WG Name: OHDSI Medical Device WG
WG Lead: Asiyah Lin & subgroup leaders

Objective 1 : Expand the leadership team and establish collaborations across OHDSI and beyond

Key results:

1. 1Q2023 : Establish **subgroups** (device generated data, device data and device adverse events) and leadership teams.
2. 1Q2023 : Respond to FDA medical device active surveillance **RFI** by Mar. 30, 2023.
3. 2-3Q2023: Develop activities to establish **collaborations** with other related WG or efforts: Surgery WG and EHDEN
4. 3Q2023: Plan Think-a-thon or Hackathon at the OHDSI annual **symposium**

What We Achieved in 2023:

1. Michael Matheny leads device adverse events subgroup.
2. Done and more:
3. Responded two NESTcc RFP
4. Had presentations by Surgery and Perioperative Medicine WG
5. **2024 ORK**: continue building partnership, including NESTcc, and cross function OHDSI WGs, hold one WG F2F meeting at the 2024 OHDSI annual symposium.

OHDSI Medical Device WG
Device ID Data subgroup
Subgroup Lead: Carrie Bosela

Objective 2 : Enable the device standardization efforts to be interoperable with OMOP to support large scale device data analysis

Key results:
1.1-2Q 2023: Explore current OHDSI datasets for device data coverage.
2.1-2Q 2023 Explore and evaluate by extending OMOP by adding a device table
3.2-3Q2023: Explore tools and method to include device data in OMOP vocabulary

What We Achieved:

1. OHDSI device vocab and procedure vocab explore (Asiyah)

2. Carrie shared the Symmetric device attributes.

3. Seng Chan You provided UDI-EDI-SNOMED Mapping

Submit a poster to OHDSI symposium

OHDSI Medical Device WG
- Device ID Data subgroup
Subgroup Leads: Asiyah Lin & Carrie Bosela

- **Year 2024 OKR: Deep dive into OHDSI vocab – device & procedure**
  - Establish the medical device branch in OHDSI device vocab, establish UDI as standard concept, FDA ProCode as Classification. Add Seng Chan You's EDI as non-standard. (decide a particular device to focus)
  - Compare the OHDSI vocab relationships with Asiyah's medical device semantic model.
  - Map to FHIR

Collaboration with Vocab WG, and Tufts

WG Name: OHDSI Medical Device WG Device-Generated Data subgroup

Subgroup Leads: Andrew Williams, Manlik Kwong

Objective 3: Develop standard strategy for managing and representing features waveform and other device-generated data:

1. Clarify OMOP Standard concept coverage gaps for features from 12-lead ECG Data and ICU monitor data
2. Develop strategy for addressing concept gaps
3. Test previously developed strategy for mapping covered concepts using MIMIC-4 Waveform Database waveform and "numerics" data

What We Achieved:

1. Reviewed prior efforts to cover concepts waveform acquisition and features
2. Developed strategy for addressing concept gaps
3. Began assessing gaps and developing candidate concepts to fill them
4. Began testing MIMIC IV waveform and numerics integration EHR strategy

Submit a poster to OHDSI symposium

OHDSI Medical Device WG
Device-Generated Data subgroup
Subgroup Leads: Andrew Williams & Manlik Kwong

Year 2024 OKR:

- Contribute extensions to the OMOP vocabulary to cover standard concepts for waveform and numerics acquisition and features

- Demonstrate the strategy for supporting OHDSI standardized analytics across integrated EHR and waveform/"numerics" data

Collaboration with CHoRUS and PhysioNet

WG Name: OHDSI Medical Device WG
Device Adverse Event subgroup
Subgroup Lead: Michael Matheny

Objective 4: Establish the subgroup, identify leaders, and develop OKR

Key results:
1. 1Q2023 : Identify leader for this group.
2. 2Q2023: develop OKR

What We Achieved:
1. Michael Matheny joined as lead

Year 2024 OKR:
1. OHDSI members' capacity for medical device RWE research.
2. OHDSI network study led by VA/Vanderbilt