Why care about identity management in the CHORDS Network?

- Health care delivery and payment systems are fragmented.
- Patients increasingly seek care in multiple systems due to specialty referrals, job turnover, and insurance changes.

What principles guide this process?

- CHORDS exchanges the minimum data necessary.
- CHORDS operates with a federated, distributed model.

“Step Zero”: Setting the Stage

- Relevant infrastructure needs to be in place before prevalence estimates can be deduplicated.
- Data partners have updated their virtual data warehouses to create a table that will store LINK_IDs.
- Step Zero involves data partners working with CORHIO to assign LINK_IDs to their patients by exchanging record-level data outside the CHORDS Infrastructure through a secure FTP site.

What is the CHORDS Two-Step Process?

**Public Health Adapter: De-Duplicated Prevalence by Demographic Strata**

E.g., What Proportion of Women, Men, Etc. Were Diagnosed with a Particular Health Condition at Two Data Partners During 2016?

<table>
<thead>
<tr>
<th>Data Partner 1 (DP1)</th>
<th>List of unique LINK_ID values at DP1 with record-level demographic or encounter data and a diagnosis flag</th>
<th>Aggregated counts of unique individuals at DP1 by age, sex, race/ethnicity, census tract and diagnosis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Enhanced VDW containing LINK_ID values</td>
<td></td>
</tr>
<tr>
<td>Data Partner 2 (DP2)</td>
<td>List of unique LINK_ID values at DP2 with record-level demographic or encounter data and a diagnosis flag</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Enhanced VDW containing LINK_ID values</td>
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</tr>
</tbody>
</table>

**Definitions:**

- **Record linkage:** Identifying an individual who appears in multiple VDWs
- **Deduplication:** Using the record linkage process to ensure individuals are only counted once in a population estimate
- **Identity management:** All of the tasks and processes that make record linkage and deduplication possible
- **PERSON_ID:** An ID specific to a data partner’s VDW
- **LINK_ID:** An ID assigned by CORHIO specific to the CHORDS network. This is not protected health information (PHI).

**Selecting Individuals for a Site-Specific Query:**

1. If a patient is diagnosed at site 1, but not site 2, site 1 contributes data.
2. If a patient is diagnosed (or not) at both sites, the site with the most recent visit contributes data.
3. If a patient is diagnosed (or not) at both sites, and has identical recent visit dates, the site is randomly selected.