



EHR Reporting Program Task Force 2021

Raj Ratwani, Co-Chair

Jill Shuemaker, Co-Chair

August 5, 2021

Health Information Technology Advisory Committee

The Office of the National Coordinator for Health Information Technology



Meeting Agenda

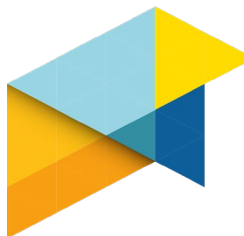
- Call to Order/Roll Call
- Opening Remarks
- Preliminary Recommendations for Public Health Measures
- Discussion of Clinical Care Measures
- Public Comment
- Final Remarks
- Adjourn

Health IT Advisory Committee EHR Reporting Program Task Force Charge

- **Vision:** To address information gaps in the health IT marketplace among all stakeholders, including ONC, and provide insights on how certified health IT is being used
- **Specific Charges:** Review the draft developer-reported measures and supporting materials developed by the Urban Institute, under contract with ONC, and provide recommendations to prioritize the measures and suggest ways to improve the draft measures
 - Consider background research, reports, and other sources as relevant to inform analysis of draft measures
 - Consider both established and emerging measurement practices and capabilities, as well as technical, legal, and policy requirements
 - Consider the use, technical feasibility, and potential policy impacts of the draft measures
 - Prioritize the draft measures to elevate those with the most potential for addressing gaps and providing insights in the certified health IT marketplace
- **Overarching Charge:** Make recommendations to prioritize and improve the draft set of developer-reported, interoperability-focused measures for the ONC EHR Reporting Program
 - Consider ways to avoid placing undue disadvantage on small and startup health IT developers in reporting measures
 - Develop recommendations to inform revisions to improve an initial set of developer-reported measures
 - Suggest additional measures and measure categories to prioritize for subsequent iterations of the developer-reported measures
 - Approve recommendations for submission to the National Coordinator by September 9, 2021

EHR Reporting Program Task Force Roster

Name	Organization
Raj Ratwani (Co-Chair)	MedStar Health
Jill Shuemaker (Co-Chair)	American Board of Family Medicine Foundation
Zahid Butt	Medisolv Inc
Jim Jirjis	HCA Healthcare
Bryant Karras	Washington State Department of Health
Joseph Kunisch	Harris Health
Steven Lane	Sutter Health
Kenneth Mandl	Boston Children's Hospital
Abby Sears	OCHIN
Sasha TerMaat	Epic
Sheryl Turney	Anthem, Inc.
Steven Waldren	American Academy of Family Physicians





Opening Remarks

Meeting Process

- **Task Force lead to present initial thoughts and recommendations**
- **All Task Force members will discuss**
- **The Urban team will document agreed upon recommendations and recommendations for further discussion**
- **Recommendations report template will be used to record emerging themes from discussion and projected during the meeting**
- **Task Force Co-Chairs will summarize initial recommendations that emerged**

Draft Domains and Measure Concepts

- **Patient access**
 - Use of different methods for access to electronic health information
 - Use of 3rd party patient-facing apps
 - Collection of app privacy policy
- **Public health information exchange**
 - Sending vaccination data to Immunization Information Systems (IIS)
 - Querying of IIS by health care providers using certified health IT
- **Clinical care information exchange**
 - Viewing summary of care records
 - Use of 3rd party clinician-facing apps
- **Standards adoption and conformance**
 - Use of FHIR profiles by clinician-facing apps (adjusted by #patients and #apps)
 - Use of FHIR profiles by patient-facing apps (adjusted by #patients and #apps)
 - Use of FHIR bulk data

Cross-Cutting Issues for Discussion

- **How frequently should reporting occur (e.g., annually, 2x a year or quarterly)?**
- **How should the results be reported?**
 - Are proposed sub-groups appropriate (e.g., demographic characteristics, setting)?
 - What are the implications of including measures that require data from developer's customers (e.g., reporting by characteristics)?
 - Does the level of reporting make sense (e.g., client, product- vs. developer-level)?
 - Should reporting consist of distributional estimates (which show variation within developer) vs. a single value per developer?
- **What is the appropriate look back period for numerator/denominator? For example, active patients seen within the last 12 or 24 months.**
- **Are other aspects of the numerators and denominators accurately specified?**
- **How feasible is it for developers to access, analyze, and report data, particularly for capturing subgroups? If not feasible today, what could be feasible by the timeframe for data collection in several years?**
- **How to address potential interpretation challenges?**
 - Degree to which measures reflect quality rather than quantity or volume? More is not necessarily better for volume-based measures.
 - Extent to which measures reflect characteristics of geographic areas or clients (e.g., providers, app developers) as opposed to product itself?
- **Is there any potential burden on users of certified health IT? Would reporting unduly disadvantage small / startup developers?**
- **Value of measure to provide insights for multiple stakeholders on interoperability, needs of patient-centered care or populations health?**
- **What unintended consequences does this measure risk causing?**



Preliminary Recommendations for Public Health Measures

Public Health Information Exchange Measures

Measures	Reporting elements and format
<p><u>1. Vaccinations/Immunizations</u>: Percentage of vaccinated individuals whose immunization data was sent electronically to immunization information system (IIS)</p> <p>Num: Number of individuals whose immunization information was electronically submitted to the registry (e.g., via HL7v2.5.1 transactions)</p> <p>Den: Number individuals with an immunization administered</p>	<p>For each measure, collect numerator and denominator counts by:</p> <ul style="list-style-type: none"> • State • State and setting (e.g., inpatient vs. outpatient) • State and age group (adults, adolescents, child/infant) <p>Require developers to report numerators and denominators, not just percentages</p> <p>EHR developer would need to construct the measure at the client-level, then roll-up into aggregated groups.</p>
<p><u>2. Immunization Forecasts</u>: Percentage of IIS queries made per individuals with an encounter</p> <p>Num: Number of immunization forecasts and histories received from IIS into EHR</p> <p>Den: Number of individuals with an encounter</p>	<p>Quintiles may not be of value for these measures because (1) would provide only variation within developers that would not be comparable across developers; (2) would result in reporting of many estimates by state and subgroups that may be burdensome to generate.</p> <p>Frequency of reporting (e.g., annually) and look back period (e.g., in the past calendar year) for numerators and denominators to be determined.</p>



Discussion of Clinical Care Measures

Clinical Care Information Exchange Measures

Measures	Reporting elements and format
<p><u>1. Summary of care records</u>: Percentage of summary of care records viewed by end users/clinicians (break out by parsing/integration of records)</p> <p>Num 1: Number of unique summary of care records received using certified health IT that are viewed by end users/clinicians</p> <p>Den 1: Number of unique summary of care records received using certified health IT</p> <p>Num 2: Number of unique summary of care records received using certified health IT that are parsed, integrated and viewed by end users/clinicians</p> <p>Den 2: Number of unique summary of care records received using certified health IT that are parsed and integrated</p>	<p>Viewing rates may differ based on whether data is integrated.</p> <p>Consider one denominator with multiple numerators to capture total number and then those that were parsed and integrated.</p> <p>Require developers to report numerators and denominators, not just percentages.</p> <p>For each measure, collect numerator and denominator counts by setting (e.g., inpatient, outpatient)</p> <p>Aggregated by developer</p> <p>Frequency of reporting and look back period for numerators and denominators TBD.</p>

Clinical Care Information Exchange Measures

Measures	Reporting elements and format
<p>2. Clinician-facing apps: Percent of registered, 3rd party clinician-facing apps with active users (as defined by end users/clinicians authorizing access)</p> <p>Num 1: Number of registered 3rd party clinician-facing apps with a minimum number of users (see potential categories/subgroups).</p> <p>Other potential numerators: Average number of apps deployed by customer; or average number of apps by product</p> <p>Den: Count of 3rd party clinician-facing apps that are registered via § 170.315(g)(10)(III)</p>	<p>Authorization of the app is a proxy for usage.</p> <p>Potential numerator categories for users: by average number of end/users/clinicians using each app across a developer; number of users (e.g., at least 1, 10, 100, 10,000, 100,000);</p> <p>Require developers to report numerators and denominators, not just percentages.</p> <p>Aggregated by developer</p> <p>Frequency of reporting and look back period for numerators and denominators TBD.</p>

Clinical Care Information Exchange Discussion

- Need definition of end users/clinicians.
- For measure 1:
 - To what extent is this data recorded in activity logs that the health IT developer has access to?
 - What challenges exist due to varying workflows in the viewing of summary of care records?
 - Concern that duplicates would be counted if we do not collect 'unique' summary of care records received.
- For measure 2:
 - How should usage of clinician-facing apps be measured? Do clinicians need to authorize 3rd party apps?
 - What categories should be selected for minimum number of users to provide variation and comparability across developers? Should multiple categories be selected or just one minimum (e.g., 10 users)?
 - Should other numerators be considered (e.g., number of apps deployed by customer and/or product)? Do these provide additional insights of value?

Other Clinical Care Information Exchange Measures Considered

- Connection to national networks
- Time-to-implementation to onboard to a new national network
- Percent of referral or transition summaries viewed by clinicians
- Percent of external data (such as labs, immunizations) incorporated in the EHR
- Percent of clients that can view an integrated encounter list
- Percent of clients that can view an integrated medication list
- Percent of ED notification that are viewed by clinicians/clinical staff
- Percent of ED notifications that resulted in some type of follow-up with the individual by clinicians/clinical staff
- Percent of discharge summaries that are viewed by clinicians/clinical staff
- Percent of discharge summaries that resulted in some type of follow-up with the individual by clinicians/clinical staff
- % of individual matches accepted into the system for query requests to external providers to return specific individual health information

Clinical Care Information Exchange

Facilitated Discussion by
Abby Sears & Steven Lane

Clinical Care Information Exchange

Assess whether users are using certified health IT to **view and use data received** from external sources **and** whether and how **clinician facing apps** are used



Recommended guiding principles

- Rely on existing data collection to respond to new reporting requirements to avoid imposing cost/burden on providers/clinicians.
 - Consider who will have to perform the data collection and storage (clinician/care level vs. developer/product level)
 - Collection should be automated and should not entail additional manual data collection, especially by provider/provider staff.
 - Data should be collected by developer product. We want to know which developer product is performing consistent with certification criteria and to be able to compare products in the marketplace.
- Should minimize increased costs on providers for computing and storage costs.
 - Even for those measures where vendor/developer may aggregate reporting or collect data, in most instances it will increase computing and storage obligations on providers.
- Clearly tie the need for measurement with certification criteria and whether measurement will lead to different outcomes.
- Consider unintended consequences of reporting requirements where providers may opt-out of clinical activities (vaccination/immunization) if additional burden is imposed.
- Consider reducing the number of metrics to one or two in each domain and reduce further stratification which increases computing and storage costs.



Use of clinical data received from an external source

Key questions:

1. Are clinical data received in C-CDA format via certified health IT (CHIT)?
 - How often are C-CDA documents received via push (Direct) messaging?
 - How often are C-CDA documents received in response to queries?
2. Are received C-CDA documents viewed in the receiving system?
 - How often are received C-CDA documents viewed by clinicians?
 - How often are received C-CDA documents viewed by non-clinician users?
3. How often do CHIT systems parse discrete data from received C-CDA documents and incorporate parsed data into the local system?
 - Is there value in differentiating types of parsed data, e.g., problems, allergies, medications, immunizations, notes?
4. How often are parsed data viewed or otherwise utilized to inform care?
 - Is there value in differentiating direct viewing of received data vs. utilization of data to inform analytics, decision support, etc.



Use of clinical data received from an external source

SUMMARY OF CARE RECORDS			
Percentage of summary-of-care records viewed by end users and clinicians and broken out by parsing /integration of records			
Proposed metric 1a	Proposed metric 1b	Reporting format	Additional Questions
<p>Num 1: Number of unique summary-of-care records received using certified health IT that are viewed by end users and clinicians</p> <p>Den 1: Number of unique summary-of-care records received using certified health IT</p>	<p>Num 2: Number of unique summary-of-care records received using certified health IT that are parsed, integrate, and viewed by end users and clinicians</p> <p>Den 2: Number of unique summary-of-care records received using certified health IT that are parsed and integrated</p>	<ul style="list-style-type: none"> Viewing rates may differ based on whether data are integrated Consider one denominator with multiple numerators to capture total number of records and then those that were parsed and integrated Require developers to report numerators and denominators, not just percentages For each measure, collect numerator and denominator counts by setting (e.g., inpatient, outpatient) Aggregated by developer Frequency of reporting and look-back period for numerators and denominators to be determined 	<ul style="list-style-type: none"> To what extent are these data recorded in activity logs the health IT developer can access? What challenges exist because of varying workflows in the viewing of summary-of-care records? Are there concerns that duplicates would be counted if we do not collect “unique” summary-of-care records received



Comments: Metric 1 - Clinical Documents Received & Viewed

Considerations:

- The information for this metric could be captured as counts in activity logs as documents are received and/or parsed rather than through reporting.
 - Do not recommend utilizing queries with look-back periods that could consume significant computing capacity and generate spurious or incomplete results due to “time-outs”.
 - If look-back reports are used to generate metrics, this should be based on a sample as opposed to all documents received in the reporting period.
- Generating, storing and transmitting activity logs for each unique summary-of-care record could require significant computing, storage and transport capacity.
- If a CHIT system is configured to re-query for and download updated versions of previously received documents this could inflate the number of received documents and potentially decrease the proportion of received documents that are viewed as there may not be a clinical need to review updated documents.
- It is important to differentiate “clinician” vs. “other end-user”. Specifics will need to be clarified, e.g., clinician includes all licensed independent practitioners + all nursing/MA/clinical support categories. This separation could increase the complexity of the activity logs, requiring additional computing and storage.

Comments: Metric 1 - Clinical Documents Received & Viewed

Draft Recommendations:

1. Metrics should be based on any valid C-CDA document type received, not only Summary of Care (CCD) documents.
2. If possible, metrics should count each received document once and avoid re-counting subsequent updates to / iterations of the same document.
3. Metrics should separate counts of documents received based on a push to the CHIT system, e.g., via Direct messaging, vs. documents pulled into the CHIT system, e.g., via query-based document exchange.
4. “Clinicians” includes all licensed independent practitioners + all nursing/MA/clinical support staff.
5. Activity log reports should be automatically generated and transmitted from provider systems at a specified interval with a programmed trigger.
6. Summary reporting should occur at least once a year, but not more than quarterly.
7. Metrics should be reported at the product level, e.g., ambulatory, inpatient, or ED EHR product, not at the vendor level as products from the same developer may have different functionality and performance.

Comments: Metric 1a

- This is meant to be a metric of viewing documents.
 - A clear definition of “viewed” is needed.
 - There is variability in workflow and the format of the summary-of-care records – some systems may automatically display whole documents while others may display subsets of received data or inform users of the availability of external documents/data requiring users to actively access and view.
 - If a user is informed that a document exists but does not bother to open it, that is not viewing
 - If data is parsed from a document and displayed or otherwise utilized in workflow this will be captured by Metric 2
 - Draft Recommendation:
8. Viewing a document should be defined as having an open document display to a user, whether the display includes all or a subset of the data received, and regardless of whether the user scrolls through or clicks on any of the data in the document itself.

Comments: Metric 1b

Goals: Determine what proportion of received documents had data parsed and integrated into the CHIT, e.g. problem, allergy, medication, immunization (PAMI), test result, vital signs, or clinical notes.

Considerations:

- Should ANY discrete data parsed/integrated from a document qualify it as having been parsed?
- Should there be measurements of each of, or the number of data types parsed/integrated by a vendor's system, or the proportion of documents with 1, 2, 3, etc. parsed data types?
- Vendor systems may not maintain sufficient provenance metadata for data parsed from a document in a manner that allows the determination of whether this parsed data was viewed or otherwise utilized by downstream processes.
- What if the parsed data, e.g., problem or an allergy, was used to inform a metric for an individual or a population, or to trigger a decision support alert, thus impacting care, but was not directly viewed by an end user?
- Collection & storage costs could be substantial for data re parsing and integration, as well as for viewing of the parsed data elements.
- Should this metric be limited to data parsing and integration rather than viewing for version 1 and roadmap the measurement of viewing/utilizing parsed data to give developers time to develop supporting functionality?

Draft Recommendations:

9. Separate metrics re:
 - How often was data parsed from received documents and integrated into the CHIT system?
 - How often was parsed/integrated data viewed in the CHIT system (as opposed to being viewed in the received document itself)?

Use of clinician-facing third party apps

Key questions:

1. How many clinician-facing third party apps are installed in CHIT systems?
2. What proportion of installed clinician-facing third party apps are ever used as intended and by how many clinician users?
3. What proportion of installed clinician-facing third party apps are used on an ongoing basis by how many clinician users?
4. What proportion of installed clinician-facing third party apps are used by different clinician sub-groups, e.g., physicians vs. other LIPs vs. nursing staff, primary care vs. specialty staff, etc.?

Use of clinician-facing third party apps

How many clinician-facing apps are registered via certification (g)(10), and to what extent are these apps used?

CLINICIAN FACING APPS			
Percentage of registered, third-party clinician-facing apps with active users (as defined by end users and clinicians authorizing access)			
Proposed metric 2a	Proposed metric 2b	Reporting format	Additional Questions
<p>Num 1: Number of registered, third-party clinician facing apps with a minimum number of users (see potential categories/subgroups)</p> <p>Den: Count of third-party clinician-facing apps registered via § 170.315(g)(10)(III)</p>	<p>Other potential numerators: Average number of apps deployed by customer or average number of apps by product</p> <p>Den: Count of third-party clinician-facing apps registered via § 170.315(g)(10)(III)</p>	<ol style="list-style-type: none"> Authorization of the app is a proxy for usage Potential numerator categories for users: by average number of end users/clinicians using each app across a developer; number of users (e.g., at least 1, 10, 100, 10,000, or 100,000) Require developers to report numerators and denominators, not just percentages Aggregated by developer Frequency of reporting and look-back period for numerators and denominators to be determined 	<ol style="list-style-type: none"> How should usage of clinician-facing apps be measured? Do clinicians need to authorize third-party apps? What categories should be selected for a minimum number of users to provide variation and comparability across developers? Should multiple categories be selected or just one minimum (e.g., 10 users)? Should other numerators be considered (e.g., number of apps deployed by customer and/or product)? Do these provide additional insights of value?

Comments: Metric 2 – Clinician Facing 3rd Party App

Considerations:

- Should measures focus on functionality offered by products as opposed to the adoption rate and use?
- Reporting by product may not reflect superior functionality, but superior marketing and existing market share.
- Could reporting low numerators/denominators in a small patient population increase the risk identification of patients, e.g., related to an app related to substance use disorder used by clinicians in a small community?
- If authorization is used as the proxy for usage, how do metrics account for apps authorized but never actually utilized in clinical workflow?
- Large complex CHIT installations may be more likely to utilize clinician-facing apps. Would it be valuable to normalize or stratify metrics based on size of installation, e.g., # of users, clinicians, encounters?

Comments: Metric 2 – Clinician Facing 3rd Party App

Draft Recommendations:

10. Report separately on app registration vs. app use if possible
11. Include 1,000+ users as a separate category for reporting volume of use.
12. Report by the following order of magnitude user number categories:
 - 1 user,
 - 2-9 users,
 - 10-99 users,
 - 100-999 users,
 - 1,000-9,999 users, etc.
13. Report the number/proportion of registered apps by usage volume category within the reporting period.

Future Considerations:

- Report range and average number of times an app was used by all users within the reporting period.
- Report by user class, e.g., physicians vs. other LIPs vs. nursing staff, primary care vs. specialty staff, etc..

Global Comments & Recommendations

1. ONC should consider limiting the initial number of metrics and complexity of the proposed metrics to assure the success of initial program implementation. Additional metrics could be identified as planned for a future program version to inform vendors of the need to develop supporting functionality.
2. Automatically generated activity logs of real-time receipt, parsing, filing, viewing and use of data is preferred over look-back reporting, as the latter would:
 - a. likely require more computing capacity, and
 - b. be prone to errors including incomplete collection due to time-outs,
 - c. vendors should not shift computing and storage costs to providers.
3. Collection and reporting of metrics may require the negotiation of new contract provision authorizing direct vendor access to query system, as well as the export of activity log summaries and/or reports.

Public Comment

To make a comment please call:
Dial: 1-877-407-7192

*(Once connected, press “*1” to speak)*

All public comments will be limited to three minutes.

You may enter a comment in the
“Public Comment” field below this presentation.

Or, email your public comment to onc-hitac@accelsolutionsllc.com.

*Written comments will not be read at this time,
but they will be delivered to members of the Task Force and made part of the Public Record.*



Final Remarks

Meeting Schedule

	Topics	Current Assignments
July 15	Kickoff—introductions, overview of task force charge and plan for meeting topics and process, begin discussion of measures	
July 22	Patient Access measures	Steve Waldren Sheryl Turney
July 29	Public Health information exchange measures Begin developing recommendations report	Bryant Karras Sasha TerMaat
Aug 5	Clinical Care information exchange measures	Abby Sears Steven Lane
Aug 12	Standards adoption and conformance measures Data quality potential future measure	Ken Mandl, Jim Jirjis Sasha TerMaat, Zahid Butt
Aug 19	Review draft recommendations report and slide deck	
Aug 26	Review final recommendations report and slides, plan for HITAC meeting	
Sept 2	Available for additional task force meeting if needed, finalize slides/report for HITAC	
Sept 9	HITAC meeting and vote	
Sept 16	Hold for follow-up task force meeting if needed	

GAO Seeking Nominations for Health IT Advisory Committee

- GAO is now accepting nominations for HITAC appointments. From these nominations, GAO expects to appoint at least five new HITAC members, focusing especially on health care providers, ancillary health care workers, health information technology developers, and patient advocates. Members serve 3-year terms beginning January 1, 2022, with the terms subject to renewal.
- Interested nominees should submit letters of nominations and resumes to HITCommittee@gao.gov by **August 24, 2021**.
- Refer to the [Federal Register announcement](#) for more information.



**Meeting
Adjourned**