

IEEE P1752.2 CardioRespiratory Measures Subgroup

Minutes of conference call held on September 29, 2022

Conference call started at 15:00 UTC (8:00 AM Pacific Time) on IEEE Webex

Attendance: 9 Attendees

Carole	Carey	IEEE EMB
Simona	Carini	UCSF / OmH
Kevin	Clark	Biomedicine domain champion, NSF
Koichiro	Matsumoto	Nihon Kohden Corp.
Hamid	Mcheick	Université du Québec à Chicoutimi
Paul	Petronelli	PALM Associates
Josh	Schilling	Vibrent Health
Ida	Sim	UCSF / OmH
Paul	Steiner	Dartmouth College

Agenda:

- Attendance and introductions
- Review of prior minutes (August meeting) – *incomplete*
- Presentation – *postponed*
- Other business:
 - Collaborations / stakeholder engagement s/p HRX
 - Next monthly meeting

Today's meeting was somewhat abbreviated due to a need to postpone the planned presentation. Nonetheless, an engaging discussion ensued about the work of the Cardiorespiratory subgroup, and how this work fits into the broader context addressed in the broader IEEE P1752 Open mHealth mandate.

The notion of data contextuality was given consideration. As an example, the Metabolic subgroup in part has focused on the serial assessment of blood glucose measurements, as well as trends, but context for the glucose measurements includes cardiorespiratory status, as well as physical activity and environmental factors; Open mHealth data provides for data schemas that may facilitate contextual analytics. Similarly, cardiorespiratory data analytics would benefit from similar contextuality, in particular (and most immediately) with respect to characterization of physical activity. For engagement of schema stakeholders, this can be emphasized as a value proposition for the adoption of the Cardiorespiratory schema presently in development.

At HRX (San Diego) earlier this month, a broad aggregation of digital health entities and engaged stakeholders in the cardiorespiratory domain were gathered. Topically, there was much that was covered (biosensors, data collection and aggregation, processing methods, analytics, systems development, strategic implementations, *etc*). Implementations of deep learning methodology and artificial intelligence also were common themes, as also was the notion of applying these technologies to facilitate the enhancement of health equity. That all said, it arguably may be said that there was little attention given to notions of interoperability and standardized data schemas necessary for leveraging these efforts most effectively (and also thereby facilitating contextuality).

The subgroup discussion progressed to a consideration of how we otherwise might promote awareness and committed engagement on the part of key stakeholders (especially from among industry and professional society entities). To increase prospects for our schema development to facilitate some of the efforts articulated above, broader-based engagement should be pursued. To that end, the idea of summary orientation meetings was discussed for the purpose of underscoring the Open mHealth value proposition.

Action Items:

- Continuation (part 2) of presentation “Recovery from Physical Activity - The Cardiorespiratory Response and Mobile Health Use Cases”.
- Other use case proposals fitting the Health Care paradigm: Volunteers requested.
- Proposal for orientation meeting for targeted stakeholders to win awareness and committed engagement.

Next meeting: October 27, 2022 at 15:00 UTC (8:00 AM Pacific Time)
Minutes taken by Paul Steiner (Dartmouth)