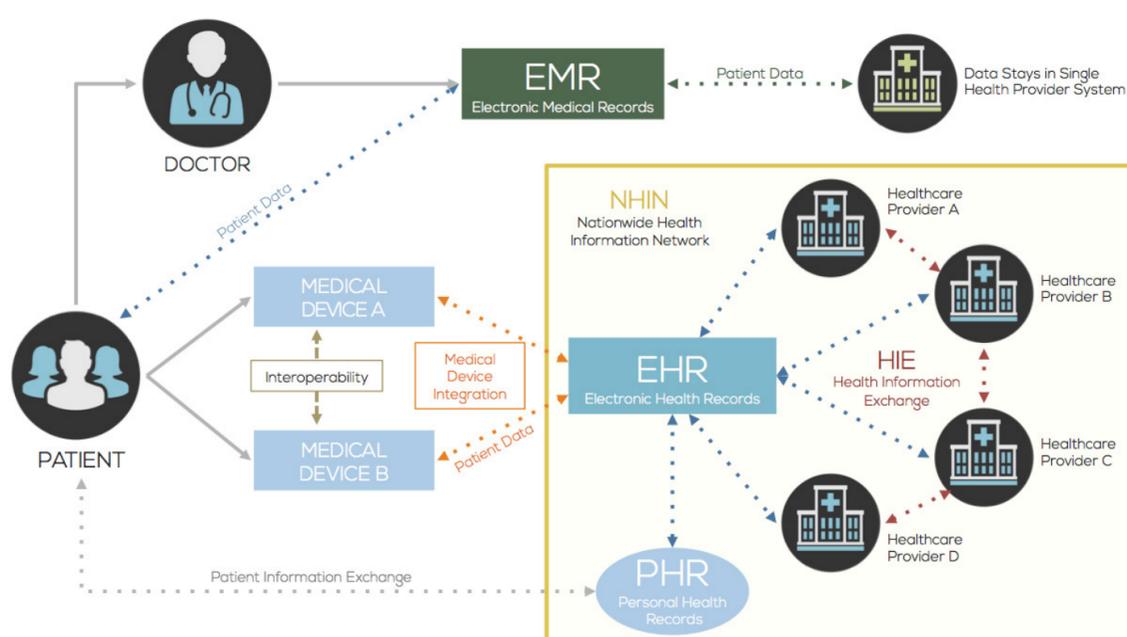


## DECIPHERING HEALTH IT

How can healthcare companies improve quality of care, and also retain a competitive edge in the evolving world of health information technology (health IT)? The answer lies in understanding the many pieces that comprise health IT, and identifying the systems required to support the seamless flow of patient information from provider-to-provider, and from provider-to-patient.

The rising need for medical device interoperability is one of many factors pressuring healthcare providers and institutions to adopt cloud-based health IT systems to meet quality care needs. Electronic medical devices track patient data that is manually or automatically logged in electronic health records (EHRs) through a process known as medical device integration. EHRs allow patient data to be shared from provider-to-provider across health information exchanges in the nationwide health information network. Patients can access health information recorded by their physicians, doctors or electronic medical devices through what is known as a personal health record (PHR).



## SPEAKING THE LANGUAGE OF HEALTH IT

**EMR:** An Electronic Medical Record contains the medical and treatment history of a patient from one practice.

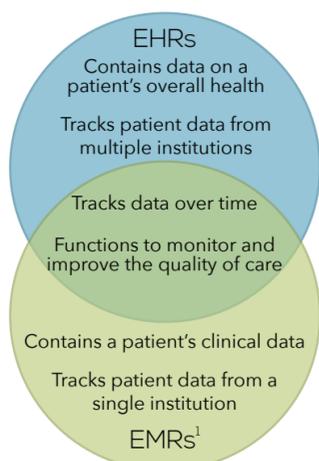
**PHR:** A Personal Health Record includes information from a variety of sources and is managed by the patient.

**EHR:** An Electronic Health Record contains information about a patient's entire medical and treatment history, and securely flows from provider-to-provider.

**HIE:** A Health Information Exchange refers to the electronic movement of EHRs from provider-to-provider.

**NHIN:** The Nationwide Health Information Network refers to the standards and policies that serve as the foundation for the exchange of patient health information.

**INTEROPERABILITY:** The ability of devices and systems to exchange and interpret data.



## FEDERAL EHR INCENTIVE PROGRAMS



The HITECH Act of 2009 provided the Department of Health and Human Services with the ability to create programs aimed at improving health care quality through the promotion of health IT. One of these programs is the Medicare and Medicaid EHR Incentive Program, which provides incentive payments to eligible healthcare institutions and professionals as they adopt, implement or upgrade EHR systems.

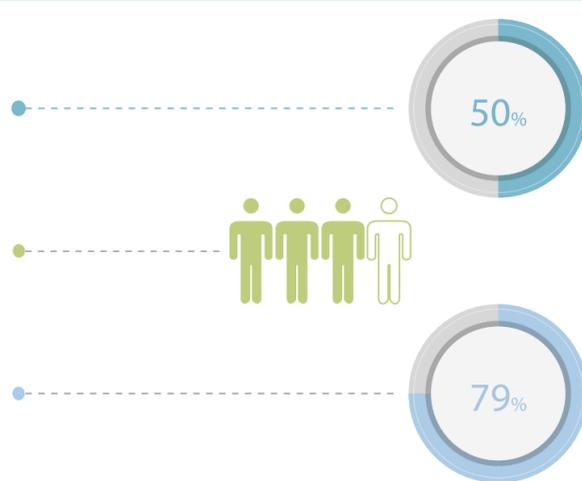
Eligible professionals can qualify for EHR incentive payments totaling as much as \$44,000 through the Medicare EHR incentive Program, or as much as \$63,750 through the Medicaid EHR incentive program. Eligible hospitals, including critical access, can qualify for EHR incentive payments totalling \$2 million or more.<sup>2</sup>

## COSTS, BENEFITS, & CURRENT ADOPTION RATE OF EHR SYSTEMS

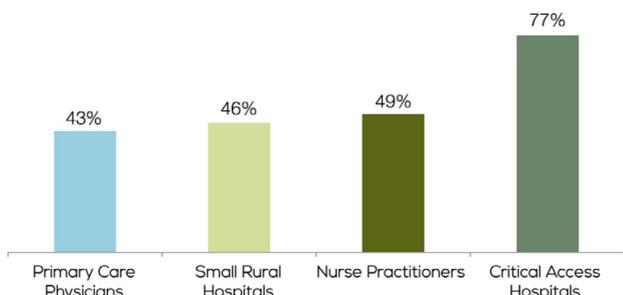
**50%** of critical access hospitals reported EHR implementation cost as the number one financial challenge for the implementation of health IT EHR systems.<sup>3</sup>

**3 out of 4** hospitals have adopted a basic EHR system, according to a 2014 study by the Office of the National Coordinator for Health Information Technology (ONC). This adoption rate represents a 27% increase from 2013 and nearly a 67% increase since 2008.<sup>4</sup>

**79%** of healthcare providers report that having an EHR system enables their practice to function more efficiently. Large hospitals can experience cost savings from \$37M to \$59M over a five year period.<sup>5</sup>



## CHALLENGES OF EHR IMPLEMENTATION



## SAFE AND EFFECTIVE IT INFRASTRUCTURES

Since 2009, The ONC has created multiple programs to address health IT infrastructure implementation challenges. The Regional Extension Center program has partnered with 43 percent of all primary care physicians, 49 percent of all nurse practitioners, 77 percent of all critical access hospitals, and 46 percent of small rural hospitals to offer support and resources in health IT infrastructure implementation.<sup>6</sup>

## CYBER SECURITY

Research demonstrates the increased usage of wearable technology and the digitization of medical records could result in nearly \$6 billion in annual healthcare data breach costs. 72 percent of healthcare institutions claim they are somewhat confident (32 percent) or not confident (40 percent) in the security and privacy of patient records on the health information exchange. Per capita, the average data breach in the healthcare sector costs \$316, nearly 57 percent more than in any other sector (\$201 average).<sup>7,8</sup>



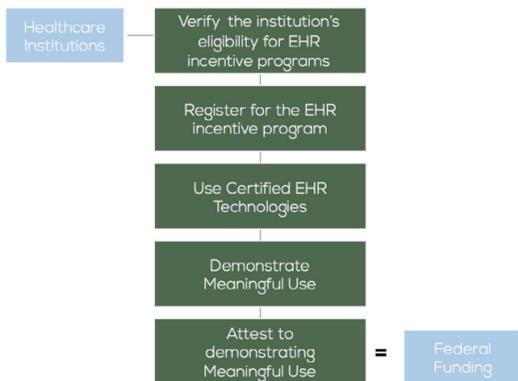
## A COMPETENT WORKFORCE

The accessibility of a competent workforce that can oversee the implementation and sustainability of Healthcare IT systems is crucial for operational efficiency and standard in care improvement initiatives.



1 in 3 critical access hospitals reports workflow changes are the leading workforce and staffing challenge. Since 2009, the ONC has granted \$10 million to higher education institutions in an effort to incite curriculums geared toward promoting healthcare IT professions.<sup>3,9</sup>

## WHAT DOES THIS MEAN FOR HEALTHCARE PROFESSIONALS?

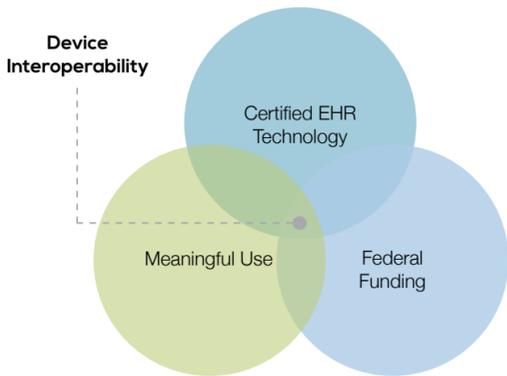


As aforementioned, nearly 1 in every 2 critical access hospitals reports EHR implementation cost is the number one barrier to adoption of an EHR solution. However, eligible hospitals can receive up to \$2 million in federal funding to meet certain criteria to receive federal funding. Hospitals must meet certain criteria to receive federal funding, one of which is the use of certified EHR technologies. Certified EHR technologies are defined as those technologies that meet the criteria of Meaningful Use.<sup>10</sup>

A component of the Meaningful Use definition is the use of technology that is connected in a way that facilitates the exchange of health information. In other words, certified EHR technology that meets Meaningful Use criteria are those devices and systems that are interoperable.<sup>11</sup>

The ONC is carrying out its mission of using information technology to improve the quality of care by supporting interoperability between medical devices and certified health IT products and systems. Healthcare device manufacturers can gain a competitive edge by aligning their production processes and product outcomes with the vision of the ONC.<sup>12</sup>

When healthcare device manufacturers create medical devices that support an interoperable exchange of data from device-to-device and seek-to those device manufacturers. When healthcare institutions - hospitals or family practices - purchase from healthcare device manufacturers producing certified EHR technologies, these institutions are simultaneously increasing their odds of becoming recognized as eligible hospitals or eligible professionals. Eligible institutions are those that can receive the funding. Eligible institutions are those that can receive the funding. Eligible institutions are those that can receive the funding and ultimately improve patient quality of care.<sup>13</sup>



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