The American Medical Association (AMA) appreciates the opportunity to provide public comment in support of the Average Blood Pressure (ABP) Level 2 data element. We have also posted an updated submission form relevant to ABP. The new submission form is posted in the Average Blood Pressure Level 2 data element section of the USCDI v3. The intent of this updated submission form is to enhance ABP information previously provided by the AMA.

High blood pressure impacts more than 120 million people in the US and is the leading modifiable risk factor for preventing death from cardiovascular disease. The accurate measurement and interpretation of blood pressure is vital for diagnosing high blood pressure and assessing effectiveness of treatment.

With over 20 years of clinical evidence and guidelines, proper estimation of an individual’s blood pressure requires multiple blood pressure measurements—in other words, obtaining 2 or more blood pressure readings and then averaging. This is true regardless of whether a patient is in an office setting or measuring their blood pressure at home. Moreover, consistent communication of ABP is critical for addressing hypertension, nationwide.

Including ABP in the USCDI will make it easier for physicians and other health care providers to diagnose high blood pressure and assess blood pressure control more accurately. Physicians need health information technology systems that can store and exchange ABP, separate and apart from individual readings. This can help with documentation and enable physicians to use ABP information in their clinical decision making. The US Centers for Disease Control and Prevention and the National Association of Community Health Centers agree with the AMA and support including a standardized ABP data element within the USCDI v3.

Moreover, during multiple HITAC Interoperability Standards Workgroup meetings, medical professional and patient organizations provided public comment encouraging the inclusion of the ABP Level 2 data element within ONC’s USCDI v3. The AMA agrees with the American Heart Association and the American Hospital Associations in support for including ABP in the USCDI v3.

There is a large body of clinical evidence that shows ABP, as defined in the AMA’s level 2 submission, is a better indicator of blood pressure status than individual readings alone, and that ABP should be used to drive clinical decision making. Below is additional information that summarizes the evidence-based recommendations for ABP use in practice. To be clear, there is clinical evidence and demonstrated patient need to include ABP in USCDI v3.

- Average Blood Pressure (systolic and diastolic) is the average of two or more blood pressure readings in a specified time period or according to a specified algorithm or protocol. During clinical encounters two or more blood pressures should be averaged to more accurately assess a person’s blood pressure status (published in Hypertension March 4, 2019). When patients are self-monitoring blood pressure, the American Heart Association recommends (published in Hypertension March 4, 2019) a minimum of 12 readings collected over at least 3 days should be averaged to more accurately assess a person’s blood pressure status. According to the European Society of Hypertension (published in the Journal of Hypertension, July 2021, PMID: 33710173), “The adverse cardiovascular consequences of hypertension, including events and mortality, largely depend on increased average blood pressure values. Thus, decision-making in hypertension is based on average values of several blood pressure readings obtained in and out of the office.”

The AMA believes there is a lack of understanding and misinterpretation by some Interoperability Standards Workgroup members on the intent of the ABP data element. Members seem to be unaware of the cross-organizational work that has already occurred to support ABP as a data element within USCDI v3. For instance, the content in LOINC today is...
sufficient to support a foundational requirement to document and exchange ABP values. The AMA has worked closely with the Regenstrief Institute team to include supportive information and context in LOINC to facilitate ABP interoperability. Our work also contributed to search terms used by LOINC panels to clarify the intended meaning of ABP codes.

- Furthermore, the AMA is supporting work to standardize and capture the protocol used to calculate an ABP. While this work is ongoing, the clinical community needs ABP in USCDI v3 now to facilitate documentation and clinical value exchange going forward. Including ABP in the USCDI v3 would not preclude the communication of ABP protocols but instead would assist clinicians in calculating accurate ABP values. Laying a groundwork for the consistent communication of needed patient information is a fundamental aspect of the USCDI. Including ABP in the USCDI v3 will enable interoperability of blood pressure information among sites of care, within care teams, and with patients.