

The American Medical Association (AMA) appreciates the opportunity to provide public comment in support of promoting 'Vital sign results: date and timestamps' from Level 2 to the draft USCDI v5.

In the Standards Bulletin, July 2023, ONC noted the need of for additional information related to average blood pressure:

ONC received significant input and support for *Average Blood Pressure* over several USCDI version update cycles. *Average Blood Pressure* is recognized as an independent risk factor in many diseases and health conditions... **The time period, number of readings, and specific protocols may be needed to interpret an Average Blood Pressure value.**

Source: ONC Health IT Standards Bulletin, July 2023. https://www.healthit.gov/sites/default/files/page/2023-07/Standards_Bulletin_2023-2.pdf

The 'Vital sign results: date and timestamps' data element could provide both the time period and the specific protocol.

Knowing the protocol is necessary to accurately interpreting the average blood pressure because there are different thresholds for hypertension depending on which average blood pressure protocol is being used. Put a different way, the threshold for hypertension mediated organ damage begins at different systolic and diastolic points depending on the average blood pressure protocol.

For example, an in-clinic blood pressure average of 140/90 equates to a home blood pressure average of 135/85 which equates to a nighttime average BP from a 24-hour ambulatory measurements of 120/70.

In-clinic average	Home blood pressure monitoring average	Daytime average – from 24-hour ambulatory measurements	Nighttime average – from 24-hour ambulatory measurements	Average of all measurements -from 24-hour ambulatory measurements
120/80	120/80	120/80	100/65	115/75
130/80	130/80	130/80	110/65	125/75
140/90	135/85	135/85	120/70	130/80

Source: Carey RM, Whelton PK; 2017 ACC/AHA Hypertension Guideline Writing Committee. Prevention, Detection, Evaluation, and Management of High Blood Pressure in Adults: Synopsis of the 2017 American College of Cardiology/American Heart Association Hypertension Guideline. *Ann Intern Med.* 2018;168(5):351-358. doi:10.7326/M17-3203

Rather than suggesting a new data element specific only to the blood pressure averaging protocol and to reduce the burden on certified health IT companies, the vital sign results: date and timestamps data element could be used. For example:

- ≥3 days in a row would indicate an average of home blood pressure measurements (ie, 9/1/23-9/7/23)
- Single dates would indicate an average of in clinic blood pressure measurements from a single encounter or multiple encounters (ie, 8/1/23, 9/8/23)
- 2 dates and times within 24-48 hours would indicate an average blood pressure from 24-hour ambulatory measurements (ie, 9/1/23 at 6pm to 9/2/23 at 6pm)

Several others have previously commented on the usefulness of vital sign results: date and timestamps specifically related to average blood pressure. They note that in order for average blood pressure to be useful it must include all the metadata to provide the context for interpretation.

The AMA requests that ONC promote Vital sign results: date and timestamps and include it in the draft USCDI v5.