Hui International™

Perinatal Health Equity and Technology Initiative:

Community Conversations

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Our Hui International team is deeply aware that our race, gender identities, socio-economic and cultural backgrounds have formed inherent biases within each of us. It is with this understanding that we strive to create a process and project where all voices matter. We believe perinatal health equity is possible through honest and multifaceted conversations, interdisciplinary commitment, innovation, and diverse stakeholder collaboration.

Lucy Morse Roberts

CEO, Hui International

Hui International – Where All Can Blossom and Thrive

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Purpose

Phase II of Hui International's Perinatal Health Equity and Technology (PHET) Initiative, the *Community Conversations Study*, investigates perinatal health possibilities and disparities in rural California. The study focuses on identifying barriers and opportunities for the use of emerging technologies — specifically telehealth and curated large language models (LLMs)— to improve maternal and child outcomes. Recognizing the absence of community voices in the Initiative's initial convening, this phase foregrounds the perspectives of individuals with lived experiences and local advocates. Employing a qualitative, focus-group based design, the study was conducted in Siskiyou County, one of California's largest rural counties. The findings aim to generate community informed strategies for integrating technology into perinatal health systems in ways that are equitable, culturally responsive, and contextually relevant to rural populations.

Background

The PHET Initiative began with a small convening in May of 2024. Health professionals, tech experts and graduate students from the UC Davis Graduate School of Management attended the convening. Through facilitated conversations, Hui International sought to explore the potential of technology-based interventions - including telehealth platforms and curated LLMs - to address persistent perinatal health disparities. First 5 Yolo sponsored the event.

The participants were guided by two central questions:

#1

"What are the barriers to perinatal health equity?"

#2

"How can technology be used to improve perinatal health equity?"

With these two prompts we created a baseline for future discussions and potential collaborations.

It was decided at that meeting to focus PHET Phase II on community voices in rural communities.

Rural areas in the United States experience significant challenges in accessing both primary and specialty healthcare[1]. This limited access is associated with poorer health outcomes, including higher rates of all-cause mortality, as well as increased mortality from cancer, obesity, and diabetes[2]. The United States has poor maternal and neonatal health outcomes, ranking last among all high-income countries in maternal mortality rate. Since the COVID-19 pandemic, telemedicine has become a more mainstream tool for treating patients, holding great potential for

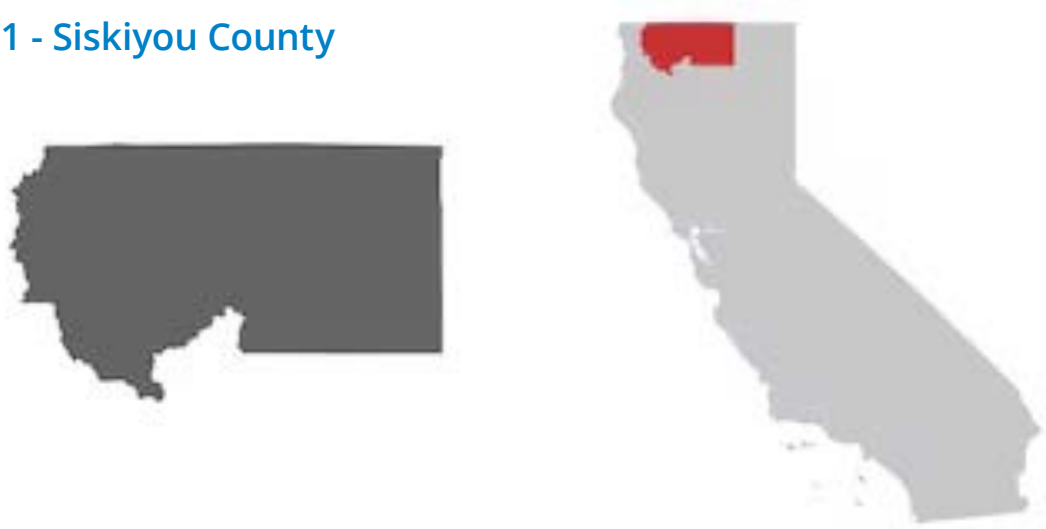
1. https://pmc.ncbi.nlm.nih.gov/articles/PMC6522336/
2. https://pubmed.ncbi.nlm.nih.gov/37196993/

those in rural areas or individuals who have difficulty attending in-person visits. However, barriers such as limited high-speed internet access, coverage gaps, internet literacy, and patient distrust remain substantial obstacles to achieving effective online medical services. This report examines California's rural Siskiyou County and explores questions about its maternal and perinatal healthcare, as well as the potential for technology to improve health outcomes.

Siskiyou County Overview

Siskiyou County is located in Northern California and spans 6,281 square miles, making it the fifth largest county in California by area (Figure 1).

Figure 1 - Siskiyou County



Siskiyou County's population in 2025 is estimated at 41,143, with an annual decline of about 2%. The county has a median age of 47.4 years—considerably higher than California's 37.6—highlighting its older demographic profile. The population is predominantly White (74.2–79.4%), with Hispanic/Latino residents accounting for 13.1–13.7%, American Indian/Alaska Native 3.2–5.3%, individuals of two or more races 6.0–11.2%, Black or African American 1.7%, Asian 1.6%,

and Native Hawaiian or Pacific Islander 0.4%. Economic indicators also reveal disparities: the median household income is $55,499, well below the state average of $96,334, and the poverty rate, at 16.6–17.2%, exceeds California's 11.7%. In 2025, the unemployment rate stood at 6.2%[3].

Siskiyou County ranks among the least healthy counties in California, with several health indicators notably worse than state averages. The premature death rate is almost twice as high as the California average, with 10,600 life years lost before age 75 per 100,000 residents compared to 5,700 statewide[4]. Obesity affects 32.9% of adults in Siskiyou County, above the California average of around 28%[5]. Smoking rates are 16%, higher than the state average of about 11.4%, and binge drinking is reported by 17.2% of adults, also above national and state averages. Additionally, adults in Siskiyou County report poor mental health on average 5.3 days per month, 32.5% higher than the California average of 4 days.

Perinatal and Maternal Care in Siskiyou County

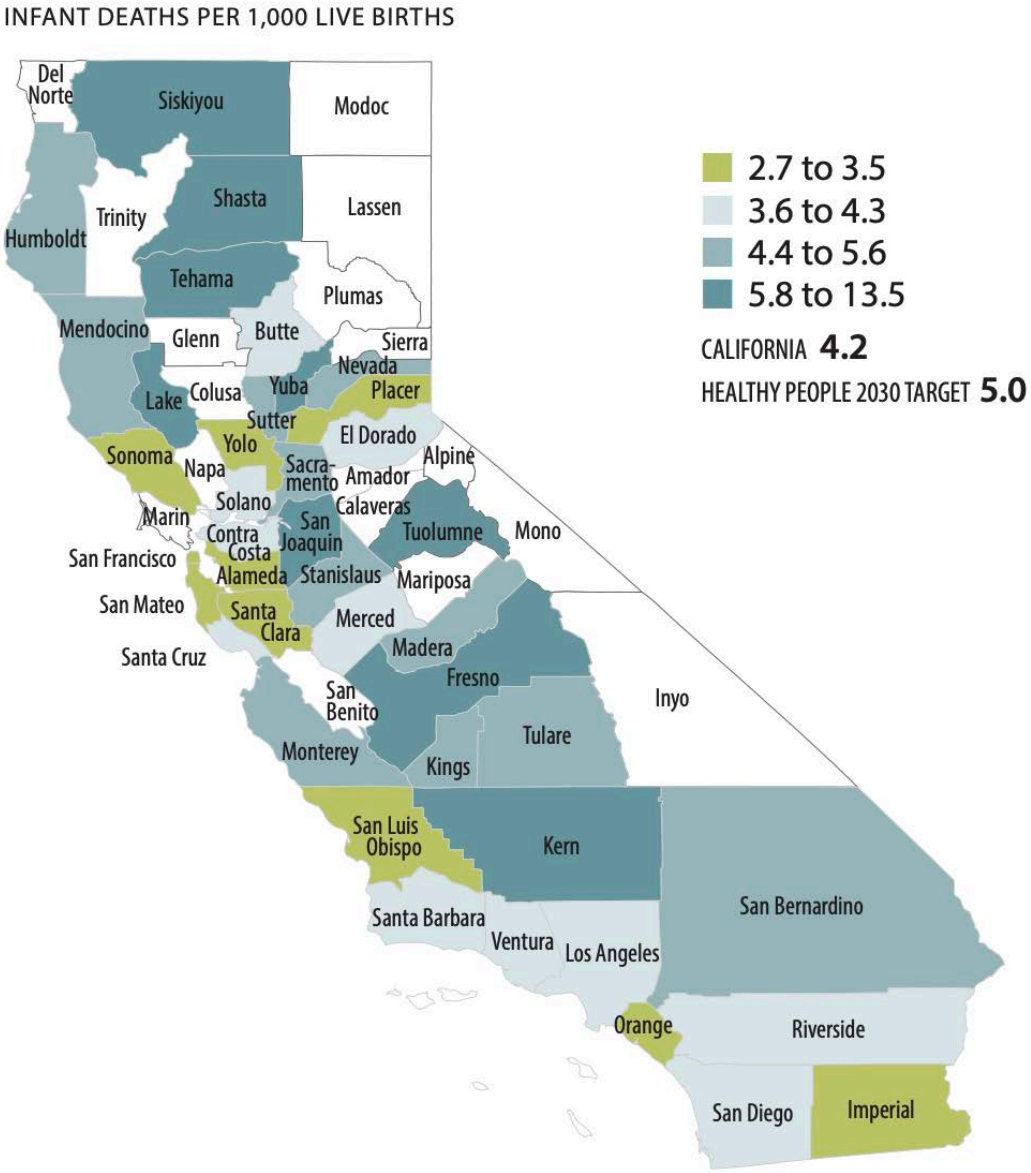
Siskiyou County has the highest infant mortality rate among all California counties, with 13.5 deaths per 1,000 births (Figure 2).

A major barrier to comprehensive perinatal care in Siskiyou County is its vast area, which features rugged landscapes and harsh weather conditions, including snow, floods, and wildfires. These factors contribute to challenging travel conditions, especially for residents in the eastern part of the county. In this region, access to local obstetric providers is very limited, with the nearest providers located two hours to the west. As a result, many pregnant women must seek care from out-of-state providers in Oregon who accept Medi-Cal. Siskiyou County is also home to a large number of migrant families, many of whom face language barriers that complicate

3. https://www.census.gov/quickfacts/fact/table/CA/INC110223
4. https://bosagenda.co.siskiyou.ca.us/511765/511776/516060/516063/522266/2522266.pdf
5. https://datacommons.org/place/geoId/06093

their ability to access appropriate perinatal services. Additionally, there is a shortage of obstetric providers who accept presumptive eligibility or participate in the Medi-Cal based Comprehensive Perinatal Services Program (CPSP).

Figure 2 - Infant Mortality by County California, 2018 to 2020



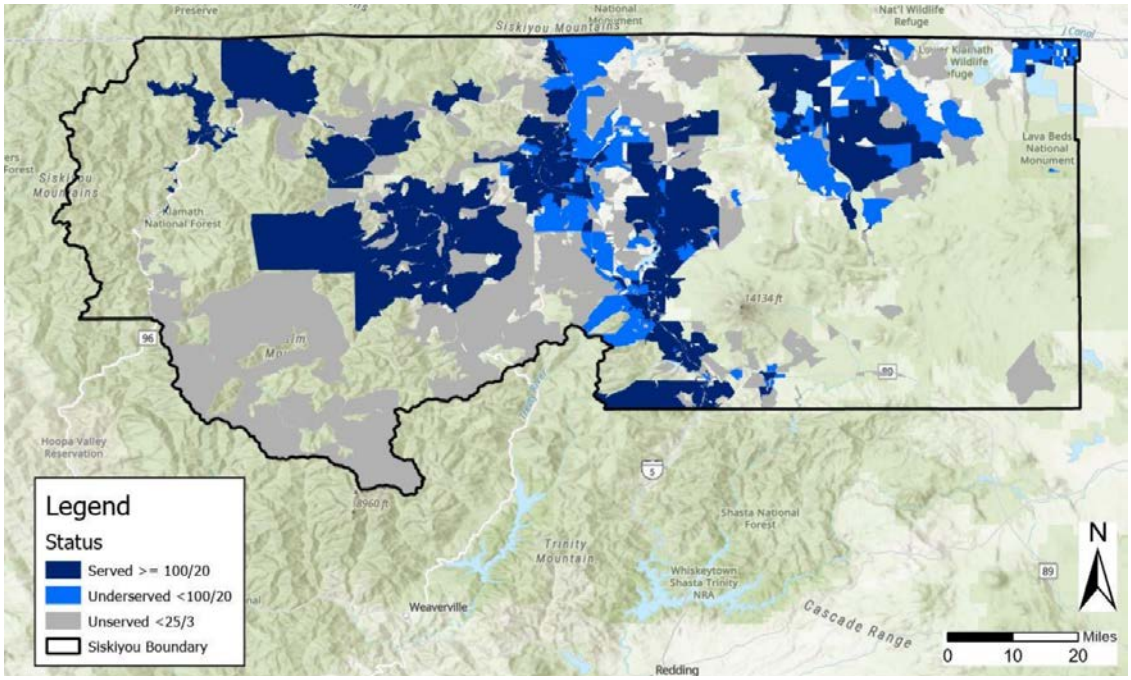
(Data and graph adapted from Maternity Care in California 2018–2020, Arkyan, CC BY-SA 3.0, via Wikimedia Commons)

Broadband Coverage in Siskiyou County

Broadband service, as defined by the Federal Communications Commission (FCC), is internet access with speeds of at least 25 megabits per second (Mbps) for downloads and 3 Mbps for uploads (25/3 Mbps). Download speed determines how quickly data can be received from the internet, such as streaming videos or browsing websites, while upload speed measures how fast data can be sent online, such as emailing files or sharing photos[6].

The U.S. Treasury recommends that a household of five working and learning from home needs at least 100 Mbps download speeds to meet their internet demands. The FCC notes that a single telecommuter or student can easily exceed the capacity of a 25/3 Mbps broadband connection. Currently, 16% of Siskiyou County households have no internet access at all. Among the county's 22,929 homes, 6,649 (19.4%) lack service at speeds of 25/3 Mbps or higher, and an additional 2,538 (11.1%) can only access speeds up to 25/3 Mbps but not 100/20 Mbps (Figure 3).

Figure 3 - Broadband Coverage of Siskiyou County



(Data and graph adapted from Siskiyou County Broadband Planning And Feasibility Study 2023)

6. https://bosagenda.co.siskiyou.ca.us/460812/460821/462415/462416/462418/3462418.pdf

Community Conversations Data

Community conversations were conducted via five focus groups with Siskiyou County community members associated with First Siskiyou. A 45 question survey was given to mothers across Siskiyou County to assess their experiences accessing medical care before, during, and after pregnancy. The survey also assessed any broader community health issues, as well as broadband coverage and feelings toward telemedicine. The following data was drawn from the surveys and focus group discussion.

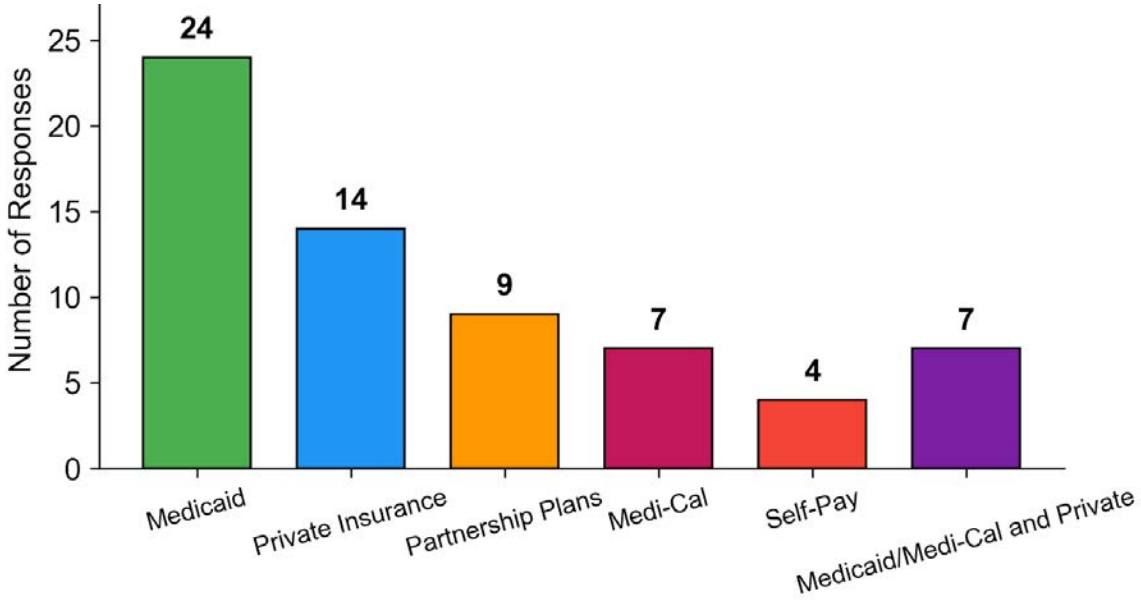
Survey Demographics

A total of 64 mothers completed the survey. The median household income among respondents was $35,000, with a range from $0 to $200,000. The median age was 36, with respondents ranging from 16 to 64 years old. Of the respondents, 20 identified as Mexican, Hispanic, Latina, or Latino; 6 as Native American or Native; 28 as White; and the remaining identified as Brazilian (1), Black and White (1), Asian and Native (1), Asian and Armenian (1), Armenian (1), Multi (1), Mexican and White (1), and Native American and White (1).

Approximately 5% of respondents held a graduate degree, 44% of had some college education, 24% held a high school diploma or GED, 13% had a bachelor's degree, 10% had less than a high school education. The number of pregnancies reported ranged from 1 to 8, with a median of 3, and the number of births ranged from 1 to 7, with a median of 2. During pregnancy, most respondents reported having Medicaid (24), followed by private insurance (14), Partnership plans (9), Medi-Cal (7), self-pay (4), or a combination of Medicaid/Medi-Cal with private insurance (7) (Figure 4).

Of the respondents, 93.7% received prenatal care, while only 66% reported receiving any postpartum care. Out of 63 responses, 21 (33.3%) reported having a C-section, which closely matches the current U.S. average of about 32%. 22 (34.9%) respondents reported experiencing pregnancy complications, including preeclampsia, high blood pressure, breech presentation, emergency C-sections, hyperemesis gravidarum, gestational diabetes, and other issues. 16 respondents (25.4%) reported experiencing postpartum complications, such as depression, anxiety, tearing, bleeding, prolapse, and hormonal issues.

Figure 4 - Insurance Type Distribution



Broadband Coverage (Survey Results)

Most respondents rated their broadband coverage as Good (26) or Fair (20), with Excellent (15) also common; 6 reported Poor (Figure 4).

When asked to rate the hypothetical effectiveness of connecting with a provider in another area via video visit on a scale from 0 (ineffective) to 10 (very effective), the average score was 6.7, indicating generally positive expectations.

Most respondents (38) feel their data plan does not limit usage, while 14 are neutral, 8 feel limited, and 6 did not answer (Figure 5).

Figure 5 - Broadband Coverage Ratings

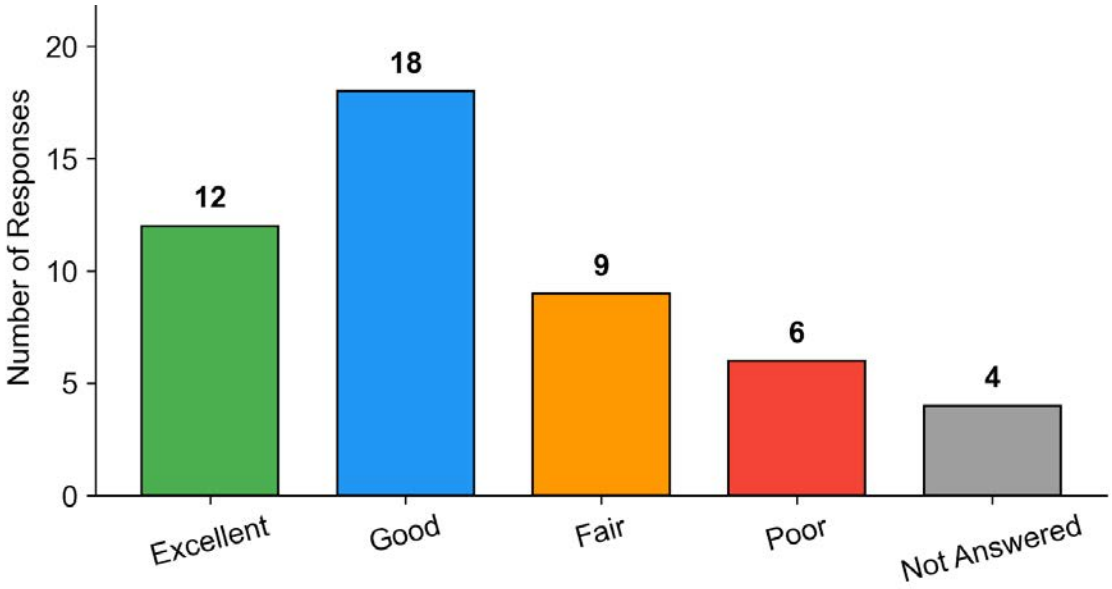
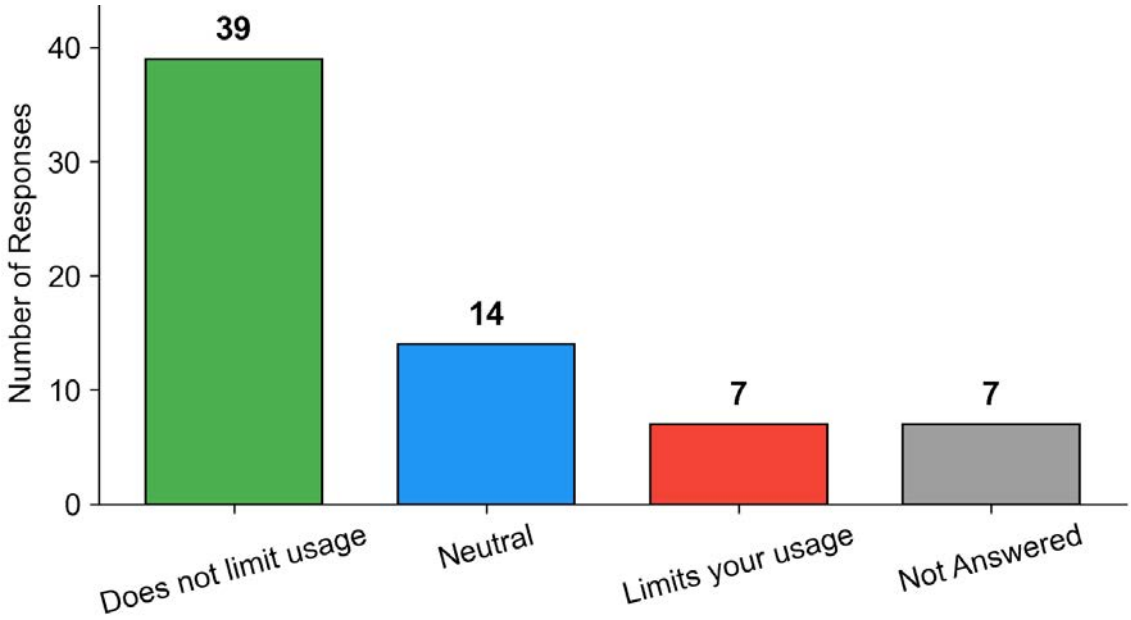


Figure 6 - Do you feel your data plan limits your usage?



The majority of respondents (36 out of 64) traveled less than 1 hour for their pregnancy-related healthcare, while 17 traveled about 1 hour, 2 traveled 2 hours, and 3 traveled more than 2 hours; 6 did not answer.

Community Health Concerns

Survey respondents identified a range of community health issues, with the most common concerns being limited access to healthcare providers and specialists, particularly for OB/GYN, dental, and mental health services. Frequent provider turnover and long wait times were also cited. Many noted that some doctors do not accept Medi-Cal/Medicaid, and transportation barriers make it difficult to attend appointments or access care. Mental health challenges, substance abuse, and addiction were frequently mentioned, along with chronic health conditions such as diabetes, high blood pressure, and obesity. Additional issues included homelessness, poverty, lack of postpartum and perinatal care options, and the spread of illness, especially in schools. Respondents also highlighted the need for more community resources, including support for special needs, education, income opportunities, and access to fresh produce.

Challenges in Accessing Care

Respondents reported a variety of challenges in accessing the care they needed. The most common issues included a shortage of available appointments, not enough doctors or specialists in the area, and long wait times for referrals. Many mentioned the need to travel long distances—sometimes out of town or even out of state—to see specialists, which was further complicated by transportation difficulties and the cost of travel. Insurance barriers were also frequently cited, including high costs, difficulty qualifying for coverage, and providers not accepting certain insurance plans. Additional challenges included language barriers, lack of information about available resources, discrimination, and feeling dismissed or not listened to by healthcare professionals. Some respondents also struggled with finding childcare during appointments or securing care tailored to their or their children's specific needs. While a few noted they had no trouble accessing care, the majority highlighted significant obstacles related to provider availability, affordability, transportation, and support services. The mean rating for ease of accessing healthcare in Siskiyou was approximately 5.8 on a scale from 1 (very easy) to 10 (very difficult).

Focus Group Recommendations for Improving Access

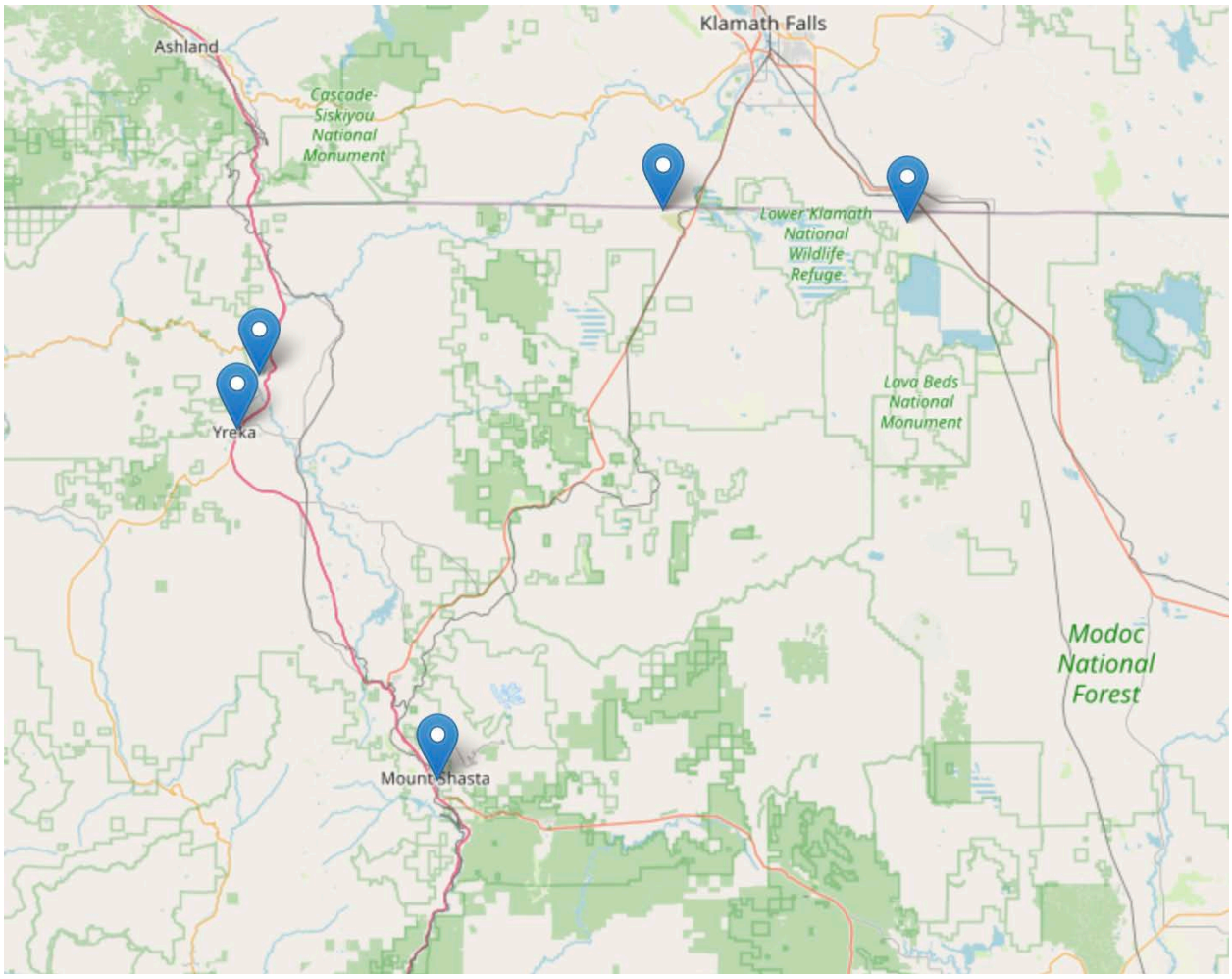
Respondents suggested several ways to make accessing healthcare easier in the future. The most common recommendations included having more doctors and specialists available locally, especially providers who are stable and do not frequently change. Many emphasized the need for affordable insurance options and higher wages to make care more accessible. Improved transportation and childcare options were also frequently mentioned. Some respondents highlighted the value of more female providers, doulas, and holistic or naturopathic

practitioners who accept insurance. Others suggested expanding telehealth and online visit options, increasing the number of clinics and support resources, and creating a more robust system for connecting with medical professionals. Overall, the responses reflect a desire for greater provider availability, affordability, stability, and supportive services to help meet the healthcare needs of the community.

Siskiyou Community Healthcare & Family Support: Focus Group Summary

Five focus groups, made up mostly of mothers (n=65), were conducted in Yreka, Mt. Shasta, Tulelake, Doris, and the Quartz Valley Indian Reservation in Siskiyou County (Figure 6). Participants discussed their experiences with medical care, pregnancy, and the challenges of living in the county.

Figure 7 - Focus Group Locations



Key Challenges Identified

1. Access to Healthcare:

Many participants reported long wait times for appointments, difficulty getting timely care, and frequent provider turnover. Significant travel distances—often over an hour and sometimes in hazardous weather—are required for both routine and specialty care. This is especially challenging for those without reliable transportation or during winter months. Frequent changes in doctors and staff make it hard to build trust and continuity, leading to repeated explanations of medical history and a lack of personalized care.

2. Quality of Care and Patient Experience:

Many felt that providers did not listen to their concerns, especially during pregnancy and postpartum. Some described being rushed through appointments or having their symptoms minimized. Experiences of being judged based on age, income, or past substance use were common. Teen parents and those with public insurance felt particularly stigmatized. Patients often lacked advocates to help them navigate the system, ask the right questions, or ensure their needs were met—especially first-time mothers and those without family support.

3. Postpartum and Pediatric Support:

After birth, follow-up is minimal—often just a single six-week checkup. There is a lack of ongoing support for breastfeeding, mental health, and parenting. Most pediatric care is provided by nurse practitioners or family doctors, with few dedicated pediatricians and long waits for appointments. Access to behavioral health and counseling for both children and adults is limited, with long waitlists and a lack of information about available resources.

4. Telehealth and Technology:

Poor internet and cell service in rural areas limit the effectiveness of telehealth, making virtual visits unreliable or impossible for many. While telehealth can be convenient, it is often seen as impersonal and insufficient for certain needs, especially when physical exams or emotional support are required.

5. Resource Awareness and Navigation:

Many families are unaware of available programs (such as public health home visits, WIC, and mental health services) due to poor communication from clinics and schools. Participants expressed a strong desire for a "resource navigator" or advocate—someone who can connect families to services, explain options, and help with paperwork.

6. Community and Social Support:

Rural living and lack of community programs contribute to feelings of isolation, especially for new parents and those without extended family nearby. There is strong interest in more parent groups, community events, and opportunities for families to connect.

Conclusion and Next Steps

Mothers and families in Siskiyou County face a range of interconnected barriers to healthcare, including geographic isolation, a shortage of local providers and specialists, long wait times, and frequent provider turnover, which often require traveling significant distances for care. These challenges are compounded by unreliable transportation, high costs, limited broadband infrastructure, and insurance barriers. Many respondents also reported feeling dismissed or stigmatized by healthcare professionals, especially those with public insurance or from marginalized backgrounds. Postpartum and pediatric support are minimal, mental and behavioral health resources are scarce, and there is a widespread lack of awareness about available community programs and services. The rural setting further contributes to social isolation and limited opportunities for families to connect or find support.

Looking ahead, meaningful progress will require a multi-faceted approach. Expanding the local healthcare workforce, improving provider retention, and increasing the availability of specialists

are critical steps. Addressing transportation barriers, enhancing broadband infrastructure, and making telehealth more accessible and reliable will also be essential. Equally important is the development of robust support systems—including resource navigators, expanded postpartum care, mental health services, and community-building initiatives—to ensure that families have the information, advocacy, and connections they need to thrive. We hope to look at other rural communities in a similar way to explore whether Siskiyou's challenges reflect a broader rural health trend or are unique to the area.

Ultimately, the experiences and recommendations shared by Siskiyou County mothers underscore the urgent need for targeted investments and collaborative solutions tailored to the realities of rural life. By prioritizing access, affordability, continuity of care, and community support, Siskiyou County can move toward a future where all families have the opportunity to achieve optimal health and well-being before, during, and after pregnancy.

Technology can close gaps in access by addressing structural barriers like distance, shortages of providers, and limited specialty services. Through established and emerging technological innovations, it is possible to reduce delays in prenatal visits, improve monitoring of high-risk pregnancies, and continuity of care for postpartum concerns. Four current options worth considering are:

- Telehealth
- Remote monitoring devices
- Mobile health apps
- AI-driven chatbots and curated LLM tools.

Expanding broadband and cellular access is critical to ensure these tools work in all areas. Trust between service providers and recipients is essential, too. Hybrid models can offer local, culturally supported care and expertise in partnership with virtual specialists. Future phases of the PHET Initiative will explore this nexus of technology and trust and local and virtual care.

AI-based language and data analysis tools were utilized to support the synthesis and presentation of findings in this report. AI Audio-to-text applications were used to help transcribe focus-group discussions.

We are grateful to our Perinatal Health and Technology Initiative Phase II Advisors:

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UC Davis student

The Parents of Siskiyou County

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