Leveraging Epic for Research: Training Topics Overview

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Patients and Providers are actively engaged with Epic Helping us bring research studies to all!

Epic EHR

- Our Epic EHR is a common element across all sites and clinics
- Our investment in the Epic EHR will grow
- Our goal is to bring clinical trials to all

MyMountSinai (Epic MyChart) website & app

- 1.4M total MyMountSinai accounts
- ~370k patients use MyMountSinai every month
- 61.4% of patients seen in the last month have an account

Patients on Clinical Trials

- 69.1% of patients participating in clinical trials have an account
    - Reference: 60% average across Epic academic organizations

Mount Sinai Health System (MSHS): OneEpic
Increasing opportunities for patient recruitment

TODAY

	2022				2023				2024				2025			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Queens 200 beds		Aug 2022 ★														
Morningside & West 600 beds						Aug 2023 ★										
Mount Sinai Hospital, Beth Israel & Brooklyn 1,400 beds							May 2024 ★									
South Nassau 500 beds										June 2025 ★						

2,700 beds in total

Epic Research features already available at MSHS

Epic Features	Audience	Academic Medical Centers Adoption (n-418)
Automatically process research-specific claims	Research team	77%
Indicate an encounter as a research encounter	Research team	54%
Notify research staff of research patient appointment/admission/demise	Research team	58%
Enable research billing review	Research team	45%
Indicate an order as related to research	Research team	68%
Associate oncology research studies with study protocols	Research team	63%
Enable best practice advisories to identify potential research patients	Research team	27%

2024 plans: raise awareness through announcements and training

Epic Research features already available at MSHS

Epic Features	Audience	Academic Medical Centers Adoption (n-418)
Show current research studies in MyMountSinai	Participants	45%
Patient opt in/out of research recruitment via MyMountSinai	Potential participants	34%
Send MyMountSinai Research messages to recruit participants	Research team	37%

2024 plans: raise awareness through announcements and training

Research Study Record

- This is the foundation of Epic Research

- Research studies must be created in Epic in order to effectively use Research features

  - Alternative is labor intensive one off's

Research Study Record

Creating the Research Study Record in Epic

- Before a patient is enrolled in a Research Study in Epic, a request to create the study record must be submitted in ServiceNow

  - Basic information is collected such as NCT#, IRB Assigned Study # and Principal Investigator

  - Use the same information in this form as the IRB submission portal

  - Note, if required info is not filled out such as PI and IRB number, the request will not be completed

Epic Research Study Record (RSH) - Mount Sinai Health System (service-now.com)

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* Request Type ❓

- Request can be placed only when the Study code/GCO is available.
- If the study is internally funded: Please provide Internally funded Number (IF#)
- Study code cannot be changed once the record is created hence provide the right study code for record creation.
- Request for study record in multiple systems (Epic/Cerner/Eagle): Please reach out the # MSH INSURANCE BUILD MSHInsuranceBuild@mountsinai.org, and Bally-Phekoo, Judy judy.bally-phekoo@mountsinai.org for Study build request.

Request for Research Study Record creation

* Study Code (GCO#) (standard format XX-XXXX 6-digit Numeric)

* Short Study Name (Is used to uniquely identify protocol. The name cannot be numeric characters)

* Brief Description of Study

* Patient - Facing Name(Click ? for more information) ❓

* Default Patient - Facing Description(Click ? for more information) ❓

Recommended contact information for Patient facing Info: (Name, E-mail and contact number) : ❓

* NCT# (National Clinical Trial Number)

* IRB Approval #

* Principal Investigator's Primary Department

-- None --

Updating the Research Study Record in Epic

- The same ServiceNow form should be used for study updates

  - Request for Research Study Record creation: No

  - Existing Research Study Record update: Yes

- Indicate any fields that need to be changed and please write in the comments if the study needs to be closed [note, the ServiceNow form will be updated in the future with a field for study closure]

- **When requesting the study to be closed in Epic**, patients enrollments should be updated and there should be no outstanding bills

Epic Research Study Record (RSH) - Mount Sinai Health System (service-now.com)

Epic Research Study Record (RSH)
Request to create a research study protocol record.

Request to create a research study protocol record.

RESEARCH STUDY RECORD REQUEST

* Requested for ❓

* Contact Phone

* Email

* Life Number

* Request Type ❓

- Request can be placed only when the Study code/GCO is available.
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Existing Research Study Record update

Epic for Research Features and Functionality

Enrolling a Patient in a Research Study

- The patient's enrollment status and additional information is entered in the **Research Studies** activity to allow staff to track patients part of a study

  - Statuses manually updated by research staff:

    - Active Statuses: Enrolled, Consent Signed & Screening Process

    - Pre-Consent Statues: Waiting for consent, Identified, Interested & Eligible

- A Research banner appears for patients **enrolled** in research studies

- Viewed from the Story Board banner

Indicate an Encounter as Research Encounter

Scheduling, Registration and Clinical Staff can link encounters to research studies:

- Scheduling– via the Appointment Desk

- Registration – via the Research Encounter Association

The association can be viewed in:

- Scheduling Activities

  – At sites with Epic Scheduling and Registration

- Chart Review

Indicate an Encounter as Research Encounter

Scheduling:

Registration:

Research Linkage is visible in Chart Review

Notify Research Staff of Research Patient Appointment/Admission/Demise

- Research staff (PI & Research Coordinators) listed in the Research study record receive automatic notifications via **Epic In-Basket** (Notifications will not be received via email)

  - **Appointment Notification**: Appointment is canceled, missed or changed

  - **Research ADT Event Notification**: Patient is admitted, transferred or discharged

  - **Post Mortem**: Patient is marked as deceased

Indicate an Order as Related to Research

- Clinicians and credentialed Research Staff can associate orders with research studies
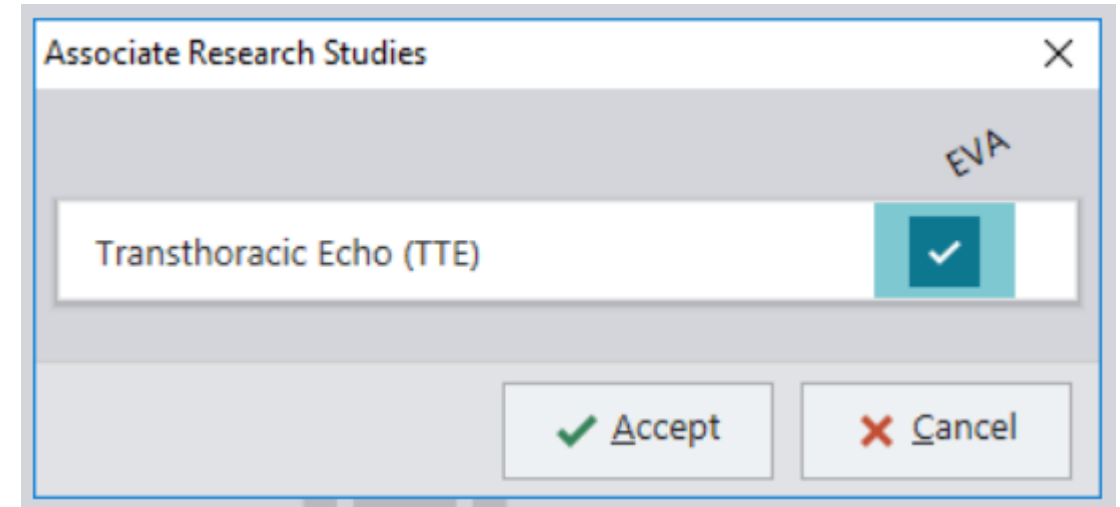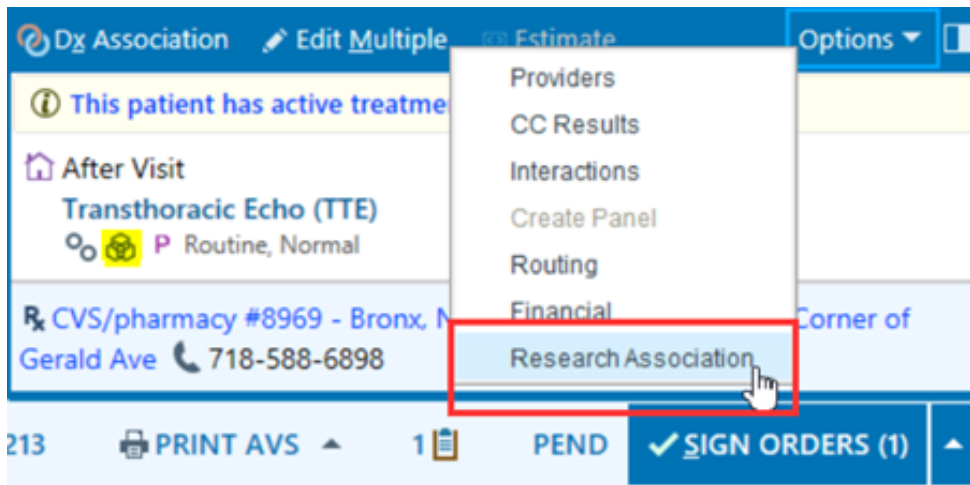
- Currently this tool is limited to certain Oncology departments and Radiology Research but looking to expand to other specialties

Associate Oncology Research Studies with Study Protocols

- Can associate a research study with one or more Beacon treatment protocols
- Can also send Epic InBasket messages to research staff when clinicians create treatment plans from protocols not approved for a study
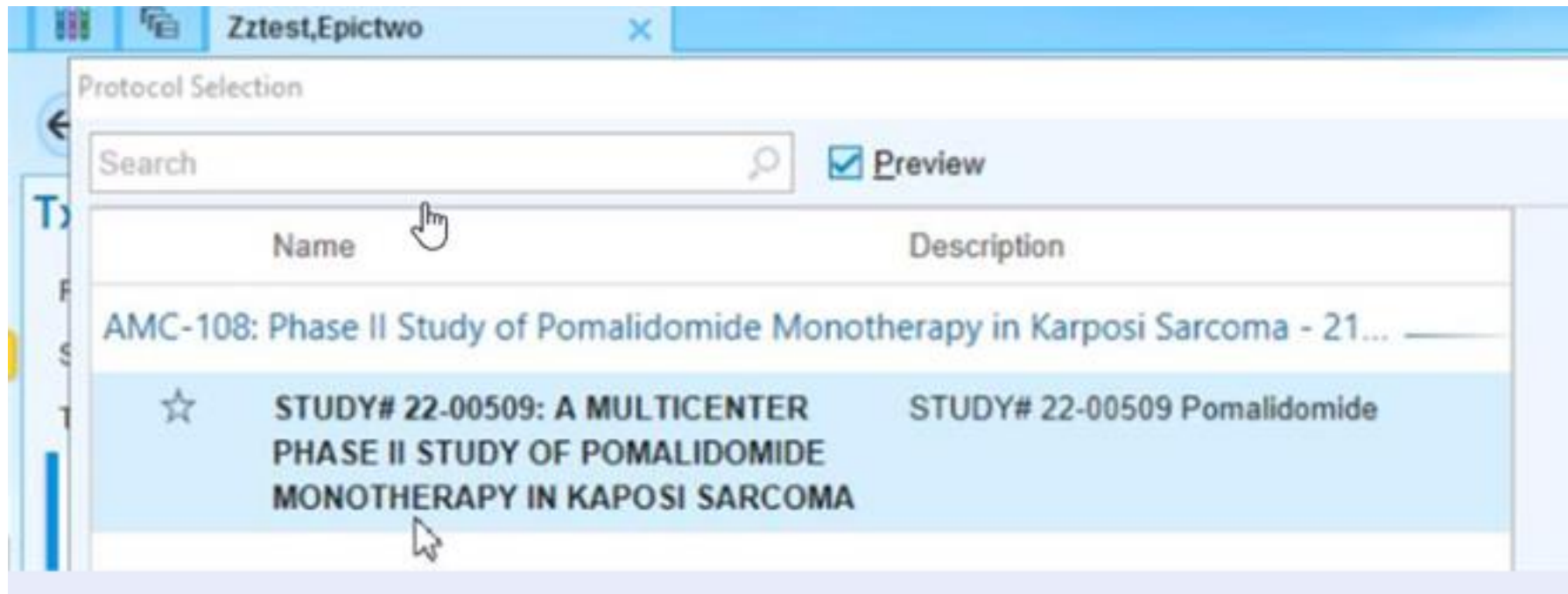
Epic Research Accruement

Clinical Trial Recruitment Alerts at Point of Care

- Best Practice Advisories (BPAs) can appear in clinical workflows if a patient meets initial screening and eligibility criteria.

- Within the BPA, clinicians can:
  - Indicate a patient's interest
  - Send a recruitment request through MyChart

- Ability to send an InBasket message when clinicians select certain association statuses

Patient Opt In/Out of Research Recruitment via MyMountSinai

- Patients indicate whether they are willing to be contacted about research studies on MyMountSinai
  - A link is included for patients to learn more information: [Mount Sinai Research](#)

Allow Patients to Complete a Research Preference Profile in MyChart

- Patients indicate which types of studies they might be interested in participating

- Responses can then be used for research recruitment outreach

List of 'Areas of Research' Currently Available

- Allergies & Immune System
- Blood, Heart, & Circulation
- Bones, Joints, & Muscles
- Brain & Nervous System
- Cancer
- Child Health
- Diabetes
- Digestive System & Liver
- Drug/Alcohol/Substance Dependence
- Ears, Nose, & Throat
- Endocrine System
- Eyes & Vision
- Food, Nutrition, & Weight
- Genetics
- Immune System

- Infectious Diseases
- Kidney & Urinary System
- Lungs & Breathing
- Mental/Behavioral Health
- Mouth & Teeth
- Newborn
- Pain Management
- Pregnancy & Neonatal
- Reproductive & Sexual Health
- Skin, Hair, & Nails
- Sleep Disorders
- Transplant
- Wellness & Lifestyle
- Women's Health

Show Current Epic Research Studies in MyMountSinai

- Display information about research studies a patient is or has been involved in

Send MyMountSinai Research Messages to Recruit Participants

- This feature may not be appropriate for all studies

- Use MyChart to find out whether potentially eligible patients are interested in participating in a study

  - Patients receive an email/text when they have a research message

- ServiceNow form will soon be available to request this feature

  - Once request is submitted, team will reach out for an intake call

In Basket Message for MyChart Recruitment

SlicerDicer

- Deidentified data for research feasibility
- Appropriate security is needed to use SlicerDicer, CRCs can only view deidentified information
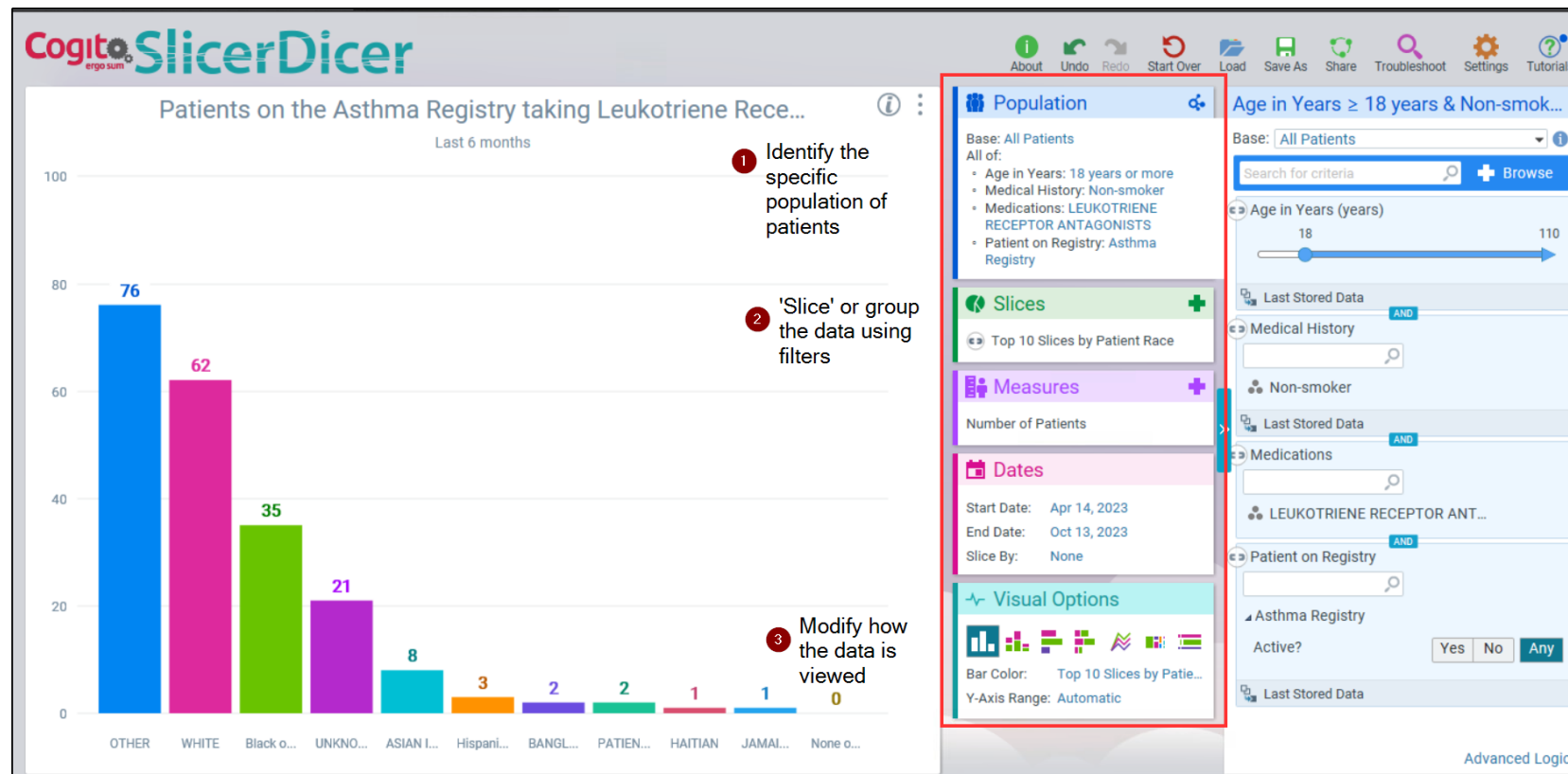
Epic Research Monitors

Granting Access to Epic for Study Monitors

Fundamentals of Research at ISMMS	Industry Initiated Clinical Research	Investigator Initiated Clinical Research	Other Research	Basic Science	CTSA Network Central Resources

Study Management

Financial Management

Monitoring and Audits

Study Closeout or Termination

Document Retention and Disposal

Guidance and Recommendations for On-site and Remote Study Monitoring (Updated 1/26/2021)

- Click > HERE (internal) for:
  - Remote Monitoring Guidance and Recommendations
  - Guidance – Use of Certified Copy

  (Note: to access internal documents in SharePoint, you may be prompted to enter your MSHS credentials.)

- Refer to COVID-19 Human Subject Research Ramp-up Guidance for the latest monitoring updates from the Dean's Office.
- For guidance on Requesting External Monitor and Auditor Access in Epic click > HERE.

Policy Updates

Update on On-site Monitoring for Clinical Trials (10/04/2022)

Monitoring for Clinical Trials

- More information available on the Research Roadmap:

Monitoring and Audits | Research Roadmap (mssm.edu)

Training Overview

Current Training

- 1 day Instructor Led training available in PEAK

- Zoom

Upcoming Training Dates

- May 16th

- May 24th

- May 30th

Agenda:

ServiceNow Request for new Research Study

Enrolling a Patient to a Research Study

Scheduling an Existing Patient

Link Appt. to a Research Study

Cancelling/Rescheduling

New Patient Registration

Updating Demographics & Coverage

Research Consent Scanning via Media Manager

In-Basket messages

Run and create reports to find patients associated with study or upcoming appointments.

How to submit an Epic request when there are issues

Upcoming Training Types

Limited CRC Training [scheduling/registration NOT INCLUDED]

– eLearning Training

BMEII Radiant Research Coordinator training **Add-on** [placing ancillary orders]

	Scheduling/ Registration	Enrolling patients in Research Studies	Linking Encounters to Research	Radiant Ancillary Orders
Full CRC Training	✓	✓	✓	X
Limited CRC Training	X	✓	✓	X
Radiant Research Coordinator Training	X	X	X	✓
View Only Training	X	X	X	X

Digital Concierge Service

Digital Concierge Service is held **every Wednesday from 3:30 pm – 4:30 pm (Eastern Time)**
plus an extra day (not Wednesday) once a month to accommodate users who cannot attend on Wednesdays
To attend to get help with any of the services below, people should register in advance **at this link**.

- **NEW: Epic for Research**
    - Leverage Epic for Research by utilizing features to recruit study participants, track patient enrollment, send consents via MyChart, receive notifications for research patient admissions and appointment changes, etc.
- **Minerva High Performance Computing (HPC)**
    - Minerva is comprised of over 2 petaflops of computational power and 32 petabytes of storage
- **Data Ark Data Commons**
    - Data Ark consists of public and Sinai-specific data sets located on Minerva
- **Mount Sinai Data Warehouse (MSDW) and Self-service Cohort Query Tools**
    - MSDW provides access to clinical and operational data collected from Mount Sinai's Epic Electronic Health Records
- **REDCap**
    - REDCap (Research Electronic Data Capture) is a secure, interactive web application for building and managing online surveys and databases
- **eRAP Electronic Data Capture**
    - eRAP is a secure, interactive web application for rapid database customization for single and multi-site studies
- **Library Resources and Services**
    - Use Library resources to find and manage evidence, data, and measurement instruments. Guidance on publication analysis and research impact, evidence synthesis, reference management, and data sharing.
- **DTP Academic Technology**
    - DTP Academic Technology provides support for computer-related issues, software questions, and IT concerns.
- **DTP Cybersecurity**
    - Protect your data, laptop and other digital resources

Thank You/Any Questions?

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