How do I know if a person has a condition and when it started? (including the difference between condition and diagnoses tables)

USE CASE

Marsha is interested in knowing how many people have hypertension in her health system, so she can include that information in a grant proposal to support the feasibility of the project.

BROAD TOPIC AREAS

Diagnosis and Condition

PaTH Network
patient empowered research

KEY CONSIDERATIONS

1. First date of a diagnosis in the EHR is dependent on the first date a person is seen in that health system. If they were diagnosed and have been getting care in another health system the first date with the diagnosis in the new health system will underestimate the length of time since diagnosis.

2. The condition table typically comes from the problem list or a similar concept. The diagnoses come from billed or encounter diagnoses that are typically associated with one or more specific encounters (clinician visit, laboratory visit, nurse phone visit, etc).

    1. Operationally the PCORnet® CDM has defined fields for onset and resolved dates, as well as report dates, so theoretically can be used to distinguish between new and older conditions. However, those fields are not reliably populated. Conversely, diagnoses are simply associated with specific encounters.

CATEGORIZATION

Key Considerations	Kahn Framework	PaTH Data Quality Framework
1	Completeness	Missingness
2	Completeness/ Temporal Plausibility	Documentation Practice

POTENTIAL SOLUTIONS

1. Be sure to have a conversation with your local informatics team as the optimal strategy for using diagnoses versus conditions may vary based on your analytic goals. For example, if you want to be sure that you do not miss any patients with given diagnoses, you may use a different approach than if you will be comparing the effectiveness of two different treatments for a given diagnosis.

2. The PaTH team typically recommends that investigators work with "diagnoses" since this field is more reliably populated compared with "conditions." This likely reflects the fact that diagnoses are required to close clinical encounters and bill for them. In addition, billing teams often review diagnoses and verify them.

3. Even though "resolution" and perhaps "onset" dates are present in the conditions table, they are difficult to interpret because they are used differently by different providers. Alternatively, researchers can define resolution dates from the patterns in which diagnoses are linked with encounters.

4. If being comprehensive is a priority (for example, identifying whether there is any mention of Condition A before onset of Condition B), consider using both the Diagnosis and Condition table. In this specific example you might use both because the researcher's interest is in a current count of patients with hypertension.