statistical classification

A hierarchical organization of terms or ideas that allows aggregation into categories.

Notes

- A *statistical classification*
  - Allows categories to be counted and compared, without double counting.
  - Is a monohierarchical classification, which mean that each node in the hierarchy is included in only one node in the level above. Although this avoids double counting, it means that arbitrary decisions are made when a node is naturally related to more than one parent.

Example

- In a *statistical classification* such as ICD-10, *bacterial pneumonia* is related to *lung disorder* or *infectious disorder*, but not to both.

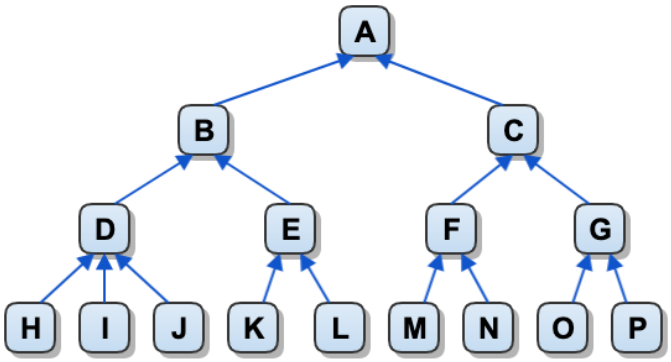

Figure 1: Hierarchy Illustration - Statistical Monohierarchical Classification

- In contrast, a polyhierarchical classification such as SNOMED CT, enables *bacterial pneumonia* to be a subtype of both *lung disorder* and *infectious disorder*. This enables more inclusive analytics and avoids overlooking conditions that are in a different category from the one being analyzed.

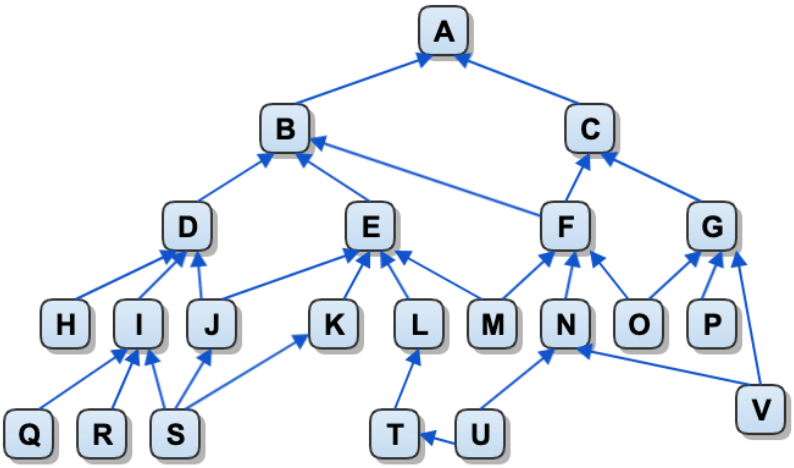

Figure 2: Hierarchy Illustration - Subtype Polyhierarchy

Related Links

- Monohierarchical classification
- Polyhierarchical classification
- Subtype classification
- Directed acyclic graph