Ontology of step count

Access more resources: DATAcc's Core Measures of Physical Activity
Ontology of step count

**Definition**
The number of steps (with steps defined as the “initial contacts of the ipsi- and contralateral foot and corresponding to the displacement of the foot together with a displacement of the trunk”) taken during a defined interval.

**Concepts**
- **Step count**
- **Step**
- **Measurement interval**
- **Metadata**

**Properties**
- **Total step count**
  - Count
  - Measurement interval of steps
  - Start/end

**Values (or nested properties)**
- **Average steps/hour, steps/day, steps/week over a period of time**
  - Number of steps
  - Hour, day, week
  - Initiation timestamp/termination

**Examples**
- The Physical Activity Guidelines Advisory Committee (PAGAC) published findings regarding the health benefits related to average steps/day.
- HL7 Physical Activity IG and in practice, industry summarizes in steps/day.
Step count

**Measure considerations (assumptions & limitations):**

- Context is key; step count can be influenced by factors such as patient gait patterns, use of walking aids, cadence, walking speed, variability of stride length, etc.

- Wear locations for wearables can drive the biggest differences in measurement (where standing would be represented as the initial movement) and step count prediction algorithms.

- If a patient uses a walker or cane, but their condition improves and the walking aid is no longer needed, further analysis may be required to account for this change.