1. **What are the main health care-related factors that influence patient outcomes in rural and/or urban underserved areas? Are there additional, systems or factors outside of the health care industry that influence health outcomes within these communities?**

Access to high quality health care is important. However, patients' health is often compromised long before they arrive to a clinic. Patients are treated when they get ill, but understanding what is making them sick is equally important to their care. For this reason, we must put more emphasis and effort into understanding how the social determinates of health (SDOH) impact health. Do our communities have **jobs and safe neighborhoods**, **affordable housing, access to transportation, opportunities for higher education, access to high quality food?**

Poverty can limit access to healthy food, safe neighborhoods, and good schools. Most prominently, poverty affects **housing**. Although individuals can lose reliable housing for a number of reasons – trauma, violence, mental illness, addiction, or another chronic health issue – **poverty** remains a significant factor in driving **homelessness. "**Access to safe, quality, affordable housing - and the supports necessary to maintain that housing - constitute one of the most basic and powerful social determinants of health." It is almost impossible to obtain and sustain good health without reliable housing. Research and experience teach us that **poverty** is both **a "cause and a consequence" of** poor health. Poverty increases the chances of poor health. Poor health, in turn, traps people in poverty.

Some 50 million people living in the U.S. speak **languages other than English** in their homes, and 22 million speak only limited English. For many, access to health care is limited by their inability to communicate their medical needs.

Vibrant communities encourage a stable work force. When communities struggle, economically, **physicians may choose to leave employment after satisfying loans**; this creates a lack of trust in the health care system and a disruption in patient care.

Social networks, whether formal (such as a church or social club) or informal (meeting with friends) provide a **sense of belonging, security, and community** and help to reduce the psychological and physiological consequences of stress. Patients who have better health support in their daily lives seem to be less likely to fall ill and require expensive medical interventions.

2. **What successful models show a demonstrable, positive impact on health outcomes within rural or underserved communities, for example initiatives that address: a) social determinants of health (particularly transportation, housing instability, food insecurity); b) multiple chronic conditions; c) broadband access; or d) the use of telehealth/telemedicine/telemonitoring?**

In tackling the social determinants of health, partnering with community organizations that are deeply committed to addressing these issues – organizations such as the local food bank, local homeless shelters, community colleges and local school systems, service organizations, faith based organization, and our transportation and housing government agencies have had a positive impact on health outcomes.

Within the clinic setting, an evaluation tool called the Protocol for Responding to and Assessing Patients' Assets, Risks, and Experiences (PRAPARE) is used by providers to gather data that will allow them to assess patients' social needs, so they can take measures to address those needs.

One challenge for providers is understanding how the social or environmental determinants affect a patient's ability to adhere to a care plan. A patient with diabetes, for example, who lives in substandard housing, recently lost their job, or lives in a food desert will face greater challenges in managing their illness than a patient who is not facing these obstacles. Often, however, it might not be readily apparent to the provider that a patient living in substandard housing may have trouble keeping their insulin refrigerated due to poor wiring and spotty electricity or that a patient living in a food desert might also lack reliable transportation options to get to a grocery store with nutritious food. Using the **PRAPARE tool**, and utilizing **Community Health Workers and Integrated Behavioral Health Staff** to assist the provider in understanding the barriers and obstacles that exist for that patient has helped in bridging those gaps in understanding.

Mobile medical clinics have been a successful model to reach the most vulnerable and isolated rural residents in southern Arizona.

3. **What should the Committee consider with respect to patient volume adequacy in rural areas?**

Efforts need to continue to award health centers, not for the number of patients treated, but for the **value and the improved health care outcomes** realized as a result of the care received. Value Based payment models **focus on quality** and/or the cost of the healthcare delivery. Moving away from the traditional fee-for-service models which promoted quantity of service and move toward value-based care aims, which demonstrate improvement is necessary.

4. **What lessons can we glean from service line reduction or elimination in hospitals that serve underserved communities where —**
   a. patients have the option to transition to alternative care sites, including community health centers and federally qualified health centers?
   b. there is broader investment in primary care or public health?
   c. the cause is related to a lack of flexibility in health care delivery or payment?

Historically, service line reduction or elimination in hospitals has **undermined communities**. Hospitals are often considered vital to local economies as they bring outside dollars into the communities via third-party payors, provide jobs, stimulate local purchasing, and help attract industry and retirees. As such, the closure of a hospital can have detrimental effects on a rural community.

5. **If states or health systems have formed regional networks of care, leveraging for example systems of transport or the use of telehealth/telemedicine, what states or entities are these, what approaches did they use to form these networks, what challenges did they overcome, and what challenges persist?**

Approximately ten **Arizona Federally Qualified Health Centers** (FQHCs) are seeking to join together under the organization and protection of a Limited Liability Company (LLC) and enter in group contracts together with insurers. The intention is to:

- maximize potential revenue for our organizations
- maintain independence while leveraging our combined size and expertise

Mental Health Systems employing regional networks of care have leveraged **systems of transport and the use of telehealth/telemedicine** in Arizona. These systems are often inadequately funded. Transport is offered and then reduced or eliminated leaving participants at a loss to attend to their telehealth/ telemed and other counseling services. Rural areas serve communities with limited or no public transportation. Challenges continue due to inadequate infrastructure and funding.

6. **What successful models show a demonstrable, positive impact on addressing workforce shortages in rural and underserved areas? What makes these models successful?**

The recruitment of qualified primary providers in rural border communities is difficult at best. The **National Health Service Corps Loan Repayment/Scholars Program**, focuses on providing an environment for the 'ideal practice of medicine' and tapping into a provider's desire to serve people in need. Additionally, health centers can focus on careful recruitment of team players, and engaging with the professional interests of mission-driven providers. All of these efforts help in recruiting highly-qualified providers to serve patients in rural, underserved areas.

In addition to a competitive salary, **efforts to provide high quality benefits for employees** is important in attracting a qualified workforce. An example of this is that employees and their

dependents may receive no-cost health and dental insurance, no-cost life insurance, a company sponsored and supported investment program, and longevity/merit bonuses.

7. Access to providers that address oral, behavioral, and substance use needs in rural and underserved communities can be particularly limited. What approaches have communities or states taken to address such gaps in care delivery?

Sylvia Kelly, in 2018, wrote an article, "Three Ways to Better Address Social Determinants of Health" that I found to be both wise and relevant. She suggests the following ways for communities to better address the social and environment factors of health:

- **Step 1**: The first step is to stop looking at people as their disease or diagnosis. People are complex; they cannot be so easily summarized. Instead, we must take into account the whole person. This includes not only their condition but also their environment. Social determinants of health are not illnesses with tested treatments like cancer, diabetes, and asthma. Social determinants of health are an untold number of circumstances surrounding people. The circumstances and how they are faced will vary from person to person.
- **Step 2**: The second step is to start having community and statewide conversations about social determinants of health …
- **Step 3**: The third step is one we should all be working on. It's concentrating on the individuals, how to make their lives better, and doing that through collaboration and coordination; looking at individuals in a person-centered way, the whole person.

Partnerships with universities, community mental health centers, and mergers with larger organizations in metropolitan areas have allowed small rural communities to address service gaps in care. Additionally, **volunteers** through VISTA and AmeriCorps have provided short term skill support for our most rural communities. The **SNAP-ED (Supplemental Nutrition Education Program)** has proven to be an effective model for promoting healthy lifestyle changes and oral health support for rural communities.

8. The availability of post-acute care and long-term services and supports is limited across the nation, but can be particularly challenging in rural and underserved areas facing disproportionately large burdens of chronic and disabling conditions. What approaches have communities taken to address these gaps in care delivery and the associated challenges of social isolation?

Communities have independently selected to **apply for grants** to fund the research and the data needed to support the viability of post-acute care and long-term services in rural Arizona.

Collaborations include faith based transportation services, County Government support for non-profit agencies, partnerships with hospitals and clinics providing food security through

distribution of fruits and vegetables. A Healthy Community Committee provides food boxes to patients upon hospital discharge. Other Healthy Community Committees support volunteer agencies that provide transportation to medical appointments and decrease challenges associated with social isolation by encouraging nutrition and exercise programs at the local senior centers and libraries.

9. There are known, longstanding issues with the availability and integrity of data related to rural and urban community health. What data definitions or data elements are needed to help researchers better identify the causes of health disparities in rural and underserved areas, but are unavailable or lack uniformity?

The health workforce is a major determinant of the access to care and services. Provider supply may not be keeping up with the burgeoning demand for services due to many factors including the aging of the population, increasing coverage through Medicaid and the Marketplace, and rapidly changing economic, technologic, and demographic factors. **Timely and reliable health workforce data** can inform stakeholders, policymakers, and interventions at many levels - federal and state, health professions training institutions, students in training, professional organizations, and at hospitals, clinics, and health systems.

Health workforce data elements collected by state licensing boards are often incomplete (e.g., do not include clinical full-time equivalents (FTE's) or location of practice), can be outdated, and therefore of limited value. State health professional licensing boards are funded and charged to assure professional competency, and not necessarily by statute, funding or inclination able to gather, analyze, and report health workforce information.

Health professional shortage areas designations enhance providers' eligibility to qualify for student loan repayment. Having a **minimum dataset for all licensing boards** will provide a more accurate reflection of truly practicing healthcare professionals.

It should be noted, while Health Professional Shortage Areas Designations include federal prison medical staff, and therefore these staff are able to utilize loan repayment programs through this eligibility category, **County Jails are not included**, nor do providers and health professional staff working within County Jail operations qualify for HRSA sponsored loan repayment programs.

10. Are there two or three institutional, policy, or programmatic efforts needed to further strengthen patient safety and care quality in health systems that provide care to rural and underserved populations?

Numerous studies have confirmed that higher levels of educational attainment can correlate with better health. Patients who have undergone more education are able to **advocate for themselves** in the healthcare system and **better engage with their providers.** Patients with more education are also more likely to be **employed** and have a **job that provides health**

benefits such as health insurance, paid leave, and retirement. Conversely, people with less education are more likely to work in high-risk occupations with few benefits. Additionally, income has a major effect on health and people with **more education tend to earn more money**. (In 2012, the median wage for college graduates was more than twice that of high school dropouts and more than one and a half times higher than that of high school graduates.) Finally, families with higher incomes can **more easily purchase healthy foods, have time to exercise regularly, and pay for health services and transportation.** Conversely, the job insecurity, low wages, and lack of assets associated with less education can make individuals and families more vulnerable during hard times—which can lead to poor nutrition, unstable housing, and unmet medical needs.

Poverty can limit access to healthy food, safe neighborhoods, and good schools. Most prominently, poverty affects **housing.** Although individuals can lose reliable housing for a number of reasons – trauma, violence, mental illness, addiction, or another chronic health issue – **poverty remains a significant factor in driving homelessness**. "Access to safe, quality, affordable housing - and the supports necessary to maintain that housing - constitute one of the most basic and powerful social determinants of health." **It is almost impossible to obtain and sustain good health without reliable housing.**