Comments on

Strategy on Reducing Regulatory and Administrative Burden Relating to the Use of Health IT and EHRs

Richard L. Wasserman, MD, PhD

The document does not address the root cause of EHR problems, provider burden and lack of interoperability. If these issues are not addressed, this effort will be rearranging the chairs on the deck of the Titanic. The causes and effects of these problems are interwoven but I will respond to each separately.

* EHR problems – The EHR is merely the interface between the provider and a large relational database. One should think of the processes of collection and storage of clinical data as a continuum from the provider to the database. Where the interface (EHR) sits will determine the product usability and provider satisfaction. The capabilities of the EHR are theoretically limitless. That is, skillful code writing should be able to shift the interface close to the clinician making it user-friendly. Writing and maintaining code is, however, costly. Consequently, most EMRs move the interface closer to the database and demand that the clinician accommodate. More than twenty years of EMR implementation have proven that this approach doesn’t work for doctors or patients. It is, however, a profitable approach for the EMR vendors. We are reaping the consequences; burnout, early retirement, job dissatisfaction.
* Provider burden – The problems described above are exacerbated by the role that billing has played in the acquisition and implementation of EMRs. These systems are purchased by hospital and health system managers, not physicians. Their interest is primarily revenue generation. Therefore the EMRs generate visit note designed to support billing and coding. This does not help doctors or patients but it is these executives and office managers who interact with EMR vendors. Not unexpectedly, the output of EMRs is well tuned to support billing even if clinical data is nearly unusable.
* Lack of interoperability – EHRs are much more complex than people outside the healthcare system and even many doctors, realize. EMR development is costly and time consuming. Because each of these systems exists to make money for their owner, there is a natural business to capture and especially to hold market share. The easiest way to keep a doctor, hospital or healthcare system tied to your system is to make it proprietary and severely limit data export. Each of the EMR vendors has a vested interest in keep their system isolated from other systems by creating barriers to data exchange. Interoperability is exactly what EMR vendors don’t want. That is why it hasn’t happened despite more than a decade of effort in that direction.

Solving these problems will require regulating vendors. With this background, I will comment on each of the strategies in the proposal.

1. **Clinical Documentation** – There are only three kinds of patients in the world from the point of view of any clinician: a patient identical to one that has been seen before, a patient almost identical to one that has been seen before and a patient that is completely different. In each case the overwhelming majority of the clinical data that needs to be captured (history, physical exam, review of systems, etc.) is negative or normal. Therefore, excepting the new patient HPI, the most efficient way to record a visit is to document by exception. That is, record an interval history or current physical exam by populating structured data fields with the normal (a single mouse click) and then revising to add the abnormal findings. This approach can prompt appropriate questions or examinations and drastically reduces the number of keystrokes to document the visit. The importance of structured data input to provide information that can be manipulated to be used in other areas of the EHR (test ordering, billing), for quality assessment and for reporting cannot be overemphasized. Documentation by exception facilitates the inclusion of data elements necessary for local, CMS and public health reporting without significantly increasing the data entry requirements (number of clicks) for EMR users. Entering free text should be discouraged and dictation should be prohibited. The appropriate focus on patient centered care should start with data provided by patients directly into the EMR by the patients or their caregivers. This data should populate screens that are easy for the clinician to review and countersign. When done correctly, almost all of the HPI for an established patient visit can been entered by the patient themselves.
2. **Health IT Usability and the User Experience** – EMRs typically do not take advantage of the capabilities of their platform’s operating system to enhance the user experience through the use of font and background style, size and color. In actuality, these factors often work against the clinician because the vendor has assigned screen development to different teams for different modules within the EMR without having a robust style manual to ensure that the look and feel of each module is the same. It is disconcerting to the clinical to have to remember where to find a particular functionality on different screens. Clinical decision support can exist at several levels. For example, if, during set up (or out of the box) diagnosis codes were linked to medications and ancillary studies, the clinician who diagnoses asthma could see a prescription list limited to asthma medications, an office procedure list limited to PFTs, FeNO, skin testing and a few other services rather than the full panoply of possibilities, and appropriate blood tests. Similar efficiency would be realized by linking diagnoses to CPT code lists. Stored data should be readily available behind intuitive icons (e.g. historical pfts, allergy tests, shot history) along with clinical guidelines. Text translations of entered data should prioritize important information and be structured for easy readability. Tools to navigate between screens should be intuitive and easy to find.
3. **EHR Reporting** – If the documentation uses structured data input, then all of the data needed for reporting can be accessed by designed data extraction tools. This would shift the burden of reporting to programmers who could create the needed reports from the data already in the system. This time, effort and money saving approach would be impossible if significant elements of the record were created by free text or dictation.
4. **Public Health Reporting** – Similar to EHR reporting, the use of structured data input and documentation by exception would enable the easy capture of additional information required for reporting without unduly burdening EMR users. The burden would focus on automated data extraction rather than data entry.