Family Medicine Resident Scholarly Project (FMRSP)

Supervisor Reference Guide

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Faculty of Medicine

Département de médecine familiale
Department of Family Medicine

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Supervisor Reference Guide

Your Role as an FMRSP Supervisor

Do I qualify to be a supervisor?

YES! Any faculty member of the Department of Family Medicine (DFM) can supervise a resident during their FMRSP project. Faculty members from outside of the DFM are eligible to be a supervisor as long as residents have a co-supervisor from within the DFM.

Faculty members who have not had prior involvement in a research project can become an FMRSP supervisor – you don't need research experience!

You are not limited in the number of resident projects that you take on, as long as you are able to support them appropriately.

Where can I get help?

The entire FMRSP team can be reached at fmrspdfm@uottawa.ca which includes the Program Administrator, the DFM Academic Research Advisor (Dr. Maddie Venables), the Education Manager (Ms. Kim Rozon) and the Faculty Lead for the FMRSP (Dr. Courtney Maskerine) who are available to you for guidance and methodological support. All contact information is at the end of the document.

What are my roles and responsibilities as an FMRSP supervisor?

Mentor:

- Provide guidance and support to the resident(s) during the completion of their FMRSP project. This includes regular check-ins every 6-8 weeks either through email or meetings.

- Mentorship can involve consultation on selecting a "doable" research question, determining project design, helping to implement the project, participating in data analysis, and assisting with the interpretation of results.

Coach:

- At regular meetings, provide ideas and strategies to overcome obstacles, or suggest resources that the resident can access to complete the project.

- Provide feedback and approve all FMRSP reports (i.e., *FMRSP Question and Timeline, Short Report, Progress Report and Final Report)* before they are submitted.

-Review and help resident incorporate feedback they receive from the FMRSP program on submitted reports.

What can I gain from being an FMRSP Supervisor?

If you are currently completing a scholarly or research project or looking to get one started, this is a great opportunity to recruit a resident! You are not expected to be an expert in the area or method of research. Taking on an FMRSP supervision role can help to shed light on your personal and clinic wide questions and interests. Whatever your level of expertise, this will help to start or grow your own research skills.

In addition, the FMRSP project has the potential to identify gaps and to improve your practice, help you stay current on developing topics in Family Medicine, earn Mainpro+ credits and add to your CV/teaching dossier – a great contribution towards academic promotion!

The Family Medicine Resident Scholarly Project (FMRSP)

What type of project can a resident take on?
Residents have the option to complete a scholarly or research project, depending on the depth and scope of the proposed work.

- A **research project** seeks to develop new knowledge on a topic. A research project requires a larger time commitment from the resident, and can require Research Ethics Board (REB) approval. The research project should be of sufficient quality to be published, however, there are no formal requirements for publication. Residents receive 12 days of academic time to work on a research FMRSP.
- A **scholarly project** is typically less intensive and scientifically rigorous than a research project. Scholarly projects can take the form of a literature review, a quality improvement initiative or survey research (dependent on scale). A scholarly project can require REB approval. Residents receive 6 days of academic time to work on a scholarly FMRSP.

How many residents can work on any given project?
A maximum of two residents can work on a project, with the exception of a literature review. Residents conducting a literature review cannot work in groups. If you have a larger project in mind, it is possible to split into multiple smaller projects.

Is Research Ethics Board (REB) approval required for FMRSP Projects?
It depends. Most residents complete FMRSP projects that do not require REB. The need for REB will depend on the type of project your resident chooses and/or intent to publish findings. For example, projects that directly involve patients or where there is deemed to be potential risk to participants will generally require REB. For more information on ethics, you and your resident can contact the Academic Research Advisor (see Page 3 for contact information).

What is the duration of the project?
The project spans the two years of residency. Please see Deadlines Section (Page 3) for a detailed timeline and deadlines.

What funds are available for the project?
Residents are eligible for up to $250 in project-related costs. These expenses must be approved by the FMRSP Program Administrator (fmrspdfm@uottawa.ca) *before* expenses are incurred. The policy can be found on Brightspace.

How often should I be meeting with my resident?
You should have regular meetings and contact with your resident(s) regarding their FMRSP. The frequency of meetings is at your discretion, however, keep in mind that your role as an FMRSP supervisor is to provide mentorship and coaching on the various stages of the project. A general guide is that you connect with your residents every 6-8 weeks to discuss the project.

Who do I contact for support?
Each clinical site has a designated faculty Clinician/Senior Investigator who is an onsite point person for research questions you may have, see Page 3 for list of site contacts.

Can my resident speak with industry/pharmacy representatives?
Medical residents should only interact with industry representatives under the direct supervision of their supervisors. The appropriate degree of interaction must be determined by the supervisor.

Timelines and Deadlines

PGY1

- **December 1 – Question and Timeline Form**
- **April 1 – Short Report**

PGY2

- **September 1 – Progress Report**
- **February 1 – Final Report**
- **Thursday in June RIO Day Presentation (for residents with a conflict to present in June, a Mini-RIO Day is organized for an Academic Day in October).**

Contact Information

FMRSP Faculty Lead
Dr. Courtney Maskerine
cmaskerine@bruyere.org
Provides oversight of the FMRSP Program.

Academic Research Advisor
Dr. Maddie Venables
Maddie.Venables@uottawa.ca
Provides support services related to research design, methodology, instrumentation, analysis and data interpretation, etc.

Winchester, Pembroke & Community Site Resource
Dr. Simone Dahrouge
sdahrouge@bruyere.org

Montfort Site Resource
Dr. Marie-Hélène Chomienne
mh.chomienne@uottawa.ca

Riverside Site Resource
Dr. Clare Liddy
cliddy@uottawa.ca

Civic Site Resource
Dr. Lise Bjerre
lbjerre@uottawa.ca

Primrose Site Resource
Dr. Sharon Johnston
sjohnston@bruyere.org

Bruyère Site Resource
Dr. Claire Kendall
ckendall@uottawa.ca

Département de médecine familiale
Department of Family Medicine

What you need to know

about your Family Medicine Resident Scholarly Project

An important part of being a competent, effective and well-rounded family physician is embracing a commitment to **lifelong learning**, and developing your skills in **creating, disseminating, applying and translating knowledge that improves primary care**. Your Family Medicine Research Scholarly Project helps you develop this important skill set - and we hope it inspires you to embrace your role as a family medicine scholar!

A snapshot of the Family Medicine Resident Scholarly Project (FMRSP)

The FMRSP is a **mandatory** (but very interesting!) resident project completed over two years during your family medicine residency. **The choice of topic to explore is entirely up to you!** The project includes **four written submissions** (1. Question and Timeline; 2. Short Report; 3. Progress Report; 4. Final Report), plus a chance to **hone your oral presentation skills** at RIO Day at the end of your second year. You get **dedicated leave** to work on the project, which can be done **alone or in groups of two residents maximum** (except for literature reviews - those must be done solo!).

Your FMRSP Journey!

1. Pick a topic!
Talk to your preceptors, ask a PGY2, or look at some previous projects (on Brightspace).

2. Identify a Supervisor
Unsure? Ask the Academic Research Advisor.

3. Define your project question (and type)

4. Complete your Question and Timeline form The deadline is December 1 during your PGY1.

5. Get ethics approval (if required)
Ask your FMRSP supervisor or the Academic Research Advisor for help.

6. Complete your Short Report
The deadline is April 1 during your PGY1.

7. Review your timeline

8. Complete your Progress Report
The deadline is September 1 during your PGY2.

9. Complete your Final Report
The deadline is February 1 during your PGY2.

10. Present your findings at RIO Day!
RIO Day is in June during your PGY2.

Hoping to get published in a peer-reviewed journal? We can help! Contact the Academic Research Advisor for training and resources.

Questions? fmrspdfm@uOttawa.ca | med.uOttawa.ca/family/FMRSP

FMRSP 10 Steps to Completing your Resident Scholarly Project

01
- Identify interesting topics to explore in primary care. Need Help? Consult
  a. Clinical supervisor b. Current PGY-2 c. Previous projects on the Virtual Campus

02
- Identify an FMRSP supervisor. Need help? Consult
  a. Potential project list on the Virtual Campus b. FMRSP Program Administrator

03
- Define project question and type (Scholarly or Research)

04
- Complete the Question & Timeline form in consultation with your FMRSP supervisor. (Deadline December 1st PGY-1)

05
- Research Ethics Board approval may be required if your project involves human subjects or their health information. Need Help? Consult
  a. FMRSP supervisor b. Web-based ARECCI Ethics Screening Tool[1] c. Academic Research Advisor

06
- Complete the Short Report in consultation with your FMRSP supervisor. (Deadline April 1st PGY-1)

07
- Review your proposed timeline and plan steps to complete your project. Consult with your FMRSP supervisor regularly.

08
- Complete the Progress Report form. Your FMRSP supervisor will evaluate your progress and provide feedback. (Deadline September 1st PGY-2)

09
- Complete the Final Report in consultation with your FMRSP supervisor. (Deadline February 1st PGY-2). Read and follow the Final Report Guidelines on the Virtual Campus.

10
- Present your project and findings at Research, Inquiry and Opinion (RIO) Day in June of PGY-2.

[1] ARECCI Ethics Screening Tool developed by the Alberta Research Ethics Community Consensus Initiative (ARECCI) Network (2005, revised 2010).

Project Question & Timeline Form

FMRSP

Submit this form electronically to fmrspdfm@uottawa.ca and copy your FMRSP supervisor. Your FMRSP supervisor must review, approve and sign this form before submission.

Deadline: December 1st of PGY-1[1]

1. Background information

Date	
Resident(s) name(s) & email address	
Resident(s)' estimated graduation date	
Primary practice site	
Resident(s)' clinical supervisor(s)	
Resident(s)' FMRSP supervisor	
FMRSP supervisor's email	

2. What is your project question?

3. Methodology/Brief summary of project (150-200 words):

Please include details such as project objective, design, setting, population, intervention, and type of data that you will be collecting.

[1] January 15th of PGY-1 for residents with a September start date.

4. Anticipated timeline of project:

Item	Anticipated date
Start date	
Start data collection	
Start data analysis	
Start final report writing	

5. Classification of your project as Scholarly or Research

The resident(s) and FMRSP supervisor(s) identify the project type as either Scholarly or Research.

Typically 70-80% of residents elect to do a Scholarly project. For Scholarly projects, you are entitled to 6 days of leave over the course of your training to work on your project. For Research projects, you are entitled to 12 days of leave as Research projects require a larger time commitment, are more scientifically rigorous, and often require Research Ethics Board (REB) approval. For more information, please review the 10 Steps to Completing your Resident Scholarly Project document on Virtual Campus.

a. Is your project (please check one)

◯ Scholarly ◯ Research ◯ Unsure

b. How confident are both you and your FMRSP supervisor(s) about your project classification as Scholarly or Research? (Please select one)

◯ Not Confident ◯ Somewhat Confident ◯ Confident

c. Is this project an extension/continuation of your quality impromevement (QI) project?

◯ Yes ◯ No

6. Research Ethics Board (REB) approval

Every project must be ethical in terms of considering appropriate consent to use participant data, the maintenance of confidentiality of data, and the protection of the welfare of participants.

REB approval may be required if your project involves human subjects or their health information and if you intend to publish or present your project results (beyond presenting at the Resident Research Day – RIO DAY). Quality improvement projects, where the intent is to evaluate the effectiveness of a program or intervention at one site, generally do not require REB approval.

Need Help? We have four suggestions:

i) Consult with your FMRSP supervisor(s)

ii) Review the 10 Steps to Completing your Resident Scholarly Project document on Virtual Campus.

iii) Complete the web-based ARECCI Ethics Screening Tool[2] developed to assist with informing if a project requires REB Approval http://www.aihealthsolutions.ca/arecci/screening/386946/0f13c182bb5f9f965576c64024a2f6b8.

iv) Consult with the Academic Research Advisor

a. Does your project require REB approval (please select one)?

◯ Yes ◯ No ◯ Unsure

b. Please briefly describe why or why not

c. How confident are both you and your FMRSP supervisor(s) about your ability to determine if your project requires REB approval or not?

◯ Not Confident ◯ Somewhat Confident ◯ Confident

7. Are you interested in publishing your research? ◯ Yes ◯ No

[2] ARECCI Ethics Screening Tool developed by the Alberta Research Ethics Community Consensus Initiative (ARECCI) Network (2005, revised 2010).

8. I hereby give my written consent to the University of Ottawa Department of Family Medicine faculty/staff to share and/or use written reports and materials created and/or prepared by me and submitted in relation with the FMRSP solely for the purposes of teaching and learning in our Department of Family Medicine. ☐

9. My FMRSP supervisor has read and accepted the content of this report (check to agree to this statement). ☐

10. FMRSP supervisor(s) signature(s):

_____ _____

FMRSP Short Report

Residents with a July 1st start date:

Submit this form with your short report to your FMRSP supervisor by February 15, 2019, for her/his review and signature. Submit the signed form with your report to fmrspdfm@uottawa.ca by March 1, 2019.

Residents with a September 1st start date:

Submit this form with your short report to your FMRSP supervisor by March 15 2019, for her/his review and signature. Submit the signed form with your report to fmrspdfm@uottawa.ca by April 1 2019.

Background information

Date	
Resident(s) name(s) & email address(es)	
FMRSP supervisor(s) & email address(es)	

Include the following in your short report* (approx. 1000 words excluding references)

- Project title
- Introduction
- Objectives and goals
- If applicable - REB submission date and/or approval (specify REB protocol #)
- Proposal:
  - Methodology (e.g. study design and setting, study population and sample size, data collection and data analysis, etc.)
  - The reasons for choosing a specific method of assessment (e.g. chart audit, educational tool, survey, etc.)
  - How will the assessment method(s) answer the project objectives?
  - If the project requires technical skills (e.g. promotional video), specify your technical experience and equipment availability
- References

FMRSP supervisor(s) signature(s)

*Please reference text in your report appropriately, plagiarism will be dealt with severely according to uOttawa regulations on Academic Fraud.

FMRSP Progress Report

Submit this form to your FMRSP supervisor by August 15th for their review and signature. Your supervisor must complete Questions 1 – 3. Submit the completed form to fmrspdfm@uottawa.ca and copy your FMRSP supervisor.

Deadline: September 1st of PGY-2[1]

Background information:

Date	
Resident name(s) & email address(es)	
FMRSP supervisor(s) & email address(es)	
REB submission date or protocol # [2] (if applicable)	

Progress Report:

A summary describing the progress of the project to date (e.g. REB approval, completed literature search. data collection, data analysis, final report update, etc.). Indicate what tasks need to be actioned and briefly note how you plan to complete them within the given timeline. The report should be approximately 300 words.

Are you interested in publishing? ◉ Yes ○ No

[1] October 1st of PGY-1 for residents with a September start date

[2] Include REB approval or exemption letter

To be completed by the FMRSP Project Supervisor:

1. Is/Are your resident(s) on track with their FMRSP project? At this stage the resident(s) should be fairly well advanced in the completion of their FMRSP project and starting the process of writing their FMRSP Final Report. Please complete the chart below (corresponding to the resident's project type) to help you assess readiness:

Type of Project	Stage	Yes	No	N/A	Comments
Literature Reviews	i) Formal literature search is completed	○	○	○	
	ii) Data extraction is underway or completed	○	○	○	
Medical Education/ QI Projects	i) Pre-intervention assessment is complete	○	○	○	
	ii) Education or clinical intervention has taken place	○	○	○	
Survey, Chart Review or Qualitative Interviews	i) REB approval has been granted (if applicable)	○	○	○	
	ii) Data collection is underway	○	○	○	
Database or secondary data analysis	i) Data has been obtained and analysis is underway	○	○	○	
Tool Development/ Website Creation	i) Content for the product has been finalized	○	○	○	
	ii) Development of the tool/website is underway or completed	○	○	○	
Other					

2. Do you feel this project can be completed within the given timeline (final report due February 1st of PGY2)? *If you have answered NO to any of the above this may be an indicator that the project should be flagged.*

◯ Yes ◯ No

3. What is your general assessment of the student's progress with the FMRSP project?

◯ Excellent ◯ Acceptable ◯ Satisfactory ◯ Inadequate**

If inadequate, please provide further comments:

** The resident will be required to meet w ith the FMRSP Program Director to discuss project progression and develop a management plan (such as implementing an adjusted project timeline).

_____

FMRSP supervisor(s) signature(s)

FMRSP Final Report

Please ask your FMRSP Supervisor to review, approve and sign this form before submission. The FMRSP Academic Research Advisor will review it for project approval. Please submit your final report to your supervisor by January 15th of PGY-2 for their review. Finally, please submit your completed final report to fmrspdfm@uottawa.ca by February 1st of PGY-2.

Guidelines

1. Please prepare a report in accordance to the following guidelines, as recommended by the Canadian Family Physician (CFP): http://www.icmje.org/recommendations/browse/manuscript-preparation/preparing-for-submission.html
2. Please ensure that the text of your report is properly referenced, otherwise it will be considered plagiarism.
3. Please ensure that reports do not exceed the word limits provided by the guidelines (excluding references, tables and figures). Word limits may differ depending on the type of research being conducted (i.e. qualitative, quantitative, sys. review, etc.): https://www.cfp.ca/content/Guidelines

The following is general information regarding each section typically found in a manuscript. For more details, please consult the CFP/ICMJE guidelines provided above when preparing your report:

1. **Title page**
   Project title, names of resident(s) and FMRSP supervisor.

2. **Abstract**
   A summary of the report (write this section last).

3. **Introduction**
   State what is lacking in the current knowledge, why the problem you have chosen is important and the objectives of your study/research question. Be as specific as possible.

4. **Methods**
   Please include sufficient detail that would allow the reader to replicate the study. In general the methods section should include the following:
   a. The full study design (i.e. qualitative, quantitative, survey, etc.)
   b. A description of the setting of the study
   c. Description of the population
   d. How your study sample was chosen (i.e. inclusion and exclusion criteria)
   e. Description of the intervention (i.e. pamphlet, teaching session, clinical process, etc)
   f. The study variables collected (i.e. age, sex, demographics, clinical variables, change in knowledge/skill, etc.)
   g. Data collection instruments and procedures used (i.e. survey details, electronic health record searches, data, etc.)
   h. Methods used for analysis (i.e. statistical testing, frequencies, t-test, etc.)

5. **Results**
Presented in text, tabular or graphic form. Describe the results without interpretation. Leave all interpretation for the discussion. Be sure to label all results (i.e. Table 1). Insert all results at the end of the written report in the order they are mentioned.

6. **Discussion/Conclusion**
State the main findings from your study. Discuss the results with reference to published research. Discuss the implications of your results. Be sure to note the strengths and limitations of your study. Offer perspectives for future work. Summative statement (in Conclusion or at the end of the Discussion section). NO NEW figures or tables should be introduced in this section.

7. **Statement of Ethics**
Please indicate whether Research Ethics Board (REB) approval was required for this project. If yes, please state the approval number.

8. **Acknowledgements**

9. **Contribution Statement**
Include a short paragraph that lists all contributors/authors to the project and the role that was played including your FMRSP project supervisor.

Example:
Resident 1 participated in the design of the study, conducted the background literature review, helped with the collection of the data, participated in the analysis and interpretation of the data and co-wrote the final manuscript. Resident 2 participated in the design of the study, assisted with the Research Ethics Board application, helped with the collection of the data, participated in the analysis and interpretation of the data and co-wrote the final manuscript. FMRSP Supervisor 1 thought up the concept and methodology for the project, helped with the data analysis and interpretation, and reviewed the final manuscript. FMRSP Supervisor 1 supervised all aspects of the study. FMRSP Research Assistant 1 helped with the Research Ethics Board application, assisted with the data analysis, interpretation and preparation of the tables and figures.

10. **References**
Only those of significance and included in the text. Please follow the reference style in the guidelines provided by the CFP.

Are you interested in publishing your work? Yes ◯ No ◯

General Assessment

This final page is to be filled out and signed by your project supervisor. Please provide us with a general assessment of the student throughout the FMRSP project:

FMRSP supervisor(s) signature(s)

University of Ottawa Department of Family Medicine
Family Medicine Resident Scholarly Project (FMRSP)
Final Evaluation

Instructions

1. Evaluation table and questions: Rate the project across key areas and then identify strengths and weaknesses. For those who want more information we have provided three documents:
   "Design Specific Guide to the Expectations for the FMRSP" with details on the expectations for the three main study designs we see in the FMRSP (literature review, survey, tool/intervention/QI),"*Formatting Guidelines for the FMRSP*", and an example of past FMRSP projects that was highly rated.

2. Summary assessment: You then decide if the project **passes** or **requires revisions and resubmission**. Where a project is felt to require revisions and resubmission the resident will first discuss the proposed revisions with their FMRSP supervisor and then based on that discussion resubmit the report to the FMRSP Program Manager.

3. Flag a project for a second review: If for any reasons you feel that the project would benefit from a second review you can flag it. All flagged projects will be reviewed a second time by an FMRSP Committee member. Projects where major revisions are proposed will automatically receive a second review.

4. Top 10 projects: Exceptional projects can be identified as a potential "TOP 10" project. All potential TOP 10 projects are reviewed again by the FMRSP Committee who will rank them.

DFM Resident Scholarly Project (FMRSP) Evaluation Form

Reviewer:

Resident(s)

Project title:

NOTE: The completed evaluation form will be anonymized and returned to the resident

TOPIC	RATING (SELECTONE)		
	Below Expectations	Meets Expectations	Exceeds Expectations
BACKGROUND			
• Summary of the Literature: Provides synopsis of recent/key literature in the area	○	○	○
• Rationale for project: Makes an effective case for the research question based on gaps in existing knowledge	○	○	○
QUESTION/OBJECTIVE			
• Clearly describes the project question/objective	○	○	○
METHODOLOGY (See attached: *Design Specific Guide to the Expectations for the FMRSP Final Report*)			
• Design of study appropriate to answer the question/objective (i.e.: literature review, Intervention/Tool & Quality Improvement, survey)	○	○	○
• Important steps in the methodology are clearly described	○	○	○
• Main outcome variable and other key data elements extracted or collected are described	○	○	○
• Proposed statistical analysis of results described (if applicable)	○	○	○
ETHICAL CONSIDERATIONS			
• Potential ethical issues considered and addressed (i.e.: voluntary participation & informed consent of participants, confidentiality of data). • Need for formal Research Ethics Board (REB) approval addressed. (REB generally not required for literature reviews and "scholarly" FMRSP projects)	○	○	○
RESULTS (See attached: *Design Specific Guide to the Expectations for the FMRSP Final Report*)			
• Results presented and explained clearly in text, figures and/or tables	○	○	○
• Results relate to the project question/objective	○	○	○
• Results given are appropriate for the method of the project	○	○	○
DISCUSSION (Reflective critique)			
• Presents reasonable interpretation & explanation of the results	○	○	○
• Critically evaluates findings (i.e. how results compare with existing scholarship)	○	○	○
• Identifies and explains study weaknesses/limitations	○	○	○
CONCLUSION			
• Makes a reasonable conclusion (supported by results, linked to question)	○	○	○
OVERALL			
• Project has relevance to Family Medicine	○	○	○
• References for any substantial statements are provided	○	○	○
• Document is readable and has few spelling and grammar errors	○	○	○
• Follows FMRSP formatting guidelines. (ie: <3000 words, Title Page, Abstract, Introduction, Methods, Results, Discussion, Conclusion, Contribution Statement,	○	○	○
SUMMARY IMPRESSION: (please select ONE)	☐	☐	☐

PART 2. SUMMARY ASSESSMENT (PLEASE SELECT ONE)

☐ Project PASSES (no significant revisions required)

☐ Project requires significant REVISIONS and RESUBMISSION (revisions detailed below). These projects will receive an automatic second review completed by the FMRSP Committee.

PART 3. STRENGTHS, WEAKNESSES AND PROPOSED REVISIONS

What are the STRENGTHS of this project? (i.e.: unique methods, tables and graphs are clear, well written discussion):

What are the WEAKNESSES of this project and what (if any) REVISIONS do you recommend? (i.e.: research question could be more defined, introduction does not review current literature, tables/figures require better layout):

PART 4. IS A SECOND REVIEW SUGGESTED?

The second review will be completed by a member of the FMRSP Committee. All projects requiring significant revisions and resubmission will automatically have a second review.

☐ **YES** ☐ **NO**

PART 5. IS THIS A "TOP 10" Project?

All projects identified as possible TOP 10 will be reviewed by the FMSRP Committee for final ranking. The top 2 FMRSP projects are awarded a monetary prize to help them present their project at a national conference.

☐ **YES** ☐ **NO**

Design Specific Guide to the Expectations of the FMRSP

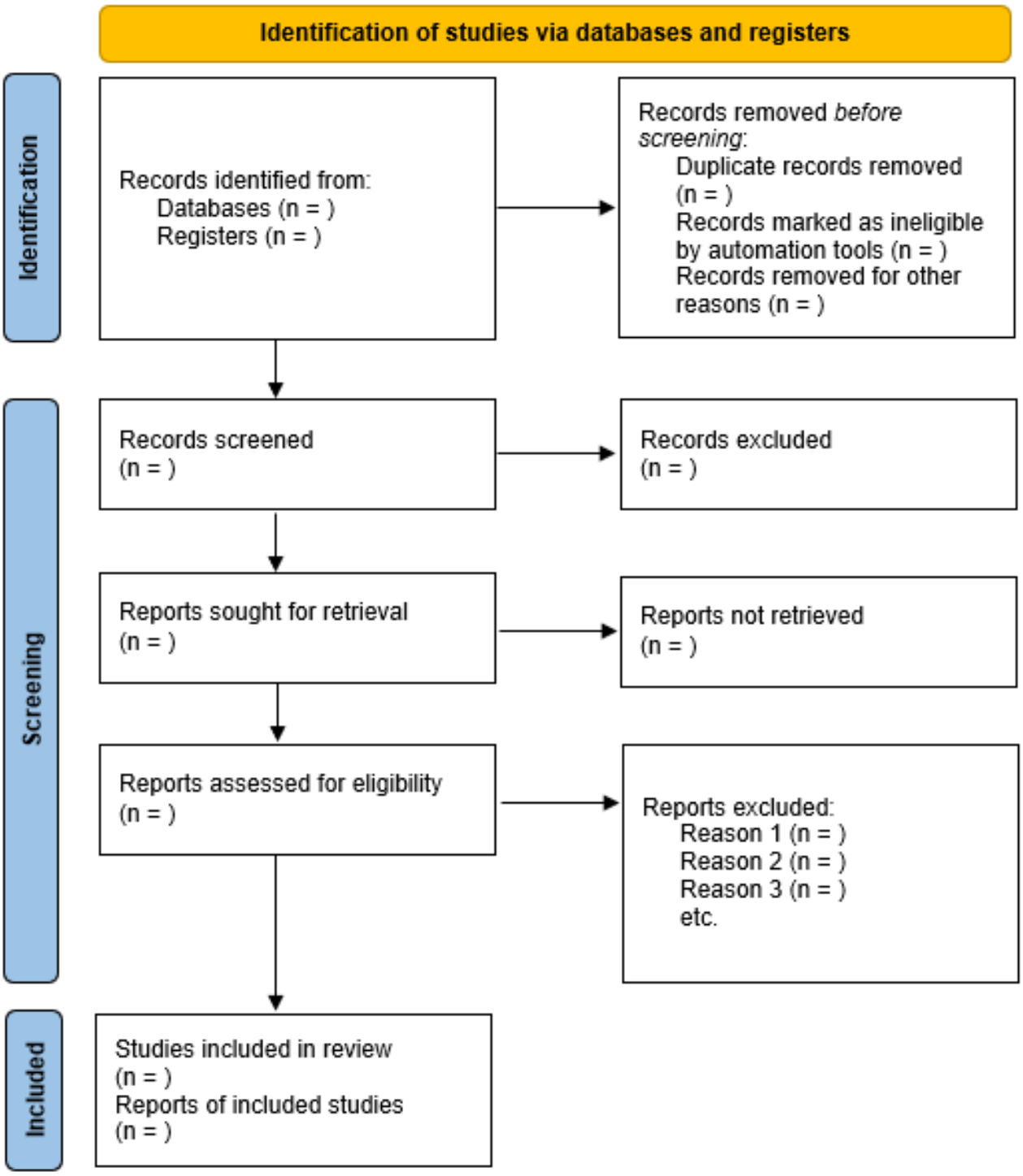
LITERATURE REVIEW

REFERENCE: Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ 2021;372:n71. doi: 10.1136/bmj.n71
PRISMA Checklist http://www.prisma-statement.org

METHODOLOGY: A literature review is conducted where there is a need to create a summation of existing literature to put forth one main conclusion or course of action

- Design of study is appropriate to the question/objective
  - The rationale for the literature review should be clearly stated
  - An explicit statement of question being addressed in the literature review with reference to participants, interventions, comparisons, outcomes, and study design included (PICOS).
- Important steps in the methodology are clearly described
  - Search strategy used to identify articles is clearly described
    - Databases used are clearly noted and MeSH terms are listed in a way that search could be duplicated
    - Study selection explained: inclusion and exclusion criteria (i.e.: language, age of participants, year article was published, methodology of study)
    - Method of data extraction from reports (e.g., piloted forms, independently/in duplicate)
- Main outcome variable and other key data elements extracted or collected are described
  - Specific data elements extracted from articles used
  - Principal summary measure (main outcome) is identified
- Proposed statistical analysis of results described
  - Description of analysis or method for combining results from the studies to be included (ie: risk ratio, difference in means for the main outcome)
- **RESULTS**
- Results presented and explained clearly in text, figures and/or tables
  - Resident presents a flow diagram (**see next page**) that details: total number of studies identified, those excluded and those included in the review
- Results relate to the research question/objective
- Results given are appropriate
  - Literature review appears to include the key research articles (both in terms of current research and important articles)
  - Reports on a main outcome/summary measure
  - Presents any identified risk of bias for studies included
  - Variation in findings across studies is explained (i.e.: study protocol, settings)

PRISMA 2020 Flow Diagram



From: Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ 2021;372:n71. doi: 10.1136/bmj.n71
For more information, visit **www.prisma-statement.org**

Developing and testing an Intervention/Tool & Quality Improvement Projects

REFERENCES:

1. Ogrinc G et al. SQUIRE 2.0 (Standards for Quality Improvement Reporting Excellence): revised publication guidelines from a detailed consensus process. http://squire-statement.org/index.cfm?fuseaction=Page.ViewPage&PageID=471
2. Canadian Family Physician. Checklist for CME program description. https://www.cfp.ca/sites/default/files/pubfiles/PDF%20Documents/Checklist/Author_Program_Description_Checklist.pdf
3. Hoffmann T et al. Better reporting of interventions: template for intervention description and replication (TIDieR) checklist and guide. BMJ. 2014;348:g1687. https://www.equator-network.org/reporting-guidelines/tidier/

METHODOLOGY:

This method is used when you want to develop and test a new idea for how to improve clinical care or e ducational knowledge

- Design of study is appropriate to the question/objective
  - There should be justification for the intervention/tool (ie: describes a gap in clinical care or educational knowledge that led to testing a new intervention/tool)
  - The goal or AIM of the intervention/tool should be clear

- Important steps in the methodology are clearly described

1. Description of intervention/tool in sufficient detail such that others could reproduce it including:
   - Materials, procedures, activities, timelines and processes used in the intervention/tool
   - Development of intervention/tool including pilot testing
   - Who implemented the intervention/tool
2. Setting/Participants
   - The setting where the intervention/tool is implemented
   - The population involved in implementation and/or evaluating the intervention/tool
   - How potential participants were identified and recruited (potential ethical issues should be addressed)

- Main outcome variable and other key data elements extracted or collected are described
  - Describes the variables (data) that will be collected for the evaluation of the intervention/tool
  - For the variables gives sources of the data (ie: survey, EMR, observation)
  - Where applicable describes validity and reliability of variables selected

- Proposed statistical analysis of results described
  Describes how the data is analyzed (ie: descriptive statistics (percentages and frequencies), qualitative analysis, other statistical methods)

RESULTS

- Results are presented and explained clearly in text, figures and/or tables

- Results relate to the question/objective

- Results given are appropriate to the method of the project including:
  - Population who participated in the intervention/tool and if this was different from what was expected
  - Outcomes of the intervention/tool
  - Any modifications that were made to the intervention/tool over the course of the project
  - Any unintended consequences (unexpected benefits, problems associated with the intervention/tool)
  - Explanation of how missing data is dealt with

SURVEYS

REFERENCES:

1) Canadian Family Physician. *Checklist for surveys.* Retrieved September 13th, 2021: https://www.cfp.ca/sites/default/files/pubfiles/PDF%20Documents/Checklist/Author_Survey_Checklist.pdf

METHODOLOGY

A survey is used if you need to gather information on a topic about which little is presently known.

- Design of study is appropriate to the question/objective
  - Rationale for the use of a survey should be explained

- Important steps in the methodology are clearly described

1. Survey development:
   - If an existing survey/survey question is used, briefly describes its properties (validity, reliability) and provides references to the original work
   - If a new survey is developed, describes the steps taken to develop and test the survey (i.e. pilot the survey and adapt)
   - The expected sample size for the survey population and how it was decided (i.e. all residents in PGY1 in DFM)
2. Survey administration:
   - When was the survey administered and duration of survey administration
   - How the survey was administered (i.e. hard copy, online)
3. Population surveyed:
   - Who the participants are & why this population was chosen
   - The inclusion and exclusion criteria for the survey population
   - How potential participants were identified and recruited

- Main outcome variable and other key data elements extracted or collected are described
  - Describes the variables (data) that will be collected in the survey
  - Describes how the survey questions are answered (i.e. likert scale, open ended questions)
  - Variables collected are related to the project question/objective

- Proposed statistical analysis of results described
  - Describes how the data is analyzed (i.e. descriptive statistics (percentages and frequencies), qualitative analysis, other statistical methods)

RESULTS

- Results are presented and explained clearly in text, figures and/or tables

- Results relate to the question/objective

- Results given are appropriate to the method of the project
  - Description of population surveyed and if this is representative of the population wanted
  - Response rate is satisfactory and if not, this is addressed in the discussion
  - Explanation of how missing data is dealt with
  - Confidence intervals are used whenever possible