Understanding the LDS Utilization Files for CMS Bundled Payments for Care Improvement (BPCI) Initiative

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BPCI Data Webinars

Date	Webinar Content	Presented By
February 13, 2012	Technical Aspects of Data Delivery and File Processing	Buccaneer
February 15, 2012	Understanding the Limited Data Set Denominator File	ResDAC
February 16, 2012	Understanding the Limited Data Set Utilization Files	ResDAC
February 17, 2012	Payment Variables Useful for Costing Bundled Payment Initiative Services	ResDAC

- All webinars will take place from 12:30p-1:45p EST
- Slides and webcast posted at http://innovations.cms.gov

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- Research Data Assistance Center (ResDAC)
  - Barbara Frank, M.S., M.P.H.
  - Faith Asper, M.H.S.

- Centers for Medicare and Medicaid Services (CMS)
  - Pamela Pelizzari, M.P.H.
  - Jay Desai, M.B.A.

Educational Objectives

- Review of the Medicare claim payment process relevant to the Bundled Payments for Care Improvement (BPCI) Initiative

- Describe the non-payment information contained in the BPCI Limited Data Set (LDS) utilization files for further defining BPCI populations and measuring use of services

- Tomorrow's Webinar will describe the payment and related variables

- Recommend you open, or refer later, to the "Metadata on the CMMI LDS files (.zip) link on the BPCI Learning & Resources Area website: url = http://innovations.cms.gov/initiatives/Bundled-Payments/BPCI-Learning-and-Resources-Area.html . I will be referring to the "Column Name" entries later in this presentation.

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Organization of BPCI LDS Utilization Files

- **Institutional Files**
  - Inpatient (Hospital claims for Part A services)
  - Skilled Nursing Facility (SNF claims for Part A services)
  - Outpatient (Hospital claims for Part B services)
  - Home Health Agency (HHA claims for Part A and Part B services)
- **Non-institutional Files**
  - Carrier
  - Durable Medical Equipment (DME)

From Claims to BPI LDS Utilization Files

- **Institutional Files**– Claims come from providers of Part A services, only, as well as providers of both Part A and Part B services. They use UB-04 form and the information is available in the LDS "institutional files".
  - Inpatient (Hospital claims for Part A services)
  - Skilled Nursing Facility (SNF claims for Part A services)
  - Outpatient (Hospital claims for Part B services)
  - Home Health Agency (HHA claims for Part A and Part B services)

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UB-04 Form

Important Fields in UB-04 Form

	42 REV. CD.	43 DESCRIPTION	44 HCPCS / RATE / HIPPS CODE	45 SERV. DATE	46 SERV. UNITS	47 TOTAL CHARGES	48 NON-COVERED CHARGES	49
1	0129	Semi-Private	200.00		2	400 00	0 00	Future
2	0250	Pharmacy			1	50 00	0 00	Use 2
3	0360	OR Services				100 00	0 00	3
4								4
5								5
6								6

66 DX	3910		Use A through Q to report "Other Diagnosis" if applicable							68 Reserved
9										

69 ADMIT DX	4280	70 PATIENT REASON DX	May be used to report reason for visit	71 PPS CODE	DRG	72 ECI	May be used to report external cause of injury	73 Reserved

74 PRINCIPAL PROCEDURE CODE DATE	a. OTHER PROCEDURE CODE DATE	b. OTHER PROCEDURE CODE DATE	75	76 ATTENDING NPI 2222222222	QUAL 1G 1234569822
3749 11 03 06			Reserved	LAST Smith	FIRST David
c. OTHER PROCEDURE CODE DATE	d. OTHER PROCEDURE CODE DATE	e. OTHER PROCEDURE CODE DATE		77 OPERATING NPI	QUAL
				LAST	FIRST

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From Claims to BPCI LDS Utilization Files

- Non-institutional Files– Claims come from providers who provide only Part B services, only. They use CMS 1500 form and the information is available in the LDS "non-institutional files".
  - Carrier
  - Durable Medical Equipment (DME)
    - withstand repeated use
    - primarily to serve a medical purpose
    - not useful in the absence of an injury or illness
    - appropriate for use in the home

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CMS 1500 Form

Diagnosis and Line Item Portion of CMS 1500 Form

Medicare Part B Services

- Physician services, and services provided by other Part B providers (e.g., ambulatory surgical centers, nurse practitioners, health departments)

- Facility charges for hospital outpatient services

- Durable Medical Equipment (DME)

- Note: A person who is seen in a hospital will generally have both Part A claim(s) from the hospital and Part B claims from the attending physician and others. A person seen in the hospital outpatient will generally generate two Part B claims, one from the facility and one from the physician.

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Topics

- Finding acute care hospitalizations

- Constructing inpatient stays

- Anchoring event: MS-DRG

- Dates

- Identifying the required types of services to be included in the bundle

- Limitations of demographic information in BPCI LDS utilization files

- RED = Column Name value in the CMMI LDS Metadata Table.

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Finding the Acute Care Hospitalizations PRVDR_NUM variable in Inpatient File
Also called CMS Certification Number (CCN)

- In BPCI, the anchoring event in Models 2, 3 and 4 is a stay in an acute care hospital for one of the MS-DRGs that you select.

- Finding the acute care hospitalizations
  - Use Inpatient File – Duh
  - Use PRVDR_NUM variable -- 6 columns
  - Columns 1 – 2 = SSA state value (Some states have more than one number – CA, TX, FL, IA, MN and IL.)
  - Columns 3 – 6 indicate the type of facility
  - To identify acute care hospitals, select values in the following ranges:
    - 0001-0879 (traditional acute care hospitals)
    - 1300-1399 (critical access hospitals)
    - No alpha characters in the ranges.

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Constructing the Acute Care Hospital Inpatient Stay Episode in which to Find the Anchoring Event in Acute Care Hospitalizations
FREQ_CD, DESY_SORT_KEY, CLM_ADMSN_DT, PRVDR_NUM and CLM_THRU_DT variables

- Great majority of acute care hospitalizations have one Inpatient claim, FREQ_CD variable value = 1

- If you program in SAS, PROC SORT the inpatient claims by DESY_SORT_KEY, CLM_ADMSN_DT, PRVDR_NUM.

- If all three the same on more than one record, use CLM_ADMSN_DT and CLM_THRU_DT, from each record to build the episode. Could also use FREQ_CD to place claims in proper order.

- Results: One record per stay containing the final MS-DRG

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Inpatient Prospective Payment System (IPPS) and Non-IPPP Hospitals in the Inpatient File CLM_PPS_IND_CD variable

- Limit to the acute care hospitals discussed earlier: traditional acute care hospitals and critical access hospitals
- The CLM_PPS_IND_CD variable field indicates whether the inpatient hospital claim was paid under the inpatient prospective payment system (IPPS). If yes, value = "2". If not paid under IPPS, the value is blank.
- Not all acute care hospitals are paid under IPPS
  - There are no IPPS hospitals in Maryland. All other states have IPPS hospitals.
  - There are 10 cancer hospitals that are IPPS-exempt
  - Critical access hospitals are not paid under IPPS
- However, there is an MS-DRG code (CLM_DRG_CD variable) in all Inpatient File records for PPS and non-PPS hospitals which is inserted during claims processing. This will be where you will find your anchoring event.

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Dates
CLAIM_FROM_ DATE and CLAIM_THRU_DATE variables

- A major difference from the regular LDS utilization files:
  - Regular LDS files have the dates "ranged". The date fields contain the quarter of the year in which service provided.
  - BPCI LDS files have the actual dates.
- CLAIM_THRU_DATE is used to place the event in an annual file (2008 or 2009). For example, a hospital claim with a CLAIM_THRU_DATE in 2008 is in the 2008 file even if hospitalization started in 2007.
- These variables are present on all records in all institutional and non-institutional files.
- Key for creating episodes of care, identifying readmissions, and identifying services received after the anchoring event.

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Identifying the Required Types of Services to be Included in the Bundle

- Physician services
- Inpatient hospital services
- Inpatient hospital readmission services
- Long term care hospital services (LTCH)
- Inpatient rehabilitation facility services (IRF)
- Skilled nursing facility services (SNF)
- Home health agency services (HHA)
- Hospital outpatient services
- Independent outpatient therapy services
- Clinical laboratory services
- Durable medical equipment
- Part B drugs

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Physician and Other Professional Services

- Part B physician and other provider "professional services" information is located in the line item portion of the Carrier File (B_CARRIER_LINE).

- As noted earlier, when a service is done in an institutional setting, there may be 2 claims submitted.
  - Example: Diagnostic x-ray done in hospital outpatient department

- If an institution owns the equipment, it will submit a claim for Part B payment of the "technical component" using the UB-04 form, and this claim will appear in the Outpatient File.

- If the physician only reads/interprets the x-ray, he/she will submit a claim for Part B payment of the "professional service" using the CMS 1500 form, and the claim will appear in the Carrier File.

- If, however, the radiologist owns the equipment and the x-ray is done in his/her "office", one Part B claim will be submitted for both the professional service and the technical component as one CMS 1500 form line item, and it will appear in the Carrier File.

Physician and Other Professional Services

- You have to define what you mean by physician services
  - Physicians only or physicians plus nurse practitioners, etc.???
  - Only in a physician office setting???
  - Limit to certain physician specialists???
- Information in (B_CARRIER_LINE) portion of Carrier File will allow you to do this.
  - PRVDR_SPCLTY, LINE_CMS_TYPE_SRVC_CD, and LINE_PLACE_OF_SRVC_CD variables

Physician/Professional Services

- Limit to certain physician specialists
  - Use PRVDR_SPCLTY code variable, perhaps with LINE_CMS_TYPE_SRVC_CD variable (1 = Medical care, 2 = Surgery, etc.)
  - Examples of PRVDR_SPCLTY code
    - 01 = General practice
    - 02 = General surgery
    - 11 = Internal Medicine
    - 97 = Physician assistant
- Only in "the office"
  - Use LINE_PLACE_OF_SRVC_CD variable
  - Examples:
    - 11 = Office
    - 22 = Outpatient hospital
    - 50 = Federally qualified health center
    - 72 = Rural health clinic
- Only certain types of visits or limit the range of procedures
  - use CPT/HCPCS codes. The HCPCS_CD variable.
  - Evaluation and management visits

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HCPCS Codes
(HCPCS = Healthcare Common Procedure Coding System)

- Level 1: 5 position numeric codes -- are CPT (Current Procedural Terminology) Codes of American Medical Association
  - e.g., 99201 Office or other outpatient visit for the evaluation and management of new patient
- Level 2: 5 position alpha-numeric codes
  - e.g., G0202 Screening mammography
- Level 3: 5 position alpha-numeric codes beginning with W, X, Y or Z

Example of Level 1 HCPCS or CPT Codes

- 00100 - 01999 Anesthesia
- 10040 - 69990 Surgery
- 70010 - 79999 Radiology
- 80049 - 89399 Pathology and Laboratory
- 90281 - 99199 Medicine
- 99201 - 99499 Evaluation and Management

Inpatient Hospital and Inpatient Readmission Services ICD9_PRCDR_CD1 through 6 and REV_CNTR variables

- Limit to acute care hospitals – see earlier discussion on how to identify
- ICD-9-CM Procedure codes ICD9_PRCDR_CD1 through 6 variables in INPATIENT_CLAIMS portion of Inpatient claims
  - Up to 6 per record
  - Major procedures will determine the MS-DRG
  - 4 columns, left justified
- Revenue Center Codes: REV_CNTR variable in INPATIENT_REVENUE portion of Inpatient claims
  - Up to 450 Revenue Center level records per inpatient base record. Found in the INPATIENT_REVENUE file in BPCI LDS files. Information, but perhaps not specific enough.
  - Examples:
    - Coronary care; values = 0210 - 0219
    - Intensive care; values = 0200 - 0209
    - Pharmacy – but not specific drug; values = 0250 - 0259
    - Laboratory – but not the test; values = 0300 - 0319
    - Radiology – but not specific procedure; values = 0320 - 0329

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Long Term Care Hospital services (LTCH)
ICD9_PRCDR_CD1 through 6 and REV_CNTR variables

- **In Inpatient File**

- Use **PRVDR_NUM** variable to identify these facilities
  - Values in last 4 columns = 2000 – 2299

- Identify services using ICD-9-CM procedure codes and revenue center codes
  - Variable information is similar to that in the acute care hospitals (previous slide) but procedures and revenue center codes more in tune with long term care rather than acute care.

Inpatient Rehabilitation Facility (IRF) services
ICD9_PRCDR_CD1 through 6 and REV_CNTR variables

- IRF claims are in Inpatient File like the LTCH claims and the services provided are the same 2 sources: ICD-9-CM procedure codes and revenue centers within it.

- Like LTCHs, use PRVDR_NUM variable to identify inpatient rehabilitation facilities. Take Inpatient File records with
  - values from 3025 – 3099 in the last 4 columns, as well as
  - those with a "T" or "R" in the 3rd (of the 6) columns.
  - 60% of claims for IRF services are from the second source

- Identify services using ICD-9-CM procedure codes
  - Reminder, in the INPATIENT_CLAIMS portion of Inpatient claims

- Revenue Center (REV_CNTR) variable in INPATIENT_REVENUE portion of Inpatient claims :
  - First listed REV_CNTR code is for Inpatient Rehabilitation Facility (IRF) = "0024". Subsequent entries are for relevant revenue centers, and final one is "0001" for the total charge of the claim.

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Skilled Nursing Facility (SNF) services
REV_CNTR variable

- ICD-9-CM procedure code fields are present, but are not frequently populated; < 2% of SNF records have information.

- Revenue Center (REV_CNTR) variable in SNF_REVENUE portion of SNF claims:
  - First listed REV_CNTR code is for skilled nursing facility (SNF) = "0022".
  - Subsequent entries are for relevant revenue centers.
  - Final one is "0001" for the total charge for the claim.

Home Health Agency (HHA) services
REV_CNTR and HCPCS_CD variables

- No ICD-9-CM <u>procedure</u> code fields.
- Use HHA_REVENUE portion of the HHA File.
- Use Revenue Center (REV_CNTR) variable in the SNF_REVENUE portion of SNF claim:
  - First listed REV_CNTR code is for home health agency = "0023".
  - Subsequent entries are for relevant revenue centers (e.g., "0421" = Physical therapy, "0551" = Skilled nursing)
  - Final one is "0001" for the total charge for the claim.
- May also use HCPCS_CD variable in the HHA_REVENUE portion of HHA claim:
  - The first listed HCPCS_CD code is for a Health Insurance Prospective payment System (HIPPS) code which describes the clinical and functional status of the patient, as well as the level of service (but not specific services) in one 5-digit code; e.g., HAGJ7.
  - Subsequent entries are appropriate HCPCS codes. 99.5% in the range G0151 – G0156, all for 15 minutes of care (PT, OT, Speech Path, Skilled nurse, Social Worker, or Home Health Aid.
  - Final entry is blank.
- Bottom line: Detail on who provides service and for how long, but only general idea of what they did.

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Outpatient Services
HCPCS_CD and REV_CNTR_APC_HIPPS_CD variables

- No ICD-9-CM procedure codes; the fields are there but they are not populated.
- Outpatient service information available in the Revenue Center Trailer (OUTPATIENT_REVENUE) portion of Outpatient File
  - CPT/HCPCS codes just like in the Carrier File named HCPCS_CD in CMMI LDS Metadata Table and Line HCPCS code in LDS Data Dictionary.
  - REV_CNTR_APC_HIPPS_CD variable
    - Hospital outpatient paid based on Outpatient PPS (OPPS) which uses the Ambulatory Payment Classification (APC) code to identify groupings of outpatient services. Thus, they are less specific than the CPT/HCPCS codes.
    - Examples
      - Level I through VI debridement
      - Level I through V Endoscopy Upper Airway
      - Spinal tap
      - Level I or II Eye tests

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Clinical Laboratory Services

- Will be in the Carrier File or the Outpatient file. The same service will not generate a claim in both files.
- Use BCARRIER_LINE portion of Carrier File
  - Based on:
    - LINE_CMS_TYPE_SERV_CD variable: value = 5, Diagnostic laboratory, or
    - LINE_PLACE_OF_SERVICE_CD variable: value = 81, Independent laboratory
    - Could also look for specific laboratory tests using the HCPCS_CD variable
- OUTPATIENT_REVENUE portion of the Outpatient File
  - Based on
    - REV_CNTR variable for values "0300"-"0319"
    - Look for specific laboratory tests using the HCPCS_CD variable

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Durable Medical Equipment
HCPCS_CD variable

- Use line item portion of the DME file (DME_LINE) and the HCPCS codes

- Criteria for Durable Medical Equipment:
  - withstand repeated use
  - primarily to serve a medical purpose
  - not useful in the absence of an injury or illness
  - appropriate for use in the home

- Primarily alpha-numeric Level 2 HCPCS codes beginning with the letter E
  - Examples:
    - E0141 – Rigid walker, wheeled, without seat
    - E0570 – Nebulizer with compressor
    - E0779 – Infusion pump ambulatory

Part B Drugs

- **Three possible sources**
  - DME_LINE portion of DME File
    - Use LINE_NATL_DRUG_CD variable
  - CARRIER_LINE portion of Carrier File
    - Use HCPCS_CD variable.
    - Drugs are presented as "J" codes, the alpha-numeric level 2 HCPCS begins with "J"
  - OUTPATIENT_REVENUE portion of Outpatient File
    - Use REV_CNTR and HCPCS_CD variables.
    - Pharmacy REV_CNTR values = "0250-0259".
    - Drugs are presented as "J" codes, the alpha-numeric level 2 HCPCS begins with "J" in HCPCS_CD variable.

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Limitations of Demographic Information in BPCI LDS Utilization Files

- The source data for the LDS Utilization files did not contain certain demographic data in the 2008 claims.

  - Therefore, some of the demographic variables in the 2008 LDS SAFs will be null.

  - State and county will only be populated for claims processed after January 2009.

  - Race and age range may be populated for claims processed after February 2008.

- *This does not affect the LDS Denominator File talked about on February 15th.*

- *LDS Denominator can be linked to the LDS Utilization files using the DESY_SORT_KEY, and should be used as the source of demographic information.*

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Summary

- Unique beneficiary identifiers and precise dates of service allow the building of episodes of care for each beneficiary

- Services can be identified in all BPCI LDS utilization files but with varying degree of specificity
  - Care must be taken to avoid undercounting – e.g., IRF
  - Care must be taken to avoid overcounting – e.g., two claims submitted by two different providers (an institutional and a non-institutional) and found in two different files (an institutional and a non-institutional) for a procedure done in a hospital outpatient department

- Demographic information should be obtained from the BPCI LDS Denominator File

Technical Assistance

Please submit technical questions to:

resdac@umn.edu

Please reference
Bundled Payments
in the Subject line

Please include
DUA number and
Request ID

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