

North Carolina Local Public Health Performance Measurement Report November 14, 2008

Introduction:

This is the first in a new series of annual reports on an initial set of performance measures for the public health system in North Carolina. The thirteen indicators were selected and refined by several committees involving representatives of both state and local public health. The indicators may change over time as additional data and/or sources of data become available. All indicators and data in this initial set come from within the Division of Public Health, Department of Health and Human Services or the Division of Environmental Health, Department of Environment and Natural Resources.

The report looks at these indicators over two time periods of three years each, 2002 - 2004 and 2005 - 2007. In addition, benchmarks were identified for each indicator; some are based on prior 3 year period averages specific to each county and others come from expectations outlined in the funding agreements between specific programs in the Division of Public Health and the Local Health Departments.

This initial report provides a baseline for performance improvement which will involve looking at changes that need to occur in practice, "best practices" if documented, and the need for additional resources to enhance the work that is being done and improve outcomes. Therefore, there is no intent to use this in a punitive manner, but to use this to facilitate discussions among public health partners about how to improve the health of the public in North Carolina.

The Indicators:

Thirteen indicators were chosen to reflect a broad array of public health domains. They, along with their benchmarks are:

1. Percentage Of Medicaid Deliveries where Maternity Care Coordination (MCC) Services Were Received.

Benchmark: Previous 3-year Average for County

2. Percentage Of Medicaid Deliveries Where Prenatal WIC Was Received.

Benchmark: Previous 3-year Average for County

3. Adolescent Pregnancy Rate Per 1,000 Population, Females 10-17.

Benchmark: Previous 3-year Average for County

4. Percentage Of Medicaid-Enrolled Children 0-21 Years Receiving Health Check.

Benchmark: Previous 3-year Average for County

5. Percentage Of Medicaid-Enrolled Children 1-2 Years Receiving Blood Lead Screening.

Benchmark: Pervious 3-year Average for County

6. Percentage Of 2-Year-Olds Receiving Services At Local Health Departments (LHD) With Age-Appropriate Immunizations.

Benchmark: 90%

7. Projected Family Planning Caseload In Ratio To Previous 3-year Average.

Benchmark: 1.00

8. Percentage Of Tuberculosis (TB) Cases Placed On Direct Observed Therapy.

Benchmark: 90%

9. Percentage Of Close Contacts Who Begin Treatment For Latent TB Infection Who Complete Treatment.

Benchmark: 80%

10. Percentage of Breast And Cervical Cancer Control Program (BCCCP) Age-Specific Targets Achieved For Mammograms (not applicable to health departments who do not receive BCCCP funds).

Benchmark: 80%

11. Percentage Of Evidence-Based Environmental Policy Change Objectives Achieved Through The Statewide Health Promotion Program.

Benchmark: 70%

12. Percentage Compliance Inspecting Food And Lodging Institutions On Schedule.

Benchmark: 100%

13. Number Of Preparedness Exercises Conducted Annually.

Benchmark: 2

It is important to note that many of the measures focus on the performance of the public health system, not just the local health department; however, the local health departments play a leadership role in assuring performance of the wider system for these critical measures. For example, two of the indicators (#4 – Health Check and #5 – Blood Lead Screening) are strongly influenced by the performance of private providers in the county in keeping with Medicaid’s emphasis on a “medical home” for each covered child. Another two indicators (#1 – MCC Services and #2 – Prenatal WIC) are also strongly impacted by appropriate referrals to these services from providers in the community who see pregnant women. In a county with strong private provider presence, the role of the health department may be different than in counties without a strong private provider base.

Factors Influencing Performance by Indicator:

Indicator #1: Percentage Of Medicaid Deliveries Where MCC Services Were Received

- Changes in Division of Medical Assistance policies have resulted in significant declines in the percentage of Medicaid for Pregnant Women served
 - Discontinuation of referrals of newly enrolled pregnant women from DSS to health departments
 - Increased program requirements and accountability coupled with lower reimbursement for services provided (i.e. increased difficulty billing for additional units of services for high risk patients)
 - Prolonged uncertainty regarding proposed changes to program rules and status
- In some counties, a greater number of health care providers are providing prenatal care to women enrolled in Medicaid for Pregnant Women. Health department staff has less access to women provided prenatal care in non health department locations.

Indicator #2: Percentage Of Medicaid Deliveries Where Prenatal WIC Was Received

- Data show that the women who become eligible for Medicaid at delivery (Emergency Medicaid) do not participate in WIC during the prenatal period; a significant number of these women are Hispanic. Their infants are enrolled in WIC shortly after birth.

Indicator #3: Adolescent Pregnancy Rate Per 1,000 Population, Females 10-17

- After significant decline for over ten years, the rate has essentially stayed the same for the last six years.
- Only 57 counties have local projects (11 are in local health departments) to address teen pregnancy across the state. There is clearly more need for teen pregnancy prevention services in the state than can be currently addressed.

Indicator #4: Percentage Of Medicaid Enrolled Children 0-21 Years Receiving Health Check

- As Health Check Coordinator positions became vacant over the last three or four years they were redistributed across the state. Since their main role is encouraging families to have their children receive well child screenings within the periodicity schedule some counties have benefited while others have lost resources.
- Participation rates for the state are slowly but steadily increasing, but health departments are serving fewer children each year in child health clinics. There are several factors contributing to this downward trend in health departments. Medicaid rates for well child check-ups were increased around 1998 and private providers began seeing more Medicaid children in their practices. CCNC has escalated their efforts to match Medicaid children with specific primary care providers.

Indicator #5: Percentage Of Medicaid-Enrolled Children 1-2 Years Receiving Blood Lead Screening

- The percent of Medicaid covered children receiving lead screening has gradually increased over the years, with the percent of positive findings gradually declining. The lead screening is primarily done at well child visits so the bullets under # 4 would also apply to this measurement.

Indicator #6: Percentage Of 2-Year-Olds Receiving Services At Local Health Departments (LHD) With Age-Appropriate Immunizations

- Overall, Local Health departments are making progress in this area. The deployment of the web-based North Carolina Immunization Registry (NCIR) to all LHDs was completed in 2005. The registry provides a reminder/recall function which can help LHDs identify children who are due or past due for immunizations. This function has greatly assisted LHDs in tracking children for immunizations and thus increasing age appropriate coverage rates among children receiving immunization services at the LHD.

Indicator #7: Projected Family Planning Caseload In Ratio To Previous 3-year Average

- The cost of providing family planning services has risen dramatically in the past few years. Contraceptives and Pap test kits have seen large price increases and federal and state funding has failed to keep pace with the cost increase. Federal Title X funds purchasing power remains at 1996 levels.
- Many county health departments are unable to hire and/or retain clinical staff to provide the services to family planning patients. Reasons for this include ability of staff to earn higher salaries in the private sector and people not wanting to live and work in the more rural areas of the state.

Indicator #8: Percentage Of Tuberculosis (TB) Cases Placed On Direct Observed Therapy

In NC, the TB program has a contract with American Lung Association to provide incentives used to enhance patient adherence to prescribed medication regimens.

- While DOT has been the standard of care for many years, the North Carolina General Statutes were updated in 2006 to include a provision which requires DOT for all active TB cases.
- Many counties employ registered nurses to initiate DOT since they are qualified to perform patient assessments and carry out other public health functions.
- NC TB Program trains local TB nurses in delivering DOT during an intensive course called Introduction to TB Management. This training is offered three times a year throughout the state.

Indicator #9: Percentage Of Close Contacts Who Begin Treatment For Latent TB Infection Who Complete Treatment

- Language and cultural barriers may exist if the patient is not native to the US. Some patients that have received the BCG vaccine may feel they are not really TB infected and not finish therapy.
- Because patients are not feeling ill with TB infection, they don't see completing therapy as a priority.
- Contacts may start but not finish therapy because of the length of required treatment (usually 9 months).
- Patients are required to come to the TB clinic monthly during regular business hours to pick up medicine and see a nurse. If patients work or live far away, this may be a huge barrier. Transportation problems are a big factor in patients getting to clinic.

- Some patients move around the state (or out of state) and become lost to follow-up. First priority is to follow up on active cases with contacts being second priority.

Indicator #10: Percentage of Breast And Cervical Cancer Control Program (BCCCP) Age-Specific Targets Achieved For Mammograms (not applicable to health departments who do not receive BCCCP funds).

- A greater number of counties are meeting this benchmark each year with clear targets and resources to focus on the target population. By showing 3 years averages, the annual progress is not clearly reflected.

Indicator #11: Percentage Of Evidence-Based Environmental Policy Change Objectives Achieved Through The Statewide Health Promotion Program

- There was a \$1 million decrease in federal funding between state fiscal years 04-05 (2,773,294) which impacted local capacity to work on such policies.

Indicator # 12: Percentage Compliance Inspecting Food And Lodging Institutions On Schedule

- Funding
 - State funds and distribution of fees collected are inadequate to cover costs of inspections
 - No mechanism to generate funds at the local level
 - No significant financial incentive to provide timely inspections, no real penalty for non-compliance
- Staffing
 - Recruitment and retention of trained staff is difficult, even for larger, high-paying agencies
 - Delays and expense of training new staff due to turnover
- Priority
 - Often set on demand for service (e.g., no one complains when inspection is late, however, they do complain if a septic permit is not issued in timely manner)
 - Local officials frequently advise health departments to provide services which directly affect development (tax generating), rather than F&L compliance inspections (non-revenue producing)

Indicator #13: Number Of Preparedness Exercises Conducted Annually

- There was an overall improvement in the number of exercises conducted moving towards the target.
- Improved accountability program where counties report exercises to identified program staff in PHP&R. The implementation of this reporting system allows for better mid-term and end-term follow-up so that encouragement and technical assistance can be offered.
- Improved communication of expectations through e-mails on the listserv and regional planning teams.

- Training programs for local Preparedness Coordinators and Public Health Regional Surveillance Teams (PHRST) regarding exercise development, execution and reporting.

The appended tables in this report show, for each indicator, county-level data for the two time periods, an indication of whether the county has met the benchmark for the indicator for each of the two time periods, and an indication of whether the county and the state are moving in the right direction on the indicator.

The following table presents a summary of the number of counties moving in the right direction and the number of counties meeting the benchmark in each time period for each indicator.

Indicator	# Counties Meeting First Benchmark	# Counties Meeting Second Benchmark	# Counties Moving in Right Direction
1. MCC	28	4	4
2. WIC	71	29	29
3. Teen pregnancy rate	97	34	29
4. Health Check	90	49	48
5. Blood lead screening	87	58	58
6. Immunizations	13	25	65
7. Family planning caseload	60	35	31
8. TB therapy	36	58	54
9. TB contact treatment	24	25	21
10. BCCCP mammograms	25	43	77
11. Environmental/policy changes achieved	17	20	54
12. Food & lodging inspections	40	39	31
13. Preparedness	72	91	48

These results are intended to identify program areas across the state where performance improvement is needed and also specific counties where performance improvement should be addressed. More than three-quarters of the funding for local public health departments comes from local sources (primarily county appropriations and local fees), with less than one-quarter from state and federal sources. In 31 years, (from 1976 to 2007), state appropriations for assistance to local health departments remained at \$5 million/year in spite of an increase in population of 62% (from 5,593,000 to 9,069,398) in the same time period. This trend is a serious problem that is certainly having an impact on public health performance in our state.