Sharing Clinical Records: DSM & CDE

Jennifer Marsala
2023 Users' Conference
Burlington, VT

Learning Objectives

- Understand how C-CDA documents support the exchange of clinical information

- Explain how Direct Secure Messaging (DSM) and Clinical Document Exchange (CDE)
  - can be used to send and receive clinical records
  - are different yet complementary solutions

- Identify the steps for getting your practice started with DSM and CDE

PCC
Pediatric EHR Solutions

What is Interoperability?

In health care today, interoperability is the ability of different computer and software systems to communicate, exchange data, and use the data that has been exchanged.

Direct Secure Messaging and Clinical Document Exchange
are two ways that PCC EHR is interoperable.

PCC EHR
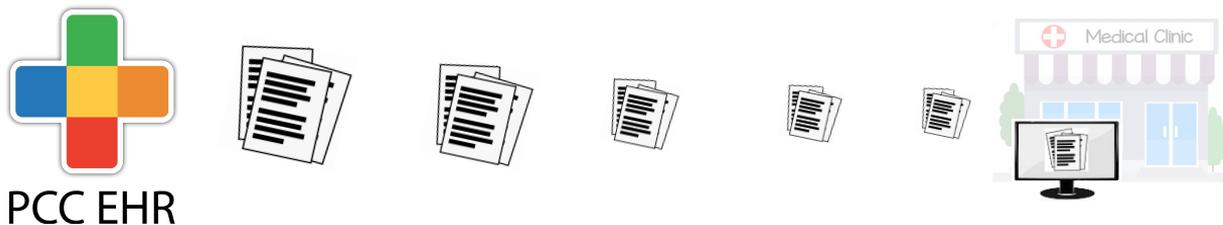
What is a C-CDA?

Clinical Document Architecture (CDA)

This is a standard.

Consolidated-Clinical Document Architecture (C-CDA)

This is an implementation guide that uses the CDA standard to specify a collection of clinical documents.

There are 12 types of C-CDA documents:

Care Plan	Operative Note
Consultation Note	Procedure Note
✱ Continuity of Care	Progress Note
Diagnostic Imaging Report	Referral Note
Discharge Summary	Transfer Summary
History & Physical	Unstructured Document

✱ Generated by PCC EHR

C-CDA Documents contain sections.

- Sections are like building blocks.

- There are 70 sections!
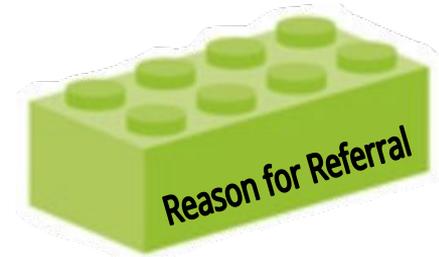
Examples

Medications	Vital Signs	Implants
Immunizations	Encounters	Social History
Family History	Nutrition	Problem
Procedures	Allergies & Intolerances	Review of Systems

Plan of Treatment

Reason for Referral

For each document type, some sections are required and some are optional.

Care Plan

Required	Optional
Goals	Health Status Eval/Outcomes
Health Concerns	Interventions

C-CDAs can include additional sections, even above and beyond the sections defined as optional.

C-CDA Documents

For each document type, some sections are required and some are optional.

Continuity of Care

Required

Allergies & Intolerances	Results
Medications	Social History
Problem	Vital Signs
Procedures	

Optional

Advance Directive	Medical Equipment
Encounters	Mental Status
Family History	Nutrition
Functional Status	Payers
Immunizations	Plan of Treatment

PCC
Pediatric EHR Solutions

Continuity of Care Document (CCD)

In PCC EHR, we also refer to this document as the **Summary of Care Record**.

C-CDA Documents and Interoperability

C-CDAs combine human-readable text with machine-processable data.

The data you share is only as good as the data you put into the system.

- Enter the data

- Be accurate

- Be complete

- Don't use discrete data fields creatively

Direct Secure Messaging is...
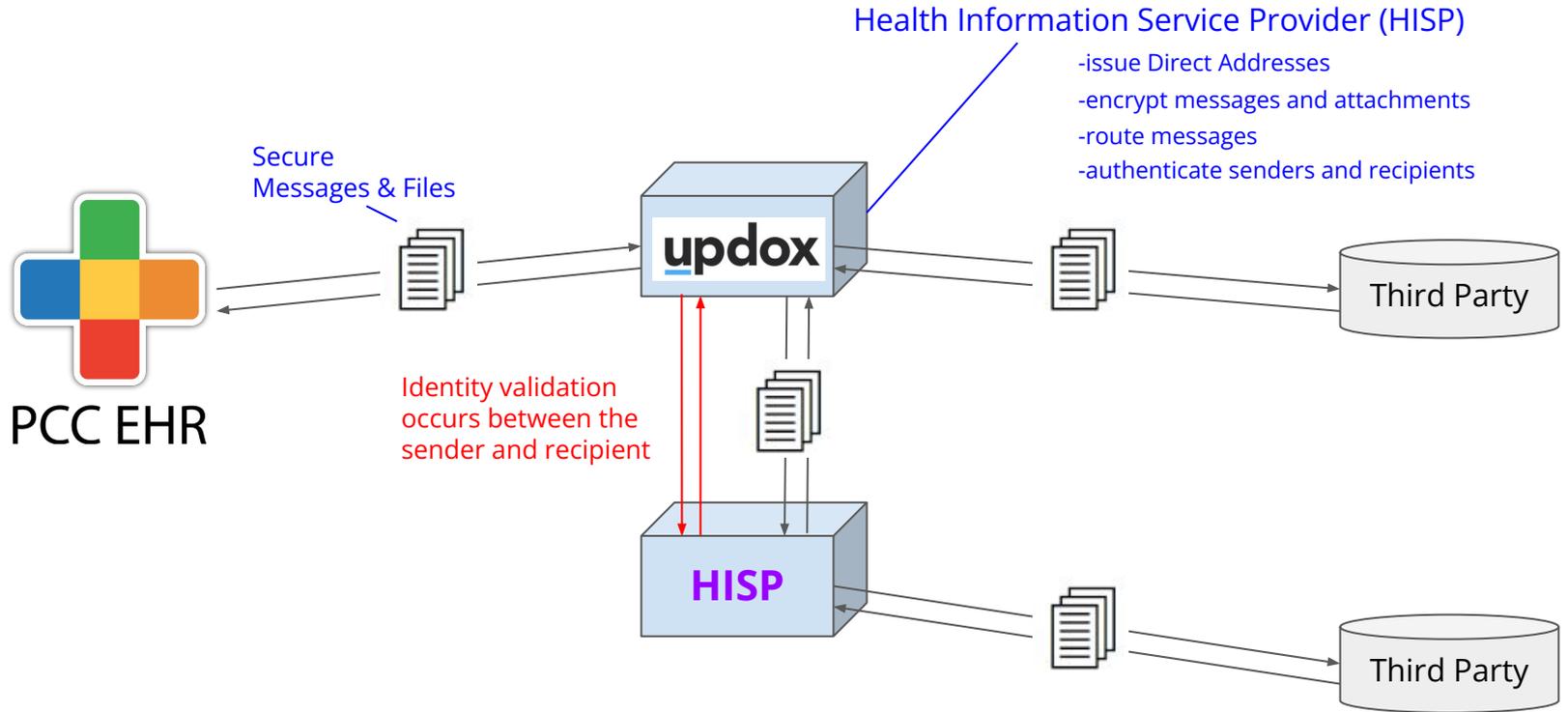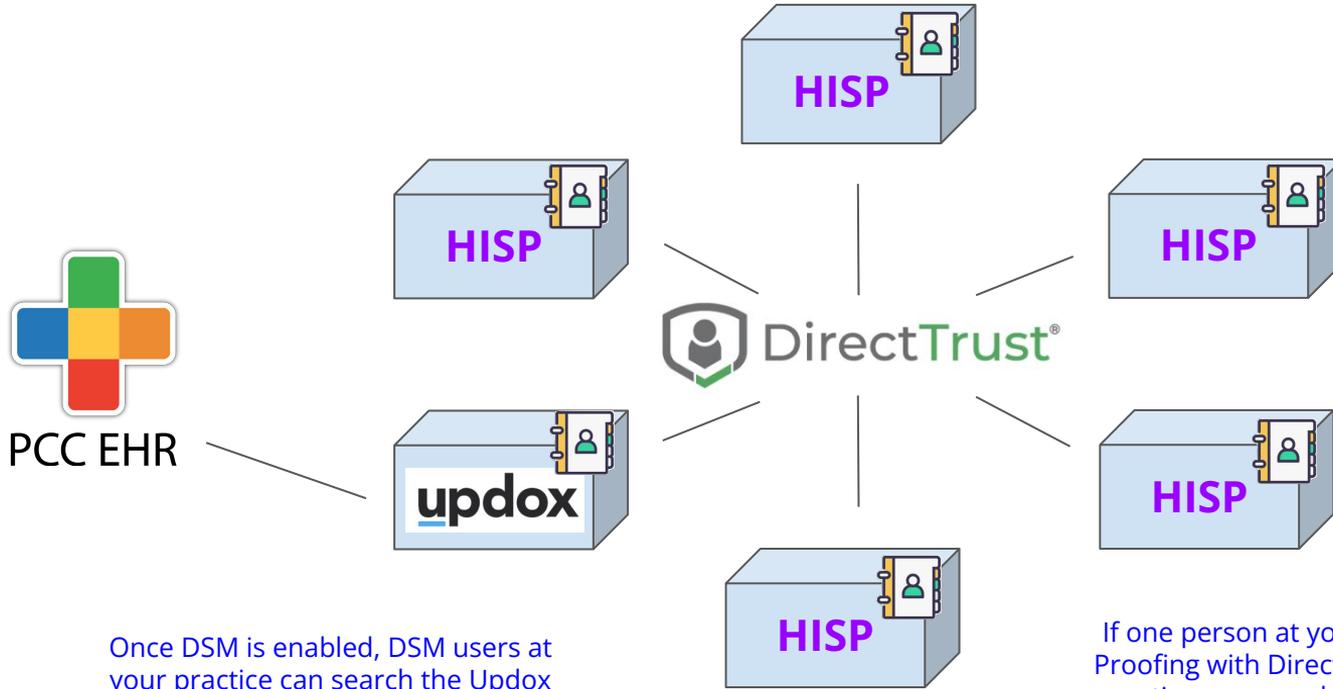
really secure email

meant for the exchange of health information.

How does Direct Secure Messaging work?

Direct is a national secure messaging standard.

Health Information Service Provider (HISP)
-issue Direct Addresses
-encrypt messages and attachments
-route messages
-authenticate senders and recipients

Secure Messages & Files

PCC EHR

updox

Identity validation occurs between the sender and recipient

HISP

Third Party

Third Party

UC 2023

PCC
Pediatric EHR Solutions

The DirectTrust Network

HISP

HISP

HISP

HISP

HISP

DirectTrust®

PCC EHR

updox

Once DSM is enabled, DSM users at your practice can search the Updox directory for Direct addresses.

If one person at your practice completes ID Proofing with DirectTrust, DSM users at your practice can search and be visible within the DirectTrust directory.

UC 2023

PCC
Pediatric EHR Solutions

Sending a Direct Secure Message in PCC EHR

Sending a Direct Secure Message in PCC EHR

Summary of Care Record

Continuity of Care Document

Patient	Todd Gack
Date of birth	August 24, 2012
Sex	Male
Race	
Ethnicity	
Contact info	
Patient IDs	3484 2.16.840.1.113883.3.2402.400.100.16
Document Id	6073507f-a309-4493-b845-366e3381bf14
Document Created:	June 19, 2023, 17:04:39 -0400
Performer (primary care provider)	
Author	PCC EHR
Contact info	Work Place: 20 Winooski Falls Way Suite 7 Winooski, VT 05404-2228, US Tel: (800) 722-7708

Select a referral or outbound transition of care:

06/19/23 Referral: Dermatology

Related to an outbound transition of care
06/19/23 Referral: Dermatology
Not related to a transition of care

○ Save as a PDF file
○ Save as a C-CDA file
● Send via Direct Secure Messaging:

Cancel   Send to...

Select referral or transition of care

Option to limit the information shared

Select Direct Secure Messaging

Sending a Direct Secure Message in PCC EHR

Recipient's Direct address

Subject line

Message

Direct Secure Message

To: mark@scone.qa.pcc-direct.com 🔍 Search

From: PCC PCC (pcc@scone.qa.pcc-direct.com)

Subject: Dermatology Referral from PCC Peds

Message:

Attached please find the patient's CCD.

Attachments (maximum 50MB):

Continuity of Care Document (13 KB)

Attach File   Attach Document   Cancel   Send

Receiving a Direct Secure Message in PCC EHR

Receiving a Direct Secure Message in PCC EHR

Add the Message to the patient's chart

View attached C-CDAs and PDFs

In 9.7, PCC EHR extracts C-CDAs and PDFs from zipped attachments.

Receiving a Direct Secure Message in PCC EHR

Configure the DSM Protocol to include additional components

Reconciling a C-CDA in PCC EHR

Reconcilable C-CDA Sections
 -Problems
 -Medication Allergies
 -Medications

Compare the C-CDA against the patient's chart and select items to import.

Reconciliation - Import

Todd Gack 10 yrs, 9 mos 08/30/12 M

Select the problems, medications, and medication allergies from the Continuity of Care Document to import into the patient's chart.

Problems

Continuity of Care Document Problems

Add to EHR	Status	Problem	Onset	Resolved	Last Modified
☑	Active	Overweight			
☑	Active	Asthma			
☐	Inactive	Wheezing			

PCC EHR Problem List

Status	Problem	Problem Note	Onset	Resolved	Last Modified
Active	Heart murmur				06/20/23

Medication Allergies

Continuity of Care Document Medication Allergies

Add to EHR	Status	Drug	Reaction	Onset	Last Modified
☐	Inactive	Anaphylaxis caused by insect bite and/or insect sting			
☑	Active	Allergy to latex		07/08/10	

PCC EHR eRx Allergies

Drug	Reaction	Onset	Last Modified

Medications

Continuity of Care Document Medications

Add to EHR	Status	Drug	Details	Last Modified
☑	Active	Timolol 0.5 % Ophthalmic Gel Forming Solution	;	06/20/23
☐	Inactive	Amoxicillin 875 mg PO Tablet	;	02/10/23

PCC EHR Medication History

Status	Drug	Formula	Details	Last Modified
Active	EPINEPHRINE 0.3 MG/0.3 ML (1:1,000) (ADULT) PEN INJECTOR		0.3 mg IM every 5 to 15 minutes PRN hypersensitivity reaction; do not exceed ...	

Warning: Imported Medication Allergies and imported Medications must be reviewed in PCC eRx to ensure that drug to allergy and drug to drug interactions are correctly represented.

Cancel   Next

UC 2023

DirectTrust Metrics

- In Q1 2023,

  - 2.7M Direct Addresses

  - 290K Organizations Served

  - 222M Messages Sent and Received

- 4 Billion Messages Sent and Received since 2014

Source: DirectTrust, directtrust.org

Direct Secure Messaging: Key Takeaways

Direct is a form of interoperability that provides the means to securely and efficiently share clinical records.

Direct is widely used and trusted in the healthcare industry.

Direct can be used for many purposes including but not limited to transitions of care and referrals.

Direct can save the time and resources that may be otherwise spent mailing, faxing, or scanning documents.

Clinical Document Exchange is…

a system of standards for publishing, cataloging, and sharing clinical documents, which…

makes documents available for retrieval by authorized parties across the healthcare ecosystem.

What is Clinical Document Exchange?

Organization seeking Documents **Organization that has Documents**

Step 1 - Patient Discovery

Third party, do you know my patient?

Yes, one match.

No

Yes, multiple matches.

Step 2 - Find Documents

You seem to have my patient in your system.

What documents are available for my patient?

Here is a list of documents that are available for the patient you specified.

There are no documents for this patient.

Step 3 - Retrieve Documents

I've selected the document(s) I want.

Can you send me the document(s)?

Here is/are the document(s) you requested.

I can't find the document(s).

UC 2023

PCC
Pediatric EHR Solutions

What is Clinical Document Exchange?

Initiator Role

Organization seeking Documents

Step 1 - Patient Discovery

> Third party, do you know my patient?

Step 2 - Find Documents

> You seem to have my patient in your system.
>
> What documents are available for my patient?

Step 3 - Retrieve Documents

> I've selected the document(s) I want.
>
> Can you send me the document(s)?
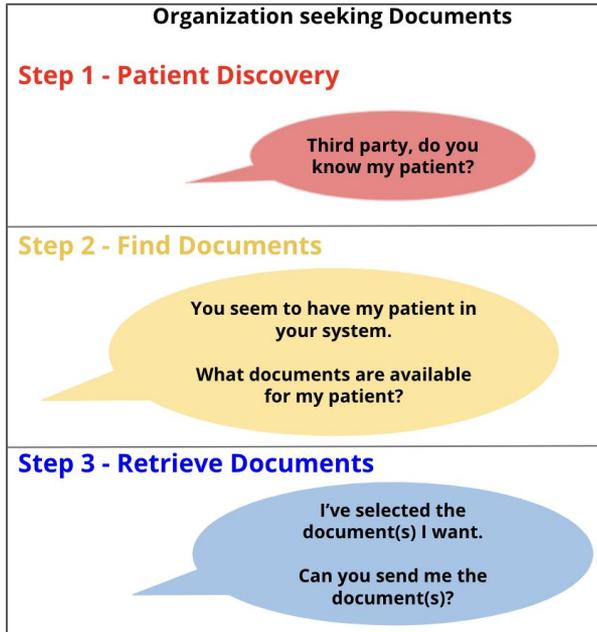
You can retrieve documents from other organizations.

Responder Role

Organization that has Documents

> Yes, one match.

> No

> Yes, multiple matches.

> Here is a list of documents that are available for the patient you specified.

> There are no documents for this patient.

> Here is/are the document(s) you requested.

> I can't find the document(s).
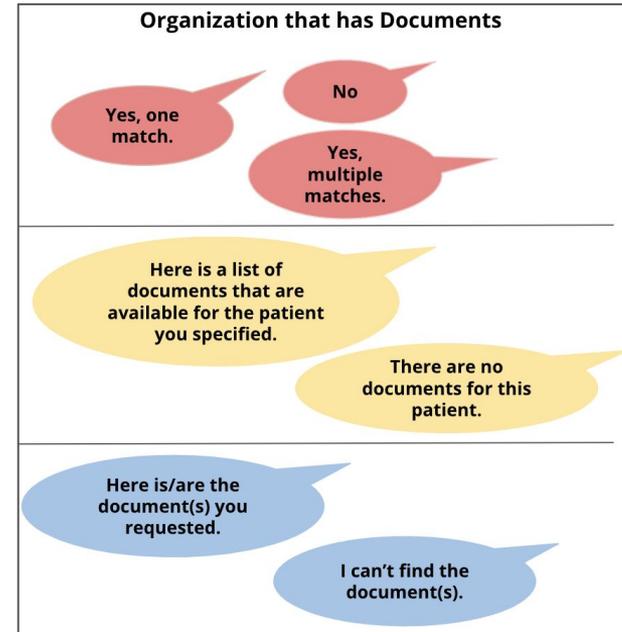
Other organizations can retrieve documents from you.

How does Clinical Document Exchange work?
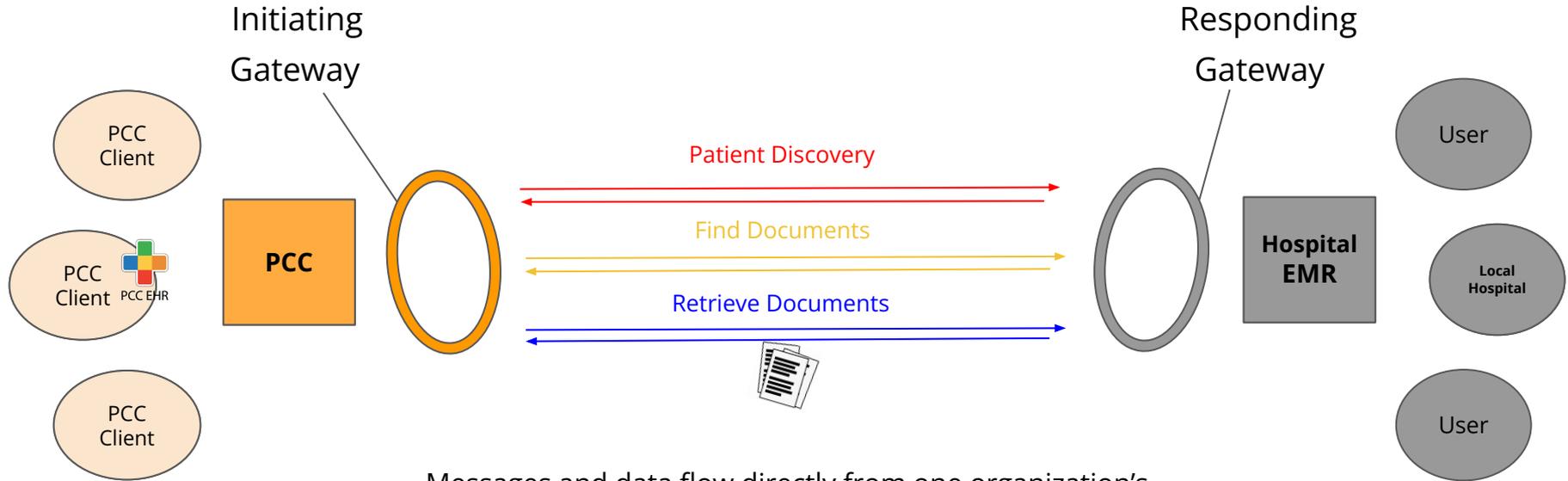
Messages and data flow directly from one organization's gateway to another, *not* through an intermediary.

Messages are safe and secure, protected by multiple layers of security.

Third party organizations *do not* have access to PCC clients' servers or systems.

carequality

- Carequality has defined a **framework** that allows participating entities to exchange documents.

- Carequality is a framework, **NOT** a network.

- PCC is a *Carequality Implementer*.

- If your practice decides to participate in Clinical Document Exchange, it becomes a *Carequality Connection*.

What other organizations are Carequality Implementers?

Who in my area is a Carequality Connection?

https://carequality.org/active-sites-search/

Initiator Role: What organizations can I query for documents?

Any organization found in the directory.
Search organizations accessible in the directory.

Default organizations will be queried
automatically from a patient's chart.
Default organizations will be preset as
default organizations in patient charts.

Clinical Document Exchange Configuration

Select default organizations to be queried for clinical documents.

Organization	Address
PCC Pediatric Test Associates (cake)	

Paradise Valley Community Hospital
4116 Rocket Drive, Golden Valley, MN 55427

Maple Valley General Hospital
2611 Wexford Way, Clinton, SC 28328

Goldvalley General Hospital
4322 Redbud Drive, Whitestone, NY 11357

Tennessee Valley Pain Management
6130 Shallowford Rd, CHATTANOOGA, TN 37421-7215

ARIZONA WOMEN'S HEALTH, PLLC
270 E HUNT HWY SUITE 10, SAN TAN VALLEY, AZ 85143-4963

Grand Valley Neurology, Prof. LLC
744 HORIZON COURT, GRAND JUNCTION, CO 81506-3936

Nashoba Valley Healthcare Group

valley   Search

Cancel   Save

Initiator Role: How do I retrieve documents in PCC EHR?

Navigate to History and then the *Find Clinical Documents* component.

Initiator Role: How do I retrieve documents for my patient in PCC EHR?

Organizations can be queried on the fly.

A default list of organizations can be set for patients.

Initiator Role: How do I retrieve documents for my patient in PCC EHR?

Confirm the patient match then proceed to Find Documents.

Initiator Role: How do I retrieve documents for my patient in PCC EHR?

Document date and type, status, and last retrieved date display for each available document.

Initiator Role: How do I retrieve documents in PCC EHR?

To open the document, click View.

To immediately reconcile the document, click Reconcile.

Initiator Role: How do I retrieve documents in PCC EHR?

The document will be saved in Retrieved Documents category.

Additional actions are available at the bottom of the Document Viewer.

Initiator Role: What documents can I retrieve from Carequality-enabled organizations?

Each Carequality Implementer determines what types of documents will be made available for retrieval.

The vast majority of documents being exchanged via the Carequality framework are longitudinal or encounter-based C-CDAs.

PCC
Pediatric EHR Solutions

Responder Role: Who can retrieve documents from my practice?

Only other **Carequality-enabled** organizations can query for and retrieve clinical documents.

Carequality Implementers have been **vetted** as legitimate entities in healthcare and are **authorized** to participate in exchange activities within the Carequality community.

PCC shares your patients' clinical documents for **treatment** purposes *only*.

PCC
Pediatric EHR Solutions

Responder Role: What documents can be retrieved from my practice?

One **Summary of Care (CCD)** document per patient is available for retrieval (when patient consent is set to *Yes*).

When changes occur to a patient's record, an updated copy is made available for retrieval.

PCC EHR does this automatically!

Responder Role: How do I record patient consent in PCC EHR?

Your participation in the Responder role of Clinical Document Exchange requires that you record patient consent in PCC EHR.

- Consent status will determine whether or not a patient's Summary of Care document can be retrieved by another organization.

- A patient's Summary of Care document can be retrieved *only* when their consent is marked **Yes**.

Responder Role: How do I record patient consent in PCC EHR?

Responder Role: Patient Consent at your Practice

When you go-live with Clinical Document Exchange, PCC will set the consent status for all of your existing patients.

Your practice's consent policy for CDE will determine the status of existing patients.

What is your practice's patient consent policy?

Opt-in

Patient data will be shared only if and when a patient has given explicit consent.

Opt-out

Patient data will be shared unless and until a patient explicitly revokes consent.

PCC recommends obtaining legal counsel to determine which consent policy aligns with state laws and requirements.

Clinical Document Exchange: Key Takeaways

CDE is a form of interoperability that provides the means to securely and efficiently provide and retrieve clinical records.

CDE allows your practice to make clinical records available to other organizations without your intervention.

CDE creates connections between your practice and larger health systems, making it easier to share data.

Like DSM, CDE can save the time and resources that may be otherwise spent mailing, faxing, or scanning documents.

DSM & CDE: Complementary Solutions

Direct Secure Messaging

Clinical Document Exchange

Getting Started with DSM & CDE

1. **Identify which of your exchange partners use DSM and CDE**

   -For DSM, reach out to your local hospital, specialists, etc.

   -For CDE, use the search tool: https://carequality.org/active-sites-search/

2. **Contact your Client Advocate and express your interest**

3. **Complete training and onboarding with a member of the CDX Implementation Team**

   Visit learn.pcc.com for more information about DSM and CDE.

Learning Objectives

- Understand how C-CDA documents support the exchange of clinical information

- Explain how Direct Secure Messaging (DSM) and Clinical Document Exchange (CDE)
  - can be used to send and receive clinical records
  - are different yet complementary solutions

- Identify the steps for getting your practice started with DSM and CDE

Thank you!

Questions?