Advancing Wellbeing in Northern Arizona:
A Regional Health Equity Assessment

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This report was prepared by the Northern Arizona University

Center for Health Equity Research

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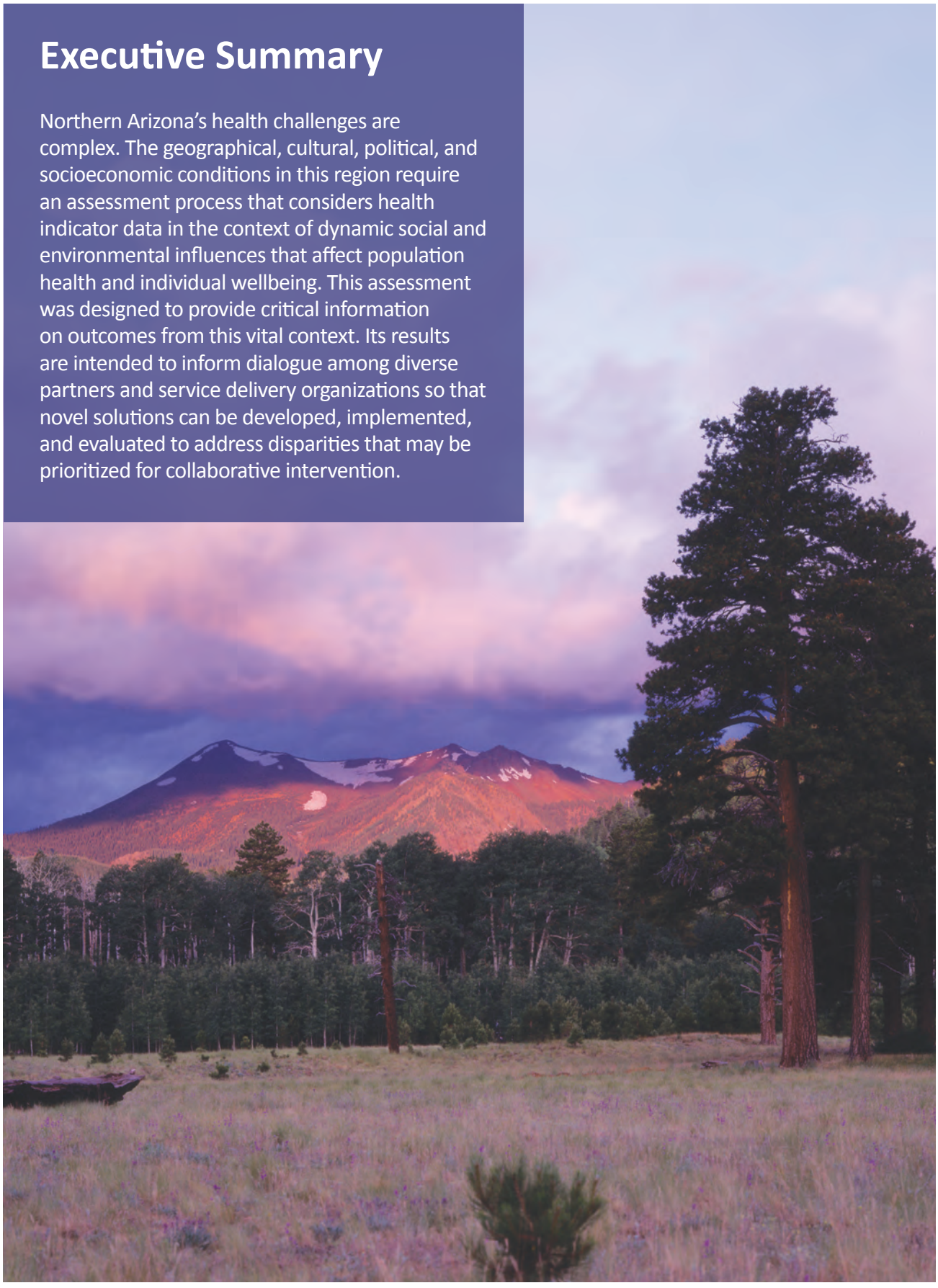
NORTHERN ARIZONA UNIVERSITY

Executive Summary

Northern Arizona's health challenges are complex. The geographical, cultural, political, and socioeconomic conditions in this region require an assessment process that considers health indicator data in the context of dynamic social and environmental influences that affect population health and individual wellbeing. This assessment was designed to provide critical information on outcomes from this vital context. Its results are intended to inform dialogue among diverse partners and service delivery organizations so that novel solutions can be developed, implemented, and evaluated to address disparities that may be prioritized for collaborative intervention.



Why Health Equity?

Wellbeing and good health are not equitably distributed. As defined by the National Academies of Sciences, Engineering, and Medicine, health equity is:

> **"the state in which everyone has the chance to attain their full health potential and no one is disadvantaged from achieving this potential because of social position or any other defined circumstance".**[1]

Targeted solutions designed to address health equity needs and challenges in northern Arizona can improve health status indicators, reduce costs in medical care, and promote vibrant community development with benefits across the social and economic spectrum.

Scope of Study

The NARBHA Institute, in partnership with the Northern Arizona Healthcare Foundation, commissioned the NAU Center for Health Equity Research (CHER) to conduct a regional health equity needs assessment to inform the goal of advancing wellbeing in northern Arizona. This report summarizes findings from CHER's comprehensive study of health disparities across the six-county region of northern Arizona encompassed by Apache, Coconino, Gila, Mohave, Navajo, and Yavapai Counties. This extensive area, which covers 66,223 square miles, is ethnically diverse and largely rural, with a mix of tribal, public and privately owned lands. Twelve of the 22 federally recognized American Indian tribes in Arizona live in this region.

Methods

The comprehensive nature of the analysis is unique; the report authors are not aware of any previous studies occurring in the region with a similar breadth and scope. The project team collected and analyzed diverse quantitative and qualitative data in an iterative process, which allowed team members to regularly discuss ongoing findings and identify areas for further exploration.

Qualitative data collection occurred through:

- Detailed review and synthesis of 57 existing reports from the region;
- Engagement in 18 stakeholder meetings, 13 conferences and community forums, 62 interviews with community leaders and service providers, and seven focus groups with 49 participants.

The quantitative team completed:

- Primary data analysis of the Arizona Department of Health Services Hospital Discharge, Centers for Disease Control and Prevention (CDC WONDER), and the Behavioral Risk Factor Surveillance System (BRFSS) datasets;
- Secondary data analysis of county-level information in diverse sectors (e.g. health, employment, poverty, food security, education, crime, youth behavior and neighborhood environment).

Framework for Analysis

Social factors determine health outcomes more often than medical care. The assessment was guided by the *Social Determinants of Health (SDOH)*[2] framework to allow for exploration of the complex intersections of social, cultural, economic, and systems level influences on health and wellbeing. Information was gathered in 5 categories: access to healthcare, economic stability, education, neighborhood and built environment, and social and cultural contexts. Such a holistic approach is fundamental to ongoing efforts to identify system-level changes that offer the potential to reduce health inequity in the region.[1]

Result Highlights

Among the many results identified in the assessment, noteworthy findings include:

• Higher Fatality Rates

When comparing Arizona and United States age-adjusted causes of death, the six-county region has significantly higher fatality rates from heart disease, cancer, chronic lower respiratory disease, accidents, suicide, chronic liver disease and assault/homicide. These leading causes of death varied by county and community, with the top three causes of death overall for the region being diseases of the heart, cancer and unintentional injuries.

• Increased Rates of Injury and Suicide

Among the leading causes of death, accidents and suicide were of particular note for northern Arizona given their comparatively high rates. Suicide rates were highest among non-Hispanic whites, while fatalities from unintentional injuries were highest among American Indian populations. Suicide and self-inflicted injury rates were also highest among people ages 13-28 across the region.

• Burden of Chronic Disease

Chronic health conditions, especially diabetes, heart disease, obesity, respiratory conditions and dental health were highlighted qualitatively as important health priorities. Across the region, the leading causes of death largely aligned with the health priorities identified by participants in the qualitative analysis, including diseases of the heart, diabetes and respiratory conditions.

• Impact of Substance Use and Poor Behavioral Health

Study participants identified substance use and behavioral health conditions as critical priorities because of the influence these issues have on accidents, suicide, chronic illnesses and violent crime, as well as their negative effects on educational attainment, economic self-sufficiency and social engagement.

• Population-Specific Disparity Patterns

Participants emphasized the key role that population level analysis will play in ongoing improvement efforts. Specific populations identified for additional "deeper dive" analysis and potential targeted interventions included American Indians (including elders), Hispanics, Veterans, aging adults, children, rural populations, low-income populations, members of the LGBTQ community and individuals with disabilities.

• Opportunity for Interdisciplinary Partnerships

While appreciative of the existing services that bring diverse individual and community benefits, many participants stressed the need for more cross-sector, inter-agency collaboration in data collection and analysis, strategic planning and resource sharing, and program implementation.

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SDOH Findings

Participants identified a range of social, environmental and system issues affecting health equity and wellbeing in the northern Arizona region. This information is summarized within the SDOH five-dimensional framework as follows.

ACCESS TO HEALTHCARE

Access to healthcare was the most discussed barrier to achieving good health.

- There is a shortage of providers and services across primary care, behavioral health and dental care. Specialty provider visits, especially for children, require residents to travel long distances, often traveling outside the region.
- Although many people report having some type of health insurance coverage, residents regularly experience difficulties accessing care because of an insufficient number of providers, the cost of services or a lack of system navigation competency.
- Recruitment and retention of rural-based providers has proven challenging and there are long wait times reported for many facilities.
- There is limited capacity for receiving behavioral health services, partially because of a lack of providers, but also, due to eligibility requirements and inadequate service options.
- There is a common perception that people most likely to receive needed behavioral health services are those who are AHCCCS-eligible, have a serious mental illness or are in crisis. Resident behavioral health needs that are less severe are often unmet.
- Because they frequently interface with community members with mental health problems, law enforcement officials need more training to recognize mental health conditions and navigate the behavioral health system.
- Participants highlighted inadequate home health care for older adults and people with disabilities, and a shortage of palliative care for people with serious conditions.
- Access to dental services for preventive care is reported as limited across the region. Poor dental coverage with many insurance plans also creates major barriers.

ECONOMIC STABILITY

A significant percentage of the population in the northern Arizona region live in poverty.

- All six counties have a higher percentage of children living in poverty than national rates and five out of six counties experience overall higher poverty rates compared with the national average.
- Lack of employment opportunities, in particular among American Indian communities, contributes to high poverty rates.
- High cost of living and unavailability/unaffordability of housing options impact residents' ability to procure healthy foods, health care services and other basic resources.
- Limited local access to healthy food options also contributes to high food insecurity. Expanded access to nutritious foods in schools is vital.
- County-specific associations were identified between lower household income and increased mentally unhealthy days, lower self-rated health status, increased functional limitations and higher cardiovascular risk factors.

EDUCATION

Educational attainment significantly correlates with reports of health status.

- Associations were identified between lower education levels and higher mentally unhealthy days, increased cardiovascular morbidity and higher self-reported functional limitations.
- Variation across the region is seen in high school graduation rates, with Navajo, Gila, and Apache counties having the lowest rates.
- American Indian youth have the lowest high school graduation rates in the region, followed by Hispanic students.
- There is a need for improved information-sharing and understanding on the benefits of preventive health care, strategies for managing health (especially for those with chronic physical or behavioral health conditions), and health system navigation.

SOCIAL & CULTURAL CONTEXT

Social and cultural factors have both positive and negative influences on health equity in the region.

Strengths

- There are many close-knit communities in the region whose residents support one another despite social and environmental challenges.
- Local and regional organizations serving the area have an understanding of the SDOH and often use this framework for holistic approaches to support health and well-being.
- American Indian populations especially demonstrate resiliency and strong communities supported by cultural revitalization efforts.

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Challenges

- Limited social activities and productive engagement opportunities are felt to result in higher rates of substance use and other risky behaviors in youth.
- The stigma associated with seeking mental health services is felt to be palpable.
- Limited transportation, loss of mobility, and insufficient community and social supports result in social isolation and poor access to resources like food and medication for aging adults and individuals with disabilities.
- Some members of the American Indian communities identified historical trauma and loss of culture as contributing to health disparities.
- There is some distrust reported with health systems, especially among the Hispanic population.
- Representatives from both the Hispanic and American Indian communities identified incongruences between traditional health beliefs and western medicine practices.

NEIGHBORHOOD & BUILT ENVIRONMENT

Important environmental factors were identified, including:

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- Transportation options are often limited, and, if available, are frequently not affordable.
- Access to parks, sidewalks, and other recreational infrastructure is varied, with residents of Apache, Mohave and Navajo counties having less access as compared to the state average.
- Although most counties in northern Arizona rated better than the state average in the quantitative measurements of violent crime, residents of specific neighborhoods in the region reported high rates of crime and violence, partly attributed to substance use.

Assessment Limitations

Gaps in data available to inform this assessment included:

- Hospital discharge data for IHS and Tribal 638 facilities. These facilities are not required to report such information to the Arizona Department of Health Services.
- Data on outpatient healthcare and mental health-related encounters. Such data sources are not easily available for integrated analysis.
- Data sources specific to the health status of members of the LGBTQ community.
- Linked data sets, to help identify patterns of individual utilization/needs over time and further population-specific needs for priority populations otherwise identified by the assessment.

The intent of this assessment was to gather and summarize quantitative and qualitative data related to health equity across a wide, six-county geography. Consequently, information regarding innovative, best practice programs that are underway across the region was not systematically gathered. In addition, the assessment was not designed to specify the priority in which interventions might be collaboratively developed and implemented to address issues identified in the assessment. Such prioritization should occur as part of future activities within and among organizations serving this region.

Next Steps

Review of this report's findings in diverse community and organizational settings may serve to:

1. Validate its major themes and findings;
2. Formulate plans to address gaps in data and refine topics for further inquiry;
3. Build collaborative dialogue that will facilitate expanded regional information sharing and interdisciplinary program planning.

Further programmatic planning will benefit from the following considerations:

- **Improvements in health equity and wellbeing depend on inter-sector and intra-region collaboration.** This collaboration can be facilitated by building capacity to more easily communicate, collect and share data and information, and align goals. Fifty-seven existing health reports and community needs assessments were reviewed as part of this regional report. Opportunities exist to combine resources for future assessments. The NAU Center for Health Equity Research would be pleased to participate in planning related to such efforts.
- **Solutions for the multi-factorial challenges identified in this report necessitate interdisciplinary approaches to service delivery; many have either not been previously attempted or have only been demonstrated locally in select communities.** New sources of data – and the ability to establish links among data sets – will be fundamental to future population health collaborations and their evaluations. Because this comprehensive health equity needs assessment included the formal acquisition of data from regional, statewide and national data bases, detailed analysis is now possible of population health conditions that are unique to the region, along with comparative studies of issues that are common across the region, state and nation.
- There was widespread community uncertainty about service availability in different parts of northern Arizona. **Stakeholders should work to create and maintain a comprehensive and up-to-date list of available resources across the region.** Resource information should be convenient and readily available, as well as be culturally, linguistically, intellectually, and age appropriate.

We hope that this report will establish a solid foundation for continued collaborative efforts to advance wellbeing in northern Arizona.

[1] Communities in Action: Pathways to Health Equity. Report by the *National Academies of Sciences, Engineering, and Medicine*, January 2017.

[2] CDC. Healthy People 2020. http://www.cdc.gov/nchs/healthy_people/hp2020.htm. Accessed 9/29/16.