

The Community Apgar Project:  
A Validated Tool for Improving Rural Communities'  
Recruitment and Retention of Physicians

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Family Medicine Residency of Idaho

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Boise State University

National Organization of State Offices of Rural Health  
Region E Annual Meeting  
August 19, 2009

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Presentation Overview

- Acknowledgements
- The Community Apgar Questionnaire (CAQ)
  - Validation through research
  - Development in Idaho and initial findings
  - The CAQ Process
  - CAQ value
  - Future applications
- Questions

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Acknowledgements

- Contributors
  - Steven Millard, President, Idaho Hospital Association
  - Ted Epperly, MD, Program Director and CEO, Family Medicine Residency of Idaho
  - Alex Reed, Psy.D., MPH, Director of Behavioral Science, Mental Health and Research, Family Medicine Residency of Idaho
  - Ayaka Nukui, BS, Center for Health Policy, Boise State University

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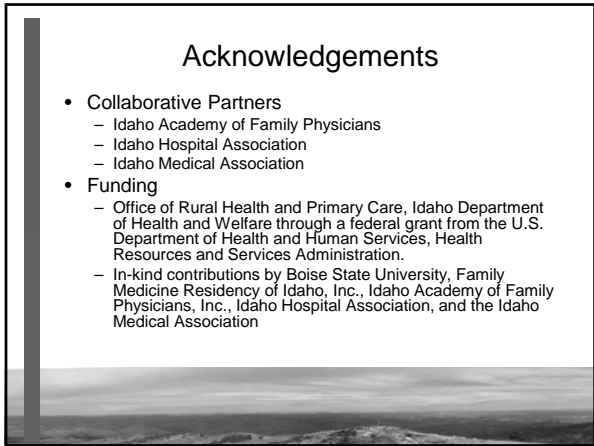
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**Acknowledgements**

- Collaborative Partners
  - Idaho Academy of Family Physicians
  - Idaho Hospital Association
  - Idaho Medical Association
- Funding
  - Office of Rural Health and Primary Care, Idaho Department of Health and Welfare through a federal grant from the U.S. Department of Health and Human Services, Health Resources and Services Administration.
  - In-kind contributions by Boise State University, Family Medicine Residency of Idaho, Inc., Idaho Academy of Family Physicians, Inc., Idaho Hospital Association, and the Idaho Medical Association



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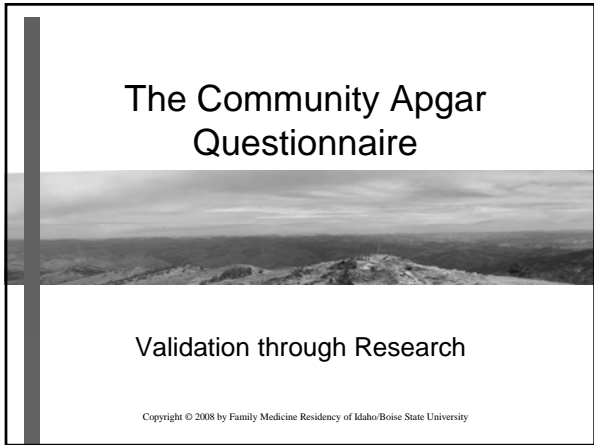
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**The Community Apgar  
Questionnaire**

Validation through Research

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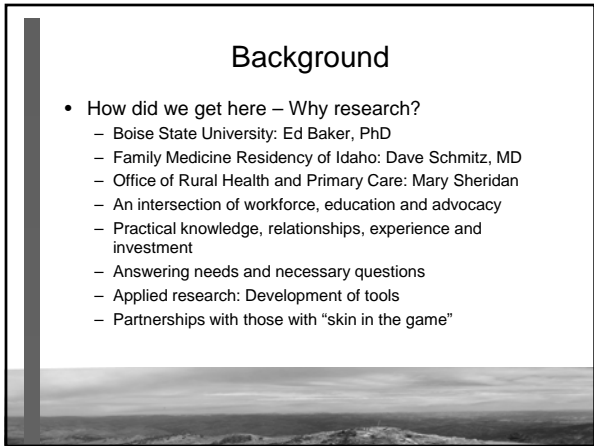
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**Background**

- How did we get here – Why research?
  - Boise State University: Ed Baker, PhD
  - Family Medicine Residency of Idaho: Dave Schmitz, MD
  - Office 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"



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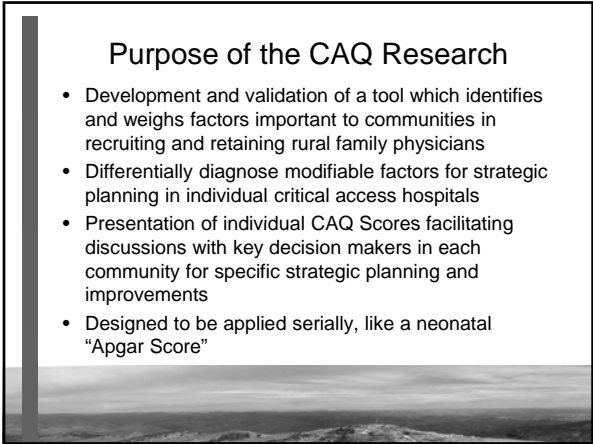
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### Purpose of the CAQ Research

- Development and validation of a tool which identifies and weighs factors important to communities in recruiting and retaining rural family physicians
- Differentially diagnose modifiable factors for strategic planning in individual critical access hospitals
- Presentation of individual CAQ Scores facilitating discussions with key decision makers in each community for specific strategic planning and improvements
- Designed to be applied serially, like a neonatal "Apgar Score"




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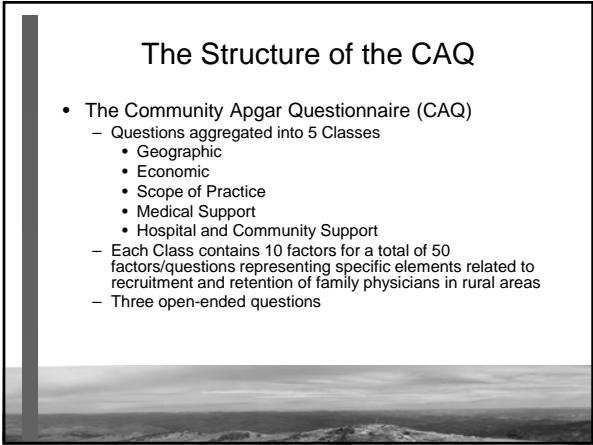
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### The Structure of the CAQ

- The Community Apgar Questionnaire (CAQ)
  - Questions aggregated into 5 Classes
    - Geographic
    - Economic
    - Scope of Practice
    - Medical Support
    - Hospital and Community Support
  - Each Class contains 10 factors for a total of 50 factors/questions representing specific elements related to recruitment and retention of family physicians in rural areas
  - Three open-ended questions




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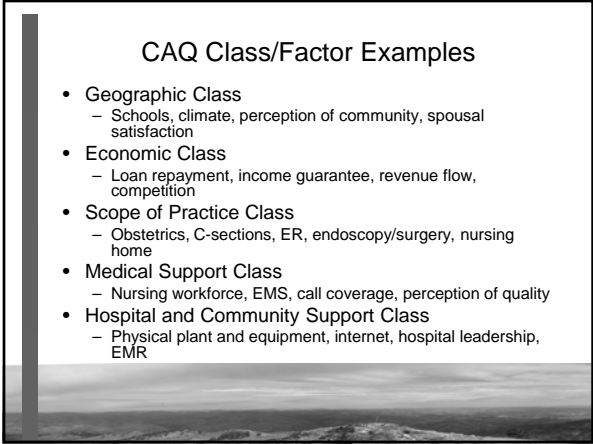
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### CAQ Class/Factor Examples

- Geographic Class
  - Schools, climate, perception of community, spousal satisfaction
- Economic Class
  - Loan repayment, income guarantee, revenue flow, competition
- Scope of Practice Class
  - Obstetrics, C-sections, ER, endoscopy/surgery, nursing home
- Medical Support Class
  - Nursing workforce, EMS, call coverage, perception of quality
- Hospital and Community Support Class
  - Physical plant and equipment, internet, hospital leadership, EMR




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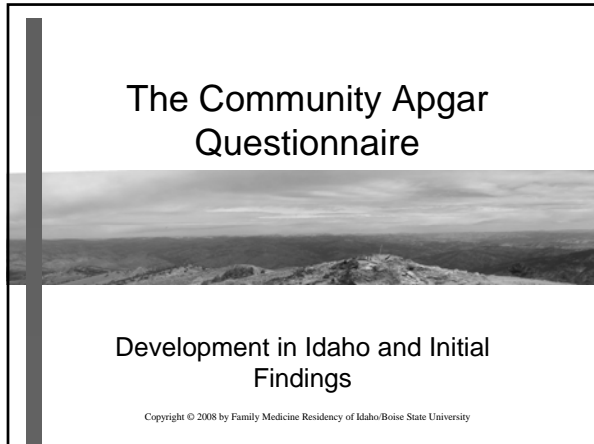
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## The Community Apgar Questionnaire

### Development in Idaho and Initial Findings

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## Research Design

- CAQ Target Communities
  - Selected based on site visits and discussions with the IHA and the State Office of Rural Health and Primary Care
  - Twelve rural communities with critical access hospitals identified
  - Communities classified as alpha [N=6] or beta [N=6] based on historical success in recruiting and retaining family physicians
  - Final sample included 6 alpha and 5 beta communities [91.7% participation rate] as one community declined initial participation but requested to participate in subsequent community assessments

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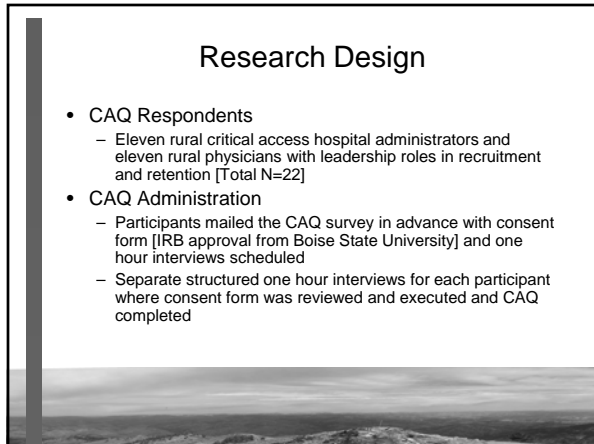
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## Research Design

- CAQ Respondents
  - Eleven rural critical access hospital administrators and eleven rural physicians with leadership roles in recruitment and retention [Total N=22]
- CAQ Administration
  - Participants mailed the 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

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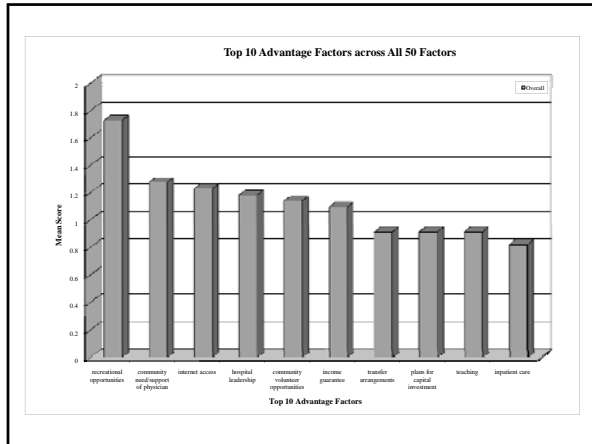
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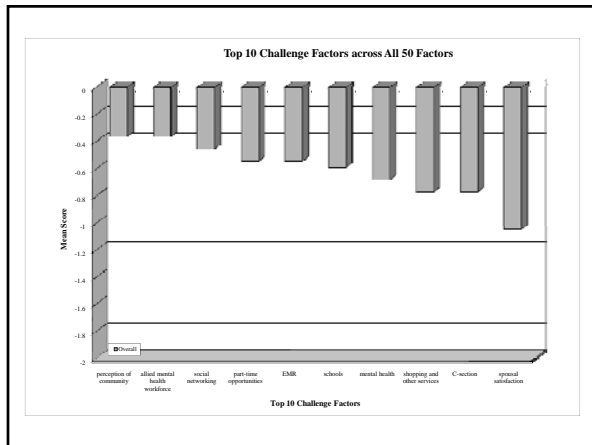
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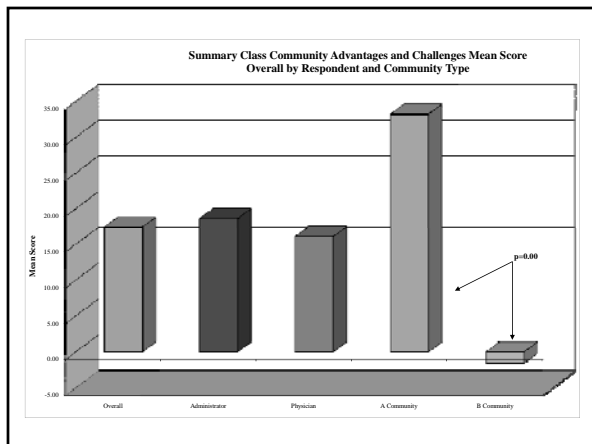
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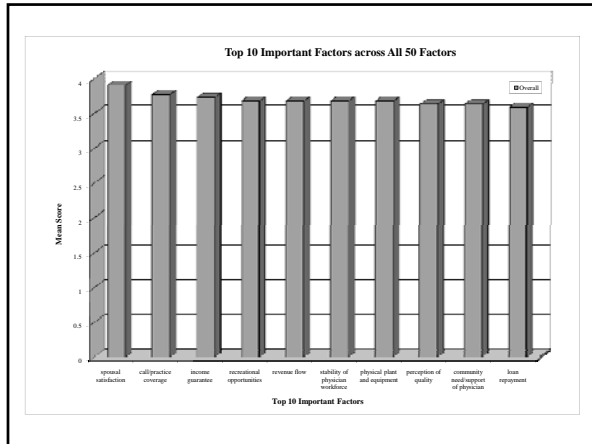
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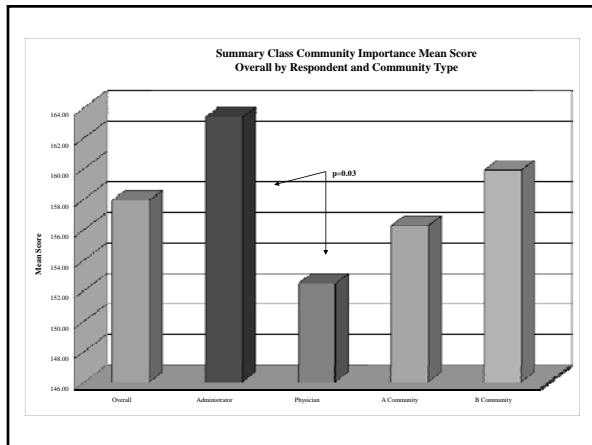
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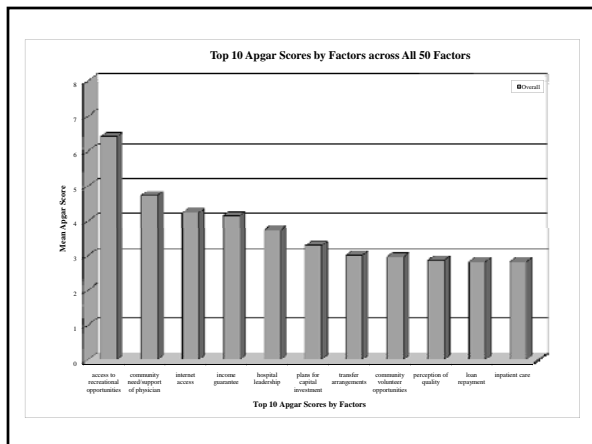
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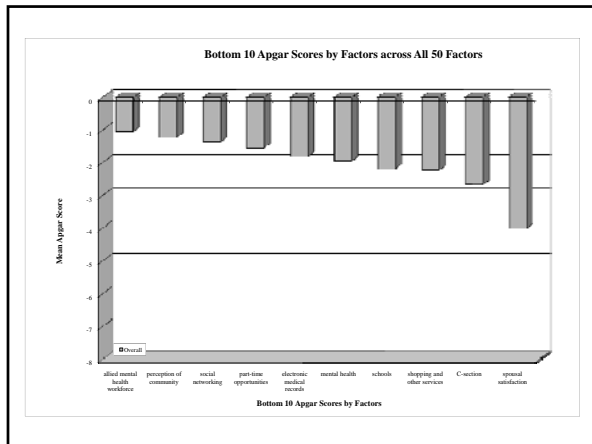
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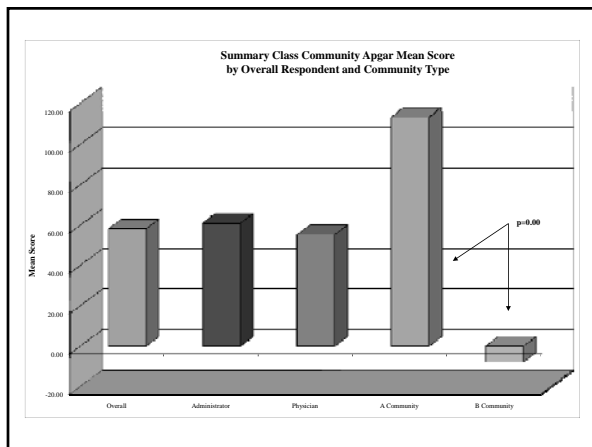
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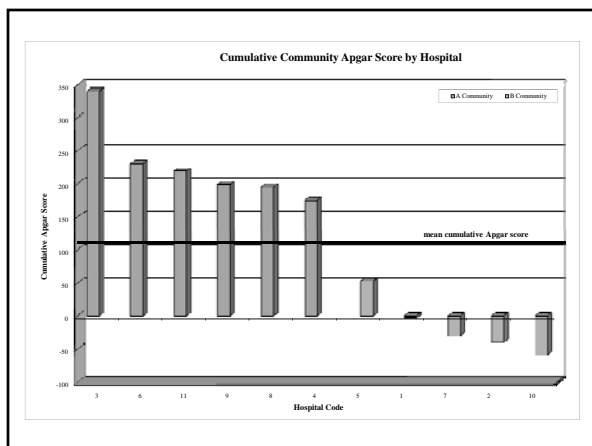
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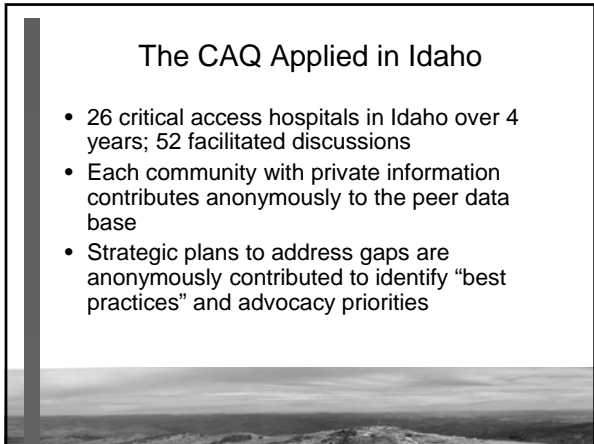
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**The CAQ Applied in Idaho**

- 26 critical access hospitals in Idaho over 4 years; 52 facilitated discussions
- Each community with private information contributes anonymously to the peer data base
- Strategic plans to address gaps are anonymously contributed to identify "best practices" and advocacy priorities



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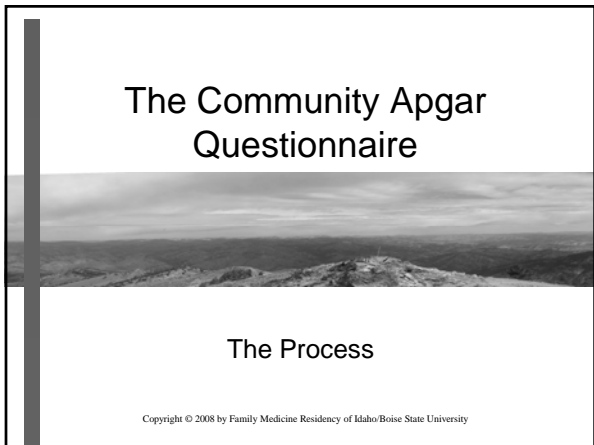
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**The Community Apgar  
Questionnaire**

**The Process**

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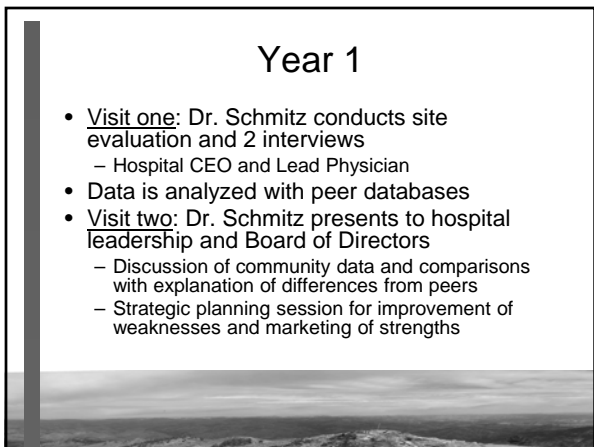
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**Year 1**

- Visit one: Dr. Schmitz conducts site evaluation and 2 interviews
  - Hospital CEO and Lead Physician
- Data is analyzed with peer databases
- Visit two: Dr. Schmitz presents to hospital leadership and Board of Directors
  - Discussion of community data and comparisons with explanation of differences from peers
  - Strategic planning session for improvement of weaknesses and marketing of strengths



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## Year 2

- Visit three: Dr. Schmitz conducts a second site evaluation and 2 interviews
  - Hospital CEO and Lead Physician
- Data is analyzed with peer databases and prior year scores
- Visit four: Dr. Schmitz presents a second time to hospital leadership and Board of Directors
  - Discussion of community data and comparisons with explanation of differences from peers and prior year scores
  - Strategic planning session for improvement of weaknesses and marketing of strengths
  - Discussion of effectiveness of strategic plan implementation and the CAQ Program

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## CAQ Program

- Each Community Hospital has 4 visits with 2 presentations approximately 1 year apart
- CAQ can be continued or reinitiated years later when community changes or needs arise
- Community is well known to the CAQ consultant who can help in recruitment

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## Expansion Beyond Idaho

- Successful implementation and state by state databases beyond Idaho
- State and regional data comparisons
- Training of state-specific CAQ consultant partners
- Linkages to State Offices of Rural Health, residencies, workforce agencies, and others

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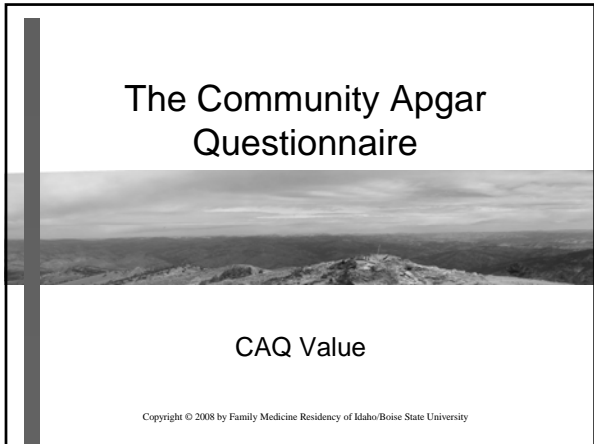
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## The Community Apgar Questionnaire

CAQ Value

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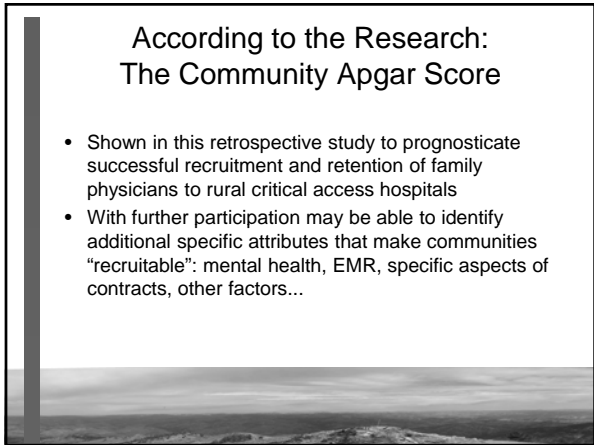
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## According to the Research: The Community Apgar Score

- Shown in this retrospective study to prognosticate successful recruitment and retention of family physicians to rural critical access hospitals
- With further participation may be able to identify additional specific attributes that make communities "recruitable": mental health, EMR, specific aspects of contracts, other factors...

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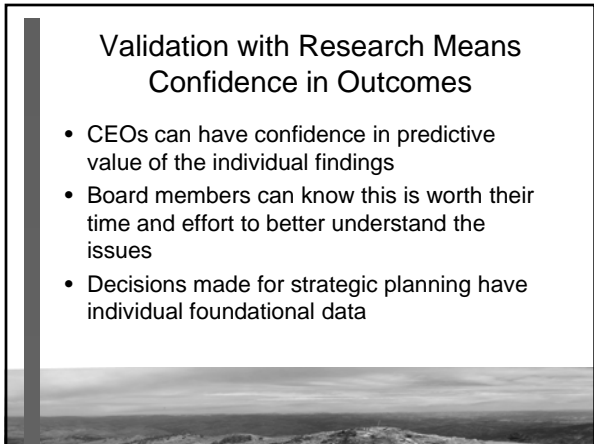
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## Validation with Research Means Confidence in Outcomes

- CEOs can have confidence in predictive value of the individual findings
- Board members can know this is worth their time and effort to better understand the issues
- Decisions made for strategic planning have individual foundational data

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## The CAQ Value Proposition

- Beyond “Expert Opinion”
- A new approach to the old problem of physician recruiting
- Self-empowering for the community: knowledge as power, not an outside “headhunter”
- Beyond physician recruitment to community improvement

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## Community “5”

### Example of Initial CAQ Assessment Information

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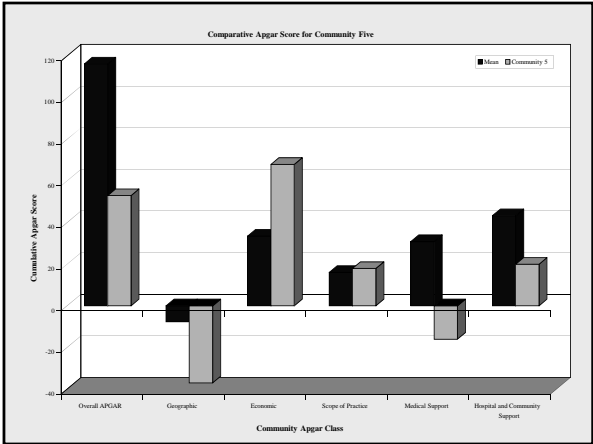
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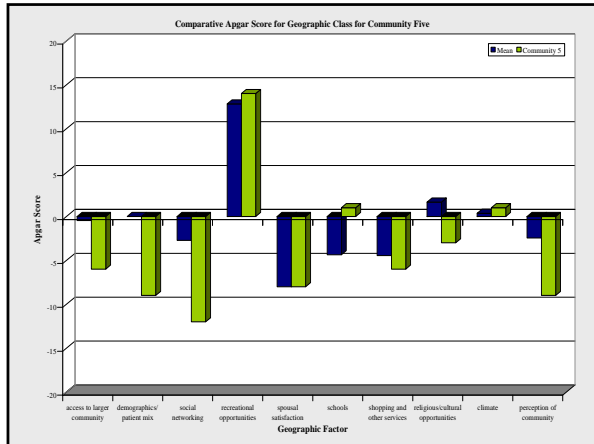
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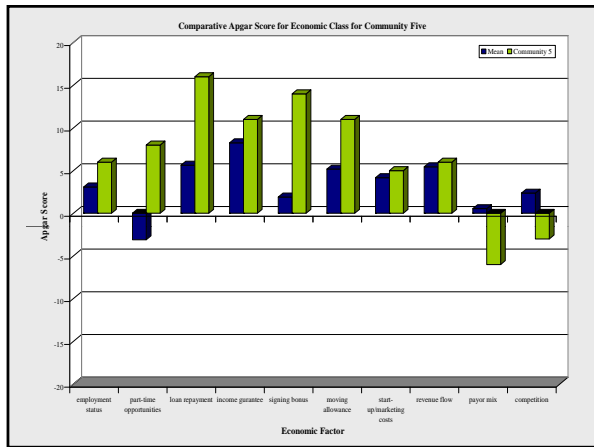
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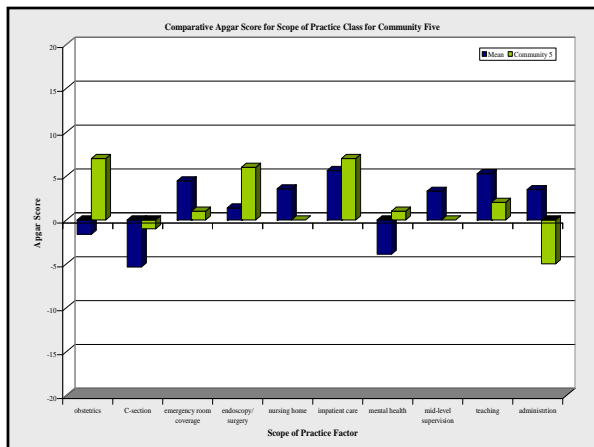
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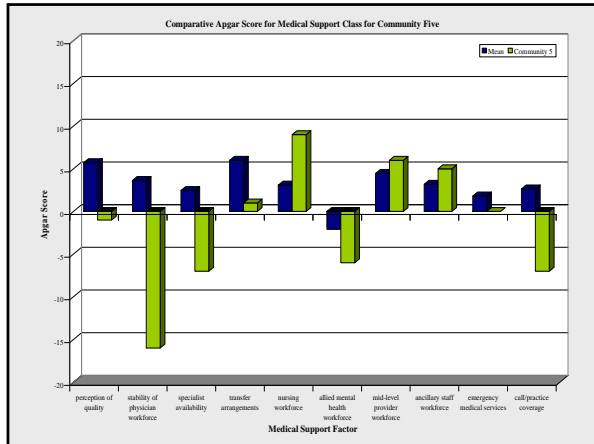
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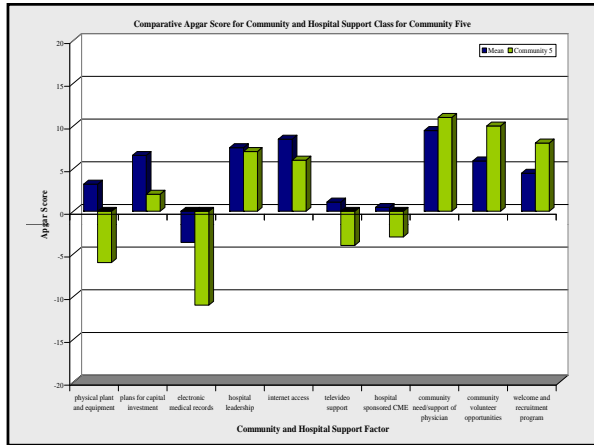
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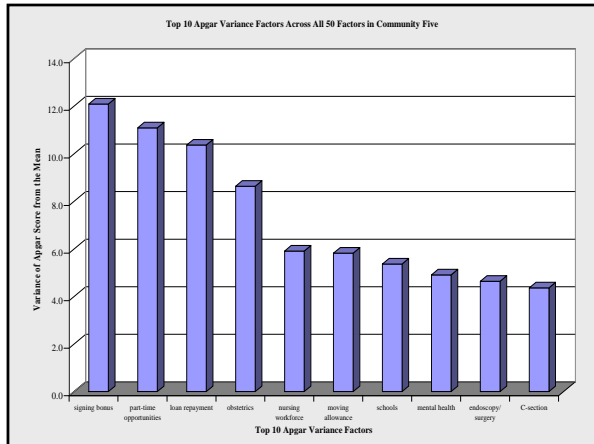
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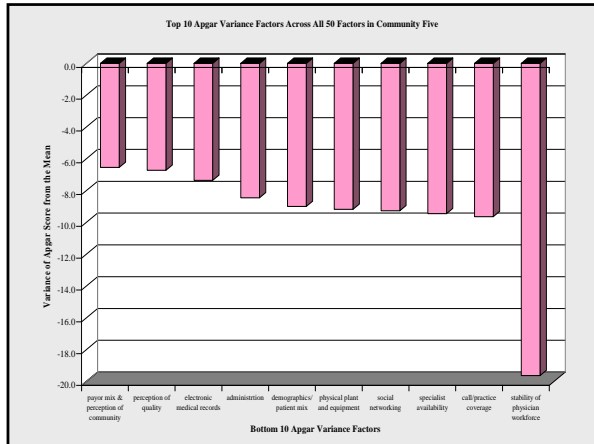
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## The Community Apgar Questionnaire

### Future Applications

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## CAQ Sister Programs

- Community Health Center CAQ under development in partnership with Idaho Primary Care Association
  - Completion date: Spring 2010
- Nursing CAQ under development in partnership with Boise State University Department of Nursing

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## Regional and National Use of the Community Apgar Project

- The Peer Group Data Bases (anonymous):
  - Idaho (possibly adding Wyoming, Montana, Oregon, Washington, Alaska, others)
  - Individual state comparisons
  - Regional database
  - National database
  - Individual communities benefit immediately
  - Further research with a “rising tide raising all boats”

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## CAQ Funding

- Funding Sources
  - FLEX funds
  - State Office of Rural Health funds
  - Grant funds
  - Direct cost share with institutions

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## Questions

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