Supplement Methods.
Example of entanglement of a bounded motif. The following example illustrates how a bounded subclass-to-class motif can become entangled:

1. *Bounded* **subclass-to-class mapping category.** The primary ICD-9-CM 909.0 [Late effect of poisoning due to drug, medicinal or biological substance] maps to the primary ICD-10-CM T50.901S forwards and converse. Moreover, the secondary ICD-9-CM E929.2 of this mapping motif also maps to the primary ICD-10-CM T50.901S, thus completing the mapping motif classified as a subclass-to-class category (**Figure 1**, row D, column I).

2. *Unbounded* **convoluted mapping category.** While ICD-9-CM E929.2 [Late effect of poisoning due to drug, medicinal or biological substance] is a primary code, its primary ICD-10-CM target is also ICD-10-CM T50.901S. However, in this motif, ICD-9-CM E929.2 is recipient of 245 ICD-10-CM codes, thus illustrating why it is categorized as convoluted and unbounded (**Figure 1**, row K, column III; some nodes and relationships not described above).

3. **Entanglement of the unbounded motif pointing to the bounded motif.** The convoluted mapping of E929.2 as primary comprises many mappings from ICD-10-CM to E929.2. Since the latter is also a secondary member of the bounded motif with CID-9-CM 909.0 as the primary seed, this constitutes many relationship pointing into this motif.

4. **Interpretation.** In other words, clinical encounters, mortality of costs data coded as ICD-10-CM E929.2 may be difficult to compare with historical data coded in ICD-9-CM, as two motifs are entangled.