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Annual Research Meeting

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QI Collaboratives for a Healthier Minnesota

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Objectives

- Describe the Minnesota Public Health Collaborative for Quality Improvement
- Provide a framework for building a quality improvement culture in the public health system
- Illustrate how quality improvement tools can be used to improve delivery of public health services

Public Health in Minnesota

- 87 counties and 11 tribes
- 75 local health departments
- 53 community health boards
- State Community Health Services Advisory Committee
- Minnesota Department of Health

Multi-State Learning Collaborative I, II, and III

- Funded by Robert Wood Johnson Foundation
- Established in 2006 and will end in 2011
- To advance accreditation and quality improvement strategies in public health departments
- Currently includes 16 states
- http://www.nnphi.org/mlc

Minnesota and MLC

- Joined in second phase (MLC-2)
- Established the Minnesota Public Health Collaborative for Quality Improvement
  - Partnership among the Minnesota Department of Health, Local Public Health Association, University of Minnesota School of Public Health
- Integrated quality improvement into public health practice

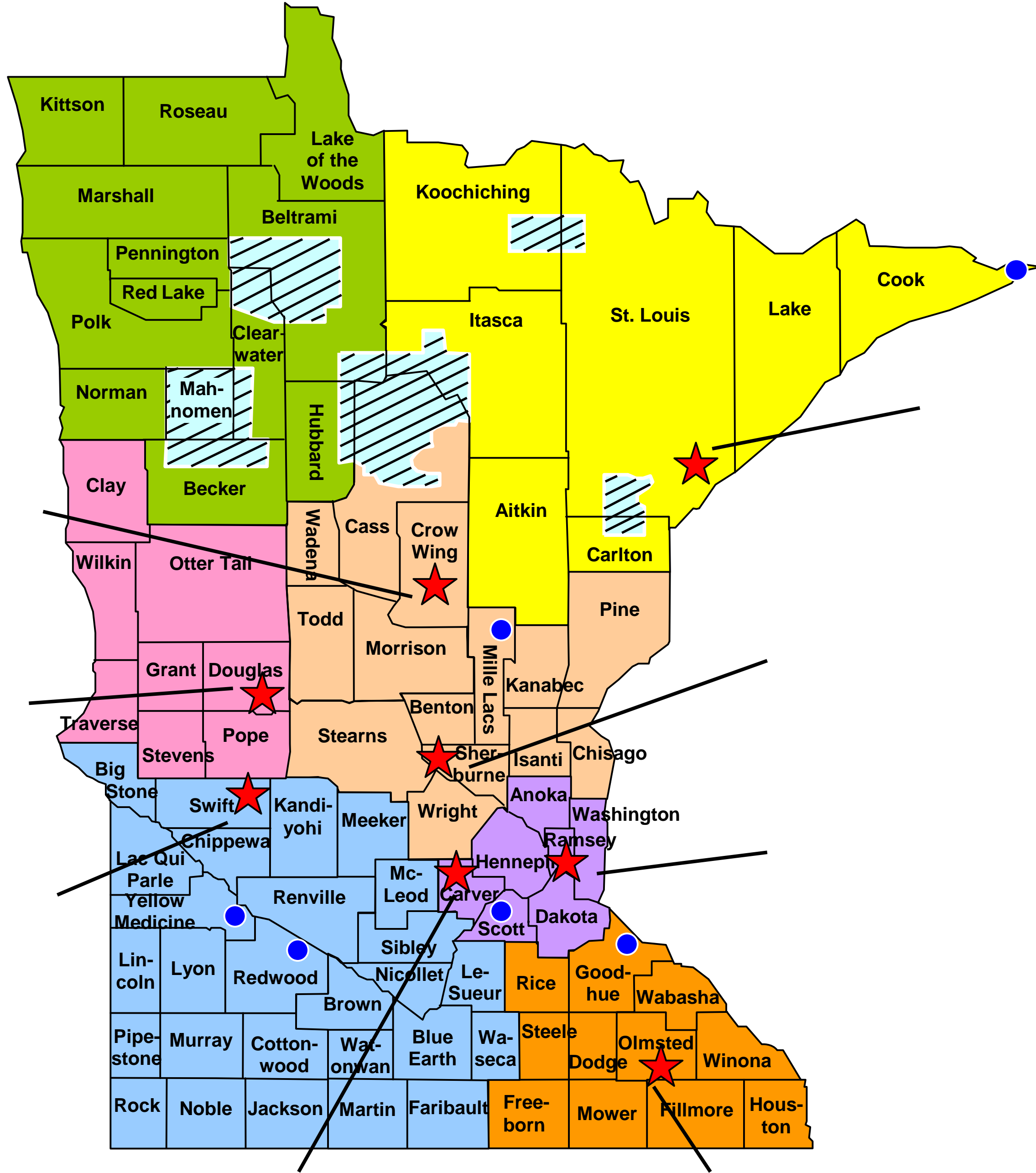
Goals of the Collaborative

- To build public health workforce capacity to use quality improvement tools and methods
- To develop and test a model for using quality improvement to improve public health practice
- To create greater practice/academic linkage

Minnesota Public Health Collaborative for Quality Improvement

- 8 projects, 34 local health departments
- Based on the Model for Improvement
- Structure similar to Institute for Healthcare Improvement (IHI) Breakthrough Series*
- Project teams:
  - Local public health staff
  - MDH public health nurse consultant
  - SPH faculty and graduate student
  - Others impacted by the issue

*IHI Breakthrough Series:
http://www.ihi.org/IHI/Results/WhitePapers/TheBreakthroughSeriesIHIsCollaborativeModelforAchieving+BreakthroughImprovement.htm


Kittson
Roseau
Lake of the Woods
Marshall
Beltrami
Koochiching
Pennington
Red Lake
Polk
Clear-water
Itasca
St. Louis
Lake
Cook
Norman
Mah-nomen
Hubbard
Clay
Becker
Wadena
Cass
Crow Wing
Aitkin
Carlton
Wilkin
Otter Tail
Todd
Morrison
Pine
Mille Lacs
Kanabec
Grant
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Stevens
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Sher-burne
Isanti
Chisago
Big Stone
Swift
Kandi-yohi
Meeker
Wright
Anoka
Washington
Chippewa
Ramsey
Lac Qui Parle
Hennepin
Mc-Leod
Yellow Medicine
Renville
Carver
Scott
Dakota
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Lyon
Redwood
Nicollet
Le-Sueur
Rice
Good-hue
Wabasha
Brown
Pipe-stone
Murray
Cotton-wood
Wat-onwan
Blue Earth
Wa-seca
Steele
Dodge
Olmsted
Winona
Rock
Noble
Jackson
Martin
Faribault
Free-born
Mower
Fillmore
Hous-ton

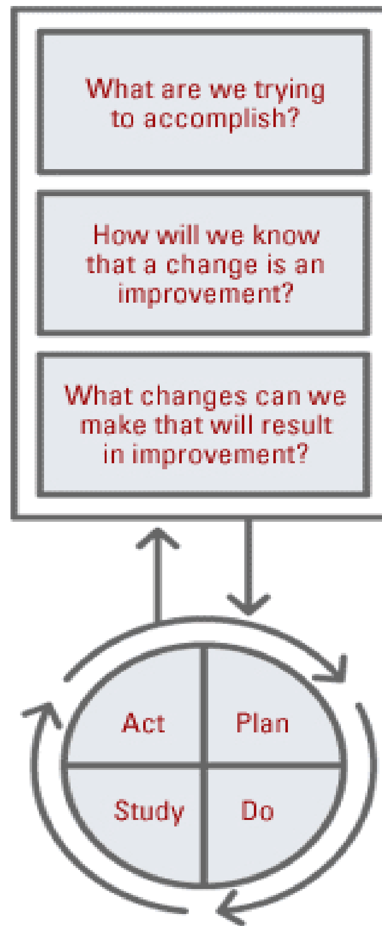
Target Populations

- Children and parents who visit public health clinics
- Children in a pediatric primary care clinic in rural MN
- Adults with latent TB infection
- Public health nurses
- Local public health leadership council
- Public health emergency responders

Quality Improvement Collaborative

- Learning sessions
  - Aim statements
  - Performance measures
  - QI Tools (Public Health Memory Jogger)
- Monthly reports
- Monthly conference calls
- Showcase and training conference
- Evaluation

Model for Improvement



1. Define the problem
2. Set an aim
3. Establish measures of progress
4. Develop an action plan
5. Test interventions
6. Monitor progress and evaluate results
7. Implement changes

Olmsted County

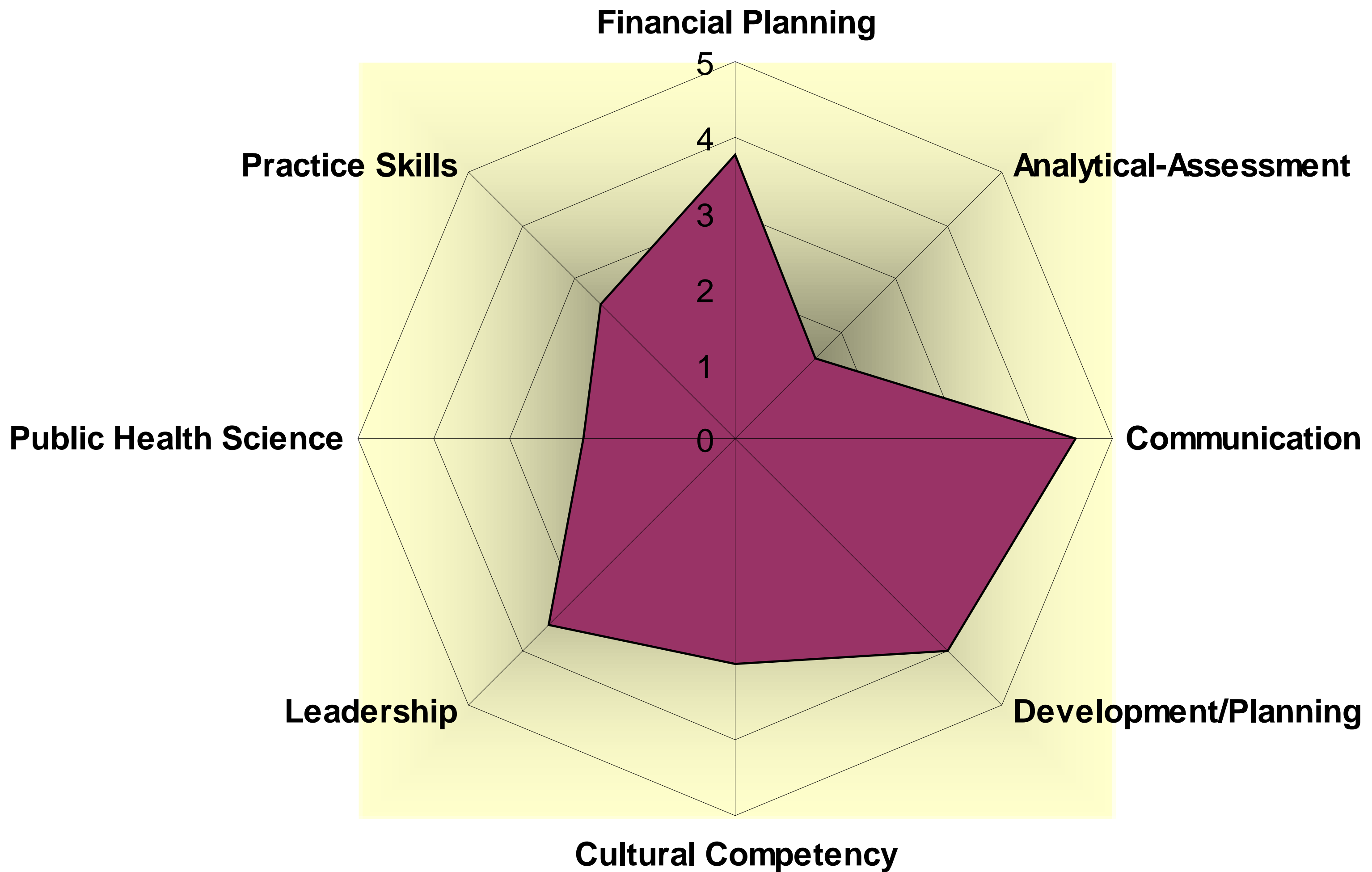
Problem:

Only 28 percent of Leadership Council members are aware of public health core competencies and how to use them in professional development and staff performance appraisal.

Aim:

By December 2007, 100 percent of Leadership Council members will rate their understanding of public health competencies at 3 or higher (1-5 scale).

Olmsted County



Olmsted County

- Plan

  Utilize the Public Health Core Competencies as a framework for assessing current proficiency in public health competencies.

- Do

  Complete a self-assessment of proficiency in the public health competencies.

- Study

  Compare recommended vs. actual proficiency levels. Prioritize development & learning needs based on the comparison.

- Act

  Develop & implement training/learning plans.

Olmsted County

AIM: By December 2007, 100 percent of Leadership Council members will rate their understanding of public health competencies at 3 or higher (1-5 scale).							
MEASURE: The following selection best describes my understanding of public health competencies and their use in professional development and performance management	1 = I have heard about PH competencies, but don't know specifics about their use in professional development and staff performance appraisal.	2 = Understanding between 1 and 3	3 = I understand PH competencies, and how they can be used for professional development and staff performance appraisal.	4 = Understanding between 3 and 5	5 = I regularly use PH competencies as a model for professional development and staff performance appraisal.	Rating Average	Response Count
August 2007	42.8% (6)	28.6%(4)	28.6%(4)	0%	0%	1.86	14
December 2007	7.7% (1)	30.8% (4)	23.1% (3)	23.1%(3)	15.4% (2)	3.08	13

Data Collection

- Monthly reports provided an overview of actions taken
- Monthly conference calls offered an opportunity to share challenges and successes
- Storyboards illustrated process from beginning to end
- Survey of participants showed learning and value of the collaborative

Outcomes

- 5 projects achieved breakthrough improvement
  - 70% reduction in staff time devoted to Health Alert Network testing
  - Over 100% increase in leadership understanding of public health workforce competencies
  - Over 100 children enrolled in dental varnish treatment program
  - 60% increase in timely completion of Personal Care Assistant reassessments
  - 169 children screened for behavioral health issues

Outcomes

- 2 projects achieved incremental improvement
  - 3% increase in immunizations for WIC clients, 6% increase for non-WIC clients
  - Reduced number of forms for recording treatment of latent TB infection from 13 to 6
  - Both of these projects are ongoing
- 1 project made no improvement

Evaluation

- 75% believe that quality improvement is relevant to their organization
- 60% "strongly agree" that the collaborative gave them new, useful information about QI
- 72% intend to use quality improvement practices in future projects
- 79% rated management's interest in the QI project as "very supportive"

Lessons Learned

- Accurate definition of the problem and aim are critical to success – take the time to get it right
- Tailor the pace and scope of learning to the capacity and capability of the audience
- Improvement is slower in the absence of evidence-based interventions
- Incentives to participate were small, so relevance and gains needed to be significant

Conclusions

- Quality improvement methods can produce measurable change in delivery of local public health services
- Slight adaptations to existing QI models may make them more amenable to public service settings
- These results are not generalizable to all public health systems
- More research is needed