Building Smoking Cessation Electronic Health Record Functionalities and Workflows for the Oncology Setting:
A Build Guide for Project Leaders, Clinicians, and Information Technology Personnel (Epic Version)

Cancer Center Cessation Initiative (C3I) Coordinating Center

Fall 2019

University of Wisconsin Carbone Cancer Center

The National Cancer Institute's **Cancer Center Cessation Initiative (C3I)** was established in 2017 with the goal of helping cancer centers build and implement sustainable tobacco cessation treatment programs to routinely address tobacco cessation with cancer patients.

As part of the NCI Cancer Moonshot program, the C3I aims to:

- Refine electronic health records (EHR) and clinical workflows to ensure the systematic identification and documentation of smokers and the routine delivery of evidence-based tobacco cessation treatment services,

- Overcome patient, clinician, clinic, and health system barriers to providing tobacco cessation treatment services,

- Achieve institutional buy-in that treating tobacco use is a component of organizational "Standard of Care," and,

- Create mechanisms to sustain tobacco cessation treatment services so that they continue beyond the funding period of the C3I.

This C3I Electronic Health Record Build Guide is designed to assist project leaders, clinicians, and information technology personnel who use Epic as their EHR platform to build smoking cessation functionalities and workflows for the oncology setting. While written specifically for the Epic EHR, the guidance should be applicable more broadly.

This Guide was produced by the Cancer Center Cessation Initiative (C3I) Coordinating Center at the University of Wisconsin Carbone Cancer Center.

Overview and Rationale

Electronic health record (EHR) technology can be used to facilitate many of the key goals of the National Cancer Institute's (NCI) Cancer Center Cessation Initiative (C3I), including identifying all adult oncology patients who smoke/use tobacco, and providing evidence-based smoking cessation treatment to them during and/or following oncology visits.

This **Clinical IT Build Guide** is designed to provide C3I Grantees, specifically those who work on an **Epic** platform, a description of and technical guidance for building and implementing key EHR functionalities that can be used to advance the goals of the C3I. These functionalities include:

- Documenting **Smoking Status**
- Creating a **Smokers Registry**
- Facilitating Smoking Cessation workflows using **Flowsheets** and the **Navigator** function
- Building **Best Practice Advisories**
- Building **Referral Orders** (for internal tobacco cessation services/programs, external tobacco cessation services/programs, tobacco cessation medications)
- Automating the building of **Reports** for reporting C3I measures biannually to the Coordinating Center

This document is designed to meet the needs of three audiences:

1. **C3I Site Leaders** who oversee the C3I cessation programs at their cancer centers
2. **Clinical Personnel** who utilize the C3I cessation programs at their cancer centers
3. **Information Technology Personnel** at the C3I sites who work with site leaders and clinical staff to build and implement the required EHR functionality

These materials can be used by any healthcare system or program that is live on Epic to build and enhance EHR-based smoking cessation treatment interventions for their patients.

The following symbols are used throughout this Build Guide to highlight information of interest to the three primary audiences:

Information for C3I Site Leaders

Information for Clinical Personnel

Steps/Instructions for Information Technology Personnel

C3I Site Leaders

1. These workflows and build instructions are designed to serve as tools to aid C3I sites. Please note: C3I sites are not required to use all of the functionalities described in these instructions, and sites can modify any of these functionalities as needed to meet their health care system's workflows, EHR infrastructure, and clinical priorities. Along with your clinical and IT teams, you will determine which components of this guide support the workflows and smoking cessation treatment programs you are implementing.

2. Throughout this document, we refer to "smoking," "smoking status," and "smokers." This is based on the C3I focus on intervening with patients who smoke cigarettes. This focus results from data which support that the bulk of tobacco-caused cancer risk results from combustible tobacco use, particularly cigarette smoking. Of course, any C3I site or oncology setting can expand its focus beyond cigarettes, and the workflows and build guides would need to be adjusted to reflect that expanded focus.

C3I Site Leaders   **Clinical Personnel**   **IT Personnel**

Document Overview Graphic

Throughout this document, we will be using the following graphic to highlight each of the functionalities described in this build guide. As shown, it includes all key areas of focus in this build guide.
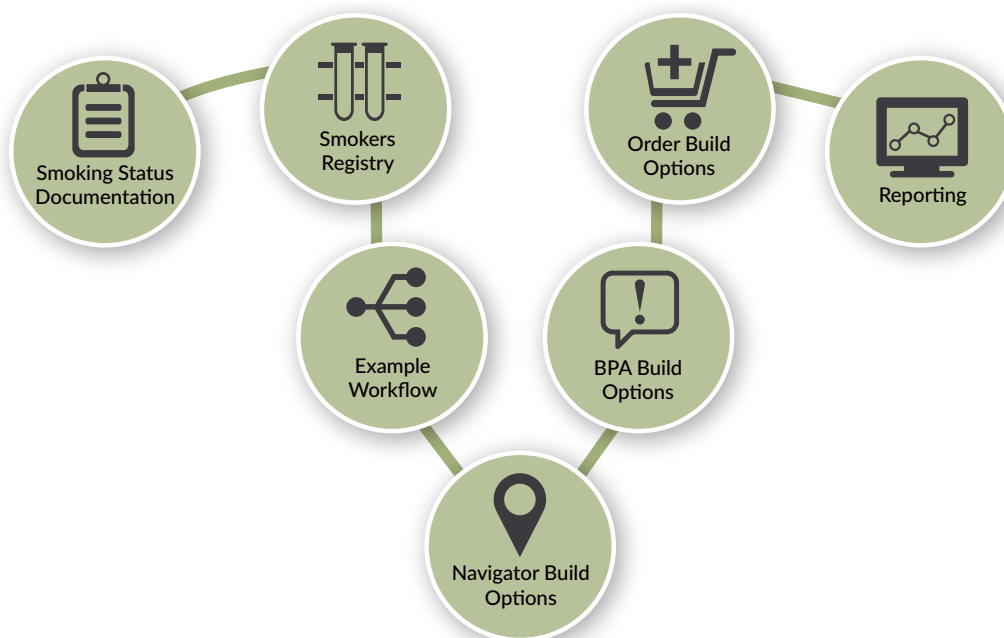

Smoking Status Documentation · Smokers Registry · Order Build Options · Reporting · Example Workflow · BPA Build Options · Navigator Build Options

Table of Contents

For questions, please contact Rob Adsit, ra1@ctri.wisc.edu

Glossary

BPA – Best Practice Advisory. BPAs are alerts that pop up for providers in the Epic system to alert them to potential actions they may want to take. They are triggered by specific documentation in the system (e.g., a patient has certain active orders, a particular diagnosis (such as tobacco use), or are due for a screening test.)

C3I – Cancer Center Cessation Initiative. This initiative, funded by the National Cancer Institute (NCI), is designed to increase the reach and effectiveness of smoking cessation treatment delivery to oncology patients who smoke in the 42 NCI-funded Cancer Centers.

Clarity – Clarity is a relational database that has its own server (an 'analytic database server' or 'Clarity server') and therefore can process data derived from Chronicles but not interfere with Epic practice management. While the Chronicles database will save data for only a limited time period, Clarity's database can store data on an ongoing basis. Therefore, for long-term, complex, or analytical reporting, the Clarity tool should be used to store and query data.

Clarity Console – A web-based interface providing centralized management tools for the Clarity data transfer process.

Clarity Data Mart Table – Custom tables that hold column information, documentation information, and constraints information for your Smokers Registry.

Chronicles Database – The complete database management system that manages all of Epic's applications' data

sets and delivers them to end users to interact with.

EDI – Electronic Data Interchange. EDI refers to Epic's Bridges application and interface records, such as those necessary to set up a referral process with a third-party system.

EHR – Electronic Health Record.

Epic Foundation System – This is Epic "out of the box," with key tools included but ready to be customized for different potential workflows. These are the building blocks of your Epic system.

Epic Hyperspace – Hyperspace is what an end user logs into in order to access Epic and its tools.

Flowsheet – Flowsheets are discrete fields for documenting data. They are made up of two primary parts:

FLO – Flowsheet row. The tool most often used by clinicians to document discrete data in the Epic system.

FLT – Flowsheet template. A record that holds multiple flowsheet rows for related documentation purposes.

Grouper – A grouper is one record that can hold multiple related records. E.g., a procedure grouper is one record that holds multiple procedure records that are similar, such as various ocular coherence tomography orders appearing under the general header of OCT.

In Basket – In Basket is the secure communication tool within Epic that can be used to share results and notes amongst users within the organization.

Interface – An interface is the connection and interaction between two or more separate components of a computer system exchanging information (e.g., an interface that permits vital signs to flow from a monitor into Epic).

IT – Information Technology.

KB_SQL – Often referred to as "Sequel." A high performance database management system.

MyChart – MyChart is the patient proxy tool used to follow up with patients after they leave the hospital or clinic. Available tools within MyChart include paying bills, asking a PCP questions, reviewing test results, and scheduling future appointments. MyChart can be used to push communications to patients who fit certain criteria (e.g., inclusion in a registry).

Navigator – Navigator is an Epic tool that helps clinicians move through common workflows quickly and in one place in the EHR, so they don't have to switch screens between clinical activities.

Navigator Section – A tool, such as Notes or a flowsheet template, as its own tab within a Navigator.

Navigator Topic – An organized group of Navigator Sections that are part of the same workflow.

Navigator Template – A collection of Navigator Sections and Topics that are part of the same workflow.

NCI – National Cancer Institute.

Orders –

Referral Order (internal services; external services) – Referral orders can automatically create a referral when a clinician signs an order for a specific procedure. Referral orders help to streamline the process for clinicians to send patients to specialists and to follow up with the outcome.

Referral Order Result – the outcome of a referral (e.g., Completed).

Medication Order – Medication orders are orders placed by a clinician for medications that the patient will receive either while inpatient or as a discharge medication.

Order Composer Configuration – The Order Composer Configuration is what determines what will appear to the end user within an order, such as order questions and other information that may guide a clinician in their ordering selections.

PAF Column – A PAF Column is one of the columns that appear as display fields when you view the output of a report or registry. E.g., nearly every report you could run will include a column for Patient Name and MRN (Medical Record Number). These are two separate PAF columns.

Preference List – A preference list is a list of preferred records for end users. E.g., there are preference lists for documentation fields and for orders to help users identify their commonly used records.

Registry – A registry is a dynamic, collective data pool defined by its criteria. Rather than needing to run a report, a registry dynamically updates whenever additional patients qualify for the determined criteria, as well as whenever a patient may no longer match the criteria. For the purposes of this document, our registry refers to the data collection of oncology patients who smoke.

Reporting Workbench – Reporting Workbench is the tool used by end users to run reports of specific criteria in order to generate a report of selected data. All data within this tool comes from discrete fields across Epic applications.

SmartSet – A SmartSet is an Epic tool to guide clinicians through a clinical intervention, including orders and patient education.

SmartText – A SmartText is a template note that can be used to present an end user with commonly used documentation or notices. SmartTexts are fully customizable and can be used for writing notes and displaying information to end users.

Social History – The Social History is an Epic-released (i.e. it is part of Epic's Foundation system) Navigator Section, which provides a place for clinicians to document the past medical history of their patient and their patient's family history of medical concerns. In addition, this section currently houses the patient's smoking history. This is where the Epic system typically "looks" when reporting on Meaningful Use and CMS (Centers for Medicare and Medicaid Services) measures for smoking status.

TTP – Tobacco Treatment Program. A program that may include referrals to external or internal resources, medications, orders and order sets to aid patients in their smoking cessation.

TTS – Tobacco Treatment Specialist.

UPD – Used to determine how deletes are run for an incremental table. Standard released update tables exist for all master files that use table-based tracking or record-based tracking. You do not need to create custom update tables for these master files.

Workflow – A workflow is the process through which clinicians collect and document information from and for the patient. In Epic, a workflow specifically relates to the documentation fields and activities within a Navigator. A Navigator's purpose is to walk an end user through their workflow and organize the fields of patient information that they should review and/or document. In this sense, a Navigator is synonymous with a workflow in the Epic system.

Workqueue – An Epic workqueue is an activity that presents patient information based on whether that patient's account satisfies the workqueue's predetermined criteria. Workqueues are used to notify clinicians of patient charts that require follow-up or include outstanding tasks. One example of a workqueue is for patients that have an appointment in the upcoming week who have previously been documented as active smokers and wish to quit. The criteria they meet is that: (1) they have an upcoming appointment in the next week, (2) the system recognizes them as smokers based on existing documentation in their chart, and (3) the system recognizes documentation in their chart that means they are trying to quit, such as a referral to a quitline or cessation medication. The patient will appear on the workqueue to notify physicians that they will be seeing the patient soon, so that physicians can follow up regarding their smoking cessation.

C3I Site Leaders   Clinical Personnel

Smoking Status Documentation and Build

Smokers Registry

Smoking Status Documentation

Order Build Options

Reporting

Example Workflow

BPA Build Options

Navigator Build Options
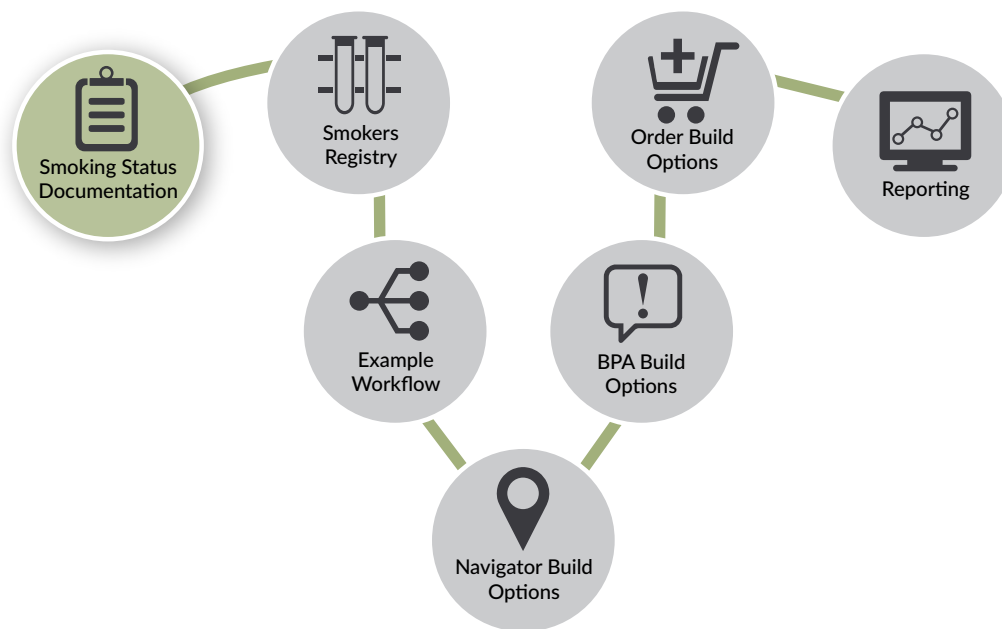
The **EHR** provides a mechanism to systematically document the smoking status of patients who present to the targeted C3I clinical sites. Accurately documenting whether a presenting patient smokes or not at the point of care is an essential first component for intervening with patients who smoke.

Non-physician staff (e.g., medical assistants, nursing personnel) are typically responsible for documenting smoking status, and this documentation typically occurs during the rooming process of a patient clinic visit or upon admission. However, the patient's smoking status can be documented and/ or revised in the EHR by clinical or tobacco treatment staff at any point of care, including after a C3I tobacco treatment visit or during a scheduled follow-up contact in person or via phone.

The recommended steps to build the smoking status documentation function below use components already in Epic. By properly entering smoking status at the initiation of care, C3I staff can facilitate the subsequent reporting of such status (e.g., for C3I biannual reports).

Clinical Personnel

IT Personnel

Workflow for Smoking Status Documentation

This section walks you through a workflow that guides the clinician to document a patient's smoking status. Smoking status documentation is found in the Social History part of Epic Foundation, and already exists within your Visit Navigator in Epic.

1. Enter patient's **Visit Navigator** and select the History Activity section.

2. In the patient's **Social History**, review and document patient smoking status. Typical smoking status classifications in Epic are overlapping and include:

    A. Current Every Day Smoker
    B. Current Some Day Smoker
    C. Former Smoker
    D. Heavy Tobacco Smoker
    E. Light Tobacco Smoker
    F. Never Assessed
    G. Never Smoker
    H. Passive Smoke Exposure – Never Smoker
    I. Smoker, Current Status Unknown
    J. Unknown If Ever Smoked

Of these, the following options identify patients who should be targeted for clinical interventions. These groups of patients will also be included as part of the inclusion criteria of the Smokers Registry:

    A. Current Every Day Smoker
    B. Current Some Day Smoker
    C. Heavy Tobacco Smoker
    D. Light Tobacco Smoker
    E. Smoker, Current Status Unknown

Once a patient is identified as a smoker (see above), Epic has the capacity to highlight such patients for interventions, using tools such as **Best Practice Advisories**. This is described in the Navigator section below.

Smokers Registry Fundamentals and Build
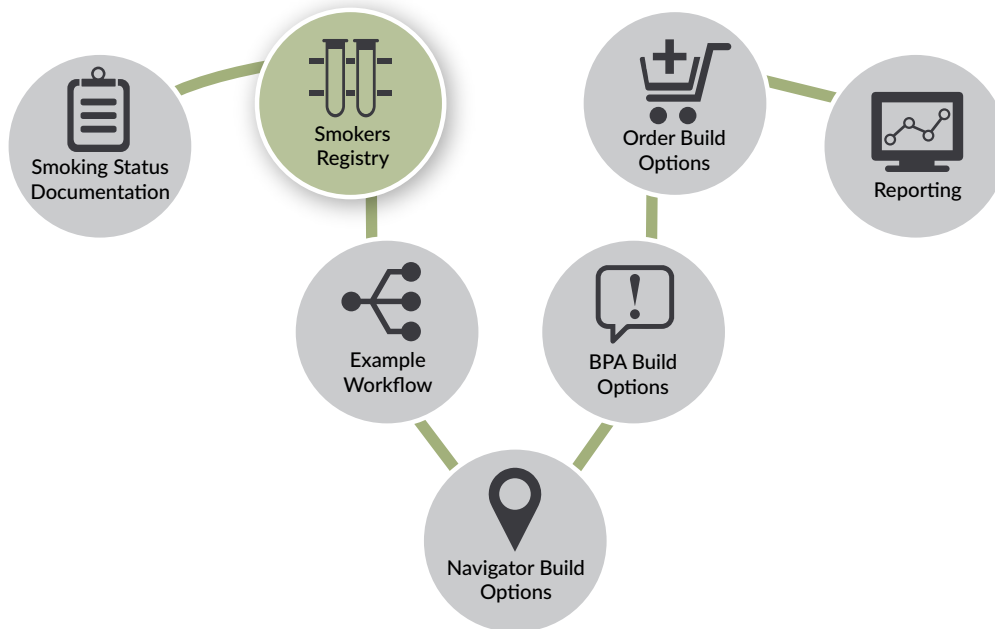
Clinical Personnel

Why Use Clarity to Build the Smokers Registry?

IT Personnel

Some of the following tasks refer to work in Clarity tables. This section addresses what this means and how Clarity is different from Reporting Workbench.

Registries are built with Clarity tools rather than the tools used for Reporting Workbench. Reporting Workbench is a capacity-limited Epic tool that draws data directly from Chronicles (the complete database management system that manages all of Epic's applications' data sets and delivers them to end users to interact with). Its limited capacity means that it is primarily used for "real-time" focused reporting. This reporting helps to answer questions such as, "Which of my diabetic patients have had HA1C determined in the last month?"

An EHR-based **Smokers Registry** can be used to meet one of the key goals of the C3I: to target all patients who smoke for cessation intervention. Registries serve as tools to group patients based on specific criteria/data found in the EHR. The build instructions below include Smokers Registry criteria, based on the experience of the C3I Coordinating Center. These patient criteria include adult patients 18 and older who: a) have a smoking status documentation (see above) of "current smoker" **OR** b) were prescribed varenicline or a nicotine replacement medication within the last year **OR** c) have a diagnosis of nicotine dependence within the last year. In addition to identifying and targeting patients who smoke for cessation interventions, a Smokers Registry can serve a key role in generating reports for the biannual C3I Data Reports.

This Smokers Registry is intended to help identify and document all new cancer center patients who smoke. Note– some C3I sites are targeting all cancer patients who smoke for intervention, not just new patients. C3I sites can customize their Smokers Registry to do both of these things.

The Smokers Registry in this guide is a customized version of Epic's default/ foundation Smokers Registry. The Smokers Registry criteria are based on the C3I Coordinating Center's work with multiple health systems in Wisconsin. The Coordinating Center has found the default Epic Smokers Registry less effective in targeting smokers for intervention, and thus has designed this customized version. Importantly, each C3I site can customize their own Smokers Registry by adjusting their EHR-based inclusion and exclusion patient criteria.

Clarity is a relational database that has its own server (an 'analytic database server' or 'Clarity server') and therefore can process data derived from Chronicles but not interfere with Epic practice management. While the Chronicles database will save data for only a limited time period, Clarity's database can store data on an on-going basis. Therefore, for long-term, complex, or analytical reporting, the Clarity tool should be used to store and query data. Data that are normally stored in the Chronicles database are structured in tables and columns on the Clarity database.

Clarity uses KB_SQL (often referred to as "Sequel") queries to define which items to extract from Chronicles. During off-peak hours, data are extracted and transferred into tab-delimited text files called flat files. If your facility has a reporting environment, Epic recommends extracting data from that environment so that you do not interfere with production activities.

On the analytical database (Clarity) server, records from the flat files are loaded into data tables. After the load process finishes, the Clarity Console sends an e-mail with information reporting on the status of the loads to specified recipients. Once the data is loaded, users can run reports.

Step-by-Step Guide to Constructing a Smokers Registry in the Epic EHR

IT Personnel

The first step in building an EHR-based Smokers Registry is to operationalize the definition of a tobacco user. To do this, patients are grouped based on criteria that can be defined within the EHR. Below, we review the suggested criteria to utilize the discrete data that can be captured about your patient population within the system.

There is substantial flexibility in determining such criteria, but two key components are ensuring that:

1. The criteria identify all the intended or targeted smokers.
2. The criteria are available and searchable in the EHR.

Step 1: Identify the relevant demographic information from the EHR that define the intended patient pool.

Required (unless otherwise indicated) Smokers Registry information needed for every patient:

1. Age 18 years or older.
2. Background data:
    A. Name
    B. Address
    C. Phone number – home and/or mobile (preferably both)
    D. Whether the patient is MyChart enabled

Step 2: Determine Smoking Status via the information available in Epic to select current smokers. Please note that if your system has other places where smoking status is regularly documented outside of the standard social history variables, these can be added as additional "OR" criteria.

Must have a current recorded Smoking Status that is NOT equal to:

1. Former Smoker
2. Never Smoker
3. Passive Smoke Exposure – Never Smoker

Must meet one of the following criteria:

1. One of these Smoking Statuses in their documented Social History in the last 365 days:
    A. Current Every Day Smoker
    B. Current Some Day Smoker
    C. Smoker, Current Status Unknown
    D. Heavy Tobacco Smoker
    E. Light Tobacco Smoker

OR

2. Has an order placed for Nicotine Replacement Therapy (NRT) or Chantix in the last 365 days.

   OR

3. Has been diagnosed with Nicotine Dependence. This includes ICD-10 codes F17.200-F17.219 (minus F17.201 and F17.211). "Diagnosed" means:

   A. Diagnosis is on Problem List;

   B. Diagnosis has been used at least once in an Encounter Diagnosis in last 365 days.

   OR

   A. Diagnosis has been used at least once as an Invoice Diagnosis in last 365 days.

   B. *If you would like to review the list of Diagnosis (EDG) records these codes correspond to, please review the "Nicotine Dependence Dx" tab on the accompanying Excel sheet.*

Edit Your Smokers Registry's Criteria

IT Personnel

The criteria for your Smokers Registry determine who will appear in your registry. To edit a registry to only show particular criteria (e.g., patients of a certain age) you need to edit the inclusion rule. This rule is set in your registry record and is edited in Epic's Hyperspace. The rule defines what criteria your Smokers Registry requires in order for patients appear there.

1. Follow this pathway to edit the inclusion rule: Epic button > Report Management > Analytics > Registry Infrastructure > Registry Editor.

2. Enter the name of your registry in the Select a Registry Record window to open the Registry Editor.

3. Select Metrics and Rules from the index on the left of your screen and highlight the rule you will be editing.

4. In the Rule Editor, select the property you want to edit by double clicking.

   A. If you are editing the rule to only show patients 18 and older, select the Age property that fits your needs.

5. In the criteria form, set your default parameter values as needed. For Age, set the value to be equal to or greater than 18.

6. If you wish to test your edited rule, select Test on the bottom of the screen and enter a patient record. Select Run Test. Verify your build.

7. Repeat steps 4 through 6 for any components that you wish to include in your inclusion rule. Below are the components and criteria we chose to use for our example workflow:

A. Is alive:

In the Rule Editor, select the property Patient Living Status.
In the criteria form:

i. Operator: =

ii. Value: Alive

B. Last recorded smoking status:

In the Rule Editor, select the property Last Smoking Tobacco Use Status.
In the criteria form:

i. Look Back Period: 365

ii. Operator: =

iii. Value:

    a. Current Every Day Smoker

    b. Current Some Day Smoker

    c. Heavy Tobacco Smoker

    d. Light Tobacco Smoker

    e. Smoker, Current Status Unknown

C. Tobacco User Diagnosis on Problem List:

In the Rule Editor, select the property Diagnosis: Problem List.
In the criteria form:

i. Operator: =

ii. Value: select each applicable Tobacco Use diagnosis.

D. Medication order placed:

In the Rule Editor, select the property Patient Living Status.
In the criteria form:

i. Medications: select each applicable medication across nicotine treatment therapy and Chantix.

ii. Operator: =

iii. Value: Yes

If you need to create a custom inclusion rule rather than edit an existing one, you will use the Rule Editor tool. An inclusion rule is the rule set in the registry that specifies which criteria must be included when filtering information. For example, for C3I you may want to create an inclusion rule for patients with a cancer diagnosis.

8. Search Rule Editor from your build dashboard.

9. Select Create a New Rule and enter the name for your rule.

10. Provide your rule with the Context of Registry Inclusion Criteria or Registry Inclusion Criteria: Contact-Based as appropriate.

11. Accept the rule and provide the rule with a description.

12. Search and select an Inclusion Criteria Property and edit the criteria form by double clicking your chosen property.

Set Your Smokers Registry's Columns

IT Personnel

In Epic, the columns of a registry or report determine what data output, or display, you will view when the system runs a query on the criteria you have set up. To add columns to your Smokers Registry report, you need to: (1) determine what columns to add to a Clarity Data Mart Table, (2) add the columns, and (3) specify the associated KB_SQL code.

1. First, you will need to create a table using the Table Wizard. This table will hold the columns that you wish to appear in your Smokers Registry view. Follow this path to begin: Epic button > Report Management > Table Wizard.

2. Name your table and then select the type of table you want to create. In our case, we will be creating a Clarity extract table.

    A. Clarity extract: Based on KB_SQL table and can be designated a Full or Incremental table.

    B. UPD (Update/Delete table): Used to determine how deletes are run for an incremental table.

    C. Category: Contains category list values for a particular Chronicles item.

    D. Registry-Based Data Mart: Creates a data mart table based off a registry record.

    E. Clarity Extract for Related Multi Item: Used when the Clarity extract table for the KB_SQL table the item belongs to already exists.

3. Select Next to go to the Table Parameters window.

4. Enter information in the required fields.

    A. INI: Must be selected before the KB_SQL.

    B. KB_SQL Table: the KB_SQL table the ETL table should be based on.

    C. Incremental Extract?: Yes for Incremental Extract, such as for master files that often change (e.g., EPT). No for Full Extract, such as for master files that are static.

    D. Make extract job-divided?: Yes divides the extract job, dividing the ETL process among several staging tables. The default is No.

    E. Version: Version in which you're creating the table.

    F. Applications: Associate applications to the table.

    G. Description: Describe the table.

5. Set Data Recoverable to Yes or No.

    A. Yes: If data in Clarity will always be re-extractable from Chronicles, or if data are purged from Chronicles but aren't needed by Clarity to store past data.

    B. No: If a full extract to Clarity isn't possible.

6. To automatically create all available columns via the Columns to Create section, leave the ALL items on the KB_SQL table option selected.

7. To select specific columns manually, select the Selected Items option in the Columns to Create section and choose Next. Add columns from the Available Items in the list to the Select Columns side of the table.

8. Each C3I site will determine what specific data output (patient factors) they want reported. Recommended columns include:

   A. MRN
   B. Age
   C. Sex
   D. Language
   E. Appointment Date
   F. Department
   G. Department Specialty
   H. Provider
   I. Appointment Status
   J. Follow-up actions
   K. Current Tobacco Status
   L. Last Tobacco Cessation Outreach
   M. Next Tobacco Cessation Outreach
   N. MyChart Status

9. Select Create to open the Table List form. Select Table Wizard to create another table and choose Edit Table to open the new table to edit or verify.

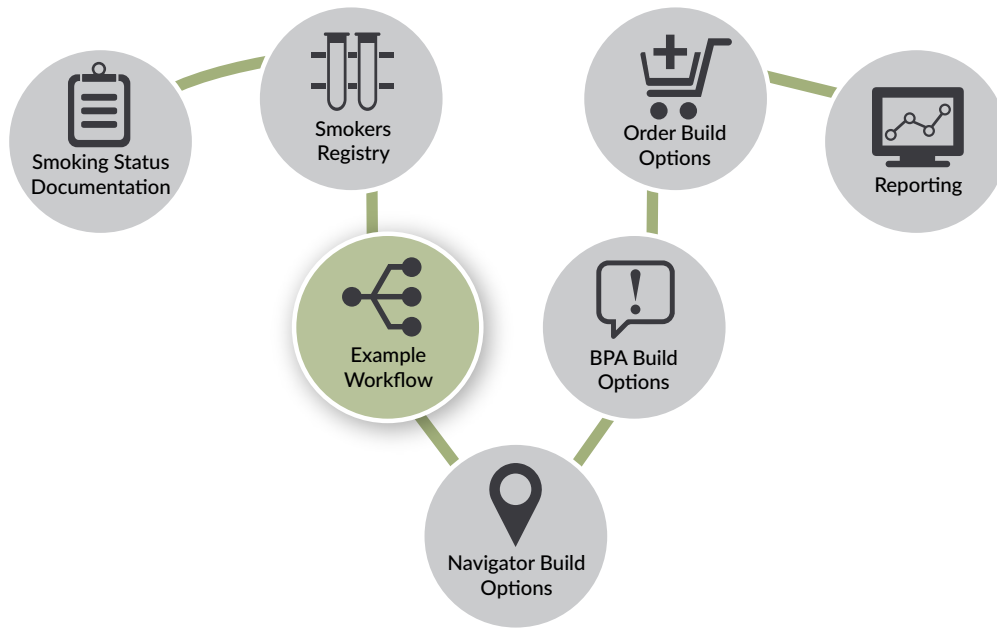10. Apply corresponding changes to the Clarity database.

Clinical Personnel

IT Personnel

Workflow Example

Smoking Status Documentation

Smokers Registry

Order Build Options

Reporting

Example Workflow

BPA Build Options

Navigator Build Options

Sample Workflow:

An adult patient visits the oncology clinic. The patient is identified and documented as a current smoker and states a desire to quit. The Medical Assistant documents Smoking Status during the rooming process by adding **Current Smoker** to the patient's Social History. Now, smoking can be addressed and tracked over time. By adding Current Smoker to the patient's Social History, the patient is added to the **Smokers Registry** and will subsequently be targeted for intervention. Adding the patient to the Smokers Registry also triggers a **Best Practice Advisory (BPA)** during the clinician visit. This provides the clinician with language to advise the patient that quitting smoking is the best thing that the patient can do to improve their health. The

BPA also recommends that the clinician: use a **referral order** to refer the patient to the internal Tobacco Treatment Specialist (TTS), discuss and **order smoking cessation medication(s)** for the patient, and/or place a **referral order to external tobacco cessation resources** such as the state tobacco quitline and/or SmokefreeTXT (the NCI text-to-quit app).

The Current Smoker status also adds a **Smoking Cessation Navigator** to this patient's record. The Smoking Cessation Navigator is an Epic tool that guides activities related to the workflow for addressing smoking with a patient who smokes.

Sample Workflow (continued):

Within a week of the patient's visit, the Tobacco Treatment Specialist (TTS) attempts to contact and see the patient. In the **Smoking Cessation Navigator**, the TTS reviews the referral to the state tobacco quitline as a Result of a **quitline referral order**. (Note– It may take 1-2 weeks for the quitline to respond to the referral order.) The TTS documents the date of outreach contact with the patient, the patient's use of the smoking cessation medication, and the date of the next outreach, if any.

When it is time to contact a patient six months after their clinic visit/quit date for the biannual C3I Data Report, the TTS or other C3I staff will see the patient's name and contact information on the **six-month report**, indicating which patients are due for outreach contact to assess smoking status (quit or continued smoking). Patients appear on this report one month prior to their six-month outreach target date. Smoking status is documented in the **Smoking Cessation Navigator** each time the TTS contacts the patient.
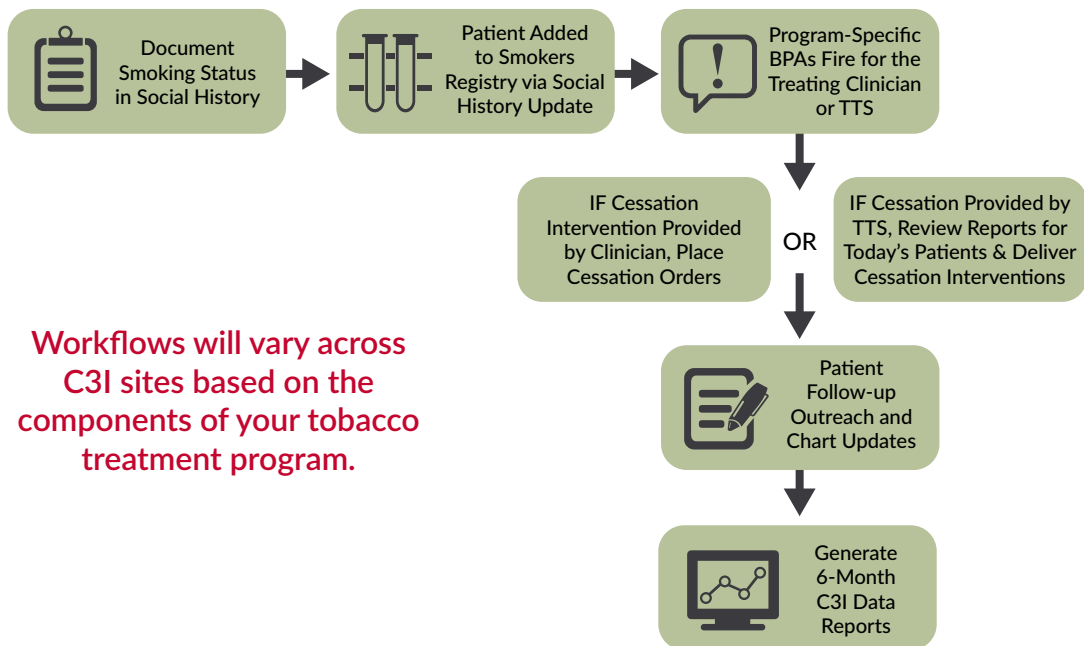
Workflows will vary across C3I sites based on the components of your tobacco treatment program.

Once you have identified the oncology patients who smoke for cessation interventions – typically by using the Smokers Registry explained above – you can use the EHR to guide the intervention. This intervention, as with other clinical activities, needs to be integrated into the workflow of the clinic or inpatient visit. The program components you have decided to include in your C3I program will guide the workflow components you build in the EHR.

Clinical Personnel

Smoking Cessation Documentation Build Options for Navigators

Navigators are EHR tools that help clinicians move through common workflows quickly and in one place in the EHR, so they don't have to switch screens between clinical activities. Related to C3I, a Navigator can be used by clinicians and tobacco treatment staff to assist them to efficiently "navigate" through their workflow, ensuring that they address each component of the cessation program intervention. Such components include visit reviews, note completion, patient arrival, and patient disposition.

The **Epic Foundation System** contains a number of pre-existing Navigator Templates that are designed to facilitate clinical workflow around a particular activity (e.g., Discharge Navigator). One is the Visit Navigator which guides the delivery and documentation of steps entailed by a visit or patient encounter, including documentation of treatment delivered (e.g., prescriptions) and tests ordered. Epic recommends starting with these templates. You might need to alter Foundation System Navigators and Navigator Sections to meet the specific needs of your organization or clinicians' workflows with regard to smoking intervention.

After you've finished building and customizing your Navigators, you'll be ready to make them available to the appropriate clinicians. The best way to do this is using a **Workflow Engine Rule**.

Workflow Engine Rules help you customize the Navigators that users can access based on context and workflow. For example, you can assign different Navigators based on the user, the encounter department, and/or the patient's age or sex.

For the **Smoking Cessation workflow**, we will provide guidance on building a **Navigator** for clinicians to use when seeing a patient in a Cancer Center. The Navigator can be set to appear only for patients who are 18 and older and who are identified as a smoker (based on the Smoking Status Documentation and/or the Smokers Registry).

Below are instructions to build the **flowsheet rows** that you may want to include in your **Smoking Cessation Navigator**. This will be determined by your site's C3I tobacco cessation workflow and C3I program components.

Instructions are provided for a number of smoking cessation tools, such as referral to an internal cessation treatment service, referral to a state quitline or SmokefreeTXT, and even medications in SmartSets. You will need to customize your Smoking Cessation Navigator build based on what cessation components your C3I site provides to your cancer patients who smoke.

Build the Flowsheet Rows for the Smoking Cessation Navigator

IT Personnel

This flowsheet tool is used to track your actual documentation, such as responses from your patients when you ask them whether they have successfully quit smoking. Flowsheet rows are used to capture the discrete data elements you will later need for reporting. Whomever you ask to complete this build can add additional rows/ groups to the flowsheets to collect additional data per your request.

1. Login to Hyperspace and go to the **Flowsheets** (FLT & FLO) activities.

2. Create Template and enter a record ID that correlates with your organization's numbering assignments.

3. Name the template according to your organization's naming conventions, such as: Amb Smoking Cessation Reporting.

   A. If your organization prefaces record names with something other than Amb (ambulatory) or OP (outpatient) then preface your record with that instead.

4. Set your display name: Smoking Cessation Reporting Measures.

5. List any synonyms that would be useful to search for the template if a user ever wishes to pull it into the Flowsheet activity (e.g., Smoking).

6. Accept and Stay.

7. Create a flowsheet group:

   A. Return to the Doc Flowsheets activity and Create Group/Row.

   B. Enter the next record ID according to your numbering conventions. This will be your flowsheet group so preface the name with G, for group.

   C. Name this group: G Smoking Cessation Programs.

   D. Provide a Display name (e.g., Smoking Cessation Programs) and synonyms so your group can be searchable.

   E. Set Row type to Flowsheet Group (2).

   F. Save your record and leave it open as you return to the Doc Flowsheets tab.

8. Create the first flowsheet row for the group:

   A. Enter the proper ID for your first flowsheet row in Create Group/Row.

   B. Name your record: R Internal Tobacco Treatment Program Offered. This will be a flowsheet row, so you preface the name with R.

   C. Set the Display name to: Which INTERNAL tobacco treatment service or program was/were offered to the patient?

   D. Set Row type to Data, and Value type to Custom List.

   E. Move to the Custom List tab and enter the following options in the table:

      i. Individually delivered in-person services/program

      ii. Group-delivered in-person services/program

      iii. Cessation education

      iv. In-house telephone-based program

      v. Non-quitline treatment vendor (e.g., TelASK)

      vi. Other internal text/mobile program

      vii. None active during this time period

   F. Check the Multi-Select box in the top right corner of the form so providers can choose more than one option.

   G. Save the record and Release this Version.

9. Return to your G Smoking Cessation Programs group that you still have open and add R Internal TTP Offered to the Group form. Save.

10. Return to the Doc Flowsheets Builder and Create Group/Row.

11. Enter the next record ID according to your numbering conventions.

12. Create a second flowsheet row:

   A. Enter the proper ID for your first flowsheet row in Create Group/Row.

   B. Name your record: R External TTP Offered.

   C. Set the Display name to: Which EXTERNAL tobacco treatment service or program was/were offered to the patient?

   D. Set Row type to Data, and Value type to Custom List.

   E. Move to the Custom List tab and enter options in the table that you want available to your clinicians:

      i. Non-quitline treatment vendor (e.g., TelASK)

      ii. Quitline via fax referral

      iii. Quitline via eReferral

      iv. SmokefreeTXT without eReferral

      v. SmokefreeTXT via eReferral

      vi. Other external text/mobile program

      vii. Web resource (e.g., Smokefree.gov)

      viii. None active during this time period

   F. Check the Multi-Select box in the top right corner of the form so providers can choose more than one option.

   G. Save the record and Release this Version.

   H. Return to your G Smoking Cessation Programs group that you still have open and add R External TTP Offered to the Group form. Save.

13. Create a third flowsheet row:

    A. Enter the proper ID for your first flowsheet row in Create Group/Row.

    B. Name the record: R TTP Other.

    C. Set the Display name to: If the patient was offered a service not listed above, what was it?

    D. Set Row type to Data, and Value type to String. This allows users to enter free text.

    E. Select Release this Version in your record so the row can be used in the system.

    F. Accept your flowsheet row. This will save and close the record.

    G. Return to your G Smoking Cessation Programs group that you still have open and add R TTP Other to the Group form. Save.

14. Create a fourth flowsheet row:

    A. Enter the proper ID for your first flowsheet row in Create Group/Row.

    B. Name your record: R TTP Connection.

    C. Set the Display name to: How will the patient be connected with or referred to a Tobacco Treatment Program or resource?

    D. Set Row type to Data, and Value type to Custom List.

    E. Move to the Custom List tab and enter the following options in the table:

        i.   No referrals offered/given

        ii. Information given and patient initiates

        iii. Clinician initiated referral (not via EHR)

        iv. EHR referral is automatic for smokers ("opt-out method")

    F. Save the record and Release this Version.

    G. Return to your G Smoking Cessation Programs group that you still have open and add R TTP Connection to the Group form. Save.

15. Create a fifth flowsheet row:

    A. Enter the proper ID for your first flowsheet row in Create Group/Row.

    B. Name the record: R TTP Connection Other.

    C. Set the Display name to: If the patient was connected with or referred to a TTP or resource not listed above, what was it?

    D. Set Row type to Data, and Value type to String. This allows users to enter free text.

    E. Select Release this Version in your record so the row can be used in the system.

    F. Accept your flowsheet row. This will save and close the record.

    G. Return to your G Smoking Cessation Programs group that you still have open and add R TTP Connection Other to the Group form. Save.

16. Release this Version of flowsheet group and Accept.

17. Return to flowsheet template record.

18. Enter flowsheet group ID into the first Group/Row field.

19. Accept and Stay in template record.

20. Create a second flowsheet group:
    A. Return to the Doc Flowsheets activity and Create Group/Row.
    B. Enter the next record ID according to your numbering conventions.
    C. Name this group: G Tobacco Cessation Outreach.
    D. Provide a Display name (e.g., Cessation Outreach) and synonyms so your group can be searchable.
    E. Set Row type to Flowsheet Group (2).
    F. Save your record and leave it open as you return to the Doc Flowsheets tab.

21. Create the first flowsheet row for this new group:
    A. Return to the Doc Flowsheets Builder and enter the proper ID for your flowsheet row in Create Group/Row.
    B. Name your record: R Last Tobacco Cessation Outreach.
    C. Set the Display name to: When did you last contact the patient to review their smoking cessation plan?
    D. Set Row type to Data, and Value type to Date.
    E. Select Release this Version in your record so the row can be used in the system.
    F. Accept your flowsheet row. This will save and close the record.
    G. Return to your G Tobacco Cessation Outreach group that you still have open and add R Tobacco Cessation Outreach to the Group form. Save.

22. Create the second flowsheet row for this new group:
    A. Return to the Doc Flowsheets Builder and enter the proper ID for your flowsheet row in Create Group/Row.
    B. Name your record: R Tobacco Cessation Outreach.
    C. Set the Display name to: Since their last visit, has the patient participated in an individually or group-delivered TTP, in person or via phone, via fax or eReferral to a quitline, a website, or a text/mobile program, or been provided counseling regarding quitting, or been prescribed a smoking cessation medication?
    D. Set Row type to Data, and Value type to Custom List.
    E. Move to the Custom List tab and enter the following options in the table:
        i.   Yes
        ii. No
    F. Select Release this Version in your record so the row can be used in the system.
    G. Accept your flowsheet row. This will save and close the record.
    H. Return to your G Tobacco Cessation Outreach group that you still have open and add R Tobacco Cessation Outreach to the Group form. Save.

23. Create the third flowsheet row for this new group:
    A. Return to the Doc Flowsheets Builder and enter the proper ID for your flowsheet row in Create Group/Row.
    B. Name your record: R Next Tobacco Cessation Outreach.
    C. Set the Display name to: When will you next contact the patient to review their smoking cessation plan?
    D. Set Row type to Data, and Value type to Date.
    E. Select Release this Version in your record so the row can be used in the system.
    E. Accept your flowsheet row. This will save and close the record.
    F. Return to your G Tobacco Cessation Outreach group that you still have open and add R Tobacco Cessation Outreach to the Group form. Save.

24. Release this Version of your flowsheet group and Accept.

25. Return to your flowsheet template record.

26. Enter your flowsheet group ID into the first Group/Row field.

27. Accept and Stay.

28. Create a third flowsheet group:
    A. Return to the Doc Flowsheets activity and Create Group/Row.
    B. Enter the next record ID according to your numbering conventions.
    C. Name this group: G 6 Month Smoking Cessation Measurement.
    D. Provide a Display name (e.g., 6 Month Smoking Cessation Measurement) and synonyms so your group can be searchable.
    E. Set Row type to Flowsheet Group (2).

29. Save your record and leave it open as you return to the Doc Flowsheets tab.

30. Create the first flowsheet row for this new group:
    A. Return to the Doc Flowsheets Builder and enter the proper ID for your flowsheet row in Create Group/Row.
    B. Name your record: R 6 Month Follow-Up. This row is where your reports can later "look to" in order to pull the proper data that you wish to report on.
    C. Set the Display name to: Is the patient smoking?
    D. Set Row type to Data, and Value type to Custom List.
    E. Move to the Custom List tab and enter the following options in the table:
        i. Contacted and smoking Yes/No
        ii. Unable to contact
        iii. Contacted and not smoking
    F. Select Release this Version in your record so the row can be used in the system.
    G. Accept your flowsheet row. This will save and close the record.

    H. Return to your G 6 Month Smoking Cessation Measurement group that you still have open and add R 6 Month Follow-Up to the Group form. Save.

31. Create the second flowsheet row for this group:

    A. Return to the Doc Flowsheets Builder and enter the proper ID for your flowsheet row in Create Group/Row.

    B. Name your record: R Last Cigarette.

    C. Set the Display name to: When did the patient last smoke a cigarette (even one puff)?

    D. Set Row type to Data, and Value type to Custom List.

    E. Move to the Custom List tab and enter the following options in the table:

        i. Smoked a cigarette today (at least one puff)

    OR, if not smoked today, smoked:

        i. 1 to 7 days ago

        ii. 8 days to 1 month ago

        iii. More than 1 month ago to 1 year ago

        iv. More than 1 year ago

        v. Don't know/Don't remember

    F. Select Release this Version in your record so the row can be used in the system.

    G. Accept your flowsheet row. This will save and close the record.

    H. Return to your G 6 Month Smoking Cessation Measurement group that you still have open and add R Last Cigarette to the Group form. Save.

32. *Optional*: Create a third flowsheet row for additional reporting abilities:

    A. Return to the Doc Flowsheets Builder and enter the proper ID for your flowsheet row in Create Group/Row.

    B. Name your record: R Quit Smoking Past 30 Days.

    C. Set the Display name to: In the past 30 days, have you tried to quit (or stay off) smoking cigarettes?

    D. Set Row type to Data, and Value type to Custom List.

    E. Move to the Custom List tab and enter the following options in the table:

        i. Yes

        ii. No

        iii. Don't know/Don't remember

    F. Select Release this Version in your record so the row can be used in the system.

    G. Accept your flowsheet row. This will save and close the record.

    H. Return to your G 6 Month Smoking Cessation Measurement group that you still have open and add R Quit Smoking Past 30 days to the Group form. Save.

33. *Optional:* Create a fourth flowsheet row for additional reporting abilities:

    A. Return to the Doc Flowsheets Builder and enter the proper ID for your flowsheet row in Create Group/Row.

    B. Name your record: R Smoking Past 30 Days.

    C. Set the Display name to: In the past 30 days, did you smoke cigarettes every day, some days, or not at all?

        i.   Every day
        ii. Some days
        iii. Not at all
        iv. Don't know/Don't remember

    D. Set Row type to Data, and Value type to Custom List.

    E. Move to the Custom List tab and enter the following options in the table:

        i.   Yes
        ii. No
        iii. Don't know/Don't remember

    F. Select Release this Version in your record so the row can be used in the system.

    G. Accept your flowsheet row. This will save and close the record.

    H. Return to your G 6 Month Smoking Cessation Measurement group that you still have open and add R Smoking Past 30 days to the Group form. Save.

34. *Optional:* Create a fifth flowsheet row for additional reporting abilities:

    A. Return to the Doc Flowsheets Builder and enter the proper ID for your flowsheet row in Create Group/Row.

    B. Name your record: R Cigarettes Past 30 Days.

    C. Set the Display name to: In the past 30 days, if you smoked either every day or on some days, about how many cigarettes did you smoke on those days? A pack usually has 20 cigarettes in it.

    D. Set Row type to Data, and Value type to Custom List.

    E. Move to the Custom List tab and enter the following options in the table:

        i.   1-4
        ii. 5-9
        iii. 10-14
        iv. 15-19
        v.   20 (1 pack) or more
        vi. Don't know/Don't remember

    F. Select Release this Version in your record so the row can be used in the system.

    G. Accept your flowsheet row. This will save and close the record.

H. Return to your G 6 Month Smoking Cessation Measurement group that you still have open and add R Cigarettes Past 30 days to the Group form. Save.

I. Release this Version of your flowsheet group and Accept.

J. Return to your flowsheet template record.

K. Enter your flowsheet group ID into the first Group/Row field.

L. Accept your template record.

M. Format your flowsheet rows for the Navigator Section.

N. In Hyperspace, open the Doc Flowsheet Builder by selecting it from your dashboard or by using the Search for Doc Flowsheet Builder. Another path option is: Epic button > Tools > Inpatient Tools > Doc Flowsheet Builder OR Epic button > Tools > Patient Care Tools > Doc Flowsheet Builder.

O. Open one of your Smoking Cessation rows.

P. Go to the Custom List form and select the "Size button width to each choice" check box to let the system automatically size the buttons that will appear, or enter a standardized width in the button width field.

Q. Save and exit the record.

Create a Navigator Record

IT Personnel

A Navigator appears to a clinician to guide them through their workflow. Two key pieces need to be built by IT for the Navigator Record: a Navigator Section and a Navigator Template. A Navigator Section must be developed in order to enter the flowsheet template into the Navigator Template (based on your C3I tobacco cessation workflow and C3I program components). You will add this section to a Navigator Topic and pull it into your Navigator Template, where it will show for the provider.

1. The same master file (LVN) holds each of the three build records needed to create a Navigator. Because of this, follow the naming conventions below when building these records:

   A. T for template

   B. TOPIC for topic

   C. SEC for section

2. Create a Navigator Section. You will need to create a Navigator Section for the flowsheet rows you built earlier.

   A. You will use this Epic-released Navigator Section record as a basis for building your flowsheet Navigator Section: 27051-SEC_MR_FLOWSHEET.

   B. You must duplicate Epic-released Navigator Sections before you can link them to your configuration record, as outlined in the next step, Create a Navigator Configuration.

C. In Clinical Administration follow the path: Navigators > Navigators (LVN) > Dup Navigator.

D. Duplicate SEC_MR_FLOWSHEET and include "SEC" in the new name so that you can differentiate the record from your topics and templates.

E. Open your duplicate record.

F. In the Descriptor field, re-enter your record name. Be sure the record name and descriptor are exactly the same.

G. Access the Section Setup screen.

H. Enter a title for the section in the Caption field. The caption will show as the Section's name once the user is in the Navigator itself.

I. Enter the section abbreviation in the Abbreviation field. The abbreviation appears in the Navigator's table of contents.

J. Press Shift+F7 to close the record.

3. Create a Navigator Configuration. When configuring a Navigator Section, you use a Visit Navigator Configuration, or VNC. In this case, you will set its type to Flowsheets to access the Documentation Flowsheet Section Settings screen.

A. In Clinical Administration, follow the path: Navigators > Navigator Configurations (VNC) and create a configuration record following your clinic's naming and numbering configuration.

B. In the Apply to Section Type field, enter 21-Flowsheets.

C. Go to the Documentation Flowsheet Section Settings 1 screen and enter your flowsheet template record ID from the previous section in the Flowsheet Template ID field.

D. Configure the other fields on this screen as desired.

E. Link your configuration record to your Navigator Section by following the path: Clinical Administration > Navigators > Navigators (LVN) and open your Navigator Section record.

F. Go to the Default Configuration screen and enter the ID of your configuration record in the Default Configuration field.

4. Create a Navigator topic:

A. To create a topic in Clinical Administration, follow the steps below. If you prefer to work in Hyperspace, skip down to part B:

   i.   Follow the path Navigators > Navigators (LVN).

   ii.   Duplicate a topic record. Give your duplicate a new name that includes the word "topic."

   iii. Open your duplicate topic record.

   iv.   In the Descriptor field, re-enter the record name. Verify that "topic" appears in the Record Type field.

   v.   Access the Topic Setup screen.

    vi. In the Caption field, enter the title that you want clinicians to see for your topic in the Navigator's table of contents. The name should effectively describe the group of sections this topic will contain.

    vii. In the Sections and Markers field, enter the section records that you want to include in this topic, in the order you want them to appear.

    viii. Enter Yes in the Chained field to allow your clinicians to jump from one section to the next by pressing F8 or clicking Next in your Navigator.

    ix. If a section can be configured using a configuration record, in the Configuration field next to the appropriate section, enter your configuration record. This configuration record overrides any default configuration set in the section record itself.

  B. Alternatively, in Hyperspace:

    i. Open the Navigator Editor and Search: Navigator Template
OR
Epic button > Admin > General Admin > Navigator Template. Shortcut: While in a workspace that use the Navigator, click the pencil icon that appears in the table of contents of the Navigator.

    ii. Add a topic record in the Search for a topic field. Give your topic a descriptive name that includes the word "topic."

    iii. In the Caption field, enter the title that you want clinicians to see for your topic in the Navigator's table of contents. The name should describe the group of sections this topic will contain.

    iv. Choose Accept to close the topic editor. Enter the section records that you want to include in this topic in the Search for a topic field, in the order you want them to appear.

    v. Next to the sections that are most regularly used, select the Chained check box to allow providers to jump from one section to the next by pressing F8 or clicking Next in your Navigator.

    vi. A wrench will appear, since your sections contain configuration records. Select the wrench icon if you need to change the linked configuration record. This configuration record overrides any default configuration set in the section record itself.

    vii. In the Navigator Template Editor, you can add a topic to a template by typing the topic into the search field at the top of the template or by clicking the Add button.

5. Add existing sections to a Navigator Topic.

  A. In Hyperspace, add a section by typing in the "Search for a section" field at the bottom of the appropriate topic, or click the Add button. You can search the name of a section without the underscores, and you don't need to include prefixes. You may also search by the ID.

B. Suggested topics include the Problem List, an Orders report that displays all internal and external medication orders, and History so providers may easily view these contributors to a patient's smoking status as they review the other information.

C. Create a new Navigator Template. Once your topics are built, they are ready to be pulled into a template. This can be done in Hyperspace or in Clinical Administration.

D. In Hyperspace:

   i.   Open the Navigator Editor and Search: Navigator Template (Epic button > Admin > General Admin > Navigator Template). Shortcut: While in a workspace that uses the Navigator, click the pencil icon that appears in the table of contents of the Navigator.

   ii. If you are creating a new template, include the word "template" in the new name so that you can differentiate the record from your topics and sections.

   iii. In the Search for a topic field, enter the topic records you want to include in the Navigator, in the order you want them to appear.

E. In Clinical Administration:

   i.   Log into Clinical Administration and follow the path: Navigators > Navigators (LVN).

   ii. At the VN Record prompt, duplicate a Navigator Template Record. Respond "yes," you would like to give the duplicate a new name.

   iii. Preface the new name with "T_" so that you can differentiate the record from your topics and sections.

   iv. Open your duplicate record.

   v.   In the Descriptor field, re-enter your record name.

   vi. Verify that Template appears in the Record Type field.

   vii. Access the second Template Setup screen.

   viii. In the Topics and Markers field, enter the topic records you want to include in the Navigator, in the order you want them to appear.

   ix. Press Shift+F7 to close the record.

Set Your Navigator to Appear to Providers

IT Personnel

If your clinic has decided to build the four key pieces of Navigator build (the Navigator Section, Configuration, Topic, and Template), you can attach the Navigator in the system so it will appear for your providers. This can be done in Profiles or in the Workflow Engine Rule, depending on your organization's preferred approach. To make this Navigator appear to providers only IF the patient is 18 years or older and has information in their chart that identifies them as a smoker (such as an active problem of Tobacco Smoker or active orders for cessation medications), you will create a rule for the Smoking Cessation Navigator and then link the Navigator to the profile of the provider.

1. Create a Rule:

   A. In Hyperspace, Search: Rule Editor and open the activity.

   B. Create a rule with a context of 2001-Patient and name it to correspond to your Navigator Section. E.g., C3I Smoking Cessation Navigator Restrictions.

   C. On the Rule Editor form, describe what this rule is meant to do. E.g., This rule is used so that the Smoking Cessation Navigator only appears in the charts of patients that are 18 years of age and older.

   D. Enter appropriate values in the following columns depending on what criteria you want for your rule.

      i. First Property:

         a. Age: Years

         b. Operator: >=

         c. Value (or Property): 18

      ii. Second Property:

         a. Diagnosis: Problem List

         b. Active Problems Only? Yes

         c. Operator: =

         d. Value (or Property):

            1. Tobacco Smoker

            2. *Your clinic may have variants of this diagnosis in your system, such as Heavy Tobacco Smoker and Tobacco Smoker Within Last 12 Months. Be sure to list all diagnoses that correspond to a smoker who should receive intervention.*

iii. Third Property:

   a. Has Active Medication

   b. Medications:

      1. Varenicline (Chantix)

      2. Nicotine Replacement Therapy

      3. *Your clinic may have variants of this medication in your system, such as Chantix Oral vs. Chantix 0.5 mg oral tab, and Nicotine 7 mg/24 hr transdermal patch vs. Nicotine 22 mg/24 hr transdermal patch. Be sure to list all medications that correspond to a smoker who should receive intervention. The medications suggested are outlined in the Epic SmartSet Example and Medication Orders for C3I section on pages 39 and 40.*

   c. Operator: =

   d. Value (or Property): Yes

iv. Fourth Property: Last Smoking Tobacco Use Status

   a. Look Back Period = 365

   b. Operator: =

   c. Value (or Property):

      1. Current Every Day Smoker

      2. Current Some Day Smoker

      3. Smoker, Current Status Unknown

      4. Heavy Tobacco Smoker

      5. Light Tobacco Smoker

E. Set the Evaluation logic to Custom such that the rule evaluates true if the patient is 18+ AND (has a diagnosis of Tobacco Smoker OR has an active medication order for Nicotine Replacement Therapy or varenicline (Chantix) OR has a qualifying last smoking tobacco use status).

   i. 1 AND (2 OR 3 OR 4)

F. In Clinical Administration, follow the path: Chronicles > Extensions (LPP) master file and duplicate extension 23003 (MR Rule-Based Navigator Section Filter).

G. Add the rule you created in the above steps to the first parameter of your duplicate record. Configure the other parameters as needed.

H. In Clinical Administration, follow the path Navigators > Navigators (LVN) and open the Navigator Section record to which you want to restrict or allow access. If you are using an Epic-released Navigator Section record, duplicate the record first.

I. Enter the extension you created above in the Filter PP field on the first screen.

J. Press Shift+F7 to close the record.

2. Link Your Navigator to the Workflow Engine Rule:

A. In Hyperspace, Search: Workflow Engine Rule Editor.

B. From the Edit Rules tab in the Workflow Engine Rule Editor, click the If button to insert a condition.

C. Select the property that you would like to use.

D. Click the arrow next to the equals button and select an operator, such as equals or does not equal. E.g., **IF** PAT_ENC_TYPE **EQUALS** AMB **OR** TEL

E. In the Value field that appears, enter one or more values. The system uses OR logic for this field. E.g., Office Visit

F. From the Edit Rules tab in the Workflow Engine Rule Editor, select the condition under which you'd like to make your Navigator's Activity available to users.

G. Click the arrow next to the Set Clinical Toolset Property button and select Add Navigators.

H. In the Activity Name field, enter a unique name for your Navigator's Activity. This name appears as the caption for its Activity tab.

I. Select Override or Append to choose whether you want the templates and menus specified here to appear instead of or in addition to other Navigators' Activities. This setting applies only when the directive's Continue option is set to Yes.

i. If you select the Override option, this Navigator's Activity appears in place of any Navigator Activities added by previous Add Navigators directives. This is the recommended option.

ii. If you select the Append option, this Navigator's Activity appears in addition to any Navigator Activities added by previous Add Navigators directives.

J. In the Navigators table, specify information about your Navigator Template.

i. In the Caption column, enter a free-text caption to appear in the Navigator Activity to label this Navigator Template. If you do not enter a caption, the name from the Navigator Template record is used. This caption appears only if you enter more than one Navigator Template.

ii. In the Template column, enter a template descriptor for a Navigator Template that you want to make available in the Navigator Activity.

Access Your Navigator

Clinical Personnel

Now that the Navigator criteria have been set for when your Navigator should appear, the steps below outline how you can test and view your Navigator to be sure it shows when appropriate.

1. Log into your department and enter the chart of a patient that is 18 or over AND either has a documented Tobacco Smoker diagnosis OR has an active medication order for Nicotine Replacement Therapy or varenicline OR has a qualifying smoking tobacco use status at last contact.

2. Among your activities, you should now be able to see and enter your Smoking Cessation Navigator.

Other Considerations: E-Cigarettes

Clinical Personnel

Some sites wish to document the use of e-cigarettes/electronic nicotine delivery systems (ENDS) and to include this in their reporting. Since CMS does not consider e-cigarette use as tobacco use, Epic recommends creating a custom history section to document e-cigarettes/ENDS. This will prevent e-cigarette/ENDS users from erroneously contributing to your numerator or your denominator for reporting smokers.

IT Personnel

The Foundation system (accessible by your Epic analyst) hosts a model of this section. If an analyst logs in as the ambulatory administrator (AMBADM in Foundation) and opens the below History Template (LQH) records, you can review these documentation fields and determine whether they should be included in your system. If you decide to do so, you can then mirror the reporting build outlined in this template and use the e-cigarette build for separate reporting.

1. T Fam Combined. This is the template that holds the topic and questions below.
    A. Topic Amb E-Cigarettes. This is the topic that holds the four questions below.
        i. Q Custom E-Cigarette Use
        ii. Q Custom E-Cigarette Start Date
        iii. Q Custom E-Cigarette Quit Date
        iv. Q Custom E-Cigarette Cartridges/Day

C3I Site Leaders

Clinical Personnel

IT Personnel

Best Practice Advisories

Smoking Status Documentation

Smokers Registry

Order Build Options

Reporting

Example Workflow

BPA Build Options

Navigator Build Options
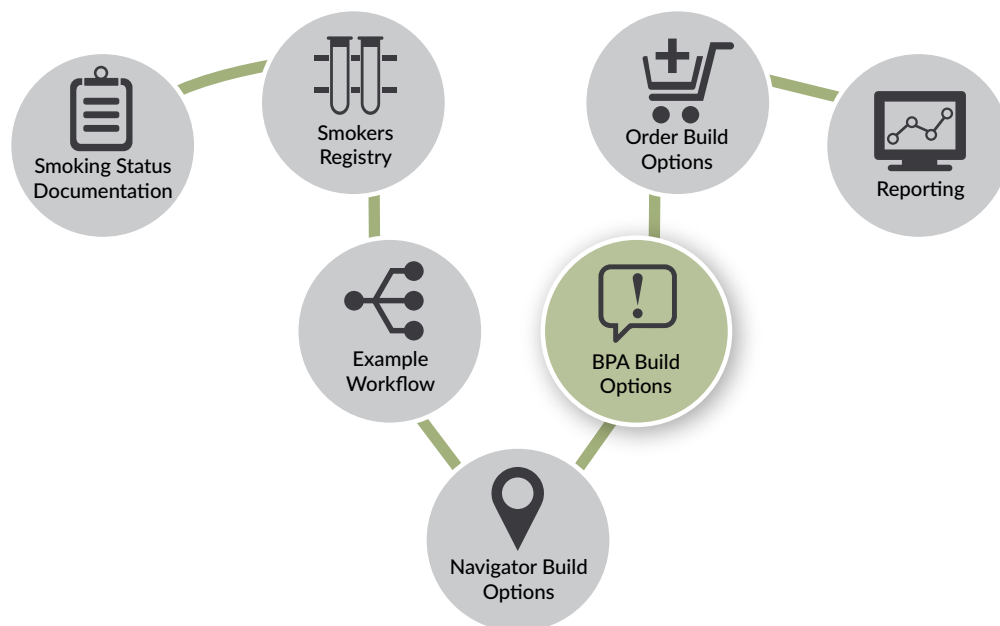
Best Practice Advisories (BPAs) prompt and guide clinicians to provide specific treatments based on a patient's characteristics. BPAs serve as an automated prompt to notify that the presenting patient warrants a particular clinician intervention (such as a colonoscopy for patients over age 50, flu vaccine if not already administered during the current flu season, etc.). As part of C3I, BPAs can be designed and built to help clinicians initiate and/or refer patients who smoke for cessation treatment, including advice to quit, prescribing cessation medications, and referrals to smoking treatments that are components of each C3I site's cessation program. In essence, as part of C3I, BPAs can provide both clinical guidance and specific language to deliver smoking cessation treatment information to patients. BPAs can also be used to initiate referrals to internal and external tobacco cessation treatment services.

Once built, the BPA will appear when the clinician opens a patient's record and the patient has been documented as a current smoker (based on smoking status documentation indicating that the patient meets criteria for the Smokers Registry). Typically, the BPA prompts the clinician to ask whether the patient is interested in quitting. If so, s/he can then order tobacco cessation medication(s), refer the patient to the internal Tobacco Treatment Specialist (TTS), refer them to the state tobacco quitline, and/or refer them to SmokefreeTXT based upon the tobacco cessation components offered in your clinic settings.

Fundamental BPA Build for Internal Referrals, External Referrals, and Medication Orders

IT Personnel

The build required for this includes:

- Create a procedure order
- Create order-specific questions
- Create an Order Composer configuration record
- Create a Best Practice Advisory
  - Criteria Records
  - A Preference List
  - A Base Record
- Create a resulting agency for your state tobacco quitline and/or SmokefreeTXT
- Build result component records for data received
- Create an ID type to map to the result components
- Complete medication mapping
- Update order transmittal rules
- Configure interfaces to send and receive data
  - Outgoing Ancillary Orders interface
  - Incoming Ancillary Results and Orders interface
  - Incoming Medication Orders to EpicCare Ambulatory interface

For a full build configuration for external referrals via Epic, the "Smoking Cessation Intervention Using a Tobacco Quitline" document on Epic's UserWeb provides an overview of the workflow in the system, along with the breakdown and impact of the build. Search for this document on https://userweb.epic.com/. Your IT analyst will have a password and know how to access Epic's UserWeb.

Procedure Order Component of BPA Build

IT Personnel

This build applies to a procedure order, regardless of whether it is for an external or internal referral order.

1. If you wish to attach order-specific questions to your referral order so that the provider may gather additional information from the patient, you will use the Order-Specific Question Editor in Hyperspace.

   A. Follow the path: Epic button > Tools > Patient Care Tools > Order-Specific Question Editor.

B. Enter the name of your question on the Create tab.

C. In the Prompt field, enter the question as you want it to appear to your clinicians, including punctuation.

D. Enter the type of response needed in the Response Type field. Once you've made a selection, you cannot change it. Options include:

   i. Free text

   ii. Date

   iii. Time

   iv. Numeric

   v. Networked

   vi. Custom List

   vii. Category

   viii. Yes/No

E. Enter any notes that may help the clinician interpret the questions in the Notes field.

F. If a patient can have multiple answers to one question, select the Multiple Response? check box.

G. Check the Release? box once your build is complete and select Accept.

2. If your organization does not have an existing Order Composer configuration record that shows only order-specific questions for the order, you will need to make one.

A. Create a record in the Order Composer configuration master file.

B. Set the ordering type to Procedure and the ordering context to Ambulatory.

C. Configure the procedure item such that:

   i. Display Items: Questions

   ii. Summary Items: Space Separator

3. In Clinical Administration, follow the path: Procedures, Scheduling > Procedures (EAP).

4. Create a procedure record.

5. If you are creating the referral order, select a Proc Type of Charge and use the same category that your organization uses for other referral orders (e.g., the Outpatient Referral Orderables category).

6. On the Record Purpose screen, enter Yes in the Orderables? field.

7. On the EpicCare Setting screen, enter No in the Clinically Inactive? field.

8. Enter the order type your organization uses for outside referrals (e.g., Outpatient Referral) in the Override Order Type field.

9. Enter the order class your organization uses for outside referrals (e.g., Outgoing Referral) in the Allowed Order Classes field.

10. On the Default Procedure Status screen, enter Normal in the Default Status field.

11. On the Order Class and Priority Defaults screen, enter Outgoing Referral (or whichever order class your organization uses for outside referrals) in the Outpatient Default Order class field.

12. On the Order Specific Questions screen, add the questions record you chose to include.

13. On the Order Composer Configuration screen, add the Ambulatory context to the Context column and the Order Composer Configuration you created to the Configuration column.

14. On the Duplicate Interval screen, set the Outpatient Interval to the number of days your organization chose to look back and check for any duplicates of this order. Epic's suggestion is 90 days.

15. Add your procedure record to a preference list so clinicians may find it if they wish to order it without being prompted by your BPA.

Preference List

IT Personnel

This build applies to all records mentioned: external referrals, internal referrals, and medication orders.

The Preference List will show up in the BPA you've created so that treating clinicians are presented with a list of actions they can take, including orders in response to the BPA. In this build example, the physician is presented with a referral order (whether internal or external) which can be ordered in response to the appearance of the BPA. Physicians do not need to order this referral order, and can close out of the BPA if they do not wish to send the order. Other orders, such as TTP medications, can also be included in such a preference list.

1. Follow the path: Epic button > Tools > Patient Care Tools > Preference List Composer.

2. Configure your list's name, list type (Orders), and ordering mode (Outpatient). Be sure that your preference list is of subtype Best Practice.

3. Create a New Section to add your referral procedure order. Your clinicians will be able to order this referral as a follow-up action to your BPA.

Criteria Records

IT Personnel

This build applies to all records mentioned: external referrals, internal referrals, and medication orders.
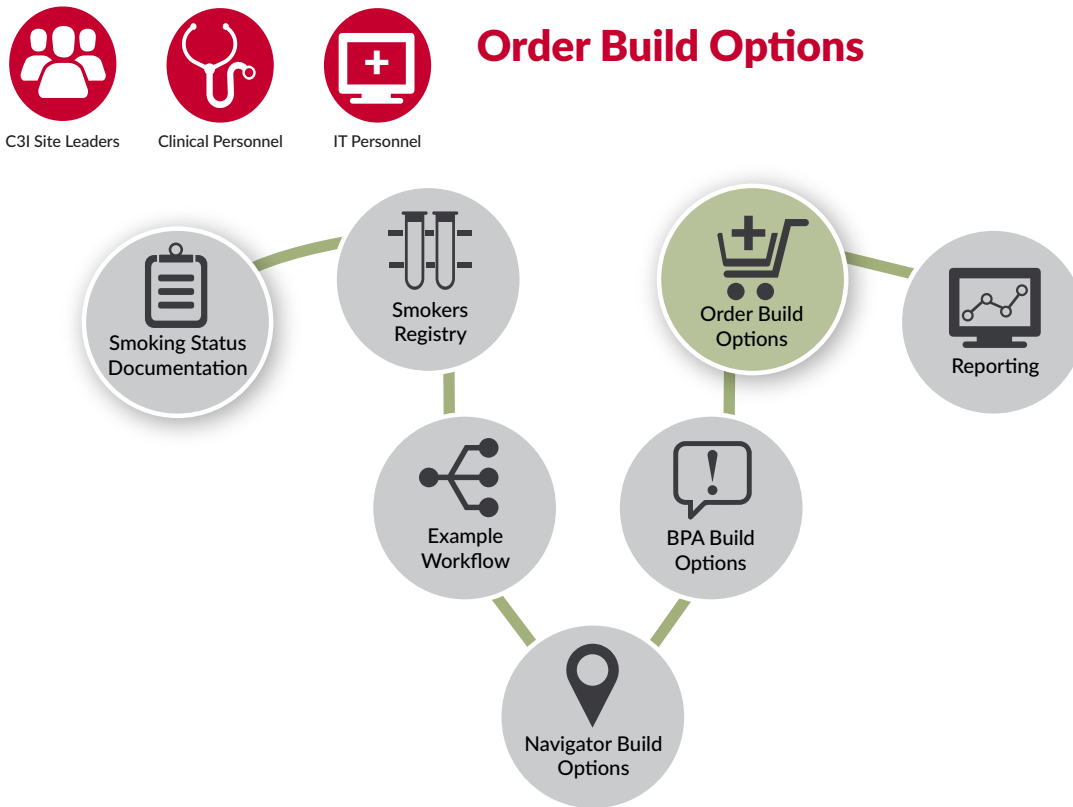
Criteria records determine the criteria a patient must meet in order for the BPA to appear in their chart as the clinician is reviewing it.

Examples of the criteria records (i.e., records which identify the patient population you want to survey) you may want to use include: Tobacco User Problem List; No Tobacco Quitline Order in Past 90 Days; Passive Smoker; Current Smoker; Age 18 Years and Older; Active medication orders for Nicotine Replacement Therapy (NRT) or varenicline.

1. Follow the path: Epic button > Tools > Decision Support > Best Practice Advisory.
2. Create a record of type Criteria.
3. Add your inclusion or exclusion criteria. E.g., on the Medication form, enter one or more medications in the Include Medication field.
4. On the General Info form, select Release and Save.
5. Follow Select Record > Best Practice Advisory and create a record of type Base.
6. In the Display Text field of the General Info tab, enter the message you want providers to see when the BPA appears.
   A. E.g., Patient is a current smoker but has not been prescribed smoking cessation medications or received smoking cessation counseling in the past year. Offer to refer the patient to quitline services or update the patient's smoking status.
   B. It is suggested you specify which options are internal, external, or a quitline within this text.
7. In the Linked Criteria tab, add your criteria record in the Linked Criteria field.
8. Move to the Restrictions tab and enter the Location, Provider Type, and Encounter type for which you want the advisory to appear.
9. Set Advisory Targeting to General BPA section.
10. On the Follow-Up Actions and Follow-Up Orders tab, enter the actions that should be available from the advisory. (E.g., add the **Smoking Cessation SmartSet** for providers to choose from.) This is also where you will add the preference list you created for Follow-Up Orders.

In Epic, a SmartSet is a tool to guide clinicians through a clinical intervention, including orders and patient education. In the SmartSet section below there is an example of Epic's Tobacco Cessation SmartSet. Work with your health system's IT staff to build or customize a Tobacco Cessation SmartSet based on your C3I tobacco cessation workflow and program components.

11. Navigate to the Acknowledgement Reasons and Health Maintenance Topics tab and add an Acknowledgement Reason of Patient Refused.
12. Move back to the General Info tab and check the record as Released and then Save.

C3I Site Leaders

Clinical Personnel

IT Personnel

Order Build Options

Smoking Status Documentation

Smokers Registry

Order Build Options

Reporting

Example Workflow

BPA Build Options

Navigator Build Options

Clinical Personnel

Place an Order – Instructions for Clinicians

The Epic **Orders** functionality facilitates the connection of patients to internal or external resources that, in C3I, are intended to assist the patient in quitting smoking. These resources include referring the patient to other clinicians who treat smoking cessation within the health system (TTS) or to external services (eReferral to the state Quitline or SmokeFreeTXT). While medication orders fall into the General Orders category, the medication order build is handled separately by the pharmacy and Orders team and is not discussed in this document.

For care continuity and follow-up, when clinicians place an **Order** for a patient to an outside referral (e.g., the state tobacco Quitline), the referring clinician wants to know the outcome of the referral (**Referral Order Result**) to "close the loop." This provides outcome information such as whether the quitline successfully contacted the patient.

The general workflow to place an Order is as follows:

1. Enter a patient's chart.
2. Navigate to the **Orders Activity** and review the patient's **Active Orders** and **Order History**.
3. Go to the sidebar to enter **Manage Orders** or **Order Sets** (depending on whether you're looking for a single order or a set of orders).
4. Search the name of your order, referral or otherwise.
5. Review and fill in any recommended or required documentation in the order.
6. Sign your order.

If you identify new orders that need to exist in your system, be sure to work with your Orders team to ensure proper approval and build processes are followed.

SmartSets and Order Sets

Clinical Personnel

SmartSets and **Order Sets** are collections of orders and clinical content that support a set of frequently used clinical activities. By defining and programming a set of specific clinical activities that are frequently used, you can save multiple steps involved in completing the requests ("Orders") for these sets of activities. For C3I, a common clinician activity is prescribing medications for smoking cessation (e.g., varenicline or combination NRT). By building a **SmartSet** for these medications, you can rapidly choose which drug to prescribe with appropriate information, such as dosing, length of treatment, etc. You can also include tobacco cessation counseling time and an ICD-10 code to automate/facilitate billing. Clinicians can select **SmartSets** and **Order Sets** from within Navigator Sections, as well as from the **Manage Orders** activity.

Order Sets can be built for both inpatient and outpatient settings. SmartSets can also contain and facilitate both the ordering and/or documenting of a variety of other clinical contents, including:

- Immunizations
- Diagnoses and chief complaints
- Levels of service
- SmartTexts
- Dispositions
- ED dispositions
- Follow-up information

Clinical Personnel

IT Personnel

Epic SmartSet Example and Medication Orders for C3I

Below are examples of SmartSets developed and used by the C3I Coordinating Center in one of its smoking cessation treatment programs. The first SmartSet organizes the clinical delivery of a comprehensive smoking cessation intervention, including documentation of:

- A tobacco dependence diagnosis (which will be added to the patient's Problem List).

- Cessation counseling provided.

- A Quit Date established by the patient (not shown below, but a calendar can indicate the planned Quit Date).

- Medication orders directing the clinician to use one of the two most effective medications—varenicline or combination NRT.

- "Tobacco Cessation Patient Instructions," ensuring all key cessation information is printed on the After Visit Summary that the patient takes home upon leaving the clinic.

Medication Components of the Smoking Cessation SmartSet

Below is another example of a SmartSet, in this instance providing very detailed instructions for the clinician regarding smoking cessation medication options and ordering:

C3I Site Leaders **Clinical Personnel** **IT Personnel**

Orders for Internal Cessation Referral Services

The EHR can facilitate the systematic referral of patients who smoke to a variety of internal cessation treatment services commonly used by C3I clinical sites. For example, Epic can prompt a **Referral Order** to the internal TTS (Tobacco Treatment Specialist). While a variety of possible Referral Orders are described below, each C3I site should only build and implement the orders, related workflows, and components established as parts of your C3I clinical cessation treatment program.

Regardless of the referral orders that are selected based on your program's needs, the build should include both the functionality for clinicians to order the cessation treatment service AND the functionality for clinicians (and the C3I program staff, if appropriate) to receive the results/outcomes of the referral order, to "close the loop". Examples of **Referral Orders** include referrals made to:

- Internal Tobacco Treatment Programs
- Tobacco Cessation Individual or Group Counseling
- Any other internal tobacco cessation resources that are being used by the Cancer Center Cessation Initiative (C3I)

IT Personnel

Building the Patient Referral to Internal Cessation Resources

1. A report is sent to the referring provider via the Communication Management activity.

   A. Referring recipients can be selected in the Communications section.

      i. In Clinical Administration, open the profile of the user who will be completing the referrals.

      ii. On the Communication Management Additional Recipient Buttons screen, enter the buttons that you want to appear.

      iii. In the Extra Button Names column, enter the preferred display name.

      iv. In the Extra Button Extensions column, enter extensions of type 183-Communication Management Recipients. Some of the included extensions are:

         a. 8420-Comm Mgr8420-Comm Mgr Recipients: Referral Series Providers. A button created with this extension adds a list of clinicians who have provided care to the patient through a series of referrals.

         b. 8421-Comm Mgr Recipients: Referred to Providers. A button created with this extension adds all the providers to whom the clinician has placed referrals during the current encounter.

      c. 8422-MR CM Recips: Last Referring Provider. A button created with this extension adds the most recent referring provider for encounters in the user's login department.

      d. 8423-MR CM Recips: Primary Care Providers. A button created with this extension adds all primary care providers of the types you specify.

    v. In the Default? column, enter Yes for each extra button whose recipients you want included by default.

    vi. If you want certain recipients to be automatically selected when users create a new communication, this is set up in the Communication Management and Communication Summary – Other Options screen in the Default Recipients field.

2. The referral encounter summary is routed to the referring provider using the Follow Up activity.

    A. This requires workqueue build and must be assigned to users to oversee and maintain.

3. The referral encounter summary is routed to the referring provider via the Routing activity in Chart Review.

    A. This requires setup for users to be able to route communications by In Basket.

      i. To allow clinicians to send communications using In Basket, add the In Basket routing method to either the department record or EMR System Definitions. Epic recommends adding it to system definitions to simplify the build.

      ii. In Clinical Administration, follow the path: Management Options > Edit System Definitions > Note, Trans, Communication.

      iii. On the Communication Management Setup - Routing screen, enter In Basket in the Route Method (I LSD 5700) column.

      iv. Add the relevant message types and definitions to Epic-wide settings.

    B. End users will enter the patient's chart and navigate to the Chart Review activity.

    C. Within Chart Review, the user will Route the applicable encounter summary and manually select the referring provider.

4. The note on the referral encounter is routed to the referring provider via the Routing activity in Chart Review.

    A. *This is the preferred option by Epic and permits the Close the Loop report (mentioned below under Follow Up) to run properly.*

    B. To ensure inclusion of the required documentation, a SmartText should be created.

    C. Follow the same steps as outlined in option 3 to ensure proper routing setup in your system.

5. The referral order is completed in the Result Orders Navigator Section (if this is in use at your site) and the chart is copied to the referring provider.

    A. When a clinician places a consult order in the Result Orders section, the referring provider receives an In Basket message in the Completed Orders folder. To determine which type of procedure orders clinicians can access in this section:

       i. In Clinical Administration, follow the path: Management Options > View System Definitions.

       ii. Go to the Result Orders Section screen and review the order types entered in the Order Types To Load field.

       iii. You can override the order types specified in EMR System Definitions for specific clinicians:

           a. In Clinical Administration, follow the path Management Options > Profiles.

           b. Open the profile of a clinician who has access to the section.

    B. Go to the Navigator Result Orders Section screen and review the list of procedure types entered in the Preferred Procedure Order Types to Load field.

    C. If the treatment program/resource that was a referral target uses this Navigator Section to complete orders AND will be sending a letter or report to the C3I staff or the referring provider, you could suppress the Completed Order messages from being sent as well. Order messages can be suppressed by the following steps (once you get approval for suppression of a message type from the relevant stakeholders):

       i. In Clinical Administration, follow the path: Management Options > System Definitions.

       ii. Go to the Send Results for Result Status screen.

       iii. In the Procedure Category field, enter one of the order types you want to suppress. (E.g., Referral.)

       iv. In the Result Status and Status for CC fields, enter Never.

       v. Repeat steps iii and iv for each order type you want to suppress.

       vi. Configure the Orders Results Navigator Section to use your results routing scheme: In Clinical Administration, follow the path: Management Options > Edit System Definitions.

       vii. Go to the Result Orders Section screen and set the Use Results Routing? field to 1-Yes.

External Referrals

C3I Site Leaders   Clinical Personnel

It is possible to build workflows for referrals to external tobacco cessation resources. eReferral to a state tobacco quitline and to NCI's SmokefreeTXT are two examples. Your state's quitline vendor (tobacco quitline vendors listed by state available at: http://map.naquitline.org/) can provide you with technical specifications of the quitline side of the patient referral order and patient referral order result. SmokefreeTXT is a service available through NCI, and is managed by a vendor called ICF. The SmokefreeTXT vendor (ICF) can provide the technical specifications for the SmokefreeTXT side of the patient referral order and referral order result. To get these technical specifications, please email: NCISmokefreeTeam@mail.nih.gov.

Clinical Personnel   IT Personnel

External Referrals to a Tobacco Quitline and SmokefreeTXT

QUITLINES: Epic has a **tobacco quitline eReferral Build Guide** on their password-protected "UserWeb" customer site: https://userweb.epic.com/. Search for **"Smoking Cessation Intervention Using a Tobacco Quitline."** Your IT analyst will have a password and know how to access Epic's UserWeb.

SMOKEFREETXT: **The SmokefreeTXT eReferral Epic Build Guide** is also available on Epic's UserWeb. Search for **"Evidence-Based Tobacco Screening and Interventions Setup and Support Guide."** The SmokefreeTXT eReferral Order build is on pages 15-16 of this Epic Build Guide. You will notice that it references the Tobacco Quitline eReferral Build. The SmokefreeTXT eReferral follows the same build as the tobacco quitline eReferral.

The technical components needed for BOTH the tobacco quitline and SmokefreeTXT eReferrals are:

- **BPA** (reviewed earlier in this document in the Best Practice Advisories section on page 33)
- **Referral Order** (including Order Questions and Order Composer Configuration as outlined below on pages 47 and 48)
- **Referral Order Result** (including Resulting Agency and Result Components as outlined below on page 50)
- **Configure Interfaces** (explained on page 51)

Quitline eReferral Build: Setting up the state tobacco quitline referral system requires partnering with a third-party tobacco cessation quitline. A list of tobacco quitline vendors by state is available at: http://map.naquitline.org/. The tobacco quitline vendor can provide the technical specifications of the quitline side of the patient referral order and patient referral order result. The tobacco quitline referral requires EpicCare

Ambulatory build and interface setup. **Your health care system may already have this in place**. Estimated build completion time is one week for one EpicCare Ambulatory analyst to complete the necessary build, and one week for the Bridges team to set up the outgoing and incoming interfaces. It is also recommended that you allow one to two weeks for testing prior to the state tobacco quitline referral going live.

SmokefreeTXT eReferral Build: Setting up the SmokefreeTXT referral system requires partnering with ICF, the vendor for NCI's Smokefree.gov. The SmokefreeTXT vendor can provide the technical specifications for the SmokefreeTXT side of the patient referral order and patient referral order result. To get these technical specifications, please email: NCISmokefreeTeam@mail.nih.gov.

The SmokefreeTXT referral uses the same EpicCare Ambulatory build and interface setup as described above in the tobacco quitline referral. **Check if your health care system already has the quitline eReferral in place, as SmokefreeTXT eReferral uses the same build**. Estimated build completion time is one week for one EpicCare Ambulatory analyst to complete the necessary build and one week for the Bridges team to set up the outgoing and incoming interfaces. It is also recommended that you allow one to two weeks for testing prior to the SmokefreeTXT referral going live.

The build required for this includes:

- Order-specific questions. These attach to the referral order so that additional information about the patient is sent to the tobacco quitline/SmokefreeTXT

- An Order Composer configuration record to show the order and the order-specific questions

- A procedure record

External Referral: Order-Specific Questions

IT Personnel

In addition to including patient demographic information in the tobacco quitline referral order (described below), you will also include that the patient agrees to the referral and the sharing of their information (defaulted to Yes), and the best time of day to reach the patient (morning, afternoon, evenings, anytime (defaulted to Anytime).

1. In Hyperspace, Search: Order-Specific Question Editor, or follow the path: Epic button > Tools > Patient Care Tools > Order-Specific Question Editor.

2. On the Create tab, enter the name of your question, using the proper naming convention. You can include OS as a prefix to denote it as an order-specific question. Click Accept.

3. In the Prompt field, enter the question as you want it to appear to providers, including punctuation.

4. Enter the type of response needed in the Response type field. **You cannot change the type of response once you've made a selection**.

   A. Choose from:

      i. Free Text

         a. Free text questions should be used only when nothing else suits your needs as it makes it difficult to write rules or do meaningful reporting.

      ii. Date

      iii. Time

      iv. Numeric

         a. Clinicians can enter only numbers. Use the Decimal Places field to specify how many decimal places numeric answers include - the default is three.

      v. Networked

         a. The allowed responses are stored in a master file in your system. Networked questions are similar to category - INI questions. Use them based on where the system stores your list of possible answers. If the answers are records in a master file, create a networked question. When records are updated, the available answers for the question are automatically updated, too. Once you select networked as the response type, be sure to enter the three-letter abbreviation of the master file that holds the networked answers in the Response INI field.

      vi. Custom List

         a. Enter all possible values that clinicians can choose from when answering the question.

      vii. Category - INI

         a. Users can only select choices from a pre-existing category list. Similar to networked questions, use category - INI questions if the answers are in a category list. After choosing category - INI, follow these steps:

            1. Enter the three-letter abbreviation of the master file that holds the item with your category list in the Response INI field.

            2. Enter the ID of the item that holds the category list in the Response item field.

      viii. Yes/No

   C. In the Notes field, enter any notes that might be helpful to clinicians when asking this question. These notes appear when a user hovers over the blue circle at the end of a question prompt.

   D. Select the Multiple response? check box if a patient could have multiple answers for one question.

   E. When you finish building your order-specific question, select the Released? check box to ensure that the question appears after you link it to the order record.

   F. Click Accept.

External Referral: Order Composer Configuration Record

IT Personnel

If your organization doesn't have one already, you need to create an Order Composer Configuration (OCC) record that shows only order-specific questions for the order. The OCC record determines what information is visible to an end user within the order.

1. In Clinical Administration, follow the path: Procedures, Scheduling > Order Composer Config.

2. Create a record in the Order Composer Configuration master file with an ordering type of Procedure and an ordering context of Ambulatory.

3. Configure the procedure items so that:
   A. Display Items = Questions
   B. Summary Items = Space Separator
   C. Item Control, Item Status, and Hide Additional Order Details link in Order Composer? remain blank

External Referral: Procedure Record for a Quitline Referral

IT Personnel

Create the procedure order for your tobacco quitline referral order.

1. Follow the path: Clinical Administration > Procedures, Scheduling > Procedures (EAP).

2. Create a procedure record following numbering and naming conventions.

3. On the Procedure Information screen, enter the following values in the fields:
   A. Proc Type: Charge
   B. Category: Use the same category your organization uses for other referral orders. E.g., you can use the Outpatient Referral Orderables category in the Foundation System.

4. On the Record Purpose screen, enter Yes in the Orderable? field.

5. On the EpicCare Setting screen, enter No in the Clinically Inactive? field.

6. Enter Outpatient Referral (or whatever order type your organization uses for outside referrals) in the Override Order Type field. You may consider creating a new order type if you plan on using HL7 2.x interfaces.

7. Enter Outgoing Referral (or whatever order class your organization uses for outside referrals) in the Allowed Order Classes field.

8. On the Default Procedure Status screen, enter Normal in the Default Status field.

9. On the Order Class and Priority Defaults screen, enter Outgoing Referral (or whatever order class your organization uses for outside referrals) in the Outpatient Default Order Class field.

10. On the Order Specific Questions screen, add the question records you created in the previous section to the Outpatient Questions column.

11. On the Order Composer Configuration screen, add a context of Ambulatory to the Context column and the Order Composer configuration record you created to the Configuration column.

12. On the Duplicate Interval screen, set the Outpatient Interval to 90 days. This setting tells the system to check for any duplicates of this order for the patient in the past 90 days. In Epic 2017 and beyond, create a Time-Based Lookback procedure duplicate check and enter 90 in the Outpatient Interval (days) field.

13. Add the procedure record you created to an outpatient orders preference list so that clinicians can find /order it without being prompted by a Best Practice Advisory.

External Referral: Configure the Resulting Agency

IT Personnel

Create and configure a resulting Agency (LLB) record for the quitline vendor. In Epic, a resulting agency represents external systems responsible for particular parts of an order and result. This record enables you to send the order-specific question responses to the vendor in the correct format so they can be viewed by the clinician (this "closes the loop").

1. In Clinical Administration, follow the path Labs, Results > Labs and create a resulting agency for your quitline vendor.
   A. Enter a name for your agency and enter Yes at the prompt asking you if you want to create a new resulting agency.
   B. Assign your record an ID, name, and demographic information.
   C. Most resulting records include lab address, city, state, zip code, lab director, and contact information.
   D. *Optional* – enter the resulting physician who should appear for all results for a lab test from this laboratory in the Resulting physician (I LLB 300) field.
   E. Go to the Availability screen.
   F. In the Service Areas table, enter the service areas that you want to have access to this resulting agency. Although a service area is not technically required, we strongly recommend listing service areas here, as providers can't select a resulting agency during order entry unless their service area is listed in the resulting agency record.
2. On the Order Questions External Identifier Mapping screen, complete the table:

A. In the Question column, enter each of the order-specific questions you created for the procedure record.

B. In the External Code column, enter an identifier that your interface will use later to identify the order-specific question.

External Referral: Build Result Component Records

IT Personnel

To correctly receive data from the tobacco quitline vendor through the incoming results interface, create result component records for each piece of discrete data that needs to be completed in the patient's chart as a result of their quitline call.

Work with your quitline vendor and Epic representative to determine which data elements require component records. E.g., the vendor Optum returns the following data:

- Contact date
- Call disposition
- Status
- Treatment plan (including counseling provided and medication sent to patient)
- Planned quit date

1. Complete the following steps for each component:

   A. In Hyperspace, create a result component record for each piece of data returned by the vendor.

      i. Follow the path: Epic button > Admin > Lab Admin > Testing > Result Component.

      ii. Click Create.

      iii. Enter a name for your component and click Accept. This name appears anywhere the Component Name item for the record is used, (e.g., when searching for a component to add in the Enter/Edit Results activity).

      iv. In the Choose Contact window, select a contact and click Accept.

      v. Go to the General Setup tab.

      vi. In the External name field, enter a user-friendly name for your component.

      vii. In the Base name field, enter a base name in all caps with twelve characters or less. The base name is used to group related components in the .lastlab SmartLink, Best Practice Advisories, and in extension records related to lab tests.

      viii. In the Common Name field, enter the common name for your component. Enter free text without special characters or punctuation up to 59 characters. You can configure the common name to be used in SmartLinks, the Results Review activity, Outpatient or Inpatient Synopsis views, Best Practice

Advisories, and in many more areas where clinicians trend or review results over time.

   ix.   In the Abbreviation field, enter an abbreviation for your component.

B. For each component, enter a data type of String in the Entry data type field of the Result Entry Setup form.

C. To associate the result components you created with your quitline vendor, create an ID type for your quitline vendor and associate it with the result components you just created.

D. To create the ID type in Hyperspace, Search: ID Types activity or follow the path: Epic button > Admin > Identity Admin > ID Types.

E. On the General Information tab, complete the following fields:

   i.   Abbreviation. Enter an abbreviation for this ID type.

   ii.   Used by INI. Enter LRR.

   iii. HL7 assigning authority. Work with your Epic representative and quitline vendor to determine the value. E.g., enter Optum.

   iv.   HL7 ID Type. Work with your Epic representative and quitline vendor to determine the value. E.g., enter Optum.

   v.   HL7 coding system. Work with your Epic representative and quitline vendor to determine the value. E.g., enter Optum.

   vi.   Context. Enter 26-Resulting Agency Component.

   vii. Resulting Agencies - Component Using this ID Type. Enter the resulting agency (LLB) record you created for your quitline vendor.

F. On the ID Rules tab, complete the following fields:

   i.   Method. Select User entered.

   ii.   Verification format. Select Alpha-Numeric.

   iii. Use temporary IDs? Select No.

2. To add the ID type to the result components you created, open the ID Maintenance activity either via Search: ID Maintenance or the path: Epic button > Tools > Identity Tools > ID Maintenance.

A. In the Master file field, select LRR.

B. In the Component field, enter one of the result components you created.

C. Click Add to add an Identifier Type to the component and search for the ID type you just created for your quitline vendor.

D. In the Enter a Permanent ID field, enter the ID that should be associated with that result component, as determined by your quitline vendor. If Optum is your quitline vendor, use the following IDs:

   i.   Contact date: ALB122   iv.   Treatment plan: ALB125

   ii.   Call disposition: ALB123   v.   Planned quit date: ALB126

   iii. Status: ALB124

External Referral: Tobacco Quitline-Provided Medication Mapping

IT Personnel

Many state quitlines provide starter kits (often two weeks) of smoking cessation medications (usually over-the-counter nicotine replacement therapy) as part of quitline treatment services. The Epic Build for tobacco quitline eReferral allows for "closing the loop" on the receipt of medications by the patient from the quitline by populating the patient's EHR medication list. The following describes that process and build.

If you plan to use an incoming medications interface to file tobacco cessation medications that the patient received from the state tobacco quitline, you need to complete medication mapping.

If the National Drug Code (NDC) for medications are sent from the quitline vendor, and NDCs are loaded into your system from your medication data vendor (e.g., FDB or Medi-Span) then you don't need to complete any additional build.

If the quitline vendor sends medication information other than the NDC, contact your Epic representative to discuss switching the interface settings for the state tobacco quitline medication mapping.

External Referral: Configure Interfaces

IT Personnel

Work with your Bridges team and refer to the specifications to set up the outgoing and incoming HL7 2.x interfaces.

If you choose to use the Incoming Medication Orders to EpicCare Ambulatory interface to document medication sent to the patient by the state tobacco quitline, work with your Epic EDI representative and your tobacco quitline to make sure that the quitline can provide enough data to safely match the medications to the correct patient and medication in Epic.

After you set up your interfaces, you also need to modify your order transmittal rules so that the tobacco quitline referral orders are sent to the outgoing orders interface.

A scanned document with a type that indicates a consultant report is attached to the order that created the referral OR to the referral. Various steps are required, including integration with a third-party Document Management System, or DMS. We review these steps below.

1. Configure workstation settings:
   A. In Hyperspace, open a workstation's settings (search: Workstation Settings) and go to the Scans section.
   B. Set the following attributes:
      i. Use Scan Acquisition System: Yes
      ii. ProgID of Scan Acquisition Server: The value you enter in this field varies based on the third-party scanning system your organization uses. Ask your scanning team to provide you with this value.
      iii. Click Accept.
   C. Enable scanning for users:
      i. In Hyperspace, open a user record (search: User Security).
      ii. On the External ID List form, enter the following:
         a. Type: Document Imaging
         b. External ID: The appropriate ID
         c. Password: The appropriate password
         d. Active: Yes
      iii. Click Finish.
      iv. You can also import this information into your user (EMP) records.
   D. Integrate with a third-party Document Management System:
      i. The setup varies based on which scanning system and hardware your organization uses, so work closely with your scanning team for the setup if you are not already live with a DMS.
      ii. To enable the appropriate document types:
         a. In Hyperspace, open Referrals System Definitions and go to the Notes/Scans > Scan Document Types form.
         b. In the Document Types field, enter a list of document types.
   E. Enable Document Types for Referral Scanning:
      i. Users can link only certain document types to referral notes. Document types are category values in the Document Type category list, as described in the Define Document Types topic.
      ii. Starting in Epic 2018, the document types you choose to allow also control which documents users can link to referrals. Your DMS must create documents of these types to support referral linking workflows.
      iii. To enable the appropriate document types:
         a. In Hyperspace, open Referrals System Definitions and go to the Notes/Scans > Scan Document Types form.
         b. In the Document Types (I POS 850) field, enter a list of document types.

F. Enable Scans Instead of Attachments:

    i. After you perform this setup, the Scan button appears instead of the Attach button when clinicians create referral notes, which lets users interact with your DMS for scans instead of selecting and uploading documents to a Web BLOB Server.

    ii. In Hyperspace, open Referrals System Definitions and go to the Notes/Scans > Notes Attach/Scan form.

    iii. In the Allow scans? field, enter Yes. In February 2019 and earlier versions, this is an option button instead that, when selected, prevents users from using attachments for referral notes.

2. Configure a note with a type that indicates that a consultant report is attached to the referral:

A. Depending on the workflow needs of your providers, you may also want to create a new tab in the Notes Activity to house these reports.

B. To create a new note type, first verify its acceptance and approval with the appropriate stakeholders. Then:

    i. Follow the path: Epic button > Admin > General Admin > Category List Maintenance.

    ii. Enter INP in the Database field and 5010 in the Item field.

    iii. Enter an ID for your note type outside the Epic release range of 1 to 99999.

    iv. Enter a title, abbreviation, and synonyms for your note type, as appropriate.

    v. Click Accept to add your note type to the list.

    vi. Click Save to save your changes to the category list.

C. Link your note type to a Notes Activity tab in the facility profile so it can be used:

    i. Access the Notes Activity Configuration master file by following the path: Clinical Administration > Notes, Text Templates > Notes Activity Configurations.

    ii. Open an existing tab record or create a new record:

        a. If creating a new record, enter a name.

        b. At the Would you like to create a new Configuration? prompt, enter Yes.

        c. At the Record ID prompt, enter a record ID in the customer range (above 10,000).

        d. At the Record Name prompt, press ENTER.

        e. At the Record Type prompt, enter Tab record and press ENTER.

    iii. Go to the Notes Activity tab Details screen.

        a. If this is a new record, enter a name for your notes tab in the Display Name field.

    iv. In the Note Types field, enter the notes you want to appear on this tab. Press F7 to insert an additional note type.

    D. Add your tab to the Notes Activity:

        i. In Clinical Administration, follow the path: Notes, Text Templates > Notes Activity Configurations (HFN).

        ii. Open the configuration record.

        iii. On the Notes Activity Configuration Record screen, list your new tab record.

    E. You are able to configure attachments and scans for your referral notes, though this requires a third-party scanning vendor. Work with your Epic TS if this additional functionality is desired.

3. Enable a referral message (724-CE Outside Messages) to be sent or received:

    A. Messages sent to clinicians' Direct addresses will appear in the Outside Messages folder of their In Basket. Material below breaks down how to provide clinicians with the access and security to receive these messages. Security should also be provided to anyone that performs workflows that cause messages to be sent to providers. Without proper security, the organization's Direct address is sent with the message rather than the user's name.

    B. Allow users to send and receive Outside Messages:

        i. In Hyperspace, search for Epic-wide Settings.

        ii. Scroll to the bottom of the Message Type Defaults list.

        iii. In the Message Type column, enter 724.

        iv. In the Definition column, enter 724.

        v. In the Registry column, enter Staff. This registry is used as the default registry.

        vi. Go to the Sendable Message Configuration form.

        vii. In the Message Type column, enter 724.

        viii. In the Display Title column, enter Outside Message.

        ix. In the Registry column, enter Staff.

        x. Click Accept to save your changes.

    C. Give users proper security to receive Outside Messages:

        i. In Hyperspace, search for Security Class. Open the security class of users who should have access to receive messages.

        ii. Go to the Receive Message Types form.

           a. If the user has an Access Type of All, they can receive messages.

           b. If the user has an Access Type of Limit, enter the following values:

               1. Message Type: 724-CE Outside Messages.

               2. Message Type Definition: 724-CE Outside Messages.

        iii. Click Accept to save your changes.

    D. Run the Build Inspector to validate the provider and user record build. This helps to create reports that you can view in Hyperspace or export to Excel. It can also be used every few months as a maintenance check.

    i.   There are two Build Inspector records to help you validate your build:

        a.   72000-CE Validate SER Build for Direct Messaging. This record is used to verify that:

              1.   Each shared provider record has a Direct address.

              2.   Direct addresses are valid and are not using an internal domain.

              3.   Provider records that are shared with other organizations are for providers who have security to view messages.

              4.   Provider records that are marked as having access to your EHR do not have Direct addresses.

              5.   Each active address line in each provider record has the Access to EHR item set to a value.

        b.   72001-CE Validate EMP Build for Direct Messaging. This record is used to verify that:

              1.   Direct addresses in user records are in the correct format.

              2.   The addresses are using your organization's domain.

              3.   Users who have security to view messages also have Direct addresses.

C3I Site Leaders   Clinical Personnel   IT Personnel

Referral Order Follow-Up

Epic offers a report in Reporting Workbench that can show all internal and outgoing referrals created over the past six months, as well as the outcome of each referral (i.e., whether the referral loop has been closed). Summaries in the report indicate each referral by referral class (i.e., what locations or places you want to allow the referral to go to, e.g., internal vs. external) and outcome of the referral, (e.g., was the referred patient successfully contacted, did the referred patient accept cessation services, did the referred patient report s/he had successfully quit, has the loop been closed with the outcome returned to the patient's EHR and/or the referring clinical staff and/or C3I staff?)

This report considers the loop closed if and when the referral has an associated **Consultant Report referral note**. The Consultant Report note type is used in the Foundation system for notes sent by referred-to providers or treatment resources to notify the referring provider that a patient has received and completed the referral.

If you are unable to find this report in your Library, contact your Epic representative to have it migrated from the Foundation system.

IT Personnel

Build Biannual Reports for C3I Outcome Measures

- Smoking Status Documentation
- Smokers Registry
- Example Workflow
- Navigator Build Options
- BPA Build Options
- Order Build Options
- Reporting
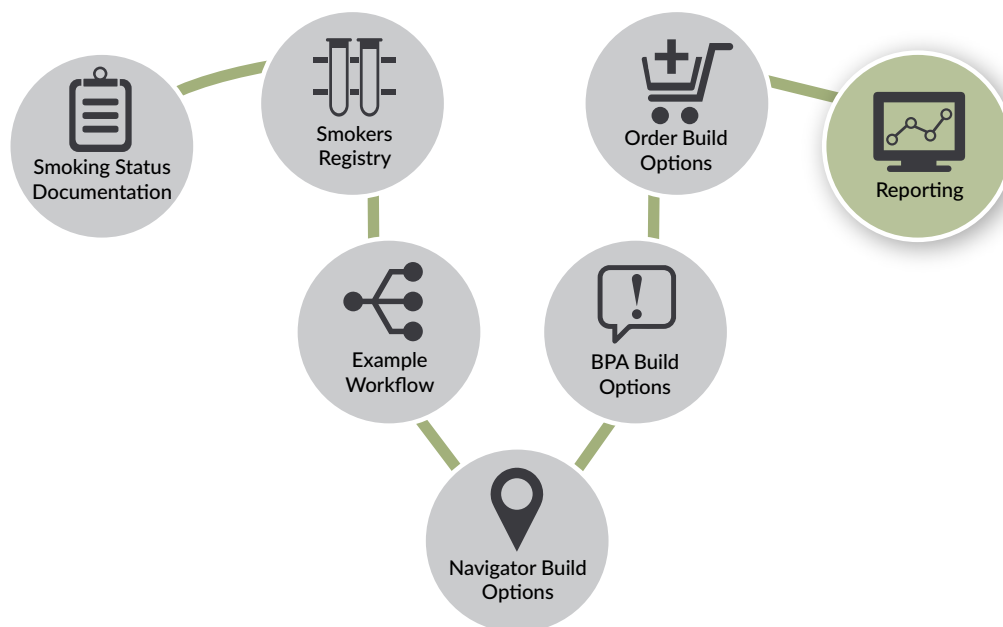
While a primary function of the Smokers Registry is to identify patients for cessation interventions, it can also be used to track patients over time who have been treated as part of the your C3I program for C3I biannual reporting. By using the Reporting Workbench tool, you can create periodic reports to be run (as necessary) for both intervening with patients who smoke and for the required biannual C3I data reports. The EHR can be programmed and used to drive key measures of C3I reach and effectiveness including:

- The proportion of all adult patients seen
- The number of adult patients who are documented as smokers
- The proportion of smokers who are referred to evidence-based cessation treatment
- The proportion of all smokers who engage in cessation treatment
- The proportion of smokers who are smoke-free six months post-treatment

C3I Biannual Reporting Periods

Jan 1, 2019 – June 30, 2019	Due July 31, 2019
July 1, 2019 – Dec 31, 2019	Due Jan 31, 2020
Jan 1, 2020 – June 30, 2020	Due July 31, 2020

Generate a Daily Report to Identify Smokers for Cessation Treatment Intervention

C3I Site Leaders   IT Personnel

While the Smokers Registry documents all patients who fulfill criteria for current smoker status (as defined above), it can also be used to identify new patients who smoke and present to C3I clinic sites, helping sites target those patients for smoking cessation intervention (either to internal or external cessation services, as designed by your C3I site). Most commonly, sites will want to program the EHR to generate a daily report of all smokers seen in the oncology clinics in order to target them for cessation intervention. Reporting Workbench is the tool in Epic that allows you to run reports and generate a daily list of new patients identified as smokers.

1. From your main toolbar, select My Reports.

2. For criteria, you can set your own depending on the goal of your report. When using the Radar My Panel Metrics Drilldown Search report template, you can choose Registry as your criterion to look to your existing Smokers Registry. If you wish to drill down within this registry, enter the name of your Smokers Registry in the Registry criteria.

    A. Add the criterion Patient Base to filter patients by provider or department (or whichever other option best suits your needs).

3. Epic reports default to "OR" logic within a criterion and "AND" logic across criteria. Double check these selections to make sure the logic of the report matches the intent.

4. You can set your time range on the Criteria tab as well. It is expected that you will run these reports to be sent to the Coordinating Center every six months. If this field is unavailable to you, you can adjust it by editing the report template itself.

    A. On the name bar of the report template, select Edit.

    B. Go to the User Interface form.

    C. Under Search Date Options, select Edit Date Range (or whichever option best suits the need of your clinic's report) and set your max lookback time for Max Days between From and To dates.

5. Be sure to provide report access to the appropriate groups under the General tab when you name the report, and mark it as private (not searchable) or public (searchable for others).

6. This will appear in the My Reports activity in Epic to be run and reviewed.

Specific Reports for C3I Reporting Periods

C3I Site Leaders   Clinical Personnel   IT Personnel

The Epic EHR can automate the production of the six-month reports for the C3I. The following reporting build provides specific guidance to generate these biannual reports for the C3I reporting measures, as well as all of the specific data needed to generate these biannual reports.

All Adult Patients

IT Personnel

This information is required for reporting C3I outcome measures. This report pulls all adult patients (18 and older) seen at your clinic in the designated time period.

1. To search all patients in your network:
   A. Select New report for the Simple Find Patients - Generic Criteria report template.
   B. Your Patient Base defaults to All Patients and Patient Living Status defaults to Alive.
   C. Under the Criteria tab, set the date range to cover your current reporting period.
   D. Add criteria Age in Years and mark the Relationship as Greater Than or Equal To Age 18.
   E. Set your Encounter Department criteria to be your cancer center setting for screening or cancer treatment.
   F. You can also set your Patient Base to be those patients of a specific Attending Provider, your Care Team, or Patients Seen in My Department, among other options that could fit your needs.

2. To search the patients that are in your Smokers Registry:
   A. Select New Report for the Radar My Panel Metrics Drilldown Search report template.
   B. Enter the name of your Smokers Registry in the Registry field.
   C. Choose to Add new criterion and Select an item from the search master file. Search Age and select Finish.
   D. Set the Relationship to Greater Than or Equal To and set Age to 18.
   E. Add the criterion Department and set this to the cancer center setting the patient should have visited over the determined time range.

3. Set the appropriate columns you wish to display as the output for your report. Note that this report will include all adult oncology patients who smoke.
   A. Go to the Display tab of your new report.
   B. Some Selected Columns will already default in.

C. Review Available Columns for any additional output you may wish to see. If you do not see what you are looking for, select +Add to search a larger list of available columns. If you still do not see a suitable column, work with your Epic representative to build a new column that suits your needs.

4. Set the appropriate columns you wish to display as output for your report. These include:

   A. Gender

   B. Race

   C. Ethnicity

   D. Age

      i.   18-24

      ii.   25-44

      iii. 45-64

      iv.   65+

      v.   Age unknown

   E. Insurance Type (at least Medicare, Medicaid, private and self-pay)

5. To set the appropriate columns you wish to display as output for your report:

   A. Go to the Display tab of your new report.

   B. Some Selected Columns will already default into the report. Review Available Columns for any additional output you wish to see. If you do not see what you are looking for, select +Add to search a larger list of available columns. If you still do not see a suitable column, work with your Epic TS to build a new column that suits your needs.

6. *To view the subset to report the number of patients with a cancer diagnosis:*

   A. Enter criteria for diagnosis, whether Diagnosis, Diagnosis by Code, or Diagnosis by Grouper.

   B. Enter the appropriate cancer diagnoses.

Current Smokers: All known smokers will appear in your Smokers Registry

IT Personnel

Refer to this registry to review the number of smokers in your network.

Go to page 6 of this guide to review the Smokers Registry Fundamentals and Build section to define your smokers.

If you run a report with criterion Tobacco Use, the results only show for those patients who had a status update in this field during the specific time range you specify in the report. **This can help identify patients who smoke and were seen during the six-month reporting period**. This information is required for reporting C3I outcome measures.

1. Select New report for the Simple Find Patients - Generic Criteria report template.

2. Search and Add new criterion.

3. Select an item from the search master file and select Tobacco Use. Select your qualifying choices for the values.

4. Verify that the date range of the report is narrow enough to identify the patient population that the provider would like to see.

Adults Screened for Tobacco Use

IT Personnel

This report will look for all adults who were asked whether or not they are a tobacco user (i.e. screened) during the determined reporting period. This information is required for reporting C3I outcome measures.

Criteria include: 18+ adult; had a visit in the reporting time range; a tobacco use diagnoses or any smoking status documentation in their social history; and prescription of any smoking cessation medications or TTPs.

1. Select New report for the Simple Find Patients - Generic Criteria report template.

2. Search and select criterion Age in Years.
   A. Set the Relationship to Greater Than or Equal To.
   B. Set the Years to 18.

3. Search and select criterion Visit: Last Date.
   A. Set the Relationship to Greater Than or Equal To and set your Date to the beginning of you reporting period (e.g., 1 month).
   B. Set Department to your clinic's department.

4. Select Add new criterion and Select an item from the search master file.
   A. Search and select the equivalent of Tobacco Use in your system. Select Finish.
   B. Set Relationship to Equal To for each qualifying smoking/tobacco use classification your clinicians have to document. Enter these options in the Tobacco Use field. List the values for all patients, both smokers and non-smokers. Each of these categories will be their own row within the criterion.

5. Enter criteria for diagnosis, whether Diagnosis, Diagnosis by Code, or Diagnosis by Grouper.

6. Enter the appropriate tobacco use diagnosis that is used by your clinic.

7. Search and select criterion Procedures. This criterion searches values within the date range and so, if you set the range to be the past one month, this criterion will filter to patients who have had the specified active procedure(s) in the past one month.
   A. Enter the corresponding procedure for the quitline referral or other TTP resource.

8. Search and select criterion Meds: Current (by exact medication) to filter patients that are currently taking the specified medication(s). You can also use criterion Meds: All time (be exact regarding the medication) if you want to see patients that have been prescribed a specified medication but may not be currently on it. You are also able to define the number of lookback days to determine whether a medication has been active on the patient's chart in the past 365 days.

   A. Enter the corresponding medications for Nicotine Replacement Therapy (NRT) or Varenicline (Chantix).

9. To view the subset to report the number of patients with a cancer diagnosis: Enter criteria for diagnosis, whether Diagnosis, Diagnosis by Code, or Diagnosis by Grouper.

10. Enter appropriate cancer diagnoses.

11. Set the appropriate columns you wish to display as output for your report:

    A. Go to the Display tab of your new report.

    B. Some Selected Columns will already default in.

    C. Review Available Columns for additional output you may wish to see. If you do not see what you are looking for, select +Add to search a larger list of available columns. If you still do not see a suitable column, work with your Epic TS to build a new column that suits your needs. Suggested columns include:

       i. Gender

       ii. Race

       iii. Ethnicity

       iv. Age

           a. 18-24

           b. 25-44

           c. 45-64

           d. 65+

           e. Age unknown

       v. Insurance Type

 Screened, Non-Smoker Adults

IT Personnel

This report will look for all adults who reported that they are not current tobacco users. This information is required for reporting C3I outcome measures.

Optional criteria include: 18+ adult; had a visit in the reporting time range; no tobacco use diagnosis or they do have smoking status documentation that says they are a non-smoker in their social history; no smoking cessations medications or TTPs were prescribed to them.

1. Select New report for the Simple Find Patients - Generic Criteria report template.
   A. Search and select criterion Age in years.
      i. Set the Relationship to Greater Than or Equal To.
      ii. Set the Years to 18.
   B. Search and select criterion Visit: Last Date.
      i. Set the Relationship to Greater Than or Equal To and set your Date to the beginning of you reporting period (e.g., 1 month).
   C. Set Department to your clinic's department.
      i. Select Add new criterion and Select an item from the search master file.
   D. Search and select the equivalent of Tobacco Use in your system. Select Finish.
      i. Set Relationship to Not Equal To for each qualifying option your clinicians have to choose if the patient IS a smoker. Each of these will be their own row within the criterion.
      ii. On the next row(s), set Relationship to Equal To for each qualifying option clinicians have to choose if the patient is NOT a smoker.
   E. Enter criteria for Problems: Not in Chart.
      i. Enter the appropriate tobacco use diagnosis that is used by your clinic.
   F. Search and select criterion Procedures: Not in Chart. This criterion searches values within the date range and so, if you set the range to be the past one month, this criterion will filter to patients who have had the specified active procedure(s) in the past one month.
      i. Enter the corresponding procedure for the quitline referral or other TTP resource.
   G. Search and select criterion "Meds: Current, Not Taking" to filter patients that are not currently taking the specified medication(s).
      i. Enter the corresponding medications for Nicotine Replacement Therapy (NRT) and Chantix.
   H. To view the subset to report the number of patients with a cancer diagnosis: Enter criteria for diagnosis, whether Diagnosis, Diagnosis by Code, or Diagnosis by Grouper (tool to combine similar groups of patients).
      i. Enter appropriate cancer diagnoses.
      ii. Set the appropriate columns you wish to display as output for your report:
         a. Go to the Display tab of your new report.
         b. Some Selected Columns will already default in.
            1. Review Available Columns for any additional output you may wish to see. If you do not see what you are looking for, select +Add to search a larger list of available columns. If you still do not see a suitable column, work with your Epic TS to build a new column that suits your needs. Suggested columns include:

A. Gender

B. Race

C. Ethnicity

D. Age

    i. 18-24

    ii. 25-44

    iii. 45-64

    iv. 65+

    v. Age unknown

E. Insurance Type

Adults Not Screened

IT Personnel

This report will return all adults without updated smoking status documentation in Epic during the reporting period.

Optional criteria include: 18+ adult; had a visit in the reporting time range; no tobacco use diagnosis and no smoking status documentation in their social history; no smoking cessations medications or TTPs were prescribed to them.

1. Select New report for the Simple Find Patients - Generic Criteria report template.

2. Search and select criterion Age in Years.

3. Set the Relationship to Greater Than or Equal To.

4. Set the Years to 18.

5. Search and select criterion Visit: Last Date.

    A. Set the Relationship to Greater Than or Equal To and set your Date to the beginning of you reporting period (e.g., 1 month).

    B. Set Department to your clinic's department.

6. Select Add new criterion and Select an item from the search master file.

    A. Search and select the criterion label that you use in your system to reflect Tobacco Use. Select Finish.

    B. Set Relationship to Not Equal To for each and every option your clinicians have, whether it states the patient is a smoker or not.

7. Enter criteria for Problems: Not in Chart.

    A . Enter the appropriate tobacco use diagnosis that is used by your clinic.

8. Search and select criterion Procedures: Not in Chart. This criterion searches values within the date range and so, if you set the range to be the past one month, this criterion will filter to patients who have had the specified active procedure(s) in the past one month.

    A. Enter the corresponding procedure for the quitline referral or other TTP resource.

9. Search and select criterion Meds: Current, Not Taking to filter patients that are currently taking the specified medication(s).

    A. Enter the corresponding medications for Nicotine treatment therapy and Chantix.

10. To view the subset to report the number of patients with a cancer diagnosis:

    A. Enter criteria for diagnosis, whether Diagnosis, Diagnosis by Code, or Diagnosis by Grouper.

    B. Enter appropriate cancer diagnoses.

11. Set the appropriate columns you wish to display as output for your report:

    A. Go to the Display tab of your new report.

    B. Some Selected Columns will already default in.

    C. Review Available Columns for additional output you may wish to see. If you do not see what you are looking for, select +Add to search a larger list of available columns. If you still do not see a suitable column, work with your Epic TS to build a new column that suits your needs. Suggested columns include:

      i.   Gender

      ii. Race

      iii. Ethnicity

      iv. Age

          a. 18-24
          b. 25-44
          c. 45-64
          d. 65+
          e. Age unknown

      v.   Insurance Type

Engagement in the C3I Internal Tobacco Treatment Program (TTP)

IT Personnel

It is essential that you include all of your tobacco treatment program documentation in the EHR system; otherwise this report will not capture the full program participation statistics. This report will run most efficiently if you have followed the How to Build a Smoking Cessation Navigator Section of this Build Guide and if your providers comply with the workflow. The information pulled for this report is required for reporting C3I outcome measures.

1. Select New report for the Simple Find Patients - Generic Criteria report template.
   A. Search and select criterion Flowsheet: Last Value.
      i. Enter the name of each flowsheet row you built in our "How to Build a Smoking Cessation Navigator" section seen earlier in this guide.
      ii. For each row, set Relationship to Equals and enter the appropriate values. This may require entering the same flowsheet row multiple times.
         a. For example, for the flowsheet row that asks: Which INTERNAL tobacco treatment service or program was/were offered to the patient? - enter Equal To and list the appropriate responses (based on your C3I Program internal services, which may include):
            1. Individually delivered in-person services/program
            2. Group-delivered in-person services/program
            3. Cessation education
            4. In-house telephone-based program
            5. TelAsk
            6. Other IVR
            7. Other internal text/mobile program
            8. The response "None during this time period" will not be included, as this means the patient should not be considered part of the TTP engagement population.
   B. Search and select criterion Procedures. This criterion searches values within the date range. Therefore, if you set the range to be the past six months, this criterion will filter to patients who have had the specified active procedure(s) in the past six months.
      i. Ensure the report logic is OR between the Flowsheet criterion and the Procedures criterion.
      ii. Enter the corresponding procedure for the quitline referral or other TTP resource.
   C. Search and select criterion Meds: Current (by exact medication) to filter patients that are currently taking the specified medication(s). You can also use criterion Meds: All Time (by exact medication) if you want to see patients that have been prescribed a specified medication but may not be currently on it.
      i. Ensure the report logic is custom set to OR across procedure and medication criteria if you are running this report to include ANY patients who are on ANY cessation treatments.
      ii. Enter the corresponding medications for nicotine treatment therapy and Chantix.

D. To view and report the subset number of patients with a cancer diagnosis:
   i. Enter criteria for diagnosis, whether Diagnosis, Diagnosis by Code, or Diagnosis by Grouper.
   ii. Enter appropriate cancer diagnoses.
E. Set the appropriate columns you wish to display as output for your report:
   i. Go to the Display tab of your new report.
   ii. Some Selected Columns will already default in.
   iii. Review Available Columns for any additional output you may wish to see. If you do not see what you are looking for, select +Add to search a larger list of available columns. If you still do not see a suitable column, work with your Epic TS to build a new column that suits your needs. Suggested columns include:
      a. Gender
      b. Race
      c. Ethnicity
      d. Age
         1. 18-24
         2. 25-44
         3. 45-64
         4. 65+
         5. Age unknown
      e. Insurance Type

2. To search those patients that are in your Smokers Registry:
   A. Select New report for the Radar My Panel Metrics Drilldown Search report template.
   B. Enter the name of your Smokers Registry in the Registry field.
   C. Choose to Add new criterion and Select an item from the search master file. Search the appropriate procedure that refers to the referral to cessation treatment or to the protocol to identify the patients who have received this order on their chart.
   D. To set the appropriate columns you wish to display as output for your report:
      i. Go to the Display tab of your new report.
      ii. Some Selected Columns will already default in. Review Available Columns for additional output you wish to see. If you do not see what you are looking for, select +Add to search a larger list of available columns. If you still do not see a suitable column, work with your Epic TS to build a new column that suits your needs.

E. To view the subset to report the number of patients with a cancer diagnosis:

    i.   Enter criteria for diagnosis, whether Diagnosis, Diagnosis by Code, or Diagnosis by Grouper.

    ii.   Enter the appropriate cancer diagnoses.

Measuring Effectiveness of the TTP for C3I Reporting

IT Personnel

C3I requires reporting on six-month smoking abstinence among smokers who engaged in a TTP as a means of measuring effectiveness. To do this, the report looks at all patients who received a component of a TTP, then examines follow-up calls (via staff, IVR, or other modalities, e.g., TelASK) or visits to the clinic setting where smoking status is documented. The questions below were included in the "Smoking Cessation Documentation Build Option for Navigators" section of this Build Guide on page 15. Look back at this section if you did not complete this build. Without this build, you cannot report on the required C3I effectiveness measure for your C3I TTP in the Epic system.

If you are to build these reporting components, please note that some measures for reporting are the same items used for patient responses, while some are different. These reporting components can be built out in flowsheet records to be incorporated into a smoking cessation Navigator for easier access. You could also include these items as a Navigator Section within the Admission Navigator so that clinicians see them as a regular part of their workflow. Navigator Sections can also display based on rules, so you may set it up to only show for patients 18 and over. The required questions will be reported on at the time of the patient's enrollment in the TTP, as well as six months after enrollment.

Report for the below answers:

1. When did you last smoke a cigarette (even one or two puffs)? (You may want to tailor the response choices for your specific C3I program. The C3I reporting choices are outlined in the next item (4.b. C3I Measures for Reporting).)

    A. I smoked a cigarette today (at least one puff)

    B. 1 to 7 days ago

    C. 8 days to 1 month ago

    D. More than 1 month ago to 1 year ago

    E. More than 1 year ago

    F. Don't know/Don't remember

2. C3I Measures for Reporting
   A. Today
   B. 1 to 7 days ago
   C. 8 days to 1 month ago
   D. More than 1 month ago to 1 year ago
   E. More than 1 year ago
   F. Don't know/Don't remember

3. *Optional Items:*
   A. Response Options: In the past 30 days; have you tried to quit (or stay off) smoking cigarettes?
      i. Yes
      ii. No
      iii. Don't know/Don't remember
   B. *Optional Measures to Report:* Number of smokers engaged in a TTP who responded:
      i. Yes
      ii. No
      iii. Don't know/Don't remember
   C. *Optional Response Options:* In the past 30 days; did you smoke cigarettes every day; some days; or not at all?
      i. Every day
      ii. Some days
      iii. Not at all
      iv. Don't know/Don't remember
   D. *Optional Measures to Report*: Number of smokers engaged in a TTP who responded:
      i. Every day or Some days
      ii. Not at all
      iii. Don't know/Don't remember
   E. *Optional Response Options:* In the past 30 days; if you smoked either every day or on some days; about how many cigarettes did you smoke on those days? A pack usually has 20 cigarettes in it.
      i. 1-4
      ii. 5-9
      iii. 10-14
      iv. 15-19
      v. 20 (1 pack) or more
      vi. Don't know/Don't remember

F. *Optional Measures to Report*: Number of CURRENT smokers engaged in a TTP who responded:
   i.   1-4
   ii. 5-9
   iii. 10-14
   iv. 15-19
   v.   20 (1 pack) or more
   vi. Don't know/Don't remember

To pull the answers to these questions by individual patient, you will need to create custom PAF columns to use in your display. One column will need to look at the first value entered in the flowsheet row where the answer was documented, while another column will need to pull the last and most recent value. This couplet of PAFs will be necessary for each custom question that you wish to report on to gauge whether the C3I TTP continues to be effective. The proper extension will be needed in your PAF build, so you should reach out to your Epic representative if you have difficulty with this setup.

Reporting Effectiveness of the TTP for C3I Reporting

IT Personnel

This reporting need will measure two categories for one reporting period: data at baseline and data for follow-up. The compliance requires that the patient was referred to a TTP and that the treatment was delivered.

1. Report 1: Effectiveness baseline. Current smokers who have engaged/enrolled in a tobacco treatment program AND who were assessed on the required effectiveness item at baseline during the reporting period.

   A. Select New report for the Simple Find Patients - Generic Criteria report template.
      i.   In Search for Criteria, choose Add new criterion and Select an item from the search master file.
           a. Enter and select Smoking Tobacco Use. Select Finish.
           b. Select Equal To and enter a line each for: Current Every Day; Some Day; Heavy Smoker; and Light Smoker.
      ii. Search and select criterion Procedures.
           a. Enter the appropriate procedure that refers to the referral to cessation treatment or protocol to identify those patients who have received this order on their chart.

      iii. Search and select Flowsheet: Last Value

         a. Enter each flowsheet record you built or migrated in the prior section measuring effectiveness. Set their Relationship to Equals and enter the appropriate values that would demonstrate effectiveness.

2. Report 2: Determine who is due for a six-month follow-up. This report will look for patients whose last visit was five or more months ago and who do not have outreach documentation in their records within the past five months.

   A. Select New report for the Simple Find Patients - Generic Criteria report template.

      i.   In Search for Criteria, select Registry and choose your Smokers Registry.

      ii. Add the criterion Visit: Last Date.

         a. Set the Relationship to Less Than or Equal To. Less Than or Equal To is for past dates, as it represents before or on the date.

         b. To look for patients whose last visit was "Less Than or Equal To" five months ago, enter M-5 in the Date field.

         c. Enter the name of your department in the Department field so the report looks for patients that had an appointment in your department five or more months ago.

      iii. In Search for Criteria, select Flowsheet: Last Date.

         a. Enter the record ID or name of your R Tobacco Cessation Outreach flowsheet row that was built in the How to Build a Smoking Cessation Navigator Section.

         b. Set Relationship to Less Than or Equal To.

         c. Set the value to M-5.

   B. *Optional Additional Criteria:*

      i.   If desired, you can also add the criterion Procedures: Last Ordered Date and set your TTP and quitline procedures as Less Than or Equal To M-5 to further drill down your patient population and see patients whose last order for those procedures was more than five months ago.

      ii. Similarly, you can choose criterion Visit: Next Appointment and set the relationship to equal today or this week to remind providers to reach out to those patients about their smoking cessation.

      iii. Set the Display to include the patient name, phone number, email address, date of the last TTP order, and last and next cessation outreach dates to better assist the providers as they review this report.

         a. These PAFs may not exist in your environment, particularly for the flowsheet values that are be referenced by your new outreach date flowsheet rows that were built earlier in this guide. Create new PAFs to show the output for your patient population when you run your reports.

3. Report 3: C3I Program Effectiveness at six-month follow-up. Current smokers who have engaged/enrolled in the C3I TTP AND who have at least one follow-up measure at six-months post-enrollment during the reporting period.

A. Select New report for the Simple Find Patients - Generic Criteria report template.

    i.   In Search for Criteria, Search and select criterion Procedures.

        a.   Enter the appropriate procedure that refers to the referral to cessation treatment or protocol to identify those patients who have received this order on their chart.

    ii.   Search and select Flowsheet: Last Date

        a.   This field restricts the search based on the date of the last entry in a flowsheet. Enter each flowsheet record you built or migrated in the prior section Measuring Effectiveness. Set their Relationship to Less Than or Equal To (evaluates as before or on the date specified) and enter T for today. Set a second Relationship to Greater Than or Equal To (evaluates as after or on the date) and enter M-6 for six months ago. Adjust the logic for these specified criteria from OR to AND.