

**Testimony as prepared for delivery before the  
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Chairman Alexander, Ranking Member Murray, members of the committee, thank you for holding this hearing and for the opportunity to present testimony.

If one were to read recent news articles, it would be reasonable to think that our health care system is less efficient and less safe because of the transition from paper to electronic records. The truth is, EHRs have revolutionized modern medicine by giving clinicians better tools to document patients' needs, safely prescribe medications, and administer care.

But, as Congress recognized in the 21<sup>st</sup> Century Cures Act, gaps remain that keep EHRs from reaching their full potential. Oversight from this committee can help fill those gaps.

My testimony will focus on three aspects of the recently proposed regulations to implement Cures that could:

- One, enable easier use of health data;
- Two, promote better matching of patient records; and
- Three, improve safety and reduce clinician burden.

**Enhanced Interoperability via Application Programming Interfaces**

First, interoperability requires patients and clinicians to be able to effectively access and extract information from EHRs. To address that challenge, Congress directed ONC to develop new criteria for EHRs to make data available via application programming interfaces, or APIs, which help different systems communicate. APIs are the foundation of the modern internet; they allow travel websites to aggregate airline fares, personal financial applications to pull data from an individuals' accounts, and countless other everyday uses.

For APIs to be effectively used, different systems need to exchange data in the same way. To accomplish this, ONC identified the use of a standard called FHIR for data exchange and provided guidance on how to consistently implement it for better interoperability. As ONC finalizes the rule, Congress should ensure that the agency maintains its commitment to these standard APIs.

### **Ineffective Patient Matching Also Inhibits Widespread Interoperability**

Interoperability also requires health organizations to know that they are communicating about the same person—this is often referred to as patient matching. When data are exchanged, records may not be matched up to half the time.

Pew has identified concrete steps that Congress should encourage ONC to take. Pew's research was cited in a recent GAO report required by Cures.

We found that better standardization of data can improve match rates. For example, Pew-funded research at Indiana University revealed that use of the U.S. Postal Service standard for address would increase match rates by approximately three percent—a significant improvement. One technology developer told us this would help their system match an additional tens of thousands of records per day.

To improve matching, ONC should specify use of the Postal Service standard for address, and include other routinely-collected elements like email address, which is already in half of records but not used for matching.

### **ONC Should Leverage Key Cures Provisions to Improve Usability and Safety**

In Cures, Congress also recognized that EHR usability must be improved. Usability refers to system design as well as how they're customized and used. *Poor usability* can introduce clinician burden and contribute to medical errors.

Pew collaborated with MedStar Health to examine the contribution of EHR usability to medication safety events—such as dosing errors—in three pediatric health care facilities. The research found

that EHR usability contributed to more than a third of the 9,000 events examined. This committee can encourage ONC to make patient safety a priority in implementing Cures.

Congress charged ONC with developing new criteria for EHRs used in pediatric care. While ONC rightly identified 10 priorities for pediatric care, such as the dosing of drugs based on weight, the agency should better focus on safety and usability. For example, ONC should clarify that developers seeking certification for pediatric functions involve pediatricians and pediatric nurses to test the system.

Congress also required ONC to establish an EHR reporting program. The agency should embed safety in the usability aspects of the program as recommended by clinicians, technology professionals, and others.

### **Conclusion**

In conclusion, the bipartisan passage of Cures launched a new era for digital health by providing patients and clinicians with better access to data and reducing medical errors. As the administration continues its implementation, this committee can ensure that Congress' goals are met by:

- supporting secure, standard API access to a wide range of health data;
- encouraging ONC to address patient matching through better data standards; and
- pressing ONC to focus on patient safety throughout implementation of Cures.

Thank you for holding this hearing, and I look forward to answering your questions.