

## Why GAO Did This Study

EHR interoperability is viewed by many health care stakeholders as a necessary step toward improving health care. However, interoperability has remained limited. Although the federal government plays a key role in guiding movement toward interoperability, many of the actions are to be completed by nonfederal stakeholders.

GAO was asked to review the status of efforts by entities other than the federal government to develop infrastructure that could lead to nationwide interoperability of health information. This report describes the (1) characteristics of selected nonfederal initiatives intended to facilitate EHR interoperability, and (2) key challenges related to EHR interoperability and the extent to which selected nonfederal initiatives are addressing these challenges. GAO interviewed representatives from 18 selected nonfederal initiatives that were frequently mentioned by stakeholders GAO interviewed, and reflected a range of approaches. GAO reviewed documents from these initiatives as well as other published research.

## ELECTRONIC HEALTH RECORDS

### Nonfederal Efforts to Help Achieve Health Information Interoperability

## What GAO Found

Representatives from the 18 nonfederal initiatives GAO reviewed described a variety of efforts they are undertaking to achieve or facilitate electronic health record (EHR) interoperability, but most of these initiatives remain works in progress. EHR interoperability is the ability of systems to exchange electronic health information with other systems and process the information without special effort by the user, such as a health care provider. These initiatives' efforts include creating guidance related to health data standards, encouraging the adoption of certain health data standards or policies that facilitate interoperability, and operating networks that connect EHR systems to enable interoperability. The initiatives varied in a number of other ways, including the types of electronic systems the initiatives are working to make interoperable, the cost of their products or services, the geographic area served, patient use of the products or services, and their organizational structures. For example, GAO found that while some initiatives are making their products or services available at no cost, others are charging a fee for their products or services based on the type of entity using the product or service (e.g., individual physician or hospital) or the amount of data exchanged. Similarly, over half of the initiatives were using varying approaches to facilitate patient access to and control over their health information. The majority of the initiatives GAO selected are still in the process of developing, or encouraging others to adopt, their products or services. Most of the initiatives' products or services were not widely available at the time of GAO's review, but initiative representatives anticipated greater availability of their products or services in the next 2 years.

Stakeholders and initiative representatives GAO interviewed described five key challenges to achieving EHR interoperability, which are consistent with challenges described in past GAO work. Specifically, the challenges they described are (1) insufficiencies in health data standards, (2) variation in state privacy rules, (3) accurately matching patients' health records, (4) costs associated with interoperability, and (5) the need for governance and trust among entities, such as agreements to facilitate the sharing of information among all participants in an initiative. Representatives from the 18 initiatives GAO reviewed said they are working to address these key challenges using different approaches. Each key challenge is in the process of being addressed by some initiatives. To move interoperability forward, initiative representatives noted, among other issues, that providers need to see an EHR system as a valuable tool for improving clinical care.

The Department of Health and Human Services provided technical comments on a draft of this report, which GAO incorporated as appropriate.