



Responsive research of minority health disparities  
in rural Nebraska communities, UNL

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the Minority Health Disparities Initiative (MHDII) at the REACH  
Lab - University of Nebraska – Lincoln.




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The mission of the University of Nebraska-Lincoln Minority Health  
Disparities Initiative (MHDII) is linking Science, Practice, Policy and  
Training for the purpose of eliminating minority health disparities.

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**UNL MHDII Community  
Impact:**

We create working collaborations between MHD researchers and rural  
Nebraska stakeholders. We want your voice in our research so that we  
can work together to translate our research into capacity building  
initiatives in our local communities.

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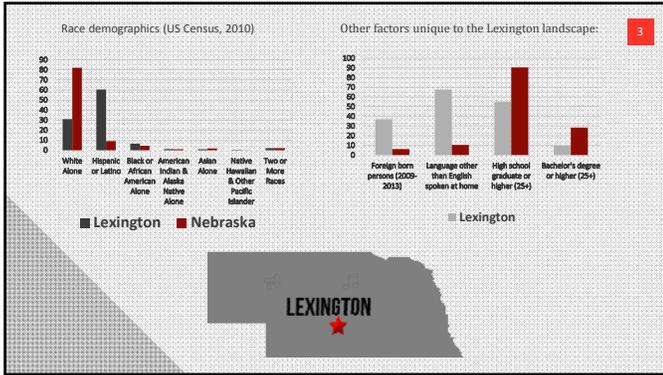
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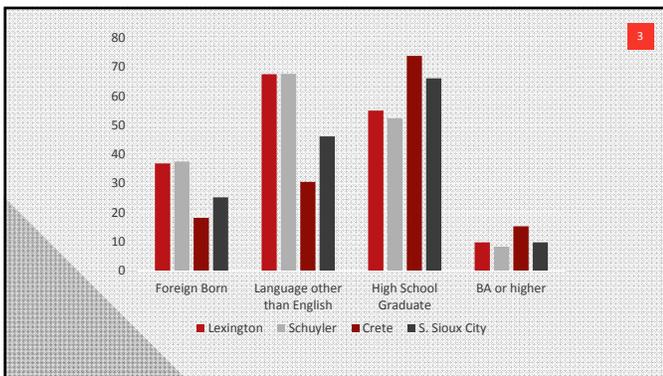
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**What can MHI do for Lexington?**

- Yourhealth – teaching high school freshman how to be public health researchers and educators.
- ISHealth/Network – developing an instrument to measure the interrelationships between social determinants of health, informal networks of health, and formal health care delivery systems.
- Photovoice with a random sample survey – a research initiative that combines a community voice with rigorous research methods to provide more insight into the health of the communities in Lexington.

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■■■■■ Connecting Researchers to Communities –  
Communities to Researchers

BHECN/MHDI Statewide Pilot Project: Cost-Savings of Behavioral Health Trained  
Community Health Workers

Project supported by:

**BHECN** | BEHAVIORAL HEALTH  
EDUCATION CENTER  
OF NEBRASKA

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■■■■■ *Community Impact Initiative in Action:*  
Case Study

Pediatric Weight Management:

- Background
- Health Disparities and Problems with Access
- Development of *LayHealth+* model
- Preliminary Results
- *CHW+* pilot

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Case Study: Pediatric Weight Management

■ ■ ■ ■ ■ Background

- Health disparities related to pediatric obesity and type 2 diabetes
- Rates for Hispanic youth  
39% overweight or obese (Ogden et al., 2014)  
Greater risk for type 2 diabetes rates compared to non-Hispanic whites
- Is rurality a risk factor, too?
- Nelson et al. (2014) results

\* Conclusion: *Pediatric obesity and type 2 diabetes are prevalent problems that disproportionately affect Hispanic youth.*

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### Case Study: Pediatric Weight Management 10

- Treatment:
  - Behavioral intervention to prevent/manage weight
  - Focus on health behavior change (diet, physical activity)
- Problems with the Current Treatment Model:
  - Reliance on doctoral-level licensed professionals
  - Lack of cultural appropriateness
    - Language
    - Cultural adaptation
  - Access problems for Hispanic families in rural communities

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### Case Study: Pediatric Weight Management 5

One strategy for addressing disparities in access: *Lay Health Leaders*

Potential Advantages	Potential Disadvantages
<ul style="list-style-type: none"><li>Increase access</li><li>Cultural background/knowledge</li></ul>	<ul style="list-style-type: none"><li>Variable quality, fidelity to program (limited oversight)</li><li>Lack of training for complex cases (limited expert consultation)</li></ul>

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### Case Study: Pediatric Weight Management 6

Our idea: *LayHealth+*

- Lay/community health delivered services
- Ongoing expert supervision and consultation via telehealth

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graph LR; A[Expert Supervision & Consultation] --> B[Improved Provider Competence & Support]; B --> C[Improved Fidelity & Quality]; C --> D[Improved Patient Outcomes]
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- Capitalizing on strengths of lay health approaches but with ongoing expert support
- Focus on building local capacity through training and support

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### Case Study: Pediatric Weight Management

Application of the LayHealth+ Model:

- *BodyWorks* for Hispanic Families
  - 8-week behavioral lifestyle change program
  - Developed by US DHHS Office of Women's Health
  - Designed for delivery by lay health leaders
  - Free materials, available in English and Spanish
- Expert Supervision and Consultation (ESC) component
  - Weekly ESC sessions between CHW and pediatric obesity treatment expert
  - Telehealth (via Vsee app)

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### Case Study: Pediatric Weight Management

Expert Supervision and Consultation Sessions:

- Review of the previous group session
  - Fidelity check
  - Discussion of challenges encountered
  - Questions about group dynamics
- Preview of next group session
  - Highlight key elements of session
  - Modeling and rehearsal
  - Role playing



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### Case Study: Pediatric Weight Management

Preliminary Results (from Lincoln Pilot):

- Telehealth session attendance
  - 100%
- Lay health leader engagement
  - Rated 9.64 out of 10
- Acceptability/satisfaction
  - Rated 6.78 out of 7
- Improved lay health leader behavioral knowledge
  - Pre-test avg: 70%
  - Post-test avg: 80%
- Treatment fidelity
  - 92% of major session components covered

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Preliminary Results (cont'd):

- Improvements in child pre-post measures:
  - Increased physical activity
  - Decreased screen time
  - Decreased sugar-sweetened beverage intake
  - Decreased fast food intake

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Plans for CHW+ (Summer 2016)

- 2 sites: Lexington, Grand Island
- UNL Grad-student ESC telehealth sessions
- Behavioral health basics training
- Process and outcome evaluation

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■ ■ ■ ■ ■ Connecting Researchers to Communities –  
Communities to Researchers 18

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■ ■ ■ ■ ■ Creating workforce development opportunities through statewide partnering to increase training opportunities across the state:

- Bodyworks training offered in partnership with Teach a Kid to Fish.
- Mental Health First Aid Training offered in partnership with Southeast Nebraska AHEC

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■ ■ ■ ■ ■ **MHDI connecting statewide.**

To connect, network, or learn more about our work:

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**Questions?**

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