Patient Matching

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PRESCRIPTION MONITORING INFORMATION EXCHANGE STANDARDS ORGANIZATION
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Overview

❖ Provide a perspective on a state Prescription Drug Monitoring Program’s (PDMP) patient matching processes

❖ Introduce the work of the Prescription Monitoring Information eXchange Standards Organization’s Patient Matching Workgroup
PDMP Patient Matching

- Identify patients who have a high probability of being the same individual
- Identify suspected diversion or abuse
KASPER Patient Matching Process
KASPER Patient Matching Process

Prescription Data

Prescription Data Load Standardization Process

Standardized Prescription Data

Prescription Data Cluster Process

Standardized and Clustered Prescription Data

Report Request

Report Request Standardization Process

Report Request Rule Set Process

Patient Matched
Standardization of Rx Records

- Use of secondary fields for standardized data
  - Patient ID
  - Last Name
  - First Name
  - Address
  - Date of Birth

- Geo coding
Assigning an Unique Patient Identifier

❖ KASPER Cluster ID

❖ Each new record is compared to all production records using four algorithms

❖ Exact Match*

❖ Weighted Match (85)
  ◦ Not a percentage matching
  ◦ Name Field logic incorporates
    ◦ Common nicknames
    ◦ Gender
    ◦ Misspellings
    ◦ Regional spelling
Assigning an Unique Identifier

Current Rules Set

1. SSN*, Last Name (85) & First Name (85)
2. Last Name*, First Name (85), Address (85) & 5 digit Zip Code*
3. Last Name*, First Name (85), & DOB*
4. SSN* & DOB*

97% Auto-Match
Matching a Request

❖ Request fields are also standardized

❖ Request rule set
  ◦ SSN, Last Name (85) & First Name (85)
  ◦ Last Name (Exact), First Name (85), Address (85) & 5 Digit Zip Code
  ◦ SSN, First Name (85) & DOB
  ◦ SSN & DOB
  ◦ DOB, Address (85) & 5 Digit Zip Code

❖ Report Request Rule Set
Managing Blended Records

❖ Blends: Two or more unique patients records with the same Cluster ID

❖ Common scenarios:
  ◦ Father/son
  ◦ Twins

❖ Verifying a blend: Two independent sources
❖ Flagging a blend/Manual review
❖ Pharmacy data corrections
Future Matching Enhancements

❖ Ongoing data analysis

❖ Predictive analytics
  ◦ Interstate requests
  ◦ Data trends
Challenges of Patient Matching

❖ Characteristics of diversion and abuse
❖ Overlapping demographic information
❖ Data quality issues
PMIX Patient Matching Workgroup
PMIX Patient Matching Workgroup

❖ Kevin Borcher, Nebraska, Lead

❖ Participants:
  ◦ Health and Human Services, Office of the National Coordinator:
    ◦ Carmen Smiley
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  ◦ California
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PMIX Patient Matching Workgroup

- Examine data elements available for patient matching
- Identify gaps and barriers to successful patient matching
  - Data quality
  - Issues with collecting data
  - Standardization
- Develop metrics for measuring quality of data and patient matching
- *Evaluate patient matching processes*
Questions?

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