Actualités du Pharo 2022 – Session 5

Unified Vaccine Schedule (UVS): recording and interpreting vaccine histories regardless of where or when the vaccine was administered

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For most purposes, such as logistics or dispensing, vaccines can be treated like any other medicine. But there is a specificity when it comes to digitising the history of vaccinations. We need to collect and describe as accurately as possible products that may have been administered anywhere in the world at any time in the last century. Accuracy is crucial because not all vaccines against a given disease are substitutable and because the characteristics of vaccines already administered determine the characteristics of subsequent vaccines and vaccine schedules. There is a single ATC code for all Covid-19 vaccines, but it is now clear to everyone that it is impossible to determine what to do without knowing exactly which vaccine has been given.

The data to be digitised comes from many sources: paper trails with more or less degraded information (DTP or "flu vaccine", abbreviated names of vaccines), labels with pharmaceutical codes, 2D codes present on packaging, pre-existing digital records according to very diverse codifications.

MyVaccines.net is developing systems to assist in the decision to vaccinate. To take into account the diversity of vaccine representations, we have created an ontology to link vaccines with their valences (a valence being defined as the functional unit of the vaccine, the knowledge of which is necessary and sufficient to evaluate the vaccine protection and the dates of the next doses to be administered) and with any pre-existing textual or numerical representation. We populated it with a complete set of vaccines, valences and coding systems, in order to provide a multilingual pivotal terminology allowing exact or approximate matching (matching through a valence hierarchy) between any pair of representation systems.