



### The Future of Laboratory Medicine Overview

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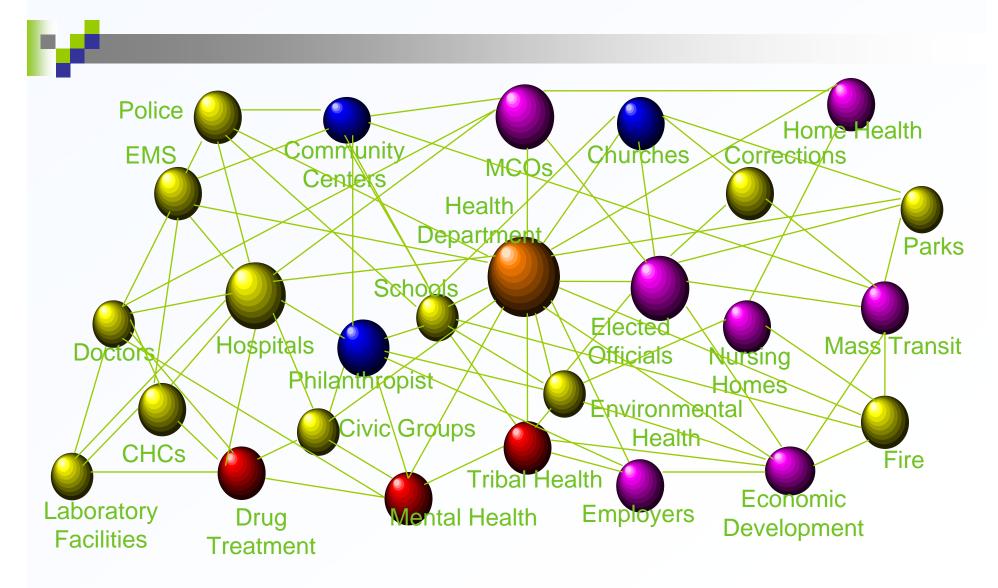
### Plan for CLIAC Meetings



- Spring 2006 Challenges to Public Health
  - \* Workgroup on Impact of Rapid and Molecular Tests for Infectious Diseases on Public Health
- Fall 2006 Challenges to laboratories performing "complex" testing in "traditional" locations
- Spring 2007 Challenges to laboratories performing "simple" testing in diverse sites



### The US Health System





# What is the status of laboratory practice in the US today?



- 190,000+ CLIA certified laboratories
- Diverse testing sites
- Diverse testing personnel
- Enhanced technology automated, rapid, near patient
- Vocabulary patient safety, informatics, risk management, quality systems, Six Sigma, Lean



# What will laboratory practice in the US look like in the future?



- What are some of the challenges we can expect?
- Where can we expect gaps in regulations, policies, standards, and guidelines?
- What innovations might address these gaps?
- What else might be needed?



# How will laboratory practices and services adapt to the future?



- What are some of the challenges we can expect?
- Where can we expect gaps in regulations, policies, standards and guidelines?
- What innovations might address these gaps?
- What else might be needed?



#### What areas need attention today?



- Communications
- Poor integration of services
- Lack of accountability/responsibility at interfaces
- Reimbursement
- Fragmented IT
- Lack of performance measures



### Health Care System – In need of a revolution



- Meets the needs of those who work in the system rather than the patients
- Characterized by overuse, underuse, misuse and errors, and waste
- Inefficient, ineffective, disorganized, disrespectful to patients
- Not based on evidence-driven practices
- High cost
- Disparities in access and care



## Health Care System – Some reasons for rising costs



- Technology
- Larger elderly population
- Increase in chronic care
- Direct marketing of health care consumer demand
- Mandates for care
- Increases in liability insurance
- Variable and non-integrated practice
- Aggregated health delivery systems



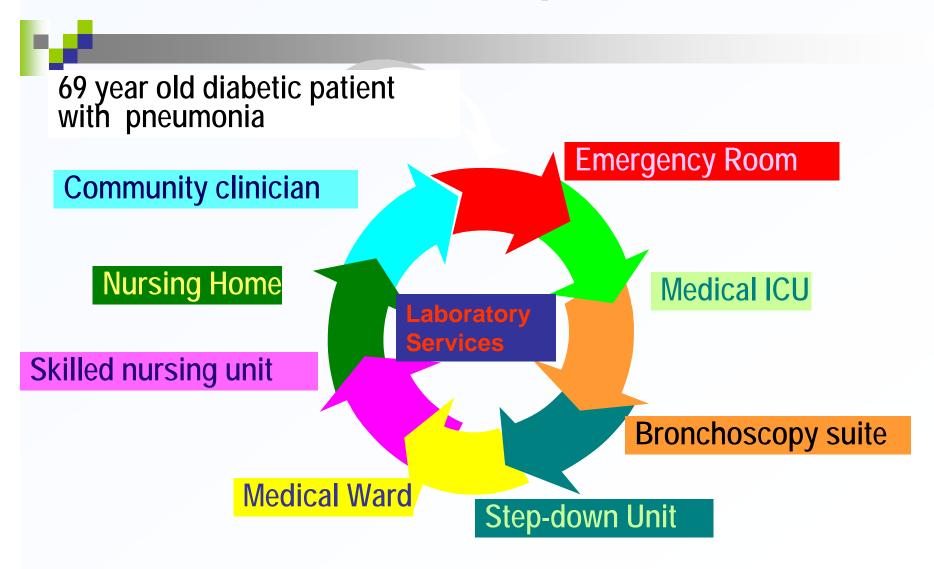
### Health Care System - Issues for the future



- Rising costs
- Public and purchaser awareness and accountability
- Performance measures
- Value-based decision on payment
- Integrated health care delivery
- Information Technology promoted as change agent
- Coordination of and continuity of care



### Who is responsible?





# What Assumptions should we make about the Future of Laboratory Medicine?



Will current practices be adequate to cope with anticipated changes in technology, patient care options, knowledge management needs, and resource limits?

Will laboratory services continue to play an essential role in patient care and public health?

Will the use of laboratory services become more appropriate and effective?

Will enhancements in informatics capability allow the laboratory to play a major role in the coordination and continuity of care?



# What are the implications for public health?

#### Possible downsides -

- Gaps in reporting?
- Consumer confusion about test results and health implications?

#### Possible benefits -

- Improved access to testing services?
- Better quality?
- Improved collaboration between public and private laboratories?



### **Speakers and Topics**



- Dr. Jocelyn Hicks
   The Future of Medical Laboratory Practice
- Dr. Cynthia French
- "The Future of Medical Laboratory Practice" A Manufacturer's Perspective on Regulations, Standards, and Guidelines in Advanced Diagnostics Microarray Product
- Dr. Steven Hofstadler
- High Throughput Mass Spectrometry-Derived Base Compositions for the Detection and Strain Typing of Bacterial and Viral Pathogens
- Dr. Elizabeth Hammond Reporting Standardization in Pathology



### **Speakers and Topics**



- Dr. Michael Laposata
   Patient-specific Narratives for Laboratory Test Evaluation
- Dr. James Harrison
   Challenges in Clinical Communication
- Dr. Kathy Doig
   Future of the Laboratory Workforce: Advanced Clinical Practice
- Ms. Kathleen Hansen
   Interdisciplinary Roles for Clinical Laboratory Scientists





# Thank you Questions/Comments