

# Benefits of Developing Interdisciplinary Teams and Working with Rural Communities to Conduct Research with a Local Impact

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## Presenters

Rural Health and Communities Grand Challenge Team



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# Agenda



- I. Building interdisciplinary teams
- II. Community based participatory research
  - i. Rural community collaboration
  - ii. Research with a rural and local impact
- III. Activity
- IV. Examples of interdisciplinary research with rural community impact
  - i. Rural and urban stigma around mental illness
  - ii. Rural caregiving for older family members
  - iii. Home visits for rural seniors
  - iv. Rural and urban nurse retention

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## Building Interdisciplinary Teams



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## Why It Is Important: Grand Challenges

Expectations of universities to solve real world problems:

25 research universities have initiatives in place to solve societies  
**Grand Challenges**

*“To reach those goals and address the most urgent issues affecting our society, researchers from different disciplines must share knowledge, ask questions, and tear down academic silos”*

President of U T Austin Gregory Fenves on Bridging Barriers Initiative  
<https://www.insidehighered.com/views/2019/09/03/analysis-pros-and-cons-universities-grand-challenges-opinion>



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## Rural Health and Communities



### Goals:

- Increase external funding
- Work collaboratively with other GC teams
- Improve inter-professional approach to research
- Focus on needs of rural communities to:
  - Address social and health issues such as addiction (opioid/opiate, methamphetamine, alcohol), mental health, domestic violence and trauma including the needs of caretakers
  - Create positive impacts on individual and community health including workforce productivity
  - Increase access to applied research and evaluation
  - Disseminate evidence-based practice concepts to providers

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## Benefits of This Approach



- Helps the public understand what research institutions are doing
- Mobilizes a commitment to civic engagement
- Improves partnerships with government, industry, legislatures, and foundations
- Focuses the institutional research agenda
- Encourages faculty to reach outside the borders of the university/college/department
  - Engages faculty across academic units

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## Engagement and Implementation



- Engage Academic Deans and Chairs (with support of administration)
- Recruit multi-disciplinary faculty and staff to serve on team(s):
  - Include tenured, tenure-seeking, and clinical faculty
  - Include staff with marketing and research talents
  - Prepare a directory of research faculty and staff identifying skill sets
  - Focus on what is possible
  - Don't spend time engaging faculty who are hostile to the concept

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## Institutional Supports



- Offer seed money to develop research concept and proposal writing (require multi-disciplinary approach)
- Offer mentorship to junior (and some senior) faculty and staff
- Provide skill-based proposal writing skills
  - Offer supports to find funding streams
- Ensure impactful communications across campus and with identified partners
  - Provide introductions to stakeholders
- Provide travel funds
- Offer Post-Docs and access to GRAs

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## Ingredients in Development



- Host gatherings
- Reward faculty for high impact cross disciplinary research practice
- Ensure GC are part of the strategic plan with sustained support
- Meet with team
- Set goals and timelines
- Have fun

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## Community Based Participatory Research (CBPR)

- Collaboration between academic and community stakeholders to identify and build up on the priorities and strengths of the community to improve health and social equity
- It is an *approach*, not a specific set of methods
- Focused on the expertise (broadly defined) of people engaged within the context of interest
- Studies suggest that a CBPR approach results in better outcomes
- Emphasize equity and social justice



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## Principles of CBPR

- Participatory and collaborative
- Cooperative, joint process of engagement and contributions (not simply a partnership)
- Co-learning process
- Systems development and community capacity building: sustainability
- Is attentive to power imbalances and strives to correct them
- Culturally competent
- Balance between research and action



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## CBPR Benefits

- Problem-driven research leading to responsive designs
- Utilizes community expertise, context, and skills
- Acknowledges and prioritizes different forms of knowledge and lived experiences
- Inclusion of equity concerns often missing from traditional research
- Specifically oriented towards sustainable social change
- Power sharing, trust



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## Rural Community Based Participatory Research

Support for collaborative CBPR in rural communities:

- Datasets are small and often misrepresent or leave out rural
- Not all rural communities are the same
- Rural communities may have assets but not resources
- Ensures a study is relevant to the community
- Ensures findings/interventions benefit the community and the researcher



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## Tips for Rural Communities and Researchers

- Collaboration should begin at the development of the research question
- Identify early what the benefits or outcome may be for the community
- Discuss dissemination plans early
- Learn from one another; build research capacity in the rural community and increase researchers' rural cultural knowledge
- Trust, transparency, and open communication



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## Rural CBPR

More information on how CBPR can benefit and be utilized in rural and tribal communities can be found at the Rural Health Information Hub, at:

<https://www.ruralhealthinfo.org/topics/rural-health-research-assessment-evaluation#community-based-participatory-research>



### What is community-based participatory research (CBPR) and how can it help rural and tribal communities and researchers work effectively together?

The Agency for Healthcare Research and Quality (AHRQ) [defines community-based participatory research](#) (CBPR) as

"an approach to health and environmental research meant to increase the value of studies for both researchers and the communities participating in a study."

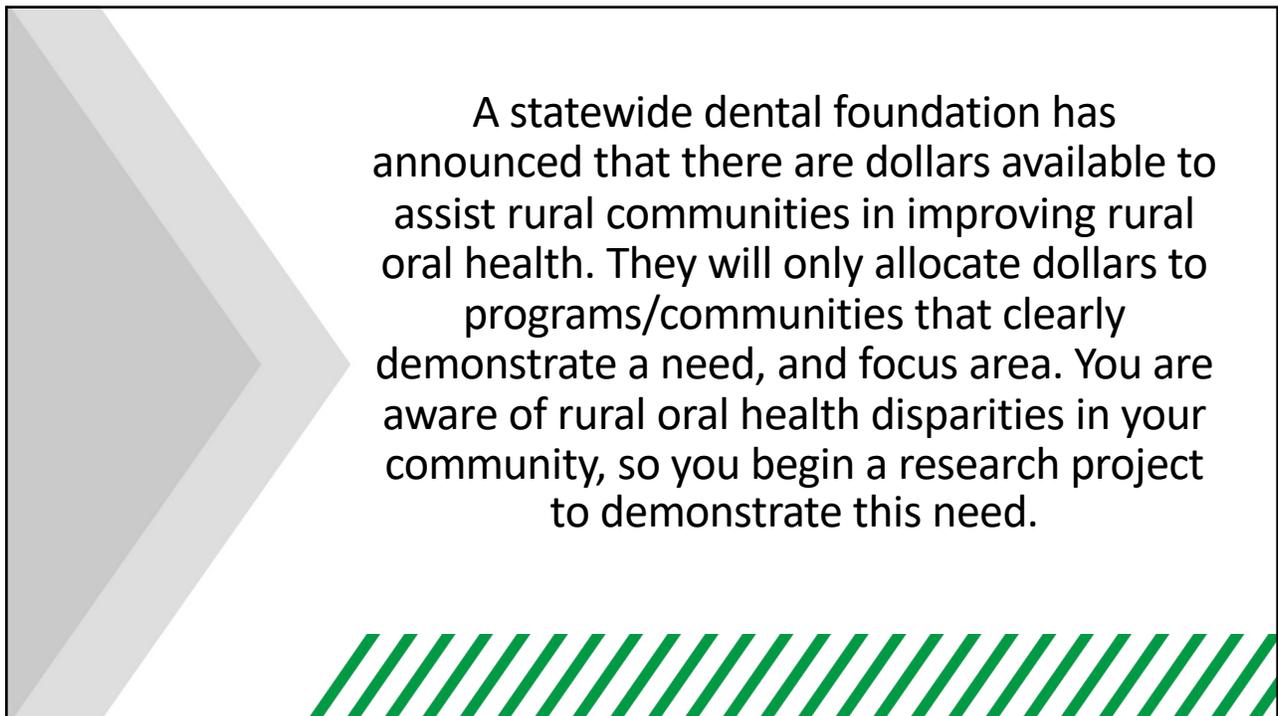
When using the CBPR approach, community members, healthcare facilities, and other stakeholders work alongside researchers. This cooperation should begin as early as setting a research agenda and identifying community needs and continue through dissemination of research findings, implementation of interventions, and on to future studies. The development of an **ongoing relationship** between the community and the researchers is an important piece of CBPR. It helps develop **trust** and **participation** and ensures the work undertaken is relevant to the community and that findings and interventions **benefit the community** and the researcher.



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1. Research question: What do you need to know about the problem?
2. Who is your “community”?
3. Who should be involved?
  - a. What power differentials are present?
  - b. Who holds decision making power for the “lead” on the research?
4. What data will you look at? How will you access the data?
5. Who will you share results with, and how will you share them?
  - a. Which research products/results will be most credible to your intended audience(s)?



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## Research with a Local, Rural Impact

Panel presentation of four interdisciplinary, community based research projects with a local impact



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## Occupational Health and Wellness Needs of Public Safety Workers: A CBPR Approach



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### Background:

- Compared to other occupations, public safety workers have:
  - Higher levels of stress, burnout, & turnover
  - Lower occupational prestige
- Research is limited in rural areas, but have additional stressors of isolation and few career alternatives
- Tools to address burnout exist, but don't seem to be making an impact
- **What are the unique health and wellness needs of public safety workers in rural areas?**

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## Interdisciplinary Team and Community Partners

- Research Team: University of North Dakota
  - Criminal justice, public administration, sociology, math/statistics, rural health, population health
  - Substantive knowledge + methodological diversity
- Community Partners
  - North Dakota Highway Patrol
  - North Dakota Department of Corrections & Rehabilitation
  - North Dakota Juvenile Court



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# Community Health Strategic Plan



- CBPR approach combined with Community Health Needs Assessment techniques
- Pilot site steering committees
- Context-specific surveys based on community expertise and experience
- Creation of a climate toolkit to assess context-specific health and wellness concerns

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# Coping Strategies of Familial Caregivers of Rural Elders with Dementia



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## Background:

- > 65 million people globally will live with dementia by 2030
- Many older adults with dementia are cared for at home by family members
- Especially in rural areas with limited access to formal care
- **How do familial care providers navigate this caregiving relationship?**

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## Interdisciplinary Team & Community Partners



### North Dakota:

- Alzheimer's Assoc. of ND local support groups
- Family Caregiving support group
- Sanford Health
- TrialMatch database



### Manitoba:

- Alzheimer Society of Manitoba
  - eNewsletter
  - Research Matters



alzheimer's  association®

trialmatch®

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## Challenges



- Response rates
- Navigating IRBs
- Institutionalized vs. non-institutionalized elders with dementia – casting a broader net

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## Caregiver Characteristics



- 54 from ND, 48 from MB
- 90% Caucasian
- 88% female
- 22-82 years old (M = 58)
- 65% were caring for a parent
- 50% employed
- Providing care for past 1-19 years (M = 3.85)
- 54% of care recipients lived with caregiver (21% in PCH)



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## Coping Strategies of Familial Caregivers of Rural Elders with Dementia



### **Coping Strategies:**

*“When you have difficulty with caring for your family member with dementia...”*

- Persistence
- Task Modification
- Goal Disengagement
- Positive Reappraisal

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# Coping Strategies & Well-being



## Positive Reappraisal:

- Less stress
- More life satisfaction
- Fewer negative emotions
- Stronger sense of control

Incidence of familial rural caregiving will continue to grow

These individual difference factors may aid in identifying needs of rural caregivers to protect their well-being

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# Sharing our Findings



## Sharing our Findings:

- Research Matters, eNewsletter, TrialMatch
- Published journal article
- [UND's Scholarly Commons digital repository](#)

THE JOURNAL OF SOCIAL PSYCHOLOGY  
<https://doi.org/10.1080/00220068.2019.1630005>



### Primary and secondary control strategies and psychological well-being among familial caregivers of older adults with dementia

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**ABSTRACT**  
Caring for an older family member with dementia can be extremely challenging, often resulting in diminished psychological well-being. A wide range of both internally and externally directed behavioral strategies may serve to protect well-being among caregivers. Specifically, primary control strategies involve direct attempts to change one's current situation, while secondary control strategies are attempts to inwardly adjust cognitions to align with the current situation. This study examined the use of multiple primary and secondary control strategies among familial caregivers ( $n = 115$ ), as well as their associations with several indices of psychological well-being. Results showed that the most common primary and secondary control strategies, namely task persistence and positive reappraisal, were used with approximately equal frequency. Furthermore, the specific strategy of positive reappraisal seemed to bolster psychological well-being among caregivers. Findings indicate that primary control strategies might be less effective than secondary control strategies within the context of caregiving for a person with dementia.

**ARTICLE HISTORY**  
Received 10 April 2018  
Accepted 22 February 2019

**KEYWORDS**  
caregivers; family caregivers; primary control strategies; psychological well-being; secondary control strategies

Older adults with dementia often require extensive care, typically involving family members contributing to that care. Although this caregiving relationship can strengthen the bond between caregiver and care recipient, caring for a person with dementia can also create tremendous psychological, emotional, physical, and financial challenges for familial caregivers (Connell, Janovic, & Callant, 2011). An estimated 62.7 million people worldwide will live with dementia by 2050 (Prince et al., 2013) and many older adults with dementia are cared for at home by family members (Alzheimer's Association, 2016), making it imperative to understand how familial caregivers navigate this caregiving relationship. The current study examined primary and secondary control strategy use as protective factors within the context of caregiving and their associations with psychological well-being among familial dementia caregivers.

#### The impact of caregiving

Many familial dementia caregivers experience stress from the hours they invest in their caregiving relationship and caregiving tasks (National Alliance for Caregiving & AARP, 2009). Approximately one-quarter of caregivers live with the person with dementia and provide around-the-clock care (Alzheimer's Association, 2016). Caregiving duties, ranging from administering medications to bathing and managing behavior, are often a major source of distress for familial caregivers (Razani et al., 2014), and more than one-third of caregivers agree that they "had no choice in becoming a caregiver" (Alzheimer's Association, 2014, p. 57). The challenges of taking on this caregiving role in a close

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## Retention of a Multigenerational Nursing Workforce



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## Retention of a Multigenerational Nursing Workforce



### Interdisciplinary teams

- Role ambiguity and overlap

### Working with rural communities

- Personal connections
- Cultural characteristics
- Community surveys

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## Research Purpose and Process



- Developing the interdisciplinary team
- Research purpose
- Working with rural communities
  - Chambers of Commerce
  - Multiple states in HHS Region 8
- Dissemination plan: What did our communities want?
  - White paper
  - Webinar
  - Dakota Conference on Rural and Public Health
  - Journal article

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## Summary



- Low stigma overall
- Little variability by geography or education
- Gender differences between groups
  - Men reported greater stigma than women; stigma centered on measures related to anxiety being around persons with mental illness, perceived relationship disruption, and personal hygiene
- Age differences between groups
  - People ages 18-35 reported the lowest average stigma scores; variable stigma present in all categories except for treatability and professional efficacy

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## Relation to Someone with Mental Illness



There is significant variability between an individual's relation to someone with mental illness and stigma associated with:

- Treatability
- Recovery
- Hygiene
- Anxiety
- Relationship Disruption

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## Rural and Local Impact of the Results



- Shared with Chambers of Commerce
- Identify local champions
  - Women
  - Family members
- Identify training opportunities
  - Men
  - Older cohorts

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# Rural Mental Health Resources



Your first stop for rural health information, to include a topic guide or rural mental health available at <https://www.ruralhealthinfo.org/topics/mental-health>



Contains copies of all research products produced by the Federally-funded Rural Health Research Centers, to include products on rural mental health available at <https://www.ruralhealthinfo.org/topics/mental-health>



Mountain Plains (HHS Region 8)

**MHTTC**

Mental Health Technology Transfer Center Network  
Funded by Substance Abuse and Mental Health Services Administration

Providing mental health training and TA to HHS Region 8 with a rural health focus available at <https://mhttcnetwork.org/centers/mountain-plains-mhttc/area-focus>

# Questions



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## Training Evaluation



<https://ttc-gpra.org/P?s=553764>



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