P1752 Working Group Meeting
Sponsored by IEEE Engineering in Medicine & Biology (EMB) Standards Committee

10 April 2018
Teleconference
Attendance

This document shows attendance from previous calls [https://tinyurl.com/tynurl.com/yc3oxg6q](https://tinyurl.com/yc3oxg6q) (link in the chat window of join.me). **If you attended the call, please verify that your name is listed**
- If not, email simona@openmhealth.org

**Put your name and affiliation in the chat window for attendance today.**
- If your name is not listed, or if you are joining only via phone, please email simona@openmhealth.org with “P1752 WG call” as subject

Attendance is important for determining voting rights, so please remember to “check in”
IEEE Patent Policy
Participants have a duty to inform the IEEE

- Participants shall inform the IEEE (or cause the IEEE to be informed) of the identity of each holder of any potential Essential Patent Claims of which they are personally aware if the claims are owned or controlled by the participant or the entity the participant is from, employed by, or otherwise represents.

- Participants should inform the IEEE (or cause the IEEE to be informed) of the identity of any other holders of potential Essential Patent Claims.

Early identification of holders of potential Essential Patent Claims is encouraged.
Ways to inform IEEE

- Cause an LOA to be submitted to the IEEE-SA (patcom@ieee.org); or
- Provide the chair of this group with the identity of the holder(s) of any and all such claims as soon as possible; or
- Speak up now and respond to this Call for Potentially Essential Patents

If anyone in this meeting is personally aware of the holder of any patent claims that are potentially essential to implementation of the proposed standard(s) under consideration by this group and that are not already the subject of an Accepted Letter of Assurance, please respond at this time by providing relevant information to the WG Chair.
Other guidelines for IEEE WG meetings

- All IEEE-SA standards meetings shall be conducted in compliance with all applicable laws, including antitrust and competition laws.
  - Don’t discuss the interpretation, validity, or essentiality of patents/patent claims.
  - Don’t discuss specific license rates, terms, or conditions.
    - Relative costs of different technical approaches that include relative costs of patent licensing terms may be discussed in standards development meetings.
      - Technical considerations remain the primary focus
  - Don’t discuss or engage in the fixing of product prices, allocation of customers, or division of sales markets.
  - Don’t discuss the status or substance of ongoing or threatened litigation.
  - Don’t be silent if inappropriate topics are discussed ... do formally object.

Patent-related information

The patent policy and the procedures used to execute that policy are documented in the:


Material about the patent policy is available at http://standards.ieee.org/about/sasb/patcom/materials.html

If you have questions, contact the IEEE-SA Standards Board Patent Committee Administrator at patcom@ieee.org
Determination of Quorum
Approval of Agenda

1. Attendance
2. Call for Patents
3. Approval of agenda and prior minutes (if quorum present)
4. Review, discussion, and approval of Sleep Schema subgroup
5. Discussion of Cardiovascular Schema subgroup scope and duties
Approval of Prior Minutes
(March 13)
Update on P1752 Policies and Procedures
Discussion:
Sleep Schema Subgroup
5.0 Subgroups of the Working Group

The Working Group may, from time to time, form subgroups for the conduct of its business. Voting Membership in the subgroup is granted to any participant of the Working Group. Such formation shall be explicitly noted in the meeting minutes. At the time of formation, the Working Group shall determine the scope and duties delegated to the subgroup, and may decide to allow participation of persons who are not Working Group members and specify the terms and conditions under which they participate in the subgroup. Any changes to its scope and duties will require the approval of the Working Group. Any resolution of a subgroup shall be subject to confirmation by the Working Group.

The Chair of the Working Group shall appoint, and may dismiss, the Chair of the subgroup.
DRAFT Sleep Schema Subgroup: Scope and Duties

Scope

• The P1752 Sleep Schema Subgroup will review and propose Open mHealth schemas related to sleep. The scope includes but is not restricted to the following aspects of sleep: sleep macrostructure (e.g., sleep duration, sleep stages), sleep microstructure (e.g., arousals), subjective sleep (e.g., sleep refreshment), and other sleep-related phenomena (e.g., apnea). The focus of this Subgroup’s work is on modeling data pertaining to sleep, and not on current or future individual devices or apps that measure various aspects of sleep.

Duties

• By reviewing the clinical aspects of sleep and existing relevant devices and apps, the Subgroup shall deliver a list of common attributes as well as a list of clinically important attributes in the domain of sleep as scoped above. The Subgroup shall propose modified and new schemas relating to sleep, as informed by use cases and the list of common and clinically important attributes. Finally, the Subgroup shall deliver a review of mappings and/or relationships to non-Open mHealth sleep schemas.
Sleep Schema Subgroup Poll Results

Please rank the sleep topics in order of importance to include in subgroup scope

- **Macrostructure**
  - **Sleep macrostructure (e.g., duration, episodes)**
    - Most important: 16

- **Subjective Measures**
- **Microstructure**
- **Sleep-disorder Related Data**
Sleep Schemas: Use Cases

• Identify a set of prioritized or unique use cases around sleep to help with developing schemas, e.g.,
  • “I can’t sleep, doc” or “I sleep during the day then I can’t sleep at night” or “would I have more concentration if I slept better?”
    • what is the macrostructure (in bed, sleep latency, sleep start, sleep phases and cycles, awakenings, sleep end, out of bed)
    • Microstructure – micro arousals, “I’m always sleepy, I sleep too much”
  • “I feel tired in the morning, I musn’t be sleeping well”
    • Subjective measures (sleep refreshment, daytime sleepiness, .....

• Out of scope?
  • “utilizing raw measurements to assess subjective and sleep disorder measures”
Sleep Schemas : Which Measures?

- Sleep Data: measures about the phenomenon of sleep itself
- Context data: other measures without which the interpretation of the main measure is difficult or would be misleading for 80% of anticipated use cases
  - E.g., snoring (without or with sleep apnea), restless legs activity, etc.
  - E.g., location of sleep, whether you sleep alone or with a partner, alcohol use, etc.
- Other related data
  - Environmental, E.g., type of bed, room temperature, light, air flow/movement, air contaminants, ambient noise levels, audio sampling for location based sound detection of birds or trains or talking, sun/moon phases and weather
  - Personal static and dynamic factors like age, gender, drugs, diet, diseases
Sleep Schema Subgroup First Steps

- Charlotte’s proposal’s first steps:
  - Sprint0: Get ready to Start
  - Sprint1: Gather information from devices that support this function
  - Sprint2: Study/Understand the existing work (including OpenmHealth, FHIR, etc.)
  - “get the subgroup familiar with the clinical important attributes of sleep”
  - sleep is a complex phenomenon

- Add “define use cases”? 
Scope and Duties (For Revision and Approval)

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Approval of Sleep Subgroup
Scope and Duties
Sleep Subgroup: Next Steps

• Chair appointment – in process
• Join the subgroup! – email simona@openmhealth.org
• Set up and add members to iMeet collaborative space
• Work will start when chair, membership, and iMeet set up
• Stay tuned!
Discussion: Cardiovascular Schema Subgroup
Cardiovascular Schema Use Cases / Measures

• Preventive cardiology
  • exercise more, lose weight, eat well, stop smoking, don’t be stressed, keep mentally active and socially connected,

• Treatment of active disease
  • CAD: chest pain, DOE, HRV
  • HTN: BP, HR
  • Arrhythmias: palpitations, DOE, chest pain, dizziness, etc.
  • CHF: weight, salt intake, DOE, 6MWT, HTV
  • Vascular includes PAD, Stroke, claudication
Cardiovascular Schema Subgroup Scope

• How to draw reasonable bounds
  • Physical activity: run, walk, other activity, sedentary time, minutes of moderate activity, etc.
  • HR, HRV, BP,
  • EKG, arrhythmias
  • Subjective: palpitations, chest pain, SOB, DOE,
  • Stress, salt intake, food intake, etc.

• Do a survey/poll?
Summary of Action Items
Future Meetings

• Continue with every other Tuesday at 8 AM Pacific / 11 AM Eastern
• Upcoming meetings
  • April 24
  • May 8
Adjournment