

PHIP Public Health Information Technology Committee Report

THE STANDARDS AND THE 2008 PERFORMANCE REVIEW

The Washington standards and measures exemplify the national goals for public health performance measurement and development of standards—quality improvement, accountability, and science. Points to remember when looking at this report include:

- The standards articulate a higher level of performance, often described as stretch standards, not a description of the system as it is performing currently.
- The standards reflect an improvement cycle; results of the performance assessment should be used to target areas for improvement.

INFORMATION TECHNOLOGY CAPACITY

The use of information technology is a critically important tool in public health. Information can be shared rapidly by many agencies, making it easier for public health to work as a system. However, each county has its own technology infrastructure, so not all agencies are able to share information effectively. The Public Health Information Technology (PHIT) Committee provides coordination of information technology planning across many separate public health entities and considers how the rapid advancements in technology can be adopted and used effectively in public health.

Integral to Standards(1) *Community Health Assessment* and (4) *Monitoring and Reporting Threats to the Public's Health* is an information system that allows for data collection, tracking, analysis and utilization. For these respective standards, the focuses of the performance measures are to:

- Have a set of core indicators that include public health data that can be used as a basis for continuous tracking of the health status of the population,
- a planned, systematic process in which health data are tracked over time and analyzed; and
- Have a notifiable conditions tracking system that documents the initial report, investigation, findings, and subsequent reporting to state and federal agencies.

2008 PERFORMANCE REVIEW

The performance review included 34 local health jurisdictions (LHJs) sites, 20 Department of Health (DOH) program sites and the State Board of Health for a total of 55 sites. Each site was asked to use the Guidelines to prepare for an on-site visit by organizing the documentation supporting the review of each measure.

During the site visit, reviewers evaluated the documents and scored each measure. The tables below represent those standards and measures that are applicable to information technology capacity. Please note: there were a variable number of sites reviewed for each measure, 33 for LHJ "agency review" and 100 for "program review"; therefore it is important to take this into consideration in understanding the specific measure's result.

INFORMATION TECHNOLOGY-RELATED STANDARDS AND MEASURES

There are 3 standards and 20 measures that intersect with the work of the PHIT Committee. These are outlined below, along with an analysis of the demonstrated performance results.

RESULTS

Standard 1: Community Health Assessment

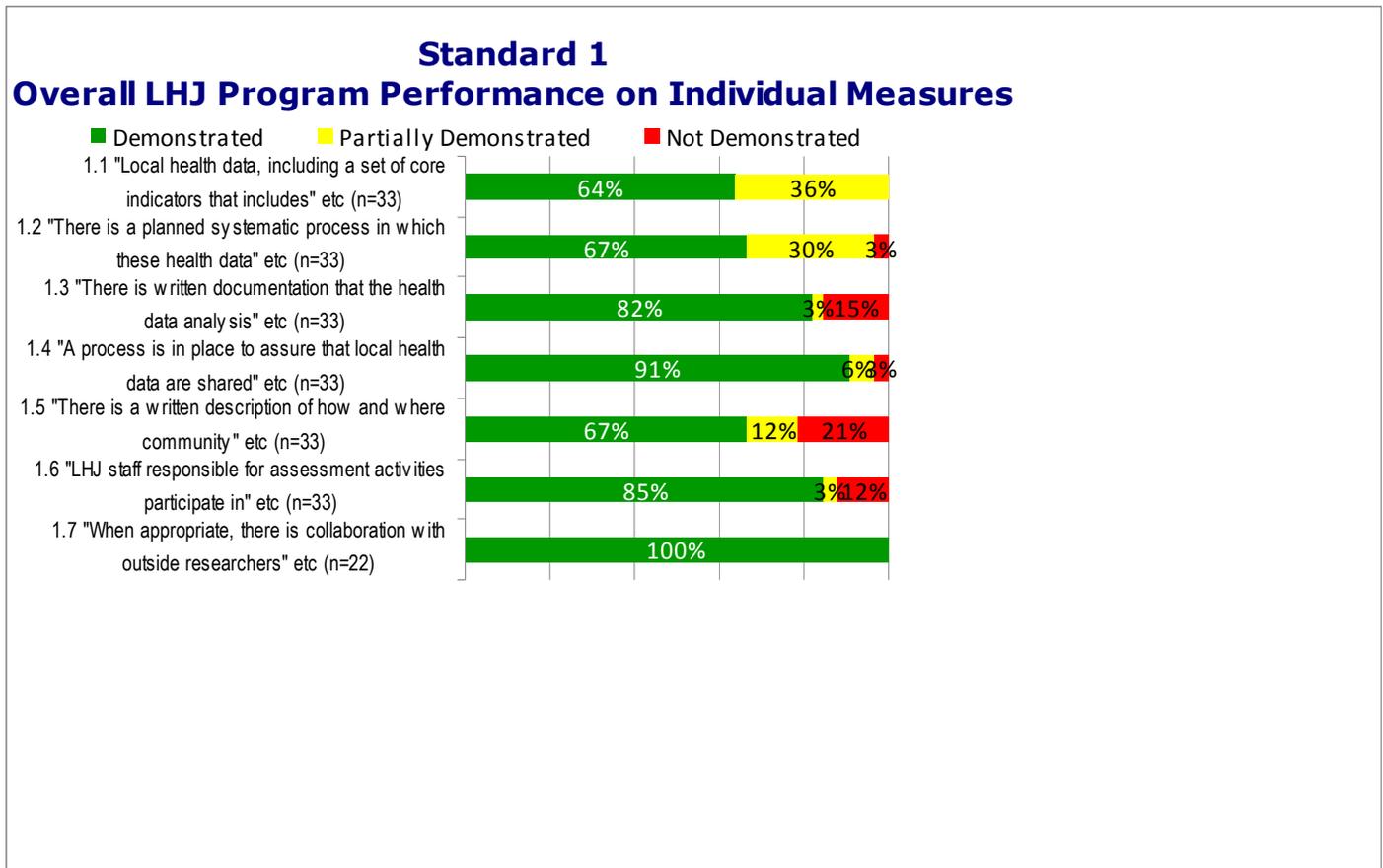
Data about community health, environmental health risks, health disparities and access to critical health services are collected, tracked, analyzed and utilized along with review of evidence-based practices to support health policy and program decisions.

The information technology-related measures include:

- **1.1L** Local health data, including a set of core indicators that includes data about population health status, communicable disease, environmental health risks and related illness, health disparities, and access to critical health services are updated at least every other year and used as the basis for continuous tracking of the health status of the population. Some data sets may have less frequent updates available but should still be included for review as part of an annual health data report. Health data include quantitative data with standard definitions and standardized measures as well as qualitative data.
- **1.1S** Health data, including a set of core indicators that includes data about population health status, communicable disease, environmental health risks and related illness, health disparities, and access to critical health services are updated at least every other year and used as the basis for continuous tracking of the health status of the population. Some data sets may have less frequent updates available but should still be included for review as part of an annual health data report. Health data include quantitative data with standard definitions and standardized measures as well as qualitative data.
- **1.2L** There is a planned, systematic process in which these health data are tracked over time and analyzed, along with review of evidence-based practices, to:
 - Signal changes in health disparities and priority health issues
 - Identify emerging health issues
 - Identify implications for changes in communicable disease or environmental health investigation, intervention, or education efforts
 - Perform gap analyses comparing existing services to projected need for services
 - Develop recommendations for policy decisions, program changes, or other actions
- **1.2S** There is a planned, systematic process in which these health data are tracked over time and analyzed, along with review of evidence-based practices, to:
 - Signal changes in health disparities and priority health issues
 - Identify emerging health issues
 - Identify implications for changes in communicable disease or environmental health investigation, intervention, or education efforts
 - Perform gap analyses comparing existing services to projected need for services (these may be statewide or regional)
 - Develop recommendations for policy decisions, program changes, or other actions
- **1.4L** A process is in place to assure that local health data are shared with appropriate local, state, and regional organizations.
- **1.4S** Coordination with LHJs and other key stakeholders is provided in the development and use of local public health indicators and data standards, including definitions and descriptions.

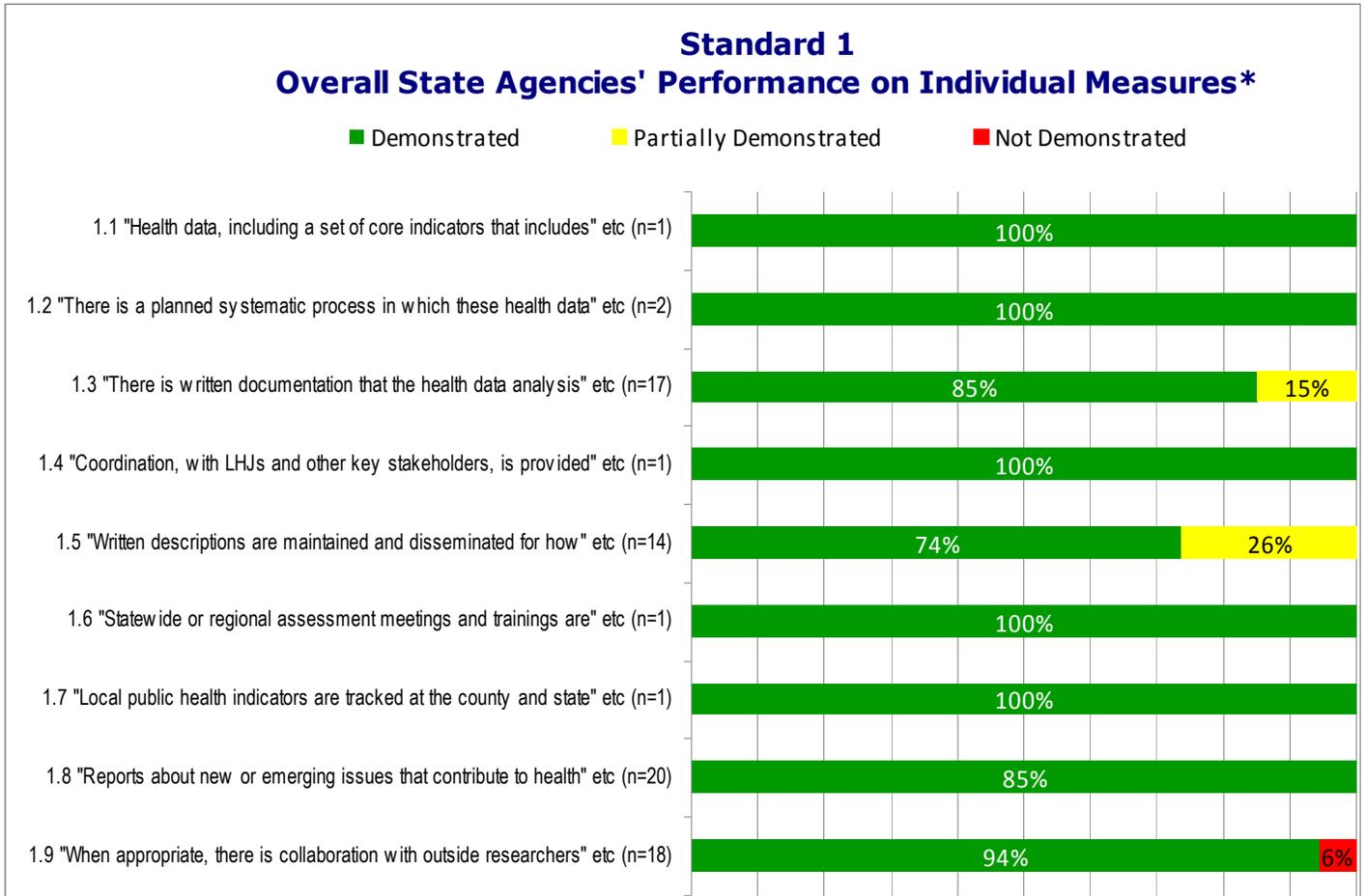
STANDARD 1 LOCAL HEALTH RESULTS

Chart 1



Overall LHJ program performance on individual measures shows 64% of LHJ's were able to demonstrate performance on **1.1L** and 67% demonstrated performance on **1.2L**. There was 91% demonstrated performance on **1.4L**, which is the highest performance for Standard 1.

Chart 2



**Includes State Board of Health*

State agencies have a demonstrated performance of 100% for 3 measures of Standard 1 (**1.1S**, **1.2S**, and **1.4S**). This standard has an aggregate percent demonstrated of 86% which is second highest performance in a standard for DOH in 2008. Measures **1.1S**, **1.2S**, **1.4S**, are reviewed just once at the agency level for DOH. This means that there is only one score and the 100% demonstrated is for the agency as a whole.

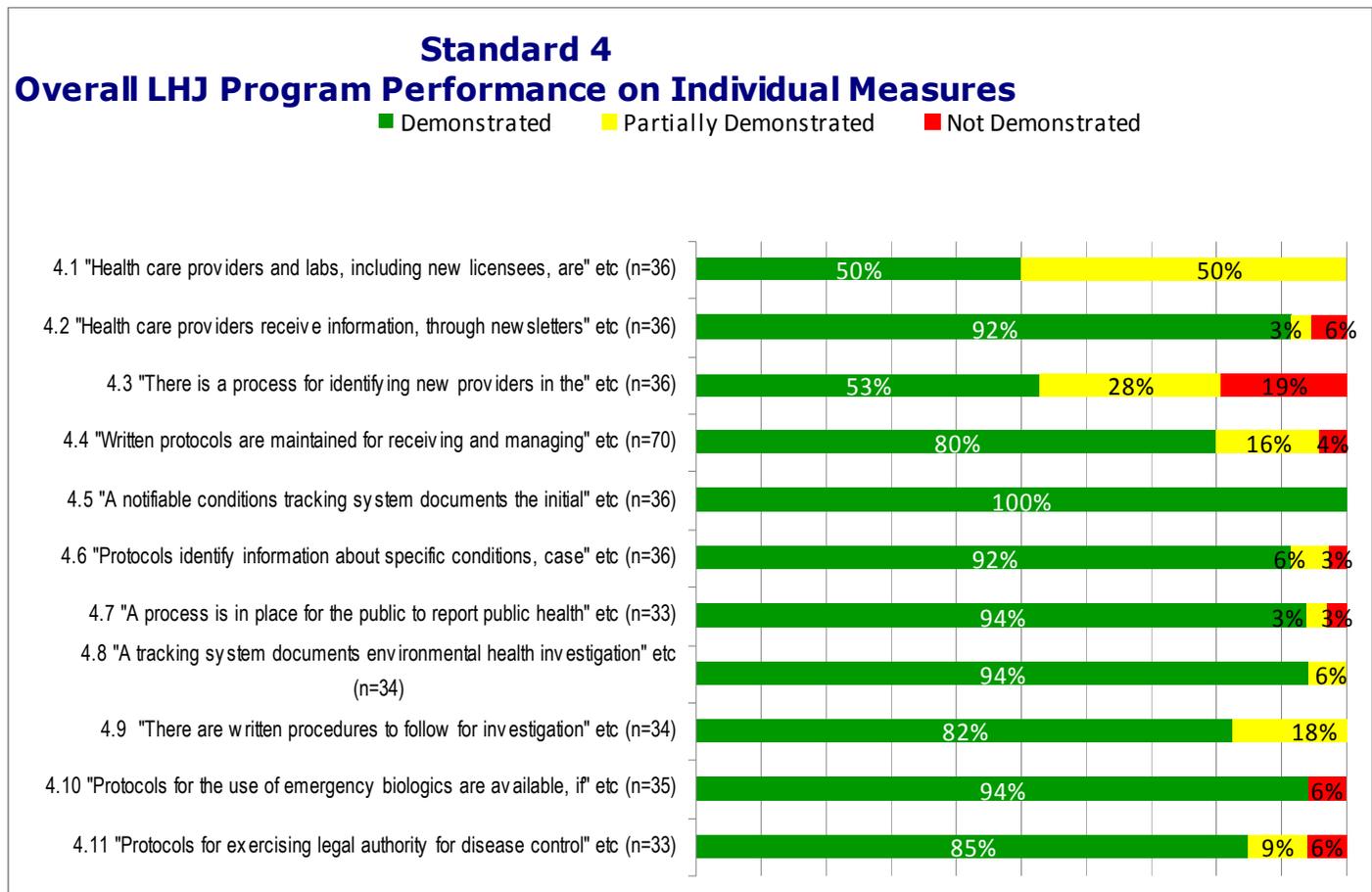
Standard 4: Monitoring and Reporting Threats to the Public’s Health

A monitoring and reporting process is maintained to identify emerging threats to the public’s health. Investigation and control procedures are in place and actions documented. Compliance with regulations is sought through education, information, investigation, permit/license conditions and appropriate enforcement actions.

The information technology-related measures include:

- **4.5L** A notifiable conditions tracking system documents the initial report, investigation, findings, and subsequent reporting to state and federal agencies.
- **4.5S** A statewide database for notifiable conditions is maintained with uniform data standards and case definitions that are updated and published at least annually.
- Data are submitted to other state or federal agencies as required. Notifiable conditions data are summarized and disseminated to LHJs at least annually.
- **4.8L** A tracking system documents environmental health investigation/compliance activities from the initial report, through investigation, findings, and compliance action and subsequent reporting to state and federal agencies as required.
- **4.12S** A tracking system documents DOH’s investigation/compliance activities from the initial report, through investigation, findings, and compliance action, and subsequent reporting to state and federal agencies as required.

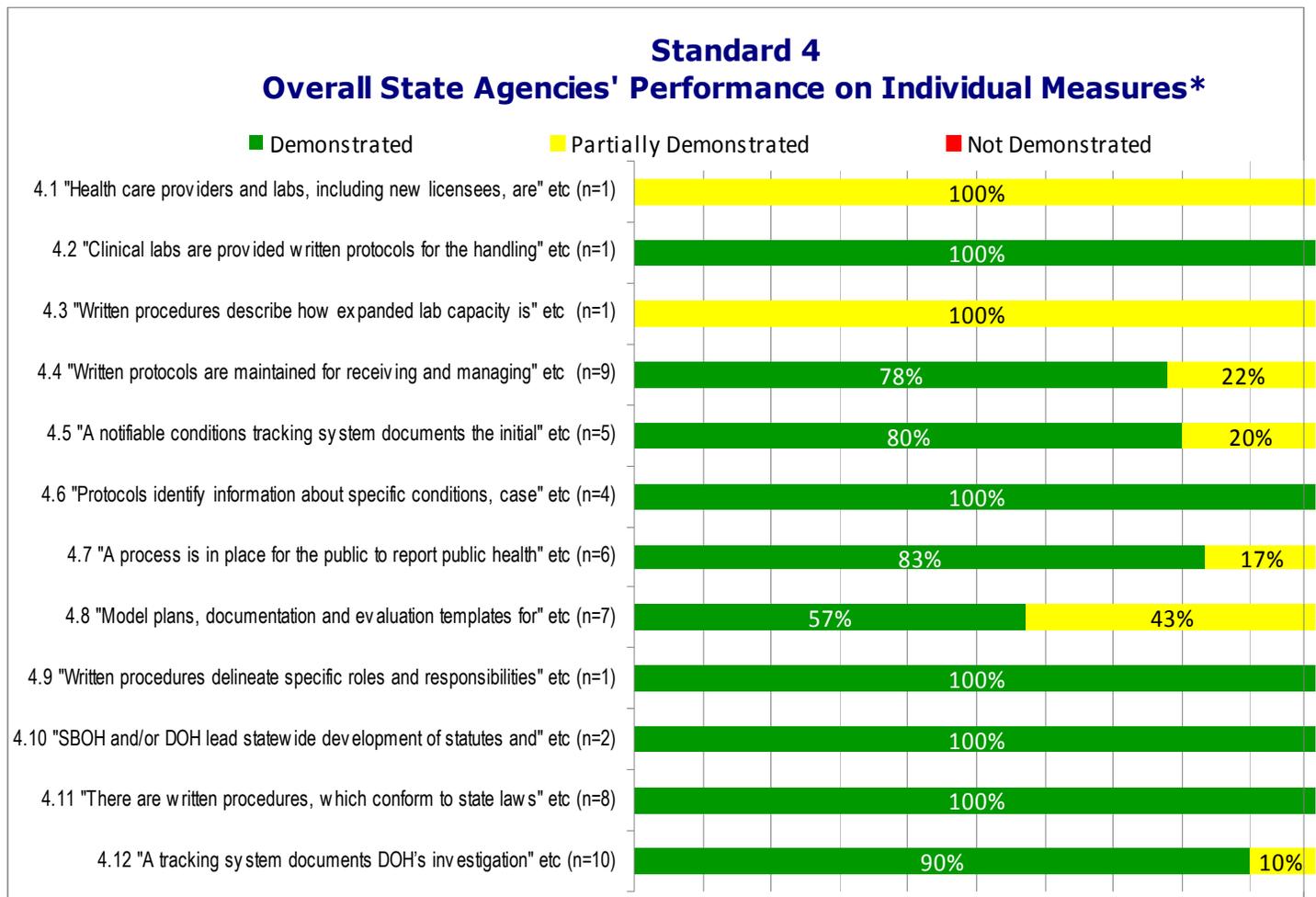
Chart 3



Measure **4.5L** showed a statistically significant improvement when compared to the 2005 measure. The measure, "A notifiable conditions tracking system documents the initial report, investigation, findings and subsequent reporting to state and federal agencies" had 82.4% demonstrated in 2005 and improved to 100% demonstrated in 2008. This is directly attributable to the successful, statewide implementation of the PHIMS communicable disease database.

Also showing a statistically significant improvement was Measure **4.8L** "A tracking system documents environmental health investigation/compliance activities from the initial report, through investigation, findings, and compliance action, and subsequent reporting to state and federal agencies as required" had 67% demonstrated in 2005 and improved to 94.1% demonstrated in 2008. This is attributable to the wider use of environmental health tracking databases, such as Envision in more of the LHJs.

Chart 4



*Includes State Board of Health

State agencies demonstrated 80% performance on measure **4.5S**. One of the measures in this standard is comparable to a 2005 measure and shows statistically significant improvement: Measure **4.12S** "A tracking system documents DOH's investigation/compliance activities from the initial report through investigation, findings and compliance actions, and subsequent reporting to state and federal agencies as required" had 33% demonstrated in 2005 and improved to 90% demonstrated in 2008.

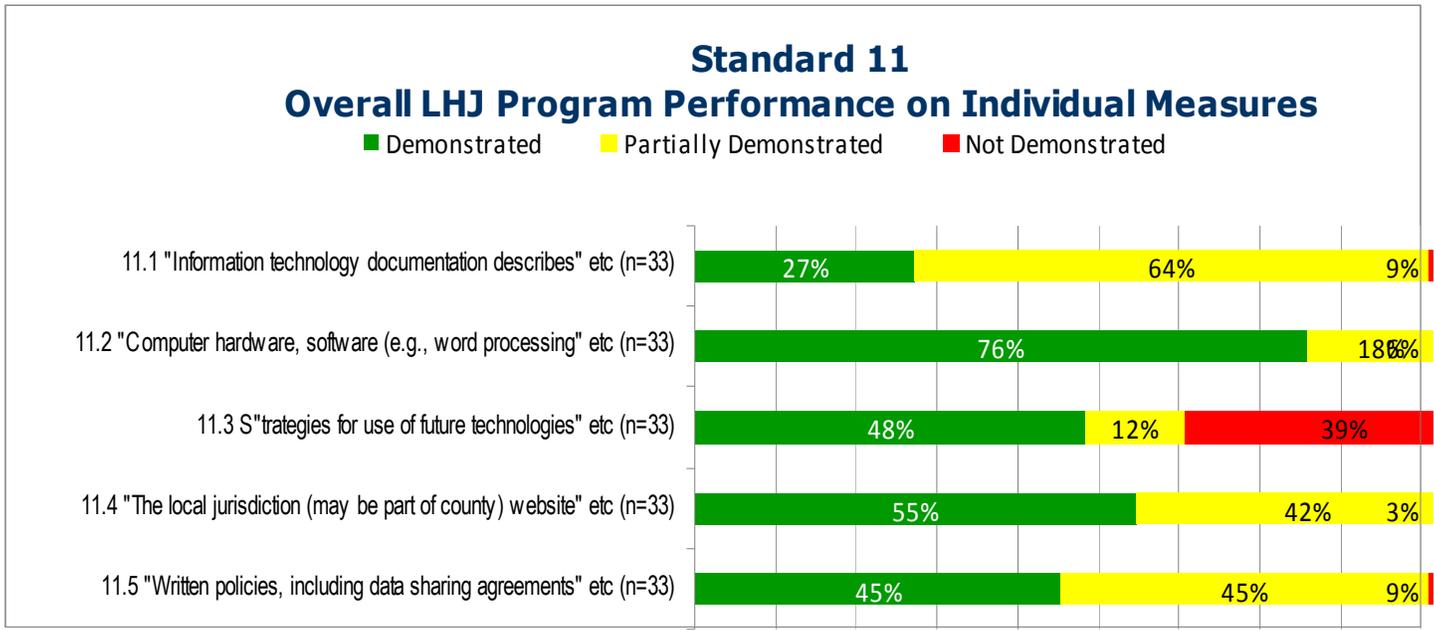
Standard 11: Information Systems

Information systems support the public health mission and staff by providing infrastructure for data collection, analysis, and rapid communication.

The information technology-related measures include:

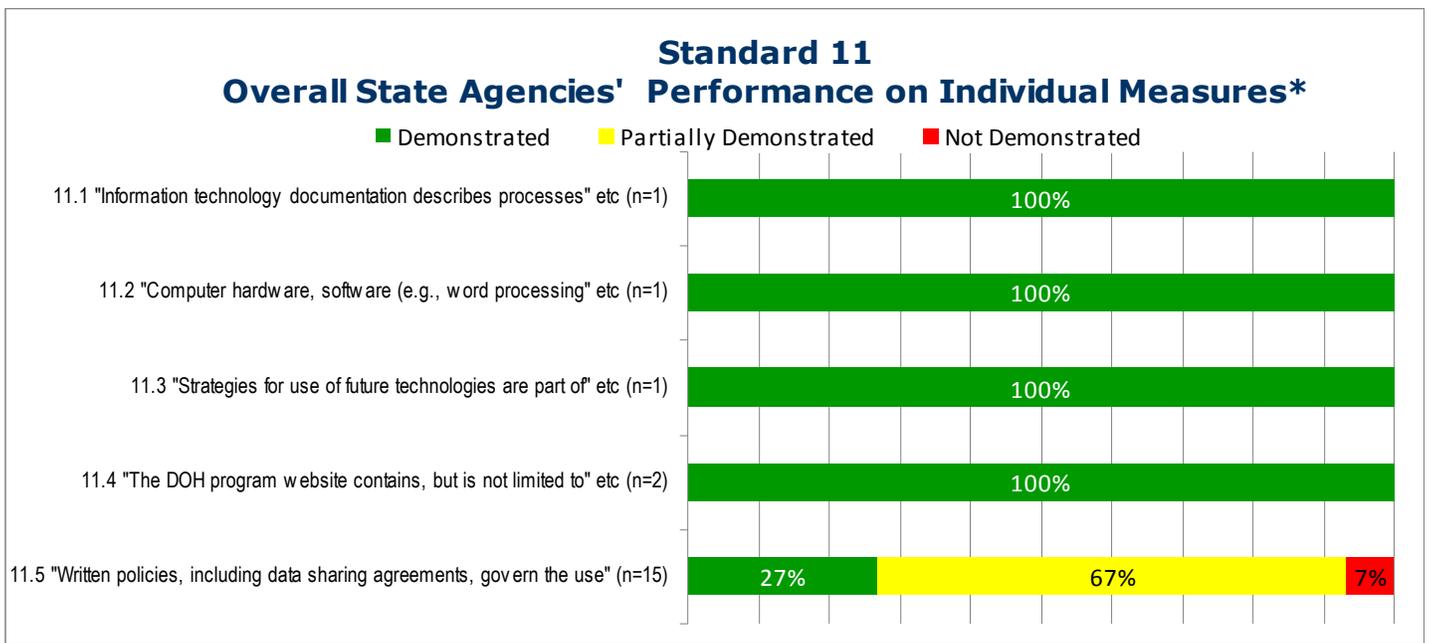
- **11.1L** Information technology documentation describes processes in place for assuring protection of data (passwords, firewalls, backup systems) and data systems to address security, redundancy, and appropriate use. There is documentation of monitoring these processes for compliance.
- **11.1S** Information technology documentation describes processes in place for assuring protection of data (passwords, firewalls, backup systems) and data systems to address security, redundancy, and appropriate use. There is documentation of monitoring these processes for compliance.
- **11.2L** Computer hardware, software (e.g., word processing, spreadsheets with basic analysis capabilities, databases, email, and Internet access), and trained staff are available to assist public health staff.
- **11.2S** Computer hardware, software (e.g., word processing, spreadsheets with basic analysis capabilities, databases, email, and Internet access), and trained staff are available to assist public health staff.
- **11.3L** Strategies for use of future technologies are part of the organization or county IS plan.
- **11.3S** Strategies for use of future technologies are part of the organization's IS plan.
- **11.4L** The local jurisdiction (may be part of county) website contains, but is not limited to:
 - 24-hr contact number for reporting health emergencies
 - Notifiable conditions line and/or contact
 - Health data and core indicator information
 - How to obtain technical assistance and consultation from the LHJ
 - Links to legislation, regulations, codes, and ordinances
 - Information and materials on communicable disease, environmental health, and prevention activities or links to other sites where this information is available
- **11.4S** The DOH program website contains, but is not limited to:
 - 24-hr contact number for reporting health emergencies
 - Notifiable conditions line and/or contact
 - Health data and core indicator information
 - How to obtain technical assistance and consultation from DOH
 - Links to legislation, regulations, codes, and ordinances
 - Information and materials on communicable disease, environmental health, and prevention activities or links to other sites where this information is available
 - A mechanism for gathering user feedback on the usefulness of the website
- **11.5L** Written policies, including data-sharing agreements, govern the use, sharing, and transfer of data within the LHJ and among LHJs and partner organizations, and all program data are submitted to local, state, regional, and federal agencies in a confidential and secure manner.
- **11.5S** Written policies, including data-sharing agreements, govern the use, sharing, and transfer of data within DOH and with LHJs and partner organizations; all program data are submitted to local, state, regional, and federal agencies in a confidential and secure manner.

Chart 5



For overall LHJ program performance, this standard has an aggregate percent demonstrated of 50% which is mid-range performance in a standard for LHJs in 2008. Only two of the five measures (40%) in this standard have 50% or more of the LHJs that were able to demonstrate performance. The lower performance in measure **11.1L** is related to low percent of LHJs (or the county agencies providing the information systems) that demonstrated they were monitoring the security and back-up systems for their databases. The structure of measure **11.5L** makes it difficult to document the sharing and transfer of data in a confidential manner. This measure requires clarification in the next revision to the measures.

Chart 6



*Includes State Board of Health

This standard has an aggregate percent demonstrated of 45% which is the third lowest performance in a standard for DOH in 2008. Measures **11.1S** through **11.4S** were evaluated once for the agency. Only measure **11.5S** was reviewed for all programs. The structure of measure **11.5S** makes it difficult to document the sharing and transfer of data in a confidential manner. This measure requires clarification in the next revision to the measures.

Recommendations

The following recommendations are specific to the results of the 2008 Performance Review regarding the Public Health Information Technology Committee. An important tool in effectively implementing these recommendations is the 2008 Exemplary Practices Compendium that contains examples of processes and documentation that demonstrate performance of at least one requirement of a specific measure. Reviewers observed that among all the LHJs and state programs, the components of the “high performing” public health system are almost all present somewhere. They just don’t exist together in any single LHJ or DOH program. Many examples of this exemplary public health system do exist, however, in the Exemplary Practices Compendium.

Recommendations are made to assist local and state agencies in developing meaningful approaches to address deficiencies and capitalizing on opportunities. Please refer to page 19 for the full recommendations that are highlighted below.

Measuring against the standards is a way for effective quality improvement in targeted areas. Many local and state programs were only able to partially demonstrate performance due to a failure to complete the Plan-Do-Study-Act (PDSA) cycle of improvement.

Recommendation: Management processes and evaluation and improvement templates should emphasize the Study step of the PDSA cycle, and the Act step should be emphasized in leadership and governance minutes and reports.

Because Standard 11 is one of 3 standards having a low aggregate performance with 50% or fewer of the DOH agency or programs able to demonstrate performance, this State Agency Standard offers the most urgent need for improvement from the DOH. The PHIT Committee can help recommend data sharing agreements and protected data transfers.

It is also recommended that:

- Committee members review the complete 2008 Overall System Report on the Standards for Public Health in Washington State report to ensure that all the standards impacting public health information technology be considered
- Highlight the need to continue making progress on the areas of measures strength for DOH and LHJ
- Review the committee’s work plan to determine how areas of improvement can be addressed through committee work