

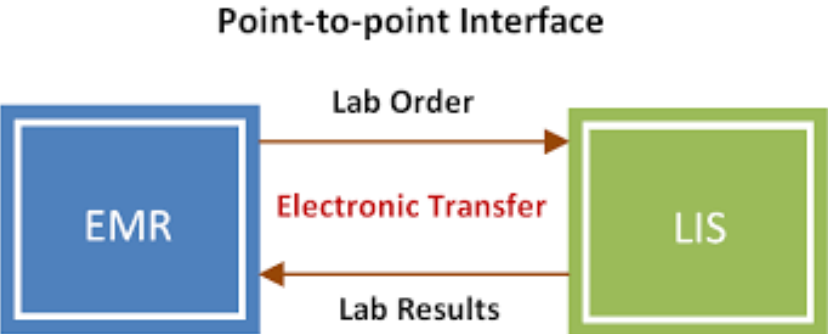


Analysis. Answers. Action.

www.aphl.org

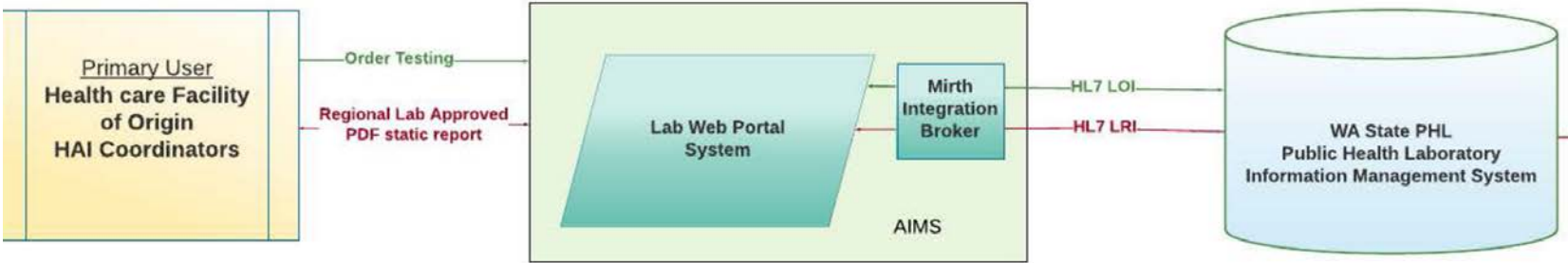
APHL Electronic Test Order and Result Initiatives

ETOR- Electronic Test Order and Results



LRI

LOI



PHL ETOR Drivers

- PHLs need to remain competitive and relevant
- Informatics solutions need to be streamlined to meet increased data demands.
- Result data need to get into the right hands quickly
- Data are needed by multiple stakeholders
 - from the clinician to PH partners

Gaining momentum

Web Portal RFP distributed

- Supported thru CDC's Division of TB elimination
- National DST reference center
- iConnect/Lab Web Portal (LWP) Selected

Programmatic Efforts to assist ETOR

- White paper / policy statement
- Standards Development (LOI/LRI)
- #1 priority of info subcommittee

LWP deployed on AIMS VPC

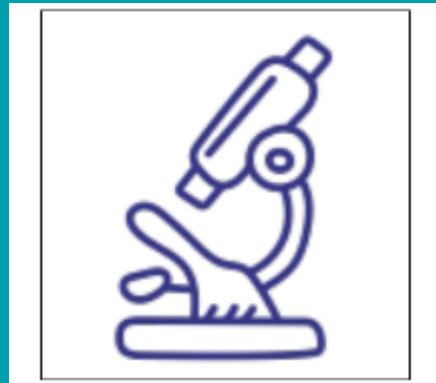
- 5 Antibiotic Resistance Lab Network (ARLN) regional labs
- National TB DST reference center project

HHS ONC ETOR process improvement

- Expand use of LWP to support emerging infectious disease use case.
- Expand to look at provider, lab and epi communication channels-

ETOR in the Clinical Domain

care & treatment / passive surveillance



DETECT



REPORT



REPORT



RESPOND

ETOR in Public Health

active surveillance needed



DETECT



REPORT



RESPOND



CRE Colonization Use Case: Interrupt transmission asap



DETECT



REPORT



Public Health needs always evolve



For Zika virus testing eligibility:

www.publichealth.lacounty.gov/acd/Diseases/EpiForms/ZikaEligibility.pdf

For Zika virus testing and notification information:

www.publichealth.lacounty.gov/acd/ZikaTesting.htm

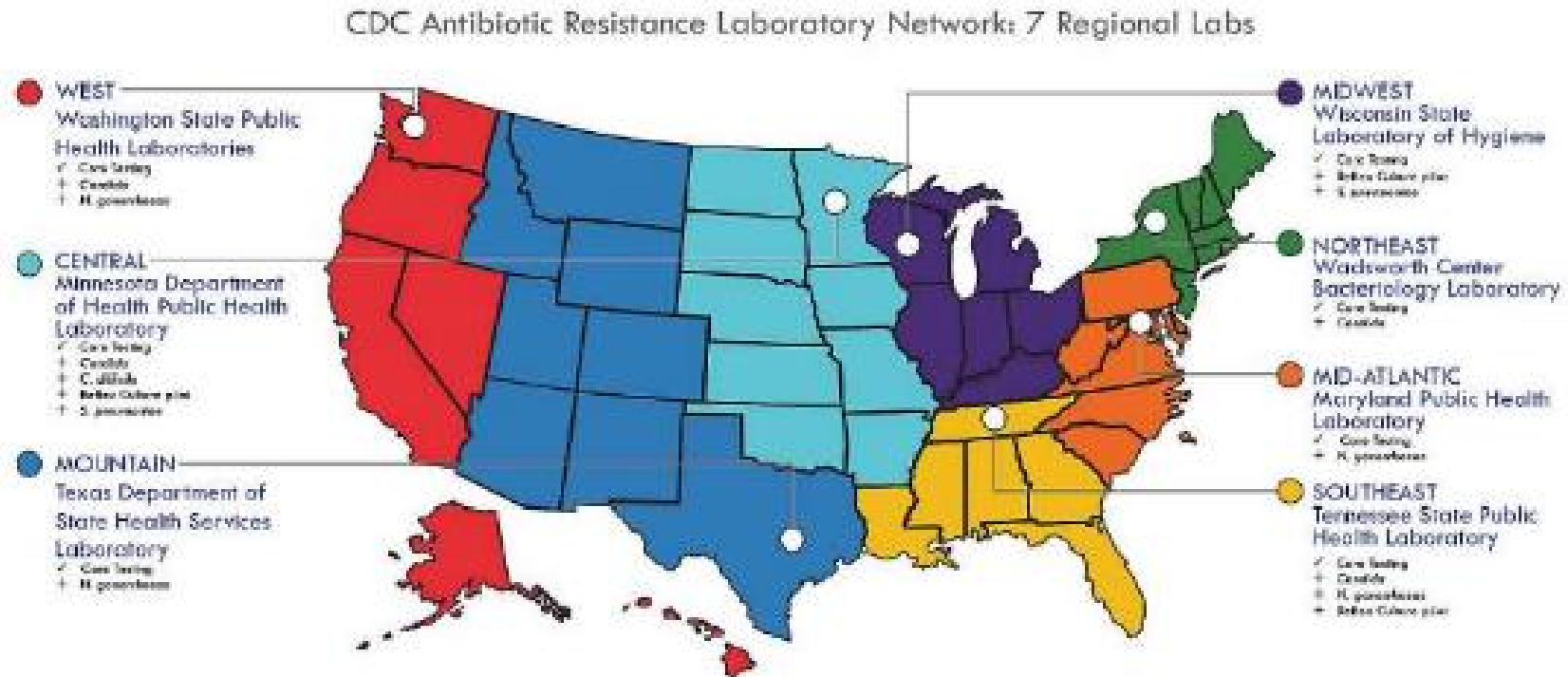
National Tuberculosis Drug Susceptibility Testing Reference Lab

Provide ETOR tools that support TB-DST
shared services



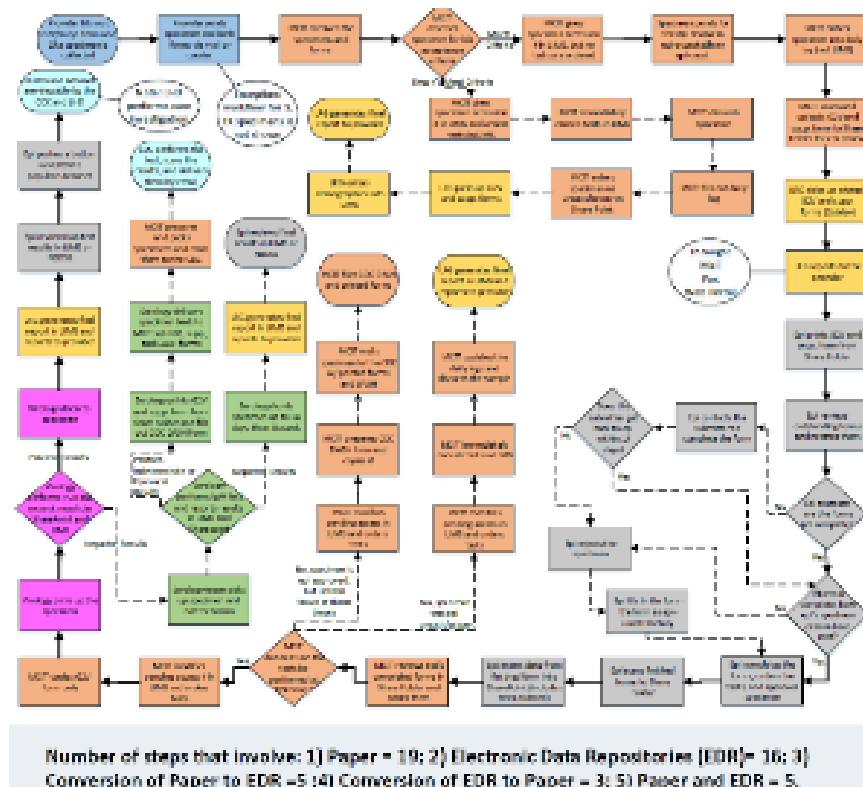
Antibiotic Resistance Lab Network

Electronically report CRE colonization results to a network of cross-jurisdictional clinical and public health partners within 48 hours of specimen receipt



ONC Idea Lab Project

Build on current ETOR efforts to enhance tools to support both private and public needs in the face of Zika and other emerging diseases



Approach



Selected competitively

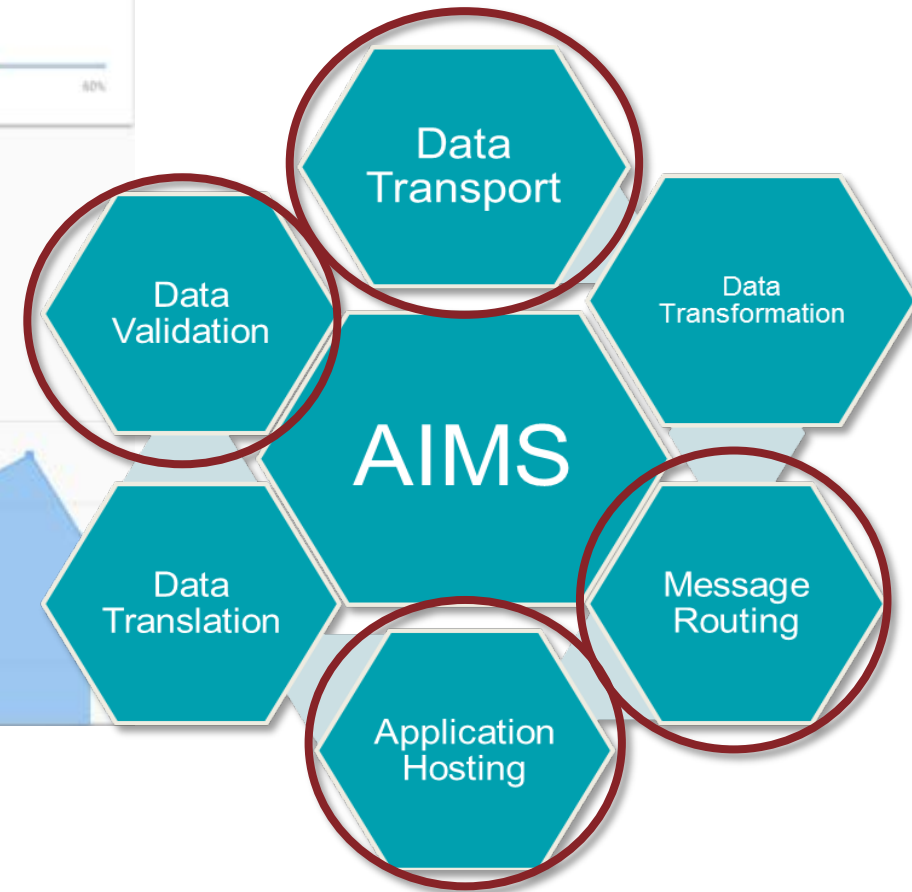
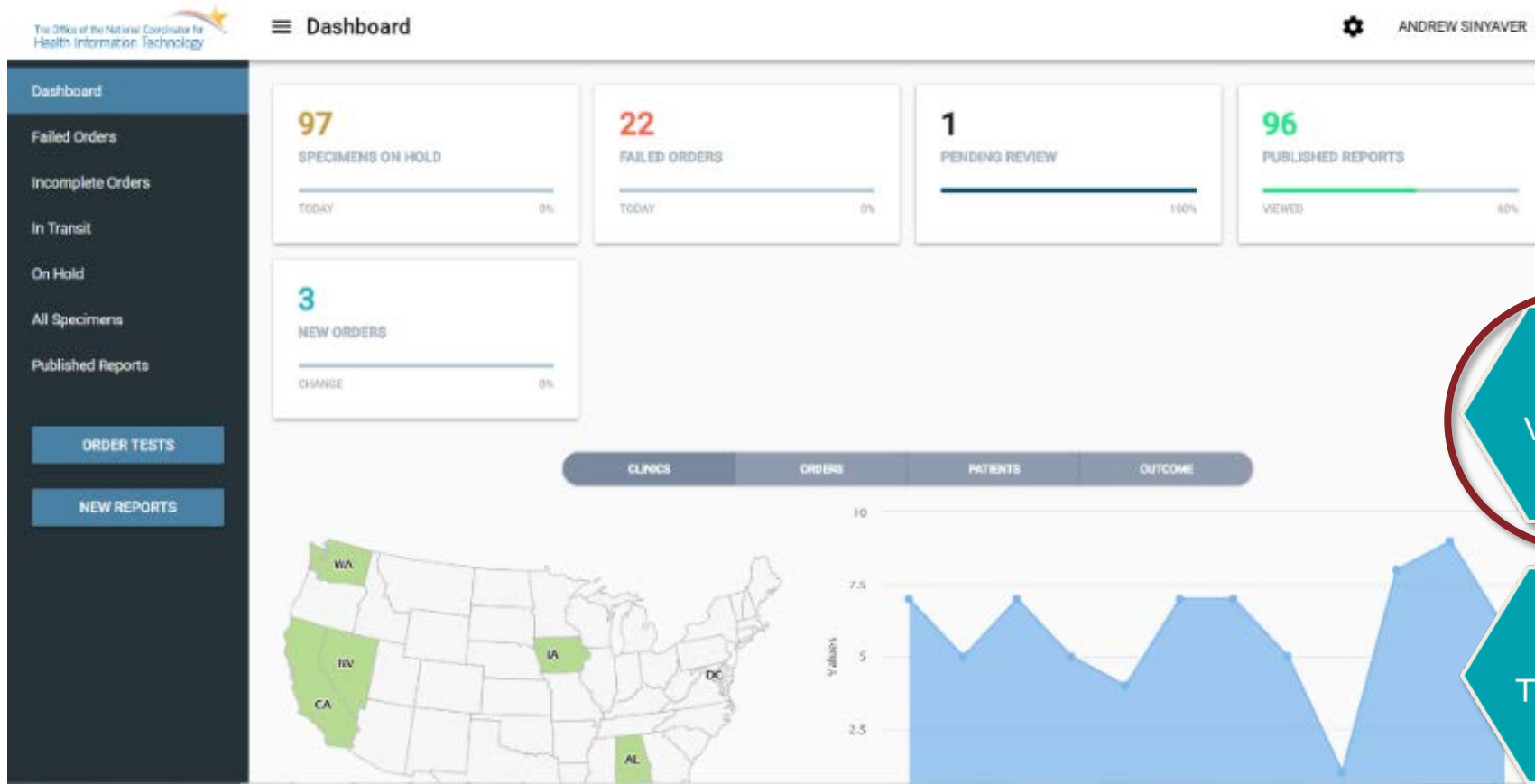


LIMS agnostic



Centrally hosted

Lab Web Portal on AIMS



Why a web portal vs. Traditional ETOR (HL7)

HL7 standards (HL7 2.5.1 LOI/LRI) have had slow adoption rates

Specialized knowledge needed

Each time you add a test, its like running around the house 7 times...(Dari)

Most commercial labs (e.g. Quest) already have web portals

Couldn't wait any longer

PHLs are launching LIMS specific portal extensions

Same model as LIMS- now all the web portals will be disparate...

Wanted to find something LIMS agnostic, flexible, and "Cloud-ready" to support mutual assistance and surge needs.

Collective Goals

- Document **Existing and potential** data flows
- Identify technology and process **Impact** to stakeholders
- Identify & validate **Functional** requirements
- Perform **Gap Analysis** between LWP and Requirements
- Develop **Standards-based** implementation guides
- Define user scenarios and **prioritize enhancements** to capture **epidemiological** relevant **information**
- Look for **solutions** to **reduce the burden** of PHL standards based data exchange.



APHL Informatics Messaging Services

 **25 Million**
Messages Lifetime
Transported

 **20 Million**
Messages/week
via Interface Engine
Processing

 **26 Million**
Number of Daily Security
Log Files

 **~100**
Number of Servers

160
Trading Partners



13
States Cross
Jurisdictional Exchange



 **2.5 TB**
of WGS Data Processed and Counting

Quest

1 Million
Number of Quest ELR Messages
Per Month

Use Cases

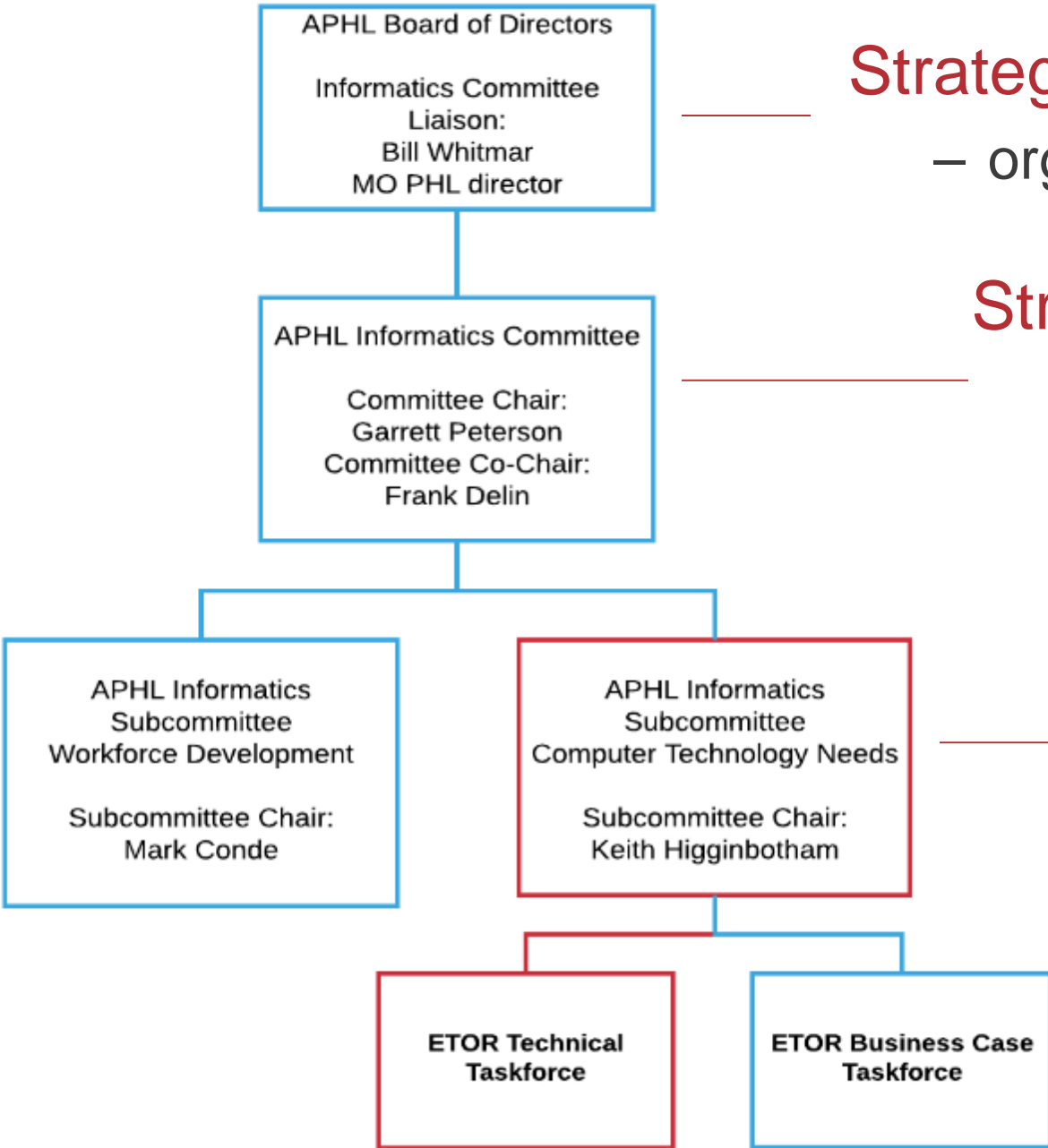
28,149
PHLIP
Messages
Per Month

63,070
Electronic Lab
Results Per
Month

222,874
Syndromic
Surveillance

Excluding Quest

APHL Committee Structure- where does this fit?



Strategy

- organizational

Strategic Alignment

- Programmatic- Big picture
- Member Focused

Targeted Needs

- Initiative Driven
- Concrete actions

Innovation and Delivery

- Time bound
- Single initiative/focus

APHL Informatics
Subcommittee
Computer Technology Needs

Subcommittee Chair:
Keith Higginbotham

Subcommittee Overview

Focused on specific technical challenges, advancements and trends in PHL informatics

- First project focused on the challenges of centralized IT infrastructure
- July 2017: ETOR selected as primary focus

ETOR: Divide and Conquer



**ETOR Technical
Taskforce**

**ETOR Business Case
Taskforce**

- Complex initiative- needed to expand membership
- Technical, business and operational components
- Meeting the needs of the project sponsors and PH stakeholders
- APHL technical efforts come into play
 - AIMS/member services
 - Cloud Computing options

**ETOR Technical
Taskforce**

Technical Development Taskforce

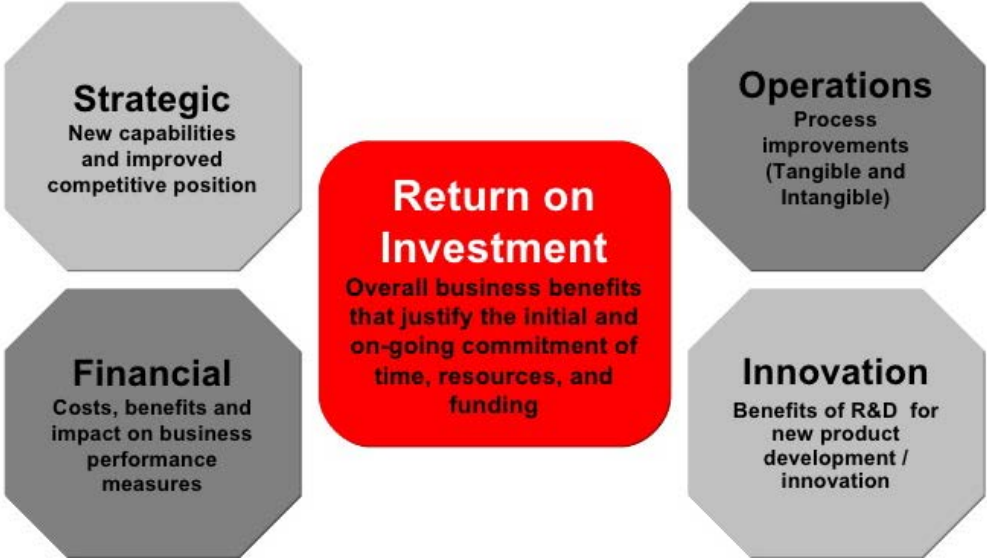
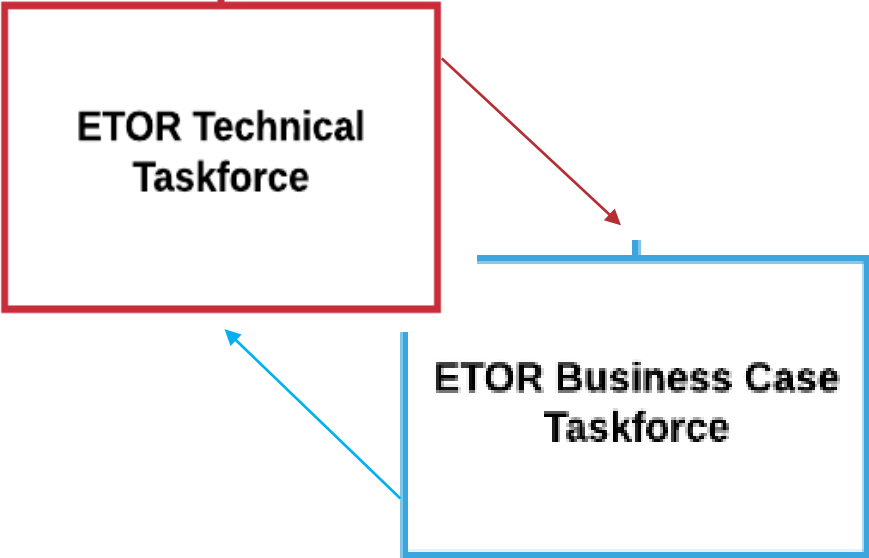
Charge:

Short Term: Refine and validate new functionality and deployment of the LWP solution on AIMS

- ONC/APHL Lab/Epi support for EID/others

Long Term: Provide technical guidance on ETOR technology solutions and deployment options

Identify operational/institutional topics for BC taskforce to consider



So....as summer approaches and the mosquitos start to buzzzz...

How can we better leverage our community to:

- ✓ **Define and evolve common solutions to support both clinical and public health ETOR**
- ✓ **Identify the ETOR business case/operational drivers**

