

The Health Professions Education in Rural Communities: Community Apgar Program

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LEADERS IN ACTION

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- All our partners across the US and Australia who have worked with us to improve health care in rural and underserved communities

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Presentation Overview

- History of the Community Apgar Program (CAP)
- Purpose/Development
- Using the Health Professions Education in Rural Communities Community Apgar Questionnaire (HPERC CAQ)
- North Dakota Overall Year One State Level Results
- Examples from Community Level Results
- Action Plan and Next Steps

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Background

- **How did we get here – Why research?**
 - Boise State University: Ed Baker, PhD
 - University of North Dakota: David Schmitz, MD
 - Idaho Bureau of Rural Health and Primary Care: Mary Sheridan
 - An intersection of workforce, education and advocacy
 - Practical knowledge, relationships, experience and investment
 - Answering needs and necessary questions
 - Applied research: Development of tools
 - Partnerships with those with “skin in the game”
 - 3RNet
 - NOSORH
 - University of Melbourne, Australia
 - Federation University, Australia

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Apgar Score for Newborns

- Devised in 1952 by Virginia Apgar, an anesthesiologist, as a simple and repeatable method to quickly and summarily assess the health of newborn children immediately after birth
- Determined by evaluating the newborn baby on five simple criteria (**A**ppearance, **P**ulse, **G**rimace, **A**ctivity, **R**espiration) on a scale from zero to two, then summing up the five values thus obtained



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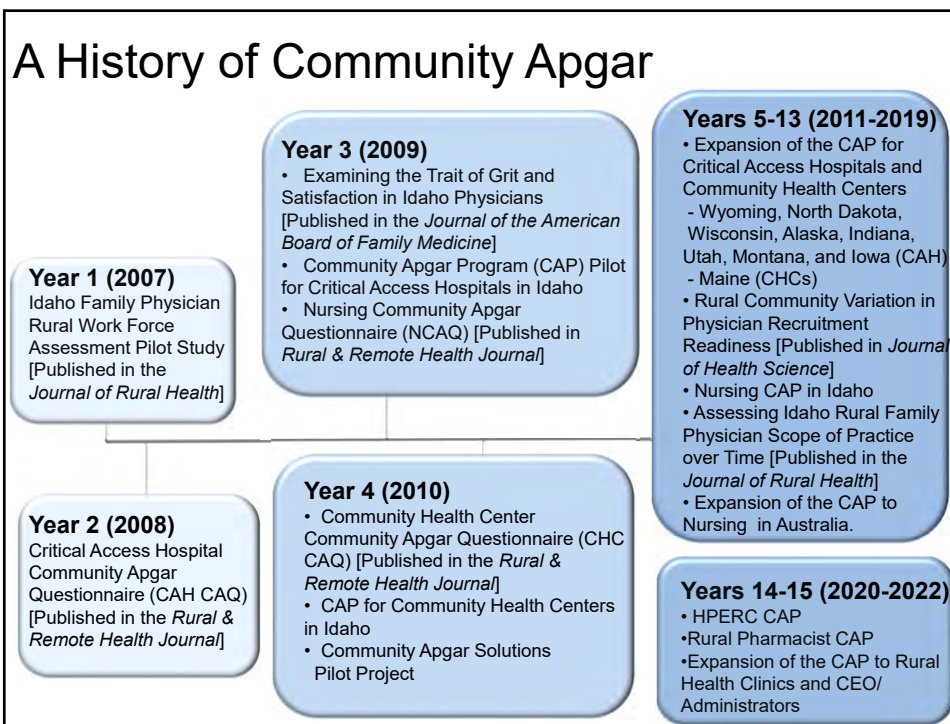
A New Response to the Same Old Problem...

What if there was a similar test for hospitals – quick and repeatable with intervention measures on standby – to assess readiness for participation in health professions education programs?

- Something new
- Something based on quantifiable data
- Something that incorporates the whole community
- Something that shows people on graphs and charts where they are and how to achieve their goals



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Purpose of the HPERC Community Apgar

- A tool used to assess a rural community's assets and capabilities for participation in health professions education programs
- Designed to be a real-time assessment tool providing guidance for the most helpful interventions at the present
- Presentation of individual CAQ Scores facilitating discussions with key decision makers in each community for specific strategic planning and improvements
- The HPERC CAQ can also be used to track a community's progress over time, similar to the clinical use of Apgar scores in newborns



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HPERC Community Apgar Questionnaire (CAQ) Development

• Goal

Develop an objective measurement tool to assess the characteristics and parameters of rural communities related to successful health professions education

• Process

Research the scientific literature

Expert opinions

Collaboration



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HPERC CAQ Development

- The HPERC CAQ
 - Questions aggregated into five classes
 - Each class contains 10 factors for a total of 50 factors/questions representing specific elements related to participation in health professions education programs
 - Open-ended questions

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            graph TD
            CAQ((CAQ)) --- Geographic[Geographic]
            CAQ --- Health[Health Systems & Community Support]
            CAQ --- Practice[Scope of Practice]
            CAQ --- Support[Educational Support]
            CAQ --- Resourcing[Resourcing (Economic)]
            Geographic --- Health
            Health --- Practice
            Practice --- Support
            Support --- Resourcing
            Resourcing --- Geographic
            
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HPERC CAQ Development: Class/Factor Examples

<div style="background-color: #337ab7; color: white; padding: 10px; transform: rotate(-90deg); transform-origin: left top;"> Geographic <ul style="list-style-type: none"> • Social & Recreational Opportunities • Community Demographics • Proximity to Home Campus • Significant Other Involvement </div>	<div style="background-color: #337ab7; color: white; padding: 10px; transform: rotate(-90deg); transform-origin: left top;"> Health Systems & Community Support <ul style="list-style-type: none"> • Facility Leadership • Welcoming Environment by Staff • Individual & Health Systems Collegiality • Website & Brand Recognition </div>	<div style="background-color: #337ab7; color: white; padding: 10px; transform: rotate(-90deg); transform-origin: left top;"> Scope of Practice <ul style="list-style-type: none"> • Diversity of Patient Population • Subspecialties • Interdisciplinary Team Care • Telehealth Use </div>	<div style="background-color: #337ab7; color: white; padding: 10px; transform: rotate(-90deg); transform-origin: left top;"> Educational Support <ul style="list-style-type: none"> • Educational Program Leadership • Quality of Preceptors & Teaching • Mentoring • Recruitment of Learners Process </div>	<div style="background-color: #337ab7; color: white; padding: 10px; transform: rotate(-90deg); transform-origin: left top;"> Resourcing (Economic) <ul style="list-style-type: none"> • EMR Access & Usability • Facility Internet & Cellular Connectivity • Meals Support • Significant Other & Pet Housing </div>
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HPERC CAQ Program: North Dakota Sample and Administration

- HPERC CAQ Target Communities in North Dakota
 - 8 facilities
 - 8 hospital administrators and 8 clinicians for a total sample of 16
- HPERC CAQ Administration
 - Participants provided the HPERC CAQ survey in advance with consent form [IRB approval from Boise State University] and one-hour interviews scheduled
 - Separate structured one-hour interviews for each participant where consent form was reviewed and executed and CAQ completed
 - HPERC CAQ Community Reports
 - Individual data from each HPERC community reviewed with community members each year of the program
 - State level results presented at state selected forum

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Use of the HPERC CAQ

- This assessment allows for identification of both modifiable and non-modifiable factors and also may suggest which factors are most important for a community to address with limited available resources.
- The HPERC CAQ may be used by communities to assess their relative strengths and challenges, the relative importance of CAQ factors, and to gain a better understanding of which CAQ factors are seen as most important.

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Making the most of the HPERC CAQ

Assessing a rural community's assets and capabilities for participation in health professions education programs:

- Community self-evaluation
- Prioritizing improvement plans
- Networking and collaboration
- Synergies in health professions education

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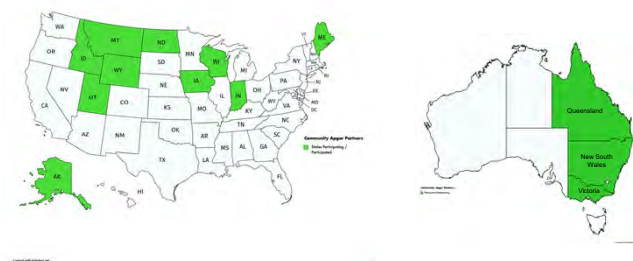
Future of the HPERC CAQ

- With further research and collaboration, this tool could also be used to share successful strategies communities have used to overcome challenges which may be difficult or impossible to modify (Best Practice Model).
- HPERC CAQ surveys may be useful in identifying trends and overarching themes which can be further addressed at state or national levels.

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Current Apgar Partners



•States Participating/Participated

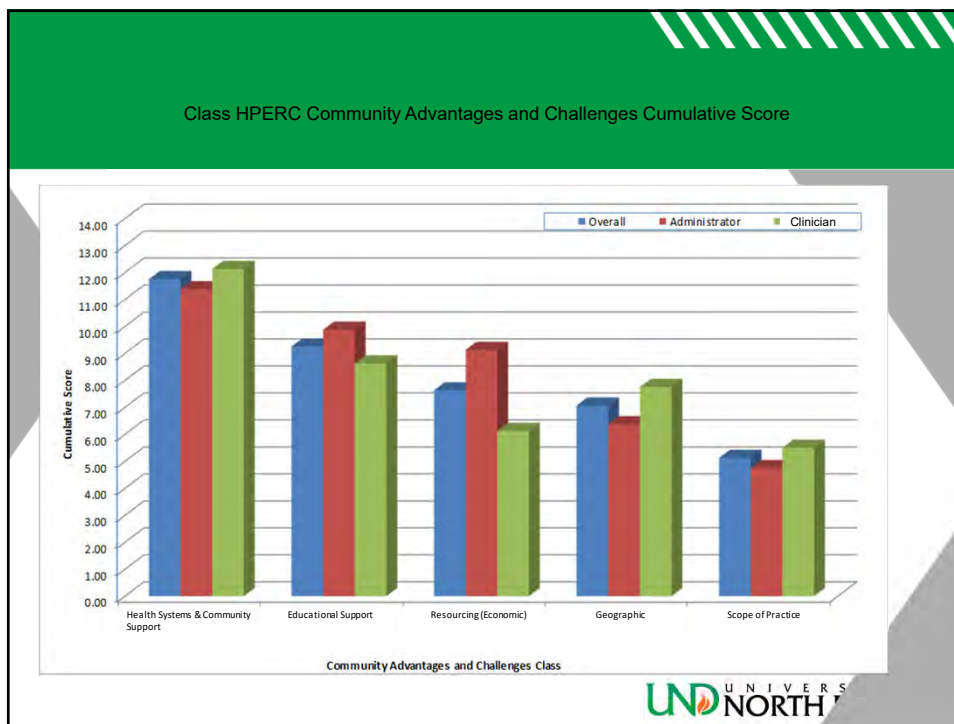


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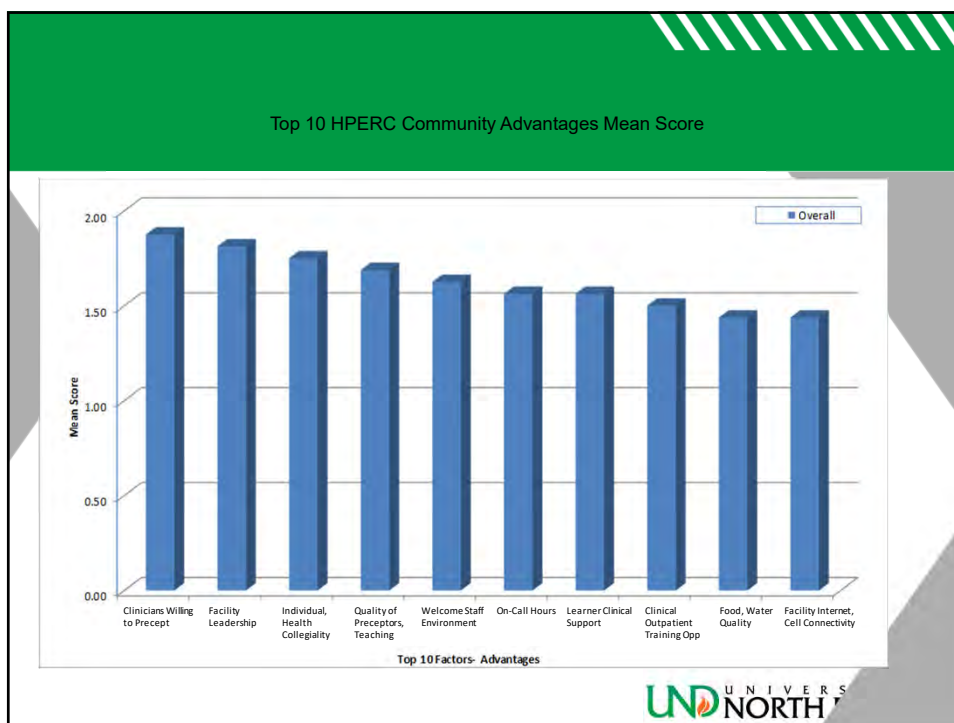
North Dakota Overall Year One State Level Results



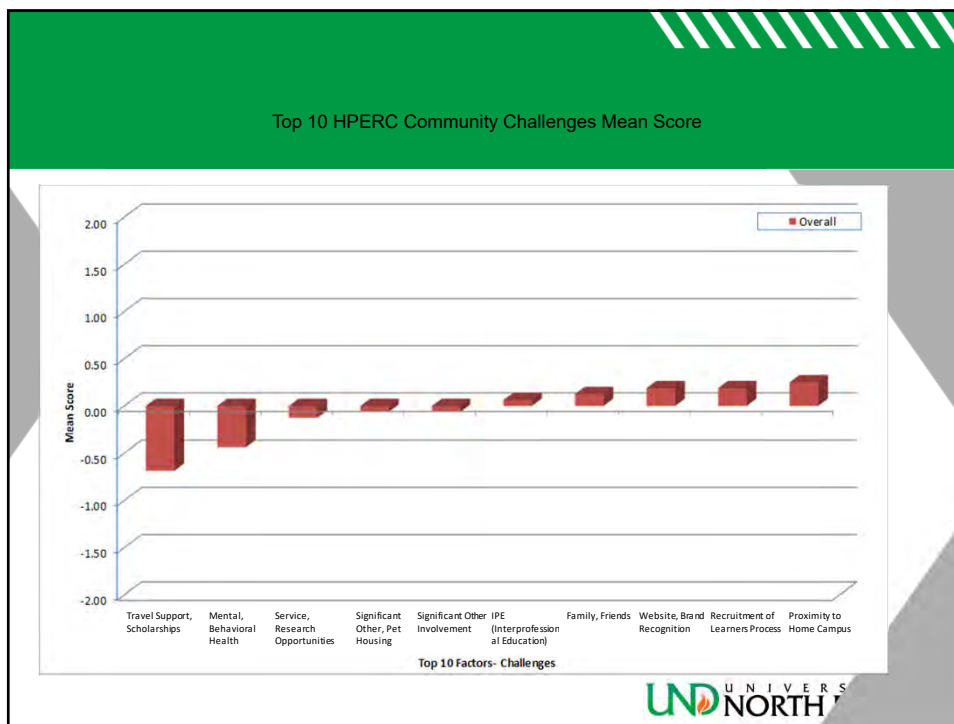
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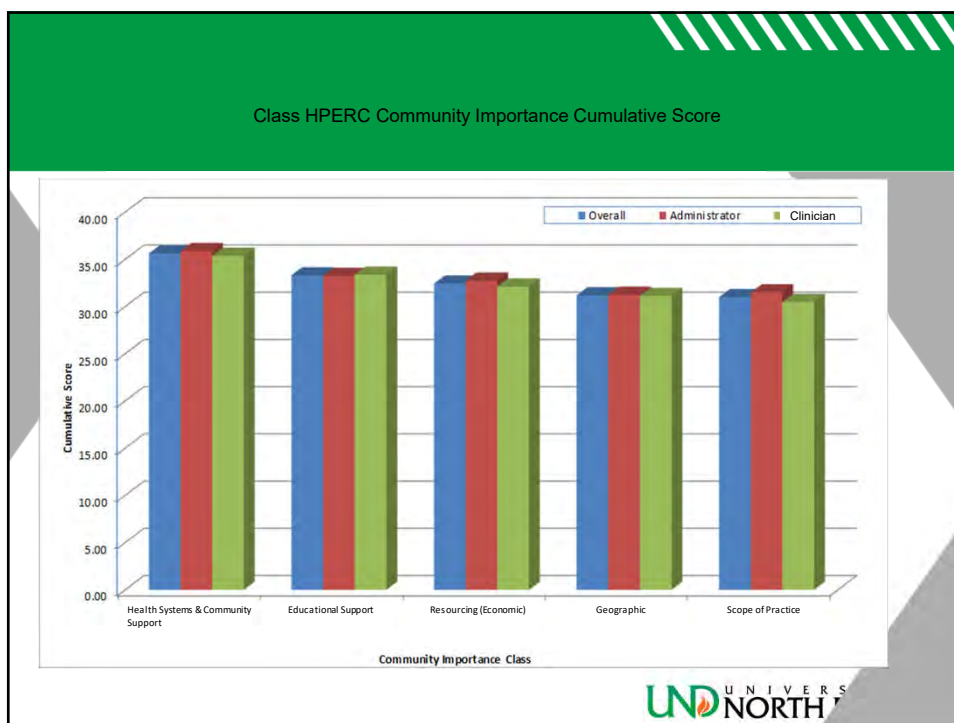
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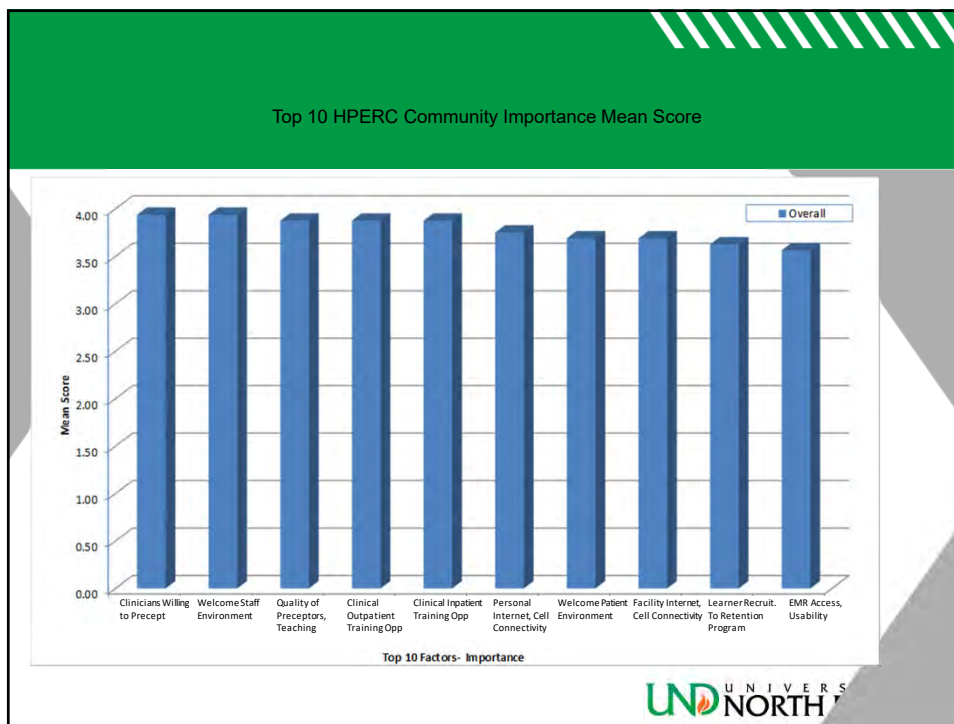
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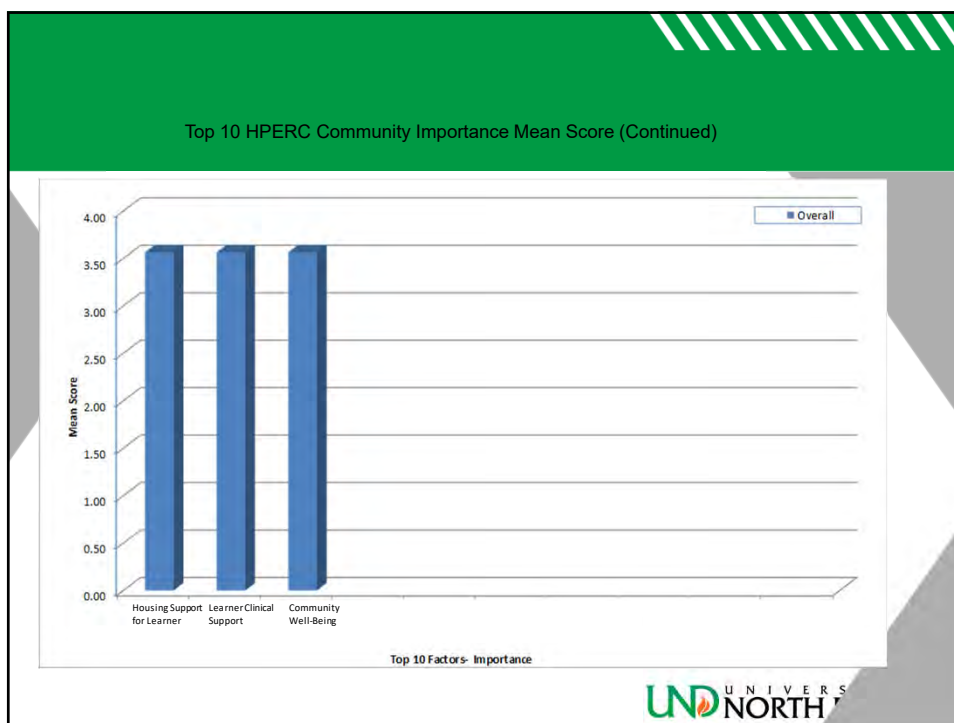
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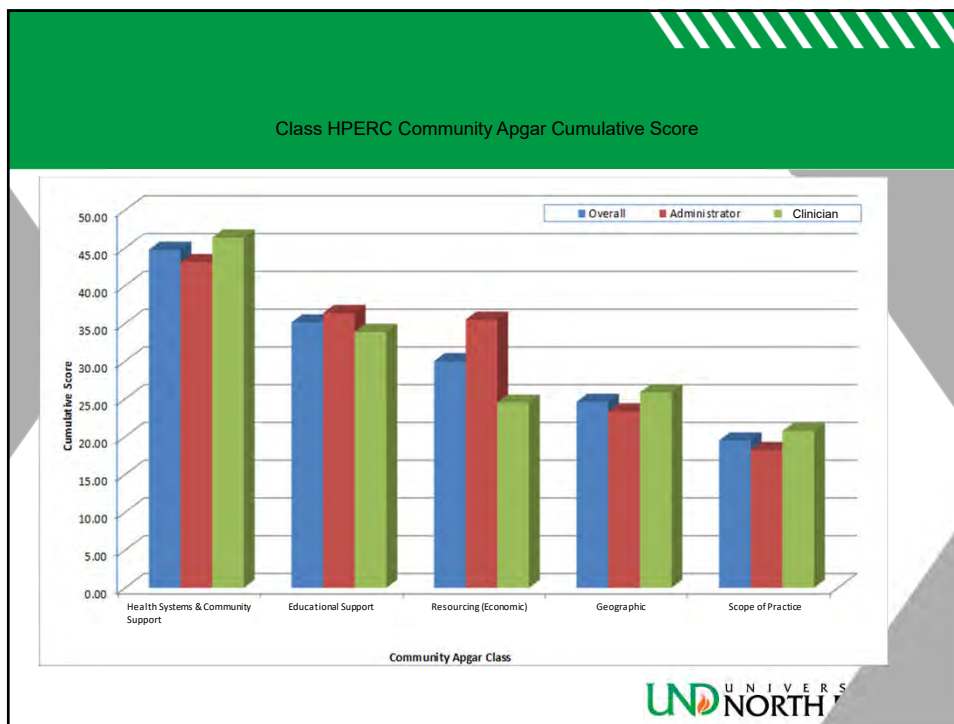
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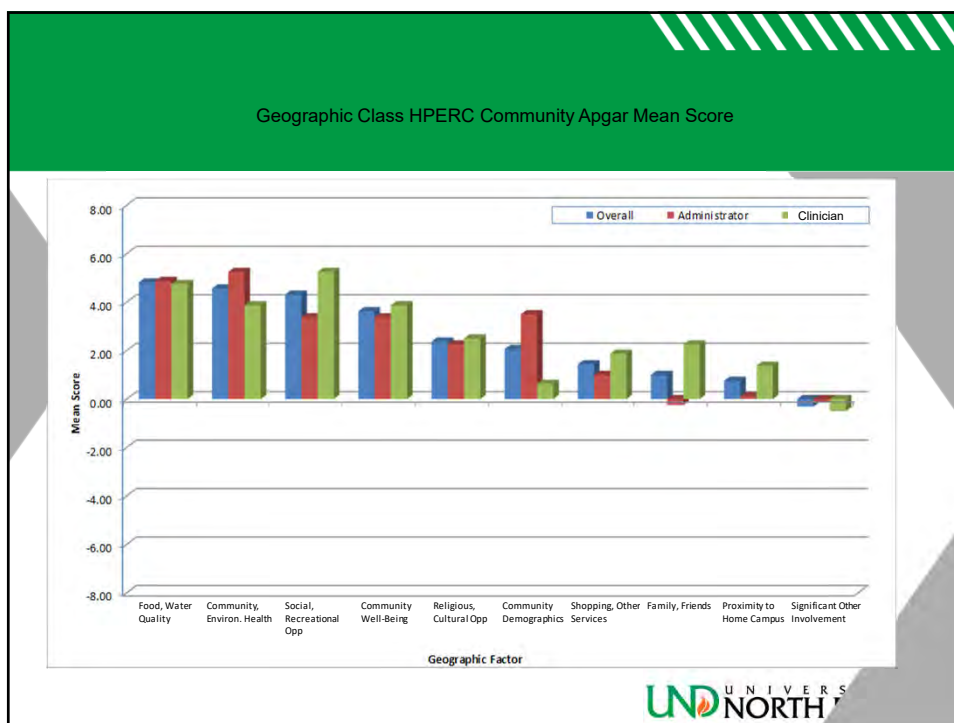
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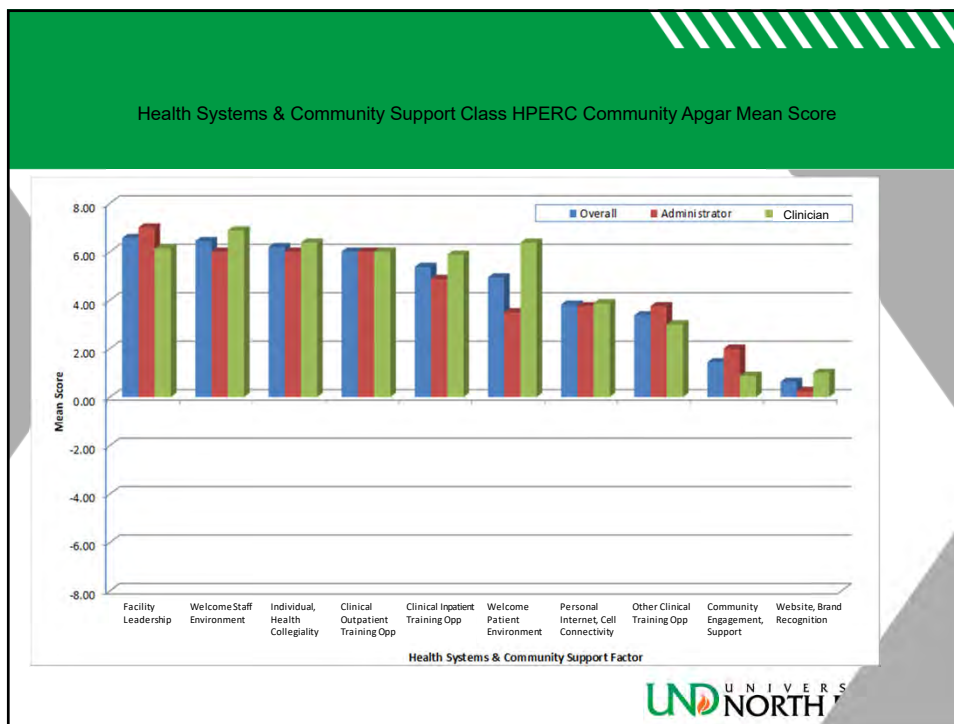
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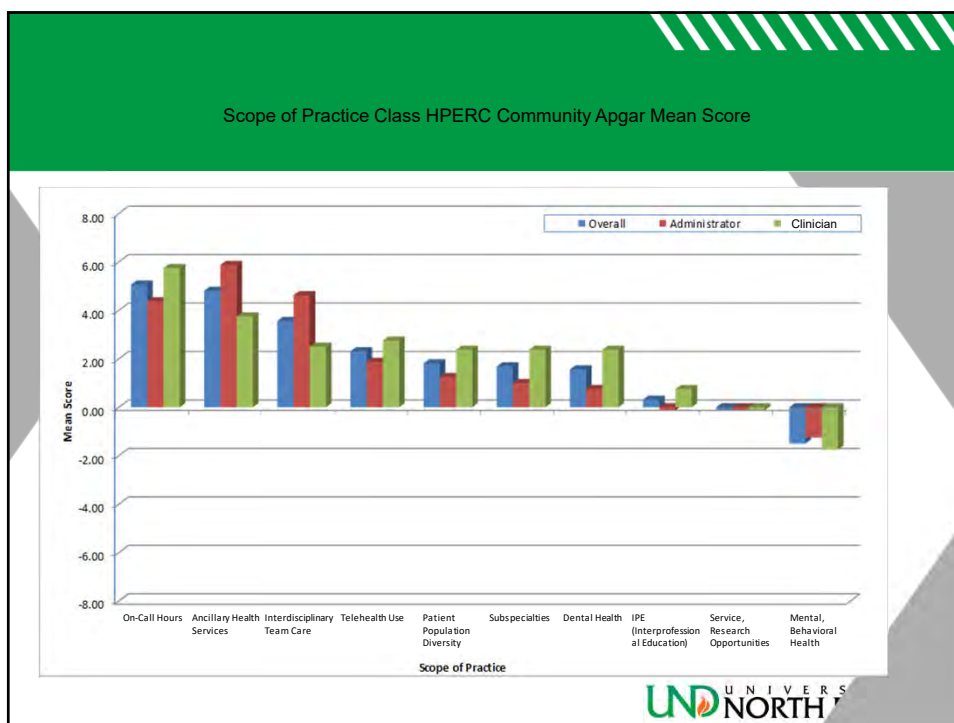
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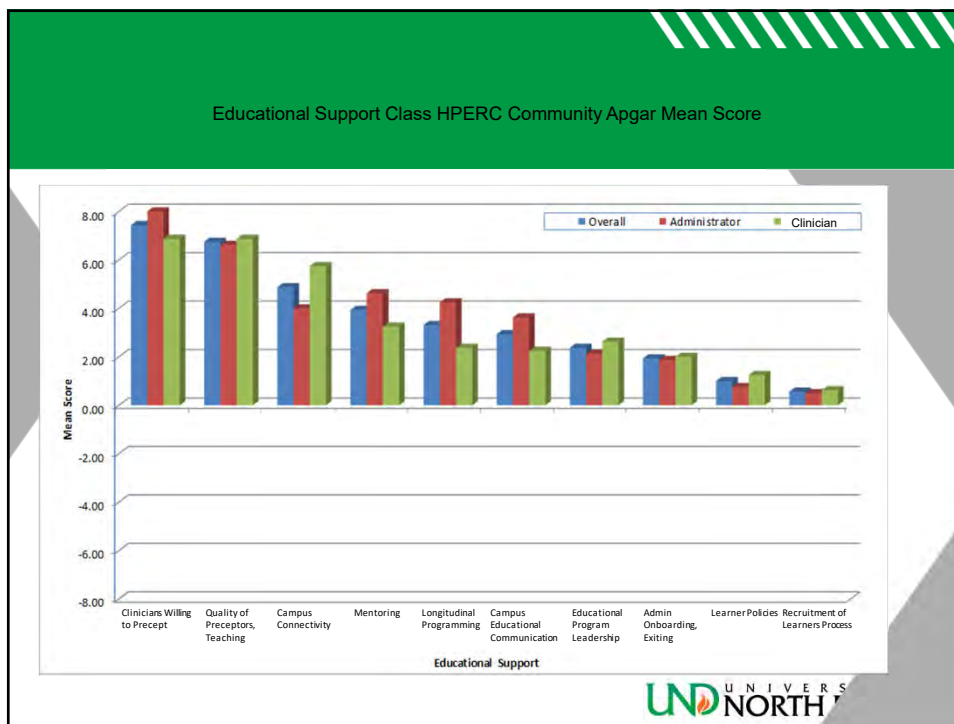
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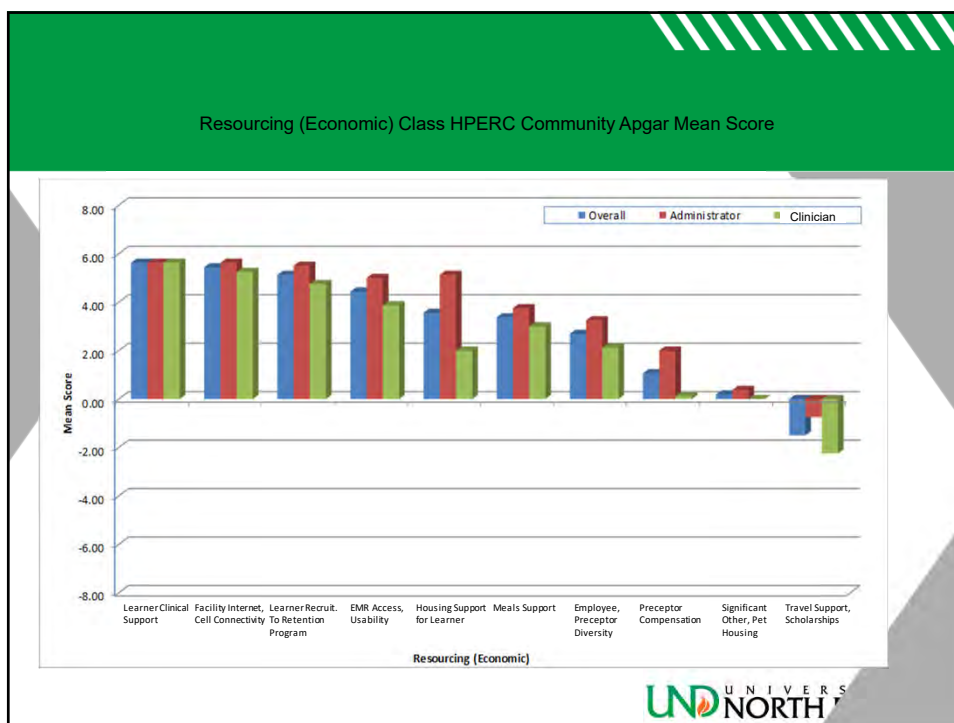
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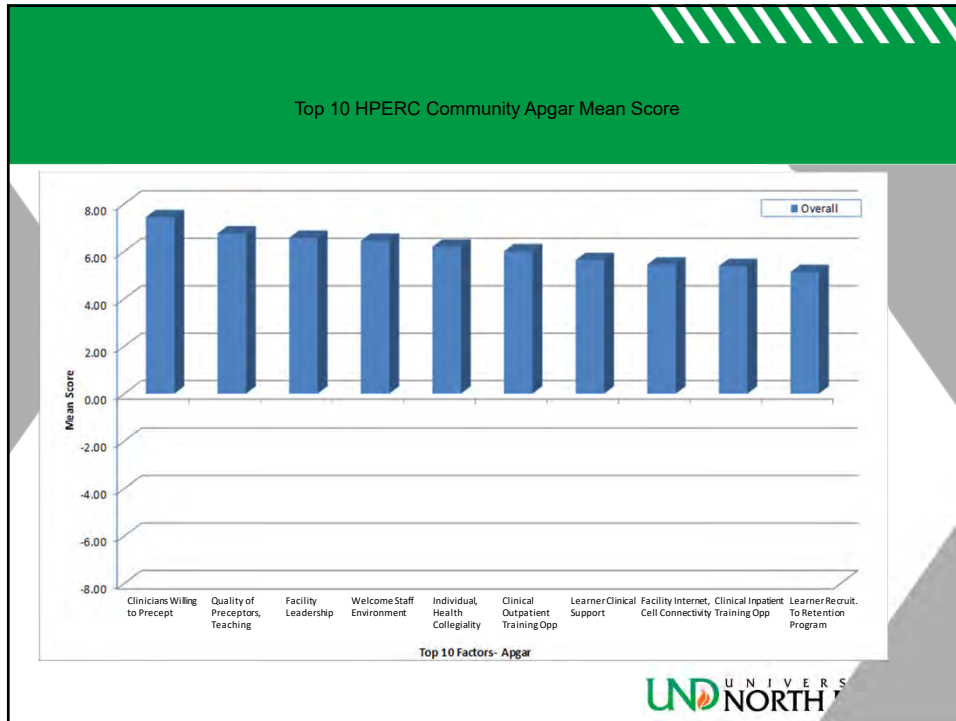
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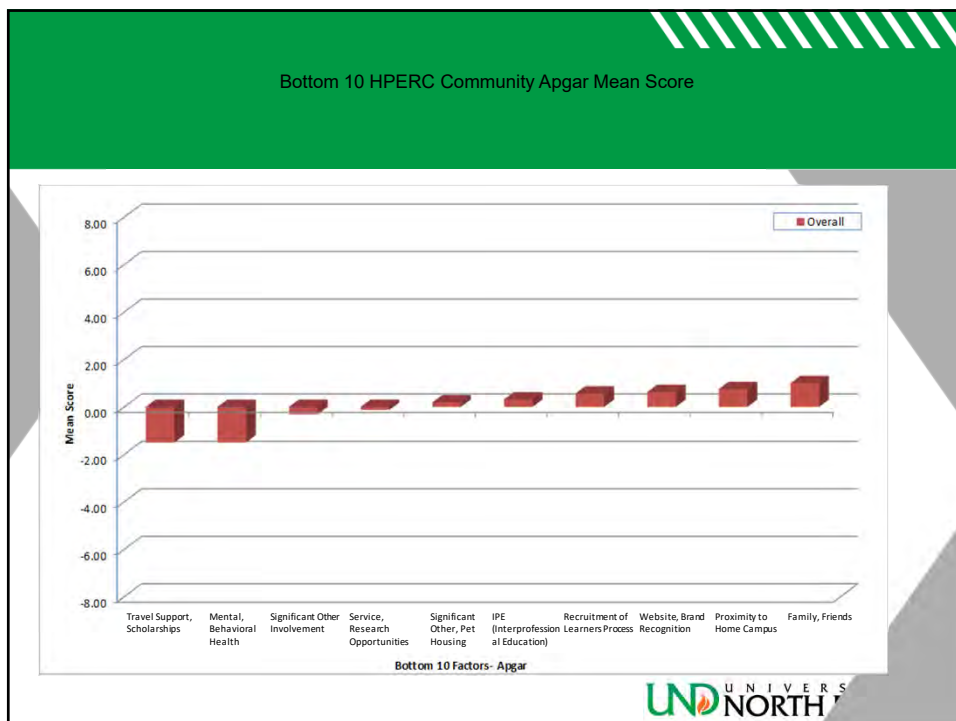
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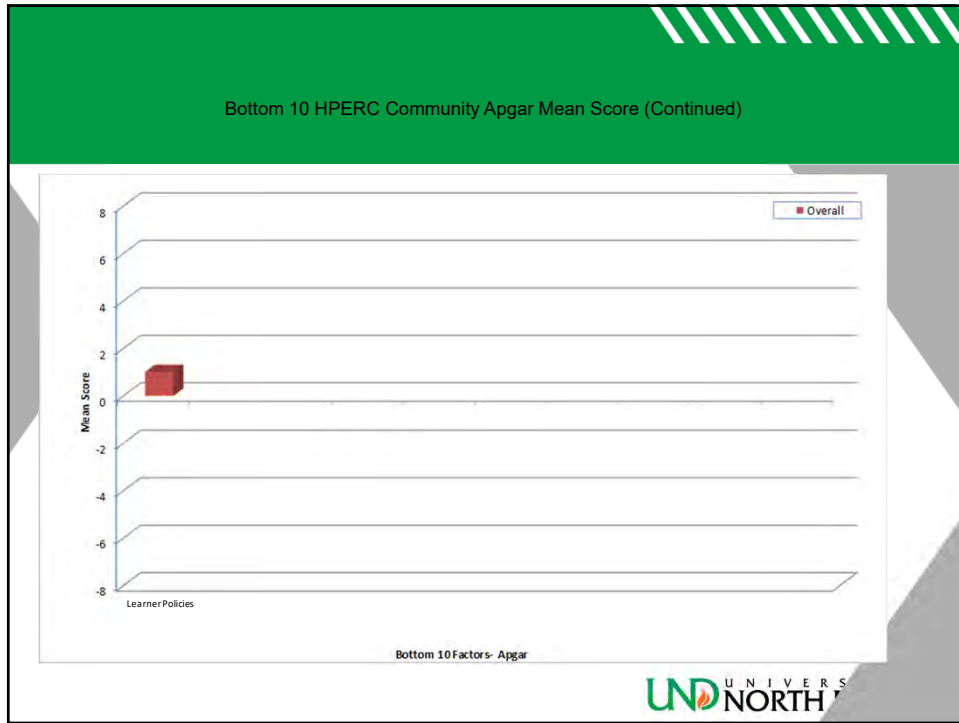
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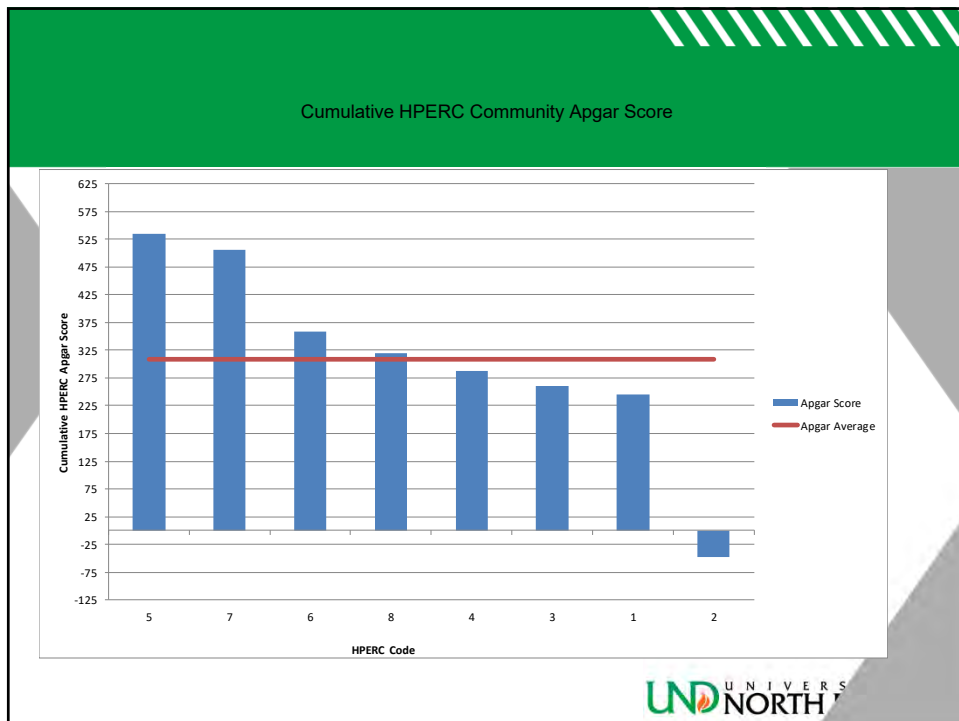
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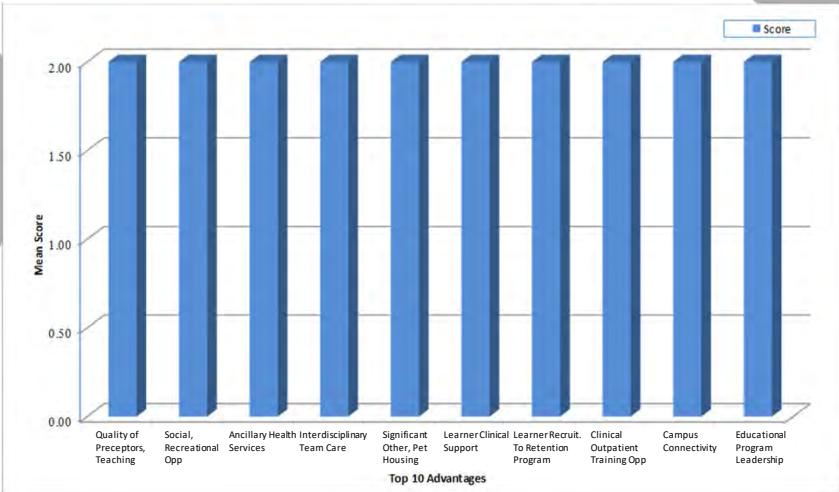
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Examples from Overall North Dakota Community Level Results




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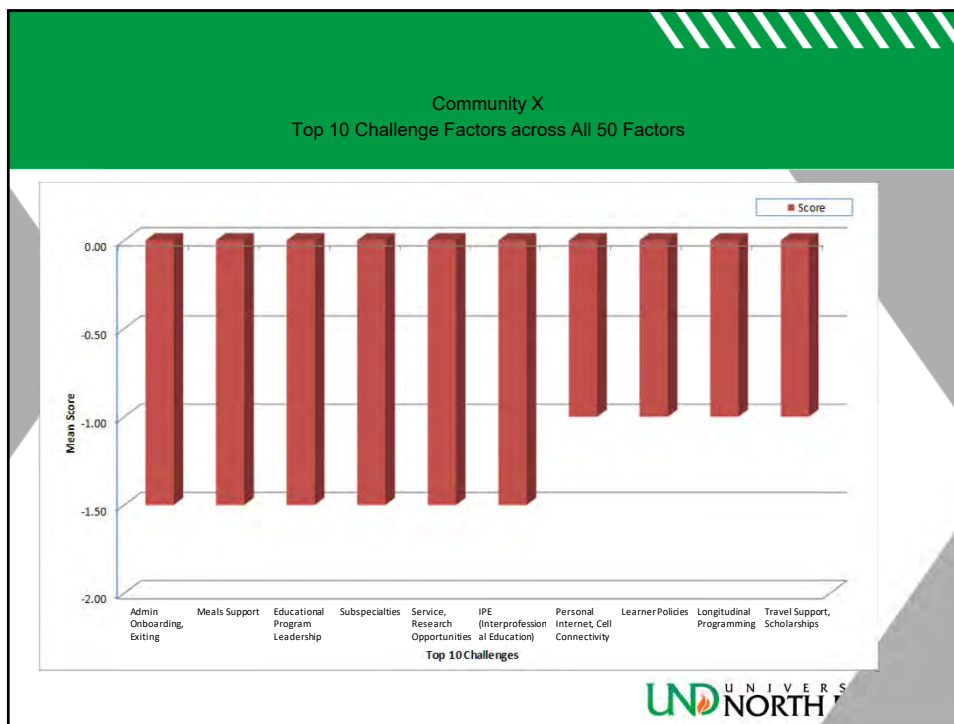
Community X Top 10 Advantage Factors across All 50 Factors



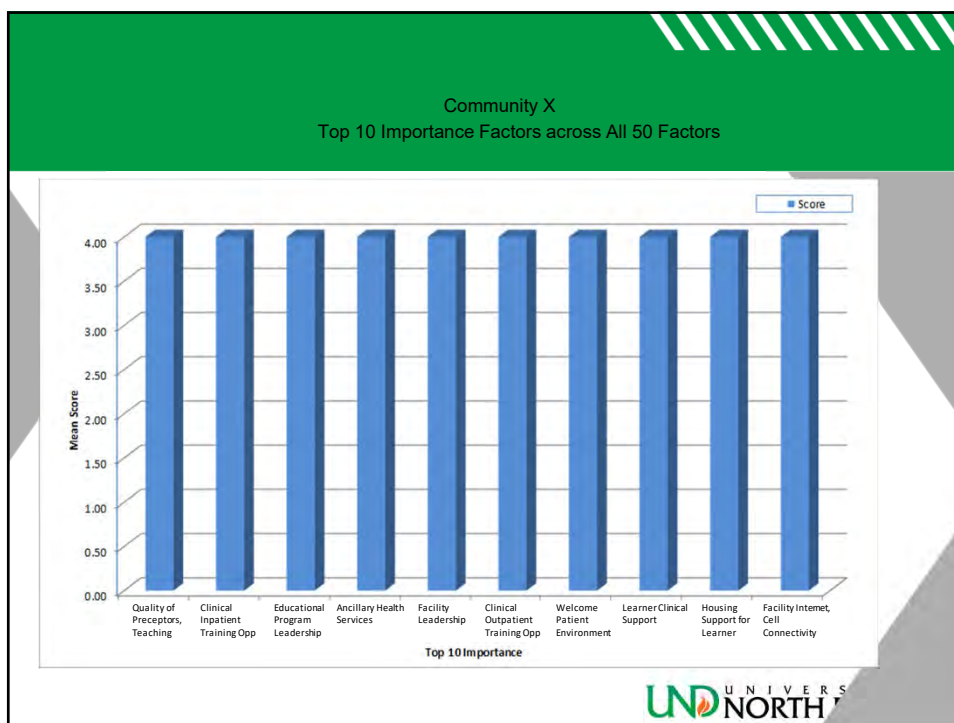
Factor	Mean Score
Quality of Preceptors, Teaching	2.00
Social, Recreational Opp	2.00
Ancillary Health Services	2.00
Interdisciplinary Team Care	2.00
Significant Other, Pet Housing	2.00
Learner Clinical Support	2.00
Learner Recruit. To Retention Program	2.00
Clinical Outpatient Training Opp	2.00
Campus Connectivity	2.00
Educational Program Leadership	2.00



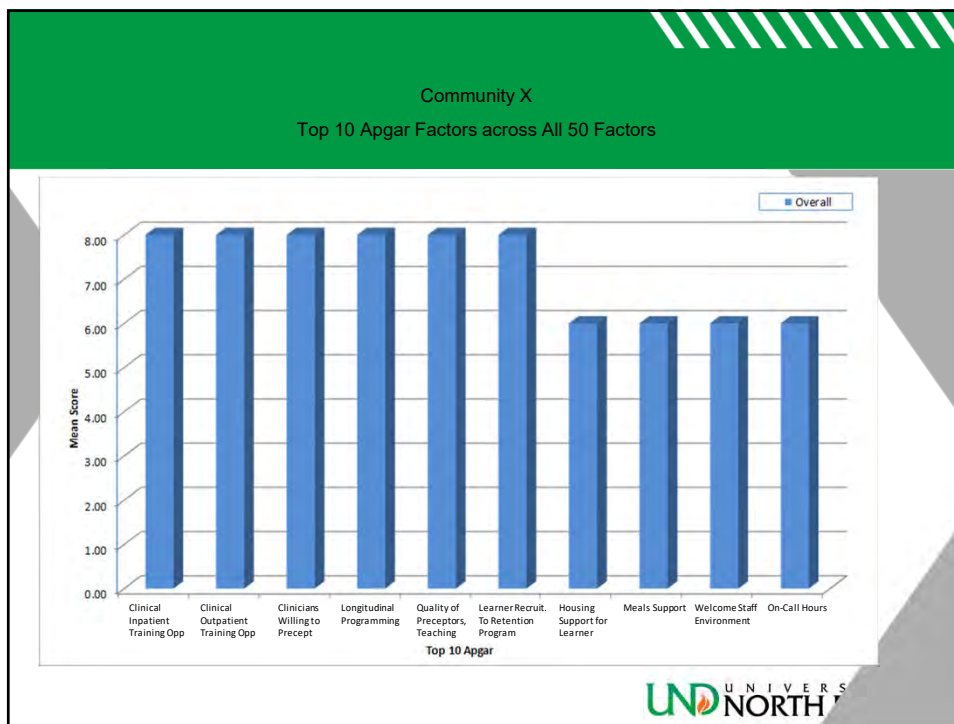
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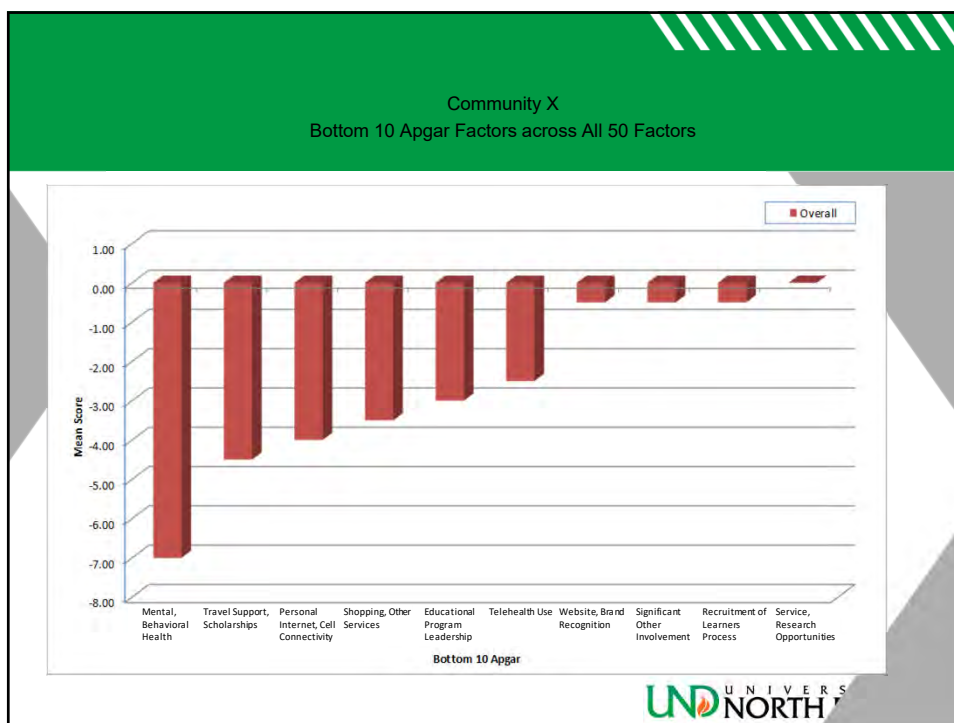
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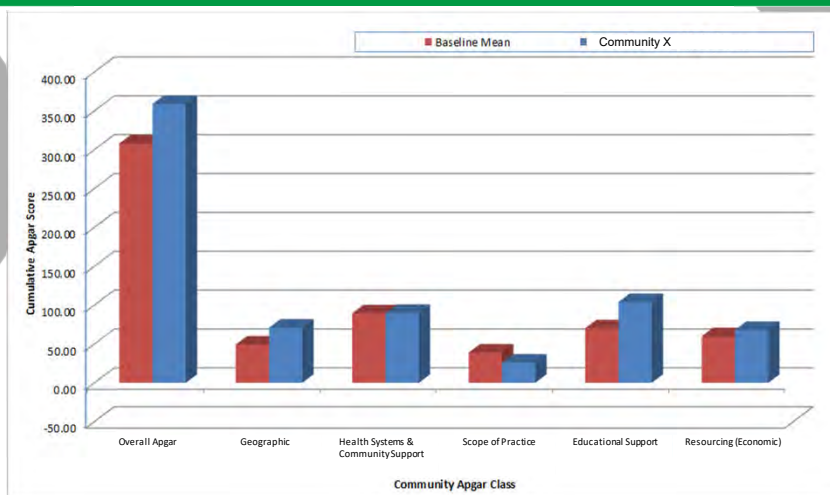
Examples from Comparative North Dakota Community Level Results



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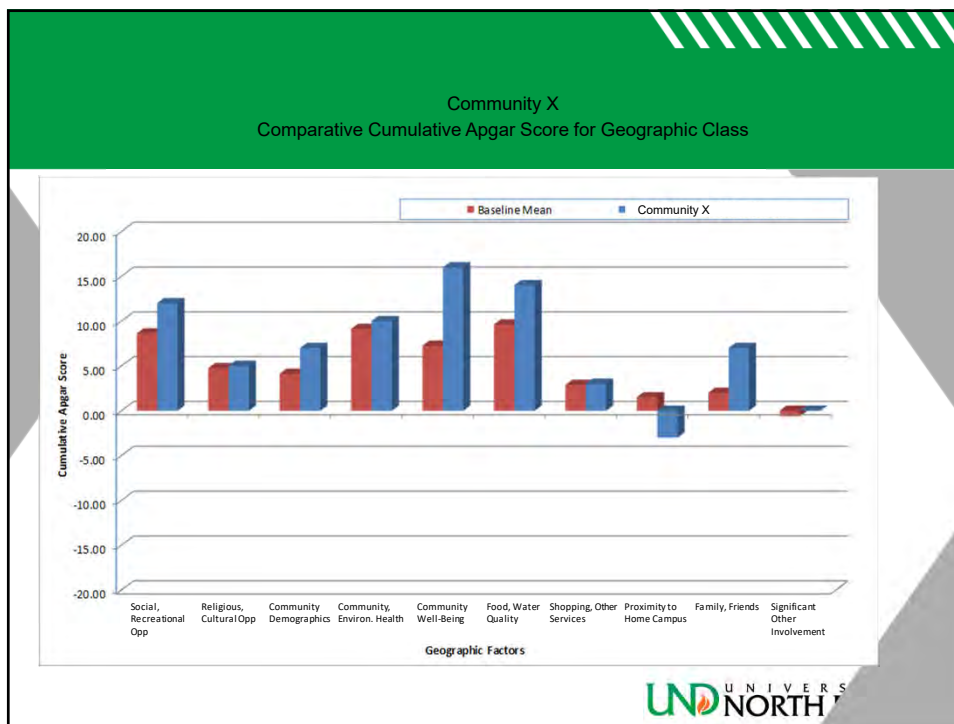
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Community X Comparative Cumulative Apgar Score

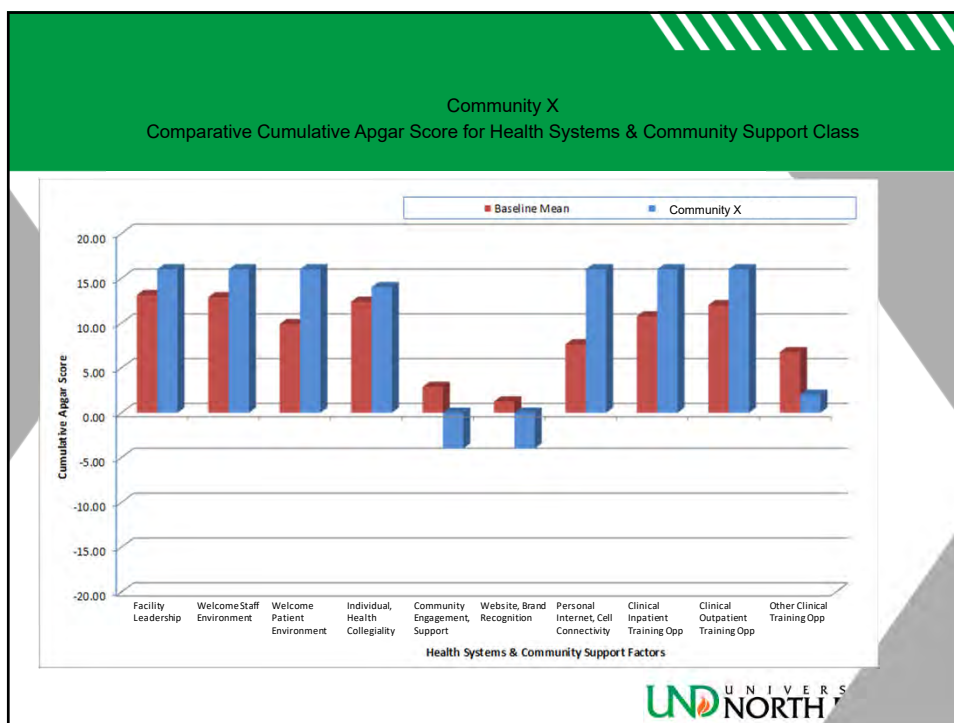


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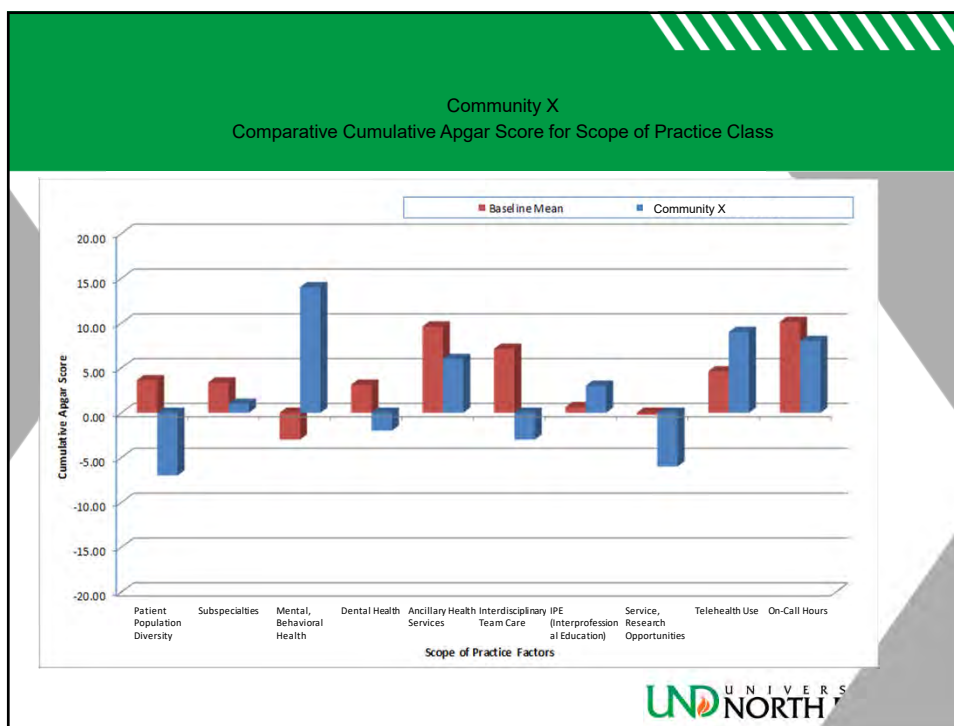
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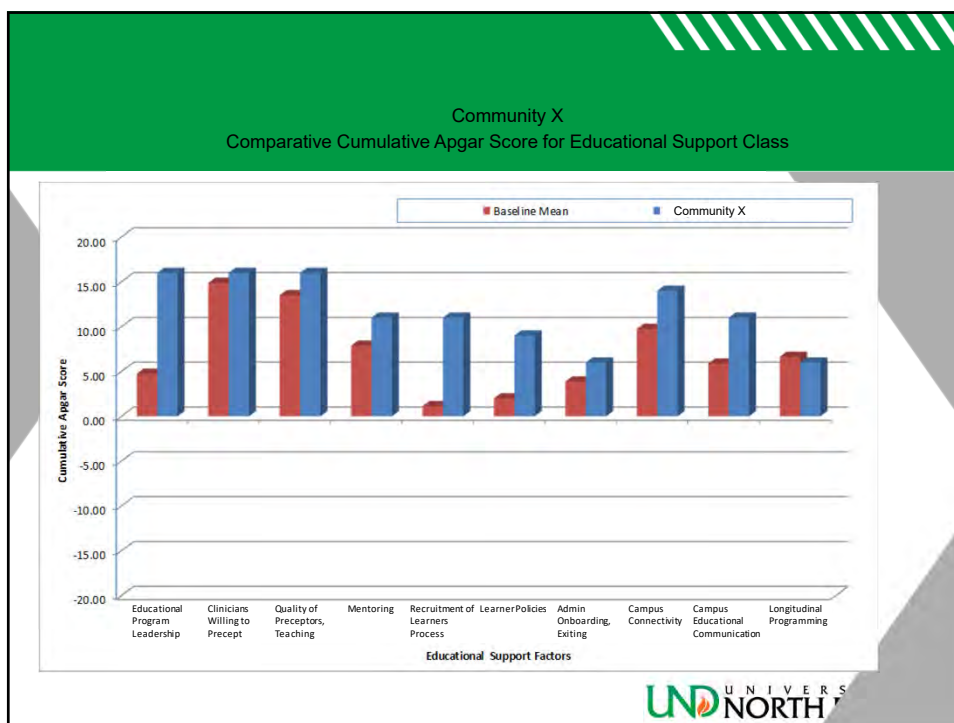
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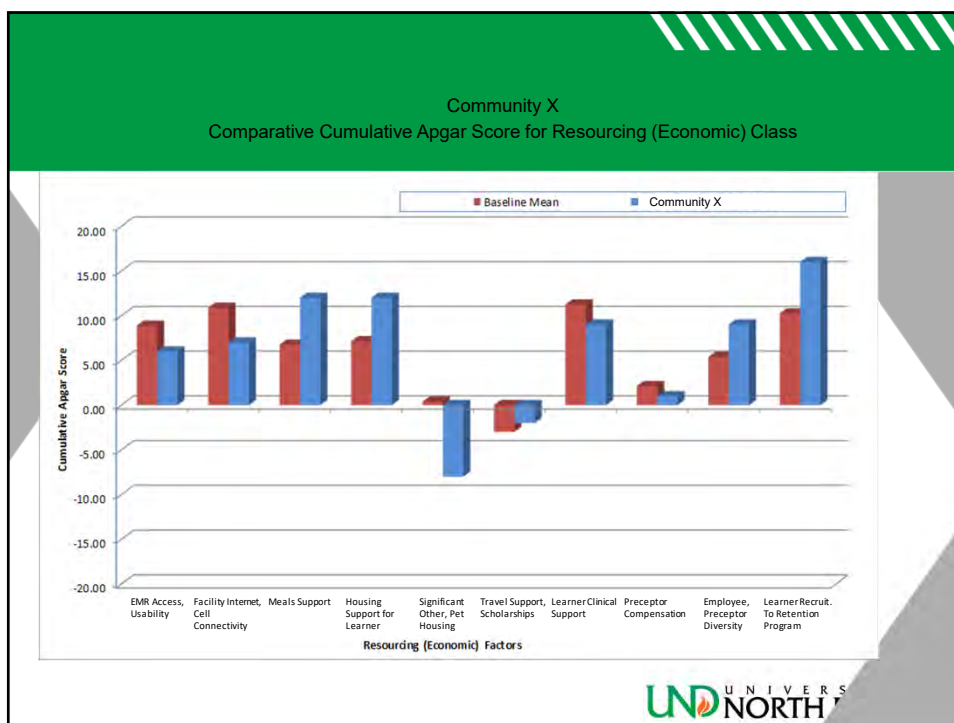
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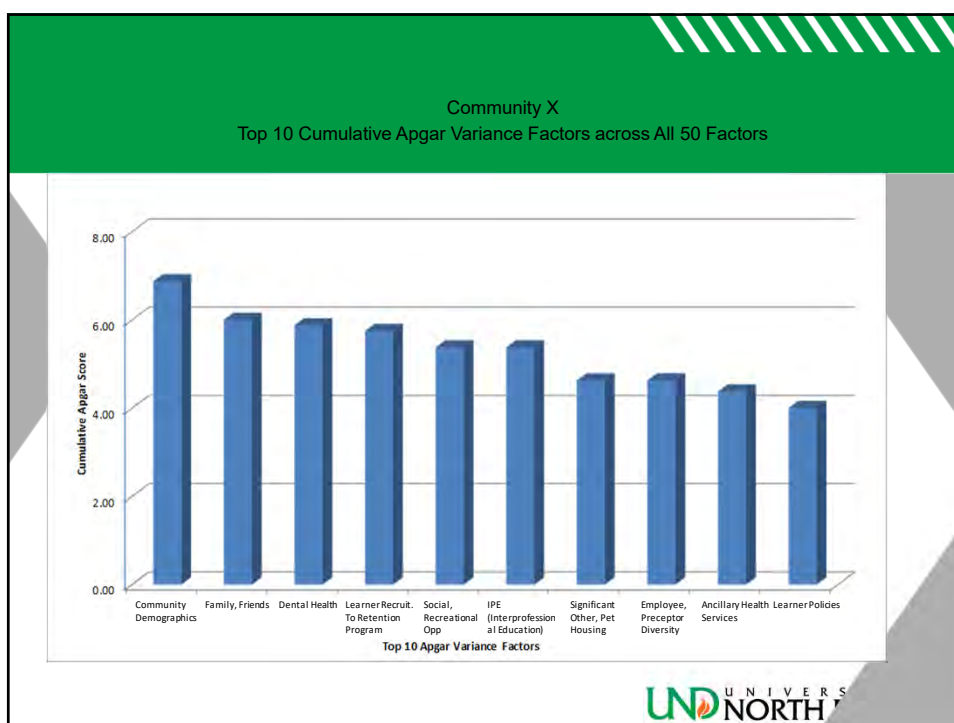
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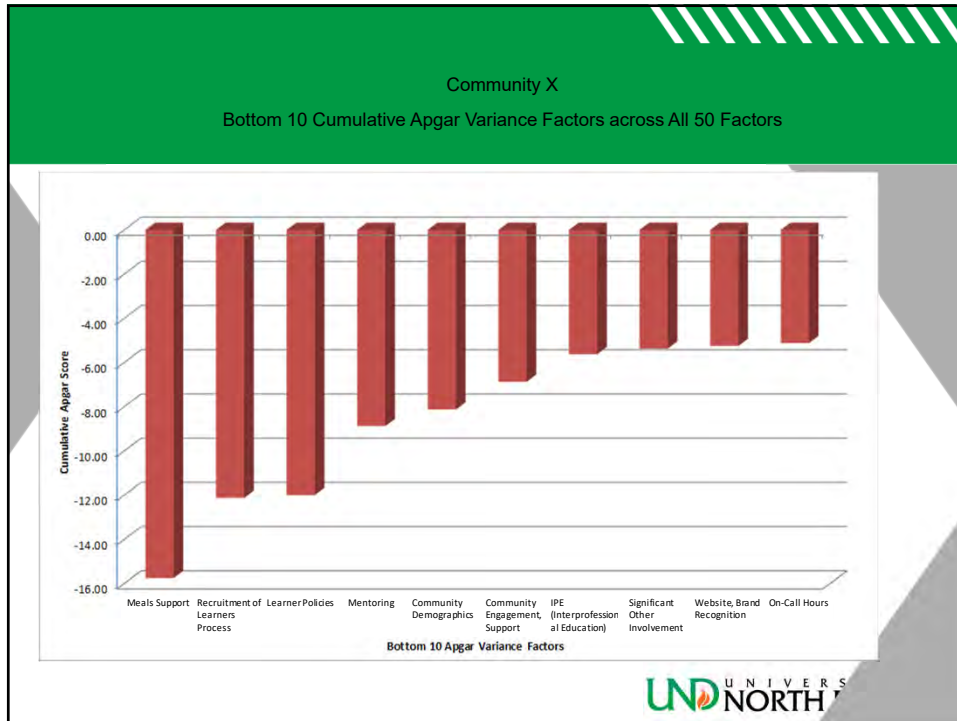
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Next Steps

- Develop action plan (next slide)
- HPERC CAQ administered again in second year
- Second administrative team presentation

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Action Plan (3-5 bullet points)

- Be as specific as possible:
- 1.
- 2.
- 3.
- 4.
- 5.

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Questions/Comments for Discussion



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