

Appendix 1 (as supplied by the authors): Definitions, types and applications of Electronic Health Records (EHRs)

<i>EHR type</i>	<i>Definition</i>
Electronic Health Record (EHR)	EHRs are electronic platforms that contain health-related data collected during medical care in practices, clinics and other medical settings from various sources, connected to form a network of patient clinical data. EHRs can also incorporate software that allow straightforward physician ordering practice (CPOEs), even including safety features; or that guide them through clinical decision making with up-to-date guidelines (CDS).
Electronic Medical Record (EMR)	EMR are routinely collected data sources that contain standard medical and clinical data gathered during medical care in an individual location of a practice, clinic or other medical setting. When the data is shared among different locations and units it becomes a network and it is considered an EHR (i.e. a primary care practice with electronic chart system that cannot be accessed by any other entity is an EMR, a hospital system where laboratory data, affiliated clinic charts, etc., are all accessed under one platform, is an EHR).
<i>EHR applications</i>	<i>Definition</i>
Personal Health Records (PHR)	PHRs are electronic platforms (often online interfaces such as web pages) that securely store patient's health information and allow patients to actively engage in their own health. Often, they can add information to a PHR, can exchange it with health providers, see test results, make appointments, or receive educational information. We consider PHR only those platforms that are tethered to an EHR, where information can be exchanged in both directions (otherwise if the patient is simply adding data but not viewing any of his/her data, we consider it ePRO).
Clinical Decision Support System (CDSS)	A CDSS is an application that supports health providers in performing health care by mining data of an EHR or EMR and providing guideline specific recommendations. CDSS systems can often identify errors or missing data and display alerts or messages through the EHR.
Computerized Physician Order Entry (CPOE) system	CPOE systems are electronic ordering technology where physician orders can be entered and processed in a computerized way, often mimicking the workflow found in clinical settings. CPOEs can be more advanced and identify ordering mistakes, display preferred treatments by individual patient EHR query, or even set up blocks with medication interaction orders.
Telehealth	Telehealth is the use of telecommunication technologies (telemonitoring) to improve the provision of care. This allows for care to be provided at a distance and therefore to maintain clinical contact with patients at home without requiring the same amount of resources to be dispensed. Examples of telehealth are blood glucose monitoring machines tethered to an EHR that integrate blood glucose levels taken by the patient at home into the EHR automatically (and can send an alert in the EHR interface to the clinician if the values are out of a predefined range and action must be taken); and increasingly mobile health data collected by wearable devices.
Electronic Patient Reported Outcomes (ePRO)	ePROs are health related information recorded by the patient themselves in electronic form, often through a web page or application. While ePROs have often been utilized in clinical trials, we also consider ePROs any data that have been collected by the patients themselves and tethered to an EHR or PHR. An example would be a patient pain diary, in which a pain score and information are inputted daily on a webpage or via a smartphone app and these data are added to an EHR; where the clinician can monitor it and consult it during a visit.
These definitions are our own working definitions used for this project and have been adapted from HealthIT.gov (10) and CMS.gov (12).	