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Igor sent me a prodigious amount of Rose files as translations of the Analysis Patterns documents into UML. I hope you find these useful, and remember all the credit is due to Igor.

Figure 4.1

```
Object of Care
     1

Patient  Population  Enterprise Segment

Observation *
```
Figure 4.7

Constraint:
all measurements' protocols are measurement protocols and vice-versa

Constraint:
all calculated measurements' protocols are calculated measurement protocols and vice-versa
**Figure 4.10**

- Phenomenon Type
  - 1..* input types (list)
  - 1

- Measurement Protocol
  - result type [list]
  - *

- Calculated Measurement Protocol
  - * formula

- Source Measurement Protocol
  - *

- Method
  - 1

- Casual Calculation
  - *

- Comparative Calculation
  - *

Constraint:
- input types have cardinality (2,2);
- both inputs are the same phenomenon type

**Figure 4.11**

- Observation
  - *

- Status Type
  - 1

- Measurement
  - *

- Actual
  - *

- Planned
  - *

- Duration
  - time offset 0..1

- Plan
  - 1
Figure 4.12

- Observation
  - Measurement
  - Status Type
    - Comparative Status Type
      - Simple Status Type
        - Actual
          - Duration
            - time offset 0..1
        - Planned
          - Plan
            - comparator 1
            - datum 1
Figure 4.17

Method

- combination method

Phenomenon Type

- input types

Measurement Protocol

- result type

Calculated Measurement Protocol

Source Measurement Protocol

Method

- formula

Dimension Combination

Casual Calculation

Comparative Calculation

Dimension

Constraint: input types has cardinality (1,1) and input types' element is the same as the result type

Constraint: input types has cardinality (2,2). Both inputs are the same phenomenon type

Figure 4.19

Age Band

Time Quantity

- upper 0..1

- lower 0..1
Figure 4.20

Range
upper : Magnitude
lower : Magnitude
isUpperInclusive : boolean
isLowerInclusive : boolean

includes() 
overlaps() 
abuts()

Age Band

Constraint: range’s bounds must be quantities with time units

Figur e 4.21

Phenomenon Type
  1 * Observation Concept

Phenomenon

Observation

Measurement

quantity

Observation Concept

Category Observation

Object of Care

Absence

Presence
Figure 4.22

Constraint: the business phenomena's ranges should not overlap

Constraint: the business phenomena's ranges should cover all possible values for the phenomenon type
Figure 4.24

Diagram showing relationships between Range, Range Function, Phenomenon Type, Associative Function, Observation Concept, Associated Observation, Observation, knowledge, operational, arguments, product, and evidence.