P1752 Sleep Schema Subgroup Meeting

Sponsored by IEEE Engineering in Medicine & Biology (EMB) Standards Committee

- 20 Nov 2019
- Teleconference
Attendance

- Put your name and affiliation in the chat window for attendance today.
- If you are joining only via phone, please email charlotte.chen@philips.com with “P1752 Sleep Schema Subgroup call” as subject.
- The document shows attendance is under https://ieee-sa.imeetcentral.com/omh/folder/WzIwLDEwMjY4MDg1XQ/.
  --If you attended the call, please verify that your name is listed.
  --If your name is not listed, either edit the document above or email charlotte.chen@philips.com.
Agenda

1. Attendance
2. Modified timelines
3. Update from the qualitative schema task group
4. Update from quantitative schema task group
6. Action Items
7. Q&A
Sleep Schema Subgroup Deliverables

- Clinically important sleep attributes
- Common sleep attributes of the existing relevant devices and apps
- Standard Comparison Report (Review and mapping)
- Proposed sleep schemas (modified and new) and use cases (quantitative and qualitative)
  1. Quantitative Measurement Schemas (including macrostructure, microstructure and etc.)
  2. Qualitative Measurement Schemas (including subjective sleep experience, other sleep related phenomena and etc.) --- Pivoted: Draft a set of sleep survey questions and schema(s) to cover various of survey question/answer types
Timeline for Stage 2 Remaining Work

- **Complete addressing comments** for Quantitative Sleep Schemas by **May 12, 2019**
- **Complete reviewing** Qualitative Measure Schemas by **May 31, 2019**

- **Validate** Quantitative Schemas by **Oct 28, 2019**
- **Draft** Qualitative Measure Schemas by **Nov 19**

- **Review/Discuss/Address** WG comments on 1st batch Quantitative Schemas by **Nov 26/Dec 5/Jan 6, 2020**
- **Review/Modify** Qualitative Measure Schemas by **Nov 19**
Qualitative Schema Task Group
Updates (Banu)
Status

• Follow up of meeting held on October 22, 2019

--- Finalization of 4 Generic sleep survey questionnaires. (Available in iMeet)
  • Assessment of poor sleep
  • Impact of non-refreshed sleep
  • Snoring
  • Sleep related habits
Updates on the Task

- Drafting of schemas for the generic questionnaires
  - Drafting done by Charlotte & Banu
  - Validation by Charlotte
Generic Survey (Assessment of Poor Sleep)

1. How often in a week do you think your sleep is disturbed? (Please select one below)
   - 5 days or more
   - 3 to 4 days
   - 1 to 2 days
   - Never

2. In the last 7 days, on average, how many times did you get up from bed during your sleep?
   Ans: _______ (answer is an integer)

3. Do you feel that you are getting adequate sleep?
   - Strongly agree
   - Agree
   - Neither agree nor disagree
   - Disagree
   - Strongly disagree

4. How long ago did you start finding your sleep was inadequate or not refreshing?
   Ans: _______ months (answer is a number)
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Generic Survey (Impact of Non-Refreshed Sleep)

1. Indicate your level of sleepiness during the day time (Please select one below):
   - Extremely sleepy
   - Very sleepy
   - Moderately sleepy
   - Slightly sleepy
   - Not at all sleepy

2. Are you unable to focus on your tasks during daytime? (Please select one below)
   - Very frequently
   - Frequently
   - Occasionally
   - Rarely
   - Never

3. Do you fall asleep in any of the following situations (please check all the ones applied to you)?
   a. During short travel in a car
   b. During short travel in public transport
   c. During work at office
   d. In a conversation with friends and family
   e. Reading / Watching TV / quietly observing surroundings
Generic Survey (Impact of Non-Refreshed Sleep)

4. Do you have difficulty participating in entertainment activities because you are too tired or feel sleepy?
   - Very frequently
   - Frequently
   - Occasionally
   - Rarely
   - Never

5. Do you have difficulty participating in sport activities because you are too tired or feel sleepy?
   - Very frequently
   - Frequently
   - Occasionally
   - Rarely
   - Never

6. Do you have difficulty engaging with family or friends because you are too tired or feel sleepy?
   - Very frequently
   - Frequently
   - Occasionally
   - Rarely
   - Never
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"code": "4",
"value": "Reading / Watching TV / quietly observing surroundings"
}
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1. Have other people around you noticed that you snore? (Please select one below):
   - Yes
   - No
   - Not sure

2. In the last 6 months, have you awakened at night gasping for breath?
   - Very frequently
   - Frequently
   - Occasionally
   - Rarely
   - Never

3. Do you suffer from high blood pressure? (Please select one below):
   - Yes
   - No
   - Not sure
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Generic Survey (Sleep related habits)

1. Have you ever taken an over-the-counter medicine to help you sleep? (Please select one below):
   - Yes
   - No
   - Not sure

2. Do you keep track of your sleep patterns? (Please select one below)
   - Yes
   - No

3. Are you a night shift worker? (Please select one below)
   a. Yes, regularly
   b. Yes, often
   c. Yes, occasionally
   d. No, never

   (If you have selected option 3(d), then skip questions 4 and 5)

4. When did you start working nights?
   Ans: _______(a date that can be partial)

5. If you started working nights in the last year, how many months ago was that?
   Ans: _______(a number with unit of measure months)

6. Do you use smart gadgets when having difficulty in falling sleep?
   - Yes, regularly
   - Yes, often
   - Yes, occasionally
   - Never
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          }
        ]
      }
    }
  }
],
Action Items

-- Draft Schemas to be uploaded to iMeet for further comments and suggestions from members.

-- Final validation
Quantitative Schema Task Group Updates
Status (1)

- Completed addressing the warning messages in the validation results
- Prepared/Distributed for the 1st batch quantitative schemas for WG to review on Oct 31
- Presented the 1st batch quantitative schemas in WG meeting on Nov 5
Status (2)

- Ongoing discussion (Simona’s email on Nov 12)
  -- sleep-body-movement  
  -- sleep-stages vs sleep-episode  
  -- sample data (one file vs multiple files)

- Reminder
  -- Remove reference to SNOMED in schemas
Next Steps

- Review and summarize WG review comments on 1\textsuperscript{st} batch schemas
- Present main WG comments on 1\textsuperscript{st} batch in WG meeting on Nov 26
- Prepare the 2\textsuperscript{nd} batch quantitative schemas
- Introduce the 2\textsuperscript{nd} batch schemas in WG meeting on Nov 26
Action Items

- Get ready to distribute the 2nd batch quantitative schemas, generic survey documents and schemas by Nov 20
- Review/Summarize the main WG comments on 1st batch schemas by Nov 25
- Address the main WG comments on 1st batch schemas by Dec 5 (Distribute on Dec 6)
Future Meetings

- Continue with Tuesdays at 8:30 AM Pacific / 11:30 AM Eastern
- Upcoming meetings
  - Dec 4, 2019 (tentative)
Adjournment