Electronic Pathology (ePath) Reporting Project Update

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Sandy Thames, CDC
Wendy Scharber, Northrop Grumman Contractor
Sanjeev Baral, Northrop Grumman Contractor
NPCR-MERP Updates

• New CyberView website launched
  – [www.cdc.gov/cancer/npcr/informatics/merp2](http://www.cdc.gov/cancer/npcr/informatics/merp2)

• Name change needed for NPCR-MERP
  – To represent expanded activities that include:
    • Modeling
    • Analysis and Design
    • Implementation

  – New Name:
    • Advancing E-cancer Reporting and Registry Operations (NPCR-AERRO)
Objectives of ePath Project

• Implement one standard electronic pathology reporting process that will meet needs of all states
  – Test and document the implementation
  – Adopt and/or develop software for implementation
  – Provide guidance to central cancer registries and path labs on implementation
• Tools and lessons learned freely available
Advantages

• One voice working with the laboratory
  – Ensures that lab receives consistent communication on development of HL7 message
  – Minimizes the need to accommodate individual state nuances that will overburden the lab

• Build momentum to work with other national labs

• Make better use of resources by utilizing existing CDC’s PHIN infrastructure/tools
ePath Reporting Project Participants

- LabCorp
- CDC’s National Center for Public Health Informatics (NCPHI)
- CDC’s National Program of Cancer Registries (NPCR)
- North American Association of Central Cancer Registries (NAACCR)
- State Cancer Registries
Message Creation

• Used consistent standard message format (HL7 v.2.3.1 ORU) – NAACCR Volume V: Pathology Laboratory Electronic Reporting and E-Path Reporting Process Guide

• Worked with LabCorp to map local lab system data to standard message format
Message Creation

- Established appropriate method for filtering out cancer case reports
  - Developed a standard ICD-9-CM Casefinding List to identify cases with input from certified tumor registrars
  - Evaluated the Pathologist coded ICD-9-CM data field
  - Report on legal issues with reporting pathology data to state cancer registries
  - Final Report from Phase 1 posted on website

- NY, CA, and FL received and tested initial LabCorp message
Message Creation

• NY received electronic message and validated with the paper pathology report in March 2009 ~ no major content issues were identified

• A few minor message issues were identified
  – LabCorp has corrected those critical to implementation
Message Transport

- Used CDC’s Public Health Information Network Messaging System (PHINMS) Software to securely transmit standard message over internet
- Installed or used existing PHINMS server and software at State Health Department
- Integrated cancer data feed on existing PHINMS server at LabCorp
- Cancer data will be transmitted on a daily basis
PHINMS Installations in State Cancer Registries

- **PHINMS connectivity completed** - AL, AK, AZ, AR, CA, CO, FL, GA, IL, KS, MI, MN, MO, NH, NY, NC, OH, OK, SC, TN, TX, VA
- **PHINMS installation in Progress** - KY, LA, ME, NV, NJ, OR

Washington D.C.
Message Processing

• Used HL7 Messaging Work Bench to test conformance of the message with standard

• Developed eMaRC Plus (electronic Mapping, Reporting, and Coding) – previously known as Mapper Plus
  – Retrieves message from PHINMS server
  – Identifies potential cancer cases
  – Builds a PathLab database
  – Provides a review and coding function
  – Exports reports in the NAACCR Record Layout

• Made list of planned enhancements available
Current Project Status

• PHINMS installed and tested in 22 states
• HL7 v2.3.1 ORU message has been developed and validated
• LabCorp has scheduled dates for states to begin receiving ePath reports on a daily basis:
  – States will be invited to sign-up for one of the following transmission start dates:
    • May 4th, May 18th, and June 1st
Project Challenges

• PHINMS Server at LabCorp re-engineered in 2006
• All pathology reports transmitted to NY, CA, FL in 2007 for testing ~ issue of reporting all pathology reports vs. specific cancer reports identified
• Staff and policy changes in 2008
Lessons Learned

• Keep open communication with all parties involved in the process (multi-disciplinary team)
• Be willing to compromise
• Develop/adopt tools needed to address issues (e.g., enhancements to eMaRC Plus)
• Documentation is critical
• Leverage resources
Next Steps

• LabCorp will continue working with us to refine reporting to include data from HER2nu and other biomarkers ~ meet on a monthly basis with State Cancer Registries and CDC

• Continued enhancements to eMaRC Plus to include computer-assisted coding function

• Invite other State Cancer Registries to set up PHINMS and join the project to receive data

• Implementation of ePath Reporting with other national labs
Thank you

• Sandy Thames
• 770-488-5689
• sthames@cdc.gov

The findings and conclusions in this presentation are those of the author(s) and do not necessarily represent the views of the Centers for Disease Control and Prevention