Standardizing Consolidated Clinical Document Architecture (C-CDA) for Transitions of Care – Discharge Summary Survey Results

By: Megan George

Master of Science in Biomedical Informatics Practicum

UT Houston School of Biomedical Informatics

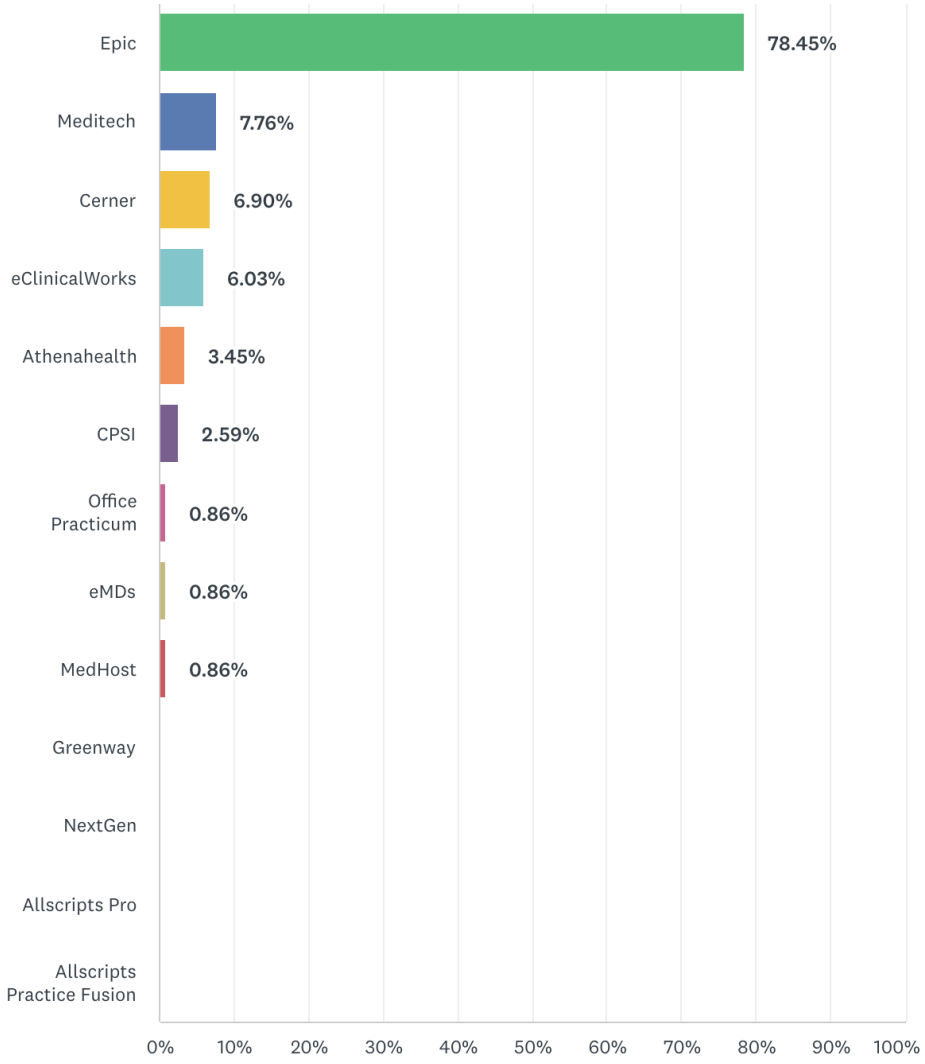
Background

- The purpose of this survey is to better understand what information is most important to physicians and care managers receiving discharge summary C-CDAs.
  - This is electronic information that is consumable by the receiving EHR as discrete elements
  - This is separate from the narrative discharge summary.
- "By responding to this brief survey, you assist in transforming data to actionable information essential to patient care, while reducing information chaos and clinician overload.” - Mark Toups, MD
- All discharge summary C-CDA's are required to have the following sections. As a result, we did not survey for these elements.

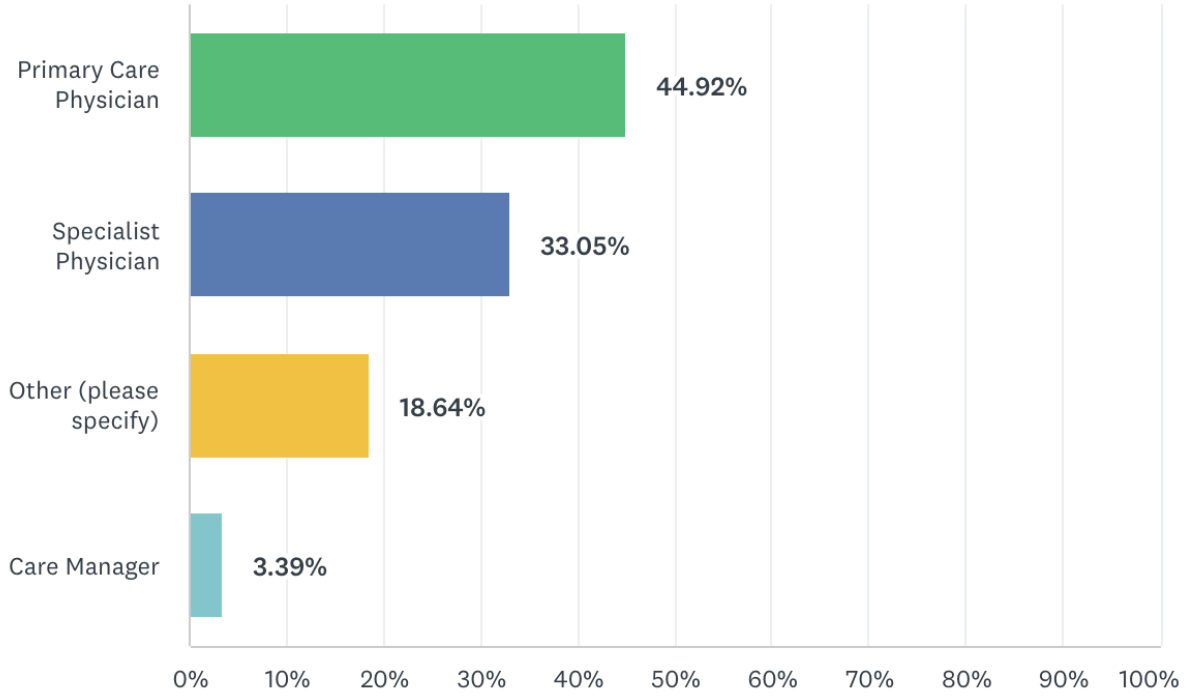
    1. Hospital Course
    2. Plan of Treatment
    3. Discharge Diagnosis
    4. Allergies and Intolerances

- Total responses: 119
- Data collection: 06/24/22 – 07/18/22

Q1. Which EHR(s) does your organization use?



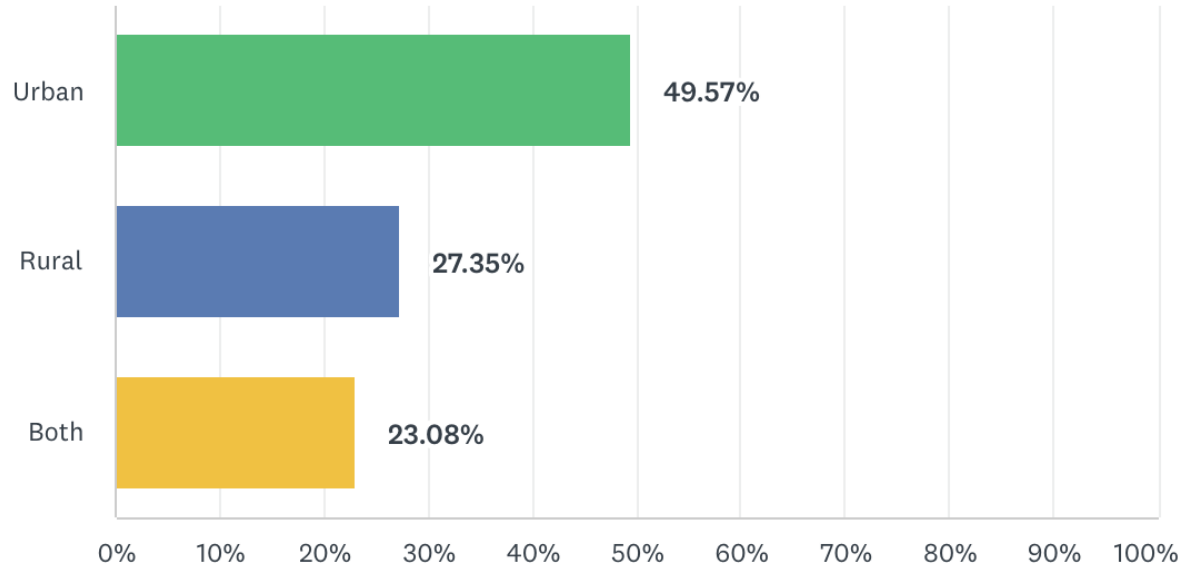
Q2. What is your role in the organization?



Other:

- PA
- NP
- CRNA
- RPA
- CMO
- Case Management Director
- Research Physician
- Case Manager
- IT Manager
- IT Analyst
- Corporate SVP

Q3. Is your practice primarily urban or rural?

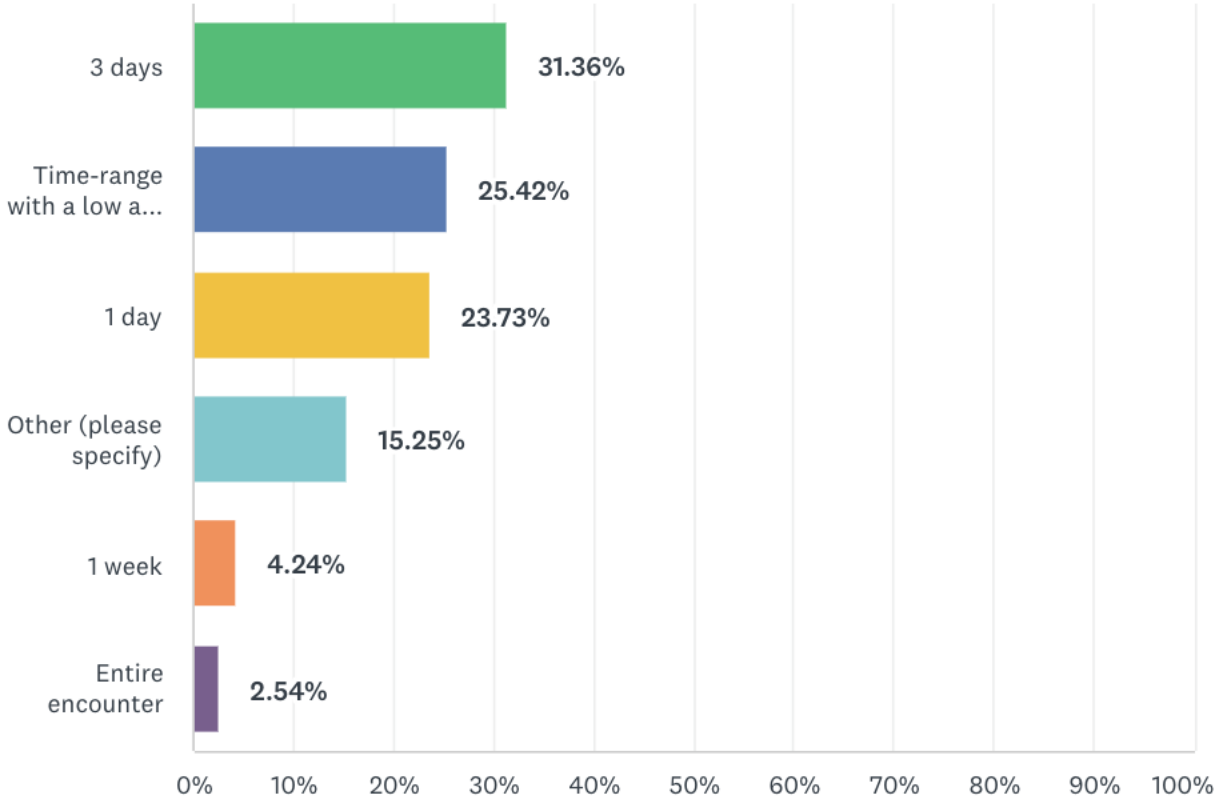


Q4. On a scale from 1 (least useful) to 5 (most useful), please rate how useful each optional section is for a discharge summary C-CDA.

Top 10:

1. Discharge Medications
2. Admission Diagnosis
3. Reason for Visit
4. History of Present Illness
5. Procedures
6. Chief Complaint
7. Diagnostic Imaging
8. Hospital Consultations
9. Laboratory
10. Problem

Q5. For vital signs, what time-frame is the most useful on the discharge summary C-CDA?

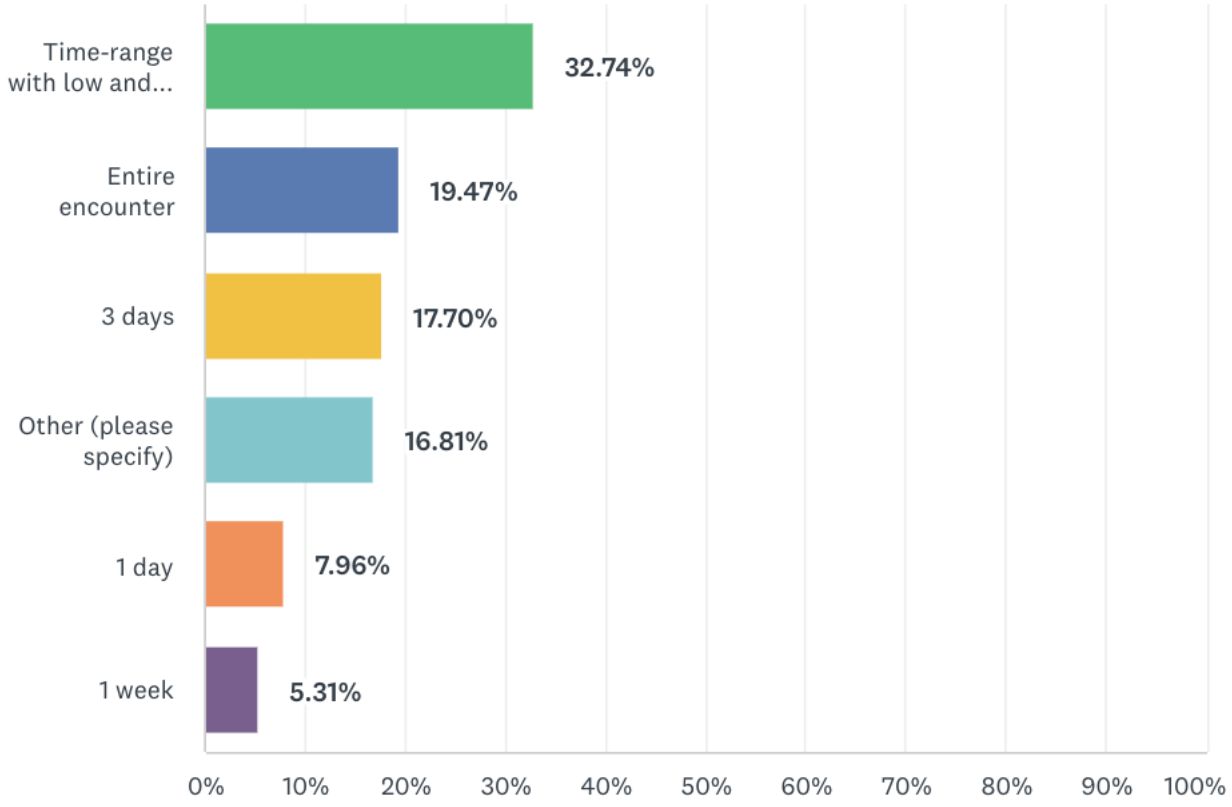


* Time-range with low and high values

Other:

- "Admission, Discharge, and excessive values (high or low)"
- "summary of abnormal and then most recent upon discharge"
- "for newborns: admission and discharge vitals/weights"
- "Admission and discharge vitals"
- "at the beginning and at the end and summary during the hospital course"

Q6. For laboratory values, what time-frame is the most useful on the discharge summary C-CDA?

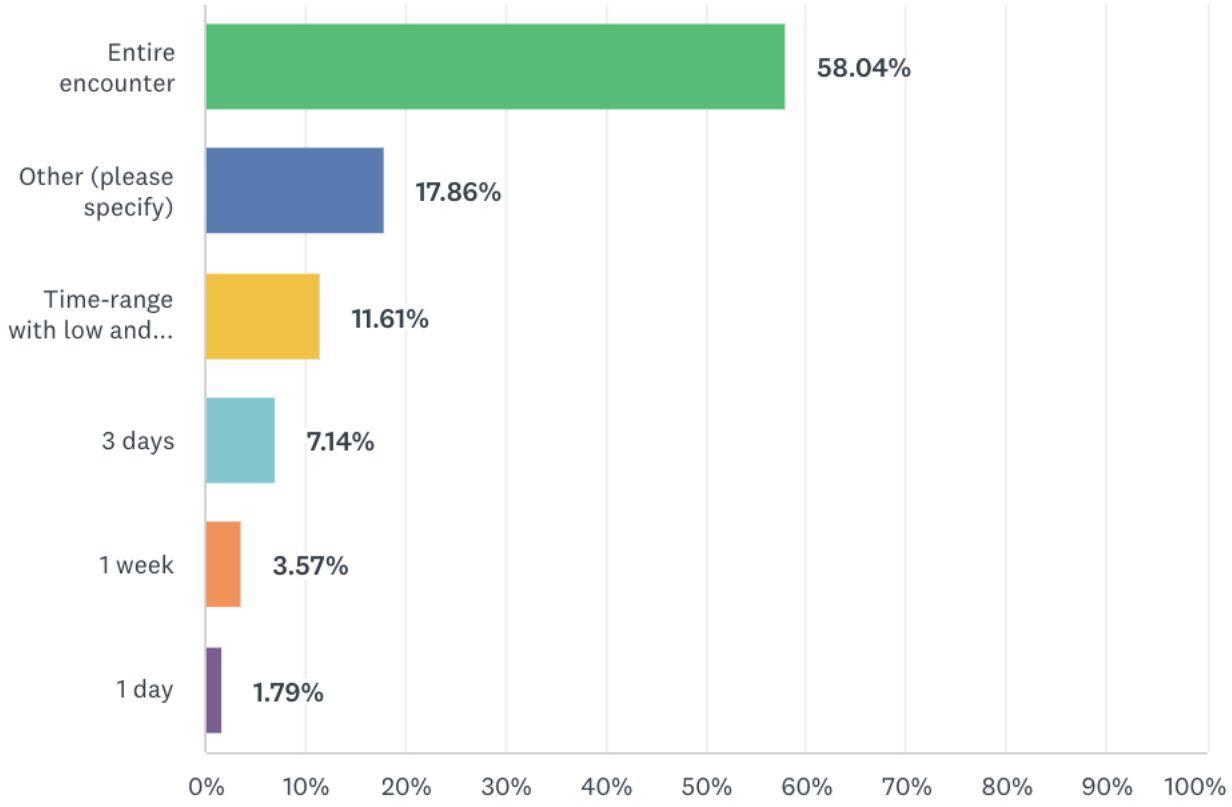


* Time-range with low and high values

Other:

- "Entire encounter if it can look succinct, i.e. be in a table that is easy to read"
- "Admission, last values before discharge and any one-time labs (e.g. HbA1c, ANA, TSH)"
- "Most recent at discharge and the worst they were during stay"
- "For hematology and chemistry, the last values are most important. For serologies, blood cultures and other tests, all values are important"
- "Within the last 2 weeks"
- "Summary of abnormal and then most recent prior to d/c"
- "day of discharge"
- "day of admit, time range with low and high values and day of discharge."
- "it all depends on the type of patients, beginning and end and description in between"

Q7. For diagnostic study results, what time-frame is the most useful on the discharge summary C-CDA?



* Time-range with low and high values

Other:

- “48-72 hrs prior to discharge”
- “All diagnostics, also if it can be done in a manner that is easy to read”
- “summary of findings and latest hard copy of each study”
- “Only studies with pertinent findings”
- “Report of study - not full study, first and last if done more than once”
- “For tube placement, no studies are needed. Otherwise all studies are important.”
- “Initial as well as all special studies (CT, MRI, Echo’s)”
- “Pre and post operative xrays”
- “only significant study results. Don't want bloat. And ideally just the impressions and not the body verbiage”
- “all advanced imaging results and last plain films”
- “Depending on the study. eg; CXR last result would be sufficient”

Q8. Please share any other comments you have below:

- “I often find C-CDAs not helpful, the hospital course section does not convey clinically relevant info. Fields are auto-populated. There is no narrative for the discharging physician to intentionally communicate with the physician they are handing off to. The discharge information is only as good as the relevant information that is provided by the physician”
- “Issues are respiratory rates and correct o2Values as they may be 3 different sets of vs in 3 different areas. Hard to validate.”
- “Follow up labs and appointments are needed. Often times, d/c summary lack d/c med list which is absolutely necessary as patient's often dont bring hospital d/c folder. Additionally, it would be very helpful if social workers / d/c nurse would verify that patients are able to afford meds ie Entresto, Eliquis, Xarelto, Paxlovid, insulin prior to discharge. Failure to do so has compromised patient care and potentially could result in poor outcomes including rehospitalization.”
- “I would like to see a statement from the discharge provider providing a brief narrative or summary of the hospital course including presenting cc and sx, discuss MDM / rationale for final diagnosis(es) based on lab and imaging results, procedures performed with results results, issues that need to be addressed or monitored after discharge.”
- “What I need most is a timely discharge summary - and that means that I can read it when I see the patient after discharge. Hospital docs need to do them at the time of discharge. NOT 30 days later”
- “Would prefer images to be transmitted as well--NOT just radiologist interpretations”
- “Needs to be lean and concise.”

Q8. Please share any other comments you have below:

- “There must be a medication reconciliation upon discharge of the patient. This list should be provided to the patient as well as be on the discharge paperwork.”
- “I think there should be a standardized discharge note with blanks to be filled in. Because of templates and east of copy a lot of extraneous reports in the meat of what’s important is list. Perfect example are ER discharge records. Most of the time they are useless everything gets pulled in but the record is hard to read and half is useless info.”
- “Lab values should be in analyze form. Summary of admission condition and discharge condition and meds would be the most helpful if consolidated to 1-2 pages”
- “NO cut and paste from other notes!”
- “Please consider the ORDER of items on the document to be Date of Admission-->Date of Discharge-->Discharge Location (Home, SNF, Rehab)--> Chief Complaint-->Discharge Summary-->Consultations-->Labs/Rads/etc.”
- “discharge plan is critical with comments on what is most concerning for follow up care”
- “Most useful part of the discharge summary is the dictated summary of the hospital course, which is not often included in the paperwork. The other information is useless without the actual summary from a physician.”
- “there was no discharge diagnosis.....many patients admitted with one dx but dc on another”

Q8. Please share any other comments you have below:

- “Discharge summary, d/c meds, admission history, all diagnostic imaging, procedures”
- “The most important part of a discharge summary is the hospital course (why did they come in, why were they admitted, pertinent findings, treatment, complications, ect) and the discharge plan (including how to proceed with outpatient therapy plan, studies to follow-up, referrals that still need to be made, ect).”
- “Standardizing "how" things are displayed is as important as "what" the CCDA contains. For example, if an organization doesn't use the Problem List, that's a real problem when others expect Problems to be listed.”
- “epic IS really bad with scheduling outpatient appointments. There is NO way to schedule multiple visits and see all appointments on 1 screen or side by side. Ex. Pt being seen by a NP, or Ultrasound tech, or SW that the Dr might need to see as well after but might not. Think of a Interventional radiologist or a maternal fetal specialist with 3-4 Ultrasound rooms running at the same time. Please fix this flaw soon!!!”
- “FOLLOW UP!!!! no one ever talks about follow up. pts need to see an outpatient provider to prevent readmit.”
- “Lab reporting is very slow for cultures, gram stains, sensitivities”

Acknowledgements

- Mark Toups, MD
- Katherine Lusk, RHIA
- THSA CCDA and Direct Secure Messaging workgroups
- Dr. Tiffany Champagne-Langabeer, UT Houston School of Biomedical Informatics
- Everyone who took time to take the survey