

Systematic review

Please complete all mandatory fields below (marked with an asterisk *) and as many of the non-mandatory fields as you can then click *Submit* to submit your registration. You don't need to complete everything in one go, this record will appear in your *My PROSPERO* section of the web site and you can continue to edit it until you are ready to submit. Click *Show help* below or click on the icon to see guidance on completing each section.

This record cannot be edited because it has been rejected

1. * Review title.

Give the working title of the review, for example the one used for obtaining funding. Ideally the title should state succinctly the interventions or exposures being reviewed and the associated health or social problems. Where appropriate, the title should use the PI(E)COS structure to contain information on the Participants, Intervention (or Exposure) and Comparison groups, the Outcomes to be measured and Study designs to be included.

A systematic review of co-localized and integrated inter-professional practices in primary care:
Implementation and effects for patients with chronic conditions
30 words remaining

2. Original language title.

For reviews in languages other than English, this field should be used to enter the title in the language of the review. This will be displayed together with the English language title.

English
49 words remaining

3. * Anticipated or actual start date.

Give the date when the systematic review commenced, or is expected to commence.

03/09/2018

4. * Anticipated completion date.

Give the date by which the review is expected to be completed.

30/08/2019

5. * Stage of review at time of this submission.

Indicate the stage of progress of the review by ticking the relevant Started and Completed boxes. Additional information may be added in the free text box provided.

Please note: Reviews that have progressed beyond the point of completing data extraction at the time of initial registration are not eligible for inclusion in PROSPERO. Should evidence of incorrect status and/or completion date being supplied at the time of submission come to light, the content of the PROSPERO record will be removed leaving only the title and named contact details and a statement that inaccuracies in the stage of the review date had been identified.

This field should be updated when any amendments are made to a published record and on completion and publication of the review.

The review has not yet started: Yes

| Review stage | Started | Completed |
|---|---------|-----------|
| Preliminary searches | No | No |
| Piloting of the study selection process | No | No |
| Formal screening of search results against eligibility criteria | No | No |
| Data extraction | No | No |
| Risk of bias (quality) assessment | No | No |
| Data analysis | No | No |

Provide any other relevant information about the stage of the review here (e.g. Funded proposal, protocol not yet finalised).

Protocol not yet finalised

Protocol not yet finalised

6. * Named contact.

The named contact acts as the guarantor for the accuracy of the information presented in the register record.

Patrice NGANGUE

Email salutation (e.g. "Dr Smith" or "Joanne") for correspondence:

Dr NGANGUE

7. * Named contact email.

Give the electronic mail address of the named contact.

Patrice.Ngangue@Usherbrooke.ca

8. Named contact address

Give the full postal address for the named contact.

Centre de santé et des services sociaux de Chicoutimi
305, rue Saint-Vallier
Chicoutimi (Quebec) G7H 5H6

9. Named contact phone number.

Give the telephone number for the named contact, including international dialling code.

+14182614696

10. * Organisational affiliation of the review.

Full title of the organisational affiliations for this review and website address if available. This field may be completed as 'None' if the review is not affiliated to any organisation.

Research Chair on chronic diseases in primary care, University of Sherbrooke

Organisation web address:

<http://www.usherbrooke.ca/crmcspl/>

11. Review team members and their organisational affiliations.

PROSPERO

International prospective register of systematic reviews

Give the title, first name, last name and the organisational affiliations of each member of the review team. Affiliation refers to groups or organisations to which review team members belong.

Dr Patrice NGANGUE. Université de Sherbrooke
 Professor Martin Fortin. Université de Sherbrooke
 Dr Tu Nguyen. Université de Sherbrooke
 Miss Catherine Forgues. Université de Sherbrooke

12. * Funding sources/sponsors.

Give details of the individuals, organizations, groups or other legal entities who take responsibility for initiating, managing, sponsoring and/or financing the review. Include any unique identification numbers assigned to the review by the individuals or bodies listed.

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

13. * Conflicts of interest.

List any conditions that could lead to actual or perceived undue influence on judgements concerning the main topic investigated in the review.

None

14. Collaborators.

Give the name and affiliation of any individuals or organisations who are working on the review but who are not listed as review team members.

Dr Aline Ramond-Roquin. Université d'Angers
 Mr Tarek Bouhali. Université de Sherbrooke
 Mr Maxime Sasseville. Université de Sherbrooke

15. * Review question.

State the question(s) to be addressed by the review, clearly and precisely. Review questions may be specific or broad. It may be appropriate to break very broad questions down into a series of related more specific questions. Questions may be framed or refined using PI(E)COS where relevant.

The systematic review aims to evaluate the effectiveness and integrated inter-professional practices in primary care targeting management of patients with chronic conditions, professionals and health organizations and services.

217 words remaining

16. * Searches.

Give details of the sources to be searched, search dates (from and to), and any restrictions (e.g. language or publication period). The full search strategy is not required, but may be supplied as a link or attachment.

We plan to conduct the search of the relevant studies based on the following terms and derived terminology from the four pre-identified conceptual groups: 1) Chronic disease or chronic condition, 2) Primary care or general practice or family practice or home care services or primary nursing, 3) patient care team or inter-professional relations or nursing team.

The search strategy will be performed on the following sources:

- (1) Databases. The following databases will be searched by a professional study librarian: MEDLINE, Scopus, CINAHL, Embase, SocINDEX, Cochrane Database of Systematic Reviews, Cochrane Central Register of Controlled Trials, Effective Practice and Organization of Care register. The literature search will focus on publications published from 2000 to consider only most recent reforms;
- (2) References lists of identified studies and any review articles found will be screened;
- (3) Additional manual search of relevant journals particularly for integrated care given the variety of key words used for indexing (Journal of Interprofessional Care, International Journal of Integrated Care)
- (4) Grey literature (Google Scholar, Pro Quest Dissertation and Theses; published reports).

129 words remaining

PROSPERO

International prospective register of systematic reviews

17. URL to search strategy.

Give a link to the search strategy or an example of a search strategy for a specific database if available (including the keywords that will be used in the search strategies).

("Chronic Disease"[MeSH] OR "Comorbidity"[MeSH]) AND ("Primary Health Care"[MeSH] OR "General Practice"[MeSH] OR "Family Practice"[MeSH] OR "Primary Nursing"[MeSH] OR "Home Care Services"[MeSH]) AND ("Patient Care Team"[MeSH] OR "Interprofessional Relations"[MeSH] OR "Nursing, Team"[MeSH] OR "Delivery of Health Care, Integrated"[MeSH]) AND (English[lang] OR French[lang]) AND ("2000"[Date - Publication] : "2019"[Date - Publication])

Alternatively, upload your search strategy to CRD in pdf format. Please note that by doing so you are consenting to the file being made publicly accessible.

Do not make this file publicly available until the review is complete

18. * Condition or domain being studied.

Give a short description of the disease, condition or healthcare domain being studied. This could include health and wellbeing outcomes.

The increasing prevalence of chronic diseases challenges health systems by reducing accessibility, quality and continuity of care (Wagner and coll., 2001). As other countries, Canada is committed in an health reform system focussing on primary health care reinforcement, inter-professional collaboration and integrated chronic disease health care (Aggarwal and Hutchison, 2012). Implementation of co-localized inter-professional teams, see as the integration of various professionals (doctors, nurses, social workers, nutritionists, etc.) in primary care unit and working at the same clinic, is a currently privileged strategy to achieve this (Fortin and coll., 2013). Prior studies have suggested that co-localized primary health professionals might be one of the determinants of chronic disease prevention and management programs' efficacy. Most specifically, co-localization is considered as a favourable context for team work in these programs (Fortin and coll., 2016). Furthermore, other assumptions can be formulated about possible co-localization's effets and causal mechanisms, such as development of a shared vision by various health professionals (i.e. for the benefit of team work and thus, services' efficacy), enhanced services' accessibility or allowed more comprehensive health care services for the benefit of the patients health condition.

However, no systematic review on professionals co-localization has been conducted in this topic.
2 words remaining

19. * Participants/population.

Give summary criteria for the participants or populations being studied by the review. The preferred format includes details of both inclusion and exclusion criteria.

Patients with single or multiple chronic diseases.
193 words remaining

20. * Intervention(s), exposure(s).

Give full and clear descriptions or definitions of the nature of the interventions or the exposures to be reviewed.

Recent (published since 2000) organizational, financial and/or professional worldwide interventions 1) aspiring to instaure or modify inter-professional practices; 2) describing co-localized and integrated inter-professionals practices in primary care intended to manage patients with single or multiple chronic diseases; and 3) evaluating their effects (quantitative, qualitative or mixed).
152 words remaining

21. * Comparator(s)/control.

Where relevant, give details of the alternatives against which the main subject/topic of the review will be compared (e.g. another intervention or a non-exposed control group). The preferred format includes details of both inclusion and exclusion criteria.

No exposition to that type of interventions.
192 words remaining

22. * Types of study to be included.

Give details of the types of study (study designs) eligible for inclusion in the review. If there are no

PROSPERO

International prospective register of systematic reviews

restrictions on the types of study design eligible for inclusion, or certain study types are excluded, this should be stated. The preferred format includes details of both inclusion and exclusion criteria.

Inclusion: experimental designs, quasi-experimental designs, observational designs, qualitative designs, mixed designs

Exclusion: editorials, commentaries, and literature. However, we will consult the bibliographic references of all relevant literature reviews in order to identify additional relevant original articles.

114 words remaining

23. Context.

Give summary details of the setting and other relevant characteristics which help define the inclusion or exclusion criteria.

Not applicable.

248 words remaining

24. * Main outcome(s).

Give the pre-specified main (most important) outcomes of the review, including details of how the outcome is defined and measured and when these measurement are made, if these are part of the review inclusion criteria.

To describe effects of co-localized and integrated inter-professional practices in primary care targeting multimorbid patients management on 1) patients (health related behaviour, health condition, quality of life); 2) health professionals (work load, health status at work); 3) organizations and health care services (health services costs, utilization and accessibility, quality of care), and to assess equity of care.

143 words remaining

Timing and effect measures

Not applicable.

198 words remaining

25. * Additional outcome(s).

List the pre-specified additional outcomes of the review, with a similar level of detail to that required for main outcomes. Where there are no additional outcomes please state 'None' or 'Not applicable' as appropriate to the review

Not applicable.

298 words remaining

Timing and effect measures

Not applicable.

298 words remaining

26. Data extraction (selection and coding).

Give the procedure for selecting studies for the review and extracting data, including the number of researchers involved and how discrepancies will be resolved. List the data to be extracted.

Titles and abstracts will be independently screened for eligibility by two reviewers. Full text of potentially relevant reports will be further analyzed for eligibility. Disagreements will be resolved by consensus and if needed, by requesting opinion of the third reviewer. A review of selection process will be performed after having reviewed 10 % of identified articles to ensure consistency across reviewers. Levels of inter-rater agreement (kappa statistics) will be documented. We will obtain the full text of relevant publications and further analyze against the defined eligibility criteria. Two reviewers will be assigned to each publication and input from the third reviewer will be solicited in case of disagreement. The following information will be recorded in this modified EPOC form: surname of first author, year of first report, date form completed, names of reviewers extracting data, report title, type of publication, funding source, conflicts of interests, and study characteristics (study type, participant, intervention types, and outcomes).

For the data extraction of selected studies, we will adapt the Cochrane Effective Practice and Organisation of Care Group (EPOC) Data Abstraction Form and Data Extraction Instructions. For the specific needs of this systematic review, reviewers will pilot the adapted EPOC form with instructions on 10 randomly chosen studies to refine and finalize it. Data extraction will be independently done by 2-3 researchers using the adapted recording form. The data extraction form sections are designed to extract information concerning all aspects of each study, including population and study characteristics, types of intervention and outcome

characteristics, results on association measures of interest, and results applicability. Authors will be contacted as needed to obtain missing information.

29 words remaining

27. * Risk of bias (quality) assessment.

State whether and how risk of bias will be assessed (including the number of researchers involved and how discrepancies will be resolved), how the quality of individual studies will be assessed, and whether and how this will influence the planned synthesis.

Each included article will be reviewed by 2 reviewers separately to assess the risk of bias for each outcome of interest. Two reviewers will be assigned to each publication, and input from the third reviewer will be solicited in case of disagreement. Different assessment tools will be used depending on the study design: the Effective Public Health Practice Project (EPHPP) Quality Assessment Tool for Quantitative Studies for cohort studies and case-control studies, the EPOC Risk of Bias Tool for RCTs, the Quality Assessment Tool for Observational Cohort and Cross-Sectional Studies, the Mixed Methods Appraisal Tool for Systematic Mixed Studies Reviews and the Critical Appraisal Skills Programm (CASP) Qualitative Checklist for Qualitative studies.

87 words remaining

28. * Strategy for data synthesis.

Give the planned general approach to synthesis, e.g. whether aggregate or individual participant data will be used and whether a quantitative or narrative (descriptive) synthesis is planned. It is acceptable to state that a quantitative synthesis will be used if the included studies are sufficiently homogenous.

Results of selected studies will be described using a PRISMA Flowchart and the statistic of inter-rater agreement (kappa) will be reported. Qualitative description of population will be performed, included studies, interventions, and outcomes characteristics using a simple frequency counts and a narrative approach. Only studies in which data on outcomes of interest are available to estimate the effect size (ES) will be included in the meta-analysis. If the estimation of the ES is not possible, the results will be reported as a narrative synthesis. The meta-analysis will be conducted using the software Review Manager. Relative risk (RR) with 95 % CI for dichotomous outcomes and standardized mean difference (SMD) with 95 % CI for continuous outcomes will be used. Random-effects model will be used to pool ES of each outcome if heterogeneity is found. Only the adjusted effect sizes will be considered in this model. Higgins' I² test will be used to test the heterogeneity. The potential heterogeneity will be explored using subgroup analyses. Publication bias will be assessed by visually examining funnel plots when 10 studies. Sensitivity analyses in order to assess the robustness of our results on each outcome of interest will be performed. Results of these analyses will be compared with initial pooled effect sizes in order to assess the confounding variables' impact. For each outcome, we will assess the quality of cumulative evidence with the Grading of Recommendations Assessment, Development and Evaluation (GRADE) to reduce the misinterpretation of our review's results. The quality of evidence will be rated high, moderate, low, or very low.

42 words remaining

29. * Analysis of subgroups or subsets.

Give details of any plans for the separate presentation, exploration or analysis of different types of participants (e.g. by age, disease status, ethnicity, socioeconomic status, presence or absence or co-morbidities); different types of intervention (e.g. drug dose, presence or absence of particular components of intervention); different settings (e.g. country, acute or primary care sector, professional or family care); or different types of study (e.g. randomised or non-randomised).

Subgroup analyses will be carried out for studies, participants, and exposition characteristics but we can not specify more for the moment.

229 words remaining

30. * Type and method of review.

Select the type of review and the review method from the lists below. Select the health area(s) of interest for your review.

Type of review

Cost effectiveness

PROSPERO
International prospective register of systematic reviews

No

Diagnostic

No

Epidemiologic

No

Individual patient data (IPD) meta-analysis

No

Intervention

No

Meta-analysis

No

Methodology

No

Narrative synthesis

No

Network meta-analysis

No

Pre-clinical

No

Prevention

No

Prognostic

No

Prospective meta-analysis (PMA)

No

Review of reviews

No

Service delivery

No

Synthesis of qualitative studies

No

Systematic review

Yes

Other

No

Health area of the review

Alcohol/substance misuse/abuse

No

Blood and immune system

No

Cancer

No

Cardiovascular

No

Care of the elderly

No

Child health

No

Complementary therapies

No

Crime and justice

No

Dental

No

Digestive system

No

Ear, nose and throat

No

Education

No

Endocrine and metabolic disorders

No

Eye disorders

No

General interest

No

Genetics

No

Health inequalities/health equity

No

Infections and infestations

No

International development

No

Mental health and behavioural conditions

No

Musculoskeletal

No

Neurological

No

Nursing

No

Obstetrics and gynaecology

No

Oral health

No

Palliative care

No

Perioperative care

No

Physiotherapy

No

Pregnancy and childbirth

No

Public health (including social determinants of health)

Yes

Rehabilitation

No

Respiratory disorders

No

PROSPERO

International prospective register of systematic reviews

Service delivery
No

Skin disorders
No

Social care
No

Surgery
No

Tropical Medicine
No

Urological
No

Wounds, injuries and accidents
No

Violence and abuse
No

31. Language.

Select each language individually to add it to the list below, use the bin icon to remove any added in error.

There is not an English language summary

32. Country.

Select the country in which the review is being carried out from the drop down list. For multi-national collaborations select all the countries involved.

Canada

33. Other registration details.

Give the name of any organisation where the systematic review title or protocol is registered (such as with The Campbell Collaboration, or The Joanna Briggs Institute) together with any unique identification number assigned. (N.B. Registration details for Cochrane protocols will be automatically entered). If extracted data will be stored and made available through a repository such as the Systematic Review Data Repository (SRDR), details and a link should be included here. If none, leave blank.

Not applicable.
48 words remaining

34. Reference and/or URL for published protocol.

Give the citation and link for the published protocol, if there is one

Not applicable.

Give the link to the published protocol.

Not applicable.

Alternatively, upload your published protocol to CRD in pdf format. Please note that by doing so you are consenting to the file being made publicly accessible.

No I do not make this file publicly available until the review is complete

Please note that the information required in the PROSPERO registration form must be completed in full even if access to a protocol is given.

35. Dissemination plans.

Give brief details of plans for communicating essential messages from the review to the appropriate

PROSPERO

International prospective register of systematic reviews

audiences.

Results of this systematic review will be promoted by a paper that will be submitted to a leading journal in the field of interprofessional care and will be available for the Ministère de la Santé et des Services sociaux (Québec, Canada) which will contribute to pursue and support the current Quebec health system reform (mainly the delocalization of inter-professional teams in primary care).

Do you intend to publish the review on completion?

Yes

36. Keywords.

Give words or phrases that best describe the review. Separate keywords with a semicolon or new line. Keywords will help users find the review in the Register (the words do not appear in the public record but are included in searches). Be as specific and precise as possible. Avoid acronyms and abbreviations unless these are in wide use.

Chronic Disease; Multimorbidity; Primary Health Care; Interprofessional Relations; Integrated delivery of Health Care

37. Details of any existing review of the same topic by the same authors.

Give details of earlier versions of the systematic review if an update of an existing review is being registered, including full bibliographic reference if possible.

Not applicable
48 words remaining

38. * Current review status.

Review status should be updated when the review is completed and when it is published. Please provide anticipated publication date

Review_Ongoing

39. Any additional information.

Provide any other information the review team feel is relevant to the registration of the review.

Not applicable.

40. Details of final report/publication(s).

This field should be left empty until details of the completed review are available.

Give the link to the published review.