

P1752 Working Group Meeting

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

Attendance Taken by Secretary

- 21 April 2026
- Teleconference

Attendance

- Attendance is important for determining voting rights, so please remember to “check in” **Write full name and affiliation on your zoom name or in the chat.** If you attend only by phone, please email the info to simona@openmhealth.org
- Secretary will mark attendance for everyone
- If you attended a previous call and your attendance was not noted on the draft minutes distributed by the Secretary, please email simona@openmhealth.org

Voting membership

- Attendance is important for determining voting membership
- After you've attended 2 consecutive meetings you are eligible for voting membership
- If you wish to become a voting member, send an email with the request to simona@openmhealth.org
- You don't need to be a voting member to participate in the WG or subgroup calls
- You need to be a voting member to move or second motions and to vote whenever the WG entertains a motion (e.g., to approve the agenda, to approve an action by the WG, etc.)
- If you miss 2 consecutive meetings, voting membership is revoked and can be gained again by attending 2 consecutive meeting and sending a request
- Accommodation can be made for special circumstances, which should be brought to the Chair's attention

IEEE Policies

IEEE SA Call for Patents

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**

Slide #1

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

Slide #2

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.

For more details, see *IEEE-SA Standards Board Operations Manual*, clause 5.3.10 and *Antitrust and Competition Policy: What You Need to Know* at <http://standards.ieee.org/develop/policies/antitrust.pdf>

Slide #3

Patent-related information

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

- *IEEE-SA Standards Board Bylaws*
(<http://standards.ieee.org/develop/policies/bylaws/sect6-7.html#6>)
- *IEEE-SA Standards Board Operations Manual*
(<http://standards.ieee.org/develop/policies/opman/sect6.html#6.3>)

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

Slide #4

IEEE SA Copyright Policy

IEEE SA Copyright Policy (November 2019)

- **By participating in this activity, you agree to comply with the [IEEE Code of Ethics](#), all applicable laws, and all IEEE policies and procedures including, but not limited to, the IEEE SA Copyright Policy.**
 - Previously Published material (copyright assertion indicated) shall not be presented/submitted to the Working Group nor incorporated into a Working Group draft unless permission is granted.
 - Prior to presentation or submission, you shall notify the Working Group Chair of previously Published material and should assist the Chair in obtaining copyright permission acceptable to IEEE SA.
 - For material that is not previously Published, IEEE is automatically granted a license to use any material that is presented or submitted.

IEEE SA Copyright Policy

- The IEEE SA Copyright Policy is described in the IEEE SA Standards Board Bylaws and IEEE SA Standards Board Operations Manual
- IEEE SA Copyright Policy, see
 - Clause 7 of the IEEE SA Standards Board Bylaws
<https://standards.ieee.org/about/policies/bylaws/sect6-7.html#7>
 - Clause 6.1 of the IEEE SA Standards Board Operations Manual
<https://standards.ieee.org/about/policies/opman/sect6.html>
- IEEE SA Copyright Permission
- <https://standards.ieee.org/content/dam/ieee-standards/standards/web/documents/other/permissionltrs.zip>
- IEEE SA Copyright FAQs
- <http://standards.ieee.org/faqs/copyrights.html/>
- IEEE SA Best Practices for IEEE Standards Development
- http://standards.ieee.org/develop/policies/best_practices_for_ieee_standards_development_051215.pdf
- Distribution of Draft Standards (see 6.1.3 of the SASB Operations Manual)
- <https://standards.ieee.org/about/policies/opman/sect6.html>

IEEE SA Individual Participation

Participant behavior in IEEE-SA activities is guided by the IEEE Codes of Ethics & Conduct

- All participants in IEEE-SA activities are expected to adhere to the core principles underlying the:
 - IEEE Code of Ethics
 - IEEE Code of Conduct
- The core principles of the IEEE Codes of Ethics & Conduct are to:
 - *Uphold the highest standards of integrity, responsible behavior, and ethical and professional conduct*
 - *Treat people fairly and with respect, to not engage in harassment, discrimination, or retaliation, and to protect people's privacy.*
 - *Avoid injuring others, their property, reputation, or employment by false or malicious action*
- The most recent versions of these Codes are available at <http://www.ieee.org/about/corporate/governance>

Participants in the IEEE-SA “individual process” shall act independently of others, including employers

- The [IEEE-SA Standards Board Bylaws](#) require that “participants in the IEEE standards development individual process shall act based on their qualifications and experience”
- This means participants:
 - **Shall act & vote** based on their personal & independent opinions derived from their expertise, knowledge, and qualifications
 - **Shall not act or vote** based on any obligation to or any direction from any other person or organization, including an employer or client, regardless of any external commitments, agreements, contracts, or orders
 - **Shall not direct** the actions or votes of other participants or retaliate against other participants for fulfilling their responsibility to act & vote based on their personal & independently developed opinions
- By participating in standards activities using the “individual process”, you are deemed to accept these requirements; if you are unable to satisfy these requirements then you shall immediately cease any participation

IEEE-SA standards activities shall allow the fair & equitable consideration of all viewpoints

- The [IEEE-SA Standards Board Bylaws](#) (clause 5.2.1.3) specifies that *“the standards development process shall not be dominated by any single interest category, individual, or organization”*
 - This means no participant may exercise *“authority, leadership, or influence by reason of superior leverage, strength, or representation to the exclusion of fair and equitable consideration of other viewpoints”* or *“to hinder the progress of the standards development activity”*
- This rule applies equally to those participating in a standards development project and to that project’s leadership group
- Any person who reasonably suspects that dominance is occurring in a standards development project is encouraged to bring the issue to the attention of the Standards Committee or the project’s IEEE-SA Program Manager

Determination of Quorum

Approval of Agenda

1. Attendance
2. Call for Patents, Copyright Policy, Code of Ethics
3. Approval of agenda and minutes (if quorum present)
4. Updates to OS repository updates: discussion and vote
5. Updates: CR subgroup
6. Other business

Approval of Prior Minutes

(March 17, 2026)

Updates to OS repository:
Discussion and vote

Update to 1752 OS repository needed


- The [survey schemas](#) reference JSON Schema version draft-04:
 - "\$schema": "http://json-schema.org/draft-04/schema#",
- instead of draft-07 as per the standard document
 - "\$schema": "http://json-schema.org/draft-07/schema#",
- Governance: triage and update proposal to WG for discussion and vote
- Notes:
 - the survey schemas are normative
 - JSON Schema draft-07 is normative

JSON Schema draft-04 and -07

- A draft-04 schema will generally *work* in a draft-07 validator, but there are a few areas where behavior differs or breaks:
- One Real Breaking Change: **exclusiveMinimum / exclusiveMaximum** ← Not used in 1752 schemas, hence N/A
- **The id vs \$id Issue:** Draft-04 uses **id** to declare a schema's URI. Draft-07 uses **\$id**. ← \$id used in all 1752 schemas
- If you relied on id for \$ref resolution within a schema, your references may break ← N/A


Proposed updates 1752 OS repository

- ✓ JSON Schema version number updated from 04 to 07 in the [survey schemas](#) (listed on the right)
- ✓ Request to the WG to review the proposed changes and make suggestions
- Request to the WG to approve the proposed changes
 - If approved, Secretary to work with OS Manager to implement changes

 survey-1.0.json


 survey-answer-1.0.json

 survey-categorical-answer-1.0.json

 survey-date-answer-1.0.json

 survey-item-1.0.json

 survey-question-1.0.json

 survey-time-answer-1.0.json

 survey-unit-value-answer-1.0.json

Update to 1752 OS repository drafted

- Secretary worked with OS Manager to draft the changes on a staging branch
 - https://opensource.ieee.org/omh-staging/1752-staging/-/compare/main...2-update-reference-to-json-schema-draft-in-the-survey-schemas?from_project_id=4
- Changes distributed to WG for comments: none received
- Request to the WG voting members to approve the change

Proposed motion

- The P1752.2 Working Group approves the changes in the 8 schemas in the [survey folder](#)
 - survey-1.0.json
 - survey-answer-1.0.json
 - survey-categorical-answer-1.0.json
 - survey-date-answer-1.0.json
 - survey-item-1.0.json
 - survey-question-1.0.json
 - survey-time-answer-1.0.json
 - survey-unit-value-answer-1.0.json
- so that the schemas in their “\$schema” section reference JSON Schema draft-07 (“\$schema”: <http://json-schema.org/draft-07/schema#>), instead of draft-04
- If the changes are approved by the Working Group, the Secretary will work with the OS Manager to merge the changes into the main branch of the repository

Updates from CR Subgroup

P1752.2 Cardiorespiratory Subgroup

Agenda →

March 26, 2026
8 PM PDT

❖ Big Picture

- ▶ P1752 Mission & Deliverable → **Physiologic Data in the Personal Health Record**

❖ Structuring wrapper into *distinct* operational sections

- ▶ Object architecture considerations for JSON wrapper code
 - **Default** (*similar to* Data Point, Data Point Series)
 - **Standard** (*models* Time Sequence data → timing of events *as a function of processes*)
 - **Detailed** (*attaches* Time Series data → events as a function of time): For post-acquisition analytics
- ▶ Object terminology for characterizing for data object complexity
 - **Dimensions** (number of measured features)
 - **Channel** (each unique source signal input for data object)
 - **Episode** (*subepochs* of the JSON data object → relevant for triggered acquisitions)

❖ Examples Reviewed

- ▶ Review 1752 code structure object for heart rate measurements
- ▶ Code illustrating reliance on existing 1751.1 wrappers, illustrated with OmH heart_rate
- ▶ Assess limitations motivating adding framework and 1752.2 data wrappers
- ▶ Code illustrating basic 1752.2 data structures derived from OmH data
- ▶ **Bulid** on this code to demonstrate its extensibility and flexibility
- ▶ Rely on more recent JSON releases to reaffirm data validity

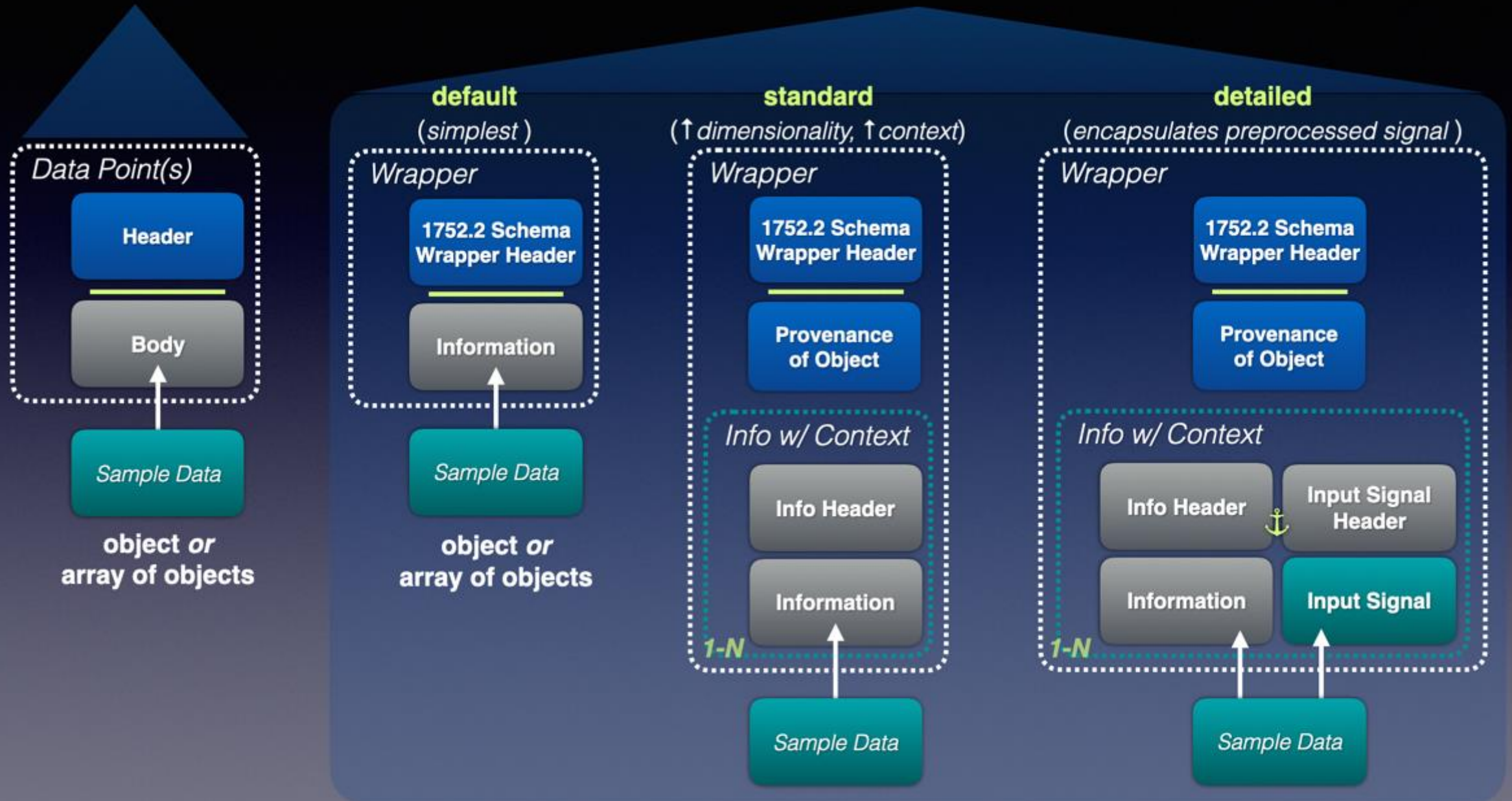
❖ Update on FHIR CardX → mCard

Next Meeting

Apr 30, 2026
8 PM PDT

P1752.1

P1752.2 CR → support for time sequence data



P1752.2

standard

Wrapper

1752.2 Schema
Wrapper Header

Provenance
of Object

Info w/ Context

Info Header

Information

Sample Data

IEEE 1752.2 Datum → Interval Array

```
{
  "effective_time_frame": {
    "time_interval": {
      "start_date_time": "2026-02-28T06:30:00.000-06:00",
      "duration": {
        "value": 60000,
        "unit": "ms"
      }
    }
  },
  "RR_interval_seq": {
    "interval_offset": 102,
    "interval_seq": [1070, 1099, 1075, 1077, 1090, 1110, 1054,
1066, 1055, 1071, 1090, 707, 1443, 1067, 1077, 1059,
1065, 1070, 1099, 1075, 1077, 1090, 1110, 1054, 1066,
1055, 1071, 1090, 707, 1443, 1067, 1077, 1059, 1065,
1070, 1099, 1075, 1077, 1090, 1110, 1054, 1066, 1055,
1071, 1090, 707, 1443, 1067, 1077, 1059, 1090, 1088,
1070, 1074, 1065],
    "unit": "ms"
  }
}
```

*expand into
generalized
"info header"*

*generalized
"information"*

P1752.2

standard

Wrapper

1752.2 Schema
Wrapper Header

Provenance
of Object

Info w/ Context

Info Header

Information

Sample Data

IEEE 1752.2 Datum → Information

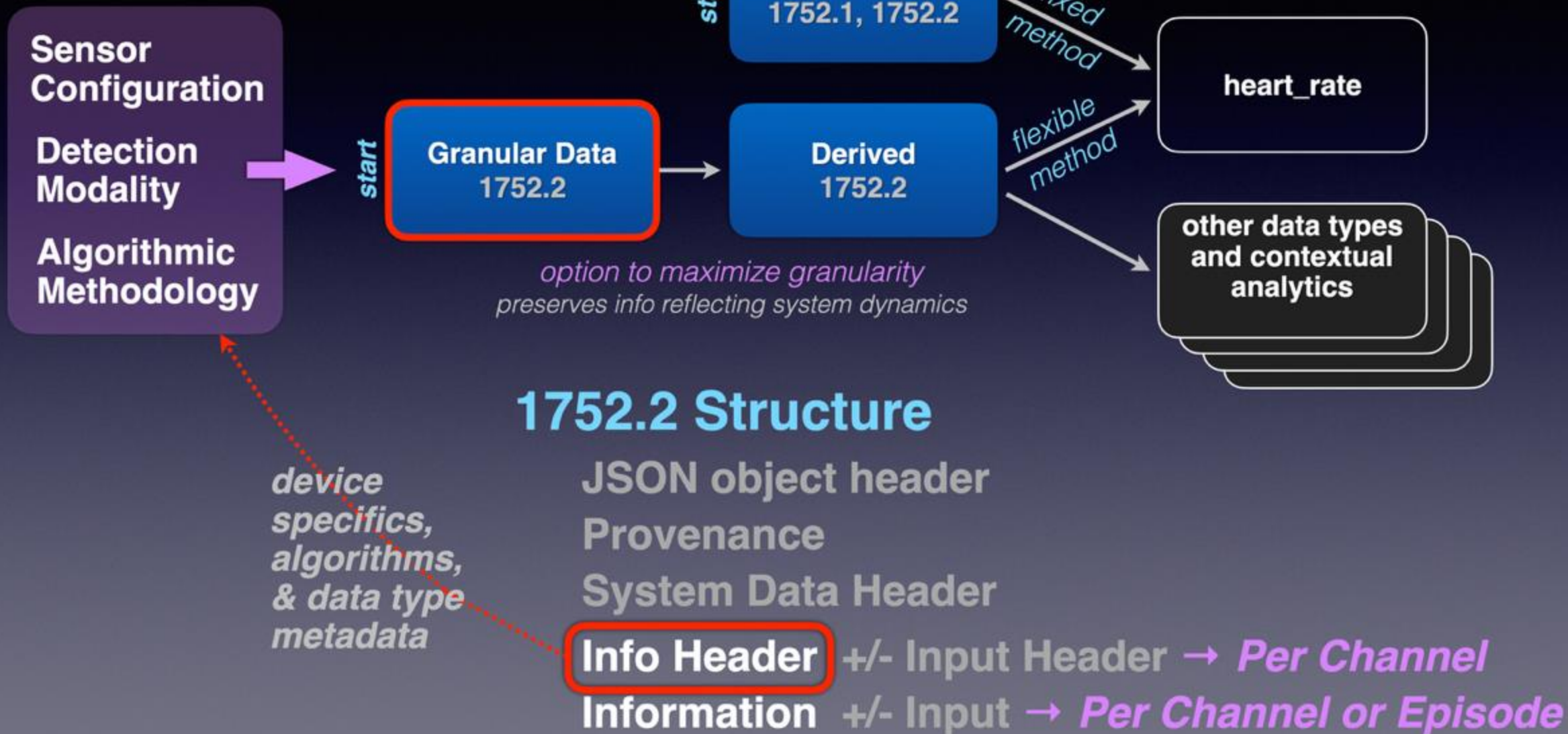
```
{  
  "RR_interval_seq": {  
    "interval_offset": 102,  
    "interval_seq": [1070, 1099, 1075, 1077, 1090, 1110, 1054,  
1066, 1055, 1071, 1090, 707, 1443, 1067, 1077, 1059,  
1065, 1070, 1099, 1075, 1077, 1090, 1110, 1054, 1066,  
1055, 1071, 1090, 707, 1443, 1067, 1077, 1059, 1065,  
1070, 1099, 1075, 1077, 1090, 1110, 1054, 1066, 1055,  
1071, 1090, 707, 1443, 1067, 1077, 1059, 1090, 1088,  
1070, 1074, 1065],  
    "unit": "ms"  
  },  
  "QT_interval": {  
    "feature_reference": "RR_interval_seq",  
    "feature_seq": [370, 399, 375, 377, 390, 410, 364,  
366, 355, 371, 390, 357, 443, 367, 377, 359,  
365, 370, 379, 375, 377, 390, 410, 354, 366,  
355, 371, 370, 347, 443, 367, 377, 359, 365,  
370, 379, 375, 377, 390, 410, 384, 366, 355,  
371, 390, 347, 443, 367, 377, 359, 390, 388,  
370, 374, 365],  
    "feature_type": ["interval"],  
    "unit": ["interval"],  
  }  
}
```

*generalized
"information"
block*

Note issue:

Last interval's QT unreliably present

Data-centric Focus



Summary of Action Items

Future Meetings

Upcoming Meetings

- P1752.2 WG call
 - Tuesday May 26, 2026 at 8 am Pacific
- Cardio-respiratory subgroup:
 - Thursday April 30, 2026 at 5 pm Pacific

Adjournment