

Chart Abstraction & Patient Information Management

In your current office environment, document management may only concern the flow of paper around the office and into the chart. When implementing an EHR system, many of these documents will be stored, transferred and/or reviewed in electronic format. This results in a fundamental change in the way the office functions. Practices often say they wish they had spent more time considering these issues beforehand. Consider goals for implementation and current and future processes for accessing and managing health information.

Goals for Implementation

What are the goals for document management once the EHR is implemented? Is the plan to become a paperless (or less-paper) office?

Rate the following (1 = low priority; 5 = high priority):

- Moving paper charts offsite
- Eliminating chart pulls for visits
- Eliminating chart pulls for telephone calls and prescription renewal requests
- Reducing document filing time
- Reducing or reallocating staff count/hours

Document Imaging Management System

Is there currently or will there be an integrated document imaging management (DIM) system? If yes, what are the functionalities of the DIM system? If an existing process is in place, consider whether designing a new process is beneficial. Note that there are additional important DIM considerations beyond the initial process of chart abstraction.

Prepare a list of which information will be scanned to patient charts using the DIM system vs. information that will be entered as structured data.

Initial Information Entry/Chart Abstraction

Identify the information that clinicians have requested to have access to during office visits:

- Current medications and allergies
- Current problem list
- Lab results – how far back? Most recent? Results for the past 1, 2 or 3 years?
- Test results (e.g., ECG, stress test, ECHO, mammogram, colonoscopy, radiology reports, bone density, PFTs, cervical cancer screening) – same as above: most recent or something else
- Immunizations
- Office visit notes – practice often choose the last three

- Consultant letters
- Social history and risk factors
- Past medical history, including recent hospitalizations

For each of the above – identify where the information is found in the paper chart and where and how it will be migrated to the EHR.

Identify the individuals who will identify/process the information per the defined protocol or process and be clear on what degree of clinical knowledge, if any, they will need.

For each set of information, clarify what will be scanned as a PDF vs. what information will be entered as structured data. For example, the health maintenance module of the EHR usually requires structured data capture to identify preventive and chronic care gaps for population health management.

Standardize the naming convention for any information that will be uploaded as a document, focusing on the user. For example, “Test Result” provides less information than “Chest X-Ray May 2019”

Conduct an estimate of the volume of documents and data to help estimate the time and staff needed for chart abstraction.

Ongoing Document Processing

- Identify existing or new staff required for medical records or split the responsibilities across different roles. Either way, put in writing who will do what to ensure an efficient process for document and information management.
- Estimate time spent per person per day filing paper: ____ hours ____ minutes
- Draw the current process for document review and filing for each document or information type. For example, test results may arrive as PDF or as structured data (via interface or hand entered). Either way, there should be an efficient and timely process to route to the ordering clinician for acknowledgement of results and to notify the patient of results.
- Identify:
 - Number and type of outside documents that come into the practice every week (e.g., test results, consult notes, patient records, discharge summaries, etc.)
 - Arrival method for each document or set of information: fax/efax, health information exchange, secure email, patient drop-off, mail, etc.
 - Current and future disposition of each set of information - for each document or information origin (e.g., hospital, referral partner, patient) and type identify the disposition of each, noting standard nomenclature for scanned documents: scanned and routed to clinician, automatic population as structured data (e.g., via interface), hand-entered as structured data, etc.
- Consider developing a scanning cheat sheet for medical records or other staff

Assessment and Planning

- Know the lead time before implementation begins for the team to prepare and to begin entering some information before go-live
- Clarify whether charts will be pulled before a visit for prep and information entry into the EHR; if yes, identify how many days prior to the visit charts will be pulled and consider entering certain information during chart/visit prep.
- Identify individuals dedicated to batch scanning, document sorting/pulling and other scanning responsibilities and assess in advance whether this meets the needs based on prior assessments of time requirements for information pre-loading (e.g., do scanning staff work every day of the week)
- Be clear on scanning capabilities and possible bottlenecks; know where and when scanning workstations are available (e.g., are scanning requirements different on different days or times).
- Set clear expectations on turnaround time from arrival of documents/information until clinicians and the care team can access the information in the EHR.
- Draw current and future state maps of information capture based on document types, volume and review/acknowledgement procedures.
- Work with all staff to define the technical features of a DIM system that makes the information capture, distribution and review process both harder and easier.

Scanning Best Practices

Take the ideas below as options to consider based on staffing, resources, technology and existing workflows. At all times, patient safety is the most important factor that drives scanning policies and procedures. Quality of care, efficiency, patient experience and the work life of staff follow closely behind.

Commit to an acceptable timeframe within which documents will be scanned and uploaded to patient charts. For example: “We will scan and upload documents into patient charts within two business days of receipt at our office.” If e-faxing, commit to “within 24 hours”.

Implement e-faxing - Once an e-fax solution is implemented, stop sending faxes/paper documents to clinicians before they are scanned/uploaded into the chart (as long as staff can commit to “same day” uploads into patient charts!). Sending to clinicians first creates a bottleneck, unnecessary extra processing and a risk for information to get lost.

Create a scanning management sheet to determine what the disposition is for each incoming document, including 1) the workflow 2) data to abstract (i.e., entered into the EHR as structured data) 3) file in patient chart where documents are managed (e.g., ultrasound reports filed under IMAGING, A1C results filed under LABS and 4) nomenclature for how the document will be named (e.g., MRI Brain Nov 2019). Include whether a document *needs* to be scanned. Some clinicians do not want to “clutter” patient charts with long physical therapy reports or home health notes. They may specify not to scan them but to put in the PCP paper inbox for review and then to send to be shredded (or scanned, if they so decide.)

Use nomenclature as cue to contents of documents – If staff are specific about naming a document, it can reduce the need to open the document (e.g., ECHO Nov 2019 – EF 35% or A1C – 7.6%)

Recognize the risk of incorrect data entry – Given that there is a possibility of making errors as staff transcribe results from a document into other fields, everyone should be aware that it’s still important to LOOK at the original document to avoid the risk of missed and delayed diagnoses.