

Displaying and Integrating Genetic Information Through the EHR Action Collaborative

DIGITizE AC

What is DIGITizE?

- Displaying and Integrating Genetic Information Through the EHR Action Collaborative

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DIGITizE: Displaying and Integrating Genetic Information Through the EHR

www.nationalacademies.org/hmd/Activities/Research/GenomicBasedResearch/Innovation-Collaboratives/EHR.aspx

(G2MC)

Who is DIGITizE?

- Government
- Providers
- Laboratories
- Vendors
- Patients Representatives
- Standards Organizations

Membership

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• Grant Wood, Intermountain Healthcare

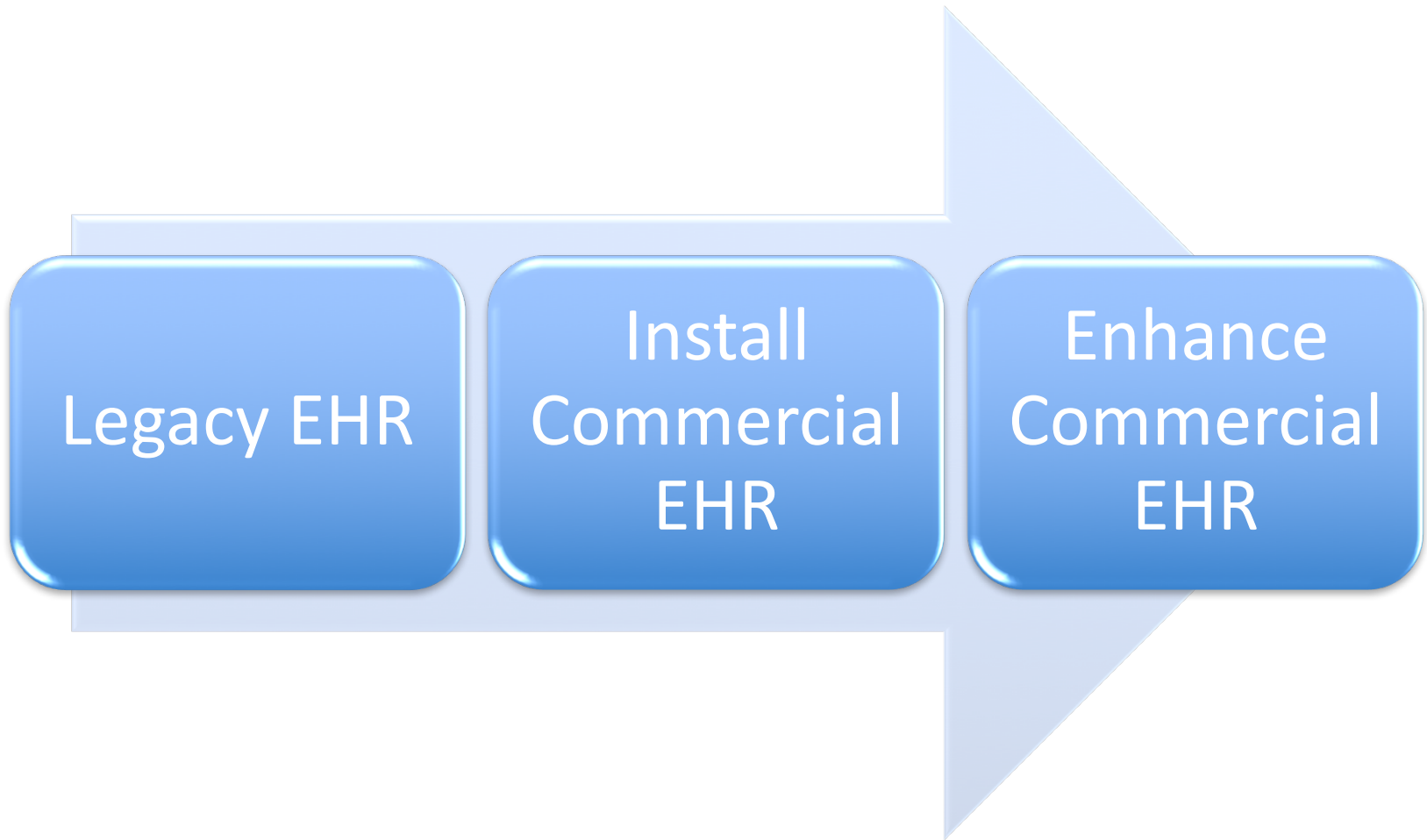
DIGITizE's Purpose

Facilitate Development and Rollout of
Genetic Aware
Electronic Clinical Decision Support

DIGITizE's Focus Areas

- Develop Implementation Guides
- Enable Collaborations to Piloting Guides

Common Hospital IT Phases



Developing Guides

First Implementation Guide

- Pre and post test alerts for abacavir and azathioprine
- Required data movement from lab to provider
- Recommended provider CDS logic

Establishing Connectivity and Pharmacogenomics Decision Support Protect Patients HLA-B*57:01 and Variants

An Implementation Guide

12/1/2015

Displaying and Integrating Genetic Information Tool
(DIGITize AC)

Version 1.0

When applying this observation to an HL7v2 message, 50956-2:HLA-B*57:01 represents the observation code that would populate the OBX-3 field of a single OBX segment returned to the ordering provider system from the testing laboratory system. The observation result value associated with this same OBX segment is found in the field OBX-5 which would contain one of two ordinal values, positive or negative.

The SNOMED-CT codes for Positive and Negative are 10828004 and 260385009, respectively. SNOMED codes are strongly recommended for accurately and precisely representing the Positive or Negative result.

The reporting laboratory is to use this LOINC code to affirm that they tested for the specific *HLA-B*57:01* allele and one of the two SNOMED codes to convey they have observed that the patient's specimen either contains it or does not contain it. If an OBX segment containing this LOINC code is not returned by a testing laboratory and stored in a manner that is available to the CDS algorithm then it cannot be assumed that the patient has been tested for the presence or absence of the *HLA-B*57:01* allele, which is directly related to the hypersensitivity of abacavir. Here's a partial OBX segment example of the key elements discussed above:

For a positive finding of the *HLA-B*57:01* allele...

OBX1|1|...|50956-2^HLA-B*57:01^LN ||10828004^Positive^SCT~LA6576-8^Positive^LN-ANS |...

And, for a negative finding of the *HLA-B*57:01* allele...

OBX1|1|...|50956-2^HLA-B*57:01^LN ||260385009^Negative^SCT~LA6577-6^Negative^LN-ANS |...

NOTE: The examples above includes the equivalent SNOMED-CT (SCT) and LOINC Answer (LN-ANS) codes in each OBX-5 field. While SNOMED-CT is the preferred standard, it does not prevent the ability to provide the equivalent answer code from the LOINC Answer list. This guide does specify a requirement to use the SNOMED-CT values so that the receiving system can fulfill the CDS rules associated with this test result. 8

CSER – DIGITizE Collaboration

- Building Lynch Syndrome Guide
- Goal is to provide clinicians with proactive alerts to prompt screening colonoscopies for patients with Lynch Syndrome
- Key step is prompting clinicians to consider placing Lynch Syndrome on the problem list in the event a positive genetic result

Key Learning

- Many individuals from many different backgrounds will invest their time to help
- But dedicated effort for project management, analysis and coordination still required
- Limited number of individuals who can play these roles

Pilots

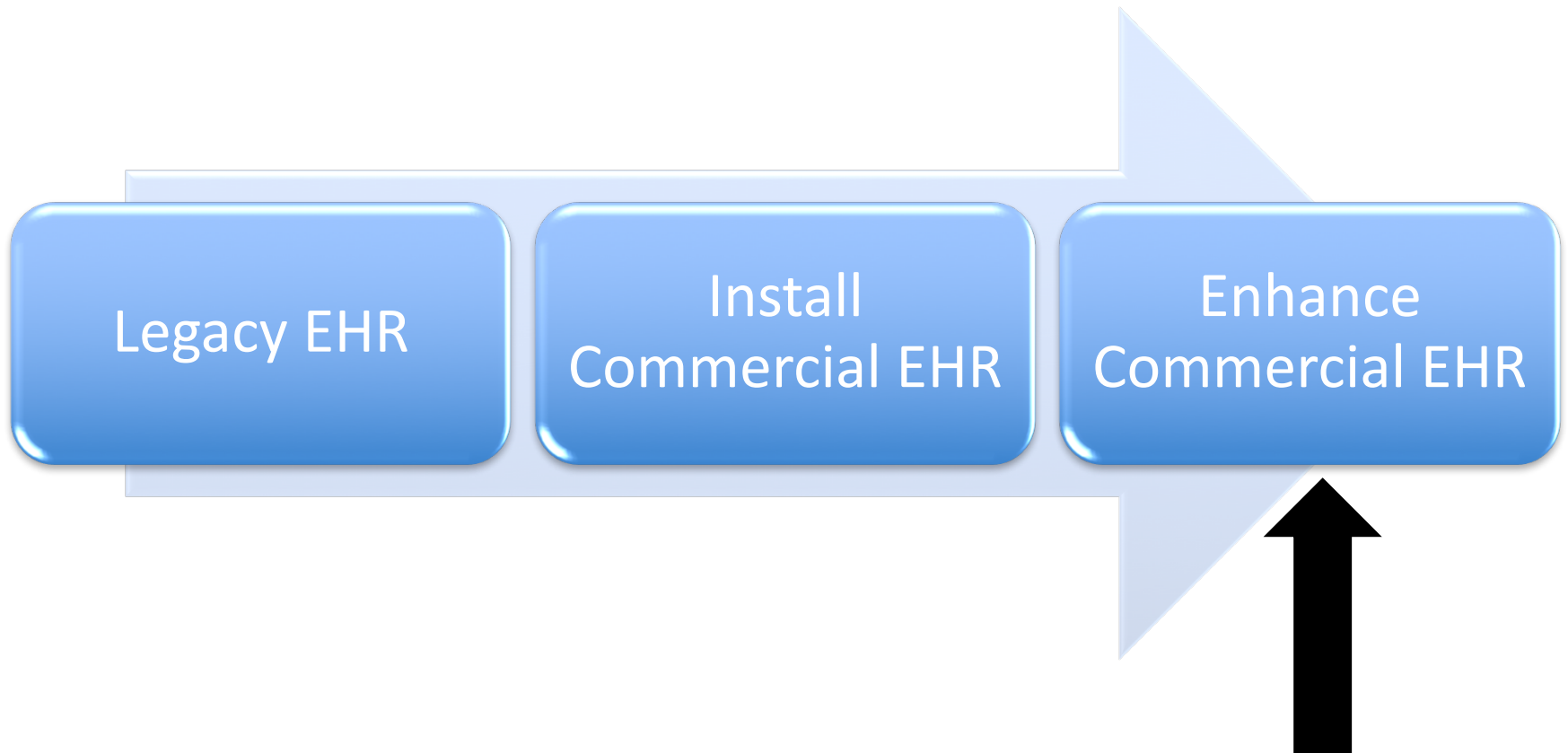
Status

- Multiple organizations working towards pilots
- Significant interest in remaining engaged and sharing war stories through the process
- Still the realm of hospital IT – vendors including EHR vendors play a supporting role

Lessons Learned

- Competition of Clinical IT Resources is Extreme
- Multi-phase approval processes
- Multiple levels of complexity in implementation

Common Hospital IT Phases



Processes and Organizations
for Innovation in this Phase is
Being Defined Now