

Navigating the Research Process at Carilion

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Objectives:

- Participants will have clear understanding of research review and approval process at Carilion Clinic
- Participants will be aware of the resources available to support their research endeavors
- Participants will be aware of the different entities at Carilion that are responsible for research oversight



Agenda:

- Clinical Research Support Resources
- Navigating the approval process
 - Research and Development
 - Conflict of Interest
 - Institutional Review Board
- Research oversight at Carilion Clinic
- SOPs for clinical research



Introduction:

Carilion Clinic is an Academic Medical Center with over 400 human subjects research studies, including over 100 clinical trials in 16 therapeutic areas

The Research and Development department facilitates, supports, and administers all research at Carilion Clinic

As our research portfolio continues to expand, our goal is to educate our current and future researchers to ensure that their research endeavors are successful



Poll to Gauge Audience's Experience

- Who has worked on a retrospective study at Carilion before?
- Prospective study?
- Industry-sponsored clinical trial?
- Grant-funded project?
- Study with external collaborator?



Clinical Research Support Services

- R&D offers researchers support in the following areas:
 - Research contracting services (confidentiality agreements, grant awards, clinical trial agreements, etc.)
 - Budget development and negotiations
 - Regulatory affairs support
 - Clinical research personnel
 - Financial administration of sponsored projects
 - Basic science lab support

<https://www.carilionclinic.org/centralized-research-services#about>



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- R&D's centralized resources are available to support researchers and reduce the burden of participating in research
 - If you have an idea for clinical research and you are not sure where to start, contact research@carilionclinic.org for a one-on-one consultation
 - We will work with you to develop your project in a manner that will reduce unanticipated obstacles and streamline your project's approval process



Research Approval Process at Carilion:

- All research projects at Carilion Clinic require R&D approval, while some also require IRB approval and Conflict of Interest Disclosure. Basic science projects may also require approval from the Institutional Biosafety Committee.
- Additionally, research training is required by R&D, Organizational Integrity and Compliance (OIC), and the IRB (CITI Modules)



Approval Type	R&D	Conflict of Interest	IRB
Required?	All projects	Funded projects	Human Subjects Research
Mechanism:	REDCap app	Smart COI annual disclosure	PRIS3M (Imedris)
Details:	Submit R&D REDCap application. R&D routes to departmental leadership for approval of project idea and staff time. R&D reviews and provides approval or feedback/ feasibility meeting trigger.	Projects with external funding require COI disclosure to ensure any potential conflicts are mitigated prior to project initiation. COI is disclosed annually and amended if a new financial relationship occurs.	Projects that meet the criteria of HSR, including an exemption determination. Investigators may also submit QA/QI projects to the IRB for formal determination of QA/QI status (some journals require).



Required Training

- Human subjects research requires CITI training (www.citiprogram.org)
 - Biomedical Researchers Course and Good Clinical Practice
 - *GCP is required for FDA regulated research and NIH funded research*
 - *Conflict of Interest for externally supported projects*
- R&D Research Training
 - Optional Modules:
 - Essentials of Grant Proposal Development
 - Essentials of Research Administration
 - Clinical Trial Billing Compliance
 - Clinical Research Coordination
 - Biosafety and Biosecurity
 - Individual research training is available by request from R&D representatives
 - Contact research@carilionclinic.org to request training.



R&D Application

- When seeking approval for a new research project, the first step is to complete the Research and Development application. This is also known as the “Department Level Review” and requires a signature from the investigator’s department chair/leader.
- **This application is available online at:**
 - [Research & Development eApplication](#)
 - REDCap enabled application
 - 10-15 minutes to complete
 - eSignature
 - Automatic Routing for Approvals
- The R&D application provides department level approval for study personnel assignments and also serves as a trigger point for R&D to schedule a feasibility review meeting and begin contracting/budgeting, if needed.



R&D Application Step by Step



Research and Development

Please complete and receive the department approval **prior to IRB PRISM application**. If you have any questions, please contact research@carilionclinic.org. If you need Epic data extract, biostatistics support, data management (REDCap), Epic research builds, Epic research access, or feasibility volume, please contact HART@carilionclinic.org.

Contact information

Carilion Clinic Principal Investigator Name

* must provide value

Position at Carilion

* must provide value

Email

* must provide value

Phone number

* must provide value

Estimated percent effort expended on project from the Principal Investigator. For an investigator, 1-2 percent is typical.

* must provide value

Contact Person (if other than PI)

Contact Email

Contact Phone Number



Is this submission a Primary Research Domain Project to fulfill a VTC SOM medical student graduation requirement?

* must provide value

☐ Yes ☐ No

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Project information

Project Title

* must provide value

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Primary Research Type

- ☐ Basic Research (in vitro/tissue culture/cell biology)
- ☐ Clinical Trial (e.g., interventional study such as drug or device)
- ☐ Clinical Research (prospective study without intervention, observational or registries)
- ☐ Clinical Research (retrospective study)
- ☐ Instructional
- ☐ Social/Behavioral Research
- ☐ Other (e.g., community outreach)

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Funding Source

- ☐ Industry
- ☐ Federal or Federal Flow Through
- ☐ Foundation / Non-profit
- ☐ Other University / Institution
- ☐ Investigator Self-Funded (e.g., discretionary; start-up funds)
- ☐ Internally Funded (e.g., RAP grant)
- ☐ I do not yet have this information available
- ☐ Other

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Do you have an interest in securing clinical research coordinator support with your study?

*Please Note: R & D research coordinators are assigned on a first-come first-serve basis.

☐ Yes ☐ No

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Personnel information

Department: (Chair/Officer/Dean)

* must provide value

- ☐ Emergency Medicine
- ☐ Family and Community Medicine
- ☐ Radford University Carilion
- ☐ Medicine
- ☐ Nursing
- ☐ Obstetrics/Gynecology
- ☐ Orthopaedic Surgery
- ☐ Pediatrics
- ☐ Surgery
- ☐ Radiology
- ☐ Psychiatry
- ☐ Other

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Additional Carilion Clinic Research Team Member?

- ☐ Yes ☐ No

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Non-Carilion Clinic Research Team Member

- ☐ Yes ☐ No

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Additional services

Additional Services: Check all that are requested

- ☐ Health Analytics data extraction
- ☐ Health Analytics statistics support
- ☐ Carilion REDCap
- ☐ Carilion's SPARC Secure Research Environment
- ☐ EPIC research access for chart review
- ☐ EPIC research study build (e.g., research drug build, BPA, ordersets)
- ☐ Pharmacy
- ☐ Clinical laboratories
- ☐ Basic science laboratory support
- ☐ Pathology
- ☐ Simulation laboratory
- ☐ Imaging
- ☐ Radiation Safety (non-standard of care imaging/administration of radioactive materials)
- ☐ Other service (Please note - any service that will be required for research purposes outside of your home department)



Upload protocol below or describe your study with sufficient detail to gain approval from your department chair, officer, vice president or dean before IRB submission/review.

Include specific aim(s), scope, time frame, number of subjects/population, methodology, or type in "attached" if uploaded.

* must provide value

Expand

Protocol: Please upload a protocol in this link if appropriate

 [Upload file](#)

Budget: Please upload a budget in this link if appropriate

 [Upload file](#)

If you are the PI, sign below and submit. If you are submitting on behalf of the PI, click submit.
Use your mouse to sign.

Principal Investigator

 [Add signature](#)

Clinical section chief (not required of all departments/functional areas)

 [Add signature](#)

Authorized department chair/ officer/ dean or vice president
(Required per Carilion Clinic policy)

 [Add signature](#)

Second clinical section chief (not required of all departments/functional areas)

 [Add signature](#)

Second Authorized department chair/ officer/ dean or vice president
(Required per Carilion Clinic policy)

 [Add signature](#)

Submit

Save & Return Later



R&D Approval



R&D will provide feedback within 5 business days for studies that require revisions or a feasibility meeting



If neither is needed, R&D will issue the approval letter.



The IRB will not approve a project without R&D letter of approval. This should be uploaded to your IRB application prior to submission.



Conflict of Interest (COI)

- Studies without external funding do not require COI disclosure or training
 - Studies with a Carilion Clinic Physician utilizing internal research funds do not require a COI disclosure
 - If VTC SOM student research funds are the only external support, please note in applications but select “N/A” for completing COI process
- Externally supported studies require COI disclosure and training
 - Research COIs should be disclosed in your annual COI disclosure to Carilion.
 - For investigators and study team members with a conflict, OIC will work with you to create a management plan. If a plan cannot be created, the study may not be able to be completed.
 - The CITI Program COI training should be completed initially and then renewed every 4 years or if the COI process changes significantly
 - Contact Carilion OIC’s Research Compliance for further assistance (researchcompliance@carilionclinic.org)
- COI Process
 - Only Carilion Clinic personnel and affiliates must complete the CC COI process
 - Transactional questionnaires are no longer required for individual protocols
 - All Research COIs should be disclosed on annual COI disclosure. If new potential conflicts arise, annual COI must be updated within 30 days to reflect changes
 - OIC will review annual disclosures and CITI COI training at the time of IRB submission to verify completion; however, COI disclosure and training can occur earlier in the research application process.
- **The IRB will not approve an externally supported study without COI clearance.**



IRB Approval

- Following R&D approval, the study team can submit the IRB application in PRIS3M for a COI check and a privacy/data security review.
- Once a study is submitted by the PI within PRIS3M, the study will be routed to the Department Chair or Unit Director for signature.
- Following R&D approval and COI clearance (funded studies only), the PRIS3M application then proceeds to the IRB for the final step in the approval process.
- Carilion Clinic's IRB reviews all human subjects research and can provide QA/QI determinations for projects that do not meet criteria for HSR.
- Industry-sponsored clinical trials are reviewed by Carilion Clinic IRB to assess safety matters, vulnerable populations, and research personnel. Carilion Clinic IRB also serves as the HIPAA Privacy Board. Carilion IRB will rely on Advarra IRB or WCG IRB as the IRB of record.
- Other commercial IRBs may be considered for industry-sponsored trials on a per-project basis.



IRB Approval, Continued

- The IRB will review your submission and provide feedback
- The study may meet criteria for expedited review and can be reviewed without convening the IRB full board review committee
- If the study meets criteria for full board review, it will be brought before the IRB review committee for discussion with the investigator and study team
- Once the review is completed and the application is determined to be acceptable, approval will be granted and the project can begin enrollment and data collection.
- **Any changes to your study protocol, personnel, or study materials, such as the Informed Consent Form, require additional approval from the IRB!**

<https://carilionclinic.imedris.net>

<https://www.carilionclinic.org/institutional-review-board#new-irb-submissions>



What is the difference between IRB approval and R&D approval? Why are both necessary?

- IRB reviews studies to ensure that the research meets federal regulations, institutional policies, and ethical standards. The review includes several criteria such as favorable risk/benefit ratio, subject selection, and consent procedure.
- R&D oversees operational aspects of research such as billing compliance, contracting/budgeting, feasibility analysis, and personnel assignments.



In Summary

- IRB approves studies that are determined to be ethical and meet Federal regulations, including having an appropriate risk/benefit ratio.
- R&D approves studies if they are feasible for the organization and processes the necessary agreements, builds, and account set ups for study activation.



Which studies require a feasibility meeting?.....

- Any study that prospectively enrolls patients and involves an intervention.
 - I.e., a drug, device, or research procedure is being studied
- Survey studies, observational studies, and retrospective studies **do not** require feasibility meetings.



What is discussed at a feasibility meeting and why is it important?

- Approval from ancillary departments
- *Coverage analysis*
- *Budget development and review*
- *Contract review*
- Logistical flow of study schedule of events
- Appropriate patient population – TriNetX
- Any obstacles that would keep study from being successful?



Grant Startup Process

- Please notify R&D as soon as you plan on submitting an extramural application
- Grant Administrator will work with study team to prepare budget, gather documentation (such as biosketches, institutional forms, etc.), and determine requirements for submission
- If external collaborators (sub-investigators) are involved, letter of commitment and budgets must be received to confirm participation
- R&D Application must be completed and approved by Dept Chair prior to submitting application package



Grant Startup Process, Cont.

- **Grants that involve prospective patient enrollment with research intervention will require feasibility meetings prior to submission.**
- Depending on grant type, IRB approval also may be required for interventional studies prior to submission/award.
- If grant is awarded, the agreement/contract will be negotiated and study will be submitted to IRB, if not already done in pre-award.



Grant Submission Deadlines

- The PI/PD must submit the budget and budget justification for review and approval no later than **10 business days** prior to the sponsor submission deadline.
- All collaborative/subaward materials (letters of commitment, budget and budget justification, biosketches, statement of work, etc.) must be received at least **5 business days** prior to the sponsor submission deadline.
- With at least **3 business days** lead time prior to the sponsor submission deadline, R&D will perform a complete final proposal review.
- R&D will submit with no less than **1 business day** prior to the application deadline.



Contracts

- Carilion Clinic does not permit investigators to sign contracts on behalf of the organization.
- All research-related contracts must be reviewed centrally by R&D and signed by our institutional research officer (Dr. Robert Trestman)



Research Oversight at Carilion

- R&D
 - Organizational Integrity and Compliance (OIC)
 - IRB
-
- R&D, OIC, and the IRB are all responsible for research oversight at Carilion.
 - Each of these departments can conduct quality reviews and/or study audits to ensure that researchers are following organizational policies/SOPs and federal regulations.
 - When in doubt, reach out to these departments for guidance. It is better to ask questions than to make assumptions that can lead to mistakes.



Clinical Research SOPs

- Standard Operating Procedures provide specific guidance to our investigators for conducting clinical research at Carilion Clinic.
- Standardized procedures increase compliance, reduce errors, and allow new investigators to learn the proper way to conduct clinical research.
- Our SOPs are based on federal regulations, FDA guidance, and local best practices.

[Research and Development's Clinical Trial Standard Operating Procedures \(SOP\)](#)



Case Study #1

- A colleague from an external institution approaches you to collaborate on a grant-funded clinical trial. You are interested in participating.
- What is your next step?
 - A. Contact R&D via email to notify the grants administrator of your plans and submit the R&D application for approval
 - B. Principal Investigator reviews and signs subaward agreement from the primary institution
 - C. Submit the study application in PRIS3M for IRB approval



Case Study #2

- You have a project idea to review your patient population's medical records from the past 2 years to compare hospitalization rates for patients who were vaccinated against COVID-19 and those who were not vaccinated.
- Would this type of project require a feasibility assessment?
 - A. Yes
 - B. No
- Would this project require IRB review?
 - A. Yes
 - B. No



Case Study #3

- An industry sponsor sends a confidentiality agreement and protocol synopsis to you for an upcoming phase II investigational drug trial. You would like to review the full protocol before deciding to participate.
- Who reviews confidentiality agreements for clinical trials?
 - A. Carilion Clinic Corporate Counsel
 - B. Carilion Clinic Research and Development
 - C. Carilion Clinic Corporate Contracts
- Who is permitted to sign research-related contracts on behalf of Carilion Clinic?
 - A. The Principal Investigator
 - B. The Director of Clinical Trials
 - C. The Institutional Research Officer



Questions

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research@carilionclinic.org

researchcompliance@carilionclinic.org

irb@carilionclinic.org

