



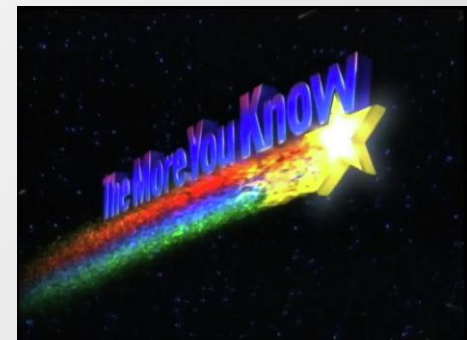
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Medical Imaging in Clinical Trials: **The Human Imaging Research Office and You!**

Nick Gruszauskas, Ph.D.

Director, HIRO

An overview of the HIRO's services



Road Map

- **What is medical imaging?**
- **Why and What is the HIRO?**
- **What services does the HIRO provide, and how do they support research?**
- **Wrapping Up**

Road Map

- **What is medical imaging?**
- Why and What is the HIRO?
- What services does the HIRO provide, and how do they support research?
- Wrapping Up



What is Medical Imaging?



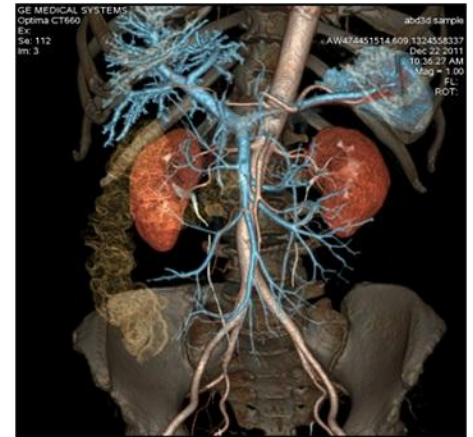
- **Medical imaging** is the use of equipment and techniques to create images of the human body for clinical purposes and/or scientific research.
- There are a variety of medical imaging techniques that are often used to create images of internal structures and organs.
- Imaging techniques may be **spatial** (highlighting structure and anatomy) or **functional** (highlighting physiology) in nature. In some cases, they can be both.



What is Medical Imaging?



- Different types of imaging methods are known as **modalities**.
- The basic imaging modalities are:
 - Radiography (x-ray) and fluoroscopy
 - Computed Tomography (CT)
 - Magnetic Resonance Imaging (MRI)
 - Ultrasound (US, echo, vascular)
 - Nuclear Medicine (SPECT, PET, bone scans, theranostics)
- The HIRO assists with all of these modalities (and more)!



What is Medical Imaging?



- **Clinical trials** often use imaging to:
 - ✓ Determine patient eligibility
 - ✓ Measure response to treatment
 - ✓ Determine if an endpoint has been met
- To support these goals:
 - Imaging may need to be performed at routine intervals defined by the trial protocol.
 - Imaging may need to be performed using guidelines and parameters specific to the trial.
 - Copies of images may need to be provided to the trial sponsor.



Road Map

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Why is the HIRO a Thing?



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- It is increasingly common for clinical trials to include **imaging manuals**.
- These manuals may include specific scan parameters and paperwork that must be utilized when performing imaging exams on a trial participant.
- Investigator-initiated projects may also include specific parameters, which can be cumbersome to execute in a clinical setting.



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Why is the HIRO a Thing?

- Images and related data are increasingly forwarded to external core labs for central review. Some projects may also collect images as part of chart reviews or AI development.
 - Improperly de-identified image data carries increasingly significant institutional risks, as evidenced by the 2007 breach of mammography research data at UNC.
 - The database contained image & demographic data and was breached due to inadequate information security.
 - UNC paid \$250,000 to notify roughly 180,000 patients and set up a call center to field questions about the breach.
 - The PI, a tenured professor, was initially fired but after appeal was merely demoted. Concerns were raised regarding the obligation of individual investigators vs. their institutions regarding data security and de-identification.
- <https://campustechnology.com/articles/2009/10/09/u-north-carolina-undertakes-review-in-face-of-7-state-data-breach.aspx>
 - https://www.insidehighered.com/news/2011/01/27/unc_case_highlights_debate_about_data_security_and_accountability_for_hacks
 - http://www.rsna.org/uploadedFiles/RSNA/Content/News/PDF/2011_RSNA_New_PDF/003%20RSNA_News_March2011.pdf



Why is the HIRO a Thing?



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The Washington Post
Democracy Dies in Darkness

Google almost made 100,000 chest X-rays public — until it realized personal data could be exposed

Fumbled project with NIH highlights potential pitfalls of Google's ambitions with sensitive health data.

By Douglas MacMillan and Greg Berninger
November 15, 2019 at 9:00 a.m. EST



(Jeff Chiu/AP)

Share Comment 155 Save

Two days before Google was set to publicly post more than 100,000 images of human chest X-rays, the tech giant got a call from the National Institutes of Health, which had provided the images: Some of them still contained details that could be used to identify the patients, a potential privacy and legal violation.

Google abruptly canceled its project with NIH, according to emails reviewed by The Washington Post and an interview with a person familiar with the matter who spoke on the condition of anonymity. But the 2017 incident, which has never been reported, highlights the potential pitfalls of the tech giant's incursions into the world of sensitive health data.

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MANAGEMENT IMAGING TECHNOLOGY VIDEOS CONFERENCES CUSTOM CONTENT SUBSCRIBE

New liability concerns emerge for radiologists who have used patient images in presentations

Marty Stempniak | August 21, 2020 | Radiology Business | Imaging Informatics



Recent updates to search engines such as Google and Bing may expose patient imaging data previously thought to be anonymous.

That's according to an update shared by the American College of Radiology, RSNA and the Society for Imaging Informatics in Medicine on Thursday. Radiologists and other providers often use patient images in educational presentations or online PDFs and, until recently, search engine spiders could not pinpoint any unique patient identifiers. However, advances in web-crawling and content processing are increasingly allowing for large-scale info extraction from previously stored files thought to be safe.

Physicians and other health professionals must pay special attention to this concern or open themselves up to potential privacy breaches and liability risk, the three groups advised.

"Healthcare providers frequently create presentations containing medical imaging for many worthwhile purposes," according to an Aug. 20 ACR [news update](#). "Patient privacy guidance including the Health Insurance Portability and Accountability Act and General Data Protection Regulation may extend to these situations. Providers may be responsible for protecting their patients' privacy in this context just as they are in routine clinical operations."

ars TECHNICA

BIZ & IT TECH SCIENCE POLICY CARS GAMING & CULTURE STORE

X-RAY VISION —

Millions of Americans' medical images and data are available on the Internet

Anyone can take a peek.

By JEFF KAO, AND JEFF LARSON, PROPUBLICA - 9/17/2019, 2:21 PM



Dislocated cervical vertebrae (traumatic lesion of cervical vertebrae C1-C2). X-ray in profile. (Photo by: BSIP/Universal Images Group Images)

ProPublica is a Pulitzer Prize-winning investigative newsroom. Sign up for [The Big Story newsletter](#) to receive stories like this one in your inbox.

Medical images and health data belonging to millions of Americans, including X-rays, MRIs, and CT scans, are sitting unprotected on the Internet and available to anyone with basic computer expertise.

The records cover more than 5 million patients in the United States and millions more around the world. In some cases, a snoop could use free software programs—or just a typical Web browser—to view the images and private data. *an investigation by ProPublica and the German broadcaster Bayerischer Rundfunk found*

- <https://www.washingtonpost.com/technology/2019/11/15/google-almost-made-chest-x-rays-public-until-it-realized-personal-data-could-be-exposed>
- <https://radiologybusiness.com/topics/health-it/enterprise-imaging/imaging-informatics/patient-images-exposed-liability-concerns>
- <https://arstechnica.com/information-technology/2019/09/millions-of-americans-medical-images-and-data-are-available-on-the-internet/>



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Medical Imaging in Clinical Trials: The HIRO and You! | 10

Why is the HIRO a Thing?



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Modern Healthcare
NEWS BLOGS OPINION EVENTS & AWARDS MULTIMEDIA DATA & INSIGHTS NEWSLETTER

June 27, 2014 12:00 AM

Guest commentary: More research hospitals need a HIRO

Samuel Armato III and Nicholas Gruszkas

TWEET SHARE EMAIL



Simultaneously accommodating imaging for day-to-day clinical care and clinical research trials can be a daunting task for a medical center. Failing to meet the imaging guidelines imposed by a clinical trial will result in additional

ITM THE UNIVERSITY OF CHICAGO @RUSH
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Human Imaging Resource Office (HIRO) Accelerates Research, ITM Helps Make it Accessible



Human Imaging Research Office | THE UNIVERSITY OF CHICAGO
The University of Chicago Biological Sciences

The Human Imaging Resource Office (HIRO) is streamlining medical imaging for researchers at the University of Chicago one scan at a time, saving them hundreds of hours and thousands of dollars.

As part of the TI Research and Technology Cluster at the Institute for Translational Medicine (ITM), HIRO helps investigators orchestrate clinical trials with an imaging component so that the work can be done faster and in line with strict study guidelines. HIRO is currently involved with about 200

Academic Radiology
Volume 27, Issue 2, February 2020, Pages 300-306

ELSEVIER

Special Report

Critical Challenges to the Management of Clinical Trial Imaging: Recommendations for the Conduct of Imaging at Investigational Sites

Nicholas P. Gruszkas PhD^a, Samuel G. Armato III PhD^{a,b}

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<https://doi.org/10.1016/j.acra.2019.04.003> Get rights and content

Rationale and Objectives

Participation in clinical research can be both highly rewarding and logistically demanding. As highlighted by recent Food and Drug Administration guidance, imaging has become an integral part of this research. The unique technical and administrative aspects of clinical trial imaging may differ substantially from those of standard-of-care imaging and thus burden the established clinical infrastructure at investigational sites. Failure to comply with requirements can lead to unusable data, repeat imaging, or the removal of patients from the trial. It is therefore imperative that all stakeholders address these challenges to engage in clinical research successfully.

Materials and Methods

- <https://www.modernhealthcare.com/article/20140627/NEWS/306279933/guest-commentary-more-research-hospitals-need-a-hiro>
- <https://doi.org/10.1016/j.acra.2019.04.003>
- <https://chicagoitm.org/human-imaging-resource-office-hiro-accelerates-research-itm-helps-make-it-accessible/>



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What is the HIRO?

- The mission of the **Human Imaging Research Office:**

“...to facilitate University of Chicago investigators conducting clinical trials and research studies that require medical imaging, and to ensure that the necessary imaging is performed and distributed in compliance with the research protocol, IRB requirements, and HIPAA regulations.”



What is the HIRO?

- The HIRO is a BSD **Core Facility** under the direction of the Office of Shared Research Facilities (OSRF).
- Oversight of the HIRO is governed by its Faculty Oversight Committee.
- Day-to-day direction of the HIRO is provided by its Director and Faculty Advisor. The HIRO also has two full-time staff and a few part-time professional staff.
- The HIRO occupies a single office in Billings/FMI.



Photo credit Sara Serritella/UChicago ITM

Road Map

- What is medical imaging?
- Why and Why is the HIRO?
- **What services does the HIRO provide, and how do they support research?**
- Wrapping Up



- The HIRO provides local investigators and research staff with several services to support the imaging needs of their clinical trials.
 - Site Initiation / Qualification
 - Imaging Exam Coordination and Monitoring
 - Imaging Exam De-identification and Distribution

Service: Site Initiation



- The HIRO assists with the imaging-related initiation activities for clinical trials noted below:

- ✓ **Site surveys** – the completion of imaging surveys and questionnaires.
- ✓ **Site training** – participation in imaging and online training sessions.
- ✓ **Test scans** – performance and submission of test imaging when required.
- ✓ **SIVs** – participation as imaging personnel in site visits when required.

An example of an imaging questionnaire.

- HIRO staff will also assess feasibility and create a trial-specific workflow if needed to ensure compliance with a trial's imaging guidelines.



Service: Site Initiation

- The HIRO also reviews protocols and imaging guidelines:
 - ✓ The HIRO reviews most trials that are routed through the **PRMC (formerly CTRC)**.
 - ✓ Investigators can optionally request HIRO review or input on their protocol via the **AURA IRB** system.
 - ✓ The HIRO provides input during a study's **budget** process if requested (for example, by providing guidance to the CTFG).

Service: Exam Coordination



- **Not all scans are equal:** the imaging parameters required by a trial may not match UCM's routine clinical parameters!
- The HIRO can determine if trial-specific parameters are needed:
 - ✓ **Exam ordering** – identification of the correct orderables in EPIC and order comments.
 - ✓ **Exam monitoring and assistance** – availability to provide help to coordinators and imaging technologists at the time of an imaging exam.
- The HIRO may provide a customized workflow for ordering imaging exams. Be sure to keep the HIRO in the loop and utilize this workflow to ensure your scans will meet your trial's requirements!

PAREXEL International
219171 Image Acquisition Guidelines
Version: 1.0

MEDICAL IMAGING SERVICES

A Phase 1/2 Study Exploring the Safety, Tolerability, and Efficacy in Combination with [REDACTED] Adjuvant

Image Acquisition Guidelines

TP-FLM-WW-008-03
Effective Date: 02 Aug 14
Replaces: SOP-FLM-WW-002

219171 Image Acquisition Guidelines

Project: 219171
Document Title: 219171 Image Acquisition Guidelines
Document Version: 1.0
Version Date: 28-Aug-14
Author: Ray (Keith) Moskowitz/Robert J. Jurek

71100 Image Acquisition Guidelines
Version: 2.0

perceptive
imaging

IMAGE ACQUISITION GUIDELINES
MULTI SLICE HELICAL CT - SINGLE SLICE HELICAL CT

- Once the parameters listed below have been configured, they shall remain consistent throughout the Screening scan.

REQUIRED SCAN 1: VOLUMETRIC MDCT SUPINE INSPIRATORY SCAN
REQUIRED SCAN 2: SUPINE EXPIRATION HRCT SCAN
REQUIRED SCAN 3: PRONE INSPIRATION HRCT SCAN
SCAN 1: VOLUMETRIC MDCT SUPINE INSPIRATORY SCAN

(Parameters for a 64 detector helical CT. If necessary, please adapt the following parameters for your scanner.)

Subject positioning	Supine, ensure no subject movement during acquisition and consistent positioning throughout the study. Make sure patient is well centered in AP and lateral directions.
Breathing Instructions	Inspiration Supine: Suspended full inspiration Note: Allow sufficient pauses between breath holds to avoid motion artifact. Do not use auto voice, watch subject's respirations. Release the breath holds before acquisition.
Scan Location/Coverage	Lung apices to costophrenic recesses
Scanning mode	Helical
Dose modulation	GE HDGE scanner - Auto-mA OFF Philips 64 scanner - Dose Right (ACS) OFF Siemens 64 scanner - Care Dose OFF Toshiba Aquilion 64 - Sure Step 3D OFF 64 x 0.625 mm (GE example, varies by make and model)
Detector	Set scan FOV ("cFOV") to ensure the exterior of the patient is encompassed within the FOV while minimizing air space around the patient. For reconstructions, adjust the display FOV to encompass lungs at the largest anatomical location and do not change it throughout the scan.
Scan and Display FOV	None
Contrast	None
KVP	GE HDGE scanner - 100 mA Philips 64 scanner - 100 mA Siemens 64 scanner - 100 effective mA Toshiba Aquilion 64 - 100 mA
mA	GE HDGE scanner - 0.984 Philips 64 scanner - 0.923 Siemens 64 scanner - 1.0 Toshiba Aquilion 64 - 1.484 (Fast Pitch)
Pitch	None
Rotation time	0.5 s
Thickness	1.25 mm
Interval	5 mm
Matrix	512 x 512
Motion Artifact	Repeat all scans which contain motion artifact
Hard Film: If Used	0 cm 1

TP-FLM-WW-008-03 Image Acquisition Guidelines Template
Effective Date: 02 Aug 14
CONFIDENTIAL DOCUMENT
Page 7



Service: Exam Distribution

- Trials will often require that de-identified copies of imaging exams be submitted to a central reviewer or core lab. The use of an imaging-specific electronic submission platform is also often required.
- The HIRO is the **official UCM team** for providing de-identified copies of imaging exams to local teams for research purposes.
 - Usually scans performed here at UCM (including Orland Park, Silver Cross, Crown Point and Ingalls) but can also include scans from other places*.
- Requests for image data are submitted to the HIRO by the research team via its website (<https://hiro.bsd.uchicago.edu>).
 - The HIRO can provide you with the data or it can often submit the data directly to the trial sponsor/CRO.
 - Note if the *patient* wants copies of their scans, you should contact the Radiology Film Library.

Service: Exam Distribution



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- Some trials may require the completion of **data transmittal forms** with each exam submitted.
- These forms vary in complexity.
- The HIRO is generally able to complete transmittal forms and will do so when submitting exams if required.

Example data transmittal forms.

TRANSMITTAL FORM

SUBJECT INFORMATION

Subject Number: [REDACTED]15 Modality: multi_slic Body Region: ☒Chest ☒Abdomen ☒Pelvis ☐Brain ☐Other

VISIT INFORMATION

Exam Date: [REDACTED]2016
Time Point: 070_week_45 Unscheduled Visit Description:

COMMENTS

SQC RESULTS

Ensure Slice Thickness for CTs is between 2.5 and 8.0 mm : Pass
Ensure no non-DICOM files : Pass
Ensure no lossy images : Pass
Checking for gaps in images : Fail

Form Completed by: [REDACTED]

PET Acquisition Document

Country ID: 78 Site ID: 28 Subject ID: E7828006

Ligand: ☐ AV-1451 ☒ Florbetapir ☐ FDG Scan Acquisition Date: [REDACTED]2016

Imaging Center Name: University of Chicago Medicine PET Imaging Center
Clinical Site Name: University of Chicago Medicine

Check the appropriate PET scan: ☐ AV-1451 Baseline (Scan 1) ☐ AV-1451 Week 52 (Scan 2)
☐ AV-1451 Week 104 (Scan 3) ☐ AV-1451 Early Discontinuation (ED Scan)
☒ Florbetapir Screening (Scan 1) ☐ Florbetapir Week 104 (Scan 2) ☐ Florbetapir Early Discontinuation (ED Scan)
☐ FDG Baseline (Scan 1) ☐ FDG Week 104 (Scan 2) ☐ FDG Early Discontinuation (ED Scan)

Document for QC of Florbetapir or AV-1451 Production Received Prior to Injection? ☐ Yes ☐ No ☒ N/A
NOTE: If QC Document has not been received, DO NOT inject subject (if QC document is applicable to your country)

Pre-Injection Information: Weight: 190.00 kg

Injection Information:
Initial Activity in Syringe: 1.0 mCi
Date of Injection: [REDACTED]2016
Residual Activity Post Injection: 0.12 mCi

Imaging Protocol Parameters:
Acquisition Protocol Used (Use protocol created at set-up visit): PETCT_florbetapir_Amaranth_4x5min
Recon Filter Type (e.g. Gaussian, All-pass...): GAUSSIAN Kernel (FWHM): 5 Iterations: 4 Subsets: 12
CT/Transmission Scan Start Time: 13:13 Stop Time: 13:13 (24hr clock)
Emission Scan Start Time: 13:14 Stop Time: 13:34 (24hr clock)

TECHNICAL COMMENTS:

Please fax to MNI at +1-203-401-4303 or email to corelab@mniimaging.com

CONFIDENTIAL
Molecular Neuroimaging, L.L.C.

MNIID1012
V2 [REDACTED] 17Apr2015



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Service: Exam Distribution

- The HIRO can pull copies of **most** imaging exams that are listed in the patient's EPIC chart* (including **echocardiography** and **DXA scans**).
- This includes scans performed at outside hospitals *as long as* a copy of the scan was forwarded to UCM at some point and loaded into our hospital archive (PACS).
 - If you have a copy of an outside scan on disc, you can bring it directly to the HIRO and we can de-identify & submit it to the sponsor as needed. Note you will still need to submit an image data request in our website!
- The HIRO can also assist in resolving imaging-related queries from the sponsor or CRO.
 - It is not unusual for the CRO to send queries directly to the HIRO. The HIRO may reach out to you for assistance when needed!
 - If you receive a query and you're not sure what it means, please reach out to the HIRO!



- **Image Data Distribution for Basic Science**
 - The HIRO also provides image data to basic science researchers and investigator-initiated projects.
 - The HIRO can provide copies of de-identified imaging exams for **retrospective studies**, **chart reviews**, and other types of epidemiologic, analytic, machine learning/AI or quality improvement projects.
 - The HIRO can assist with cohort identification and build databases of imaging exams based on specific criteria. This may be performed in conjunction with the Clinical Research Data Warehouse team.



Service: Exam Distribution



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- Requests for image data must be submitted via the HIRO's website.
- In order to submit requests, you must first **create an account** in the system*.
- You must also **register the trial** in question with the HIRO (or if it is already registered, you must **request access to it**).
 - To register a trial on behalf of a PI, you must become a **Technical Liaison**.
- Quick tutorials for all of these activities are available on the HIRO's website.

Human Imaging Research Office (HIRO) | THE UNIVERSITY OF CHICAGO

Imaging Research Institute • The University of Chicago

Welcome!

Our goal is to assist University of Chicago investigators and research staff with medical imaging performed on human subjects for research purposes. This includes the acquisition, analysis, collection, anonymization and distribution of image data. We also provide access to and support for the University's Broker Systems, which allow investigators to obtain HIPAA- and IRB-compliant clinical research data. Our website is meant to serve as a complete portal, or "one stop shop," for biomedical researchers to learn about the University's research policies and to provide access to the various resources that researchers can use to obtain compliant clinical data.

213 327 283 140

Jan-2016 Feb-2016 Mar-2016 Apr-2016

Mr. of Exam/Scan Processed

HIRO Featured in ITM Newsletter!

The HIRO and its staff have been featured in the November 2015 newsletter of the University's Institute for

HIRO featured in Science Life!

The HIRO has been featured in a June 2012 article on the University of Chicago's Science Life Blog! The

HIRO publishes journal article!

The HIRO has published a journal article! The article highlights the issues surrounding medical imaging performed

Register IRB Protocol
View Protocols
Submit Image Request
View Image Requests

Submit an image request to the HIRO

Back

Select Scans

You can request one or more scans using the form below. Simply fill out the form for each scan, then add it to your cart. When you are done, click the "continue to delivery options" button.

Your order cart

Scan List

Your cart is empty

0 scan(s)

Enter scan details

Please enter the details for a single scan below. Once a scan has been added to your cart, you will be given a chance to add further scans, or to continue to the delivery options for your request.

Outside exam ☐

Please check this box if this is the exam was performed at an outside facility.

Medical Record Number (MRN) *

The medical record number of the patient in question.

Patient name



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Service Fees

- The HIRO recovers its costs through a recharge model.
 - ✓ HIRO fees are subject to standard University indirect rates.
 - ✓ The HIRO's invoicing and collections are handled by the OSRF.
- Most industry clinical trials include the HIRO's fees in the trial budget.
- Investigator-initiated projects can include the HIRO's fees in grant budgets and can utilize local funding programs like **ITM Core Subsidy** awards.
- The HIRO also receives a subsidy from the **Cancer Center** for qualifying projects.

Road Map

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- **Wrapping Up**



The Importance of the HIRO

- The HIRO's primary goal is to ensure that the imaging exams performed for, and distributed to, clinical trials and research projects are compliant with the research protocol, IRB requirements, and HIPAA regulations.
- Failure to properly engage the HIRO's services with your trial may lead to:
 - **Queries and Deviations** – Imaging exams that are not performed according to trial guidelines or properly submitted to the trial sponsor will generate numerous trial queries and may even trigger an official protocol deviation or violation.
 - **Repeat Imaging** – Imaging exams that are not performed according to trial guidelines may need to be repeated at UCM's expense. This may also increase patient radiation exposure and decrease patient satisfaction.

The Importance of the HIRO

- Failure to properly engage the HIRO's services with your trial may lead to:
 - **Patient Removal** – Imaging exams that are not performed according to trial guidelines or properly submitted to the trial sponsor may force the removal of the patient from the trial. This may have an adverse impact on patient care and satisfaction.
 - **FDA Action** – Numerous or repeated deviations or violations may prompt an audit from both the trial sponsor and the FDA. Such audits may lead to the suspension of patient enrollment and trial activities and could jeopardize participation in future trials.
 - **HIPAA Compliance** – Improperly de-identified data may generate protocol deviations or violations and may even trigger federal HIPAA violations and fines to the institution.

Keys to Remember

- The HIRO is here to help you! Here are some keys that will help keep your trial's imaging running smoothly:
 - ✓ **Engage the HIRO with new trials early** – if your new trial will involve imaging, contact the HIRO as soon as possible. This is especially important if the trial will use a central reviewer or requires imaging site qualification. Forward any imaging materials you receive to the HIRO, and if you don't receive any, ask the sponsor to provide them!
 - ✓ **Let HIRO help with imaging questionnaires** – if you receive imaging-related questionnaires or surveys, forward them to the HIRO for review and completion. Please don't use answers from old surveys; things change all the time!

Keys to Remember

- The HIRO is here to help you! Here are some keys that will help keep your trial's imaging running smoothly:
 - ✓ **Notify the HIRO of upcoming scans as soon as possible** – remember to keep the HIRO in the loop when you schedule imaging appointments! If the HIRO asked to be notified when scans are scheduled, be sure to email the HIRO as soon as possible. This will allow the HIRO to provide the imaging technologists with the resources needed to perform the exam properly.

HIRO Email: hirohelp@bsd.uchicago.edu

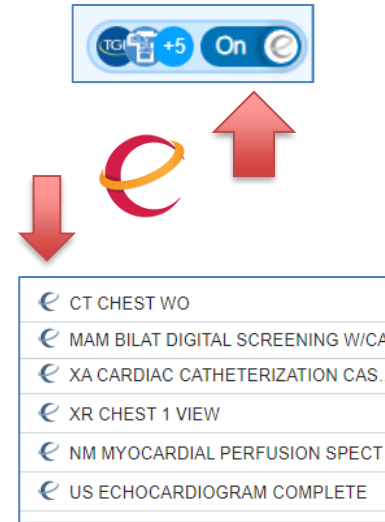
Keys to Remember

- The HIRO is here to help you! Here are some keys that will help keep your trial's imaging running smoothly:
 - ✓ **Submit image data requests as soon as possible** – most clinical trials require that we submit exams 3-5 days after they are performed. Failure to do so will usually generate queries. The HIRO cannot submit an exam without the proper data request, so make sure you submit the necessary requests via the HIRO's website!
 - ✓ You can even submit an image data request for a scan scheduled in the future!



Keys to Remember

- A note about EPIC CareEverywhere:
 - ✓ **A great way to see if a patient has outside scans!** – the CareEverywhere feature will display a patient’s imaging records from outside hospitals, letting us know that they have had exams performed elsewhere.
 - ✓ **Not a great way to get copies of outside images!** – unfortunately, CareEverywhere only lets us know that an outside scan was performed (and sometimes it will give us a copy of the report). It does ***not*** automatically share the actual *images*. If images must be submitted to a sponsor, *you will need to request a copy of the scan on disc from the outside facility*. Once the disc is available, you can submit an image data request via the HIRO’s website and we can use the disc to upload the images to the sponsor.



Keys to Remember

- The MRI Research Center (Mitchell Q300):
 - ✓ **The MRIRC is a core facility that can perform complex MRI scans.** If your trial includes MRI scans, the HIRO will review the requirements and determine if their level of complexity requires the MRIRC. The MRI requirements for most trials are relatively routine and do not require the MRIRC. The HIRO will provide you with its assessment during start-up.
 - ✓ If the HIRO assigns your trial's MRI scans to the MRIRC, we will let you know as they have a slightly different start-up and scan scheduling process. *If your trial's MRI scans have been assigned to the MRIRC, they **must** be performed by the MRIRC.*
 - ✓ If you are not sure if your trial has been assigned to the MRIRC, *please check with the HIRO.* The MRIRC cannot perform scans for trials that have not gone through their start-up process.

More Protips!

- If you submit an image data request and ask us to expedite it (“**stat**”), please be available in case there are questions.
- Similarly, please be available for discussion if you submit a large image data request (> 10 scans). Large requests often take longer to process and generate questions.
- If you receive a missing data query for a scan you’ve already requested, or if you’re not sure if a scan has been uploaded, please reach out to the HIRO and ask. Don’t submit a (duplicate) request!
- Double-check the subject numbers and time points in your image data requests (**don’t guess!**).
 - Incorrect subject IDs or time points can lead to multiple queries and require lots of time to untangle. Although the HIRO tries to double-check when possible, we don’t always have all the required information.

Questions?



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Human Imaging
Research Office

- The HIRO is always available to help answer any imaging-related questions you might have! If we can't answer them, we will help find the people who can!



❖ **Phone:** 702-9172

❖ **Fax:** 834-6721

❖ **Office:** FMI I-102

❖ **Website:** <https://hiro.bsd.uchicago.edu>

❖ **Email:** hirohelp@bsd.uchicago.edu

❖ **Hours:** 8AM – 4PM, Monday - Friday



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