The Office of the National Coordinator for
Health Information Technology
HEALTH IT PLAYBOOK

Section 1
Electronic Health Records

In this section

Learn how to:

- **Understand EHR contracts and products (/playbook/electronic-health-records/#section-1-1)**
- **Select an EHR (/playbook/electronic-health-records/#section-1-2)** that's a good fit for your practice
- Plan for **adoption and implementation of your EHR (/playbook/electronic-health-records/#section-1-3)**
- Apply lessons learned so you can **optimize workflow (/playbook/electronic-health-records/#section-1-4)**
- **Migrate your data (/playbook/electronic-health-records/#section-1-5)** from the old system to the new system

Which phase of the EHR adoption process are you currently in?

Planning & Selection (/playbook/electronic-health-records/#Plan-Selection-summary)

Adoption & Implementation (/playbook/electronic-health-records/#Adopt-Implement-summary)

Optimization & Workflow Redesign (/playbook/electronic-health-records/#Optimization-Redesign-summary)

EHR Replacement & Data Migration (/playbook/electronic-health-records/#EHR-Replacement-summary)

An electronic health record (EHR) is software that's used to securely document, store, retrieve, share, and analyze information about individual patient care. EHRs are hosted on computers either locally (in the practice office) or remotely. Remote EHR systems are described as "cloud-based" or "internet-based."

With over 75% of office-based clinicians and 96% of hospitals in the United States using an EHR system, nearly all practices have an immediate, practical interest in improving the efficiency and use of their EHRs. Some practices may be considering a replacement acquisition of an EHR to better care for their patients and reduce the burden on clinicians who need to use the EHR.

As part of the **21st Century Cures Act (https://www.congress.gov/bill/114th-congress/house-bill/34)**, ONC is helping healthcare practices improve the quality of care for patients, which includes optimizing EHRs and increasing data interoperability.

This Playbook is a source for clinicians and practice administrators who are adopting, optimizing, upgrading, or changing an EHR system. The tools you'll find here are intended to make your EHR experience more efficient, less burdensome, and more effective.

The EHR journey

Most clinicians agree that implementing an EHR is an ongoing journey. There is no single destination or end, as there's always the opportunity to optimize workflows or improve the use of data. This section provides resources to guide you through the many stops along the road to EHR adoption, implementation, and improvement. These include:

- Planning
- Selecting a vendor
- Contracting with a vendor
- Implementing and adopting an EHR
- Using your EHR
- Optimizing or replacing your EHR

After you spend time using and getting familiar with your EHR, it's time to think about how you can use your workflows to improve and optimize the way you use your EHR. This part of the ongoing EHR journey starts each time you adopt additional health IT solutions, such as:

- Adding a patient portal
- Connecting to a health information exchange
- Participating in value-based care or new payment models

The information in this Playbook reflects lessons learned from years of implementation experience across a wide variety of clinical settings. Navigate the Playbook and select the tools appropriate for your EHR adoption journey.

(1.1) Understand EHR contracts

EHR Contracts Untangled: Selecting Wisely, Negotiating Terms, and Understanding the Fine Print

Selecting an EHR and then negotiating its purchase is a challenge for any healthcare clinician. ONC's downloadable **electronic health records contract guide (https://www.healthit.gov/sites/default/files/playbook/pdf/ehr-contract-guide.pdf)** can help you, your business managers, and your advisors select the right technologies for your practice, and then navigate the acquisition process. It will also help you negotiate contract terms to minimize potential problems and to build a stronger relationship with your health IT vendor.

Upgrading your EHR? The guide can also help you upgrade your current system to meet new certification requirements or to integrate new modules, capabilities, and services.

The EHR contract guide in 2 parts

Part A highlights critical planning steps to help you understand the EHR acquisition process. A thorough understanding will help you communicate your specific requirements to potential vendors. Topics include:

- Types of EHR products and service models
- Researching and comparing EHR products and vendors
- Identifying and prioritizing your EHR's technical and operational requirements
- Due diligence — finding the best EHR for your needs
- Understanding certification and regulatory requirements
- Procurement strategy, planning, and resourcing

Part B focuses on negotiating and contracting, and it contains strategies and recommendations to negotiate best-practice EHR contract terms. The guide also provides example language to illustrate how you might address legal issues in a contract. Topics include:

- EHR safety and security
- How to ensure system performance meets expectations
- How to manage and protect EHR data
- Interoperability and integration
- How to manage risk and liability
- Vendor-dispute resolution
- How to manage EHR transition issues

Disclaimer

This document should not be construed as legal advice and does not address all possible legal and other issues that may arise with the acquisition of an EHR. Because every healthcare clinician organization is unique with respect to its operations, priorities, resources and IT infrastructure, your purchase, implementation and use of an EHR will present issues specific to your practice or organization that cannot be contemplated or addressed in this guide. We strongly encourage you to obtain the advice of an experienced attorney whenever you are proposing to enter into a legally binding agreement for health IT products or services.

Electronic Health Records Contract Guide

Overview

Provides critical planning and negotiation steps to help you understand and communicate your EHR requirements; includes examples of contract language and technical terms
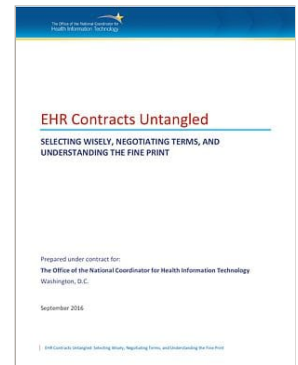
Who it's for

Healthcare clinicians, business and office managers

When it's used

To select an EHR and to negotiate the purchase

Download Electronic Health Records Contract Guide [PDF – 798 KB] (https://www.healthit.gov/sites/default/files/playbook/pdf/ehr-contract-guide.pdf)

(https://www.healthit.gov/sites contract-guide.pdf)

(1.2) Select an EHR

The decision to move to an electronic health record (EHR) system requires a lot of time and effort. Before you begin your implementation project, it's important to understand the benefits that an EHR brings to your practice. It's also important to set realistic expectations. Common roadblocks to successful adoption include:

- Difficulty understanding your organization's information needs
- Uncertain costs
- The intense effort required to identify and implement a system

How can you overcome implementation roadblocks? Gather as many of these success factors as possible:

- Readiness
- Eager personnel
- Someone to champion the cause
- Stakeholders who perceive EHRs as useful
- Teamwork

Remember: Your planning must address both the initial and the ongoing effects that EHR implementation will have on your clinical practice.

Cloud-based EHRs

Cloud-computing platforms provide scalable, on-demand access to IT services. The cloud can help you rapidly provision and launch an EHR system while minimizing management effort and cost. However, it's important to thoroughly understand the benefits and challenges associated with a cloud-based EHR.

Reduce your risk!

Use legal contracts, appropriate service level agreements with your cloud clinician, and on-going monitoring

Common benefits:

- Reduces upfront hardware and software costs
- Reduces ongoing maintenance costs
- Lets you start small and increase IT allocations as needed
- Provides higher levels of IT service availability than in-house IT services
- Reduces run-time failures

Common challenges:

- Data security — you and your cloud clinician share responsibility
- You have a lower level of data access and control compared to an on-site EHR system

Locally hosted EHRs

With locally hosted EHRs, your EHR software and data are housed on server computers at your location.

Common benefits:

- If your practice doesn't already have reliable, high-speed internet access, a locally hosted option will require less investment in internet connection upgrades
- You won't have to trust an outside organization with the security of your patients' data

Common challenges:

- Making sure the servers are physically secure is your responsibility
- You'll be in charge of performing regular data backups

Choosing an EHR system takes planning and a systematic decision-making approach. Understanding your practice's needs and the capabilities of the various EHR systems on the market will help you find a system that meets your needs.

Choosing Electronic Health Record (EHR) Software

EHR systems aren't one-size-fits-all. To choose the right EHR software, clinicians and staff need to consider their practice's specific needs and resources. Use this 6-step module to help you decide which EHR software and vendor is best for your practice.

Go to the AMA STEPS Forward™ Electronic Health Record (EHR) Software Selection and Purchase module (https://www.stepsforward.org/modules/ehr-software-vendor-selection)

Learn more about the basics of EHR systems. The following resources are designed to help you select and test EHRs. The tools will help you:

- Assess your readiness
- Create a leadership team
- Set goals to assist your decision-making process
- Compare and select vendors
- Choose the right system for your practice

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EHR Demonstration Scenario, Evaluation, and Vendor Questions

Overview
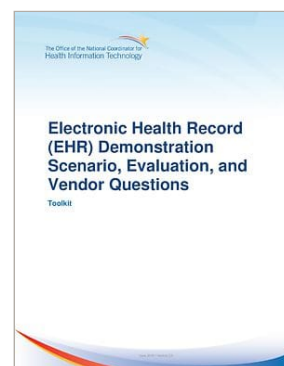Provides established scenarios to help clinicians and health IT implementers understand vendor capabilities

Who it's for
Clinicians and health IT implementers

When it's used
To select, or upgrade to, a certified EHR vendor

Download EHR Demonstration Scenario, Evaluation, and Vendor Questions [PDF – 602 KB] (https://www.healthit.gov/sites/default/files/playbook/pdf/ehr-demo.pdf)

(https://www.healthit.gov/sites demo.pdf)

EHR Selection Education

Overview
Provides information about choosing an EHR system; defines common IT terms and discusses hardware and software considerations

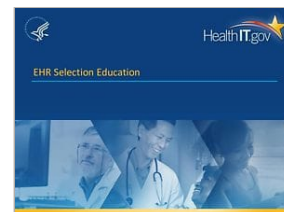**Who it's for**
Clinicians and health IT implementers

When it's used
To help you select or upgrade an EHR

Download EHR Selection Education [PDF – 742 KB] (https://www.healthit.gov/sites/default/files/playbook/pdf/ehr-selection-education.pdf)

(https://www.healthit.gov/sites selection-education.pdf)

EHR Selection Tool

Overview
Helps clinicians and health IT implementers select EHR functionalities from 10 major categories. Web-based tools include an interactive guide, case studies, definitions, and an EHR-selection matrix

Who it's for
Clinicians and health IT implementers

When it's used
To plan, select, and implement an EHR in long-term and post-acute care settings

Go to the LeadingAge EHR Selection Tool for Long-Term and Post-Acute Care Settings [↗]
(https://www.leadingage.org/ehr-selection-tool)

EHR System Testing Plan

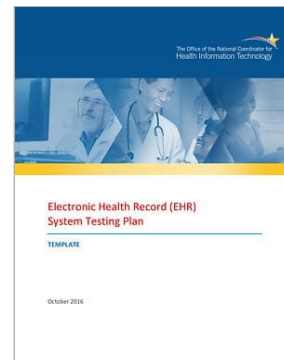**Overview**
Helps you track various EHR performance tests

Who it's for
Clinicians and health IT implementers

When it's used
To track various EHR vendor systems during the selection process and to learn how each one works

Download EHR System Testing Plan [PDF – 533 KB]
(https://www.healthit.gov/sites/default/files/playbook/pdf/ehr-system-testing-plan.pdf)

(https://www.healthit.gov/sites/...system-testing-plan.pdf)

Learn more about the basics of EHR systems. The following resources will help you compare vendors and pricing.

Vendor Comparison Tool

Overview

Suggests questions to ask EHR vendors during demos — including how their systems meet Meaningful Use objectives
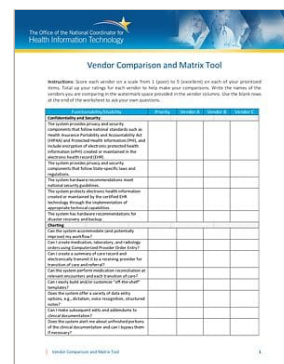
Who it's for

Clinicians, practice managers, and health IT implementers

When it's used

To research and select an EHR system

Download Vendor Comparison Tool [PDF – 336 KB] (https://www.healthit.gov/sites/default/files/playbook/pdf/vendor-comparison-tool.pdf)

(https://www.healthit.gov/site: comparison-tool.pdf)

Vendor Pricing Template

Overview

Defines line-item costs for EHR software, implementation, training, and support — for both on-site licensing models and cloud-based platforms. A helpful tool that provides a framework for comparing costs among prospective vendors

Who it's for

EHR implementation leads, practice managers, and finance leads

When it's used

To research, select, and contract EHRs

(https://www.healthit.gov/site: pricing-template.xlsx)

Download Vendor Pricing Template [XLSX - 102 KB] (https://www.healthit.gov/sites/default/files/playbook/pdf/vendor-pricing-template.xlsx)

(1.3) Adopt and implement your EHR

A successful EHR adoption consists of 2 steps: pre-implementation and implementation. Following these guidelines will help you get the most out of your system.

During the pre-implementation phase, you:

- Establish a governance process and a project plan
- Communicate with and involve staff and patients

- Redesign workflows
- Provide education and training

Establishing a governance process means creating guidance and a stewardship plan focused on data integrity. This helps ensure that your EHR system is implemented in an effective and sustainable manner and that your practice manages data appropriately.

During the implementation phase, you:

- Tailor the system to meet practice requirements
- Establish a change-management process
- Determine how to backload patient medical histories
- Account for time your staff needs to learn and use the system
- Support the system
- Encourage your staff along the way

Electronic Health Record (EHR) Implementation

Successfully implementing an EHR system requires a multi-disciplinary approach — from ensuring privacy and security compliance to rethinking practice workflows and training staff. This 9-step module can help your practice plan for a smooth transition from paper records to an EHR system.

Go to the AMA STEPS Forward™ EHR implementation module ↗ **(https://www.stepsforward.org/modules/ehr-implementation)**

The downloadable guides in this section discuss how to implement an EHR, and they include supporting activities such as training, mock go-lives, and system testing.

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Change Management in EHR Implementation

Overview
Explains basic change-management principles and discusses the importance of managing change effectively during EHR implementation

Who it's for
Clinicians and health IT implementers

When it's used

To guide your process before and during EHR implementation

Download Change Management in EHR Implementation [PDF – 597 KB] (https://www.healthit.gov/sites/default/files/playbook/pdf/change-management-ehr-implemention.pdf)

(https://www.healthit.gov/sites management-ehr-implemention.pdf)

Chart Migration and Scanning Checklist

Overview

Provides guidelines on what paper-record information you need to import into an EHR system
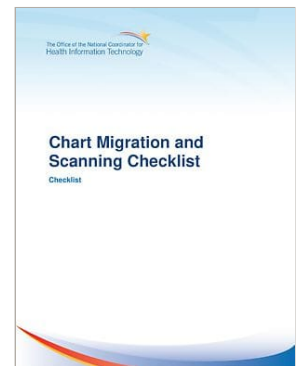
Who it's for

EHR implementation lead, practice manager, and clinical lead

When it's used

To plan EHR implementation; to conduct a paper-to-EHR migration

Download Chart Migration and Scanning Checklist [PDF – 597 KB] (https://www.healthit.gov/sites/default/files/playbook/pdf/chart-migration-scan-checklist.pdf)

(https://www.healthit.gov/sites migration-scan-checklist.pdf)

Creating a Leadership Team for Successful EHR Implementation

Overview

Helps you create a leadership team and describes important roles and responsibilities; includes a template to use during your process
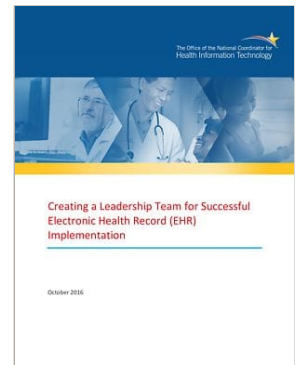
Who it's for

Clinicians and health IT implementers

When it's used

To plan for implementing an EHR system

Download Creating a Leadership Team for Successful EHR Implementation [PDF – 487 KB] (https://www.healthit.gov/sites/default/files/playbook/pdf/creating-leadership-team-for-successful-ehr-implementation.pdf)

(https://www.healthit.gov/site
leadership-team-for-
successful-ehr-
implementation.pdf)

Defining Goals and Objectives for EHR Implementation

Overview
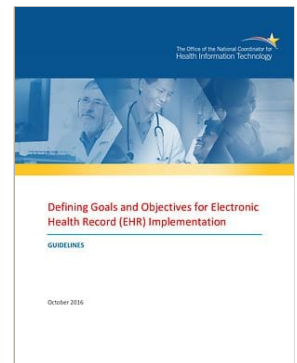Helps you establish realistic, measurable goals for your EHR implementation

Who it's for
Clinicians and health IT implementers

When it's used
To plan for and implement an EHR system

Download Defining Goals and Objectives for EHR Implementation [PDF – 628 KB] (https://www.healthit.gov/sites/default/files/playbook/pdf/defining-goals-and-objectives-for-ehr-implementation.pdf)

(https://www.healthit.gov/site
goals-and-objectives-for-
ehr-implementation.pdf)

(1.4) Optimize how you use your EHR

It's time to evaluate the implementation process and its effect on your practice. This is where you learn what worked — and what didn't — so you can either avoid repeating mistakes or follow a similar path to success.

Issues to consider include:

- Did your implementation process go smoothly?
- Did everyone in your practice participate and feel involved?

- Did events go as planned?
- What were the implementation's strengths and weaknesses?
- How did the implementation affect workflow — the steps that you and your staff take to complete tasks?
- Can you identify opportunities for improvement?

You've met a significant milestone on your electronic health record (EHR) journey. A thorough evaluation provides a solid foundation, and it will help you continue to improve the value of your EHR system.

Plan for ongoing improvements

"Usability" refers to how easy, effective, and efficient a piece of software is to use. The usability of your EHR depends not only on how it is designed but also on how it's implemented. Once you have your EHR up and running, it's helpful to:

- Take a continuous optimization approach — meaning the system can always be improved
- Establish a process to gather feedback from clinicians, patients, and other EHR users
- Make improvements based on user feedback and best practices

The tools and resources in this section will help improve and optimize EHR usability and practice workflow, and drive clinical transformation.

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Optimizing Electronic Health Records (EHRs)

Implementing EHRs can seem like a daunting task — and teamwork is key to success. Leadership, systems, and individuals can all help improve workflows. Complete this module to learn the 8 steps for optimizing the use of EHRs in your practice.

Go to the AMA STEPS Forward™ Electronic Health Record Optimization Strategies for Thriving module ⬀ **(https://edhub.ama-assn.org/steps-forward/module/2702761)**

ONC Change Package for Improving EHR Usability

Overview
A toolkit with strategies, resources and case studies to help mitigate EHR usability issues while optimizing the use of health IT

Who it's for
Health IT implementers

When it's used

Following an EHR implementation to improve the usability of EHRs across healthcare IT systems including hospitals, ambulatory, and small practices

Download the ONC Change Package for Improving EHR Usability [PDF – 2.4 MB] (https://www.healthit.gov/sites/default/files/playbook/pdf/usability-change-plan.pdf)

Improving Care Coordination Using Consolidated Clinical Document Architecture (C-CDA) Scorecard

Overview

Lets you test the quality and clarity of information in clinical documents you receive during transition of care to improve care coordination. Describes an industry standard that EHRs use to exchange information among clinicians and patients

Who it's for

Eligible professionals, eligible hospitals, and critical access hospitals (CAH)

When it's used

To receive an electronic summary of care from a hospital or a referring clinician during transition of care

Visit the Improving Care Coordination Using Consolidated Clinical Document Architecture (C-CDA) Scorecard website ⬈ (https://sitenv.org/ccda-smart-scorecard/)

The resources in this section will help improve and optimize EHR usability, workflow, and drive clinical transformation.

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Learning Guide: Driving Clinical Transformation in a Practice Setting with Health IT

Overview

Shows how you can use health IT to drive clinical transformation in your practice

Who it's for

Individual practices, communities, and learning-collaborative organizers that want to use health IT to improve practice performance and care management

When it's used

To teach stakeholders about the ways health IT can improve practice performance and care management

(https://www.healthit.gov/sites

Download Learning Guide: Driving Clinical Transformation in a Practice Setting with Health IT [PDF – 382 KB] (https://www.healthit.gov/sites/default/files/playbook/pdf/learning-guide-executive-summary-clinical-transformation.pdf)

Workflow Assessment for Health IT Toolkit

Overview
Helps you plan, design, implement, and use health IT in ambulatory care

Who it's for
Clinicians, IT support staff, and practice managers

When it's used
To find tips and guidance that address clinical and administrative workflow concerns

Visit the Workflow Assessment for Health IT Toolkit website (https://healthit.ahrq.gov/health-it-tools-and-resources/workflow-assessment-health-it-toolkit)

Workflow Redesign Templates for EHR Implementation

Overview
Provides guidelines for workflow process mapping to help you optimize EHR efficiency
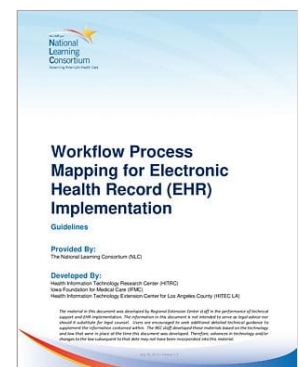
Who it's for
Clinicians, practice managers, and clinic staff

When it's used
To plan your EHR implementation and throughout the entire process

Download Workflow Redesign Templates for EHR Implementation [PDF – 569 KB] (https://www.healthit.gov/sites/default/files/playbook/pdf/workflow-process-mapping-for-electronic-health-record-ehr-implementation.pdf)

(https://www.healthit.gov/sites/process-mapping-for-electronic-health-record-ehr-implementation.pdf)

(1.5) Migrate your data

Migrating from paper-based documentation to an electronic health record (EHR) system requires careful planning, and so does migrating from one electronic environment to another. Reasons you may want to replace your EHR include:

- Outgrowing your first EHR's capabilities
- Expanding your practice
- Joining another practice

Careful data-migration planning ensures that your new EHR can both integrate and access historical data.

EHR Contract Guide Chapter 9: Transition Issues: Switching EHRs

Download and follow the steps provided in Chapter 9 of the EHR Contract Guide to help you migrate data from your current EHR to your new EHR system.

Overview
Provides specific guidance for transitioning to a new EHR vendor, including:

- Length of support
- Data portability
- Software license
- Transition support services
- Data transfer and conversion
- Contract language and terms

(https://www.healthit.gov/sites contract-guide-chapter-9.pdf)

Who it's for
Clinicians, business and office managers

When it's used
To transition to a new EHR system

Download EHR Contract Guide Chapter 9: Transition Issues: Switching EHRs [PDF – 117 KB] (https://www.healthit.gov/sites/default/files/playbook/pdf/ehr-contract-guide-chapter-9.pdf)

Have a tool or resource to make this Playbook even better? **Share your feedback with us. (/playbook/feedback)**

✓ Section 1 Recap

Start the health IT journey by adopting electronic health records.

- ☐ Understand EHR contracts
- ☐ Select an EHR
- ☐ Adopt and implement your EHR
- ☐ Optimize your workflow
- ☐ Migrate your data

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