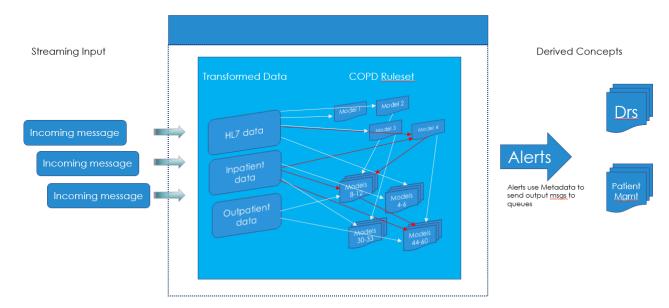
OnLEP Engine Processing Flow

In order to provide dependency driven processing, one of the design requirements for the OnLEP Engine is to allow models to use data from multiple models, and to use data from one processed calculation along with the source data, in another calculation.

- 1. For the COPD model, we receive the following *datasets* as incoming messages:
- HL7 data
- Inpatient data
- Outpatient data
 - 2. That data is tranformed into new *messages* that reveal in their xml, what kind of data they contain, to other objects.
 - 3. *Models* then consume the input, run their specific rule on that data, and send out the result as either a *container* or a *message*.
 - 4. A second rule *model* can then consume the original but transformed *message* (example: a specific beneficiary's inpatient data) and the result of the earlier *model*.

Model Working Set – Engine process



The simplified view above shows the consumption of data in multiple models, following the red arrows.

- 1. All incoming data is tranformed into engine-readable xml messages, containers or other elements.
- 2. HL7 data & Inpatient data are consumed by Model 4.
- 3. Model 9 (for instance) consumes the result of Model 4, as well as the original Inpatient data.
- 4. Model 48 (for instance) consumes the result of Model 9, as well as the original inpatient data.
- 5. Model 48 could also consume the result of Model 9, Model 4 as well as the original inpatient data.