



Human Services  
Research Institute

# Improving Transparency in the Collection and Validation of Healthcare Claims Data

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# Data Ecosystem

- Involve All Stakeholders
- Create Transparent Processes
- Make System User-Friendly/Flexible
- Provide Metadata to Data Users
- Improve Data Quality

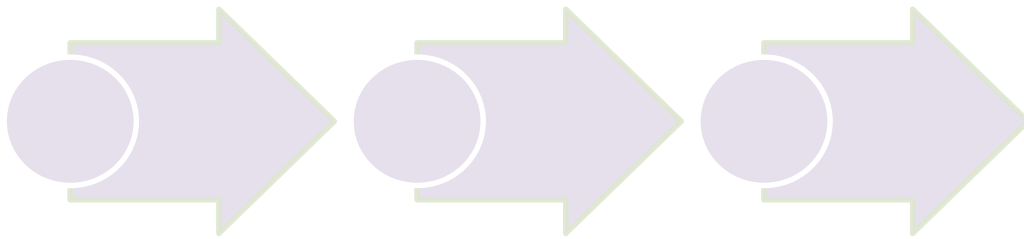




Involve All Key Stakeholders  
in Design Process

- Design was based on input from
  - Payers
  - System Administrators
  - Data Users
  - Consumers
- Ongoing Relationship with System Users for Continuous Quality Improvement





Create a Transparent  
Process



Make System User-friendly  
and Flexible

# Provide Convenient Feedback

### Submission History

ID	Name	Period	Type	File	Issues	Status	Submitted	Action
873								
871								
715								
714								
713								
712								
711								
710								
665								
612								

### Notifications

[New](#) [Clear All](#)

Date
10/22/2013 9:09:02 PM
10/7/2013 3:14:20 PM
10/7/2013 1:13:19 PM
10/7/2013 1:12:58 PM
10/7/2013 10:44:12 AM
10/7/2013 10:38:46 AM
10/4/2013 2:35:43 PM
10/4/2013 2:35:22 PM
9/30/2013 2:41:53 PM
9/27/2013 3:32:52 PM
9/27/2013 2:43:52 PM
9/27/2013 2:40:13 PM
9/26/2013 12:42:38 PM
9/26/2013 12:41:22 PM

### Validation Issues

File ID	Validation #	Element	Validation Name	Issue Type	Status
900	92	MC011	Valid ANSI ASC X12 Relationship Code	Exemption	Failed
900	321	MC012	Percentage Male	Profile	Failed
900	109	MC020	Admission Type Populated	Profile	Failed
900	117	MC025	Service Provider Tax ID Number Populated	Profile	Failed
900	131	MC034	Service Provider State Populated	Profile	Failed
900	158	MC054	Valid Revenue Code	Exemption	Failed
900	159	MC055	Valid Procedure Code	AdHoc	Failed
900	166	MC059	First Date of Service Within Admission/Discharge Dates	AdHoc	Failed
900	168	MC060	Last Date of Service Within Admission/Discharge Dates	AdHoc	Failed
900	186	MC076	Billing Provider Number Populated	Profile	Failed

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# Provide Metadata to Data End Users



# Validation Result Summary

Validation	Passing Threshold	# Passing	Denominator	% Passing
MC001 - Valid Submitter ID	100.00%	9,956,627	9,956,627	100.00%
MC002 - Valid Payer ID	100.00%	3,100,239	3,102,424	99.93%
MC003 - Insurance Policy Type Code Populated	100.00%	9,956,627	9,956,627	100.00%
MC003 - Valid ANSI ASC X12 Insurance Policy Type Code	100.00%	9,964,956	9,964,956	100.00%
MC004 - Payer Claim Control Number Populated	100.00%	9,956,627	9,956,627	100.00%
MC005 - Valid Line Counter	100.00%	9,956,627	9,956,627	100.00%
MC005A - Valid Version Number	100.00%	9,956,627	9,956,627	100.00%
MC005A - Version Number Populated	99.50%	9,912,033	9,956,627	99.55%
MC006 - Insured Group or Policy Number Populated	99.90%	9,956,627	9,956,627	100.00%
MC007 - Valid Subscriber SSN	33.00%	9,273,997	9,956,627	93.14%



# Improve Data Quality

# Data Quality Characteristics

- ✓ Accuracy
- ✓ Completeness
- ✓ Integrity
- ✓ Validity
- ✓ Consistency
- ✓ Reliability
- ✓ Relevance
- ✓ Timeliness

# Examples of Data Standards: Incoming Data



- Data are due monthly or quarterly by submitters
- Data must meet validation requirements
- Required data fields must be populated
- Data are checked against external lists for matches (i.e., zip codes, ICD 9 codes, NPI)

# Examples of Data Standards: Release Data



- Quarterly releases include over 95% of expected claims volume
- Maintain or improve Provider, Patient, and Payer Index Match Rates
- Maintain consistent claim volume over time
- Claims data released must have a matching eligibility file 100% of the time

# Lessons Learned

- “Nothing About Us Without Us”
- Ongoing feedback from key stakeholders is critical for developing a transparent process
- Feedback to stakeholders about what we are doing with the feedback (closing the loop)
- Developing a data pipeline that is easily configurable and extensible, flexible in dealing with a changing business environment