to approve the final list of statements among members of the assessment team.

Step 2: Sorting

Participants grouped the brainstormed statements into categories based on their understanding of each item's meaning. For each category, participants were assigned a label that reflected the shared theme among the included statements. Participants categorized all statements and ensured that each group had a label. There were no restrictions on the number of categories.

Step 3: Rating

Each participant rated the strategy statements using a Likert scale, ranging from 0 (not important at all) to 5 (extremely important), focusing on the perceived impact each strategy could have on improving maternal and child health outcomes for Black Arizonans. They then completed a second round of ratings using the same scale to assess the feasibility of each strategy, indicating how realistic or achievable they believed each strategy to be.

Step 4: Approval of Labels

A cluster map displayed the grouped strategy statements along with their assigned category labels. The team invited participants to review and assess the appropriateness of the labels, suggest alternative names for categories, and provide input on whether statements were appropriately placed.

Step 5: Ground-truthing

Participants provided feedback in an open text field on how they would utilize the concept map, the community, or their organization to support Black Arizonan families.

Data Analysis

The GroupWisdom software *(Concept Systems, Inc., 2024)* supported the concept mapping process by applying multidimensional scaling and cluster analysis techniques. Using data from the sorting activity, we generated a similarity matrix that quantified how frequently pairs of strategy statements were grouped by participants, with higher values indicating greater similarity between pairs. We used the data to position each statement on a two-dimensional map, visually representing the relationships among them. We determined the final number of clusters included in the concept map through an iterative process, aiming to identify a solution that best balanced internal consistency within clusters and clear differentiation between them.

The resulting cluster map has a strong representation of the conceptual structure, with closely related statements grouped and distinct clusters reflecting different thematic areas. The research team reviewed the clusters and refined their labels to align with overarching themes, drawing on participant-generated labels from the sorting phase as a reference.

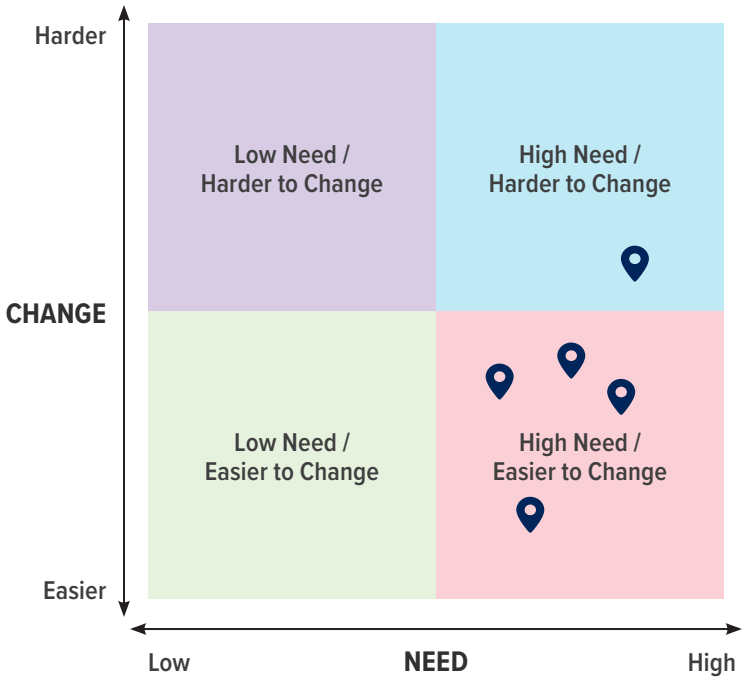
COMMUNITY FORUMS: PRIORITY SETTING

Community Forums (CFs) *(Anderson et al., 2019)* were led between September and November 2025 by a public health consultant, with preliminary results shared by ADHS and UA with local service providers and stakeholders. CFs enable large groups concerned about an issue to connect, share perspectives, and find community-relevant solutions to a problem. CFs encourage suggestions and concrete solutions for action. ADHS and UA shared preliminary findings at the CFs, and participants worked in small groups to add, modify, or expand on the issues listed on the sticky notes. Next, the consultant led an open discussion focused on the sticky notes, and ADHS representatives organized the sticky notes into categories based on the results of the prioritization matrix (see FIGURE 4). This prioritization matrix will help inform future programs, policies, and quality improvement of ADHS MCH services (see FIGURE 5).

FIGURE 4. Community Forum Photo

COMMUNITY FORUM LED BY THE ARIZONA DEPARTMENT OF HEALTH SERVICES IN YUMA COUNTY. In the photo, Dr. Martin Celaya and Dr. Patricia Tarango are working with community members and partners to complete the prioritization matrix. Pictured to the left are the top concerns selected by the community forum. Pictured in the center back is the prioritization matrix.

FIGURE 5. Example of a Prioritization Matrix



The Steering Committee selected the locations for CFs to ensure adequate representation from urban (n=1), rural (n=3), and border (n=2) communities. ADHS recruited participants through email, social media, local businesses, and community partners' social networks, highlighting that the CF was open to the public and utilizing a snowball convenience sampling process. There were 130 participants in the CFs. Diverse Sectors were represented, including CHWs, non-governmental organizations (NGOs), state and county health department employees, healthcare workers, community members, and agency/organizational leaders.

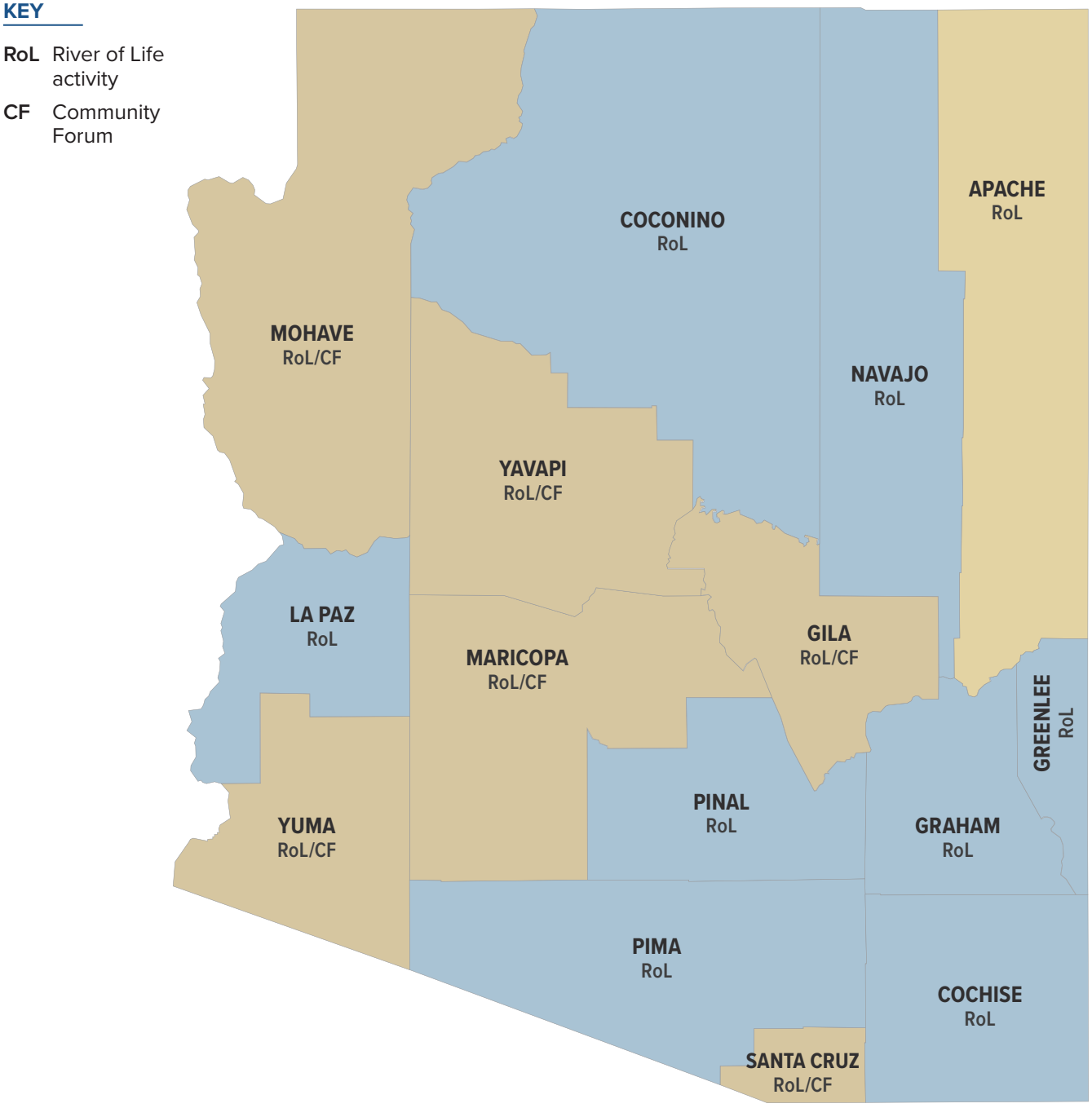
Validity-Trustworthiness and Reliability

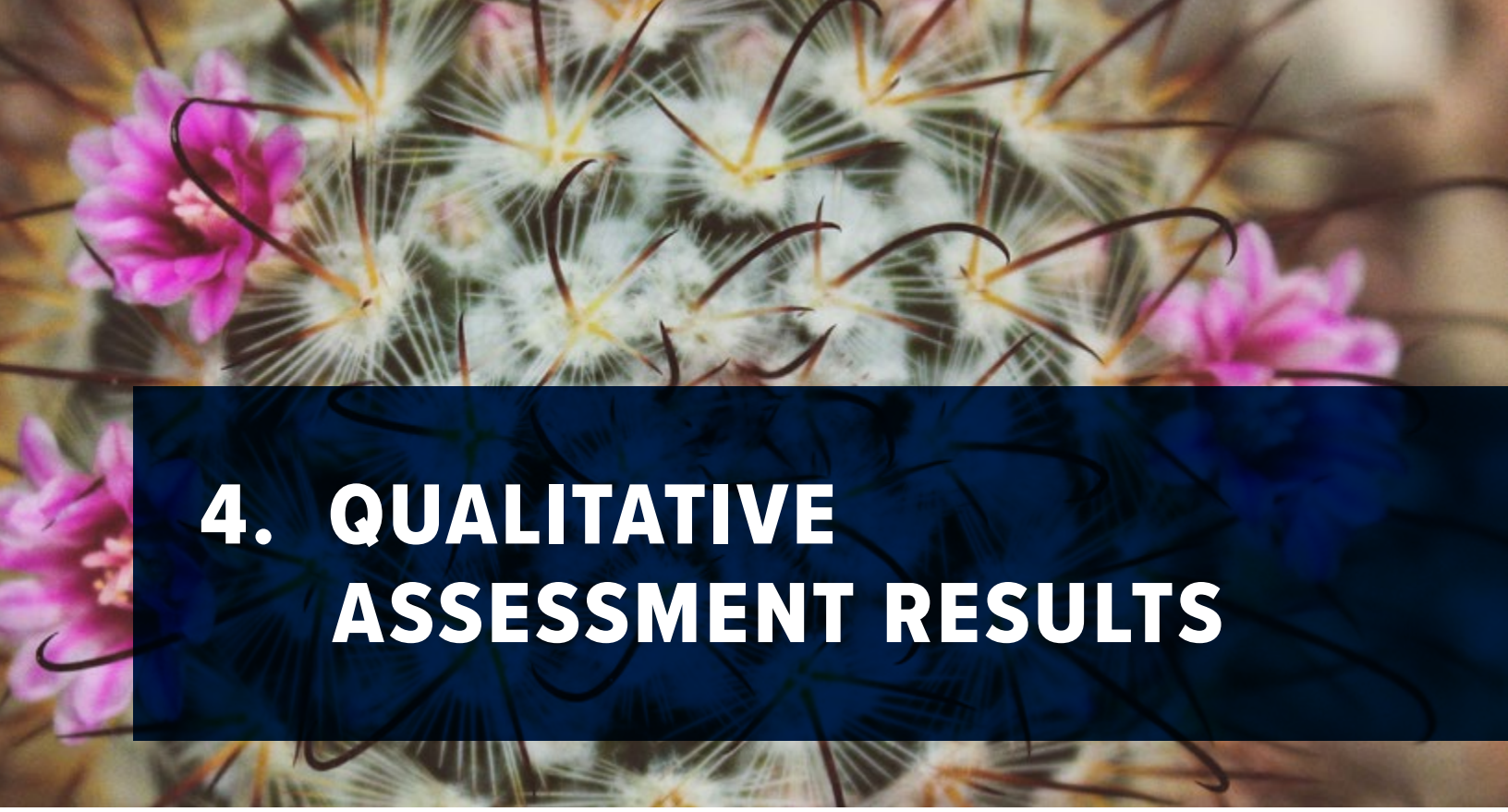
Built-in member checking and triangulation through discussions within and from each group, preliminary findings dissemination, and once again, through the presentations and discussions in the CF. The reliability of the analysis was confirmed through scheduled research team meetings where the analysis and the coding schemes were reviewed and discussed. Members of the research team cross-checked the coding schemes. The CF review served as a peer review to assess the validity of the data analysis.

Statewide Coverage

We employed three data collection approaches, including the River of Life planning tool used at statewide meetings. Community forums. Every county in the state was included in at least one of these approaches, and in some counties, all three approaches were used (see FIGURE 6).

FIGURE 6. Arizona Title V Assessment: Data Collection Map





4. QUALITATIVE ASSESSMENT RESULTS

In this section, we present results from the River of Life method and the Community Forums. Through the statewide and regional meetings coupled with the MHUs, we ensured representation from each of Arizona's 15 counties. One hundred eighteen people participated in the ROL sessions, largely due to the support of the Steering Committee and other partner representatives, including members from each of the 15 Arizona counties (see FIGURE 7 and TABLE 6).

TABLE 6. Communities represented by Participants in the ROL and CF sessions

PARTICIPANT DEMOGRAPHICS		POPULATIONS REPRESENTED
Gender and Sexual Orientation	Females, Males, LGBTQ+, non-binary	Pregnant women
Race/Ethnicity	AI/AN, Asian, Black, or African American, Native Hawaiian, Pacific Islander, White, Hispanic	People experiencing housing insecurity or who are unsheltered
Geography*	Rural, Urban, Urban & Rural Tribal, Border, Non-Border	People experiencing poverty in poverty
Language	Monolingual, Spanish	People experiencing domestic violence
Age	Children/Youth, Babies/Infants, Older Adults, Pregnant Women	People who were formerly incarcerated
Immigration Status	Migrant, Immigrant, Refugee, People with undocumented status, Mixed-Status families, People who are seeking asylum	People recovering from substance use/alcohol disorder
Disability	People and families with special health care needs	People who are uninsured, underinsured, or do not have health insurance
Income	People/households with incomes below the poverty level	People with a mental illness
		People with a behavioral health disorder

**Note: Participants were not recruited on Tribal lands. Data collection within Tribal communities was conducted by the Inter-Tribal Council of Arizona (ITCA) in collaboration with Diné College.*

Participants included community members, youth, community health workers, healthcare providers, NGOs, and public health departments and agencies. Participants were identified through purposive convenience sampling methods at statewide and local convenings, via social networks, and the UA MHU. The mobile units offer free preventive health screenings and assessments, as well as health education, and serve as a trusted source of health services for members of under-resourced, minoritized, and stigmatized communities. The MHU partnership with the Ventanillas de Salud (a Mexican consulate program providing community health services, outreach, and information) further underscores their role as a safe and trustworthy source of health services and information.

RIVER OF LIFE THEMES

Eight common themes related to the social and political drivers of health emerged from the ROL and CF sessions. The themes included Access to care, Childcare, Food Insecurity, Housing Access, Income and Financial Security, Mental and Behavioral Health, Social and Community Support, and Transportation. The assets were related to social capital and community integration, family, CHWs, community, and public resources. Barriers were partially attributable to root causes and upstream factors that limit knowledge and access to essential resources. Transportation and distance to resources lead to isolation from services, which participants from all settings (urban, rural, and border) identified as a common barrier across themes. Arizona is a large, predominantly rural state. Arizona's fifteen counties span 113,998 square miles (13), and 12% of Arizona's population resides in rural areas.

Access to Care

Access to care was a critical issue mentioned across ROL sessions. Participants reported that sliding fee scales and community health workers *(Ingram et al., 2017; Kangovi et al., 2020)* play crucial roles in helping people access and navigate healthcare services and systems. Significant barriers exist related to distance, and the lack of providers contributes to a shortage of available care options, particularly in rural and frontier communities. Subthemes related to barriers in accessing care include the lack of reliable transportation, spotty or no internet access, and immigration status.

"Only one hospital that's pretty far, the hospital just sends you to Tucson anyway."
— Youth, Santa Cruz County

"It can cause people to avoid doctor appointments, because of cost."
— Male, Youth, Santa Cruz County

"Lack of full reproductive care."
"Not enough incentives to relocate to rural areas."
— Rural Women's Network Conference

"Dificultad para los accesos medicos, ya sea por estatus migratorios o dificultades financieas. *(It is difficult to access medical care due to immigration status or finances.)*"
— Health Start CHW, Female Speaker, Spanish Group

"Miedo a buscar asistencia. *(Fear to look for assistance.)*"
— Amado, AZ, Community Member, Mobile Health Unit

Childcare

Members of both urban and rural communities in the state discussed assets and barriers related to both the lack of childcare providers and affordable childcare options. Intergenerational households and extended family support were assets. The lack of qualified childcare providers and affordable childcare options is a significant barrier for young families.

"'Generational influence' provides a support system during pregnancy and childcare."
— Community Health Worker, Pima County CHW COP

"I feel that everyone in our community has trouble finding babysitters."
— Community Health Worker, Health Start, English Group.

"Parents or people who are pregnant cannot take time off work and do not have support from partners/families."
— Community Member, Rural Women's Network Conference.

Food Insecurity

The Women, Infants, and Children (WIC) program is a critical resource and source of information for young families. The ROL participants emphasized the services WIC provides, including helping families access formula and healthy foods. Nutrition education and breastfeeding support. Local food banks and community-based organizations provide additional support to community members with limited access to food. Food deserts, lack of affordable supermarkets, and limited transportation contribute to food insecurity.

"The area is a food desert because areas are scattered/far apart."
— Community Member, Rural Women's Health Network.

"Limited transportation limits access to food banks."
— Community Member representing an Agency/Organization, Rural Women's Health Symposium

"Need access to Healthy Food."
— Community Member, River of Life Drawing- Community Member, Peeples Valley

Access to Housing

Participants reported a general lack of housing, a shortage of affordable housing, inadequate housing resources, a scarcity of women's shelters, and a lengthy waiting period for housing. Housing insecurity exacerbates the limited access to childcare, food, and healthcare experienced by unhoused people. Additionally, participants reported that this situation significantly contributes to mental health challenges.

"If the housing situation is not stable, that can have an impact on their health. If there is house scarcity and they are having a baby, it becomes difficult."
— Participant, Pima County CHW English group, 2024

"Most of the time, families have a difficult time getting into affordable housing due to ongoing investigations (DV, drug use, CPS, etc.)"
— Unhoused Community

"There are many people with animals and not enough shelters that accept people with animals."

"There are a lot of kids out in the streets with their parents, which is dangerous."
— Community Member, Mobile Health Unit, 2024

Income / Financial and job security

Income and the lack of financial or job security interact with and increase the impact of the other social drivers impacting maternal and Child Health needs/ outcomes. The lack of jobs (stable jobs) and low-wage jobs without benefits were reported by the participants as significant barriers.

"No tener la necesidad de tomar decisiones como si el cuidado médico es más importante que el cubrir una necesidad básica. *(Not having the need to decide between choosing medical care or covering our basic needs.)*"
— Community Health Worker, Health Start. CHW Spanish Group

"Mas ayuda economica para pagar la renta en tiempo de necesidad. *(More economic help when paying rent in times of need.)*"
— Community Health Worker, Health Start, Spanish Group

"Not enough support for single mothers: financial, childcare, paid leave, job support."
— Community Members River of Life Drawing, Rural Women's Health Symposium

Mental and Behavioral Health

The barriers to accessing mental and behavioral health services mirror those impeding access to health services in general, but are further complicated by bias and stigma, both in the community and among providers. The lack of providers and accessible services, as well as a shortage of insurance coverage, including a lack of perinatal mental health services and providers.

> "Many people who want to overcome their addiction are told to wait for a long period of time before they can access treatment, and it is usually too late by the time space becomes available."
> — Unhoused Community

> "Lack of trauma-informed care. Needs to trickle down to direct providers."
> Community Members representing an Agency/Organization, Rural Women's Health Symposium

> "Addiction is difficult to overcome when there are not enough resources."
> — Unhoused Community, Maricopa County

> "Not enough sober and transitional living centers for women; trying to get sober in jail."
> — Pinal & Maricopa County, Female Community Member

> "Not enough mental Health Services."
> — Community Member, Rural Women's Health Symposium

> "Lots of trauma in having to get rid of pets."
> — Unhoused community

Social and Community Resources for Families

Community-focused organizations, including both public and other non-profit entities, provide essential support and services to enhance health. Participants reported that the most effective of these resources are home-visiting programs and CHWS. However, there is a lack of awareness about these resources, concerns about eligibility, and limited access to resources.

"CHWs and case managers provide support through education and transportation and help navigate the system, along with community classes and outreach for pregnant people."
— Participants, Arizona Rural Women's Health Symposium

"There is a lot of support from local organizations that offer various resources, services, food, clothing, and hygiene kits."
— Participant, Unhoused Mobile Health Unit

"Mothers having to do it all can cause a great deal of stress."
— Unhoused Community

"Not enough support for single mothers."
— Safford Graham County; Mobile Health Unit

Transportation

Much of Arizona's land mass is rural and frontier. The fifteen counties span 113,998 square miles, leaving many communities isolated from essential resources and services. Telehealth is an important asset, increasing access and acting as a bridge to health services (mental health services). However, many communities still lack access to stable internet connections. Lack of transportation and reliable internet further compounds the isolation and barriers to accessing services, care, and resources necessary for maternal, child, and adolescent health.

"Huge barrier is mass transportation."
— Community Member, Rural Women's Health Network.

"Transportation very limited."
— Community Member, Rural Women's Health Network

"Transporte y mas hospitales. *(Transportation & more hospitals.)*"
— Participant Graham County, Mobile Health Unit

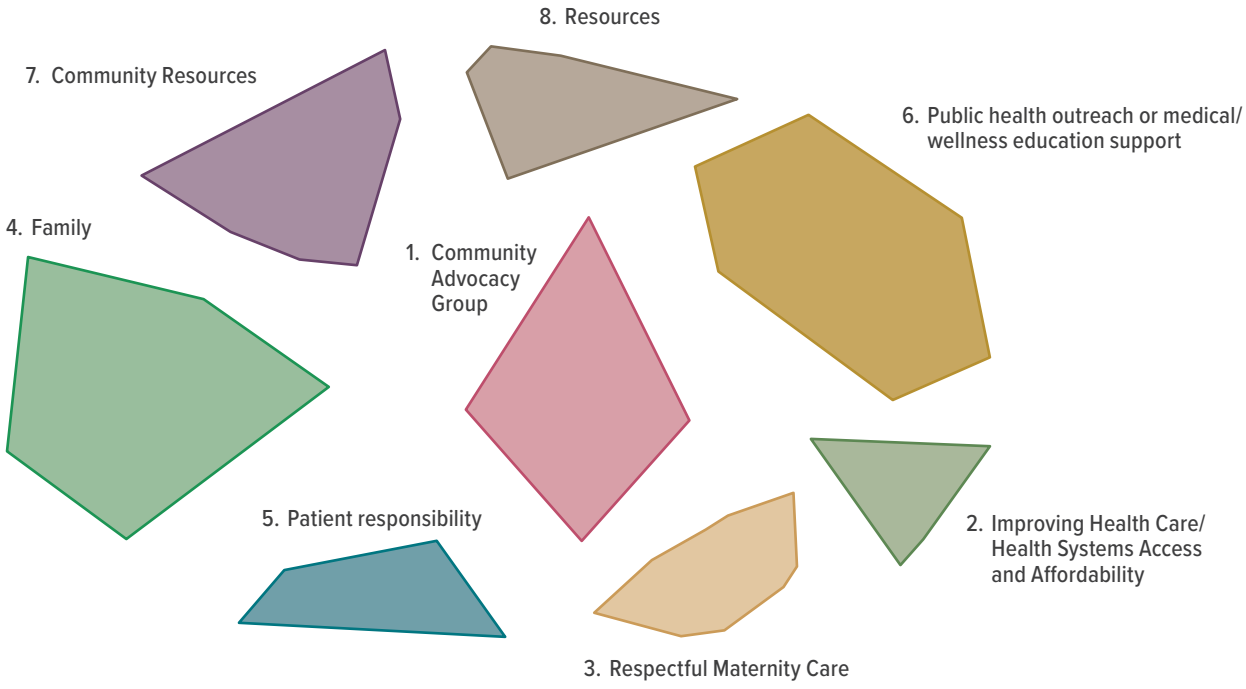
GROUP CONCEPT MAPPING RESULTS

Participants for step 1, the brainstorming session, included 94 adult Arizonans. More than half (56.38%) identified themselves as parents or guardians. Most participants identified as Black/African American (61.70%), female (78.72%), and reported residing in Pima County (61.70%). We engaged 10 individuals representing healthcare, research, and community organizations in steps 2 through 5. The participants included five medical professionals, two individuals who identified as parents and vested community members, one home visitor/early intervention specialist, one social worker, and one researcher.

The brainstorming step yielded 202 statements. Further refinement of the statements, consolidation of statements, and removal of duplicates by the assessment team resulted in a final list of 86 statements. Statements removed were not responsive to the prompt, were uninterpretable, or were incomplete.

The cluster map (FIGURE 7) illustrates that participants' ideas coalesced into eight distinct but interrelated themes, representing key community priorities in maternity care, healthcare access, and support systems. On average, participants created 7.4 piles during the sorting process. The selected final Cluster Map, comprising eight clusters (FIGURE 7), has a stress factor of 0.3259, indicating a better overall fit and representation of the input data on the two-dimensional map. By consensus of the research team and the study participants, the eight clusters were the 1) Community Advocacy Group, 2) Improving Health Care/Health Systems Access and Affordability, 3) Respectful Maternity Care, 4) Family, 5) Patient Responsibility, 6) Public health outreach or medical/wellness education support, 7) Community Resources, 8) Resources. Statements for each cluster are presented in Table 3.

FIGURE 7. Final Cluster Map



Label approval feedback demonstrated high acceptance of the 8-cluster map, and on average, the labels for each cluster had a 95% approval (answered "Yes" to "Do you agree with the name of Cluster #"). Cluster #3 was initially labeled "Desire for Specific Specialties/Physicians" but based on participants' feedback, we revised the name to "High quality, respectful maternity care," and the GroupWisdom suggested label "Respectful Maternity Care/Reducing Experiences of Discrimination in Health Care Settings." We chose "Respectful Maternity Care" as the final cluster label. There was some disagreement about the inclusion of statements in each cluster. However, individual statements cannot be manipulated in or out of clusters; therefore, any discordance with the inclusion of statements in a cluster is used to qualitatively contextualize the data.

TABLE 6. Communities represented by Participants in the ROL and CF sessions

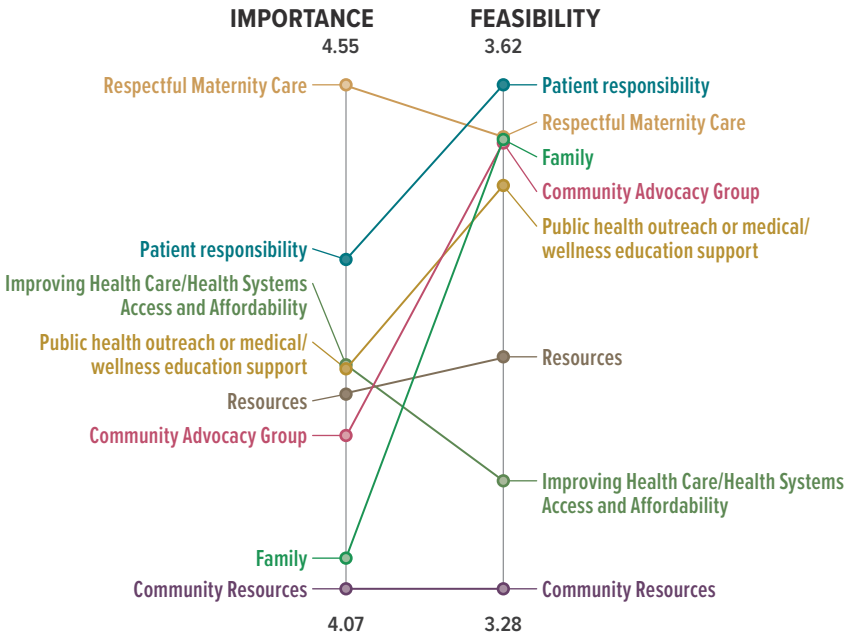
CLUSTER	STATEMENT #	STATEMENT
1 Community Advocacy Group	1	More education on the statistics of African American households
	10	Advocate for policies that address racial disparities.
	33	Financially responsible dental care
	34	Expansion for WIC programs
	53	Combating the stigma around mental health services
	60	Research on Black children to emphasize what they need
	76	Classes on health in high school
	83	Fellowship Opportunities would be an enhancement to improve child health practices in Arizona and across the country.
2 Improving Health Care/ Health Systems Access and Affordability	20	More emphasis on vaccinations
	24	Mobile clinics in poverty areas
	35	Easy access to emergency healthcare, information, and events.
	39	Specialized therapists
	69	Faster access to doctors.
	72	Early intervention.
	74	Improved preventative care.
	78	Collaboration between medical services and other programs such as nutrition, welfare, and public health.
	80	Teaching of/ or collaboration with alternative medicine, holistic medicine as it relates to maternal and child health for Black communities.
3 Respectful Maternity Care	9	Focus on reducing the high rate of maternal mortality and hypertension
	11	Expand insurance options
	13	Better leaders in health care
	14	Educate doctors on the signs, diagnosis, and treatment of illnesses in Black women.
	17	More racially diverse OB-GYNs and longer access to them after birth would be helpful. One appointment at 6 weeks to basically tell you that you are allowed to have sex is not sufficient.
	28	Clients who are assertive about their care. Providers who do not feel threatened by assertive clients and then threaten to or do "fire" the client from the practice.
	29	More education in the medical field.
	30	Emphasize the importance of ensuring each patient receives the same level of care.
	54	Good doctors who actually care about helping the Black community.
	56	More time for appointments.
	58	Appointments available at nonworking hours
	59	Cultural labor visits while in the hospital
	66	Anti- Racism training for Health professionals
	73	Overall, better service delivery.
	84	Culturally diverse providers who treat Black patients with respect.
	85	More compassionate caregivers
	86	Believe the client when she tells the provider she thinks things are not right.

CLUSTER	STATEMENT #	STATEMENT
4 Family	3	Ask more questions
	4	We are too private, need to be able to share
	5	Mothers should be more involved in their child's learning.
	25	Vitamins are needed for the mother and the child.
	27	Try not to wait until the last minute to get help.
	37	Safety zones with specialists available.
	46	Black empowerment organizations that are publicly funded
	63	More research towards Black Childbirth
	70	Committed family relationships.
	71	Faith.
5 Patient responsibility	7	Reading up on treatment, knowing what you are being given
	8	Making and keeping appointments
	26	Speak with your doctor about how you are feeling.
	52	More Black community representation in hospitals and clinics.
	77	More Black doctors
6 Public health outreach or medical/wellness education support	2	Better learning centers/ better awareness for teaching
	12	Education on child CPR for new Black moms
	16	Medical transportation over vouchers
	21	Access to books and education materials
	23	We need continued healthcare even before we reach childbearing age.
	32	Coverage for child and mother-based Nutrition Education.
	36	Better access to affordable childcare and healthcare.
	40	Assistance with enrolling in programs
	42	Better-established agencies
	45	More federal financial support for prenatal health
	51	More access to underserved communities
	55	Proper information on birth control
	61	Classes or seminars on social events to get mothers ready for the new information
	67	Consistent support from community service providers and case managers.
	79	The use of community-based care.
	81	More access, more outreach to better education and medical services, also emphasizing the importance of the community knowing this kind of information. Teach self-advocacy (the 'how-to') to the Black community. Elders may need advocates.
	82	More educational forums to inform and educate the Black community in regard to healthcare; classes on how to advocate for themselves and/or to appoint a person to advocate for them; not a power of attorney, but strictly for the healthcare needs

CLUSTER	STATEMENT #	STATEMENT
7 Community Resources	6	More support from fathers
	22	Improved financial status
	31	More Black communities to share personal experiences
	38	Support groups for children and mothers.
	41	Sister city programs with Black communities and historically Black towns and communities
	43	Black leaders' coalition
	50	Affordable housing to Black mothers
	62	Supplements catered towards Black mothers
	65	Specific organizations that target the community at each step
	75	Health Programs in Black Churches
8 Resources	15	Access to healthy food and prenatal
	18	More resources for the lower-income
	19	More resources for before and after school (hours), childcare.
	44	Resources like planning clubs for mothers to plan for the birth, after birth, and during the baby's life.
	47	Pills, creams, and diapers for women for aftercare/ after delivery
	48	Knowledge of where to go for local food banks/distributions
	49	Easily accessible food stamps
	57	Outreach in more poverty neighborhoods to keep our Black kids safer
	64	Ensuring men have access to mental health support, housing, and food.
	68	Diverse media and representation for all ages.

Figure 8 demonstrates that participants' ratings of importance and feasibility were closely aligned across clusters, with Respectful Maternity Care identified as a top priority in both, while Community Resources ranked lowest on both measures. As shown, Cluster 3, Respectful Maternity Care, received the highest average rating for importance of 4.55. The cluster rated the most feasible was 5, Patient Responsibility, with a rating of 3.62. The Pattern Match (FIGURE 8) rankings show that the importance and feasibility were considered together. Cluster 3, Respectful Maternity Care, was among the highest-rated, and Cluster 7, Community Resources, was the lowest-rated in both categories.

FIGURE 8. Pattern Match



Importance ratings had a narrow average range from 3.36 to 5.0. The statements rated highest for importance with mean ratings of 5.0 were #9 "Focus to reduce [the] high rate [of] maternal mortality and hypertension" and #86 "Believe the client when she tells the provider she things are not right. Providers [that] do not make assumptions about intellectual level based on ethnicity," both from Cluster 3, Respectful Maternity Care. Other statements were rated highly for importance, centered on representation and diversity of healthcare providers and health equity. Table 4 lists the top-rated statements in terms of importance.

TABLE 4. Top-rated Statements for Importance

STATEMENT #	STATEMENT	AVERAGE RATING
9	Focus on reducing the high rate of maternal mortality and hypertension	5.00
86	Believe the client when she tells the provider she thinks things are not right. Providers [that] do not make assumptions about intellectual level based on ethnicity.	5.00
54	Good doctors who actually care about helping the Black community.	4.91
66	Anti- Racism training for Health professionals	4.91
30	Emphasize the importance of ensuring each patient receives the same level of care.	4.82
84	Culturally diverse providers who treat Black patients with respect.	4.82
17	More racially diverse OB-GYNs and longer access to them after birth would be helpful. One appointment at 6 weeks to basically tell you that you are allowed to have sex is not sufficient.	4.73
36	Better access to affordable childcare and healthcare.	4.73
50	Affordable housing for Black mothers	4.73
57	Outreach in more poverty neighborhoods to keep our Black kids safer	4.73
74	Improved preventative care.	4.73
85	More compassionate caregivers	4.73
10	Advocate for policies that address racial disparities	4.64
14	Educate doctors on signs, how to diagnose, and treat illnesses in Black women	4.64
15	Access to healthy food and prenatal	4.64
51	More access to underserved communities	4.64
58	Appointments available at nonworking hours	4.64

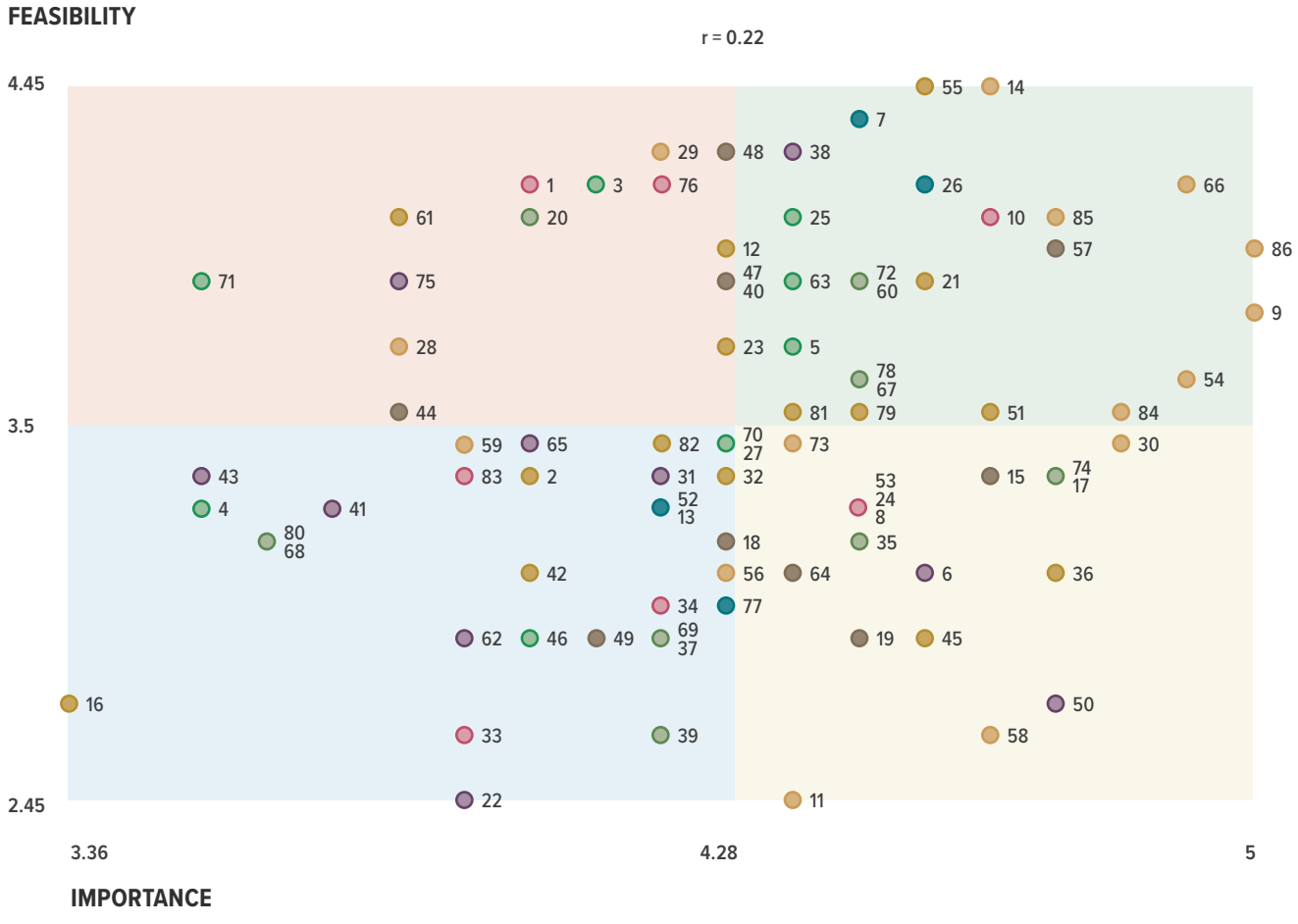
Ratings for feasibility had a slightly wider mean range of 2.45 to 4.45. The statements rated highest for feasibility, with mean ratings of 4.45, were #14, "Educate doctors on signs, how to diagnose and treat illnesses in Black women" (Cluster 3), and #55, "[Provide] Proper information on birth control" (Cluster 6). Other statements rated highly for feasibility spanned across clusters, suggesting broad opportunities for implementation of ideas. Table 5 lists the top-rated statements for feasibility.

TABLE 5. Top-rated Statements for Feasibility

STATEMENT #	STATEMENT	AVERAGE RATING
14	Educate doctors on signs, how to diagnose, and treat illnesses in Black women	4.45
55	Proper information on birth control	4.45
7	Reading up on treatment, knowing what you are being given	4.36
29	More education in the medical field.	4.27
38	Support groups for children and mothers.	4.27
48	Knowledge of where to go for local food banks/distributions	4.27
1	More education on the statistics of African American households	4.18
3	Ask more questions	4.18
26	Speak with your doctor about how you are feeling.	4.18
66	Anti- Racism training for Health professionals	4.18
76	Classes on health in high school	4.18
10	Advocate for policies that address racial disparities	4.09
20	More emphasis on vaccinations	4.09
25	Vitamins are needed for the mother and the child	4.09
61	Classes or seminars on social events to get mothers ready for the new information	4.09
85	More compassionate caregivers	4.09
12	Education on child CPR for new Black moms	4.00
57	Outreach in more poverty neighborhoods to keep our Black kids safer	4.00
86	Believe the client when she tells the provider she thinks things are not right. Providers do not make assumptions about intellectual level based on ethnicity.	4.00

Figure 9 shows that the most actionable priorities, those rated highest in both importance and feasibility cluster in the top-right quadrant of the Go-Zone, with many originating from the "Respectful Maternity Care" domain. Mean ratings for importance and feasibility on each statement are depicted in the Go-Zone (FIGURE 9). Mean importance rating scores are set on the x-axis, with mean feasibility rating scores on the y-axis. Statements rated both as most important and most feasible are shown in Quadrant 4 (Green), while those rated least important and least feasible are in Quadrant 1 (Blue) of the Go-Zone. Statements rated as most important but less feasible are in Quadrant 2 (Yellow), while statements rated most feasible but less important are in Quadrant 3 (Orange). Statements are shown with a colored dot on the Go-Zone to match their corresponding cluster (See FIGURE 6).

FIGURE 9. Go-Zone Mean Ratings for Importance and Feasibility



Statements in Quadrant 4 that were rated highest for both importance and feasibility are included in Table 6. Most of the statements (86, 9, 66, 54, and 14) that are top-rated for importance and feasibility are from Cluster 3, Respectful Maternity Care.

TABLE 6. Highest Rated statements for Importance and Feasibility

STATEMENT #	STATEMENT	IMPORTANCE	FEASIBILITY
86	Believe the client when she tells the provider she thinks things are not right. Providers [that] do not make assumptions about intellectual level based on ethnicity.	5.00	4.00
9	Focus on reducing the high rate of maternal mortality and hypertension	5.00	3.82
66	Anti- Racism training for Health professionals	4.91	4.18
54	Good doctors who actually care about helping the Black community.	4.91	3.64
14	Educate doctors on signs, how to diagnose, and treat illnesses in Black women	4.64	4.45
55	Proper information on birth control	4.55	4.45
7	Reading up on treatment, knowing what you are being given	4.45	4.36

Participants' feedback on how they or their organizations would utilize the concept map to support Black families in Arizona revealed several areas for incorporating or optimizing the concept map to enhance its effectiveness. Participants felt the concept map could help determine if resources were accessed efficiently and equitably. It was mentioned that the concept map could serve as a tool for tracking community health outcomes and "ensuring families in need are not overlooked," or that a checklist inspired by the map could support quarterly reviews and prompt early intervention when barriers arise. Furthermore, the concept map could help raise awareness in the Black community about healthcare access and the importance of preventive measures, such as vaccinations. Specifically, healthcare providers noted that the map would help address patient concerns holistically by visualizing connections among different needs and services. Regarding data visualization, some participants expressed a need for more intuitive visual layouts, preferring simple, descriptive terms over numeric codes, as seen in some data reports. Suggestions also included reorganizing some categories of the concept map that did not seem to "fit," with recommendations to refine language or consolidate overlapping themes.

COMMUNITY FORUMS: PRIORITY SETTING RESULTS

The qualitative data for the CF were gathered from assessment team notes and participant comments, representing various sectors and counties across the state. Three members of the research team independently reviewed the forum transcripts and notes. They then engaged in group discussions to develop a shared coding framework and preliminary theme definitions through a consensus-based approach. A codebook was developed based on the framework. Inter-coder agreement procedures were documented. Disagreements related to coding were resolved by reviewing the data, discussing it, and reaching a consensus. The codebook was revised based on the results of the discussions. The top health-related priorities identified included mental health, childcare, family support, transportation, food assistance, financial resources, cultural and linguistically appropriate services, and the promotion of available health resources (see FIGURE 10).

FIGURE 10. Priorities Identified from Community Forums

Mental Health

Participants stressed the barriers to accessing mental and behavioral health services, due in part to the critical shortage of providers and resources. Participant recommendations included increasing access to support groups, more suicide prevention programs, and campaigns to raise awareness and reduce stigma. Additionally, participants emphasized the importance of adapting interventions to meet the unique needs of specific communities, including youth, pregnant and postpartum people, and maternal and paternal mental health services. Programming, particularly within school settings, was highlighted as a critical strategy for suicide prevention and early intervention for young people.

In addition to identifying gaps, participants described significant barriers to accessing care. These included the high cost of mental and behavioral health services, the shortages across the state of qualified mental health providers, and a lack of sufficient cultural and linguistically appropriate care. Provider shortages are particularly challenging in border, rural, and urban underserved communities.

Community-identified solutions included increasing funding for mental and behavioral health services and programs, improving access to postpartum depression education and screening, and providing more treatment options for individuals with substance use disorders, particularly for pregnant individuals. They also advocated stigma-reducing education and enhanced access to treatment facilities for substance use disorders (SUDs).

Childcare

Accessible and affordable childcare emerged as a significant concern during all the community forums. Families across the state have limited options for childcare. Participants noted that when childcare services are available, they often lack qualified caregivers. Many working families find facilities with qualified staff to be too expensive. The shortage of qualified childcare options has compelled families in rural communities to rely on informal networks. One participant mentioned seeing community members frequently posting on Facebook to find someone available to watch their children. This participant was associated with a community-based organization that informally tracked local families actively seeking childcare.

Primary and Specialty Care Shortage

Every forum participant reported shortages of primary and specialty care providers, especially in rural and isolated areas, which negatively impact health outcomes. A common theme was the ongoing turnover of providers in underserved communities. One participant from a remote region stated, “There are no incentives for providers to stay... nothing they want for their families.” Many also noted that while loan repayment programs help recruit providers temporarily, they contribute to high turnover rates. Once providers fulfill the required service hours for loan forgiveness, they often leave, leading to a lack of continuity in care. The community forum believed this cycle undermines community trust and long-term health planning.

Transportation

Transportation poses a major barrier to accessing healthcare and other essential services. Participants noted the inadequacy of public transportation, especially in rural areas. Many individuals who need to travel for medical procedures and specialty services often face long drives (sometimes several hours) to reach the nearest metropolitan area. This is not feasible for many who lack reliable transportation or have inflexible work schedules. The challenge extends beyond healthcare, affecting access to education, employment, and healthy food. The responses from participants highlight the urgent need for affordable and accessible public transportation solutions.

Access to Quality and Affordable Healthcare

Participants across all forums highlighted the limited availability and high costs of healthcare services. Many expressed their frustrations with eligibility restrictions for public insurance and sliding-fee scales. Several participants noted that income thresholds were unreasonably low, forcing families to make impossible choices, often having to decide between food and healthcare. One participant remarked, "You must quit your job to qualify," while another stated, "It is a broken system." Additionally, participants raised concerns about the inconsistency in the quality of care and long waiting times, especially for specialty services. The lack of culturally and linguistically appropriate care often exacerbated these barriers.

Community Education and Awareness of Resources

Participants in the forum acknowledged that a lack of awareness and limited health literacy are significant barriers to accessing care and preventive services. Many community members were unfamiliar with existing programs and unsure about how to navigate the healthcare system. Despite these challenges, participants also emphasized the strengths within the community, particularly the collaboration among local organizations. One participant from a border community stated, "We work well as a community. We all come to the table and work together." These collaborative efforts are valuable assets that present opportunities to enhance outreach and improve service coordination.

Access to Healthy and Affordable Food

Participants recognized that both urban and rural food deserts are significant issues. During the discussion, they highlighted that many low-income families and individuals face limited access to affordable, nutritious food, particularly those residing far from grocery stores. Even when healthy food options are available, prices are often prohibitively high. These challenges contribute to chronic diseases related to diet and underscore the need for localized food systems, subsidies, and nutrition education that is culturally relevant, linguistically appropriate, and tailored to community needs.

Culturally and Linguistically Appropriate Services (CLAS)

Participants highlighted the significance of culturally and linguistically appropriate healthcare services (CLAS). The absence of bilingual providers, interpretation services, and culturally relevant materials presents a significant barrier to achieving equitable care. In the Spanish-speaking forums, participants voiced concerns about the shortage of Spanish-speaking mental health professionals. One of the participants shared their experiences regarding this issue:

> "También estoy de acuerdo con [participant]. Necesitamos muchos trabajadores de salud mental que hablen español. Casi no hay en nuestras comunidades que sean bilingües. Es alta necesidad y además es difícil. Va tomar tiempo y un proceso para tener más psicólogos, trabajadores sociales, consejeros capacitados en los dos idiomas. Para poder llevar esto a la comunidad, especialmente a la habla Hispana. *(I agree with the other participant. We need many more mental health workers who speak Spanish. There are hardly any bilinguals in our communities. There is a high need, and it will take time and a process to train more psychologists, social workers, and counselors in both languages. We must bring this to the attention of the community, especially the Spanish-speaking community.)*"

Dental and Oral Health

Dental and oral health have become critical areas of concern. Participants reported a lack of dental care options in their communities, with affordability and insurance coverage being significant barriers. A common sentiment expressed was that "Dental plans do not accept insurance," and many providers did not accept Medicaid or discounted plans. Families with young children were particularly affected. One participant shared, "Our local dentist does not accept young children," highlighting the limited availability of pediatric dental care, especially in rural and low-income areas.

Limitations

This qualitative assessment provides important insights into maternal and child health (MCH) needs across Arizona; however, several limitations should be considered when interpreting the findings. First, the use of purposive and convenience sampling methods may limit the generalizability of the results. Participants were recruited through community networks, events, and organizational partnerships, which may have resulted in the overrepresentation of individuals already engaged with health or social services and underrepresentation of more isolated or harder-to-reach populations.

Second, while efforts were made to ensure statewide representation, including participation from all 15 counties, the depth of engagement likely varied across counties and population groups. Some communities, particularly those facing the greatest structural barriers, may not have been fully captured despite the use of Mobile Health Units and community-based outreach strategies. Additionally, participants were limited to one data collection activity, which, while intended to reduce duplication, may have restricted opportunities for deeper engagement or cross-method validation.

Third, the Group Concept Mapping (GCM) process involved a relatively small number of participants in later stages (e.g., sorting, rating, and validation), which may influence the stability of cluster interpretations and ratings. Although the process included member checking and consensus building, some disagreement remained over the placement of statements within clusters, reflecting the subjective nature of qualitative categorization.

Finally, as with all qualitative research, findings are based on self-reported perceptions and experiences, which may be influenced by recall bias, social desirability, or local context. While triangulation across methods (River of Life, GCM, and Community Forums) strengthens the credibility of the findings, they should be interpreted as reflecting community perspectives rather than as definitive measures of need.

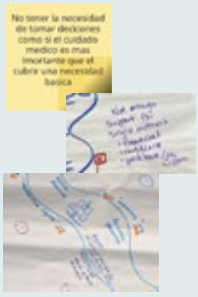
Conclusion

This qualitative assessment highlights the complex and interconnected factors shaping maternal and child health outcomes across Arizona, particularly among historically underserved communities. Across all methods, participants consistently identified structural and social drivers, including access to care, housing, childcare, transportation, food security, and financial stability, as central to improving health outcomes.

A key finding is the critical importance of respectful, culturally responsive, and equitable healthcare, particularly for Black/African American communities. The prominence of "Respectful Maternity Care" as a top priority across importance and feasibility ratings underscores the need for healthcare systems to address bias, improve provider-patient relationships, and ensure equitable treatment. At the same time, community-based supports, including community health workers, local organizations, and peer networks, were identified as essential assets that can bridge gaps in care and improve service delivery.

The findings also point to actionable opportunities. Many high-priority strategies were viewed as both important and feasible, suggesting that targeted investments, policy changes, and programmatic improvements can yield meaningful impact. Moving forward, integrating community voice into planning and implementation will be critical to ensuring that interventions are responsive, effective, and sustainable. Overall, this assessment provides a strong foundation for guiding Arizona's Title V MCH priorities and advancing health improvement statewide.

SUBTHEME	DESCRIPTION	ASSET / BARRIER / POLICY			ROL IMAGES	GROUPS/COUNTY	QUOTES
Access to Healthcare							
Time	People do not have time to attend appointments due to other obligations like work or children		●				
Location	Location of healthcare facilities are far and difficult to access without adequate transportation		●				
Transportation	Expensive, limited, or non-existent options; especially difficult in rural areas		●				
Available appointments	Appointment times are usually during most people's working hours; limited or no weekend hours available		●				
Workforce shortage	There are not enough healthcare providers available; not enough specialty providers (i.e.: cardiologists, neurology, OB/GYN, etc.)		●				
Healthcare coverage, cost	The cost of healthcare is too high, especially for those without insurance		●			Nogales Youth, Santa Cruz County	Because of no insurance: "It can cause people to avoid doctor appointments, because of cost" Male, Youth, Nogales, Santa Cruz County
Childcare	Parents have to miss healthcare appointments due to childcare obligations; limited or unaffordable childcare options		●				
CLAS/ Community Appropriate Care	Providers need additional training for culturally relevant healthcare practices as well as care that is community-focused Providers do not speak the same language which limits communication		●			Mobile Health Unit, Douglas, AZ, Cochise County	"Se necesita una atención sin fronteras *(we need medical care without borders)*" Community Member, Douglas, AZ, Cochise County, Mobile Health Unit "End the stigma around maternal health" Group C, Rural Women's Network Conference "Ultimate goal to reduce maternal mortality" Female, Community Member, Mobile Health Unit "Drs. no hablan en el idioma (doctors do not speak the same language)" Pima County CHW COP Spanish group
Inadequate infrastructure/ availability	Not enough healthcare facilities are available or the infrastructure is poor and not able to handle large communities or unique needs		●			Nogales Youth, Santa Cruz County	Regarding the hospital in Nogales: "Only one hospital that's pretty far, the hospital just sends you to Tucson anyways." Male, Youth, Nogales, Santa Cruz County Regarding the lack of healthcare facilities availability: "Nececitamos un bien hospital *(we need a good hospital)*" Community Member, Douglas, AZ, Cochise County, Mobile Health Unit "Lack of full reproductive care," "Fear of retaliation for healthcare providers," "Not enough incentives to relocate to rural areas." Female Speaker; Rural Women's Network Conference"
Distance	Healthcare facilities can be far and inaccessible with limited transportation; difficult for rural areas		●				
Immigration	Community members reported fear of accessing services/resources or asking for help due to fear of citizenship status.		●				Regarding immigration: "Miedo a buscar asistencia *(fear to look for assistance)*" Community Member, Amado, AZ, Mobile Health Unit "Dificultad para los accesos medicos, ya sea por estatus migratorios o dificultades financieas *(it is difficult to access medical care due to immigration status or finances)*" Health Start CHW, Female Speaker, Spanish Group "Access to health insurance is a huge issue, especially for migrants, the 5-year rule; even if you are 'legal,' you cannot qualify for access until 5 years." Pima County CHW COP English group"

SUBTHEME	DESCRIPTION	ASSET	BARRIER	POLICY	ROL IMAGES	GROUPS/COUNTY	QUOTES
Time of interaction	There is not enough time between the patient and doctor during medical visits		●				"Los Drs. no pasa suficiente tiempo con el paciente *(doctors do not spent enough time with patients.)*" Pima County CHW COP Spanish group
Misinformation			●				Regarding misinformation: "not knowing and believing false statements" Male, Youth, Nogales, Santa Cruz County
Social and Community Support							
Community Based Organizations	Some participants report a strong presence of community support, while others report needing more resources, such as rural communities.	●	●				"There is a lot of support from local organizations that offer various resources, services, food, clothing, and hygiene kits" Community Member, Unhoused "Community organizations try to help our as much as they can be showing up for the community between 2-3 times a week" Community Member, Unhoused "Food is usually available for children and organizations bring out food for children" Community Member, Unhoused
Resources	Some participants report strong resources offered in the community, while others report needing more resources, such as in rural communities. Reported assets for community resourfces: WIC, El RIO, free clinics, "MESH," MHC Hands of Hope, Hush-a-Bye	●	●			Mobile Health Unit, Safford, AZ, Graham County Pima County CHW COP English group	"Not enough support for single mothers, financial, childcare, paid/leave, job support" Community Member, Safford, AZ, Graham County; Mobile Health Unit "Don't shy away from virtual spaces" Female Speaker; Rural Women's Health Network "No tener la necesidad de tomar decisiones como si el cuidado medico es mas importante que el cubrir una necesidad basica *(not having the necessity to decide between choosing medical care or covering our basic necessities)*" Spanish Group; Health Start CHWs
Awareness	Need more awareness regarding community resources available		●				
CHWs	Play a pivotal role in health education and care coordination	●					
ADHS and Gov Programs	Strong presence of state and federal programming	●					
NGO programs	Strong presence of NGO programming	●					
Improvement of Resources/ Programs	Current programs and resources need to be strengthened, increased funding		●				"Issue with funding for things we think are important" Female, Community Member, Rural Women's Health Network
Family Support/ Community Integration	Strong interpersonal relationships in families and communities Strong "generational influence" provides a support system during pregnancy and childcare	●				Pima County CHW COP, Ally Group	
Availability	Community resources and social support are not often available, and when they are available, there are many restrictions		●			Unhoused Community	"Mothers having to do it all can cause a great deal of stress." Community Member, Unhoused Community
Infrastructure	Infrastructure is poor or not strong enough to handle the needs of communities.		●				

SUBTHEME	DESCRIPTION	ASSET / BARRIER / POLICY			ROL IMAGES	GROUPS/COUNTY	QUOTES
Childcare							
Limited options	Urban and rural areas have difficulty finding childcare		●				"I feel that everyone in our community has trouble finding babysitters." English Group, Health Start CHWs "Parents or people who are pregnant cannot take time off work and do not have support from partners/families." Santa Cruz County, Female Community Member; Rural Women's Network Conference
High cost	Costofchildcareisoftentoohighformost parents		●				Discussing childcare costs: "most families cannot afford it" Pima County CHW COP Ally Group
Unhoused population	Unhousedpeoplehaveincreaseddifficulty findingaffordableandavailablechildcare		●				
Mental & Behavioral Health							
Stigma	Fearofdisclosingmentalhealthconditions andafearofseekinghelpduetoconcerns of discrimination		●				
Inadequate infrastructure/ availability	Not enough mental health facilities availableortheinfrastructureispoorand not able to handle large communities or unique needs		●				"Many people who want to overcome their addiction are told to wait for a long period of time before they can access treatment, and it's usually too late by the time space becomes available." Community Member, Unhoused "Need for more Community Bridges treatment centers" Community Member, Unhoused "Not enough sober and transitional living centers for women; trying to get sober in jail." Pinal and Maricopa County, Female speaker
Access	Access to mental health resources is restricted, especially difficult for those without insurance or unhoused populations.		●				
Limited resources	Not enough mental health resources for people		●				"Addiction is difficult to overcome when there is not enough resources." Community Member, Unhoused
Healthcare coverage, cost	*Cost of mental health services or resources are too high, especially for those without insurance*		●				
Food Insecurity							
High cost	*Cost of food is too high and limits the type of food that a person has access to*		●				
Transportation	*Limited to no transportation limits access to healthy foods*		●				"Limited transportation limits access to food banks"
Limited options	*There are not enough options for healthy and affordable food especially in areas that are rural*		●				"The area is a food desert because areas are scattered/far apart" Santa Cruz County, Female Speaker, Rural Women's Health Network
Community programs help with infant formula	*Some resources are available for help with infant formula*	●					"WIC helps with infant formula"
Transportation Access							
Inadequate infrastructure/ availability	*Poor public and rural infrastructure to accommodate community needs*		●				"Huge barrier is mass transportation" Female Community Member, Rural Women's Health Network "Transportation very limited" Female Community Member, Rural Women's Health Network Regarding the hospital in Nogales: "No method [of transportation] from the clinic for all people." Male Speaker, Santa Cruz County, Nogales Youth "Transporte, mas hospitales *(Transport, more hospitals)*" Thatcher, AZ, Graham County, Mobile Health Unit "
High cost	*Cost is high to access transportation, leaves many with no option for transportation*		●				

SUBTHEME	DESCRIPTION	ASSET	BARRIER	POLICY	ROL IMAGES	GROUPS/COUNTY	QUOTES
Long distance	*Distance creates a barrier for transportation as long distances limit the type and availability of transportation, especially difficult in rural areas*		●				
Social isolation in unhoused population	*Lack of transportation limits social integration in unhoused peoples*		●				
Housing Access							
High cost	*Housing cost is too high causing difficulty with finding and keeping stable housing*		●				
Limited availability	*There is not enough options available for stable and affordable housing*		●				*"There are a lot of kids out in the streets with their parents which is dangerous" Community Member, Unhoused* *"There is a lot of dangers for children including drug use, predators, illness, etc." Community Member, Unhoused*
Lack of resources for unhoused	*Not enough resources available to help unhoused people find stable and affordable housing, without restrictions*		●				*"There are a lot of kids out in the streets with their parents which is dangerous" Community Member, Unhoused* *"There is a lot of dangers for children including drug use, predators, illness, etc." Community Member, Unhoused* *"If the housing situation is not stable, that can have an impact on their health. If there is house scarcity and they are having a baby, it becomes difficult" Pima County CHW COP English group*
Long waiting periods	*Applications and timeline for housing are extensive*		●				*Regarding waiting for housing: "causes delays in getting into shelters" Community Member, Unhoused*
Pet and legal restrictions	*Pet or legal restrictions limits the type and available housing for unhoused peoples, can be traumatizing for unhoused people to have to give up their pets*		●				*"Most of the time, families have a difficult time getting into affordable housing due to ongoing investigations (DV, drug use, CPS, etc.)" Community Member, Unhoused* *"There are a lot of people with animals and not enough shelters that accept people with animals" Community Member, Unhoused* *"Lots of trauma in having to get rid of their pets" Community Member, Unhoused"*
Lack of women's shelters	*Not enough available shelters only for women, safety concern*		●				
Transitional living/ residential treatment centers	*For individuals with mental health or substance use, there is not enough facilities for those in active treatment*		●				
Safety of shelters	*Available shelters for unhoused populations are unsafe*		●				
Income/Financial/Job Security							
Lack of jobs/ unstable employment	*There are not enough employment opportunities for individuals. Employment is not consistent.*		●				
Low wages/ income	*"Employers are not offering adequate wages or income* *Increase wages in healthcare workforce"*		●				*"We need to give the CHWs the tools they need, that includes financial compensation." Pima County CHW COP Spanish group* *"Make it a decent living, they do important work" Pima County CHW COP Spanish group"*
Limited paid leave	*Employers do not offer enough paid leave for employees to utilize*		●				
Limited job support/ flexibility	*Employment limits a person's ability to take time off or access resources due to restrictive hours*		●				

SUBTHEME	DESCRIPTION	ASSET / BARRIER / POLICY			ROL IMAGES	GROUPS/COUNTY	QUOTES
Policy Advocacy							
Longer and paid paternal leave	*Communities want paternal leave over 6 weeks and paid.* *Supportive policies for families*			●			*"Longer maternity and paternity care,"* *"Dads need time off too,"* *"Paid parental leave."* *Health Start CHW* *"A lot of what we talked about can go back to policy, such as Roe vs. Wade, policies in the workplace that are supportive of families." Pima County CHW COP Ally Group* *"Programs that we can build for complete family support, its important. We focus on the mother and child, but you need a family to grow and build. We cannot do stuff alone. Families are integral to that, but someone needs to support the family beyond that. They may have internal resources, but they need external resources to help them" Pima County CHW COP English*
Increase home visit availability	*Communities want more community or health resources that are able to offer home visits.*			●			
Increase resources in rural areas	*Rural communities want more accessible resources in their areas, increased funding to support resources.*			●			
Affordable transportation	*Communities want accessible, timely, and affordable transportation options, especially in rural areas. Infrastructure for public transportation needs to be strengthened.*			●			
Jobs with daycare	*Parents want employment benefits to include childcare options.*			●			
Affordable childcare and pre-schools	*Communities want pre-school education for children that is affordable and accessible.*			●			
Affordable housing	*Communities want more options for housing that are affordable and obtainable with limited restrictions*			●			
More accessible healthcare options	*Communities want affordable and accessible healthcare that is available during non-traditional hours*			●			
Increased SNAP benefits	*Communities want an increase in federal SNAP benefits to increase access to healthy foods.*			●			
Increased funding for community resources	*Communities and community organizations want increased funding for community resources to increase accessibility and reach.*			●			
Reimbursement for CHWs/ Doulas	*Payment for services provided by CHWs or doulas to community members*			●		*Pima County CHW COP, Ally Group*	*"Medicaid needs to do more about reimbursement, acknowledging CHWs and doulas."*
Care coordination	*Integration needed between clinics/ hospitals and CHWs/CHR*						*"CHWs need to set up appointments and coordinate with other providers" Pima County CHW COP English group* *Need for clinical integration with CHRs, "at the Indian center, we have a lot of resources, we are open to everyone; patients are referred to me and I help them get their specialty care" Pima County CHW COP English group*

REFERENCES

Anderson, L. M., Adeney, K. L., Shinn, C., Safranek, S., Buckner-Brown, J., & Krause, L. K. (2019). Community engagement approaches to improve health: A systematic review and meta-analysis. American Journal of Public Health, 109(8), e1-e9. doi.org/10.2105/AJPH.2019.305113

Boulton, M. L., Lemmers, A., & Montoya, M. (2020). State maternal and child health needs assessments: Lessons learned and best practices. Maternal and Child Health Journal, 24(6), 729-737. doi.org/10.1007/s10995-020-02910-2

Concept Systems, Inc. (2024). GroupWisdom™ software (Version 2024). groupwisdom.com

Cook, K., & Bergeron, K. (2019). Using Group Concept Mapping to engage a hard-to-reach population in research: Young adults with life-limiting conditions. International Journal of Qualitative Methods, 18. doi.org/10.1177/1609406919868106

Harris, P. A., Taylor, R., Minor, B. L., Elliott, V., Fernandez, M., O'Neal, L., McLeod, L., Delacqua, G., Delacqua, F., Kirby, J., & Duda, S. N. (2019). The REDCap consortium: Building an international community of software partners. Journal of Biomedical Informatics, 95, 103208. doi.org/10.1016/j.jbi.2019.103208

Harris, P. A., Taylor, R., Thielke, R., Payne, J., Gonzalez, N., & Conde, J. G. (2009). Research electronic data capture (REDCap) - A metadata-driven methodology and workflow process for providing translational research informatics support. Journal of Biomedical Informatics, 42(2), 377-381. doi.org/10.1016/j.jbi.2008.08.010

Ingram, M., Reinschmidt, K. M., Schachter, K. A., Davidson, C. L., Sabo, S. J., & De Zapien, J. G. (2017). Establishing a professional profile of community health workers to promote workforce development. Public Health Reports, 132(3), 273-280. doi.org/10.1177/0033354917700426

Israel, B. A., Schulz, A. J., Parker, E. A., Becker, A. B., Allen, A., & Guzman, R. (2018). Critical issues in developing and following community-based participatory research principles. In N. Wallerstein, et al. (Eds.), Community-based participatory research for health: Advancing social and health equity (3rd ed., pp. 31-46). Jossey-Bass.

Kane, M., & Rosas, S. R. (2018). Conversations about Group Concept Mapping: Applications, examples, and enhancements. SAGE.

Kangovi, S., Mitra, N., Grande, D., Huo, H., Smith, R. A., & Long, J. A. (2020). Evidence-based community health worker program addresses unmet social needs and generates positive return on investment. Health Affairs, 39(2), 207-213. doi.org/10.1377/hlthaff.2019.00981

LaNoue, M., Mills, G., Cunningham, A., Sharbaugh, D., Johnson, M., & Guttendorf, J. (2016). Concept mapping as a method to engage patients in primary care practice improvement. Annals of Family Medicine, 14(4), 370-376. doi.org/10.1370/afm.1959

Rosas, S. R. (2017). Group Concept Mapping methodology: Toward an epistemology of group conceptualization. Quality & Quantity, 51, 1403–1416. doi.org/10.1007/s11135-016-0349-1