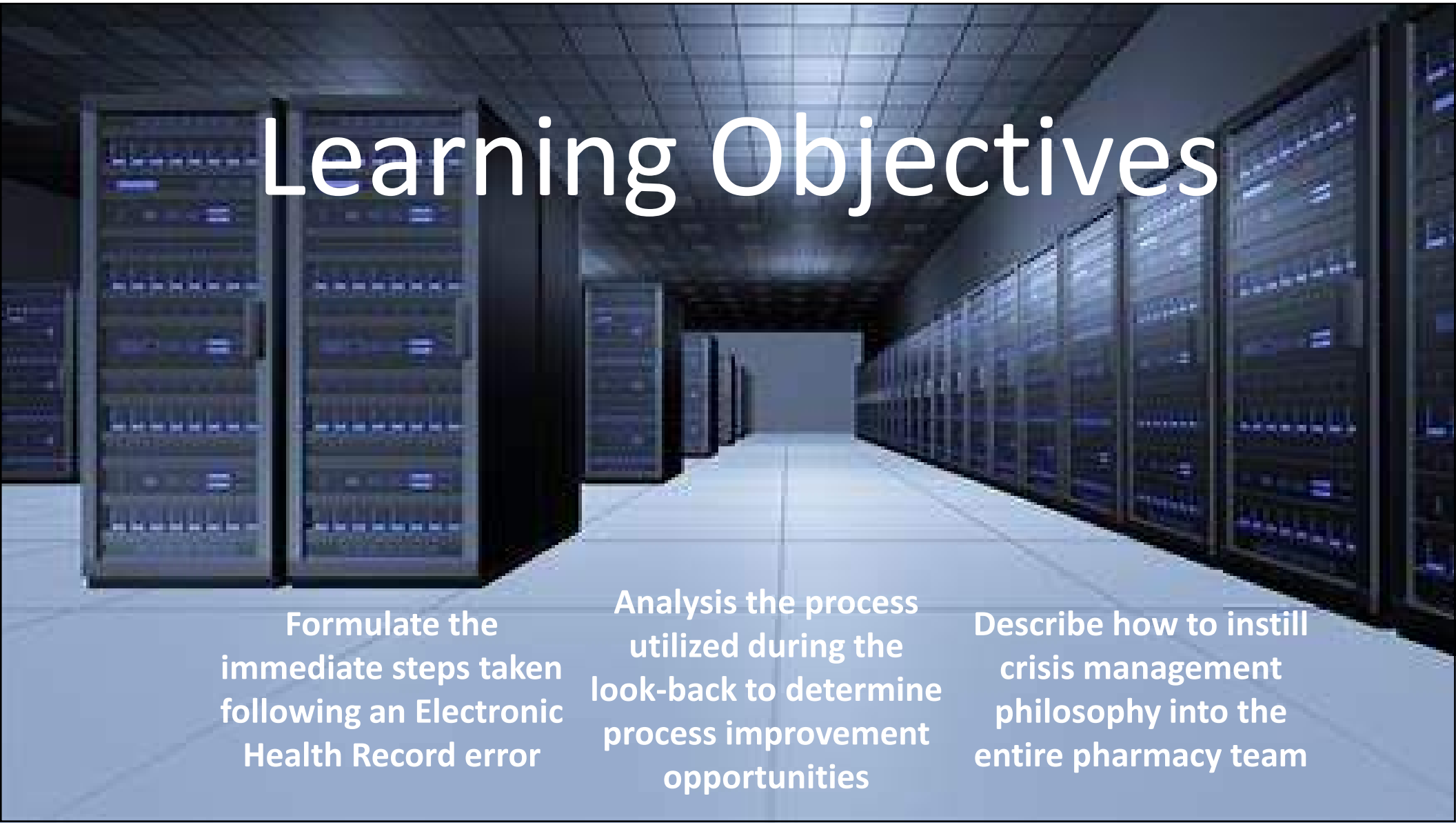
Lessons Learned from an Electronic Health Record Failure

Karen J. Arthur, PharmD, BCPS, CPHQ
Associate Pharmacy Chief, Medication Safety, Informatics & Procurement
Veteran Health Indiana
Karen.Arthur@va.gov

VA | U.S. Department of Veterans Affairs

I have nothing to disclose



Learning Objectives

Formulate the immediate steps taken following an Electronic Health Record error

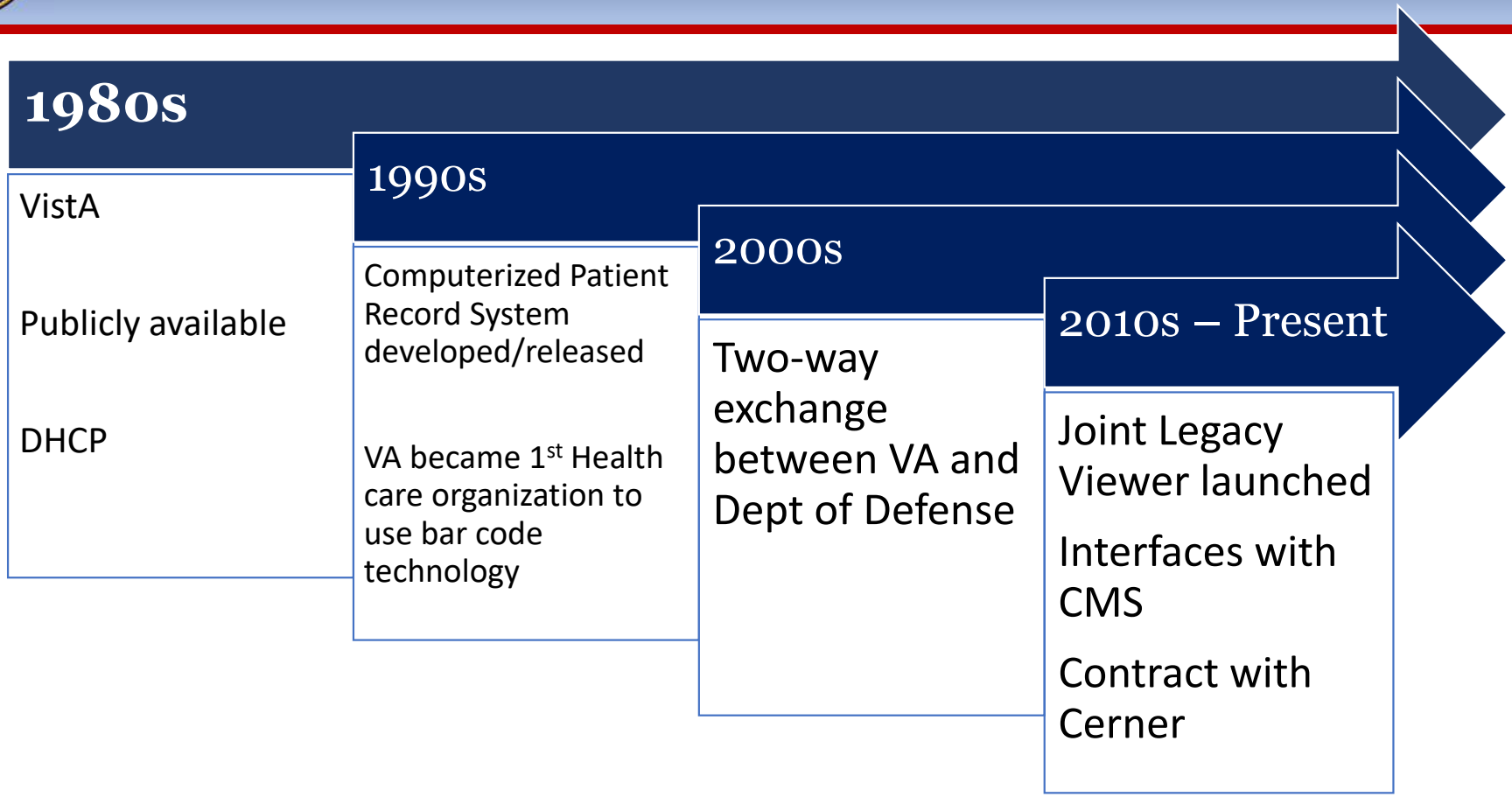
Analysis the process utilized during the look-back to determine process improvement opportunities

Describe how to instill crisis management philosophy into the entire pharmacy team

Veterans Health Administration

- 9 million enrolled veterans
- 172 Medical centers
- 1,138 outpatient sites of care

Electronic Health Record Journey



Veteran Health Indiana - Indianapolis, IN

- Tertiary care referral academic medical
- Serve ~ 62,000 veterans annually
- 1 million outpatient appointments
- 8600 admissions to 159 inpatient beds
- More than 1 million outpatient prescriptions processed
- Centralized Mail Order Pharmacies
- Regional Pharmacy Call Center

Pharmacy Add on Technology at VHI

Inpatient

- Omnicell®
  - ADC
  - IVX
  - Anesthesia Workstation
  - Carousel
- VistA Chemotherapy Manager

Outpatient

- ScriptPro®
- Omnicell® ADC
- Endicia®
- Methasoft®

Timeline of EHR Failure

April 15, 2023

RMS Upgrade performed

April 17, 2023

Detected Appointments were not transferring correctly

RMS restored to pre-upgrade version

April 28, 2023

Incident report from Pharmacy Call Center discovers address is changed by "UNKNOWN" on 4/17;

999 addresses altered

April 28, 2023

Health Benefits begins contacting Veterans to confirm correct address; Pharmacy contacts Veterans who are Indianapolis based

May 1 – May 3, 2023

Pharmacy discovers ~299 Veterans without address updates continue to receive incorrect medications

What would you do next?

slido

A. Allow the health benefits team to review addresses contacting each veteran one by one (5 team members)

B. Revert the addresses immediately

C. Stop filling prescriptions

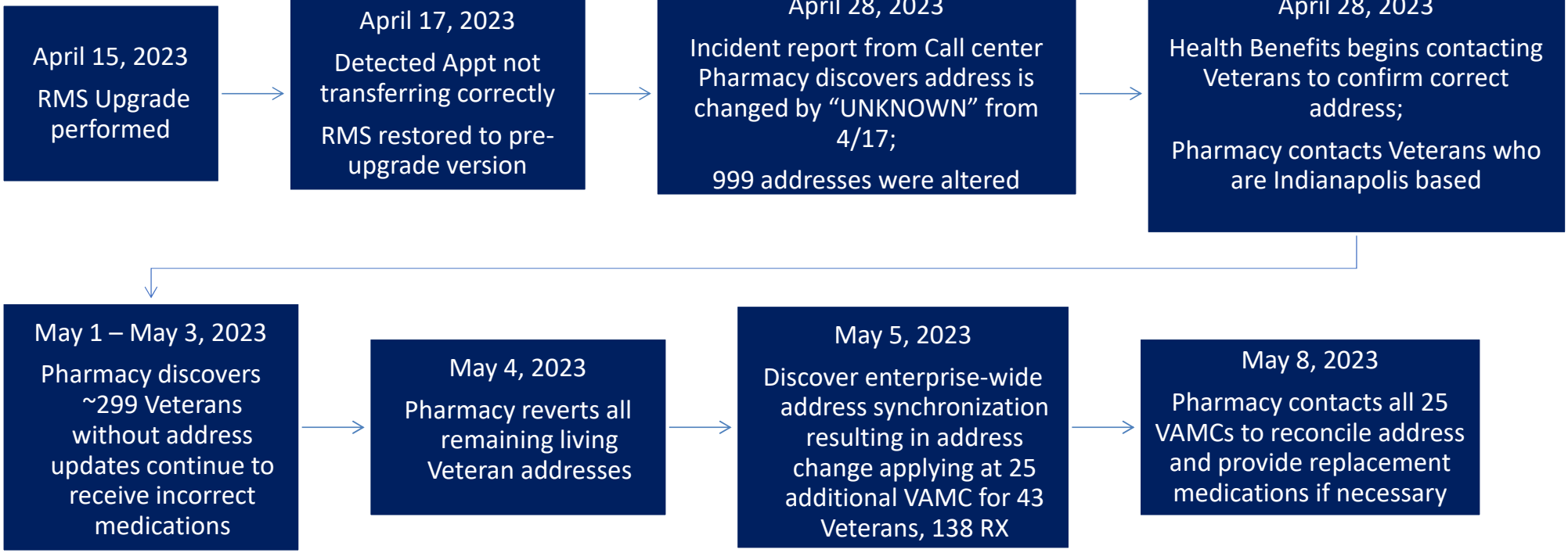
D. None of the above

slido

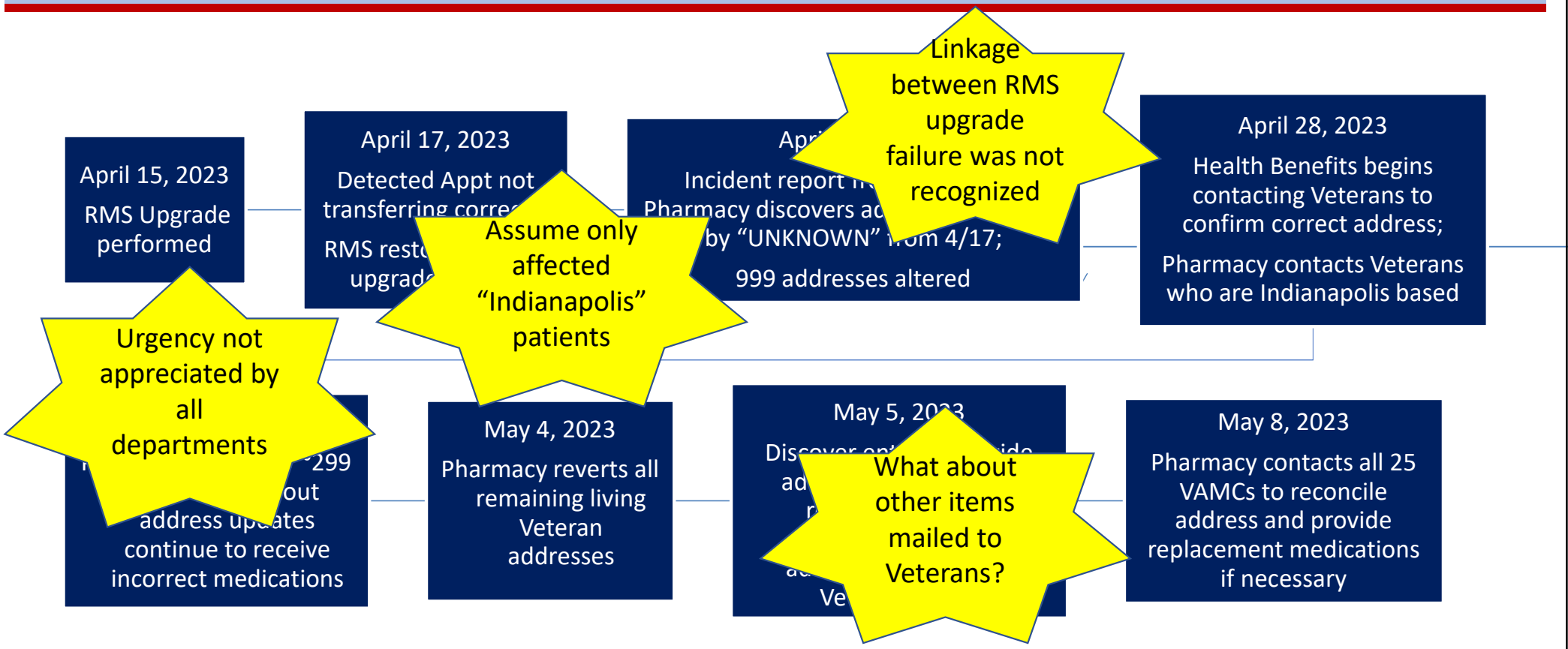
What would you do next?

ⓘ Start presenting to display the poll results on this slide.

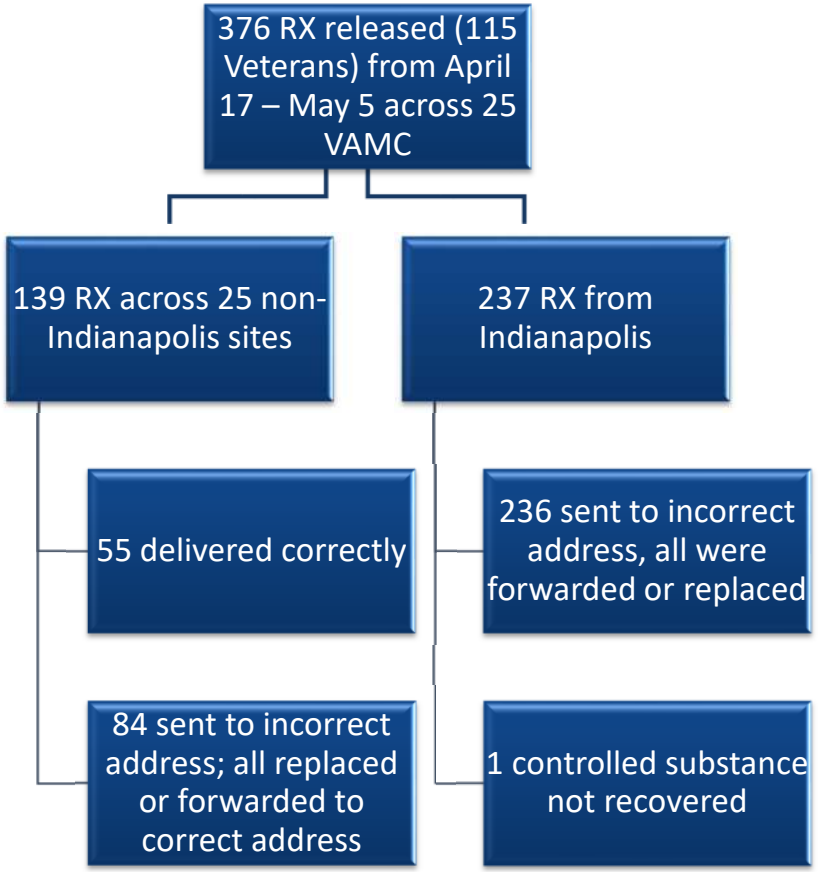
Timeline of EHR Failure



Failed Assumptions (April 15 – May 8)



Medication Dispensing



- Seven Veterans were unable to be reached via phone and letters were mailed
- Two Veterans took medication mailed to their address with another Veteran's name on the bottle
  - No harm occurred
- Event was considered resolved on June 22, 2023

Emergency/ Crisis Management

Are you prepared for a failure?

- What is the risk?
- Have you considered the worst case?
- Joint Commission Sentinel Event Alert 67: Preserving patient safety after a cyberattack

Our plan for EHR failure is?

A. Fully functional and tested annually

B. In development

C. We have considered a plan

D. What? The EHR doesn't fail!

slido

Our Plan for EHR failure is?

ⓘ Start presenting to display the poll results on this slide.

Why is no one else panicking?

- Invoking incident management/command structure
  - FEMA based standard approach to emergency response
  - Interdisciplinary
  - Provides logistical and administrative support to staff
  - Specific objectives
  - Common language

- False assumptions regarding the extent
  - Review all the potential patients
  - Mobilize resources to review the data in a timely manner

Additional Lessons Learned

- Data Management
  - Multiple lists were created
  - Various team members completing reviews
  - Availability of the data
  - Centralized storage

- Does everyone know the plan or where to find the plan?

- Simulating Failures


Questions?

Lessons Learned from an Electronic Health Record Failure

Karen J. Arthur, PharmD, BCPS, CPHQ
Associate Pharmacy Chief, Medication Safety, Informatics & Procurement
Veteran Health Indiana
Karen.Arthur@va.gov

VA | U.S. Department of Veterans Affairs