



# Using Bridgell Reports for Data Validation and Cleaning

DATA GROUP WEBINAR BY BEN FOUTS, RCHC

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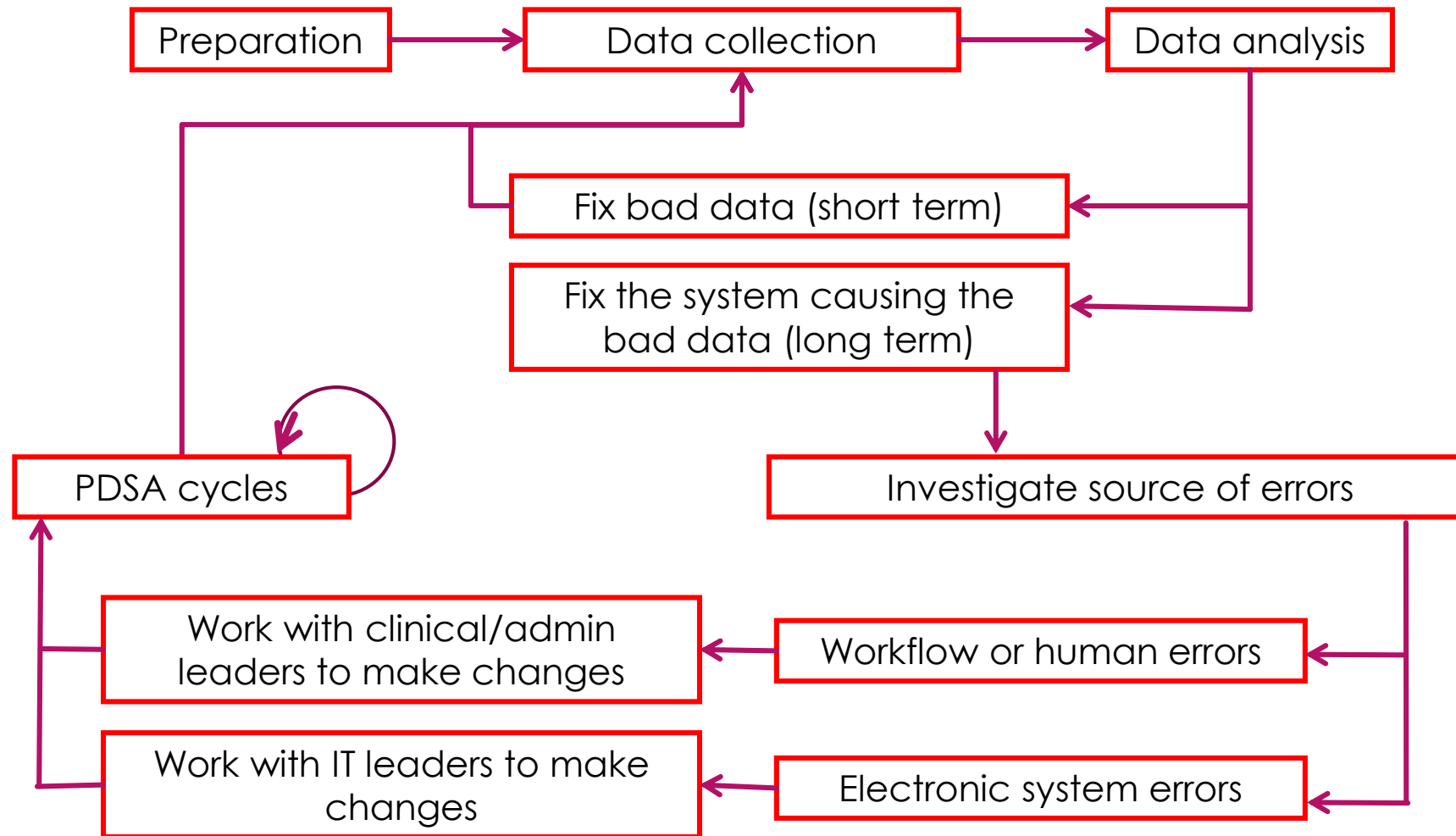
# Agenda

1. Brief review of Data Validation Cycle
2. Documents to help you during the quality assurance process
3. Examine three categories of BridgeIT validation reports, along with examples:
  - a) System Set-Up Reports
  - b) Record-Level Reports to Identify Infrequent Errors
  - c) Record-Level Reports to Identify Frequent Errors
4. Discussion of what health centers are currently doing to assure the quality of their data

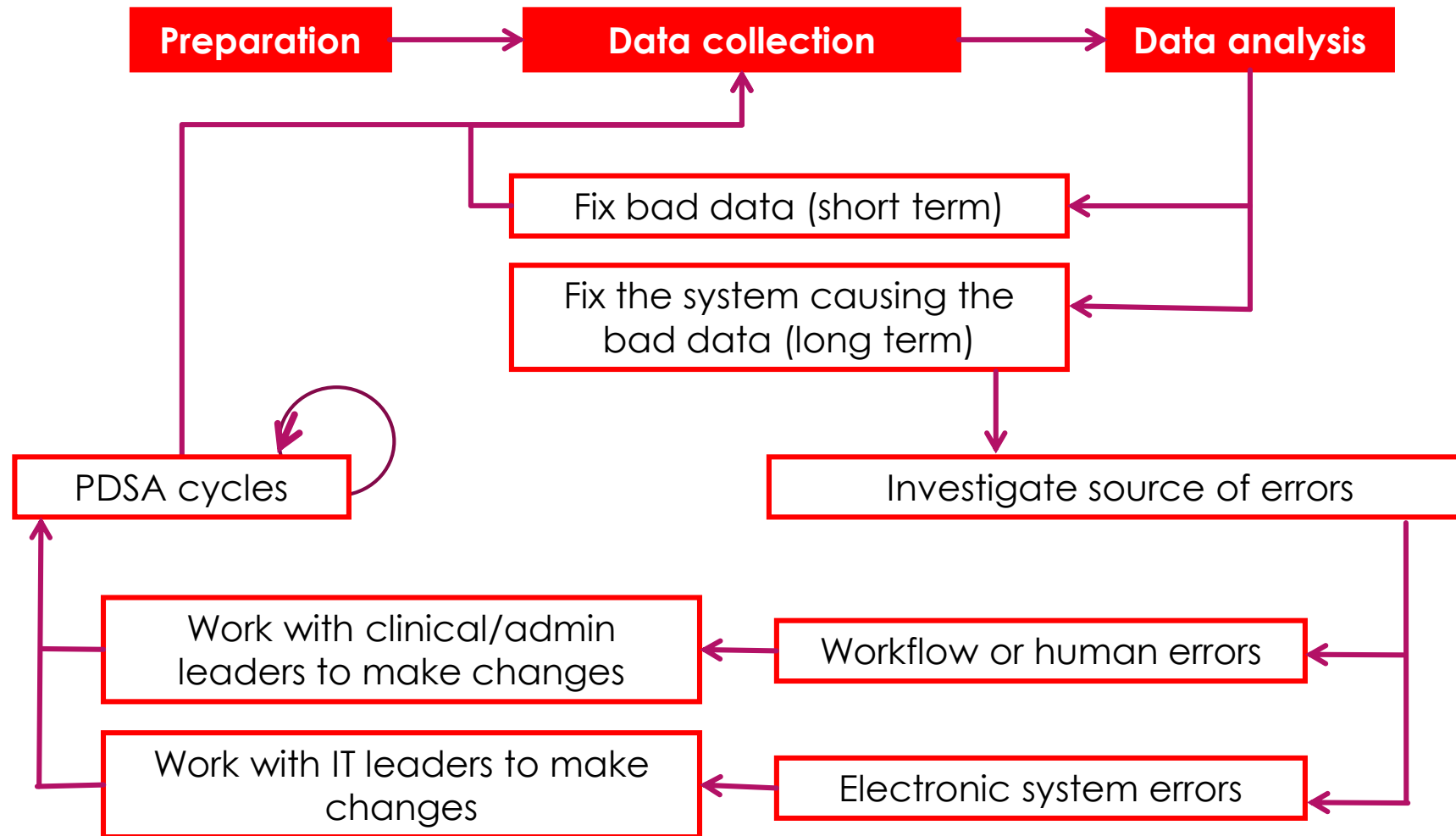
# Data Validation Cycle

BRIEF OVERVIEW

# The Data Validation Cycle



# The Data Validation Cycle



# Preparation

- ▶ Choose the area you want to focus on: is there a BridgellT validation report that fits the need? *We will look at the various reports in this presentation*
- ▶ Choose frequency in which to run the reports: should you check more often because the error rate is high? *The instructions split the reports into frequent/infrequent groups*

# Data collection

- ▶ Run the reports with the proper filters and outputs. *The instructions describe what to do. We will look at some examples in this presentation.*
- ▶ If routine, this step can be automated or assigned to a staff member. *You can run reports and save results using the Bridgell Task Manager*

# Data analysis

- ▶ This is the procedure that you go through to identify the errors or omissions in the data
- ▶ Data can be put in tables or graphs
- ▶ Data can be split by department, facility, provider, month, etc.
- ▶ Information gathered here will inform the next stages of the cycle.



# Short Term Strategy: Fix the Errors

- ▶ Many BridgeIT validation reports show record-level data. Therefore, you can filter the report for records with errors, then look the patients up in eCW
- ▶ Once the data is fixed, you can then run the validation report again (the next day) and check the repair completeness

# Long Term Strategy: Fix the System

- ▶ The “System” refers to the system of data input, which can involve workflows, properly trained staff, software interfaces, etc.
- ▶ The BridgeIT validation reports can be used to begin the investigation into what is producing the errors and can be used to monitor if the errors were fixed. But you might need additional information (either by creating your own reports or using the registry)

# Useful Documents

FOR QUALITY ASSURANCE

# New Document

We will go into detail about its contents in this presentation

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## Instructions for Using Bridgelt Reports to Regularly Validate and Clean eCW Data (Version 4)

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Serving Sonoma, Napa, Marin & Yolo Counties

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# Validation/Cleaning Document Highlights

- ▶ Validation cycle explanation
- ▶ Three main sections:
  1. System Set-Up Reports
  2. Record-Level Reports (Rarer Events)
  3. Record-Level Reports (More Common Events)
- ▶ Each report explanation has:
  - ❖ Validation report name
  - ❖ Associated data report names
  - ❖ Reference to another document with page numbers
  - ❖ General explanation of how to use

# Relationship to System Set-up Document

## System Set-Up For the BridgeIt Annual Clinical Report Set (Version 4)

- ▶ This document explains the standard system set-up. The 'set-up' validation reports give information on the current eCW set-up
- ▶ Appendix A (page 27) has a table on report categories, which are tied to some of the validation reports
- ▶ Instructions on setting-up lab groups, LOINC codes and medication groups

# Relationship to Instructions Document

## Instructions for Using the BridgeIt Annual Clinical Report Set (Version 10a)

- ▶ The instructions document has a section on how to run the validation reports specifically designed for the data reports
- ▶ For example, the hypertension report (Hypertension\_v6) has an associated validation report (HTN\_Validation\_v2). The report description and suggested uses begin on page 98

# Relationship to Technical Document

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## Technical Documentation For the BridgeIt Annual Clinical Report Set (Version 10a)

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- ▶ The technical document gives a top-to-bottom description of all the data reports.
- ▶ Defines the standard fields and calculation
- ▶ Useful if you are investigating bad data
- ▶ Useful if you are redesigning workflows or training staff on proper data entry



# BridgelT Validation Reports

AS DESCRIBED IN THE  
VALIDATION AND CLEANING  
DOCUMENT

# Section 1: Set-up Reports

- ▶ Display how the system has been set-up, or how items have been assigned to groups
- ▶ Usually, you need to ensure proper set-up first because it is fundamentally important to the functioning of the data reports
- ▶ If you are new to this, don't panic: most of the set-up has already been done (properly). These are tools that you can use to assure yourself and monitor the situation into the future
- ▶ Run once or twice a year (at least towards the end of the calendar year)

# Set-up Reports: UDS and OSHPD Categories

## In the UDS Bridgell Data Mapping folder

- ▶ Provider
- ▶ Patient insurance
- ▶ Adjustments

## In the UDS OSHPD folder

- ▶ Provider
- ▶ Patient insurance

# Set-up Reports: Other Categories

- ▶ See pages 27 to 29 of the System Set-up Document
- ▶ Categories:
  - ❖ Vitals
  - ❖ Lab tests
  - ❖ Diagnostic images
  - ❖ Rx Groups
  - ❖ Preventive medicine structured data
  - ❖ Social history structured data
  - ❖ HPI structured data

# Set-up Reports: Other Categories

- ▶ Many of these are part of Stephanie Heckman's report set (folder UDS Setup and Data Review) and described in the 2015 UDS Instructions Document
- ▶ Generally there is agreement between Stephanie's instructions and the Technical Document in terms of the names of fields (we use most of the same standards), but always refer to the Technical Document for the official description of the RCHC Annual Report Set
- ▶ Example of a report: Clin\_Preventive Structured Data Setup
  - ❖ Page 16 of the validation/cleanup instructions
  - ❖ Page 21 of Stephanie's instructions

# Other Categories: Modified Reports

- ▶ Problem\_List\_Codes\_Used\_v5 (Data sheet shows the problem list codes for patients seen within a period of time. Output shows unduplicated patients and codes/problem names used)
- ▶ Clin\_Lab Tests UDS Review LAB GROUP (Used for checking assignment of cervical cancer screening tests to the Pap Test group)
- ▶ Rx\_Group\_Meds\_Raw\_v1 (Used for checking assignment of medications to Rx Groups. See page 39 of the System Setup Document for a list of groups)

# Set-up Reports: OB Reports

- ▶ Prenatal structured data on the Initial Physical Tab
- ▶ Prenatal structured data on Form A
- ▶ Delivery structured data

## Section 2: Record-Level (Rarer)

- ▶ Errors are fairly rare (that is, do not occur very often per unit time or per unit number of records). But you should verify this for your own health center.
- ▶ Run every quarter or so. They are in the Annual Clinical Report Set New folder
- ▶ Problem List Reports: patients possibly missing a diagnosis code for a chronic disease on their problem list OR who have a code that might not be true
- ▶ OB Reports: find bad data for trimester and deliveries. NOTE: may be run more frequently if you want to catch errors before the record is officially locked



# Record-Level Report Example

## Diabetes problem list validation

- ▶ DM\_Validation\_v2
- ▶ See page 19 of the Validation/Clean-up Instructions
- ▶ See page 97 of the Annual Reports Instruction Manual

## Section 3: Record-Level (Common)

- ▶ Errors are generally more common because of the volume of records
- ▶ Run monthly or so
- ▶ Most are in the Annual Clinical Report Set New folder. Check the BridgellT Report Index to make sure you have the latest versions
- ▶ Lab Test Validation Reports (cancer screens, diabetes-related tests)
- ▶ Image Validation Reports (cancer screens)

# Lab Test Validation Report Example

## Diabetes lab test validation

- ▶ DM\_LabTest\_Validation\_v2
- ▶ See page 24 of the Validation/Clean-up Instructions
- ▶ See page 111 of the Annual Reports Instruction Manual

## Section 3: Other Reports

- ▶ Positive Depression Screens and Associated Follow-up  
(Displays individual positive screens and any associated follow-up)
- ▶ Other UDS, OSHPD and claims-related reports
  - ❖ In the UDS Setup and Data Review or the UDS OSHPD folders
  - ❖ Follow Stephanie's Instructions in the UDS and the OSHPD instructions manuals

# Section 3: Other Reports

## Documents that need to be properly attached

- ▶ Clin\_Lab or Imaging Reports To Move and or Attach MODIFIED\_v3
- ▶ Based on Stephanie's old report Clin\_Lab or Imaging Reports to Move and or Attach
- ▶ Looks for documents for colonoscopy, sigmoidoscopy, pap, mammogram, or eye exam in a period of time. You can filter by these types
- ▶ Suggests what you need to do with the document: move to lab or x-ray folder and attach

# Next Steps: By the End of the Week

- ▶ Ben will place the new/updated validation reports on your BridgellT server
- ▶ The new version of the Validation and Cleanup document will be put on the IHIT Portal
- ▶ A copy of this presentation will be put on the IHIT Portal
- ▶ An e-mail will be sent out to the health centers announcing the location of the reports and documents

# Questions

- ▶ Any questions about the reports?
- ▶

# Peer-to-Peer Experience Sharing

- ▶ What are you already doing around data quality assurance at your health center?
- ▶ Do you have a data quality committee (or something like it)? If so, what do you do in that committee?
- ▶ Are any of the reports mentioned in this presentation useful to you?
- ▶ Are you performing other kinds of data-gathering activities around data quality assurance?
- ▶ Do you have any other kinds of tips or tricks you can share with your peers?