

IMPROVING TIMELINESS IN NBS

Health Information Technologies in the Texas Newborn Screening Laboratory

Rachel Lee

2015 SPECIMEN AND SUBMITTER VOLUME

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▣ 790,000 Specimens

- 404,000 Valid 1st screens
- 379,000 Valid 2nd screens
- 7000 Unsats



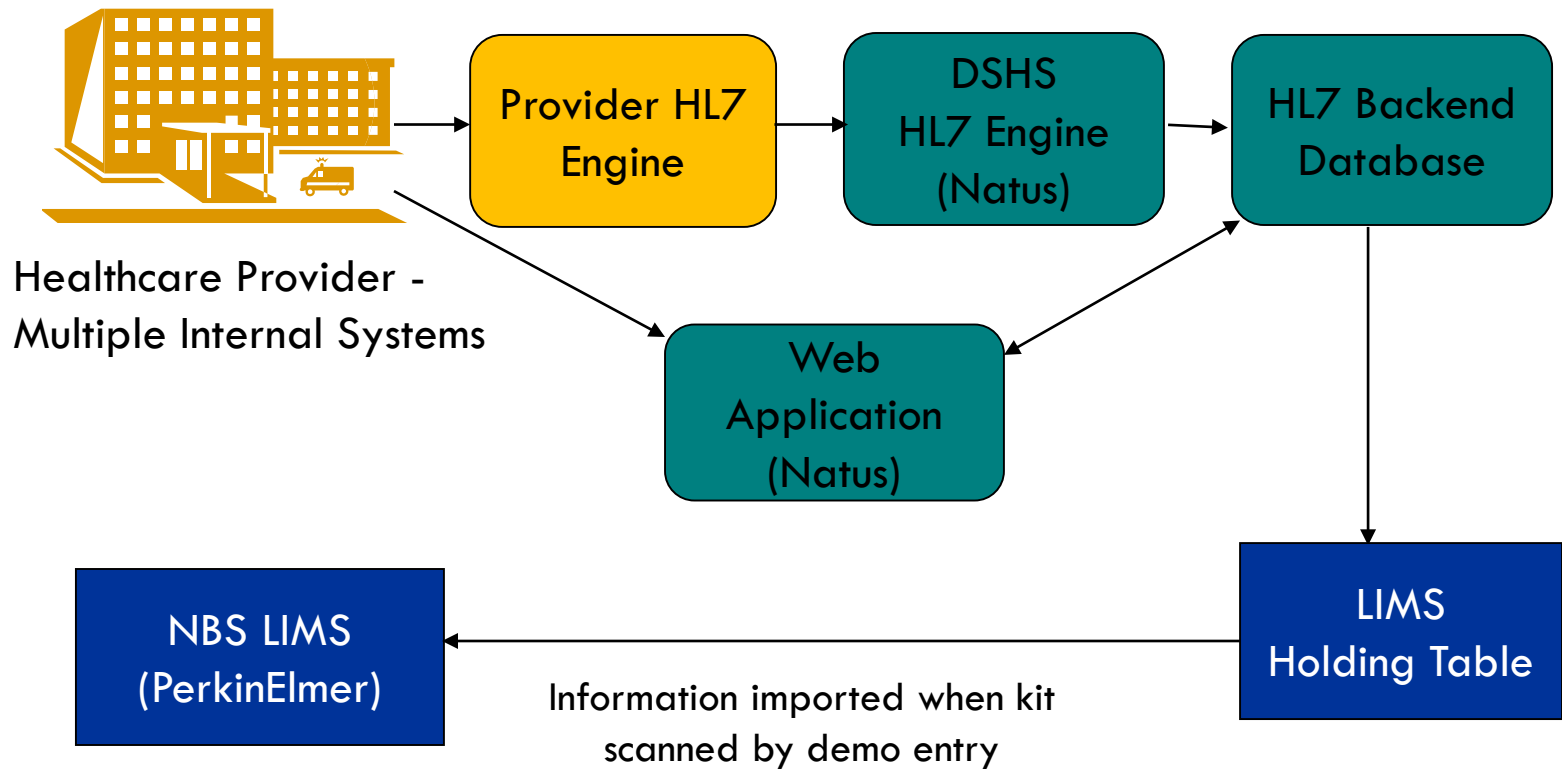
▣ > 2100 Submitters

- 300 Hospitals
60% of specimens
(100 to 12,000 specimens per year)
- 50 Birthing Centers
- 100 Independent Midwives
- 1650 Pediatric Clinics



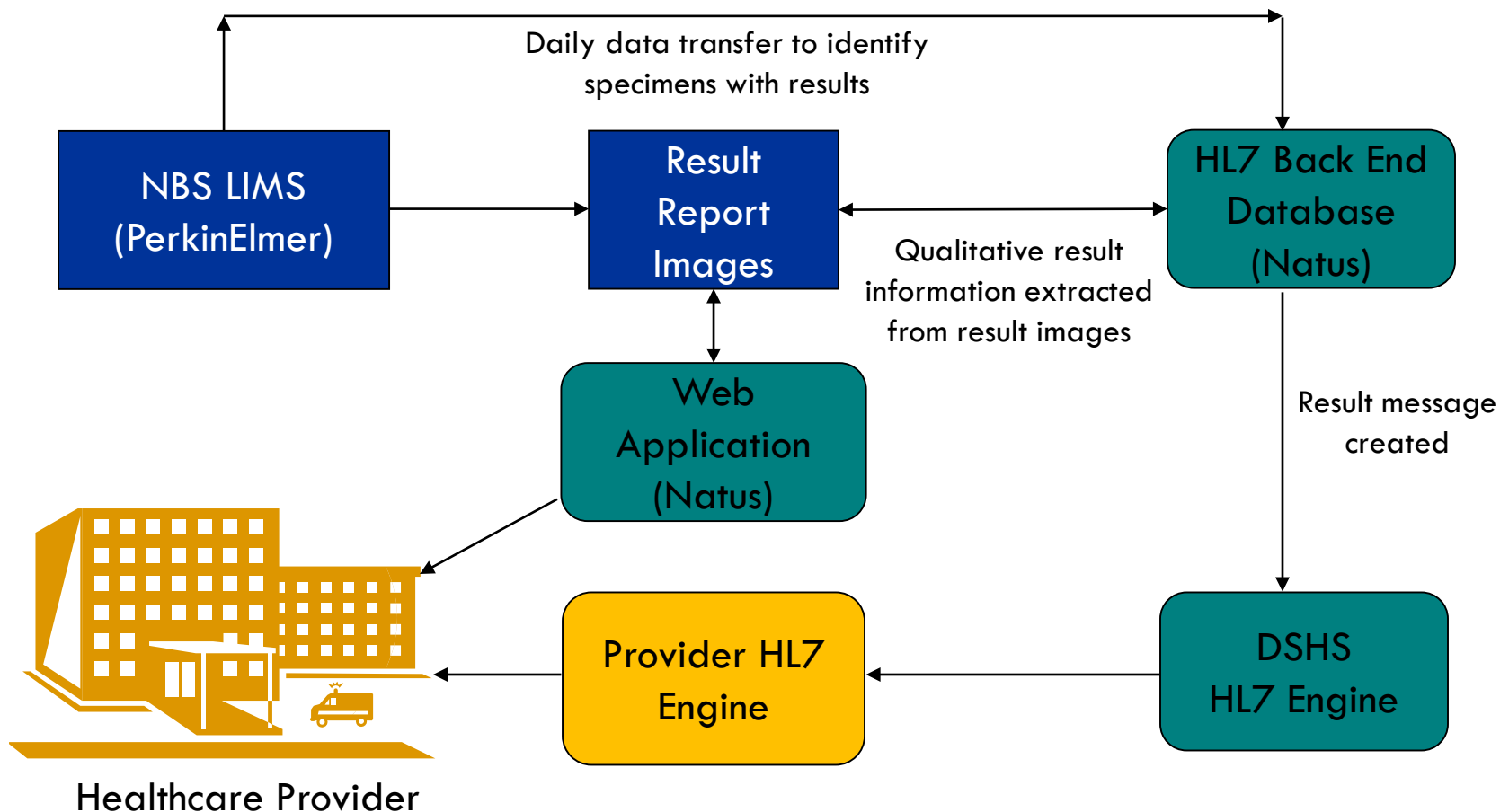
Order / Demographic Receipt

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Result Reporting

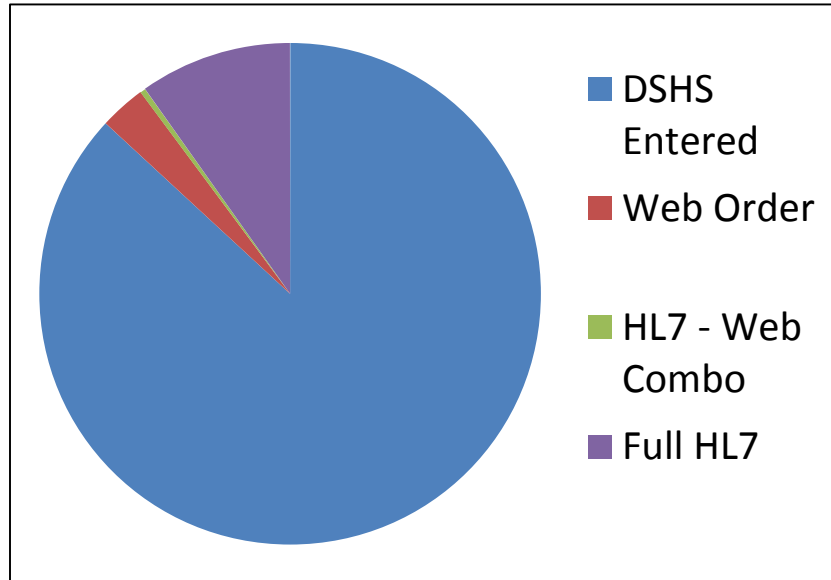
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CURRENT STATUS - OVERALL

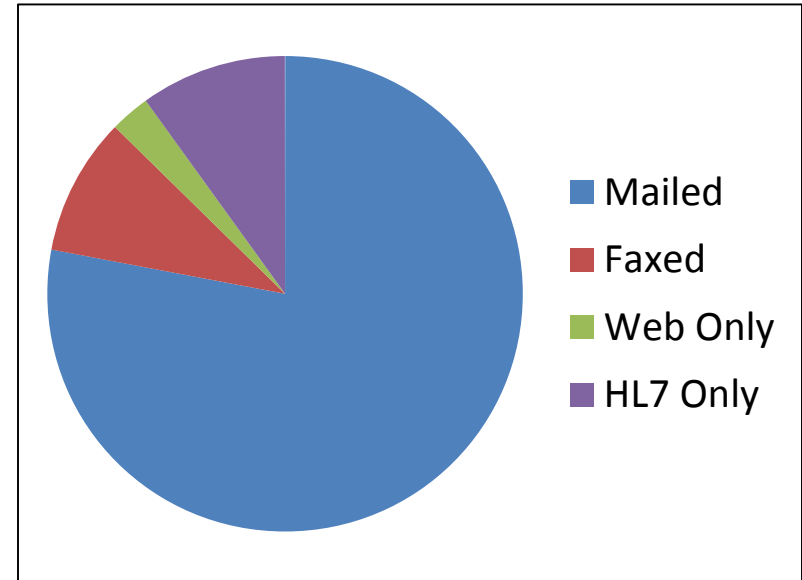
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Test Ordering



~105,000 per year (13.5% of NBS)
Remote Ordering

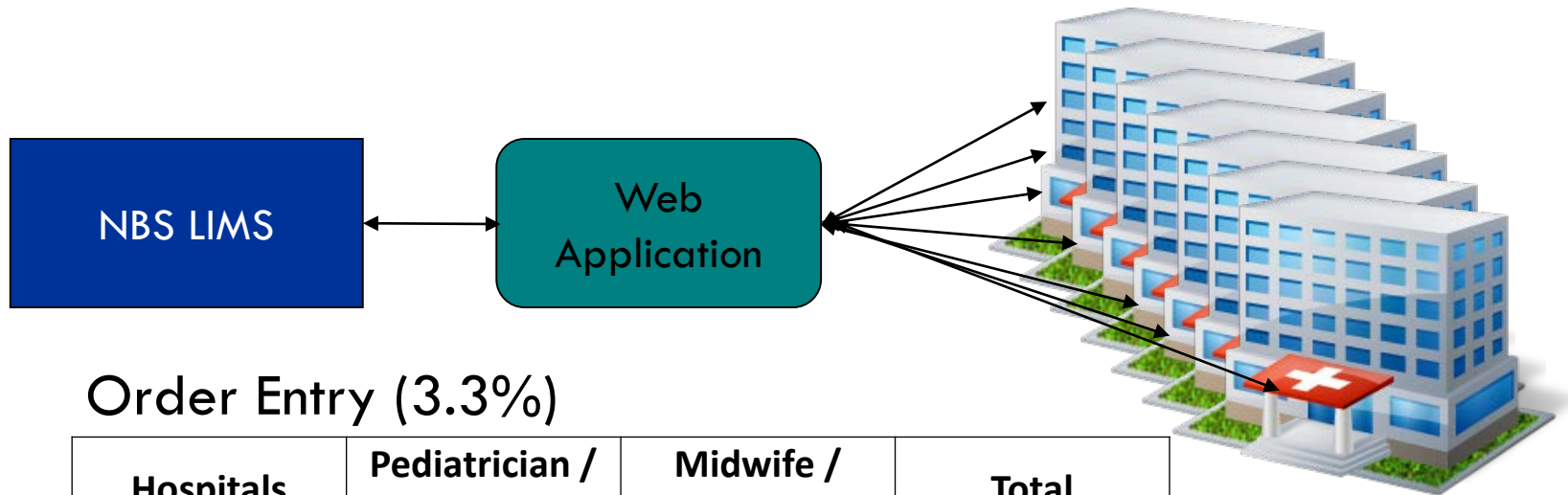
Reporting



~95,000 per year (~12.6% of NBS)
Electronic Reporting Only

Current Status – Web Application

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Order Entry (3.3%)

Hospitals	Pediatrician / Clinic	Midwife / Birthing Center	Total
13	9	2	24

Results Access

- ▣ All NBS results available
- ▣ ~1800 Facilities with accounts
- ▣ ~225,000 views / year

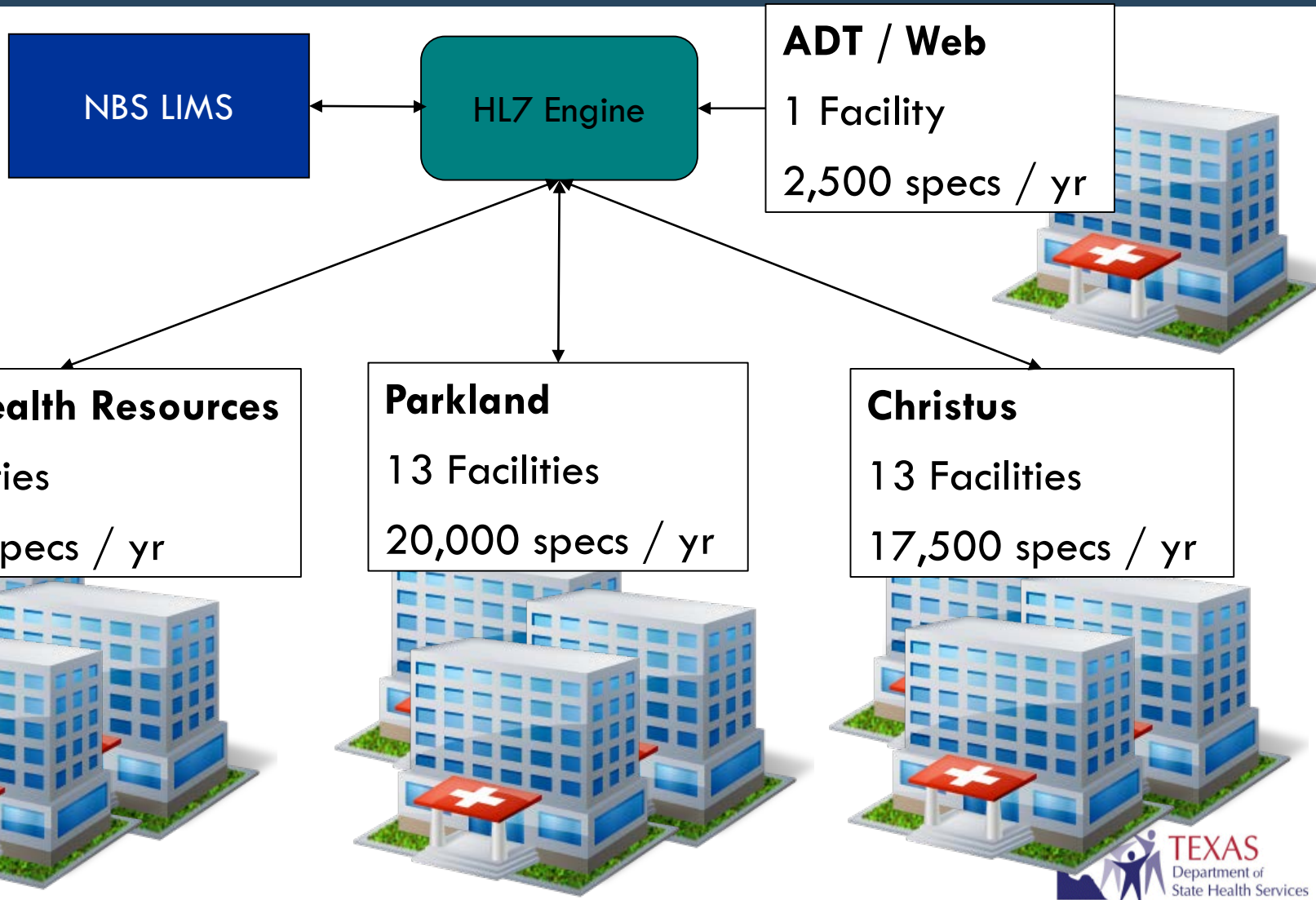
Benefits of Web Application

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- Demographic Entry (Neometrics)
 - Eliminate hand-entry of fields
 - Auto-populate some fields
 - Require critical fields and valid information
 - Minimize hand-writing interpretation
 - Improve quality of data received
 - Reduce time required to complete data entry in DSHS
 - Improve DSHS processes for better customer service
- Result Reports
 - Fast, easy, 24/7 access to reports and report cards
 - For Neometrics, users can access NBS results for previous specimens drawn by other facilities

Current Status – HL7

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BENEFITS OF HL7

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- Providers no longer need to enter data
- Improve Data Quality
 - ▣ Data validations included in entry systems
 - ▣ Allows update of some patient data until demographic information is imported
- Eliminate need for manual transcription of the results

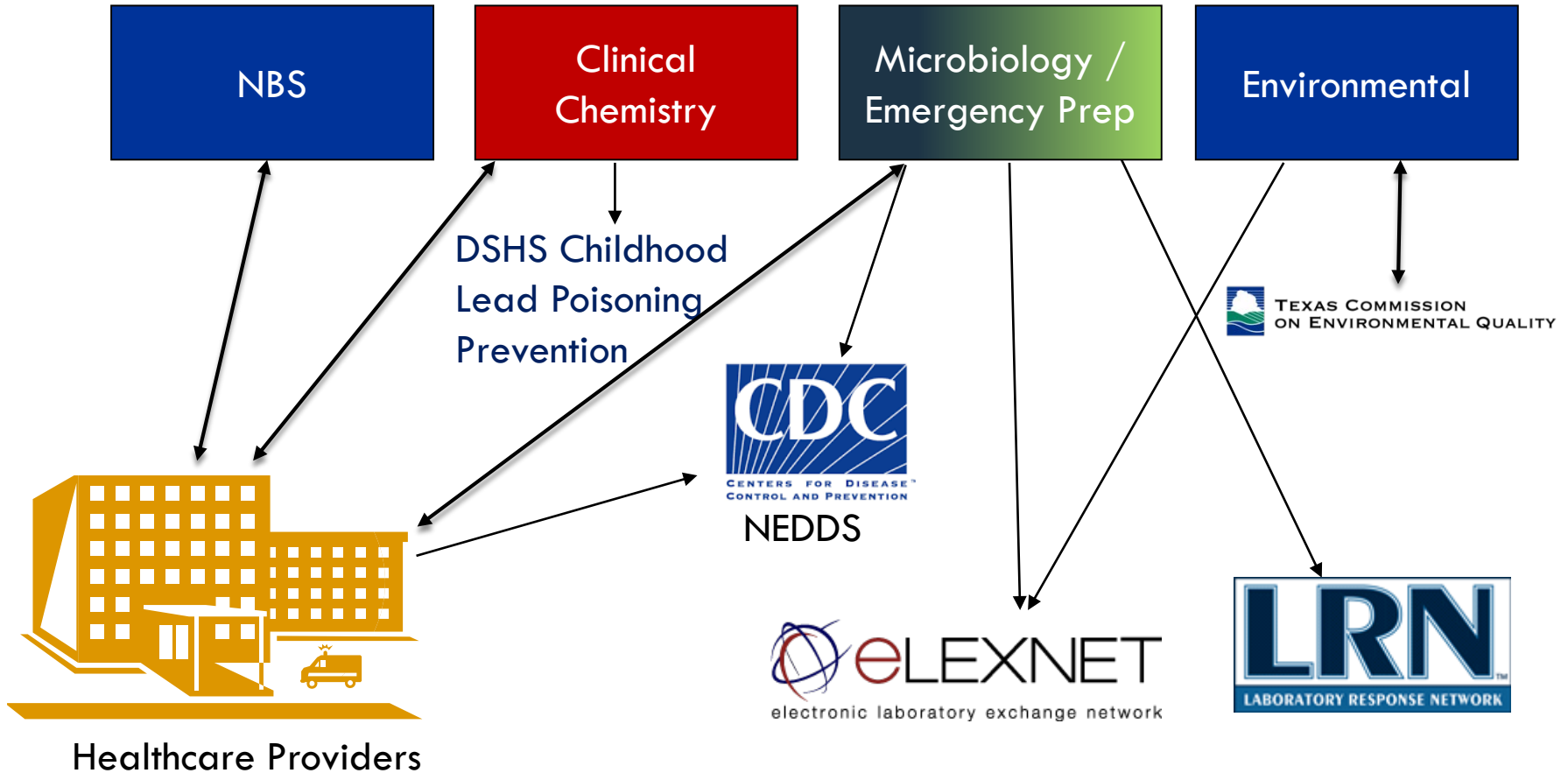
Moving Forward

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- Improve Web Application
- HL7 new message: NLM / PHII Implementation Guide
 - ▣ Simplified result options
 - ▣ Minimizing necessary result validations
- Recruit more participating sites
- Health Services Gateway
- NewSTEPS 360 grant

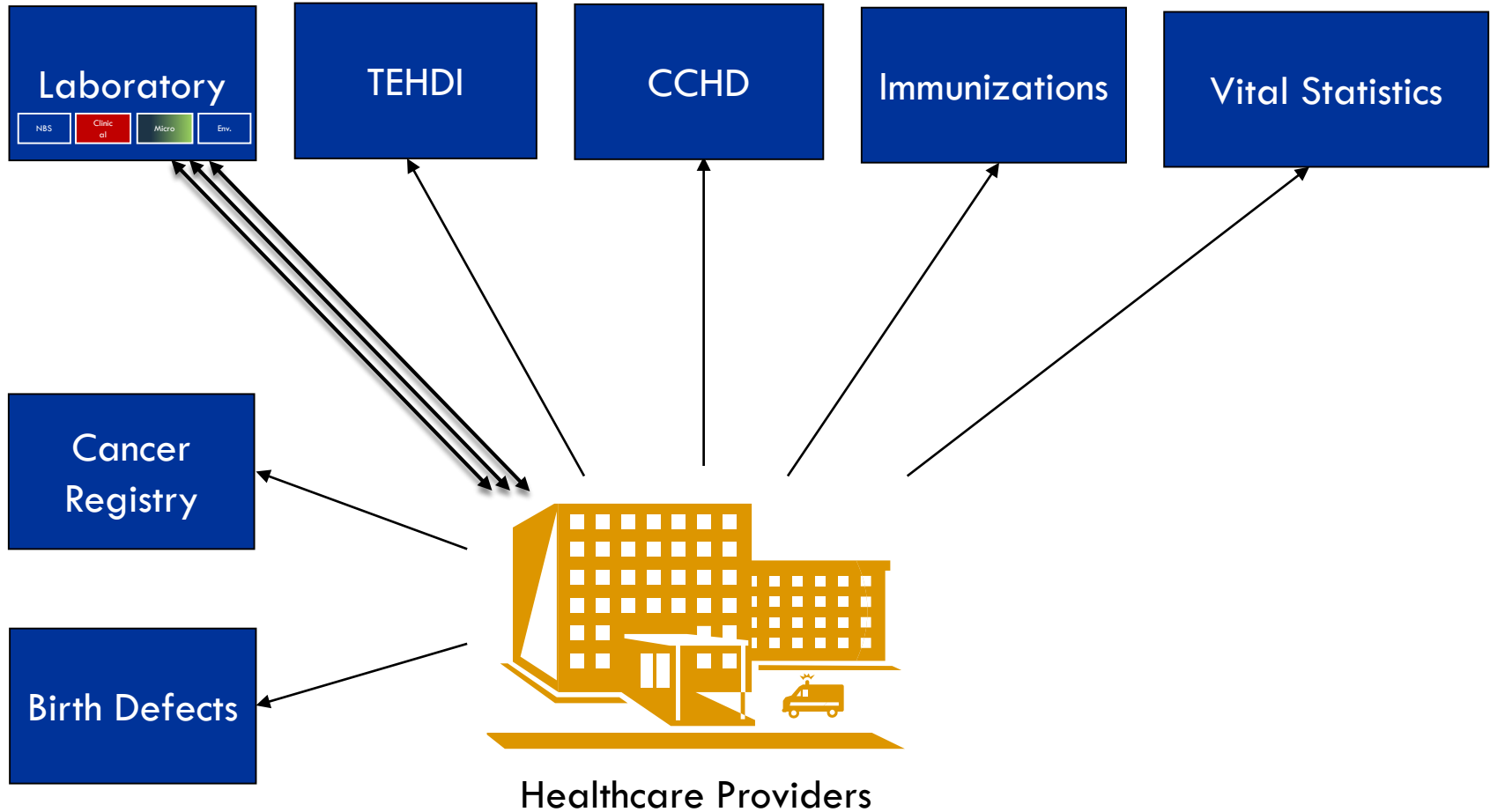
Integrating into Lab / Agency HIT

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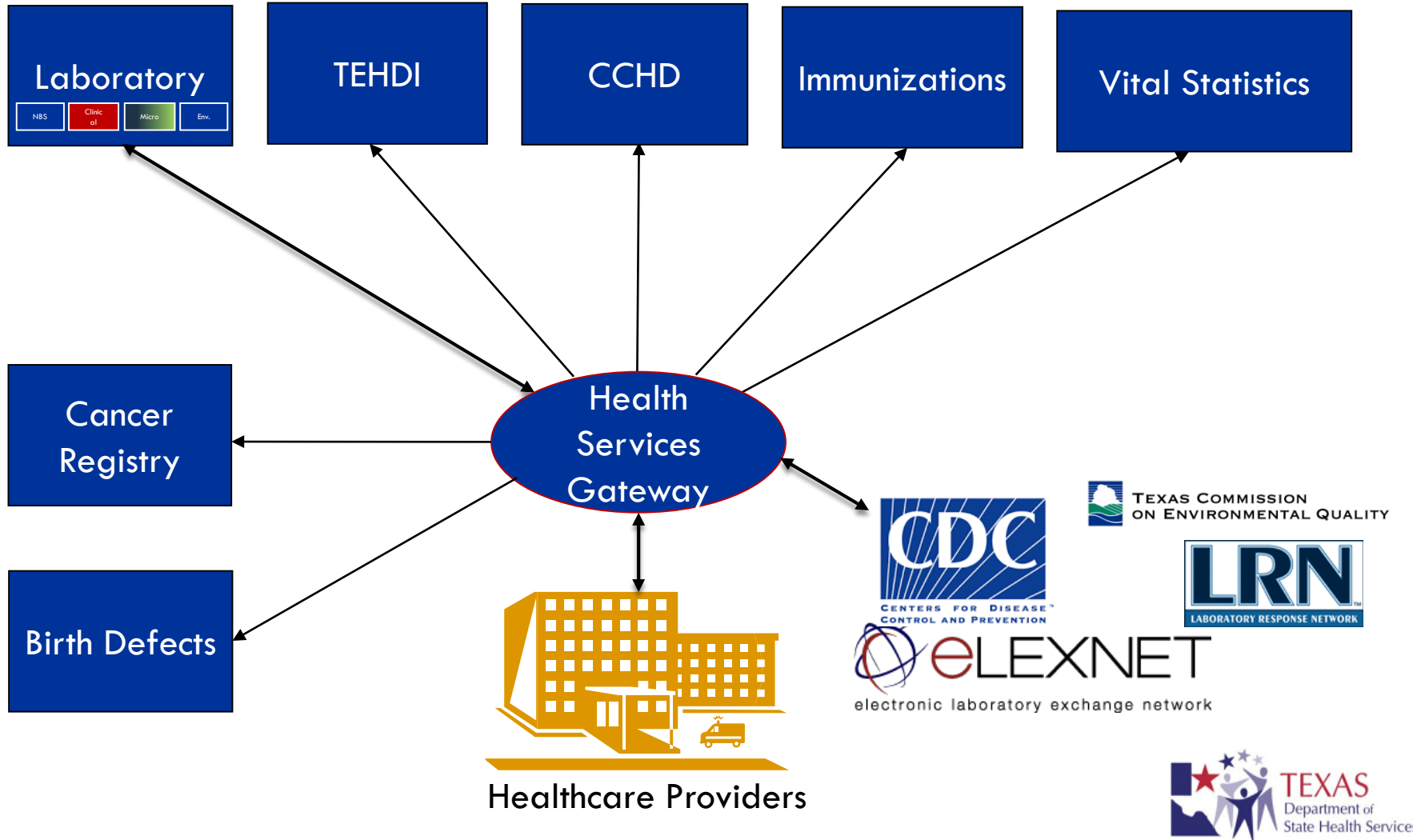
Integrating into Lab / Agency HIT

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Health Services Gateway

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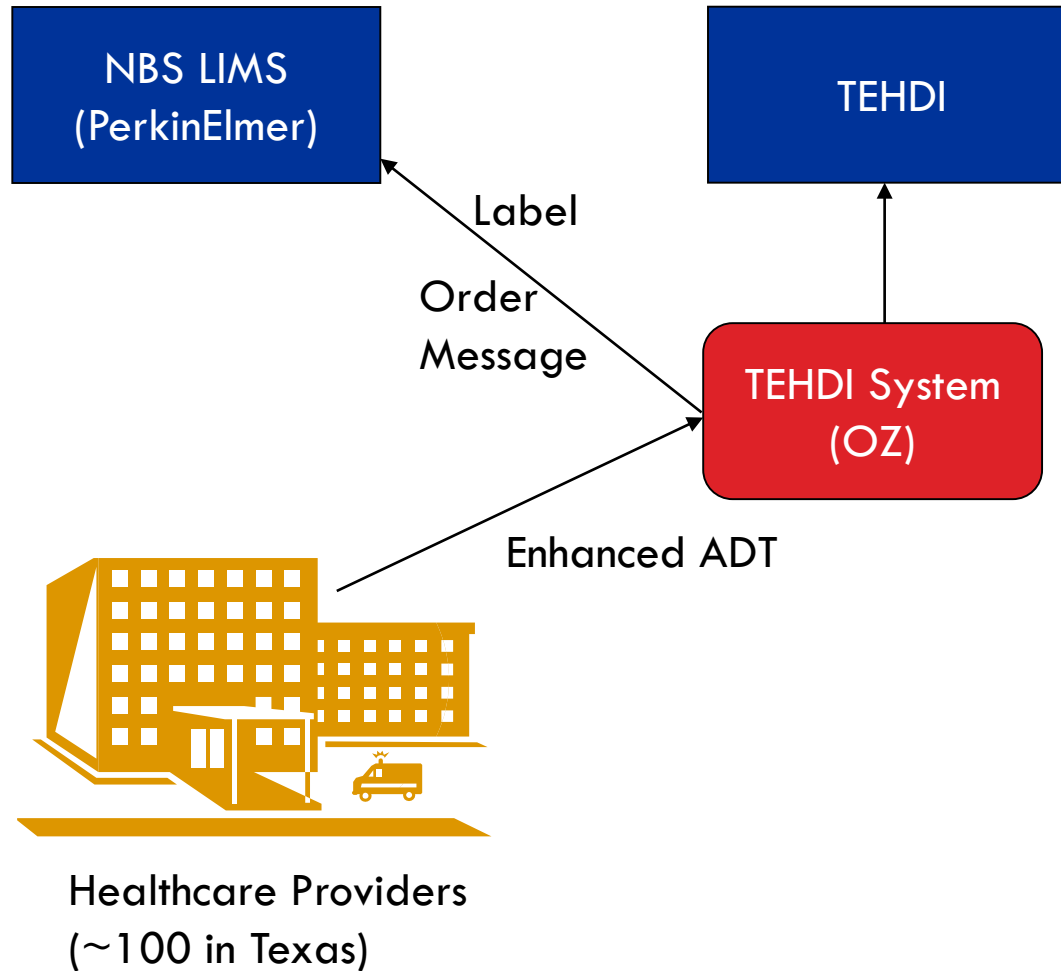
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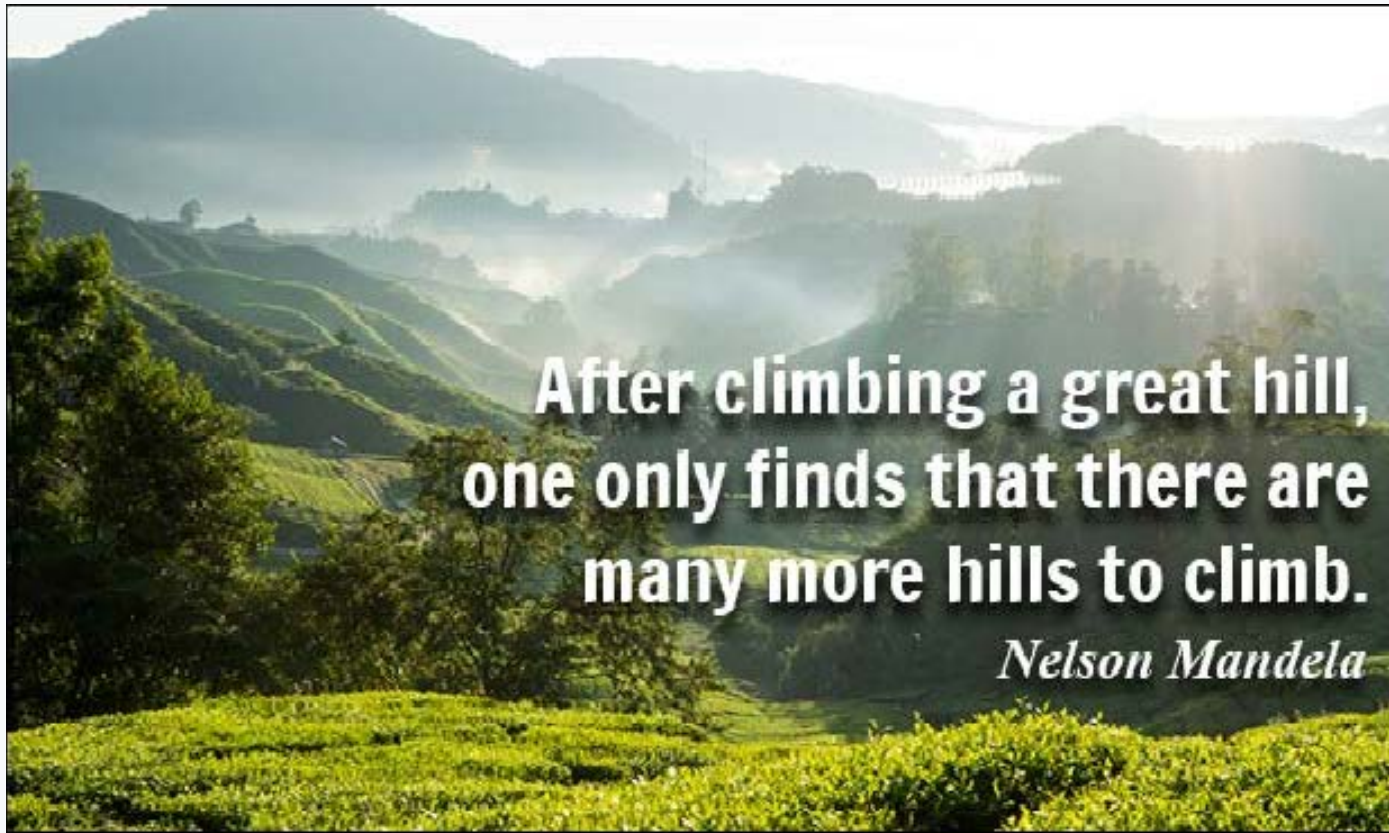
NewSTEPS 360 Grant

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THANK YOU

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**After climbing a great hill,
one only finds that there are
many more hills to climb.**

Nelson Mandela