

DATA INTEGRITY: Part 2

Health Information System Reporting

Presentation to the Technology Committee
NC Association of Local Health Directors
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Review from April 2016

Do we think that Batch reporting is important?

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

Review from April 2016

Framework for Assessing Data Integrity

Practice Management

Batch Interface

Report Concerns

Vendor Translation

Review from April 2016

Practice Management

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

Review from April 2016

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?

Review from April 2016

Report Concerns

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

Current EHR vendors in NC Local Health Departments:

- CureMD
- Patagonia
- Netsmart/Avatar “HIS”
- Netsmart/Insight
- GE Centricity
- Cerner
- Mitchell & McCormick
- McKesson Visual Health (Practice Partners)

| VENDOR | LHD | Records Submitted | Records Accepted | Records Rejected | % Rejected |
|------------------|----------------------|-------------------|------------------|------------------|---------------|
| Patagonia | Beaufort | 11,531 | 10,649 | 882 | 7.65% |
| Patagonia | Caswell | 7,122 | 6,525 | 597 | 8.38% |
| Patagonia | Chatham | 8,126 | 7,409 | 717 | 8.82% |
| Patagonia | Cleveland | 35,510 | 31,031 | 4,479 | 12.61% |
| Patagonia | Dare | 8,376 | 7,528 | 848 | 10.12% |
| Patagonia | Davidson | 10,274 | 9,489 | 785 | 7.64% |
| Patagonia | Davie | 7,631 | 6,666 | 965 | 12.65% |
| Patagonia | Durham | 44,043 | 36,845 | 7,198 | 16.34% |
| Patagonia | Franklin | 10,412 | 9,584 | 828 | 7.95% |
| Patagonia | Graham | 3,382 | 2,812 | 570 | 16.85% |
| Patagonia | Greene | 3,770 | 3,308 | 462 | 12.25% |
| Patagonia | Halifax | 8,042 | 7,700 | 342 | 4.25% |
| Patagonia | Harnett | 17,499 | 16,276 | 1,223 | 6.99% |
| Patagonia | Hertford | 3,566 | 3,399 | 167 | 4.68% |
| Patagonia | Hoke | 10,745 | 8,808 | 1,937 | 18.03% |
| Patagonia | Hyde | 1,855 | 1,274 | 581 | 31.32% |
| Patagonia | Jackson | 9,541 | 8,214 | 1,327 | 13.91% |
| Patagonia | Macon | 7,218 | 6,606 | 612 | 8.48% |
| Patagonia | Montgomery | 6,916 | 6,629 | 287 | 4.15% |
| Patagonia | Moore | 10,441 | 8,737 | 1,704 | 16.32% |
| Patagonia | Nash | 8,326 | 7,037 | 1,289 | 15.48% |
| Patagonia | Orange | 14,520 | 13,613 | 907 | 6.25% |
| Patagonia | Person | 7,311 | 7,082 | 229 | 3.13% |
| Patagonia | Richmond | 8,709 | 5,861 | 2,848 | 32.70% |
| Patagonia | Robeson | 41,657 | 28,885 | 12,772 | 30.66% |
| Patagonia | Rockingham | 55,764 | 37,125 | 18,639 | 33.42% |
| Patagonia | Rowan | 11,666 | 8,550 | 3,116 | 26.71% |
| Patagonia | Stokes | 6,164 | 5,823 | 341 | 5.53% |
| Patagonia | Surry | 17,224 | 16,606 | 618 | 3.59% |
| Patagonia | Transylvania | 3,221 | 3,067 | 154 | 4.78% |
| Patagonia | Wilkes | 17,074 | 16,107 | 967 | 5.66% |
| Patagonia | Yadkin | 4,907 | 4,132 | 775 | 15.79% |
| Patagonia | Appalachian District | 19,509 | 17,876 | 1,633 | 8.37% |
| Patagonia | | 442,052 | 371,253 | 70,799 | 16.02% |

**Patagonia
Processing Period:
4-01-2016 – 6-30-2016**

442,052 Records submitted
371,253 Records accepted
70,799 Records rejected

16.02% Rejection rate
(10.76% if you remove 4
extreme outliers-those with
rejection rates above 25%)

Represents a 33.36% reduction
in claims rejection rate since last
report-😊

Patagonia: Data from
33/85 health
departments.

CureMD

Processing Period:

4-01-2016 – 6-30-2016

| VENDOR | LHD | Records Submitted | Records Accepted | Records Rejected | % Rejected |
|---------------|--------------------|-------------------|------------------|------------------|---------------|
| CureMD | Bladen | 8,262 | 7,933 | 329 | 3.98% |
| CureMD | Brunswick | 17,013 | 15,222 | 1,791 | 10.53% |
| CureMD | Cabarrus | 40,339 | 29,641 | 10,698 | 26.52% |
| CureMD | Carteret | 5,690 | 2,386 | 3,304 | 58.07% |
| CureMD | Craven | 25,138 | 25,073 | 65 | 0.26% |
| CureMD | Duplin | 27,005 | 22,241 | 4,764 | 17.64% |
| CureMD | Edgecombe | 10,063 | 9,921 | 142 | 1.41% |
| CureMD | Forsyth | 6,358 | 4,086 | 2,272 | 35.73% |
| CureMD | Henderson | 30,730 | 12,211 | 18,519 | 60.26% |
| CureMD | Johnston | 26,203 | 22,579 | 3,624 | 13.83% |
| CureMD | Onslow | 21,666 | 8,848 | 12,818 | 59.16% |
| CureMD | Pender | 17,638 | 15,664 | 1,974 | 11.19% |
| CureMD | Sampson | 11,108 | 10,519 | 589 | 5.30% |
| CureMD | Scotland | 10,417 | 7,987 | 2,430 | 23.33% |
| CureMD | Stanly | 7,970 | 7,952 | 18 | 0.23% |
| CureMD | Union | 22,654 | 20,673 | 1,981 | 8.74% |
| CureMD | Wayne | 51,362 | 36,983 | 14,379 | 28.00% |
| CureMD | Wilson | 17,060 | 14,992 | 2,068 | 12.12% |
| CureMD | Toe River District | 14,343 | 11,717 | 2,626 | 18.31% |
| CureMD | Albemarle District | 35,533 | 27,539 | 7,994 | 22.50% |
| CureMD | MTW District | 28,100 | 24,623 | 3,477 | 12.37% |
| CureMD | | 434,652 | 338,790 | 95,862 | 22.05% |

434,652 Records submitted
 338,790 Records accepted
 95,862 Records rejected

22.05% Rejection rate
 (**12.16%** if you remove 6
 extreme outliers- those with
 rejection rates >25%)

Represents a 6.76% increase in claims
 rejection rate since last report ☹

Cure MD : Data from
 21/85 health departments

InSight
Processing Period:
4-01-2016 – 6-30-2016

| VENDOR | LHD | Records Submitted | Records Accepted | Records Rejected | % Rejected |
|----------------|------------|-------------------|------------------|------------------|---------------|
| Insight | Alamance* | 290 | 97 | 193 | 66.55% |
| Insight | Catawba | 10,559 | 10,125 | 434 | 4.11% |
| Insight | Cumberland | 54,855 | 53,666 | 1,189 | 2.17% |
| Insight | Gaston | 52,254 | 50,897 | 1,357 | 2.60% |
| Insight | Iredell | 15,379 | 15,189 | 190 | 1.24% |
| Insight | | 133,337 | 129,974 | 3,363 | *2.52% |

133,337 Records submitted
129,974 Records accepted
3,363 Records rejected

2.52 % Rejection rate

Represents a 1.65% reduction in claims rejection rate since last report. 😊

InSight: Data from 5/85 health departments .

*Alamance transitioning from InSight to GE Centricity – rejection rate not calculated in total.

**GE Centricity
Processing Period:
4-01-2016 – 6-30-2016**

| VENDOR | LHD | Records Submitted | Records Accepted | Records Rejected | % Rejected |
|---------------|------|-------------------|------------------|------------------|------------|
| GE Centricity | Wake | 196,668 | 128,488 | 68,180 | 34.67% |

196,668 Records submitted
128,488 Records accepted
68,180 Records rejected

34.67 % Rejection rate
Represents a 16% increase in claim
rejection rate since last report. 😊

GE Centricity: Data from
1/85 health departments.

**Practice Partners
Processing Period:
4-01-2016 – 6-30-2016**

| VENDOR | LHD | Records Submitted | Records Accepted | Records Rejected | % Rejected |
|---------------|----------|-------------------|------------------|------------------|------------|
| Practice Part | Guilford | 102,141 | 98,886 | 3,255 | 3.19% |

102, 141 Records submitted
98,886 Records accepted
3,255 Records rejected

3.19% Rejection rate
Stable since last report 😊

Practice Partners : Data
from 1/85 health
departments.

**Mitchell & McCormick
Processing Period:
4-01-2016 – 6-30-2016**

| VENDOR | LHD | Records Submitted | Records Accepted | Records Rejected | % Rejected |
|--------|----------|-------------------|------------------|------------------|------------|
| M & M | Buncombe | 23,375 | 23,049 | 326 | 1.39% |

23,375 Records submitted
23,049 Records accepted
326 Records rejected

1.39 % Rejection rate
Stable since last report ☺

M & M: Data from 1/85
health departments.

Cerner
Processing Period:
4-01-2016 – 6-30-2016

| VENDOR | LHD | Records Submitted | Records Accepted | Records Rejected | % Rejected |
|--------|-------------|-------------------|------------------|------------------|------------|
| Cerner | Mecklenburg | 56,175 | 48,777 | 7,398 | 13.17% |

56,175 Records submitted
48,777 Records accepted
7,398 Records rejected

13.17% Rejection rate
Represents 6.46% decrease in claims
rejection rate since last report 😊

Cerner : Data from 1/85
health departments.

Take home messages:

- Types of error messages continue to be predominantly vendor or local user generated.
- 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