

**BIOGRAPHICAL SKETCH**

Provide the following information for the Senior/key personnel and other significant contributors.  
Follow this format for each person. **DO NOT EXCEED FIVE PAGES.**

NAME: Bryna Koch

eRA COMMONS USER NAME (credential, e.g., agency login):

POSITION TITLE: Assistant Research Professor

EDUCATION/TRAINING (*Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.*)

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
Santa Clara University	BS	05/2002	Sociology & Spanish
University of Arizona, Tucson, AZ	MPH	07/2007	Public Health Policy and Management
University of Arizona, Tucson, AZ	DRPH	05/2022	Public Health Policy and Management

**A. Personal Statement**

I am an assistant research professor at the University of Arizona, Mel and Enid Zuckerman College of Public Health. I have 17 years of experience in public health policy analysis, research, and evaluation at the local, state, and national level. I have developed, organized, and implemented evaluation and analytical projects to meet federal and state funding requirements, assess program efficacy, and promote program improvement. This includes projects funded by federal agencies and departments; the Department of Education, the Department of Agriculture, the Administration for Children and Families, the Substance Abuse and Mental Health Services Administration, and the Federal Office of Rural Health Policy as well as state agencies; the Arizona Governor's Office of Youth, Faith, and Family and the Arizona Department of Health Services.

My work at the Arizona Center for Rural Health (AzCRH) focuses on supporting public health and health care organizations so they can meet their goals of improving health in rural and underserved Arizona. My projects at the AzCRH focus on analysis of rural public health and healthcare systems, including health workforce analysis to inform public health and health care organizations. I oversee the Arizona Health Workforce Data System team at the AzCRH. As part of this health workforce data project, I manage a team that compiles, analyzes, reports, and shares health workforce data with non-profit organizations, state agencies, healthcare organizations, and other researchers. We use public record secondary data about the health system, population health, and the health workforce to create policy briefs, interactive reports, and ArcGIS maps to inform communities, public health and health care leaders, policy makers, and others. We provide technical assistance regarding health workforce data to collaborators and researchers as they write grant submissions and answer research questions. Our primary focus is on understanding geography as a key component of health care access and equity by better understanding the distribution and availability of the health workforce in rural compared to metro areas of Arizona.

I am or have been key personnel on multiple federal and state funded projects at the AzCRH. From 2022 to 2024 I was the principal investigator for the Arizona Health Improvement Plan (AzHIP) Intra-Agency Services Agreement (ISA) focused on addressing financial and other barriers for students in health workforce professions pathway programs. I support multiple programs at the AzCRH including the State Office of Rural Health (SORH) with assessments and other analytical projects. I have in-depth knowledge

of the health policy environment, rural health care system structure, relationships with key organizations across the state, and awareness of the uniqueness of rural communities in Arizona.

## **B. Positions, Scientific Appointments, and Honors**

2022 – Present	Assistant Research Professor, Arizona Center for Rural Health, Zuckerman College of Public Health, University of Arizona
2016-2022	Research Program Administrator, Arizona Center for Rural Health, Zuckerman College of Public Health, University of Arizona
2014-2016	Director of Program Evaluation and Student Assessment, University of Arizona College of Medicine – Tucson
2013-2014	Research Analyst, University of Arizona College of Medicine - Tucson
2011-2014	Evaluation Specialist, University of Arizona, Norton School of Family and Consumer Science
2007-2011	Evaluator, Pima Prevention Partnership

## **B. Contributions to Science**

My contributions are focused largely within the domain of applied public health policy. I have categorized my contributions in three areas 1) using data to inform policy and practice, 2) analysis of rural public health, healthcare system factors like workforce shortages, and 3) development of interactive maps and reports.

**1. Using data to inform policy and practice.** Policy makers, grant writers, public health leaders, healthcare administrators, and program planners require reliable data to inform their efforts. The lack of an integrated federal public health or healthcare workforce data system leaves significant workforce information gaps at the state and local level. In addition, state leaders and policymakers frequently seek out (and prefer) state and local specific data and analysis to inform their decision-making. With the Arizona Health Workforce Data project, we have, 1) provided support to inform two state level policies (HB 2197, SB 1096) to improve the collection of healthcare workforce data by establishing a Minimum Data Set (MDS) survey requirement for select health workforce licensing boards and 2) significantly increased the public availability of health workforce and health system analysis that is publicly available via interactive and static reports access via the AzCRH website. The foundation of this effort includes the development of the health workforce data warehouse using secondary data (including health workforce licensure data) that provides the basis for the Arizona Health Workforce Profile Report and other data products. Selected non-peer review publications related to these efforts are listed below.

- a. **Koch, B.**, Derksen, D. J., Garn, A., & Drake, C. (2024). Quantifying Arizona's Primary Care Shortage Using Health Professional Shortage Area (HPSA) Data. Arizona Center for Rural Health.
- b. **Koch, B.**, Derksen, D. J., Garn, A., & Drake, C. (2023). Quantifying Arizona's Mental Health Workforce Shortage Using Health Professional Shortage Area (HPSA) Data. Arizona Center for Rural Health.
- c. **Koch, B.**, Derksen, D. J., Garn, A., & Drake, C. (2023). Quantifying Arizona's Dental Health Workforce Shortage Using Health Professional Shortage Area (HPSA) Data. Arizona Center for Rural Health.
- d. **Koch, B.**, Derksen, D. J., Drake, C., & Coates, S. (2022). Arizona Health Workforce Profile: Physician Specialty. Arizona Center for Rural Health
- e. **Koch, B.**, Derksen, D. J., Drake, C., & Coates, S. (2022). Arizona Health Workforce Profile: Direct Care Workers. Arizona Center for Rural Health.

**2. Analysis of rural public health, healthcare system factors like workforce shortages.** My peer-reviewed and non-peer reviewed focus on understanding the public health and healthcare challenges in rural Arizona. Geography, particularly rural geography, is a critical and often neglected component of public health analysis. Due to low population numbers, rural populations at sub-state or sub-county level are often excluded from research and/or eventual statistical analyses. Selected publications related to these efforts are listed below.

#### *Peer Reviewed Publications*

- a. Brady, B., **Koch, B.** Gulick, D., Carter, H., & Derksen, D. (2023). Arizona Physician Relocation Patterns Differ by Rurality and Primary Care Status. *Family Medicine*. 2023 Jan;55(1):20-26. PMID: PMC10681337
- b. Brady, B., Gildersleeve, R., **Koch, B.**, Campos-Outcalt, D., & Derksen, D. (2021). Federally Qualified Health Centers Can Expand Rural Access to Buprenorphine for Opioid Use Disorder in Arizona. *Health Services Insights*, Aug 6: 14, 11786329211037502. PMID: PMC8365010

#### *Non-Peer Review Publications*

- c. Arora, M., Peters, J. S., Rooney, B. C., & **Koch, B.** (2023). Public Health System Capacity in Arizona: Learning from the COVID-19 Pandemic Response. Arizona Center for Rural Health.
- d. Clichee, D, Taj, EA, Horn J, **Koch, B.** & Murphy B. (2023) Integrating opioid prescribing guidelines into the electronic health record systems: An assessment of community health centers and critical access hospitals in Arizona. Arizona Center for Rural Health.

3. **Development of interactive maps and reports.** To support the sharing and dissemination of information and encourage data use, I have led efforts at the Arizona Center for Rural Health to expand our ArcGIS interactive mapping and interactive data reports using software like Tableau and Microsoft Power BI. Selected interactive maps and reports related to these efforts are listed below.

#### *Interactive Reports*

- a. **Koch, B.**, Drake, C., & Coates, S. Arizona Healthcare Employment, Projections, and Wage Report. (2024). The Arizona Center for Rural Health.
- b. **Koch, B.**, Drake, C., & Coates, S. The Arizona Health Workforce Profile Report. (2023). The Arizona Center for Rural Health.

#### *Interactive Maps*

- c. **Koch, B.**, Drake, C., & Coates, S. Arizona Rural and Safety Net Health Facilities 2023 [1:50]. (2023). The Arizona Center for Rural Health ArcGIS Hub.
- d. **Koch, B.**, Drake, C., Wightman, P. & Coates, S. Arizona COVID-19 Vaccine Sites Drive Time Map. (2022) [1:60]. The Arizona Center for Rural Health ArcGIS Hub.