Research Webinar
Research Functionality Modifications & Updates
The Connect Care Research Team

**Research Triad**

**Clinical Operations:**
- Carrie Farnell, CORe Lead
- Cindy Shumlick, Clinical Informatics Lead
- Mehwish Rao, Senior Trainer, Research
- Nicole Tjepkema, Credentialed Trainer
- Tamara Murray, Credentialed Trainer
- Meaghan Creydt, Training Consultant

**IT:**
- Ashley Melenka, Manager – Ambulatory EMR & Research
- Brian Preeper, Murray Taylor, Kathleen Wright and Gillian Stebner – IT Analysts
- Virginia Marshall, Project Manager

**CMIO:**
- Dr. Stuart Rosser

**AHS Research & Innovation**

- Becky Wong, Director, Health System Access
- Trina Johnson, Provincial Lead, Research Ops
- Pedro Reis, Project Manager
- Leanne Blahut, Project Manager

**Connect Care Research Triad Leadership**

**Clinical Operations:** Shelley Bannister
**IT:** Marcus Norman
**CMIO:** Leahann McElveen

**AHS Research & Innovation Leadership**

- Marc Leduc, Sr Provincial Director

**Epic**

- Eric Jansen, Research Application Manager
- Ryan Nealon, Research Technical Support
One patient = One chart

- Research is part of patient care
- Research should be a part of the patient record
- Research teams have a role in ensuring chart accuracy
How we learn what is needed … from YOU

Call **1-877-311-4300** for access issues (I can’t log in, my password is not working, I can’t find Citrix ...)

Submitting a ticket is the fastest way for an IT issue resolution! If you need to **create a ticket** for workflow related matters, the more detail you can provide the better

Reminders:
- Clinical area: select ‘research’
- Connect Care Department: select ‘Peds CIU’ or ‘WMC CIU’
- Issue description: Add as much detail as possible
Where can I learn how to navigate the views for patients in inpatient settings as well as inpatient tools and reports?

1. Your Learning Home Dashboard includes chart navigation and workflow completion resources. Scroll to the bottom of your dashboard to see both Outpatient and Inpatient guides, Reporting resources and more.

2. The Provincial Health Systems Access webpage on Insite also has a comprehensive resource section.
Connect Care Research Functionality – IT Updates

**Research Icon** now appears on patient storyboard for interventional AND observational studies

**Change Job button**
Now available in Epic button menu
IT Updates - continued

Oncology dashboard visibility:

1) **Find it …**

2) **Make it a Favorite …**

3) **View it …**
IT Updates - continued

Notifications
Beacon protocol notification setting for research

• We identified research studies that did not request the addition of the oncology/beacon protocol notification, and all existing research studies that have both a beacon protocol and a research study record were updated with an auto-notification setting that will send an alert to clinical care team members that attempt to apply a treatment protocol that is not allowed as part of the research study.

• Research study teams involved in studies with Beacon protocols for studies entered in Connect Care and clinical care teams providing care to patients participating in these studies should refer to the oncology/beacon notification description as outlined in the Research Study Conversion Guide.
IT Updates - continued

Notifications
Beacon protocol notification setting for research
Notifications
Research results and routing InBasket notifications

- All research study records have been reviewed and updated with an auto-notification that alerts research study coordinators and the principal investigator with an InBasket message when results associated with research-flagged orders are updated in the patient record.

  - All laboratory results will also continue to be sent to NetCare.
  - Results will not flow from the new lab systems to Aria.
  - Some results are filing under different NetCare folders. If you are unable to find a result, use the NetCare search function to find the report you need.
IT Updates - continued

Notifications
Research results and routing InBasket notifications

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Notes recorded by Marius Van Der Westhuizen, MD on 10/7/2019 at 00:01 AM MDT
THIS IS A SAMPLE NOTE
IT Updates - continued

Notifications
Research results and routing InBasket notifications

• Any testing ordered in Connect Care, but performed at a lab which is not live on Beaker, will not flag to the InBasket. Results will be available in Connect Care for results review and on NetCare.

• For providers in environments not live on Connect Care, results will continue to be provided to you as they are in current state (eg. Print, fax or e-Delivery) but extra vigilance is requested to ensure that the results are correct, being received, and are going to the correct locations.

More information on results routing can be found on https://www.albertahealthservices.ca/info/Page16724.aspx
IT Updates - continued

Patient Encounters (visit) related

Appointment auto-reminders

- For departments who opted-in to this functionality, automated Appointment Reminders started on Monday, Jan 27th (for all appointments booked Jan 30, 2020 and after). Contact the clinical department where your appointments are booked to confirm if the department has opted-in to the auto-reminder functionality.

- As a reminder, staff must update the communication preferences when speaking with patients during the scheduling process; informing patients about this functionality, that they will receive reminder calls unless they request otherwise. Whomever is booking patient appointments will need to be aware of that decision about contacting your patients.

Recall tab for future appointments

- The purpose of the Recall tab update is to enable end users with a research coordinator role to see when future appointments are booked for patients. They can subsequently schedule research visits on the same day the patient is arriving for previously scheduled medical appointments.
IT Updates - continued

Using and documenting the Telephone and Virtual health visit type, and Zoom virtual health toolkit during COVID-19

Some departments have had Virtual Health and Telephone Visit types since Connect Care launch. If you have been using them, please continue with your normal business practice.

• Meant to replace face-to-face appointments with providers

• Travel screening questionnaires and Best Practice Advisories (BPAs) will not trigger with these appointments

• Change face-to-face appointments to virtual health or telephone as per provider

• Where possible, scheduled encounters are preferred to ad-hoc encounters, for patient/provider convenience, for resource allocation, and for ensuring that critical/related information (e.g. referrals and other documents) remains linked to the encounter
IT Updates - continued

**Schedule a Telephone visit type** when the provider will speak to the patient on the phone (audio only – no eyes on the patient) or a **Virtual Health visit type** when the provider will connect with the patient using video technology such as Zoom (both audio and video – eyes on the patient).

- Vax sites must cancel the existing appointment and schedule a new appointment using the Telephone visit type

  Use “**Pandemic Response**” as the Cancel Reason and enter **COVID-19** in the free text Comment. The link between the original appointment and the clinical documentation may be broken, but the documentation is not lost and can still be seen in the patient’s chart.

- Non-VAX sites can use Change Appt functionality to change the visit type to Telephone. Use “**Pandemic Response**” as the Change Reason and enter **COVID-19** in the free text Comment.
IT Updates - continued

Enhancement to Telephone Encounter navigator

Suggested use:
- Documenting a phone call with a patient
- Can include planned or unplanned calls.

Document call-specific items, such as who you contacted and the reason for the call.

Enter orders and send chart, just like other encounters.

Remember to link your encounters to research!
IT updates - continued

Reminder … How to link your encounter to research
IT Updates - continued

The Zoom Virtual Health Toolkit is available to clinical health researchers with studies approved as part of Connect Care, with the goal to support quality virtual care - anytime, anywhere. It combines resources from AHS Virtual Health, Connect Care, and Zoom.

- Zoom software allows providers flexibility to connect with patients virtually, such as in the home, on any device that meets minimum hardware and software requirements.

- Requires access to the appropriate devices, hardware and software requirements

- Enables clinicians to deliver health services, expertise and information in real time over distance, improving access and eliminating barriers to patient care across Alberta

- AHS has entered an Enterprise agreement with Zoom, and the AHS-Zoom account ensures health grade encryption and security.
IT Updates - continued

Documentation Encounters

Suggested use:
- Updating patient chart with info collected outside of a normal visit
- Writing Research Note to track patient progress on a study

Remember to link your encounters to research!
IT Updates - continued

ED & OR

Patients aren’t always available through a schedule or easily searchable through Patient Lists.

The **OR Status Board** and **ED Track Board** are available tools that can be used to identify and find patients in either the Operating Room or Emergency Department, respectively, depending on the context (department) to which you are logged in.

Access these tools via the Epic button!
ED & OR

Inpatient research-related Research Kit orders no longer cancelled at patient discharge

Description: Originally reported by a research end user in the Emergency Department. It was discovered that some research kit orders were being cancelled after a patient was discharged from the hospital or transferred to another department but prior to reception and processing by the lab.

Date of Fix: March 4, 2020.

Impact to Users: It is recommended that all research end users who may have placed inpatient orders directly before a patient’s discharge or transfer, to check that all orders were received and resulted as expected.
IT Updates - continued

Security
Research Coordinators role updated to View and Pend SmartSets/Order Sets

Description: This security update to the research coordinator role allows access to restricted and un-restricted SmartSets/Order Sets and to pend orders from them.
Date of Fix: March 31, 2020.

Impact to Users: All research coordinators now have access to the SmartSets/Order Sets function. It is recommended that users who have these complex order sets built as part of their research study familiarize themselves with how to queue up and pend these orders. Please see the relevant training document for more guidance. This security update will have no impact on users using exclusively preference lists or individual orders to queue up/pend research orders.
IT Updates - continued

Security
Research Coordinators role updated to enable documenting study medication administration on the MAR for research study participants.

Description: Allow research coordinator role access to document on the Medication Administration Record (MAR).
Date of Fix: April 21, 2020.

Impact to Users: All research coordinators will be expected to document their own medication administration for their research studies on the MAR. It is not expected that research end-users will be able to retroactively go back to previously held research encounters to document on the MAR.
Orders-related
What resources should I review to be ready for documenting study medication administration on the MAR?

Recommended reading:
• Outpatient Guide – Ambulatory Medications & Orders (page 11)
• Inpatient Guide – Medication Administration
• Emergency Department Guide – Medication Administration
Orders-related – Pharmacy: Medication Ordering Types

Clinically Administered Medication (CAM)

- Icon: 
- When to use: medication will be administered in an ambulatory/outpatient AHS clinical care setting.
- Rationale: clinically administered meds (CAM) are routed to AHS pharmacy and allows for labels to be printed and for proper in system administration documentation.

Home Medication

- Icon: 
- When to use: medication will be administered outside of an AHS care setting.
- Rationale: in this case the administration of the medication does not have to be documented in the CIS, therefore there’s no need to route it to pharmacy or to print labels.

During Visit Medication

- Icon: 
- When to use: patient is taking the medication in an AHS inpatient setting.
- Rationale: the medication is properly routed to pharmacy and allows proper in system administration documentation.
Education Updates - continued

Orders-related – Pharmacy: Using the generic investigation med record

The generic record should be used when your investigational med has not been built or has been built incorrectly.

Scenario: A researcher cannot find their investigational drug in the right context. E.g. the drug is available as a home med, but not as a “clinically administered med”.

1. Use the generic record “INV UNABLE TO FIND STUDY DRUG” for continuity of care.
2. Open a ticket to IT under “research” so the drug can be available in the right context.
Orders-related – Pharmacy: what information do I need to include for CAMs?

When ordering a CAM through and Orders Only Encounter:

• Enter the date and time for the medication administration that corresponds with the patient clinic visit. This is crucial so Pharmacy can ensure the medication is ready in time for the patient’s research appointment.
Orders-related – Pharmacy: Take Home Messages

- For any pharmacy dispensed/prepared drugs, always send/FAX the “Dispensing Sheet” to Pharmacy, regardless of the encounter type (pre-charting, “orders only” or during the appointment) or the medication type (bed, CAM, home).

- For studies using an IVRS/IWRS system, always provide pharmacy with the IVRS information printout/email.

- If you are using a SOC med for an approved indication/dose in an open-label study, use the SOC record. There is no need to request the build of an investigational record.
Orders-related – Research Kits

Completing a clinic collect workflow (eg. Research Kit) and acting on the original order signed for lab collection - without cancelling the order

1. After the investigator/physician has signed the order, open the clinic schedule and select your patient.
2. Open the patient chart to ‘Order Review’, where a coordinator can release the order.
3. Once the order has been released, go to ‘Order Inquiry’.
   • Under Views, select ‘Lab Orders by Type’.
   • After selecting that view, the research kit order is visible and the specimen can be collected.
Orders-related – Research Kits
Are you ordering and labeling research kits correctly for clinic collect?

- Select the correct options for ‘clinic collect’
- During the patient appointment, make sure you complete the collection workflow in system
- Print the patient label and research kit label for the paper requisition.
Orders-related – Research Kits

Are you ordering and labeling research kits correctly for lab collect?

• Remember to select the correct options for ‘lab collect’ and print the patient label for the paper requisition.
• Recall that this workflow also applies when patients are doing a specimen collection at home (i.e.) urine; and bringing that sample to the lab for processing or shipping:
Orders-related – Research Kits: Take Home Messages

When ordering a research kit, complete these essentials:

• Always provide the lab with the study customized paper lab requisition for research kits.

• Affix both patient and research kit labels to the requisition when “clinic collect” labs are performed.

• Affix the patient label to the requisition when “lab collect” labs are performed.

• Always separate research specimens from SOC when taking samples to the lab touchdown space. DO NOT PACKAGE THEM TOGETHER.
Orders-related - ECGs

Is my study approved to order ECGs? Am I ordering ECGs correctly? What are the expectations for ECG orders?

When do I need Operational Approval?
If you are using an AHS ECG machine you MUST do this. All ECGs read for wave 1 sites are managed through the MAZ Alberta Health Institute ECG lab.

When do I order and document in Connect Care?
1. Is the study using an AHS ECG machine or a Third Party?
   • If AHS ECG – order in Connect Care
   • If Third Party – do not order in Connect Care but document in the visit the test occurred & results

2. Does the study require an ECG appointment to be scheduled by AHS or is it part of a research visit?
   • If AHS needs to schedule – order as “future” status and add the desired date
   • If performed during a scheduled research visit – order as “normal” status

3. All ECG orders must be linked to the respective research study
Orders-related
Considerations and guidance if you think you need to cancel an order

Depending on the scenario, you may need to cancel and re-order a research-linked order. Apply the following guiding principles:

- Don’t cancel/reorder if it’s already in use by a group downstream
- Don’t cancel while lab is processing the samples/order
- Don’t cancel something that’s been scheduled, unless you speak with the appropriate unit to hold your slot while you cancel/reorder
- Don’t cancel if there’s a result (It’s complete at that point, and we shouldn’t undo it.)

Remember the triad of linkages that must be done to ensure workflows are complete:
1) Associate the patient to a research study,
2) Link the encounter (i.e. visit or admission) to the research study and,
3) Link each order with the research study.
Education Updates – continued

General

Dx code to close out research encounters

• There is a system requirement to assign a diagnosis to close research only visits.

• For diagnosis, users can only choose from the ICD-10 codes in-system, and research codes are held in ICD-10 code # Z00.6.

• Upon review of all options in this code classification with Health Information Management (HIM) and members of the research community, the recommendation is for users to select the option to assign the diagnosis of “Patient in clinical research study” from code # Z00.6.
Connect Care Research Functionality – Education Updates

General
One-pager for physician sign-off on cc'd charts

- One of the most used ways for physician to sign off on research orders is the “cc’d chart” functionality.

- To assist physician users in locating the “cc’d charts” in their inBasket, a “How to Guide” called “Physician Signing Workflow Research Orders Visits” was developed and uploaded to the Research Coordinator Dashboard.
Connect Care Research Functionality – Education Updates

**General**

**Lab Test Name Changes** Many test names have changed in Connect Care, with historical names frequently added as synonyms. The AHS Laboratory Test Directory and Collection Information Guide (aka Guide to Lab Services) contains information with the legacy system names and the new Connect Care Terminology. It can be found at [https://www.albertahealthservices.ca/lab/Page3217.aspx](https://www.albertahealthservices.ca/lab/Page3217.aspx)
Connect Care Research Functionality – Education Updates

**General**

**Lab Reference ranges**

- Whenever feasible, reference range standardization has been established. The significant changes to reference ranges **requires that clinicians check the full test result with the new reference range to ensure that they are correlating the results appropriately for their patient context.** Please see [https://www.albertahealthservices.ca/assets/wf/lab/wf-lab-major-changes-for-laboratory-medicine-with-connect-care-appendix-a.pdf](https://www.albertahealthservices.ca/assets/wf/lab/wf-lab-major-changes-for-laboratory-medicine-with-connect-care-appendix-a.pdf)

- Gender X and Gender Unknown reference ranges have now been created that span the highest and lowest value limits of the male and female parameters. Extra caution is advised in interpreting the results within your individual patient’s clinical presentation.

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**B. Clinical Biochemistry**

**I. Standardization in Test Reporting**

**24 hour Urine Changes**

- Standardized acceptable time for 24 hour urine collection: 22 to 26 hours
- Standardized reporting units: unit/day (e.g., 24 hour urine urate to be reported as mg/day)

**Ammonia**

- Reference intervals and critical thresholds for ammonia will change in Beaker as follows:
  - Critical Values:
    - 0-16 years: >110 umol/L
    - >16 years: >200 umol/L
  - Reference Intervals:
    - <3 months: 30 – 100 umol/L
    - 3 months – 150 years: 20 to 50 umol/L
Why use Patient Lists or ‘Patients on my studies’ report?

- See a list of patients on a unit
- Can be customized
- Refer to ‘Inpatient – Find Patients guide’
Education Updates - continued

Study Staff and Monitor Access

How do I request Connect Care access for new studies and staff?

• For non-emergency requests (unrelated to COVID-19 staffing reassignments) and related to the new hire of staff, you can request training and access for new hires at https://extranet.ahsnet.ca/teams/AHSRA/ITAccess/SitePages/CC_User_Training.aspx

• New hire training for the Research Staff course is offered once per month for Wave 1 sites. Note: In-person training availability may be limited during the COVID-19 response.
Study Staff and Monitor Access

How long before a monitor visit should I request monitor access?

- While the Health System Access team works to streamline the provisioning process with AHS IT, it is recommended that research coordinators request access to the Provider portal for external study monitors at least 3 weeks in advance of the visit.

- Access instructions can be found at [https://extranet.ahsnet.ca/teams/AHSRA/News%20%20Annoucements/tms-cis-connect-care-implementation-waves-1-to-6.pdf](https://extranet.ahsnet.ca/teams/AHSRA/News%20%20Annoucements/tms-cis-connect-care-implementation-waves-1-to-6.pdf)
Charge Review

What happens to my patients’ billing when I do not complete the charge review, and why is this so important to complete?

Every patient that is linked to a study MUST undergo charge review, and each charge related to a service performed on your study patient must be associated with one of three groups:

- Study-Related – Bill to Study
- Non-Study Charges (standard of care)
- Study-Related – Bill to Patient/Insurance (i.e. services offered “in kind” or free of charge).

- When a patient is linked to a research study ALL CHARGES including standard of care are held for review until the research coordinator has marked the research charge review as “Mark Account as Reviewed”.

- Charges quickly build up and any studies holding up large sums in charge accounts will be flagged as not up to date, especially if your patient is admitted.

- Review the “Research Charge Review” guide on your Research Coordinator Learning Home Dashboard for more information and steps to performing charge review.
Education Updates - continued

Charge Review

How do I correct an error in charge review that is marked as reviewed after the 28 day charge review window has closed?

- Once you have marked research study-associated charges as “reviewed” in your charge review report, those charges will be released from the work queue and be cleared from the research account and will not be available for you to switch that charge between research and standard of care.

- If you find that you have incorrectly associated a charge and it has already been cleared, please submit a ticket to ‘research’ using the [https://insite.albertahealthservices.ca/Main/cc/SitePages/ConnectCareHelp.aspx?type=workflow](https://insite.albertahealthservices.ca/Main/cc/SitePages/ConnectCareHelp.aspx?type=workflow) link. Please provide as much detail as you can on the charge including the order name, the date or the charge, the patient identifier and identifying the nature of the error.
Support Resources and Reminders

Support Available for live sites

- Super Users
- Learning Home and Coordinator Dashboards
- WMC Rapid Response lines:
  - 1-877-311-4300 (IT service & solutions)
  - 1-780-913-8034 (complex workflows)
  - 1-780-913-5224 (HIM issues)
- Inbox: cc.research@ahs.ca

Remember to …

- Complete the charge/activity review
- Link your encounters and orders to the respective research study
We are here to answer your questions.

Contact Connect Care:
CC.Research@ahs.ca
Questions & Answers Summary

Question 1: What if I submitted a ticket but did not pick "research"?

A: You can provide the Connect Care Research IT team with your ticket number at cc.research@ahs.ca, and one of them will follow up with you directly.

Question 2a: We require AHS Zoom evaluation documentation for Sponsors. While we have escalated this request to Becky Wong (and AHS Zoom teams). Is there anyone else who can assist us in the meanwhile? It is also an expectation that the documentation on the MAR takes place.

A: The Research Operations team will contact the PIA committee for AHS zoom. There is an aggregate of available policies and information for virtual health located here: https://insite.albertahealthservices.ca/Main/assets/tls/ep/tls-ep-covid-19-allied-virtual-practice-guidance.pdf#search=zoom%20pia

Question 2b: The link, above, does not seem to address the question regarding proven/documentated validation. If a PIA only partially complete, I assume that significant progress has been made. When can we expect more information?

A: AHS privacy is developing a letter endorsing the use of the AHS instance of Zoom for research purposes. We will make it available with our other letters of support on the research coordinator dashboard in CC once it is released.
Questions & Answers (cont’d)

**Question 3a:** I thought that we could not schedule ECGs in the future as AHS equipment could not act on the order. Has this changed?

**A:** If you are using AHS ECG services, the order should be done in-system. If you are using a third-party ECG machine (e.g. Sponsor provided machine), then you do not order it in system, but you must document that an ECG has been performed and the result (for example in the progress note). If the ECG will be done during a scheduled research visit, order it as "normal" so it will not trigger the ECG scheduling workflow.

**Question 3b:** If ECGs are done on an AHS machine, but ordered in triplicate at one time point how is that managed? For example, a research ECG may be ordered at baseline but requires triplicate tracings (e.g. 5 min apart) for better representative tracing. Is that to be ordered as 3 separate ECGs?

**A:** We are investigating this workflow question with the Connect Care Cupid module team and cardiology subject matter experts. We will make the answer available to end users on the research coordinator dashboard in Connect Care once it is released, and provide an update in an upcoming newsletter.

**Question 4:** Do I still need to review all charges, even if the amount is showing as $0 (zero dollars)?

**A:** Yes, all charges must be reviewed, regardless of dollar amounts. Currently for research, the system is tracking the activity and not the dollar amount.
Questions & Answers (cont’d)

Question 5: Can we schedule telephone visits or not yet? I am able to book, but then I cannot sign them, is this still an issue?

A: The final stage of review and approval at our Change Control meeting takes place on May 20th to enable researchers to sign the telephone encounters. The full functionality should be available shortly thereafter. We recommend if you have any open telephone research visits, that you leave them open until they can be closed once the full functionality is available.

Question 6: Do all medications administered to research patients at AHS facilities need to be ordered in system? What if I’ve missed some in previous visits … should I back-order?

A: Yes, all medications (INV or SOC) given to AHS patients must be ordered in Connect Care. Any medications administered to patients inside an AHS care setting must be documented in the MAR. If a patient is currently taking medications at home, you can update their medications as a ‘home med’ if they continue to take them at home. You cannot ‘back-order’ medications if a medication order was missed for past appointments; for example, you cannot place an order for a CAM that took place in the past.

A new order must be placed every time a new dispensing is taking place. The order should include the respective number of doses. Study teams are able to “renew”/reorder the medication every time the same way that is done for SOC medications.