

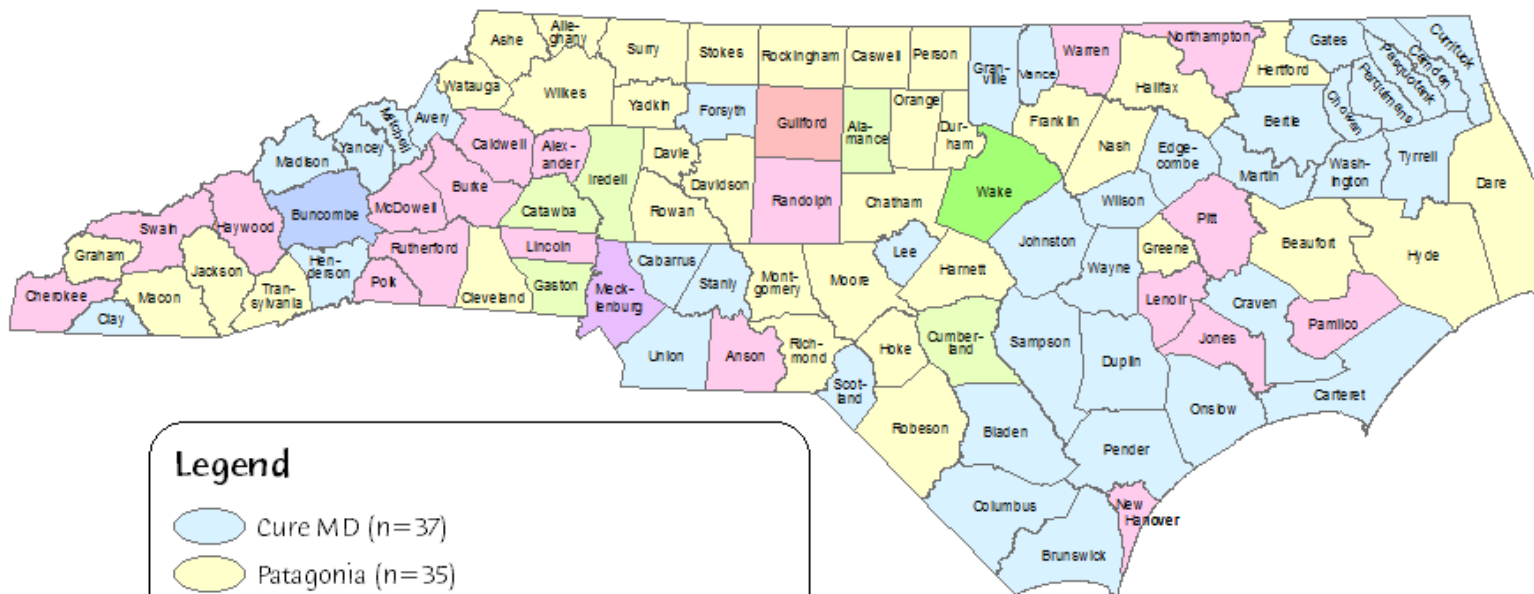
DATA INTEGRITY

Health Information System Reporting

Presentation to the North Carolina Association
of Local Health Directors
Annual Legal Conference
April 20, 2016

Phyllis Mangum Rocco, Head
Division of Public Health, Local Technical
Assistance and Training Branch

North Carolina Practice Management & EHR Software Vendors



Legend

- Cure MD (n=37)
- Patagonia (n=35)
- HIS (n=19)
- InSight (n=5)
- Cerner (n=1)
- GE Centricity (n=1)
- McKesson Visual Health Net (n=1)
- Mitchell & McCormick: Practice Partner (n=1)

Do we think that Batch reporting is important?

N.C. Population Estimates July 2015 U.S. Census Bureau	Population	Percentage of Total Population Estimate	Electronic Health Record Vendor
North Carolina	10,042,802	100%	
Mecklenburg	1,034,070	10.20%	Cerner
Wake	1,024,198	10.10%	Centricity
Guilford	517,600	5.10%	McKesson
Forsyth	369,019	3.70%	CureMd
Cumberland	323,838	3.20%	InSight
Durham	300,952	3.00%	Patagonia
Buncombe	253,178	2.50%	M&M
New Hanover	220,358	2.20%	HIS
Onslow	186,311	1.80%	CureMD
Pitt	175,842	1.80%	HIS
Total Population Estimate 10 Counties in N.C.	4,405,366	43.80%	*Eight (8) different vendors



Background

Prior to February 2016

Business practice standard

- Bi-weekly Phone Conferences with vendors
- HelpDesk trouble shooting of reports and batch error reports

February 2016

Technology Committee

- Batch County Error Reports
- Required Data for Programs

March-April 2016

HIS Response

- Systematic Review of Batch Errors
- Additional Meetings with State Program Staff

Framework for Assessing Data Integrity

Practice Management

Batch Interface

Report Concerns

Vendor Translation

Practice Management

- 📄 Data collection issues (form/system design)
- 📄 User input issues (training/turnover)

Batch Interface Design Concerns

Is the raw data captured from LHDs = the raw data transmitted by the BATCH vendor?

Is the raw data transmitted by batch vendor = the raw data uploaded into HIS?

Report Concerns

- 📄 Local – vendor system reports
- 📄 HIS – local user of HIS reports
- 📄 Client Services Data Warehouse
- 📄 Specialty data extracts (SCHS)

DPH is looking at the Use of Reports in HIS & CSDW

- Compare key reports in HIS to similar reports in CSDW
- Insure that all data generated from HIS reports can be matched in CSDW with “like” reports
- Compile a list of CSDW and HIS reports for batch users
- High alert for any issue that that prevents accurate batch reporting
- Tracking issues with Remedy Tickets

Reporting Results

- Patient and Service Count Reports
 - Match – If the count is in HIS, then is it in CSDW
 - Does it Match? If not a match, a few reasons:
 - Batch clients used different programs codes than those in HIS
 - Batch PC program may have client in HIS' AH program
 - Batch systems captured “TB” as a separate program from EPI in HIS
- Patient Counts by Practitioner
 - Match – Consistent in HIS & CSDW
 - Instances of “Default Practitioner” gone from report

Comparison To Vendor Counts

Examined “count” data from 1 district & one non-district health department and compared two vendors:

Patagonia and Cure MD

- Vendor systems generated more clients in custom reports generated from batched data
- Missing patients usually found in batch error reports
- Vendor systems sometimes erroneously included “test” patients used in UAT and training
- Discovered clients that were never included in batch submissions.

Reporting

“Some things working well, other things, not so well.”

- Patient counts by demographics work
 - Required data - Counts by Race, Ethnicity, Sex
 - Potential issues with “By Preferred Language”, “Age”, and “Education”
- Currently, cannot determine guarantor – only Medicaid & Non-Medicaid
 - Batch file editing change can correct (\$\$\$)
- No county submission reconciliation report
 - Did all services rendered submit to HIS?

Preliminary Findings:

- Basic Patient and Service Count reports return same data as on-line counties
- Counts by Insurance Type Not Reliable
- Possibility that Not All Batch County Services Are Submitted

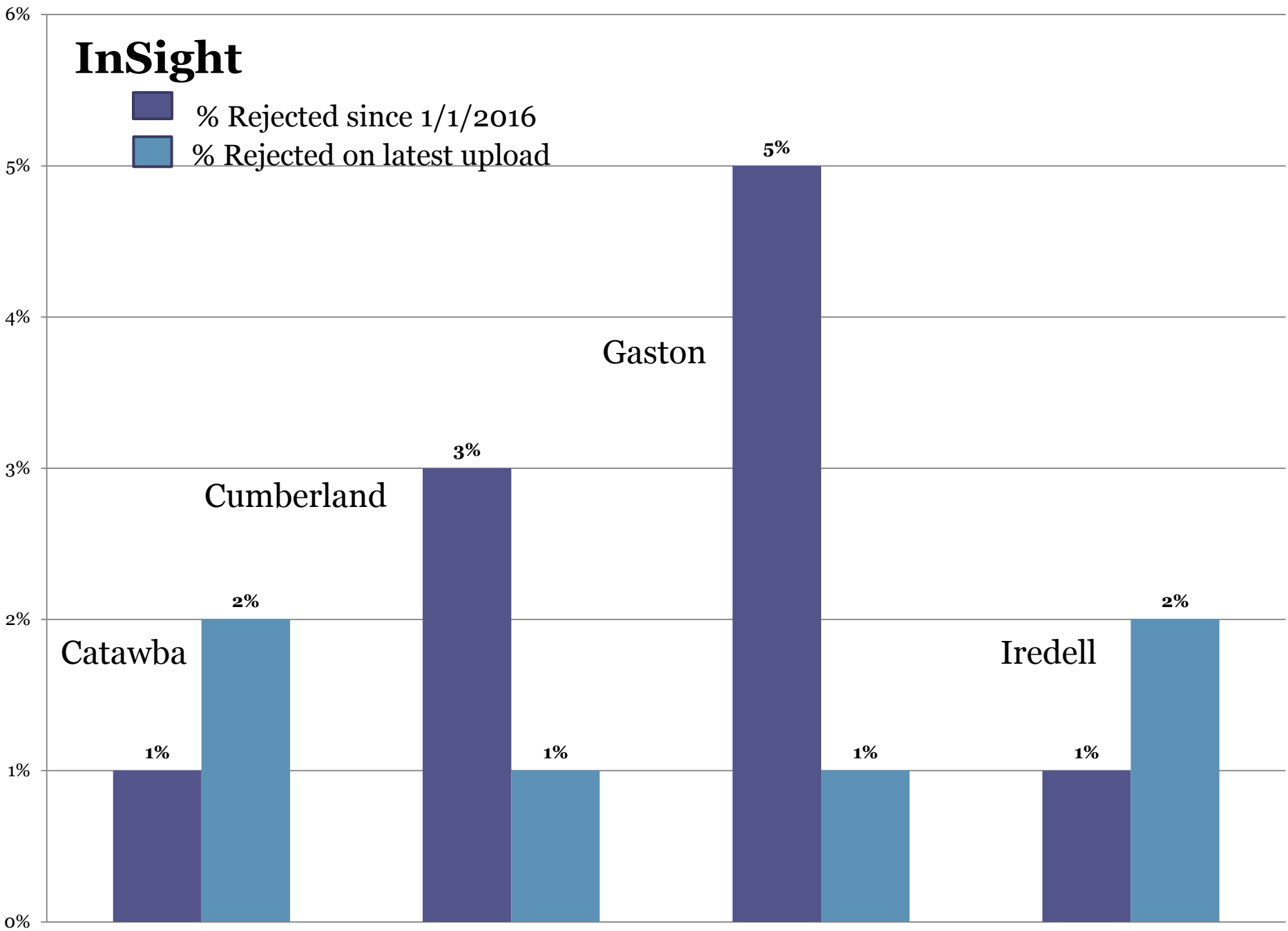
Vendor Translation

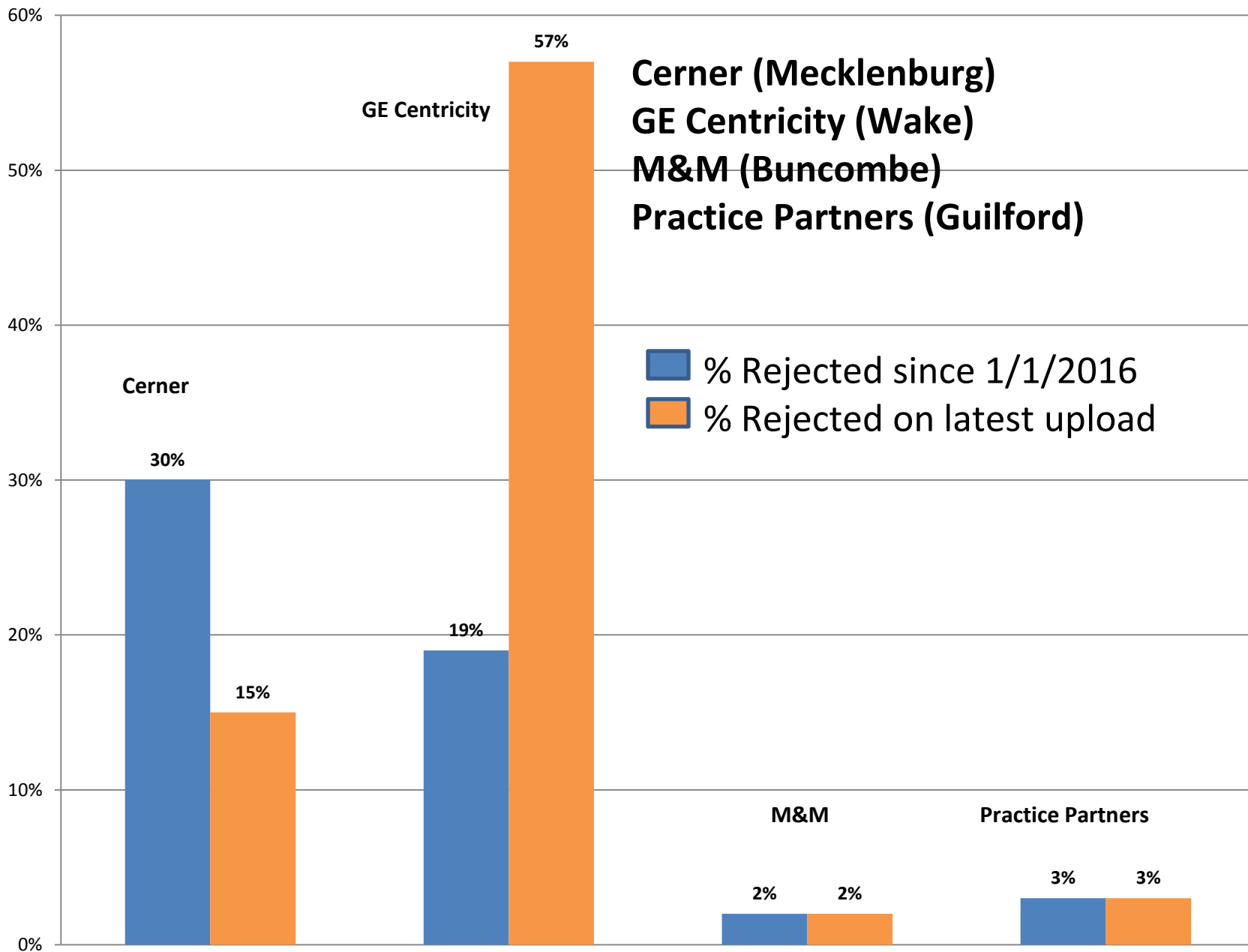
🗑️ Example: Vendor submits data without recommended edits

🗑️ Example: Vendor translates free text data into discreet fields for the county staff

InSight

- % Rejected since 1/1/2016
- % Rejected on latest upload

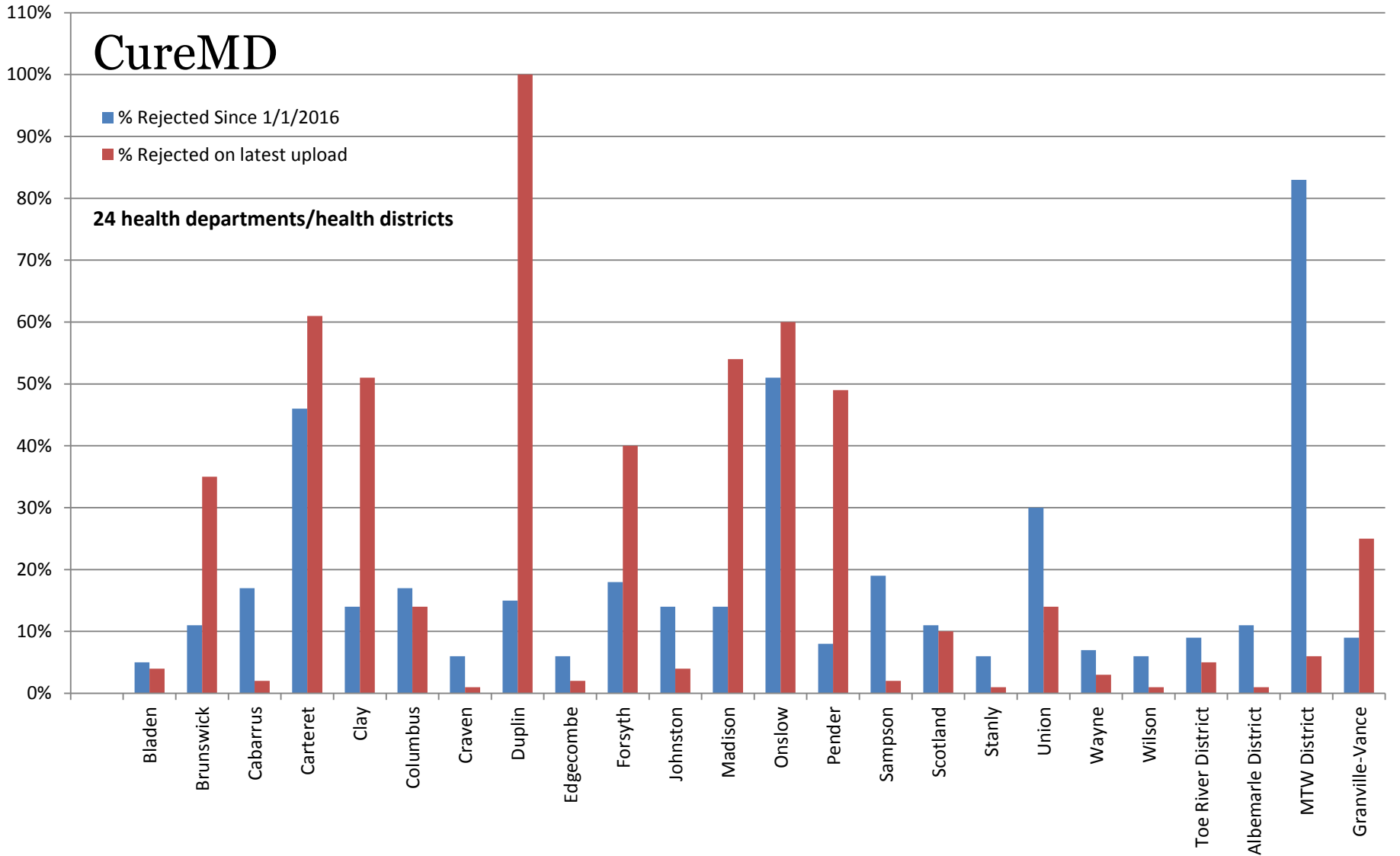




CureMD

■ % Rejected Since 1/1/2016
■ % Rejected on latest upload

24 health departments/health districts

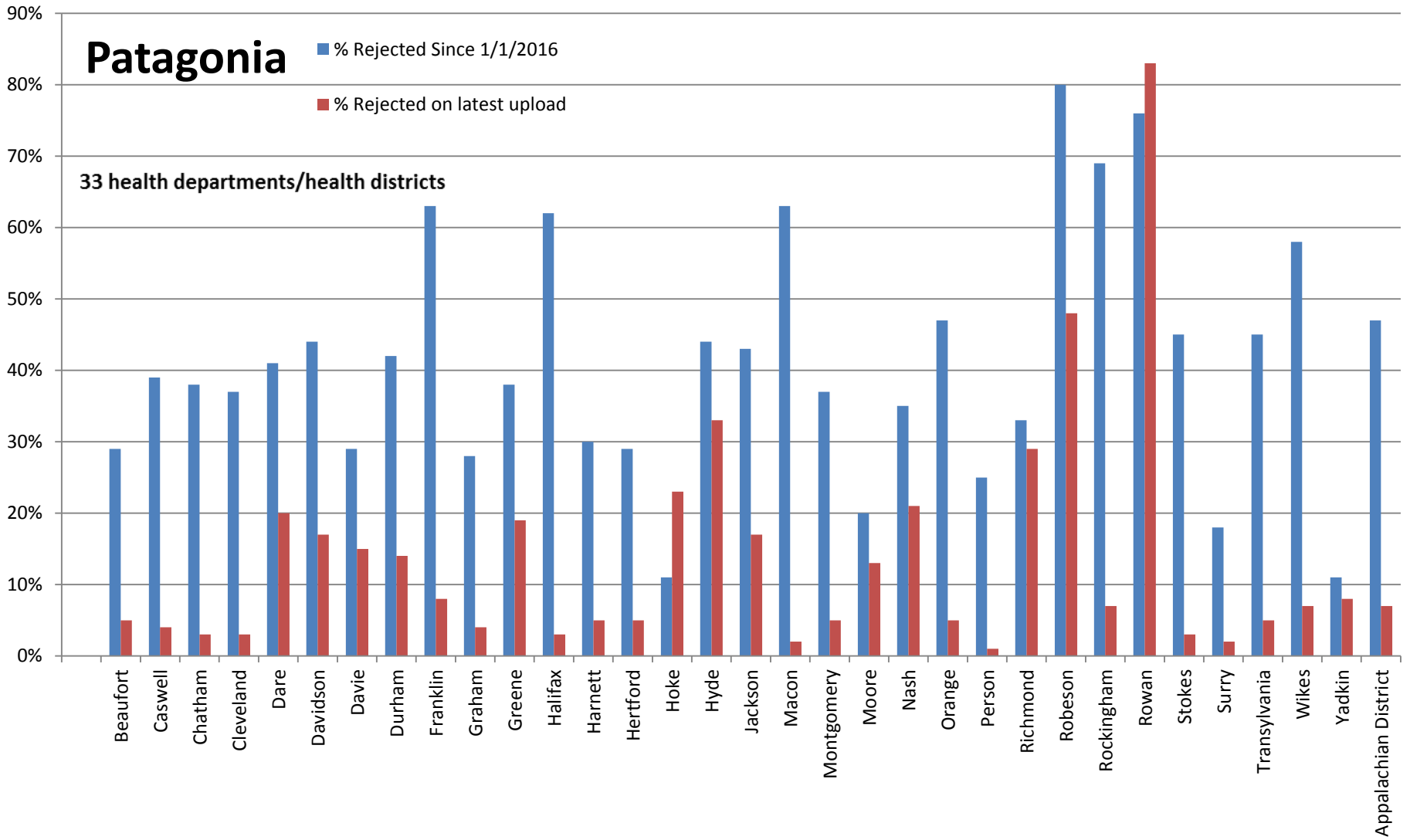


Patagonia

■ % Rejected Since 1/1/2016

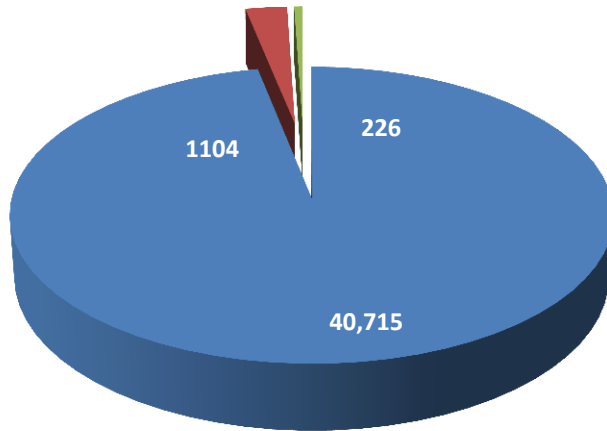
■ % Rejected on latest upload

33 health departments/health districts

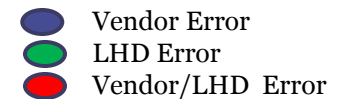


District X: Batch Error Report

January 2, 2016 Processing Date

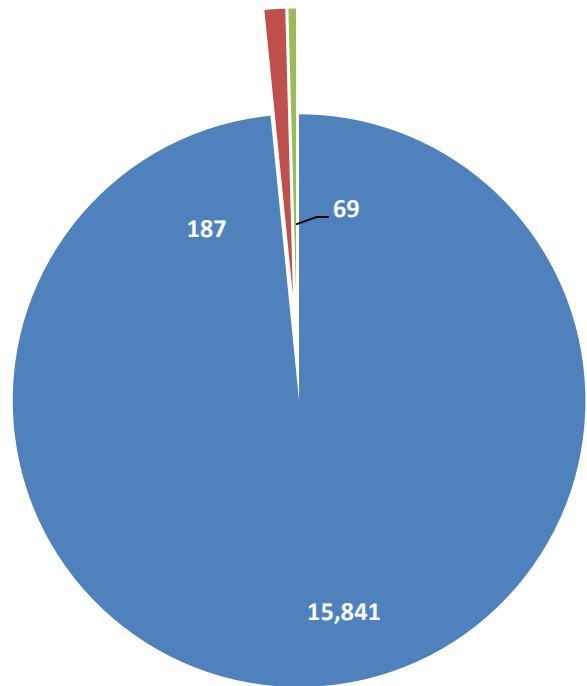


- 50,352 total errors (57.3%)
- 42,179 (83%) result of 8 different types of errors

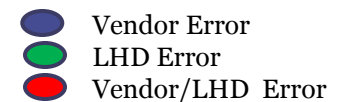


District X: Batch Error Report

January 9, 2016 Processing Date

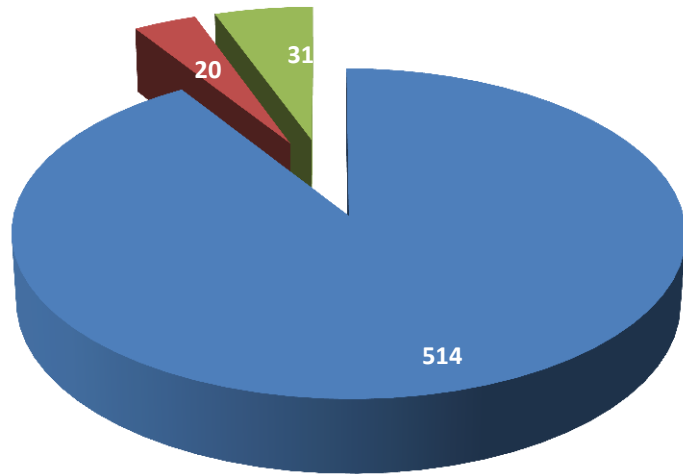


- 16,939 total errors (42.57%)
- 16,097 (95%) result of 7 different types of errors

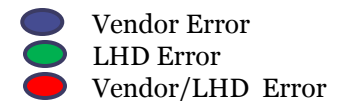


District X: Batch Error Report

February 8, 2016 Processing Date

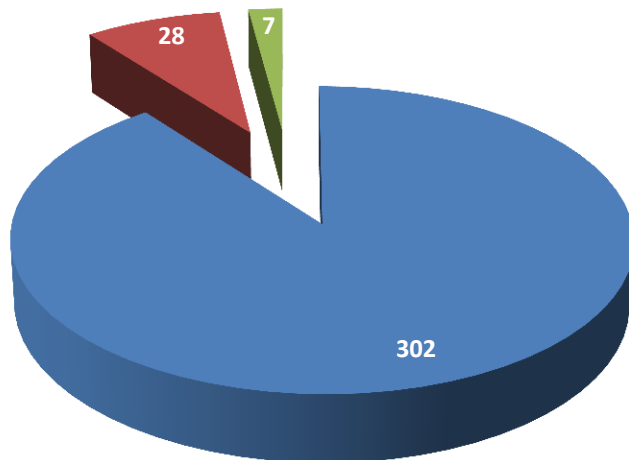


- 720 total errors
(**11.32%**)
- 565 errors
(**78%**)
result of
6 different
types of
errors

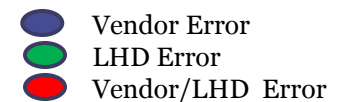


District X: Batch Error Report

March 5, 2016 Processing Date



- 474 total errors (7.74%)
- 337 errors (71%) result of 8 different types of errors



What happened in this district health department between December – March to make such a difference?

PATAGONIA

HINT:

- The local users did nothing differently.
- HIS at the state did nothing differently.

SOCO - Single Overriding Communication Objective

“Addressing vendor translation issues will resolve the vast majority of error reports for local health departments.”

- **The vendor is accountable to you as the contractor.**
- **DPH is ready to share a detailed analysis of your local reporting issues to inform your discussions with the vendor.**

Take home messages:

- A major vendor has a history of not implementing recommended edits before submitting data to the state.
- You must systematically look at how your data is entered, transmitted, and retrieved.
- Ask the HIS HelpDesk to assist with data analysis.
- Talk with your vendor; assure data integrity at the point of transmission
- Be patient and be prepared for web-based reporting to reduce the amount of time between submission of data and notification of error.



Thank you.

Questions now accepted.