

Medical Programs Analytic & Reporting Knowledgebase (MPARK)

Summary Data Training
For Potential
Accountable Care Entities (ACEs)

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Prepared by

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What Data

- Topical summary data with respect to
 - Recipients
 - Providers
 - Hospital admissions
 - Prescription drugs
 - Emergency room visits
- By service calendar year
 - 2010 and 2011

How Presented

- One (large) table for each topical area
 - 5 tables
 - One row for each entity within a topical area
 - Your data will include ACE eligible recipients, their services, and the providers that provided those services
 - About 75% of statewide Medicaid recipients
 - You can request a narrower geographic selection
- +Recipient-Provider cross-walk table
 - Connects service and cost columns of Recipient and Provider tables

How Delivered

- Data tables: by secure file transfer (ftp)
 - After completion of data use agreement
 - Link sent via email and expires after 5 days(!)
 - Zipped -- you will be provided instructions for unzipping
 - Comma delimited with character fields in quotes
- Reference tables:
 - DRG1995, Diagnosis, ICD-9 Procedure Codes
 - Available on MPARK website

Metadata

- This presentation
- Data dictionary
 - Describes each table and column
- Glossary
 - Terms used in data dictionary or within the data
- Acronym list
- CDPS condition flag documentation
- Sample SQL analysis code, with annotation
- Submit questions

Why Not Claims Level Data?

- **Much easier to use (!!!!!!!)**
 - This is what we use for innovation analysis
 - Data is “flattened” and simplified
 - No need for reference tables
- Smaller
 - Requires substantially less IT infrastructure
- HIPAA limited data set
 - Less onerous data management requirements

Use The Data To

- Understand population enrollment and demographic characteristics
- Understand which providers provide care for a population
- Understand population costs
- Assess the population potential for care coordination
- →The “go to data” for coordinated care strategy development

Not For

- Recent data
- Coordinating the care of a specific recipient
- Quality of care measurements
- Longitudinal analysis other than year-to-year
- ACA expansion population

ACE Data

- Potential ACEs receive data for about 75% of Medicaid recipients
- “ACE Eligible Population”
 - Includes: Recipients currently enrolled in voluntary HMOs
 - See section 3.1.3.6 of solicitation for exclusions
- Mostly healthy children and adults
 - Non-disabled, non-senior
 - Less than 75% of Admissions, Drugs, and ER Visits
 - No waiver services or waiver providers
- Row counts on the following pages are for 100% of Medicaid recipients

Recipient Table

- Primary Key:
 - RecipientKeyID
- Columns:
 - Demographics and enrollment (40)
 - Age / sex / race / ethnicity / county/ zip / Medicare / PCCM / PCP / MCO / disabled / CCE elig / days
 - Diagnosis and drugs (110)
 - SMI / CDPS Dx / CDPS Rx
 - Waiver participation (30)
 - Services
 - Used indicators (60) / events (60) / units (60) / costs (60) / add-on cost (1) / total cost (1)
- Size (statewide, 1 yr):
 - ~3.0 million rows, ~420 columns

Provider Table

- Primary Key:
 - ProviderKeyID
- Columns:
 - Provider description (10)
 - Provider type / name / county / zip / NPI (when available) / reimbursement type
 - Services
 - Recipients served (60) / events (60) / units (60) / costs (60) / add-on cost (1) / total cost (1)
 - Can use cross-walk table to recreate for sub-populations
- Size (statewide, 1 yr):
 - ~100k rows, ~250 columns

Types of Service

(Recipient and Provider File)

- *Inpatient hospital**:
 - *IPMatDelv + ERUndocAlienCost + IPMatNonDelv + IPNewborn + IPSubAbuse+ IPPsych + IPOther*
 - Claim costs only, inclusive of DSH and related payments
- *Nursing homes (non-DD)*:
 - *NursingFacility + Hospice*
- *DD institutions*:
 - *ICFMRPrivate + ICFMRPublic*
- *State mental hospitals*:
 - *MentalHealthRegCost*
- *Prescription drugs**:
 - *PrescDrugs*
- *Emergency room**:
 - *ER*

Types of Service, cont'd

- Waiver services:
 - *HCBSRH + HCBSPC + HCBSDH + HCBSHM + HCBSOS + HCBSESE + HCBSCM + HCBSADH + HCBSHHA + HCBSRespite + HCBSESPS + HCBSPVS*
- Professional:
 - *PhysSurgReg + Outpatient + ClinicServices + FQHC + RHC + FQHCRHCMH + PCCM + EPSDT*
 - Note: FQHC and RHC include all services provided at those sites, including non-professional lab and radiology
- Mental health and substance abuse rehab:
 - *RehabMH + RehabSA*
- Managed care (non-PCCM)
 - *MedHIPPMCO + HospEncounterAddOn*
 - Note: substantial costs have historically been excluded from our voluntary HMO contracts, including prescription drugs
- Lab/radiology:
 - *LabRadiology*

Types of Service, cont'd

- Non-emergency transport:
 - *NonERMedTransCost*
- Other
 - *OtherServices + TCM + DentalServices + PDDE + OtherPracServ + PvtDutyNursing + SchoolBased + Nurses + SHL + PhysicalTherapy + OccTherapy + RehabOther + Sterl + Abortion + HomeHealth + Admin + CoinsurDeduct + PHP*
- Notes:
 - * Event-level details available via separate tables
 - Types of service were developed from federal reporting requirements
 - A cost that is small overall may be very significant for a particular population

Recipient-Provider Cross-Walk Table

- Primary Key:
 - RecipientKeyID & ProviderKeyID & TypeofService
- Columns:
 - Events (1) / Units (1) / Cost (1)
- Size (statewide, 1 yr): ~30 million rows, 6 columns
- Useful for:
 - Identifying populations served by select providers
 - Identifying providers serving select populations

Hospital Admission Table

- Primary Key:
 - RecipientKeyID & AdmissionSeqNbr
 - RecipientKeyID & AdmissionDt & ProviderKeyID is close to but not a key
- Modeled from IL Hospital Discharge Database (IHA/IDPH)
- Columns:
 - Admission (15)
 - Recipient / hospital / dates / admission source & type / discharge status / type of service
 - Diagnoses
 - Codes (25) / POA indicators (25)
 - Procedures
 - Codes (25) / dates (25)
 - Financial (35)
 - DRG / Charge / other payers / payment by component
- Size (statewide, 1 yr):
 - ~ 500k rows, ~ 150 columns

Emergency Room Table

- Primary Key:
 - RecipientKeyID & AdmissionSeqNbr
 - RecipientKeyID & AdmissionDt & ProviderKeyID is close to but not a key
- Modeled from IL Hospital Discharge Database (IHA/IDPH)
- Columns:
 - Admission (15)
 - Recipient / hospital / dates / admission source & type / discharge status / type of service
 - Diagnoses
 - Codes (25) / POA indicators (25)
 - Financial (35)
 - APLGroup (the payment basis for ER visits) / Charge / other payers / payment by component
- Size (statewide, 1 yr):
 - ~ 2 million rows, ~ 100 columns

Drug Detail Table

- Primary Key:
 - RecipientKeyID & ClaimSeqNbr
- Columns:
 - Drug (20)
 - NDC / name/ generic / dose / days / pharmacy / prescribing doc / class (not ideally expressed)
 - Financial (5)
 - CDPS indicators (45)
- Size (statewide, 1 yr):
 - ~ 26 million rows, ~ 70 columns

Fee For Service (FFS) vs. Managed Care Organization (MCO) Data

- Services paid for by MCOs are NOT included in data
 - Excluded services paid FFS and are included in the data
 - The MCO contracts for potential ACE recipients, until recently, excluded prescription drugs and several other types of service
 - MCO premiums are included (TOS=MedHIPPMCO), inclusive of maternity kick payments
 - Extra payments to FQHCs and Hospitals (TOS= HospEncounterAddOnPayment) are included
- To understand FFS costs, exclude recipients who had MCO coverage during year

Request Data

- Statewide
 - Big
 - Have all data for to consideration various geographies
- ***Or*** Subset Only
 - You define your geography of interest
 - Smaller and easier to manage

Caveats

- HIPAA limited data set
 - Cannot attempt to identify
 - Only named users for intended purposes
- Requires database software and skills
 - Excel not adequate except for smaller subpopulations
- Summary data can be no better than source data
- Messy around edges
- Flattening introduces issues
- **Must read metadata (!!!)**
- Learning process for us
 - Questions and feedback, negative and positive, welcomed

Strategy Development

- At the highest level
 - Identify your population
 - Identify the costs associated with the population *by type of service*
 - Determine which costs *for which type of service* are reducible and by how much
 - Refer to literature
 - Determine which costs may increase and the resulting net savings
 - Develop plan for: Net claims savings \geq care coordination fee \geq ACE costs to deliver care coordination
 - Organize ACE to achieve savings

Strategy Considerations

- Phase-in period
- Sub-populations
- Proportion of care with affiliated providers
- Medical management literature
- High vs. impactable costs
- Acute care outliers / end of life care
- Risk stratification / targeted efforts
- Regression to the mean
- Statistical variation

Sample Population Criteria

(“where” statements)

- Serious Mental Illness Condition
 - *SMIIInd=1*
- Enrolled as of point in time (end of year)
 - *CurrentEnrollmentInd=1*
- Adult
 - *AgeGrpCd>=2*
- Not in MCO anytime during year
 - *MCOInd=0*
- In certain counties:
 - *Countydesc IN ('XXX', 'YYY')*
 - *Note: Be careful with county spellings (Mc, St, and De counties; Will and Williamson)*

Calculating Population Average Cost

- Monthly cost (PMPM)
 - $(365/12) * \text{SUM}(\text{Cost}) / \text{SUM}(\text{NbrOfEnrolledDays})$
- Annualized cost
 - $365 * \text{SUM}(\text{Cost}) / \text{SUM}(\text{NbrOfEnrolledDays})$

Combining Years

- Use 'outer join' on primary key for Recipient and Provider
 - Unless your goal is to only select recipients or providers present in each year
- Append hospital and prescription drug files

Resources

- Metadata:
 - ACE data website:
<http://www2.illinois.gov/hfs/PublicInvolvement/cc/ACE/Pages/Data.aspx>
 - Always start with the website and the metadata it provides
- Questions, including to add another data user to the data use agreement:
 - Paul.stieber@illinois.gov
- Outbound communication:
 - For critical or time-sensitive matters
 - Make sure that we have accurate contact information for
 - Primary ACE contact
 - Primary data contact, if different