Diagnostic Imaging: The Research Ethics Board Application Process

Guide to Initiating a Clinical Research Study
Overview:

Our goal is to provide a complete introduction of the general REB process to all clinical/research fellows and those interested in generating a clinical research study.

- What is the Research Ethics Board?
- Obtaining Grant/Scientific Review Approval
- First Steps

Important Documents:

- Data Collection Forms (DCF)
- Protocol
- Budget
- Consent Forms
Overview:

Our goal is to provide a complete introduction of the general REB process to all clinical/research fellows and those interested in generating a clinical research study

- Completing the REB Application
  - General Fields
  - Study Information
  - Retrospective (Chart Review) Study
  - Prospective Study
  - Data Storage and Destruction
  - Departmental Sign off and Costing

- Reviewing Completed Application
  - Role of Diagnostic Imaging Department

- REB Approval Process

- Post REB Approval

- Staff Change Form

- Amendment Request Form

- Adverse Event & Unanticipated Problem Report Form
What is the **Research Ethics Board**?

**Research Ethics Board (REB)**

- Responsible for the **ethical assessment** and **approval** of all research involving human subjects at SickKids, or research conducted off-site by SickKids researchers

- Mandated to approve, reject, propose modifications to, or terminate any proposed or ongoing research

- REB reviews conducted in accordance with hospital policies, national guidance documents and relevant laws

- **Research ethics certification is mandatory for all investigators and research team members**, and no application will be approved or renewed without evidence of certification

For more information involving clinical research studies, visit the [REB website](#)
Obtaining Grant and or/ Scientific Review Approval

Before beginning the application process, it is mandatory to obtain grant (if applicable) and or/ scientific approval on all prospective studies with the exception of health chart reviews (retrospective studies) and database applications.

Grant-Funded Studies:

- Clinical research protocols submitted for grants and awards from external funding agencies must have an internal peer review organized through the Grants Management Office (GMO).

- For detailed information about the grant approval process including the steps, internal peer review and resources/tools, please visit the grants management site at:

Internal website: Grants Management Office
Grant Approval Overview:

1. **Before gaining approval**: the researcher is required to complete the application associated with the research grant/award according to both the granting agency and SickKids policies.

2. **Notice of application**: At least six weeks prior to the granting agency’s due date, a completed **Notice of Application (NOA)** must be submitted to SickKids’ GMO. The NOA informs the Research Institute as to the researcher’s intent and to plan for the receipt of the research grant.

3. **Internal peer review**: The researcher is responsible for organizing an internal peer review that requires approval from a committee consisting of two or three reviewers (dependent on study budget) and committee chair. He/she is responsible for preparing all study documents and creating research grant proposal to present to the committee. Each member must fill out a **Reviewer’s Report Form**, review all study documents (provided by the researcher) and review the research grant application at least three working days before meeting with the applicant.

4. **Institutional sign off**: The PI’s GMO Coordinator will assist in obtaining institutional sign-off, be sure to contact her with several days notice prior to the submission deadline.
Tips for selecting internal peer reviewers:

- Select reviewers with expertise in the methodology and field of study (choose an expert);
- Select reviewers that are familiar with the granting agency;
- One external (non-SickKids) reviewer is permitted where appropriate;
- For a clinical study, the expertise of the reviewers must include all the disciplines represented in the proposal;
- For a clinical trial application, one of the reviewers should have expertise in clinical trial methodology

For an in-depth summary of the review process, please visit the GMO’s internal website

5. After the review process is over, the committee chief must sign off on the reviewer’s report form, which should then be submitted to the GMO office. After the applicant and program head sign the research grant application, the package must be submitted again to the GMO for institutional sign off.
List of Granting Agencies Relevant to Diagnostic Imaging:

Canadian Institute of Health Research (CIHR):
http://www.cihr-irsc.gc.ca/e/193.html

National Institute of Health (NIH):

Society of Pediatric Radiology (SPR):

Radiological Society of North America (RSNA):
https://www.rsna.org/Grants_and_Awards.aspx

University of Toronto CREMS program (for the support of a medical student):
http://www.md.utoronto.ca/program/research/crems.htm

Physicians’ Services Incorporated Foundation (PSI):
http://www.psifoundation.org/

Chase Mission Main Street Grants:
https://www.missionmainstreetgrants.com/

Ontario Brain Institute (OBI):
http://www.braininstitute.ca/homepage

Ontario Research Fund:
https://www.ontario.ca/business-and-economy/research-funding
Non-Grant Funded Studies:

- For all **prospective** non-grant funded studies, the completion of a scientific peer review prior to the submission of the REB application must be done (retrospective studies are exempt from peer review)

- The peer review must be conducted by at least two SickKids staff with knowledge in the area the study is being conducted

- There is a specific scientific peer review form that must be used and appropriate sign-off obtained from all reviewers prior to submitting to the REB
Steps for Preparing Scientific Peer Review

CLICK TO JUMP TO OUTLINE
First Steps

- **Tri-Council Policy Statement (TCPS 2):**

  - All clinical researchers are required to complete a mandatory research ethics training tutorial

  - The TCPS 2 online tutorial consists of eight modules which include case study examples in audio, video and text. The tutorial has log on and log off capability so that it can be completed over time. Upon completion, a printable certificate is generated

  - This certificate must be presented to the Diagnostic Imaging Research Office and be attached to the REB application at the time of submission

**Link to TCPS 2 Training**
Example of Certificate:

Rochelle Albert

Certificate of Completion

This document certifies that

has completed the Tri-Council Policy Statement:
Ethical Conduct for Research Involving Humans
Course on Research Ethics (TCPS 2: CORE)

Date of Issue: June 20, 2011
- It is expected that all investigators on the study are to complete this training. If training has been completed previously, the ‘previously provided’ option can be selected beside the name of the investigator. If not, the ‘attached’ option should be ticked off, while including the certificate in the REB application package.

- List all investigators and obtain SickKids ID numbers on the application page. The ID’s can be found under the HSC Directory tab on the internal SickKids website.

More on Signatures:

Signatures can be obtained from all investigators after the completion of the REB application. Request assistance from DI Research Office.

Refer to end of module slide: 40
Study Information:  
Important Documents in REB Process

It is essential to become familiar with all supplementary documents included in the study preparation process. Some are necessary to include with the REB application at the time of submission, and others must ideally be prepared before the commencement of the study.

- **Data Collection Forms (DCF’s):**
  - All demographic data taken from the study must be saved separately once data analysis takes place. A template of the data collection form that you will be using to obtain your data **MUST be attached to the REB application package**
  
  - DCF’s must include:
    - Title of study
    - Version date/number
    - Page numbers (where applicable)
Note: The collection of any sensitive personal health information is often discouraged by the REB, as the collection may provide identification of the patient.

The sample collection criteria below is found on the REB application and should be avoided if possible. If not, a rationale should be discussed following the selection.

### 15. SENSITIVE PERSONAL HEALTH INFORMATION AND RESEARCH DATA

The Research Ethics Board considers the following information to be sensitive personal health information, collection of which could result in identification of and/or harm to the participant (e.g., cause embarrassment, refusal of employment or insurance coverage, stigmatization). The collection of this information must be explicitly stated in the consent form.

Indicate the sensitive personal health information you will be collecting for your study:

- **No sensitive personal health information will be collected**
- [ ] Biometric identifiers
- [ ] Confidential legal information
- [ ] Data with research participant identifiers
- [ ] Date of death
- [ ] Dates of treatment, where treatment is rare or unique
- [ ] Email address
- [ ] Ethnicity
- [ ] Family income
- [ ] Family history
- [ ] Genetic Information
- [ ] Gender
- [ ] Health card number
- [ ] HIV status
- [ ] Identifiable images
- [ ] Initials
- [ ] Local references
  (e.g., address, postal code, etc.)
- [ ] Mental health status
- [ ] Name
- [ ] Race
- [ ] Religious affiliation
- [ ] SickKids medical record number
- [ ] Social insurance number
- [ ] Telephone or fax number
- [ ] Unusual diagnosis
- [ ] Other

Note: Full DOB is considered identifying information. Usually MM/YYYY is acceptable.

If you have checked any of the sensitive information fields above, describe:
- Why the collection of **each field** is necessary to achieve the scientific objective of your study
- What measures you will be taking to protect the information
If sensitive information is collected, the PI is responsible for ensuring it is kept securely and separately from the data collection files. A unique identifier can then be created for each patient.

**Example of DCF:**

<table>
<thead>
<tr>
<th>Study Name:Investigators:</th>
<th>Study ID</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Clinical features</td>
</tr>
<tr>
<td></td>
<td>Age</td>
</tr>
</tbody>
</table>

Page number: 16
Protocol: Developing the research protocols

A research protocol outlines the key objectives, methodology, and ethics behind the research study. Protocols differ depending on the type of study being conducted.

Key components of any research protocol include:

Scientific Aspects of Protocol:

Research Problem: What do we intend to seek through this study?
- Study title, abstract, background, hypothesis, rationale
- Relevant literature review to support study topic
- Detailed explanation of specific study objectives/significance of research

Methodology: How will we perform this research?
- Research design and methods (inclusion/exclusion criteria, screening and recruitment of patients, sample size, justification of statistical methods for assessing results)
- Timeline of events (who will be involved and when events of study will take place)

Outcome Measures: What findings can we report?
- Data management (how will result of the study be recorded/presented)
- Statistical analysis (sample size calculations, ratios, quantifiable data) and consult a statistician to understand applicable statistical issues/concerns

Conclusion: What can we draw/gain from study findings?
Protocol: Developing the research protocols

Ethical Aspects of Protocol:
- Outline the potential benefits/harms to subjects and others involved in the study
- Discuss any alternative treatments or procedures currently being performed
- Discuss how potential harms will be minimized (including the risk of breach of privacy and confidentiality)
- Explain who and how consent and assent will be obtained throughout the study period

DON’T FORGET...
- All protocols must be reviewed by the REB and should include an appropriate version and page numbers and date as a footer on the document. Any changes to the document must be made using TRACK CHANGES.

For additional information about protocol requirements visit the REB website:

For assistance in protocol writing, drug trial (Health Canada) and observational protocol templates, visit the Clinical Research website:

Coming soon!
Budget: Tips for creating an itemized study budget

Budget costs range from a list of expense types depending on the type of study and funds available for use. We provide a few areas of costs to consider when formulating an itemized study budget.

Study Personnel:
- Account for study staff included in the personnel section: e.g. research associates, trainees, coordinators/managers, analysts, research nurses, technicians, PI (salary)

- Benefits should be budgeted for at 16% for study personnel employed for more than one year and more than .5FTE, and trainees at 4-6% in lieu of benefits

Research Subject Care Costs
- Drug Costs: cost of study drug/placebo, pharmacy fees, testing of drugs
- Imaging Costs: DPLM imaging, contrast, and sedation costs if applicable, health records
- Recruitment Costs: promotional costs (newspapers, newsletters, magazines, study websites)
- Reimbursement Costs: parking, mileage, meals, thank you gifts

Data Management and Analysis
- Biological samples acquisition, analysis, transcribing services, consultants including database programming, biostatistician, research data and record management

Materials and Supplies
- Specialized equipment
Clinical Research Budget Preparation Checklist*

Listed below are a range of expense types for consideration as you prepare your clinical research budget. Please note that unfunded projects (i.e., projects conducted with divisional or departmental funds) also incur expenses and must include budgets.

**Study Personnel**
- Study staff (e.g., clinical research assistant, coordinator or manager, statistical or database analyst, data entry staff, research nurse (for clinical assessments, medication administration etc), lab technician (for analysis of biological samples), secretary, salary of principal investigator (for some grants such as NIf)
- Trainees (e.g., post graduate fellows, graduate students, summer students)
- Travel, meal allowance etc., for study staff to present the study results at conferences

*In kind contribution should be noted for “unfunded” projects. Employee benefits of 10% should be included for study personnel employed for more than 1 year at more than .5FTE. For trainees include 4-6% in lieu of benefits.

**Research Subject Care Costs**
- Drug costs as confirmed from the research pharmacy costing sheets included in the REB application form. Cost of study drug (if a company is providing the drug free of charge, this should be noted)
- Other therapeutic or diagnostic costs as reflected in departmental costing sheets included in the REB application form (e.g., DPLM, imaging, sedation (if required), Health Records costs for chart selection and/or record retrieval
- Neuropsychological testing including purchase of tests, scoring software etc.
- Genetic counseling
- Professional time/supervision of technologists/interpretation of results
- Research subject recruitment costs (e.g., newspapers, newsletters, magazines)
- Interpreter/Translation costs (if applicable)
- Research subject reimbursement costs (e.g., parking, mileage, meals, thank you gift)

**Data Management & Analysis**
- Biological samples acquisition, analysis, transportation and storage
- Video tapes, audiocassettes, transcribing services
- Consultants including database programming, biostatistician
- Research data and record management and long term storage

**Materials & Supplies**
- Specialized equipment, computers, forms, postage, telephones, long distance charges, printing of REB applications

**Other Considerations**
- For multicentre trials, costs associated with investigators’ meetings, teleconference calls, fax machines, site visits etc. need to be included
- For sponsored research projects the Research Institute overhead, and REB review fee will need to be included

*Based on a checklist developed by the Clinical Research Office. For further information on current salary ranges, cost estimates etc. please contact Julie Gibson, Clinical Research Manager.
<table>
<thead>
<tr>
<th>Costs Related to DI Procedures</th>
<th>Where to Find Out More Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical Costs of the MRI, CT scan, X-ray, etc.</td>
<td>Contact Nicole Brown (Diagnostic Imaging) at ext. 201922</td>
</tr>
<tr>
<td>Contrast Agents</td>
<td></td>
</tr>
<tr>
<td>Storage of the Image</td>
<td></td>
</tr>
<tr>
<td>e.g. film, CD-ROM, DVD</td>
<td></td>
</tr>
<tr>
<td>Professional Time/Supervision of Technologists/Time to Interpret the Results. Interpretation may be provided by an expert at SickKids or at another institution.</td>
<td>Contact Nicole Brown (Diagnostic Imaging) at ext. 201922</td>
</tr>
<tr>
<td>Bone Age Studies</td>
<td></td>
</tr>
<tr>
<td>DEXA studies</td>
<td></td>
</tr>
<tr>
<td>Quality of Life Measures</td>
<td></td>
</tr>
</tbody>
</table>

Source: Clinical Research Expense Type, Clinical Research Office

For additional information about budget requirements and available templates, and information (Research Expense Type document) visit the Clinical Research Office website:

COMING SOON!
Consent Forms: Assent, Subject, Parent

- Consent forms are mandatory for all clinical research studies, except when a waiver of consent is requested (usually on retrospective studies).

- Consent forms for all prospective studies must be included when submitting the REB application for approval.

- All consent forms must follow a specified structure and format as detailed in the templates that follow.

- There is no age of consent (e.g. consent is based on capacity): the ability to understand the elements of the information relating to the decision and the ability to appreciate the reasonably foreseeable consequences of participating or not participating in that specific research project. When the individual cannot give consent, a substitute decision maker e.g., parent or guardian is approached.

- Consent form policies and guidelines can be found on the REB website.
Consent Forms: Assent, Subject, Parent

- **Subject/Control:** Outlines direct consent from individual participating in the study. Usually the language utilized should be that of a Grade 7/8 level.

- **Parent:** When the individual cannot give consent or may not be at an age to understand all information involved in the study, a substitute decision maker i.e., parent or guardian is approached. You/your child language should be utilized throughout the consent form. Usually the language utilized should be that of a Grade 7/8 level.

- **Assent:** When children cannot give consent, it is still important to engage the child to the full extent possible by giving the child the opportunity to assent (agree) or dissent (disagree) to the research. For non-therapeutic research, the child's dissent overrides parental consent. Parents should be approached before their children are approached for assent.

For more information on Consent Forms and templates visit the [REB website](#):

Or See the [Obtaining Consent Module](#) on our website.
REB APPLICATION: HOW DO I COMPLETE IT?
Before discussing the general fields of the REB application, it is important to know how to locate the form.

REB Application (March 2013 version) can be found on the REB website at the link below:

REB Application
## PART 1: STUDY INFORMATION

**EXAMPLE:**

<table>
<thead>
<tr>
<th>Complete project title</th>
</tr>
</thead>
<tbody>
<tr>
<td>A pictorial essay on imaging of pediatric vasculitis</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Short title (max. 50 characters)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imaging of systemic vasculitis in children</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lay summary (max. 750 characters)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vasculitis is a disease group characterized by inflammation of the blood vessels that can result in significant damage to its walls, narrowing of the vessel lumen or even complete occlusion with consequent marked functional deterioration of every body organ they supply. The study focuses on the evaluation of vasculitis in children because this disease group is rarely discussed separate from the adulthood form while some of its subgroups are almost only seen in children. We aim at making the radiologists and clinicians aware of the manifestations of vasculitis in children that can be detected by the different imaging modalities. Such awareness is essential for early diagnosis and management of the affected children.</td>
</tr>
</tbody>
</table>

**List in point form the objectives of your study**

- The study aims to provide the reader with information that can help to:
  - Get knowledge of pathogenesis and recent classification of systemic vasculitis in the pediatric age group.
  - Describe the most frequent articular and extra-articular medical imaging findings of systemic vasculitis in children.
  - Develop a differential diagnosis of vasculitis and vasculitis mimic conditions.

<table>
<thead>
<tr>
<th>Duration of study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anticipated study start date</td>
</tr>
<tr>
<td>Anticipated study completion date</td>
</tr>
</tbody>
</table>

Anticipated completion date should be a year (or two for good measure) from start date
All research team members should be included with supporting information (see slide in First Steps section of module). The number of co-investigators should be selected to open fields

**EXAMPLE:**

### 2b. Co-Investigators

<table>
<thead>
<tr>
<th>Co-investigator # 1</th>
<th>Co-investigator # 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Name</td>
</tr>
<tr>
<td>Clinical division</td>
<td>Clinical division</td>
</tr>
<tr>
<td>Institution</td>
<td>Institution</td>
</tr>
<tr>
<td>Signature</td>
<td>Signature</td>
</tr>
</tbody>
</table>

**27**

- TCPS 2 certificate? ○ Attached ○ Previously provided ○ N/A*  
  *Only if the individual is not a SickKids employee, trainee or volunteer*
Study Team Members: All individuals assessing study information should be included in this section. E.g. Nurses, technologists, research coordinators etc.

EXAMPLE:

2c. Study Team Members
Any other individuals that will be accessing study information should be listed here.

<table>
<thead>
<tr>
<th>Name</th>
<th>Clinical division</th>
<th>Team member # 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nicole E Brown</td>
<td>Diagnostic Image</td>
<td></td>
</tr>
<tr>
<td>Clinical Research Project Coordinator</td>
<td>Institution</td>
<td>SickKids</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SickKids badge number (if applicable)</td>
<td>Credentials</td>
<td></td>
</tr>
<tr>
<td>0 1 1 1 3 7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TCPS 2 certificate? □ Attached □ Previously provided □ N/A*

* Only if the individual is not a SickKids employee, trainee or volunteer

What responsibilities will this individual have in this research study

- Recruiting participants
- Obtaining consent
- Collecting data
- Interacting with participants
- Analyzing data
- Accessing personal health information
Alternate Research Contacts: If you would like the DI research office to facilitate the administrative duties for the REB submission and ongoing approvals, include all research associates for queries regarding study.

EXAMPLE:

<table>
<thead>
<tr>
<th>2d. Alternate Contacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternate research contact</td>
</tr>
<tr>
<td>Name</td>
</tr>
<tr>
<td>Institution</td>
</tr>
<tr>
<td>TCPS 2 certificate?</td>
</tr>
<tr>
<td>Alternate administrative contact</td>
</tr>
<tr>
<td>Name</td>
</tr>
<tr>
<td>Institution</td>
</tr>
<tr>
<td>TCPS 2 certificate?</td>
</tr>
</tbody>
</table>
If funding is needed: fill out appropriate amount based on budget

<table>
<thead>
<tr>
<th>3. STUDY SPONSOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Who initiated/wrote the protocol for the study?</td>
</tr>
<tr>
<td>- SickKids principal investigator</td>
</tr>
<tr>
<td>- Principal investigator at another hospital/ university</td>
</tr>
<tr>
<td>- Industry</td>
</tr>
<tr>
<td>- Other</td>
</tr>
<tr>
<td>Name of the PI and/or institution, company or group</td>
</tr>
<tr>
<td>Andrea Doria, SickKids</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4. PROJECT FUNDING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount of funding needed for this study</td>
</tr>
<tr>
<td>Funds needed for the overall study</td>
</tr>
<tr>
<td>Funds needed for the study at SickKids</td>
</tr>
<tr>
<td>Pl:</td>
</tr>
<tr>
<td>Short Title:</td>
</tr>
<tr>
<td>Research Ethics Board Application Form</td>
</tr>
<tr>
<td>Page 3 of 13</td>
</tr>
<tr>
<td>Form Version Date: October 1, 2012</td>
</tr>
</tbody>
</table>

Attach the budget for this study at SickKids: Budget attached

<table>
<thead>
<tr>
<th>Amount of funding available for this study (number only)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Funds available for the overall study</td>
</tr>
<tr>
<td>Funds available for the study at SickKids</td>
</tr>
<tr>
<td>Number of different funding sources (include internal, external and in kind donations)</td>
</tr>
</tbody>
</table>

If this is a multi-centre study, all budget and funding information should be sent from participating institutions.
a) Retrospective (Chart Review) Study

**PART 2: ETHICAL INFORMATION**

**10. RESEARCH CATEGORY, RISK LEVEL AND TYPE**

10a. Research Category

Indicate the research category and the level of continuing review by selecting only one of the boxes in the matrix below. If there are multiple components to your study, select the research category that applies to the most invasive type of contact that you will have with the participants.

See REB continuing review guidelines.

<table>
<thead>
<tr>
<th>1. Research Category</th>
<th>2. Risk Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Retrospective Data Collection</td>
<td>LEVEL I: Adverse events and annual REB Reports</td>
</tr>
<tr>
<td>Studies Involving existing personal health information NO participant contact</td>
<td>X</td>
</tr>
<tr>
<td>B. Prospective Observational</td>
<td></td>
</tr>
<tr>
<td>NO physical exams but involves participant contact</td>
<td></td>
</tr>
<tr>
<td>C. Prospective Observational</td>
<td></td>
</tr>
<tr>
<td>Physical exams, physiological assessments and/or imaging NO biological specimens (blood, urine, tissue, saliva) taken</td>
<td></td>
</tr>
<tr>
<td>D. Observational Study of Biological Specimens</td>
<td></td>
</tr>
<tr>
<td>Retrospective or Prospective (blood, urine, tissue, saliva) taken NO administration or use of a drug, biologic, natural health product, or device</td>
<td></td>
</tr>
<tr>
<td>E. Clinical Intervention Trial</td>
<td></td>
</tr>
<tr>
<td>Drug</td>
<td></td>
</tr>
<tr>
<td>Biologic</td>
<td></td>
</tr>
<tr>
<td>Device</td>
<td></td>
</tr>
<tr>
<td>Behavioural</td>
<td></td>
</tr>
<tr>
<td>Surgical</td>
<td></td>
</tr>
<tr>
<td>Food</td>
<td></td>
</tr>
<tr>
<td>Natural health product</td>
<td></td>
</tr>
</tbody>
</table>

**10b. Research Study Components**

- Does this study have a retrospective chart review component?
  - @ Yes  ☐ No

- Does this study involve a retrospective analysis of previously collected tissue samples?
  - ☐ Yes  @ No

- Does this study have a prospective research component (including clinical interventions)?
  - ☐ Yes  @ No

- Does this study involve a clinical intervention or an invasive procedure?
  - ☐ Yes  @ No

- Retrospective studies involve only **EXISTING** Personal Health Information (PHI) and require no patient contact.

- Usually involves the analysis of past patient charts through our databases: PACS, ISYS, or EPC.

- Usually a Level 1A study.

Only the first option should be selected for DI studies.

This will open up:

*Retrospective Chart Review Information Field*
Retrospective Chart Review Information Field

11. RETROSPECTIVE CHART REVIEW INFORMATION (for studies that involve a chart review - as indicated in question 10b)

Attach a separate protocol OR if there is not a protocol available, provide responses to the following question

☐ Separate protocol attached

Provide the background, methods and statistical analysis for your study

Background: Vasculitis are a diverse set of diseases linked by the presence of blood-vessel inflammation and are often associated with life-threatening or critical complications, including glomerulonephritis, diffuse alveolar hemorrhage, pulmonary hypertension and airway compromise. This set of diseases are uncommon disease in childhood frequently subjected to delayed diagnosis. The diagnosis may be suspected when suggestive clinical features are present, which is not always the truth in clinical practice. The confirmation of diagnosis strongly depends on imaging appearances.

Methods: We will retrospectively review the literature covering the imaging findings of different groups of paediatric vasculitis and will describe the spectrum of the pathological changes of vasculitis in the different target organs of children and adolescents and the related imaging findings associated with each disease category.

Statistical Analysis: N/A

11b. Health Chart Screening

Anticipated number of charts that will be screened for participant eligibility (approximate number)

100

How will you identify the charts that you will screen for participant eligibility? What search criteria will you be using?

We will search patients diagnosed with vasculitis who have undergone various imaging on the 'ISYS' search database.

11c. Enrollment in Health Chart Review

Anticipated number of research participants to be enrolled in the health chart review (approximate number)

50

Eligibility criteria for enrollment in the health chart review

Children between the ages of 0-18 years diagnosed with some form of vasculitis and who have undergone imaging over the last 15 years.

11d. Health Chart Dates

What are the earliest and latest health chart entry dates that you will be accessing?

Earliest date January 1, 1999  Latest date Aug 31, 2013

Latest date can not exceed date of this REB application
11e. Waiver of Consent for Health Chart Review

The Personal Health Information Protection Act (PHIPA) does allow for research without participant consent in certain situations. The following conditions must be met before a waiver of consent is considered:
- The objectives of the research cannot be reasonably accomplished without using personal health information
- There are adequate safeguards to protect the privacy of individuals
- There is a public interest in this research while protecting the privacy of individuals.

Please note, any waiver of consent excludes any record that has been “locked” by the participant. See hospital policy “Lockbox”.

Are you requesting a waiver of consent for this health chart review?

☐ Yes  ☐ No

Indicate the reason(s) for this request (check all that apply)

☐ 1. The request for chart review is only to determine study feasibility or the appropriate sample size and not to conduct research

☒ 2. The sample size is so large that obtaining consents are impracticable

☐ 3. The participants have graduated to adult services or are otherwise too difficult to locate making obtaining consents impracticable

☐ 4. The participant group under investigation has a high mortality rate so cannot be contacted without causing distress to the family (e.g., children with severe heart malformations).

☐ 5. There is a high risk of sample bias due to unique participant group characteristics which would invalidate the research (e.g., research concerns family disintegration issues)

☐ 6. Other Reason - IN ADDITION to a reason selected above

- A waiver is granted for 20 or more planned subjects

- Important to overestimate numbers to increase chances of obtaining the waiver

- Always request a waiver even if you are unable to justify a large number
b) Prospective Study

- Prospective studies measure future outcomes and developments in a study over the indicated time frame.

- Prospective studies are much more complex, and one must carefully study his/her own study’s risk levels and interventional use.

- Upon REB submission include:
  - Consent Forms
  - Protocol
  - DCF
  - Scientific Peer Review documents
  - Budget documents

- The key sections of a Prospective Study include:
  - Prospective Research Information
  - Clinical Trials Information (if applicable)

---

### 10. RESEARCH CATEGORY, RISK LEVEL AND TYPE

<table>
<thead>
<tr>
<th>1. Research Category</th>
<th>2. Risk Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Retrospective Data Collection</td>
<td></td>
</tr>
<tr>
<td>Studies involving existing personal health information</td>
<td></td>
</tr>
<tr>
<td>No participant contact</td>
<td></td>
</tr>
<tr>
<td>B. Prospective Observational</td>
<td>X</td>
</tr>
<tr>
<td>No physical exams but involves participant contact</td>
<td></td>
</tr>
<tr>
<td>C. Prospective Observational</td>
<td></td>
</tr>
<tr>
<td>Physical exams, physiological assessments and/or imaging</td>
<td></td>
</tr>
<tr>
<td>No biological specimens (blood, urine, tissue, saliva) taken</td>
<td></td>
</tr>
<tr>
<td>D. Observational Study of Biological Specimens</td>
<td></td>
</tr>
<tr>
<td>Retrospective or Prospective</td>
<td></td>
</tr>
<tr>
<td>(blood, urine, tissue, saliva) taken</td>
<td></td>
</tr>
<tr>
<td>No administration or use of a drug, biologic, natural health product, or device</td>
<td></td>
</tr>
<tr>
<td>E. Clinical Intervention Trial</td>
<td></td>
</tr>
<tr>
<td>Drug</td>
<td></td>
</tr>
<tr>
<td>Biologic</td>
<td></td>
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<tr>
<td>Device</td>
<td></td>
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<tr>
<td>Behavioural</td>
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<tr>
<td>Surgical</td>
<td></td>
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<tr>
<td>Food</td>
<td></td>
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<tr>
<td>Natural health product</td>
<td></td>
</tr>
</tbody>
</table>

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34
**Study Arms:** The number of target groups involved in your study: Control (healthy patients), Intervention (patients receiving study agent)
- Ensure all patient recruitment tools and consents (assent/subject, parent) are attached:

13d. Recruitment of Potential Research Subjects
Include with this application all recruitment tools (posters, letters, etc.) that will be used in this study

☐ Recruitment tools attached

Is the manner in which you will recruit potential participants the same for all arms?

☐ Yes  ☐ No

13e. Obtaining Consent from Research Subjects
Please note that consent should not be obtained by any individuals that are a part of the participant’s treating team. If a treating team member is the only individual best qualified to explain the study, please justify.

For Intervention Studies Only - A regulated health care professional must explain and obtain consent for an intervention study. Refer to “Free and Informed Consent in Research” policy to confirm that the person assessing capacity to consent is qualified according to law and policy.

Include with this application all consent forms that will be used in this study

☐ Consent forms attached

Are the individuals and manner of obtaining consent from participants the same for all arms?

☐ Yes  ☐ No
- If a study includes a clinical intervention or invasive procedure:

14. CLINICAL TRIALS INFORMATION (for studies with a clinical intervention or invasive procedure - as indicated in question 10b)

This trial is a

- Phase I - initial use in humans; to determine the safest dose, route and schedule for a new drug; to identify toxic side effects
- Phase II - to provide preliminary information about how well a drug works; to generate more information about safety and benefit of the drug
- Phase III - to compare a new drug or combination of drugs or a procedure with current standard therapy; to obtain additional safety and efficacy data
- Phase IV - following regulatory approval of the drug; study drug is used for the approved indication; to determine if efficacy can be improved

Indicate whether the methods have been used in the following participants, and if not, whether it feasible to do so:

<table>
<thead>
<tr>
<th>Category</th>
<th>It has been studied</th>
<th>It is feasible</th>
<th>It is not feasible</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult experimental animals</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Experimental animals at analogous stage of development</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Adult humans</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Older children where relevant</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Healthy children</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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</tbody>
</table>

If your study will be using a placebo, explain what considerations led to the proposed use. Refer to the Tri-Council Policy Statement 2 - Article 11.2 for acceptable criteria.
Data Sources, Storage and Destruction

The following options are generally selected for most studies and can be used as a guideline:

### 17. DATA SOURCES

All individuals that will be accessing personal health information (e.g. health records, Electronic Patient Charts (EPC), clinic or research databases) must be listed in Section 2 (Research Team) above.

You will need to follow the appropriate processes for each data source and obtain permission from the health information custodian or database administrator in order to gain access to the data.

**Health Records** - Indicate all sources of data that you will be requesting permission to access for screening and/or for enrollment

- [ ] Paper charts - available only for data prior to May 1, 2000
- [X] SickKids clinical information systems
  - [X] Electronic Patient Chart (EPC)
  - [ ] KidCare
  - [X] PACS
  - [ ] CIMS

**Databases/Registries** - Indicate all sources of data that you will be requesting permission to access for screening and/or for enrollment

- [ ] Clinical division/department database
- [ ] Research database/registry
- [X] Data warehouse

Specify

- [ ] DI Datawarehouse, ISYS

Do you plan on linking locally collected data with any other data set (e.g. other hospitals OHIP, ICES data, etc)?

- [ ] Yes
- [ ] No

Will you be using any other sources not listed above?

- [ ] Yes
- [ ] No
### 18. DATA STORAGE AND DESTRUCTION

Refer to the SickKids Policies "Information Security" and "Records Retention and Destruction"

Indicate the physical safeguards that you will be using to securely maintain your data:
*The SickKids Policy requires that PHI be stored behind two locks*

- [X] Locked office
- [X] Locked storage unit
- [ ] Biometric authentication
- [ ] Cipher/coded locks
- [ ] Access cards
- [ ] Other

Indicate the administrative safeguards that you will be using to securely maintain your data:
*The SickKids Policy requires that PHI be stored with two separate Passwords/Authentication methods*

- [X] Subjects coded
- [X] Computer passwords ONLY with research team
- [ ] Locked folder on SickKids shared drive
- [ ] Designated individual responsible for controlling who has access to data
- [ ] Other

Indicate the technical safeguards that you will be using to securely maintain your data:
*The SickKids Policy requires that PHI be stored with two separate Passwords/Authentication methods*

- [X] Files/folders password protected
- [X] Computer password protected
- [ ] Firewalls
- [X] Network Drive
- [ ] Encrypted laptop (CANNOT be a personal laptop)
- [ ] Encrypted USB key (CANNOT be a personal device)
- [ ] Other

**How long will the data be stored?**

- [ ] 7 years from last publication
- [ ] 25 years from end of study (if drug, biologic or natural health product trial approved by Health Canada)
- [ ] Other

Indicate the methods that will be used to destroy the data:

- [X] Paper records will be disposed in SickKids confidential disposal bins
- [X] Electronic records will be destroyed by contacting SickKids IS help desk
- [ ] Old CDs, DVDs, videos, USB keys, external hard drives and other technology will be sent to the repair centre for destruction
- [ ] Other

Indicate the individuals that will have access to the data in the future once the study is complete:

- [X] Investigators
- [X] Staff/trainee
- [ ] External individuals - data MUST be de-identified
- [ ] Students/volunteers
- [ ] Other

---

Any retrospective study must be kept seven years after date of last publication.

Any higher risk studies that involve Health Canada approval must be kept 25 years after the date of the end of the study.
Departmental Sign off and Costing

If you require sign off and costing from other departments, you will need to attach all forms to the REB application:

### 5. OTHER SICKKIDS SERVICES

<table>
<thead>
<tr>
<th>SickKids services that will be utilized for this research study</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ No SickKids services are being utilized</td>
</tr>
<tr>
<td>□ Anaesthesia</td>
</tr>
<tr>
<td>□ Biostatistics</td>
</tr>
<tr>
<td>□ Child Health Services</td>
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<tr>
<td>□ Decision Support</td>
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<tr>
<td>□ Diagnostic Imaging</td>
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<tr>
<td>□ Dietetics</td>
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<tr>
<td>□ Emergency Medicine</td>
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<tr>
<td>□ Genetic Counseling</td>
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<tr>
<td>□ Immunology</td>
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<tr>
<td>□ Paediatric Laboratory Medicine</td>
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<tr>
<td>□ Pharmacology</td>
</tr>
<tr>
<td>□ Pharmacy</td>
</tr>
<tr>
<td>□ Rehabilitation Services</td>
</tr>
<tr>
<td>□ Physiologic Research Unit</td>
</tr>
<tr>
<td>□ Psychology</td>
</tr>
<tr>
<td>□ Social Work</td>
</tr>
</tbody>
</table>

**Other clinical services (non-research)**

Provide **proof of sign-off for all departments that you will be utilizing** to conduct this study. This should be done by submitting the form provided by the service. For services that do not have a specific form, an e-mail print out of their approval will suffice.

□ Proof of sign-off for all departments attached
Role of Diagnostic Imaging Research Office:

- The DI research associates act as your liaison with the REB
- Upon completion of the REB application, the DI Research Office will:
  - Review completed application to ensure all information is included
  - Obtain all signatures from PI’s, co-investigators, and departmental head on your study
  - Ensure all department research costing forms are signed and included in package
  - Submit the completed application to the REB. After submission, the REB coordinator will check the application package and let us know if anything is missing from their perspective

Contact Us:

Nicole E. Brown
Clinical Research Associate III
Room M639 (Atrium Imaging), Atrium
nicole-e.brown@sickkids.ca,
(416) 813-7654 ext. 201922

Vaishnavi Batmanabane
Clinical Research Project Assistant
Room M639 (Atrium Imaging), Atrium
vaishnavi.batmanabane@sickkids.ca,
(416) 813-7654 ext. 205549
REB Approval Process:

- After the REB application has been reviewed, the REB reviewer assigned to the project will send the study PI a response from the REB.

- If the reviewer deems the application as acceptable, the PI and research coordinator will be sent a letter of approval. This approval will include all approved version dates of DCF’s, protocols, and consent forms (where applicable), and the overall date of the approved REB application.

- If there are changes that are requested or any questions that may need to be answered, they will be outlined in detail in an email to the PI. It is expected that an itemized response to this email be provided.

- The reviewer is expected to provide any updated documents requested by the reviewer.
Post REB Approval:

- It is expected that after the original REB approval is gained, changes may need to be made to the application itself.

- The REB should always be informed of any additions to staff, changes in imaging protocol/consents, and unexpected events, and approval should be gained before carrying out the necessary changes.

The following provides additional forms that the researcher should be familiar with throughout the course of his/her involvement in a clinical study. Please contact the DI Research Office team for help with completing these forms when applicable.

All links to individual forms will be provided in the following slides. You can also find links to all forms on the REB website.
Staff Change Form:

The staff change form is utilized when any additional staff may need to be added or removed to the study after initial REB approval has been obtained. All individuals added to the study that are SickKids staff, trainees, or volunteers must complete their TCPS2 upon submission of this form.

Staff that may be added/removed:
- investigators
- nurses
- collaborators
- medical/graduate students
- study team members
- technologists
- research assistants/coordinators

Common reasons for use:
- Change in PI;
- A new summer student or fellow may need to take over a role on a pre-existing study;
- Change in primary contact of the study;
- Removal of a physician, or researcher who is no longer part of the study.
Specify # of staff members to add/remove. Drop down menus will be provided where the responsibilities of all staff must be indicated.
Amendment Request Form:

The amendment request form is completed when any modification is made to the initially approved study. All amendments made to the study protocol, consent forms, or DCF’s should be provided alongside this form, with the inclusion of TRACK CHANGES and an updated version date.

**Common reasons for use:**

- Changes in the imaging protocol or study procedures (i.e. adding MRI sequences etc.);
- Extension of data collection period;
- Adding additional groups/study arms;
- Extending number of charts to review or sample size;
- Changing recruitment/enrollment process- adding individuals who will be obtaining consent;
- Updating budget/funding information;
- Changes in patient risk or safety information;
- Changes in subject reimbursement policies.
### PART 1: STUDY INFORMATION

<table>
<thead>
<tr>
<th>1. PROJECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>REB file number</td>
</tr>
<tr>
<td>Complete project title</td>
</tr>
<tr>
<td>Principal investigator</td>
</tr>
<tr>
<td>Name</td>
</tr>
<tr>
<td>Lay summary (max 750 characters)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. STUDY DETAILS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research category and level of continuing review</td>
</tr>
<tr>
<td>Level of continuing review</td>
</tr>
<tr>
<td>Study status</td>
</tr>
<tr>
<td>Study sponsor</td>
</tr>
<tr>
<td>Project funding</td>
</tr>
</tbody>
</table>

Was a waiver of consent granted for this study?  
Yes  No

Is this a Health Canada approved study?  
Yes  No

### PART 2: AMENDMENT DETAILS

Science review may be needed for major amendments. If a science review was required, attach a copy of the completed science review form.

#### 3. TYPE OF AMENDMENT

Indicate which of the following aspects of your study are being added, deleted, updated, changed or otherwise amended:

- Study procedures
- Study sites
- Length of study
- Data collection period
- Data being collected
- Data sources
- Number of groups or arms
- Sample size
- Screening sample size
- Inclusion/Exclusion criteria
- Recruitment process
- Study sponsor
- Amount of funding available
- Amount of funding required
- Subject reimbursement
- Other

Indicate the documents that are being amended or added. Attach all indicated documents to this application with changes marked (where applicable):

- Protocol
- Informed consent/assent form(s)
- Investigator’s brochure
- Data collection form(s)
- Questionnaire or survey
- Interview script
- Written materials for subjects
- Recruitment tools or documents
- Study budget
- Data Safety (DSMB) plan
- Contract
- Other

Specify

Is this amendment the result of an audit, adverse event or unanticipated problem?  
Yes  No

#### 4. STUDY CHANGES

4a. Rationale for changes

- (Describe the changes that you are proposing, making sure to reference what was in place previously (e.g. “we are changing the sample size from 19 to 22”, rather than “we are increasing our sample size to 22”))

- Provide the rationale for each change

---
Amendment Request Form Template:

4b. Impact on Subjects
What impact will this amendment have on research subjects?
This amendment will have no impact on research subjects.

Describe any changes to the potential risk to the subject.
There are no changes that will be made to the potential risk of the subject.

Will current participants be informed of the change(s)?
☐ Yes ☐ No

5. PRINCIPAL INVESTIGATOR ATTESTATION
I have read the information contained in this form. By signing below I agree that:
- I will inform my study team of all changes included in this amendment.
- I will only implement the changes described on this amendment form.
- I will ensure that, except in cases where the safety of the study participant is at risk, the changes will not be implemented until final REB approval has been received.

Name of Principal Investigator: ___________________________  Signature of Principal Investigator: ___________________________  Date: ___________________________

6. SIGNATURES OF APPROVAL FOR THIS AMENDMENT

Department/Division Head
The signatures of division or department heads who are named as investigators in this application are not accepted here; sign-off in such cases is done by an existing (e.g., not created specifically for this research project) deputy, or by the person to whom the Head reports for patient care matters.

Division Head Name: ___________________________  Division Head Signature: ___________________________  Date: ___________________________

Science Review Board Chair
If applicable - Any studies involving staff, subjects or data from the Department of Haematology/Oncology requires approval from the Department of Haematology/Oncology SRB.

SRB Chair Name: ___________________________  SRB Chair Signature: ___________________________  Date: ___________________________

PART 3: RESEARCH ETHICS BOARD APPROVAL (REB OFFICE USE ONLY)

7. APPROVAL FOR THIS AMENDMENT

Comments: 

Version dates of approved documents (if applicable):

<table>
<thead>
<tr>
<th>Protocol version date</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consent and assent form version date</td>
<td>N/A</td>
</tr>
<tr>
<td>Investigator’s brochure version date</td>
<td>N/A</td>
</tr>
<tr>
<td>Data collection tools version date</td>
<td>N/A</td>
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<tr>
<td>Written materials version date</td>
<td>N/A</td>
</tr>
<tr>
<td>Recruitment documents version date</td>
<td>N/A</td>
</tr>
<tr>
<td>Other approved documents</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Signature of approval:
The membership and operations of The Hospital for Sick Children’s (SickKids) Research Ethics Board (REB) are in compliance with Part C, Division 5 of the Food and Drug Regulations, Part 4 of the Natural Health Products Regulations, the Medical Devices Regulations, the CIHI Guideline for Good Clinical Practice E6, Tri-Council Policy Statement: Ethical Conduct of Research Involving Humans, 2nd edition (TCPS 2), the Ontario Personal Health Information Protection Act, 2004, and other applicable regulations.

The REB has reviewed and approved the amended documents listed above for this study which is to be conducted by the principal investigator named on this amendment application. All clinical trials at SickKids are conducted by qualified investigators, as defined in the Regulations. The approval and the views of this REB have been documented in writing, in accordance with the applicable legislation, regulations, and guidelines.

Review type: ☐ Delegated ☐ Full Board

Signature of REB Chair or delegate: ___________________________  Date of approval: ___________________________
Adverse Event & Unanticipated Problem Report Form:

The **adverse event and unanticipated problem report form** is used to report any protocol deviations and serious, unexpected adverse events or unanticipated problems (including protocol deviations, privacy breaches, and participant complaints) that meet all 3 of the following criteria as assessed by the PI:

- Unexpected AND
- Related or possibly related to participation in the research AND
- Suggests increased risk to research participants or others than was previously known or recognized

If all three are not applicable DO NOT REPORT TO THE REB, but retain documentation of the event in your study file.

For more information on adverse events and reporting events to the REB, see the **Adverse Event and Unanticipated Problems and Protocol Deviations Reporting guidelines**

**Common Reasons for use:**

- deviations to protocol;
- reporting unexpected, serious, and unforeseeable events to the REB;
- deviations in consent process, i.e. consent obtained on unapproved version of consents due to lack of correspondence from the REB or administrative error;
Adverse Event & Unanticipated Problem Report Form Template:

5. EVENT ASSESSMENT (Not Required for Privacy Breach or Patient Complaint Reports)

6. FOLLOW-UP ACTIONS

Indicate the actions that will be taken to prevent the recurrence of this event in the future (check all that apply)

- No action required
- Temporarily suspend the study and investigate further
- Revise the study protocol
- Revise consent/assent forms
- Re-consent study participants currently on study protocol
- Inform study participants currently on the study protocol as soon as possible
- Inform subjects whose participation has ended
- Inform Data Safety Monitoring Board (DSMB)
- Increase the level of continuing review
- Other

7. PRINCIPAL INVESTIGATOR ATTESTATION

I have read the information contained in this form. By signing below I agree that:
- I have provided all of the information that I currently have regarding this event
- I have assessed and graded the event (when applicable to the type of event that I am reporting)
- I will follow all necessary reporting requirements (e.g. Health Canada, SickKids Privacy Office, etc.)
- I will implement the follow-up actions indicated above as well as those indicated by the PEC below

Name of Principal Investigator: [ ]
Signature of Principal Investigator: [ ]
Date: [ ]

8. DEPARTMENT HEAD ACKNOWLEDGEMENT OF THIS ADVERSE EVENT/UNANTICIPATED PROBLEM

Department/Division Head
The signatures of division or department heads who are named as investigators in this study are not accepted here; sign off in such cases is done by an existing (e.g., not created specifically for this research project) deputy, or by the person to whom the Head reports for patient care matters.

Division Head Name: [ ]
Division Head Signature: [ ]
Date: [ ]

Link to Adverse Event & Unanticipated Problem Report Form