

CIMI/O&O

Vital Signs

Sept. 26, 2017

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Vitals Analysis Overview

- Collated current models within the industry
 - FHIR, FHIM, CEM, Argonauts, ONC CDE
- Reviewed with CIMI
 - Added Device Class concepts (per Bruce Bray)
- Mapped to SNOMED CT and LOINC
 - Added additional devices listed in LOINC



Vitals Goals

- “Uber” CIMI Vitals Model
 - Will contain all observations and “qualifiers” in use across the industry
- CIMI Vital Signs Panel LOINC Panel Request
- All attributes and values sets will have bindings to standard terminologies
- Valueset creation in VSAC



Review Spreadsheet

Ballot	RowNum	Type	Vitals	LOINC Code	LOINC	SCT Co	SCT FSN	Units	Susan Comments
			Vital Signs		Do we want to create our own?		https://loinc.org/new/get-section-ct.php?name=intermediate-magnitude-and-expression-associations-new-available/		85353-1 is the LOINC code for the FHIR profile panel but doesn't exist. FHIR top level is 8713-3 but doesn't align with DA.
	1	Panel	Clothing worn during measure	8352-7	Clothing worn during measure	248159006	State of dress (observable entity)		Should this just be under weight or at this level?
	2	Qualifier	Undressed (finding)			248160001	Undressed (finding)		
	3	Value	Street Clothes, no shoes				Parent = 365825002 (State of dress new finding (finding))		
	4	Value	Street Clothes, with shoes				Parent = 365825002 (State of dress new finding (finding))		
	5	Value	Street Clothes, with shoes				Parent = 365825002 (State of dress new finding (finding))		
	7	Qualifier	Body Position	8361-8	Body position with respect to gravity>Type:Pt*Patient:Nom:	397155001	Body position (observable entity)		This is also under B/P, should only have in one place.
x	8	Value	Right lateral decubitus position (finding)			102535000	Right lateral decubitus position (finding)		
	9	Value	Left lateral decubitus position (finding)			102536004	Left lateral decubitus position (finding)		
	10	Value	Recumbent body position (finding)			102538003	Recumbent body position (finding)		
	11	Value	Orthostatic body position (finding)			109040000	Orthostatic body position (finding)		
	12	Value	Prone body position (finding)			12400000	Prone body position (finding)		
	13	Value	Inverse Trendelenburg position (finding)				Inverse Trendelenburg position (finding)		
	14	Value	Fowler's position (finding)			26527006	Fowler's position (finding)		
	15	Value	Sitting position (finding)			30212006	Sitting position (finding)		
x	16	Value	Trendelenburg position (finding)			33586001	Trendelenburg position (finding)		
	17	Value	Supine body position (finding)			34106002	Trendelenburg position (finding)		
	18	Value	Left lateral tilt (finding)			40199007	Supine body position (finding)		
						414585002	Left lateral tilt (finding)		
	19	Qualifier	Exertion Phase	See 82289-0	Rating of perceived exertion (Score), Ordinal (Trial Status)	none			82289-0 Rating of perceived exertion (Score) Note, this is an ordinal and probably not a match.
	20	Value	After exercise (qualifier value)			255214003	After exercise (qualifier value)		
	21	Value	At rest (qualifier value)			263678003	At rest (qualifier value)		
	22	Value	During exercise (qualifier value)			309604004	During exercise (qualifier value)		
	23	Qualifier	Sleep Status	new					
	24	Value	Awake (finding)			248218005	Awake (finding)		
	25	Value	Asleep (finding)			248220008	Asleep (finding)		
	26	TopElement	Respiratory Rate	9279-1	Respiratory rate:Nrat:Pt:Respiratory System:Qn:	86290005	Respiratory rate (observable entity)	/min	Same LOINC across all
	27	Qualifier	Type of Breath rate device	9277-5	Class:Type:PT:Breath rate device:Nom: Body position with respect to gravity>Type:Pt*Patient:Nom:	none			
	28	Qualifier	Body Position	8361-8	Body position with respect to gravity>Type:Pt*Patient:Nom:	397155001	Body position (observable entity)		Same value set as above
	29	TopElement	Heart rate	8867-4	Heart rate:Nrat:Pt:XXX:Qn:			/min	Same LOINC across all
	30	Qualifier	Heart Rate Measurement Method	8886-4	Heart rate method				
	31	Value	Auscultation			37931006	Auscultation (procedure)		
	32	Value	Auscultation, automatic			37931006	+ Auscultation (procedure) + automatic new (new)		Note that intermountain has both automatic and manual
	33	Value	Auscultation, manual			37931006	Auscultation (procedure) + manual new (new)		
	34	Value	Automatic monitor			new			



Microsoft Excel
Worksheet



Issues/Questions - Device vs. Method

- Device vs. Method
 - There's a fuzzy line between device and method.
Guidance as to how to divide
 - E.g. Doppler, Oximeter
 - Method is precoordinated with device
 - E.g. “arterial pressure monitoring with automatic cuff”



Issues/Questions – Pre vs. post coordination

- Body location and side
- Automated and manual
- Invasive and non-invasive



Next Steps

- Subgroup CIMI/OO Meeting to Review Issues and Questions
- Review ISO 11073 – Device Nomenclature Review
- Confirm that all values are actually used today in the industry (since some came for LOINC)
- Finalize Attributes and value sets
 - New SNOMED CT concepts AND
 - Value sets will be created in HSPC extension
- Create CIMI Models
- Request LOINC Panel



QUESTIONS?

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