Creating a Path for Reliable Provider Information

NAHDO’s 35th Annual Conference
August 25, 2020
Objectives

Examine Provider Complexity in APCD Data

Discuss Provider Index vs Directory

Understand Value and Importance of NPI and NPPES
Defining a Provider

What is a provider?

What is the provider universe?
Defining a Provider

What is a provider?

What is the provider universe?

Context of the inquiry

Define the use case

Define the unit of analysis for specific provider-level inquiries
## Provider Elements on APCD Claim Records

<table>
<thead>
<tr>
<th>Billing</th>
<th>Rendering</th>
<th>Service Facility Location</th>
<th>Attending</th>
<th>Operating</th>
<th>Referring</th>
<th>Prescribing</th>
<th>Pharmacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizations &amp; Individuals</td>
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<td>Organizations</td>
<td>Individuals</td>
<td>Individuals</td>
<td>Individuals</td>
<td>Individuals</td>
<td>Organizations</td>
</tr>
<tr>
<td>Provider Num, NPI, Tax ID</td>
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<td>Location Num, NPI</td>
<td>Provider Num, NPI</td>
<td>Provider Num, NPI</td>
<td>Provider Num, NPI</td>
<td>NPI, Tax ID, DEA</td>
<td>Provider Num, NPI, Tax ID</td>
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<tr>
<td>Name (L or Org)</td>
<td>Name (F, M, L, S)</td>
<td>Name (Location, L or Org)</td>
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<td>Name (F, M, L)</td>
<td>Name (Org)</td>
</tr>
<tr>
<td>Street Address</td>
<td>Street Address</td>
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<td></td>
<td></td>
<td></td>
<td>Address (City, State, ZIP)</td>
<td></td>
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<tr>
<td></td>
<td>Specialty, Entity Type</td>
<td>Specialty</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

L = Last Name;  F = First Name;  M = Middle Name or Initial;  S = Suffix (e.g., Jr., Sr., III)
Two Organizing Approaches

**Provider Index**
Inventory of the provider ‘units’ submitted on APCD records + provider details

**Provider Directory**
Provider nesting & other relationships, analytical groupings + enhanced provider details
### APCD Provider Index: Where to Start?

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# National Provider Identifier

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<tr>
<th>WHAT IT IS</th>
<th>HISTORY</th>
<th>DATA ELEMENTS</th>
<th>VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-digit intelligence-free identifier for providers of healthcare services</td>
<td>HIPAA Administrative Simplification Standard for identification of covered healthcare providers in administrative and financial transactions</td>
<td>NPI</td>
<td>Available at the national level</td>
</tr>
<tr>
<td>Assigned through the National Plan and Provider Enumeration System (NPPES)</td>
<td>Created to “improve the efficiency and effectiveness of electronic transmission of health information”</td>
<td>Entity type (‘1’ Individual; ‘2’ Organization)</td>
<td>Available publicly, at no cost, in a machine-readable format and through a website query tool</td>
</tr>
<tr>
<td></td>
<td>2004 (Jan): NPI Final Rule published</td>
<td>Provider name(s)</td>
<td>Monthly updates available for full replacement files</td>
</tr>
<tr>
<td></td>
<td>2005 (May): NPI becomes effective</td>
<td>Business mailing and practice location street addresses</td>
<td>Wide range of potential uses</td>
</tr>
<tr>
<td></td>
<td>2007 (May): Compliance deadline</td>
<td>Other identifiers (Medicare, Medicaid, DEA, etc.), licensing and taxonomy information</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2007 (Sep): Dissemination through NPI Registry, NPI Downloadable File</td>
<td>Sole proprietor, organization subpart, parent organization</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dates: enumeration, last update, deactivation, reactivation, certification</td>
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<tr>
<td></td>
<td></td>
<td>Deactivated NPIs</td>
<td></td>
</tr>
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</table>
APCD Provider Index: Processing Steps

Data Submission → Data Validations → Provider Composite ID → Provider Details

Eligibility
Medical, Dental, Pharmacy Claims
Payer-Based Provider Files

Standard Code Lists
(e.g. current NPPES list of providers)
Validation Rules

NPI

NPPES Data Elements
(refreshed quarterly in the APCD Data Warehouse)

PROVIDER INDEX
Example: Hospital Provider

FACILITIES, DEPARTMENTS

- General Acute Care Hospital
  - Swing Beds
  - Internal Medicine
  - Specialty Care
  - Physician Services

INDIVIDUALS

- General Acute Care Hospital
  - Physician A
  - Physician B
  - Nurse C
  - Nurse D
  - Supplier E

PHYSICAL LOCATIONS

- Location X
- Location Y
- Location Z
MHDO and HSRI worked directly with hospital providers to:

- Validate the list of *billing* NPIs to include in analysis
- Validate the facility location(s) address(es)
- Confirm the consumer-friendly display name
- Decide on analytical grouping for cost estimates: rollup across all locations (Scenario 1) or separate for each location (Scenario 2)
- Revisit and confirm accuracy of all the above during each release of CompareMaine
Building a Provider Directory

Standards and reference information
(e.g. facility, professional, state or national inventories)

Audience
(e.g. health systems, healthcare consumers, researchers)

Methodological considerations
(e.g. universe or subgroup, provider detail elements to include and maintain, custom or standard provider groupings)

Time and resources investment

Context of the Inquiry | Use Case
Challenges & Limitations

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<th>Provider Directory</th>
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<td>• Absent NPIs</td>
<td>• Difficulty in determining relationships between providers</td>
</tr>
<tr>
<td>• Using NPPES for the provider name is not always straightforward (e.g. occasionally the alternate “doing business as” name is preferred)</td>
<td>• Time and resource intensive</td>
</tr>
<tr>
<td>• NPPES may be incomplete (e.g. determining primary taxonomy where not indicated)</td>
<td>• Maintenance may not be sustainable</td>
</tr>
<tr>
<td>• NPPES recency of updates</td>
<td>• “Does it scale?”</td>
</tr>
</tbody>
</table>
Recommendations

To build reliable provider information:

• Monitor APCD submissions to detect data quality issues and changes over time and between payers; refine intake validations

• Improve data users’ knowledge and understanding of the provider complexity in APCD

• Use opportunities to promote the NPPES and to increase its completeness and accuracy

• Continue to explore pathways towards a national Provider Directory using best practices, streamlined validation processes, and additional provider resources (e.g., state or national databases for provider licensure information, DEA database)
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Thank You.

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