# Quality in the Public Health System

APHA 137<sup>th</sup> Meeting Philadelphia, PA November 9, 2009 12:30 – 2:00pm

Cheryll D. Lesneski, DrPH Gillings School of Global Public Health UNC-Chapel Hill

## **Presenter Disclosures**

## **Cheryll Lesneski, DrPH**

The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:

No relationships to disclose

# Objectives

This session will show how the quality concepts in the HHS Consensus Statement are being used to support QI in financial management practices specifically for:

- Conducting a gap analysis using financial and operational ratio and trend analysis
- Identifying an AIM Statement that can be used in QI models such as Institute of Healthcare Improvement's (IHI) Model for Improvement
- Developing measures for changes and improvements

# **Clarity of Purpose**

First – to know where we are headed we must have direction.

□ The Mission of Public Health

- To fulfill society's interest in assuring conditions in which people can be healthy
- Public health should address principally the fundamental causes of disease and requirements for health, aiming to prevent adverse health outcomes.

□ A Vision for Public Health

Healthy people in healthy communities

# Achieving Quality in Public Health

Improving health outcomes and conditions \* Measure improvement in

- Process
  - Evidence-based policies, programs, services and research
  - Acquisition, use, & management of financial resources
- Outcomes
  - Increases in desired health outcomes and conditions (social, political, and environmental determinants of health)

## National Framework for Quality in Public Health

- Public Health Practice that conforms with National AIMS (Characteristics) of Quality in Public Health is
  - Population-centered
  - Equitable
  - Proactive\*
  - Health Promoting
  - Risk Reducing
  - Vigilant\*
  - Transparent\*
  - Efficient\*
  - Effective

# Relationship of Quality & Finance

Quality Movement grew out of a desire to deliver better goods and services while reducing costs

Funding is finite, so, <u>MUST</u> align costs for desired levels of services, functions, or product line

# Relationship of Quality & Finance

From a SYSTEMS perspective, the examination of costs is a vital component of quality improvement and performance measurement processes.

When improving quality, must look at all system components, including and especially FINANCES!

### Translating National Aims for Public Health Quality to Financial Management Practices that are:

#### PROACTIVE

Improving financial status of public health organizations by routinely monitoring fiscal health which is vital to achieving sustainability, avoiding fiscal distress, and fulfilling the public health mission

#### VIGILANT

Creating practices that enhance financial and operational surveillance activities through standardized routine analysis across the system

#### TRANSPARENT

Sharing valid, reliable, timely, and meaningful data that is readily available

#### EFFICIENT

Analyzing the cost and benefits of services to maximize limited resources

Examples of Quantitative Financial Management Tools that Promote Quality Improvement

> Financial Ratios & Trend Analysis

## **Overview of Pilot Model for Financial Ratio and Trend Analysis**

Examples of data used in Financial and Operational ratios include:

- Organizational financial and operational data
  - Revenues
  - Expenditures
  - Workforce
- Mission Critical information on strategic public health priorities
  - Programs resulting in health improvements
- Community demographics
  - Population trends
  - Uninsured rates

# Ratios Overview, cont'd.

Format – numerator/denominator Examples:

- Revenues per capita
- % of budgeted revenue received
- Expenditures per capita
- Administration as % of total expenditures
- Total Margin
- FTEs per 1000 population
- % of Priority PH outcomes 3 year rate w/improvement
- % of programs with expenditures that exceed revenues
- # of programs without a dedicated funding stream
- And more...

## **Ratios are Useful**

## Financial ratios help organizations identify

- Questions to ask
- Issues to address
- Problems to solve
- Strategic direction
- Areas to improve
- Ratios do not necessarily provide
  - Answers
  - Explanations
  - Solutions

## Setting the QI AIM Statement: Identify Gaps in Financial & Operational Performance

| Financial Data &<br>Ratios                                       | Actu | 1al 2008   | Issue<br>←  | Averag<br>LPHAs | e of Peer  |
|--|------|------------|---|-----------------|------------|
| Total Revenues   | \$   | 62,619,015 | 12% Change from 2007<br>State & County revenues are<br>decreasing while fees from<br>Medical Services up 98%  | \$              | 71,362,745 |
| Total Expenditures   | \$   | 68,212,188 | Expenditures exceed revenues  | \$              | 69,973,433 |
| Total Medical Revenues as<br>a % of Total Revenues<br>Ratio      |      | 39%        | Dependence on revenue from<br>medical services  |                 | 12%        |
| Medical Services<br>Expenditures as a % of<br>Total Expenditures |      | 48%        | High % of expenditures support<br>delivery of medical services<br>(\$8.3 million dollar <b>deficit</b> of<br>medical services expenditures<br>over medical services revenues) |                 | 10%        |

## Identify Gaps in Mission Critical Ratios

| Financial Data  | Actual 2008 | Issue  | Average of    |
|---|-------------|--|---------------|
| & Ratios  |             | ←  | similar LPHAs |
| % of Monitored<br>Community Health<br>Outcomes<br>w/Improvement During 3<br>YR Period | 30%         | Improvement in Community Health<br>Outcomes /Risk Factors Needed.<br>Ex. Rates of communicable &<br>vaccine preventable diseases , AIDs ,<br>STDs, heart disease, cancer, stroke,<br>diabetes, births to teens, infant<br>deaths, motor vehicle crashes,<br>obesity, physical activity, tobacco<br>use, etc. | 52%           |

## Identifying Gaps & Areas for Improvement

| National<br>AIMS for<br>QI | Potential<br>Gaps<br>Ratio<br>Analysis   | <b>Potential Causes</b>   | Areas for<br>Improvement   |
|----------------------------|--|---|--|
| Vigilant<br>Transparent    | Expenditures<br>exceed<br>revenue<br>Minimal<br>analysis and<br>reporting  | <ul> <li>Inadequate budgeting process</li> <li>Inability to track revenues &amp; expenditures to prevent problems</li> <li>Loss of revenue streams</li> <li>Expenditures for medical services exceed revenues</li> </ul>                                | <ul> <li>Improved surveillance<br/>of organization's<br/>financial data</li> <li>Benchmarking with<br/>PH organizations</li> <li>Stakeholder reports</li> </ul>  |
| Proactive<br>Efficient     | Provision of<br>medical<br>services vs.<br>mission<br>critical PH<br>services<br>Health<br>outcomes not<br>improving | <ul> <li>Inaccurate analysis of program costs &amp; outcomes from current services</li> <li>Inadequate capacity for delivery of population centered PH services</li> <li>Skills needed to deliver population-centered public health services</li> </ul> | <ul> <li>Financial surveillance</li> <li>Build community<br/>benefit partnerships<br/>with tax exempt<br/>hospitals</li> <li>Strategies to<br/>implement<br/>population-centered<br/>services</li> </ul> |

#### **Proactive, Vigilant, Transparent, & Efficient:** Public Health's Quadruple Goals Initiative to Improve Financial Status and Mission Critical Objectives

| National AIMS<br>for Quality<br>Improvement | Financial &<br>Mission Critical<br>Areas for QI   | Metrics  | Changes that Lead to<br>Improvement   |
|---|---|--|---|
| Proactive                                   | Reduce<br>occurrence of<br>expenditures<br>exceeding<br>revenues in public<br>health programs<br>by 100% within<br>12 months<br>Increase by 40%<br>population-<br>centered services<br>within 18 months | <ul> <li>Total Margin Ratio<br/>improvement</li> <li>% of programs where<br/>expenditures exceed revenues</li> <li># of diverse revenue streams</li> <li>Population-based ratios:<br/>Revenues &amp; Expenditures per<br/>Capita</li> <li>Financial Sustainability Index</li> <li>Ratio of medical care<br/>expenditures to population-<br/>based expenditures</li> <li>Presence of community health<br/>improvement plan developed<br/>with public participation</li> </ul> | <ul> <li>Establish process to monitor<br/>&amp; control expenditures</li> <li>Implement strategies to<br/>diversify revenue streams</li> <li>Acquire dedicated revenues<br/>for new programs</li> <li>Have a team for population-<br/>centered programs using<br/>evidence-based guidelines<br/>that can deliver 70% of the<br/>health promoting services to<br/>the population</li> <li>Cooperate and coordinate<br/>w/other PH organizations,<br/>hospitals, local providers of<br/>health &amp; social services &amp;<br/>community members</li> </ul> |

#### **Proactive, Vigilant, Transparent, & Efficient:** Public Health's Quadruple Goals Initiative to Improve Financial Status and Mission Critical Objectives

| National AIMS<br>for Quality<br>Improvement | Financial &<br>Mission Critical<br>Areas for QI   | Met   | rics  | Changes that Lead to<br>Improvement   |
|---|---|---|---|---|
| Vigilant                                    | Standardize<br>financial &<br>mission critical<br>data by using 80%<br>of financial &<br>mission critical<br>ratios | critical rati   | king used by<br>ealth<br>on •<br>c health<br>ons in a<br>pting<br>mission | Collaborative learning<br>projects & educational<br>programs to teach and use<br>financial ratios<br>Benchmark Revenue and<br>Expenditure Per Capita with<br>comparable agencies for<br>reporting |
|   | Monitor progress<br>using ratios  | <ul> <li>% of increated expenditure benefit correlation benefit correlation health imp</li> <li>% of programshow an in in communiation communiation communiation community</li> </ul> | •<br>res that<br>•<br>munity<br>rovement<br>ams that<br>provement         | Use Epi data to support the design of community benefit improvement programs  |

### **Proactive, Vigilant, Transparent, & Efficient:** Public Health's Quadruple Goals Initiative to Improve Financial

**Status and Mission Critical Objectives** 

| Status and Mission Critical Objectives      |   |   |   |  |
|---|---|---|---|--|
| National AIMS<br>for Quality<br>Improvement | Financial &<br>Mission Critical<br>Areas for QI   | Metrics   | Changes that Lead to<br>Improvement   |  |
| Transparent                                 | Within 1 year<br>increase access to<br>Public Health<br>financial & mission<br>critical information<br>by creating &<br>disseminating<br>useful annual<br>reports           |   | <ul> <li>Communication plan in<br/>place for financial &amp;<br/>mission critical reporting</li> </ul>  |  |
| Efficient                                   | On a yearly basis<br>conduct analysis of<br>revenues,<br>expenditures, and<br>outcomes across<br>similar public<br>health<br>organizations<br>using financial<br>ratio data | <ul> <li>per population</li> <li>% of programs w/cost<br/>analysis</li> <li>% of public health<br/>organizations adopting<br/>ratios who use the data to<br/>improve acquisition, use<br/>and management of<br/>revenues</li> </ul> | <ul> <li>Training events on cost<br/>analysis, ratios analysis</li> <li>Reporting of program costs<br/>and benefits</li> <li>Reward public health<br/>organizations for<br/>producing better health for<br/>the population and not<br/>just producing more<br/>services.</li> </ul> |  |

# Public Health and the Mission

- Public health practitioners are the prevention experts in our communities
- Public health has an opportunity to transform into assurers of quality throughout all sectors of healthcare and public health
- We must acquire, use, and manage the resources needed to improve our community's health
- Examining financial data and ratios identified
  - Gaps in performance
  - Areas to improve
  - Alignment of public health resources with public health organization's mission vs. medical services

# **Spread the Change**

 Use National Aims for QI to identify gaps
 Adapt processes such as the IHI Model for Improvement to achieve improvements

- AIM Statement
- Measurement
- Change
  - Plan Do Study Act
  - Cycles of learning
- Continuous quality improvement

# **Thank you!**

Emails and phone calls most welcomed!

lesneski@email.unc.edu
 919.966.6617