Presentation Overview

• Acknowledgements
• The Community Health Center Community Apgar Questionnaire (CHC CAQ)
  – Background
  – Development
  – Selected State and Community Level Findings
• The Community Health Center Community Apgar Program (CHC CAP)
  – The CHC CAP process
  – The Maine experience
• Questions
Acknowledgements

• Contributors

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– Ted Epperly, MD, Program Director and CEO, Family Medicine Residency of Idaho
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  – Research and Physician Faculty time contributions made by Boise State University and Family Medicine Residency of Idaho
The Community Health Center Community Apgar Questionnaire (CHC CAQ)

BACKGROUND
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”
Background

• Six Years of Work
  – Year 1
    • Idaho Family Physician Rural Work Force Assessment Pilot Study (Published in the Journal of Rural Health)
  – Year 2
    • Critical Access Hospital Community Apgar Questionnaire (CAH CAQ) [Published in the Rural and Remote Health Journal]
  – Year 3
    • Examining the Trait of Grit and Satisfaction in Idaho Physicians
    • Community Apgar Program (CAP) Pilot for Critical Access Hospitals in Idaho
    • Nursing Community Apgar Questionnaire (NCAQ)
Background

• Six Years of Work (cont.)
  – Year 4
    • Community Health Center Community Apgar Questionnaire (CHC CAQ)
    • Community Apgar Program (CAP) for Community Health Centers in Idaho
    • Community Apgar Solutions Pilot Project
  – Years 5 & 6
    • Expansion of the Community Apgar Program (CAP) for Critical Access Hospitals and Community Health Centers
      – Wyoming, North Dakota, Wisconsin and Alaska (CAHs)
      – Maine (CHC)
The Community Health Center Community Apgar Questionnaire (CHC CAQ)

DEVELOPMENT
Development

• Community Health Center Community Apgar Questionnaire (CHC CAQ) Research Objectives

  – Develop an objective measurement tool to assess the characteristics and parameters of Idaho community health centers related to successful recruitment and retention of family physicians
Development

• The CHC CAQ
  – Questions aggregated into 5 Classes
    • Geographic
    • Economic
    • Scope of Practice
    • Medical Support
    • Facility 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 medicine physicians in community health centers
  – Three open-ended questions
Development: Class/Factor Examples

- **Geographic Class**
  - Schools, climate, perception of community, housing, spousal satisfaction

- **Economic Class**
  - Loan repayment, salary, signing bonus, part-time opportunities

- **Scope of Practice Class**
  - Mental health, inpatient care, obstetrics, emergent care, administrative duties
Development:
Class/Factor Examples

• Medical Support Class
  – Nursing, allied mental health, pharmacy, perception of quality, call coverage

• Facility and Community Support Class
  – Physical plant and equipment, EMR, CHC leadership, community support of physician
Development

• Community Apgar Score
  – Constructed from the sum of weighed parameters in the five classes of the CAQ
    • similar to the five dimensions of the neonatal Apgar
    • a repeatable measure of a community’s assets and capabilities
  – Designed to differentially diagnose a community health center’s relative component strengths and challenges
    • prioritize improvements
    • identify marketing opportunities
The Community Health Center Community Apgar Questionnaire (CHC CAQ)

SELECTED STATE LEVEL FINDINGS
Top 10 CHC Advantage Factors across All 50 Factors

Mean Score

recreational opportunities
loan repayment
retirement package
perception of quality
mid-level provider workforce
perceived fiscal stability
community need/support of physician
CME benefit
minor trauma (casting/suturing)
schools
teaching
ancillary staff workforce

Top 10 CHC Advantage Factors
Top 10 CHC Challenge Factors across All 50 Factors

- Mean Score

- demographically underserved/payor mix
- obstetrics: prenatal care
- specialist availability
- nursing workforce
- perception of community
- salary
- production incentive
- spousal satisfaction
- mental health
- televideo support

Top 10 CHC Challenge Factors
Top 10 Important Factors across All 50 Factors

Mean Score

Top 10 Important Factors:
- Spousal satisfaction
- Call/practice coverage
- Income guarantee
- Recreational opportunities
- Revenue flow
- Stability of physician workforce
- Physical plant and equipment
- Perception of quality
- Community need/support of physician
- Loan repayment
Top 10 CHC Apgar Scores by Factors across All 50 Factors

Mean Apgar Score

Top CHC 10 Apgar Scores by Factors

- recreational opportunities
- loan repayment
- perception of quality
- schools
- retirement package
- community need/support of physician
- CME benefit
- mid-level provider workforce
- call/practice coverage
- minor trauma (casting/suturing)
Bottom 10 CHC Apgar Scores by Factors across All 50 Factors

Bottom 10 CHC Apgar Scores by Factors

Mean Apgar Score

-8 -7 -6 -5 -4 -3 -2 -1 0 1 2

obstetrics: specialist availability administration welcome and recruitment program demographic: underserved/payor mix nursing workforce production incentive salary perception of community spousal satisfaction televideo support mental health
Cumulative CHC Community Apgar Score by Community Health Center

Community Health Center Code

mean cumulative CHC Apgar
Cumulative CHC Community Apgar Score – Maine Facilities

![Bar chart showing cumulative CHC Community Apgar Score for different Community Health Center Codes. The x-axis represents the Community Health Center Code, and the y-axis represents the Cumulative CHC Apgar Score. The Apgar Score and Apgar Average are indicated by different colored bars.](image-url)
The Community Health Center Community Apgar Questionnaire (CHC CAQ)

COMMUNITY “5”
Comparative CHC Apgar Score for Community Five

- Overall
- Geographic
- Economic
- Scope of Practice
- Medical Support
- Facility and Community Support
Comparative CHC Apgar Score for Geographic Class for Community Five

Geographic Factor:
- access to larger community
- demographic: underserved/payor mix
- housing (availability & affordability)
- schools
- social networking
- recreational opportunities
- spousal satisfaction
- shopping and other services
- climate
- perception of community

CHC Apgar Score

Mean vs. Community 5
Comparative CHC Apgar Score for Economic Class for Community Five

Economic Factor

part-time opportunities
loan repayment
salary
signing bonus/moving allowance
length of contract flexibility
perceived fiscal stability
production incentive
retirement package
CME benefit
competition

CHC Apgar Score
Comparative CHC Apgar Score for Medical Support Class for Community Five

- Perception of quality
- Stability of physician workforce
- Specialist availability
- Nursing workforce
- Mid-level provider workforce
- Ancillary staff workforce
- Pharmacy services
- Allied mental health workforce
- Language services support
- Call/practice coverage

Mean
Community 5
Comparative CHC Apgar Score for Facility and Community Support Class for Community Five

Facility and Community Support Factor

- Physical plant and equipment
- Plans for capital investment
- Electronic medical records
- CHC leadership
- Televideo support
- Community need/support of physician
- Welcome and recruitment program
- Medical reference resources
- Delegated physician patient services
- Moonlighting opportunities

Mean

Community 5
Top 10 CHC Apgar Variance Factors Across All 50 Factors in Community Five

- Mental Health
- Salary
- Delegated Physician Patient Services
- Perception of Community
- Housing (Availability &/or Affordability)
- Demographic: Underserved/Payor Mix
- Competition
- Administration
- Allied Mental Health Workforce
- Televideo Support
Bottom 10 CHC Apgar Variance Factors Across All 50 Factors in Community Five

Bottom 10 CHC Apgar Variance Factors

- Nursing workforce
- Mid-level provider workforce
- Perception of quality
- Stability of physician workforce
- Welcome and recruitment program
- Medical reference resources
- Electronic medical records
- Pharmacy services
- Physical plant and equipment
- Recreational opportunities
The Community Health Center Community Apgar Questionnaire (CHC CAQ)

COMMUNITY “8”
Comparative CHC Apgar Score for Community Eight

<table>
<thead>
<tr>
<th>Community CHC Apgar Class</th>
<th>Overall</th>
<th>Geographic</th>
<th>Economic</th>
<th>Scope of Practice</th>
<th>Medical Support</th>
<th>Facility and Community Support</th>
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</tr>
</tbody>
</table>
CHC Apgar Score

Comparative CHC Apgar Score for Geographic Class for Community Eight

Geographic Factor

- access to larger community
- demographic: underserved/payor mix
- housing (availability &/or affordability)
- schools
- social networking
- recreational opportunities
- spousal satisfaction
- shopping and other services
- climate
- perception of community

Mean
Community 8
Comparative CHC Apgar Score for Scope of Practice Class for Community Eight

Scope of Practice Factor

Mean

Community 8
Top 10 CHC Apgar Variance Factors Across All 50 Factors in Community Eight

- Spousal satisfaction
- Perception of community
- Social networking
- Obstetrics: Prenatal care
- Call/practice coverage
- Obstetrics: Deliveries/C-section
- Production incentive
- Welcome and recruitment program
- Access to larger community
- Televideo support
Bottom 10 CHC Apgar Variance Factors Across All 50 Factors in Community Eight

- medical reference resources
- physical plant and equipment
- language services support
- recreational opportunities
- office GYN procedures
- teaching
- plans for capital investment
- loan repayment
- retirement package
- delegated physician patient services
The Community Health Center Community Apgar Program (CHC CAP)

CHC CAP PROCESS
Year 1

• **Visit one:** Dr. Schmitz and/or CA consultant conducts site evaluation and 2 interviews
  – Administrator and Lead Physician
• Data is analyzed with peer databases
• **Visit two:** Dr. Schmitz and/or CA consultant presents to 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
Year 2

- **Visit three**: CA consultant conducts a second site evaluation and 2 interviews
  - Administrator and Lead Physician
- **Visit four**: Dr. Schmitz and/or CA consultant presents a second time to 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
CHC CAP

• Each site has 4 visits with 2 presentations approximately 1 year apart
• Time requirement is about 2 hours plus the strategic planning board meeting per year
• CAQ can be continued or reinitiated years later when community changes or needs arise
• The CA consultant and your CPCA will be stronger as they can be better informed for recruitment
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
Validation with Research Means Confidence in Outcomes

- Administrators 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
Additional Considerations

- Ongoing support will be available from Dr. Schmitz and Dr. Baker for the Maine program
- IRB and other issues will be addressed with the primary research team
- State and regional data comparisons will be a future goal
- Linkages to the State Office of Rural Health, residencies, workforce agencies, and others will also be a benefit from aggregate data
Regional and National Use of the Community Apgar Project

• The Peer Group Data Bases (anonymous):
  – Individual state comparisons
  – Regional database
  – National database
  – Individual communities benefit immediately
  – Further research with a “rising tide raising all boats”
• States Participating in the CAP
• States Interested in Implementing the CAP
The Community Health Center Community Apgar Program (CHC CAP)

THE MAINE EXPERIENCE
Questions