
Part 2: Finding & Appraising the Evidence for PPPGs

HSE QI Division in conjunction with the HSE National Health Library and Knowledge Service
Dr. Steevens Hospital Dublin D08 W2A8
May 2018

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HSE National PPPG Programme
Part 2: Learning Outcomes

✓ Define Evidence-Based Practice
✓ Use EBP framework to compose a question for a literature search
✓ Use EBP framework to locate the evidence via electronic resources
✓ Use EBP framework to appraise the evidence
Evidence-Based Practice requires that decisions about health care are based on the best available, current, valid and relevant evidence. These decisions should be made by those receiving care, informed by the tacit and explicit knowledge of those providing care, within the context of available resources. All health care professionals need to understand the principles of Evidence Based Practice (EBP), recognise it in action, implement evidence-based policies, and have a critical attitude to their own practice and to evidence. Without these skills professionals will find it difficult to provide best practice.” (Sicily Statement on Evidence-Based Practice, 2005)
The 5 Steps of EBP:

1. **Ask**
2. **Acquire**
3. **Appraise**
4. **Apply**
5. **Analyze & Adjust** (Evaluation, Dissemination, & Follow-up)

Client/Community Assessment

The 5 Steps of EBP:

1. **ASK** patient-centred, focused question(s) - construct well-built clinical questions
2. **ACQUIRE** the best evidence relevant to your questions - select the appropriate resource(s), conduct search(es)
3. **APPRAISE** the evidence for validity (closeness to the truth) and applicability (usefulness in clinical practice)
4. **APPLY** the evidence through collaborative decision-making, integration with clinical expertise, patient preferences
5. **ASSESS** outcomes and make changes to practice as necessary
Step 1: Ask a focused question

A focused, answerable question (usually) contains three parts, also known as PICO:

- **P**atient/Population/Problem
- **I**ntervention/Exposure
- **C**omparison (this part can be left out if no comparisons are being made)
- **O**utcome
- **T**ime (sometimes applicable)
Scenario 1

A patient is going on a long-haul flight. They have a tendency to get swollen ankles and have heard that wearing elastic compression stockings can prevent the occurrence of Deep Vein Thrombosis.
Sample PICO 1

In passengers on long-haul flights, does wearing elastic compression stockings, compared to no stockings, prevent DVT?

• Passengers on long-haul flights (P)
• Elastic Compression Stockings (I)
• No Stockings (C)
• Deep Vein Thrombosis (DVT) (O)
Scenario 2

A 64 year old post-menopausal woman with a mild history of heart disease wants advice about HRT, especially oestrogen replacement therapy, which she fears may affect her heart condition.
What are the risks of exacerbating heart disease in a 64 year-old postmenopausal woman receiving oestrogen replacement therapy?

- Post-menopausal woman (P)
- Oestrogen-replacement therapy (I)
- None (C)
- Exacerbating Heart Disease (O)
Scenario 3

As records manager in an acute hospital, you have been asked to investigate upgrading to a digital dictation system as a means of improving efficiency and turnaround time in the production of reports and letters.
Does digital dictation, compared to traditional analogue tapes, lead to shorter turnaround time for the production of letters and reports in a medical records department?

• Medical Records Department (P)
• Digital dictation system (I)
• Analogue tapes (C)
• Faster turnaround time for letters and reports (O)
Exercise

• Working in pairs, think of a work-related query or scenario that you recently experienced

• PICO your chosen scenario/query

• Feedback to larger group
Scenario 4

The nursing home where you work is drawing up a new infection control policy. You have heard that simple hand-washing is effective for preventing the spread of Healthcare Associated Infections. You have been tasked with searching the literature for formulating the new policy.
Sample PICO 4

P

AND

Synonym 1
OR
Synonym 2

I

AND

Synonym 1
OR
Synonym 2

C

AND

Synonym 1
OR
Synonym 2

O

AND

Synonym 1
OR
Synonym 2

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Sample PICO 4

P: Nursing homes OR Long-term Care Facilities

I: Handwashing OR Hand-washing OR Hand hygiene

C: No Comparison

O: Healthcare Associated Infections OR HCAIs OR Infection Control
Sample PICO 4

P AND I AND C AND O

Synonym 1 OR Synonym 2
Synonym 1 OR Synonym 2
Synonym 1 OR Synonym 2
Synonym 1 OR Synonym 2
Sample PICO 4

P: Synonym 1 OR Synonym 2

I: Synonym 1 OR Synonym 2

C: Synonym 1 OR Synonym 2

O: Synonym 1 OR Synonym 2

AND

AND

AND

AND
Sample PICO 4

P

Synonym 1
OR
Synonym 2

AND

I

Synonym 1
OR
Synonym 2

AND

C

Synonym 1
OR
Synonym 2

AND

O

Synonym 1
OR
Synonym 2

AND

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Sample PICO 4

P

Synonym 1
OR
Synonym 2

AND

I

Synonym 1
OR
Synonym 2

AND

C

Synonym 1
OR
Synonym 2

AND

O

Synonym 1
OR
Synonym 2
Step 2: Locate the evidence

Your choice of database or information resource will depend on:

- Time available
- What resources you have access to
- Type of information you require
- What you need the information for
- Your area of expertise
### Step 2: Some health information resources

#### Databases
- PubMed
- MEDLINE (sub-set of PubMed)
- Cochrane Library
- CINAHL
- Embase

#### Controlled vocabularies
- MeSH (PubMed, MEDLINE)
- CINAHL Headings (CINAHL)
- EMTREE (Embase)
- MeSH can also be used within CINAHL, Cochrane Library and Embase

#### Grey Literature
- Clinicaltrials.gov
- World Health Organization ICTRP Search Portal
- CDC Stacks (Centres for Disease Control)
- OAIster database
- OpenDOAR
- OpenGrey
- Research theses
- Conference proceedings

**NB:** start creating user accounts in the databases you use (where possible) – options to save searches, save citations, save search history, share bibliographies, create alerts and Table of Contents (TOC) alerts
Search strategies (1/6)

**Boolean operators** (AND, OR, NOT)
- Using AND between terms will narrow a search - each term **must** appear in your search results
- Using OR between terms will broaden a search - **either** term must appear in your search results
- Using NOT between terms is a way of excluding a term (or terms) but this can be tricky. It is **not advisable** to use this operator unless you are sure it won’t exclude potentially relevant, related or useful material

Examples:
- `heart AND lung` finds items that contain **both** `heart` and `lung`
- `heart OR lung` finds items that contain **either** `heart` or `lung`
- `heart NOT lung` finds items that contain `heart` but **do not contain lung**

**Phrase searching** (using quotation marks “ ”) - when you want to search for an exact sentence or phrase rather than a set of keywords

Examples:
- “multiple sclerosis” instead of ‘multiple’ AND ‘sclerosis’
- “nursing homes” instead of ‘nursing’ AND ‘homes’
Truncation is represented by an asterisk (*) and used to search for variant endings of a term. To use truncation, enter the root or core letters (at least three letters required) of a search term and replace the ending with an *

Example:
nurs* = will retrieve nurse, nurses, nursing, nursed etc.

Wildcards are represented by a question mark (?) or the hashtag symbol (#)

? – if you are unsure of the exact spelling of a term, you can use the question mark to search for one unknown letter. This is also useful for U.S. vs. British spelling variations (e.g. s/z)

Examples:
ne?t = will retrieve results containing neat, nest or next etc.
paraly?e = will retrieve results containing paralyse and paralyze
# - you can use the hashtag symbol to search for terms where an alternate spelling may contain an extra character and you wish to retrieve results containing both variations

Example:
tumo#r = will retrieve results containing tumor and tumour

NB: wildcards and truncation cannot be combined for a term in a search - a search for p#ediatric* would be the same as a search for p*. When using the # wildcard, plurals and possessives of that term are not searched - a search for colo#r will not retrieve "colors" or "colours"
Search strategies (3/6)

Proximity operators

Depending on the database, you can use a proximity search to search for two or more words that occur within a specified number of words (or fewer) of each other in e.g. the title, abstract, title & abstract. Usually, the proximity operators are composed of a letter (N or W) and a number (to specify the number of words). The proximity operator is placed between the words that are to be searched, and depending on the database, may be as follows:

Near Operator (N) or W/n (within) – where the words in the query must be within a specified number of words, regardless of the order in which they appear.

For example:
health N5 reform will find results that would match ‘health reform’ as well as ‘reform of health’

PRE/n - where the first term in the query must precede the second by a specified number of terms. E.g. ‘behavioural PRE/3 disturbances’ would find articles in which ‘behavioural’ precedes ‘disturbances’ by three or fewer words

NEAR, NEXT, ADJ – depending on the database, these are other terms for proximity operators
Parentheses

Parentheses (brackets) allow you to execute a search in a logical, structured manner. They are particularly useful when you are using synonyms and the Boolean ‘OR’ operator. Most databases will allow you to use brackets and the ‘OR’ operator to search for references containing either word.
For example: using the nursing home and hand hygiene scenario, where synonyms have been chosen etc., the search strategy may look as follows:

nursing homes OR long-term care facilities AND handwashing OR hand-washing OR hand hygiene AND healthcare associated infections OR HCAIs OR infection control

Using brackets will make the search more logical/structured, as follows:

(nursing homes OR long-term care facilities) AND (handwashing OR hand-washing OR hand hygiene) AND (healthcare associated infections OR HCAIs OR infection control)
Search strategies (5/6)

Search filters/refining your search results

Once you have your search results, you may refine these by applying such filters as (where available) e.g. material type, date range/publication years, language, gender, age, geography – there are many to choose from in the various databases. How far back do you want to search? What language would you prefer the articles to be in? What type of articles would you like to retrieve? (e.g. Clinical Trial, Practice Guideline, Randomized Controlled Trial, Controlled Clinical Trial, Meta-analysis, EBM review, Systematic Review, Research...)

To note:

• Full-text – this may seem like a good option, however, by selecting this filter/limit, you won’t retrieve (what may be hundreds of) excellent, relevant evidence-based citations. The material may be available as full-text via another database – check!
• English language – as there is some foreign language material in CINAHL and Medline, this filter can be a useful one. However, this can be interpreted as being compromised as there could be excellent evidence available in a foreign language
• Human/Animal/Gender/Age – use these limits where appropriate. Depending on the topic at hand, you may only be interested in studies of humans of a particular gender or age
Saving/managing your search results

• You will usually be able print, email or save references/citations, and/or add them to folders that you create in your personal account within a database.

• To note: PubMed’s version of folders is called ‘Collections’. With PubMed, you also have the option to share folders/bibliographies with colleagues, so long as they too have PubMed accounts.

• Check with each database you use how to a) save searches, b) view your search history (where available), c) save citations, d) save full-text articles (where these are available).

• You may also wish to set up alerts for particular keywords, authors or phrases and/or Table of Contents (TOC) alerts – alerts may be set daily, weekly, monthly etc. and will help keep you up-to-date with recently published material.

Always have a look at the ‘Help’ or ‘Tutorials’ pages within each database and don’t forget to contact your local information specialist for assistance with any of these strategies or for further information and guidance.
# Find your local HSE Library

Find your local HSE Library services, resources, contact information, opening hours and site details.

<table>
<thead>
<tr>
<th>Hospital Name</th>
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<th>Hospital Name</th>
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<tr>
<td>Bantry General Hospital, Cork</td>
<td>Cavan General Hospital</td>
<td>Cherry Orchard Hospital, Dublin 10</td>
</tr>
<tr>
<td>Connolly Hospital, Blanchardstown Dublin</td>
<td>Cork University Hospital</td>
<td>Dr. Steevens’ Hospital Library Dublin</td>
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<td>University Hospital Galway</td>
<td>Health Promotion, Tallaght</td>
<td>Mallow General Hospital, Cork</td>
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<tr>
<td>Mayo University Hospital</td>
<td>Galway University Hospitals</td>
<td>Midland Regional Hospital, Mullingar, Westmeath</td>
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<td>Midland Regional Hospital, Portlaoise, Laois</td>
<td>Midland Regional Hospital, Tullamore, Offaly</td>
<td>Naas General Hospital</td>
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<td>NLMHS Library, Cork</td>
<td>Our Lady of Lourdes Hospital, Drogheda</td>
<td>Our Lady’s Hospital, Navan</td>
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<td>Roscommon University Hospital</td>
<td>Sligo University Hospital</td>
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<td>St. Brigid’s Hospital, Louth</td>
<td>St. Columcille’s Hospital, Loughlinstown</td>
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<td>University Hospital Kerry</td>
<td>University Hospital Limerick</td>
<td>University Hospital Waterford</td>
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<td>Wexford General Hospital</td>
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Sign in to NCBI (top right) to create your account

Pubmed & MEDLINE

- PubMed has been available since 1996. Its >28 million references include the MEDLINE database and the following types of citations:
  - In-process citations
  - "Ahead of Print" citations that precede the article's final publication in a MEDLINE indexed journal
  - Citations that precede the date that a journal was selected for MEDLINE indexing
  - Pre-1966 citations that have not yet been updated with current MeSH and converted to MEDLINE status
  - Citations to author manuscripts of articles published by NIH-funded researchers

- MEDLINE is the National Library of Medicine (NLM) journal citation database. Started in the 1960s, it now provides more than 24 million references to biomedical and life sciences journal articles back to 1946. MEDLINE includes citations from more than 5,200 scholarly journals published around the world.

- The MEDLINE database is directly searchable from NLM as a subset of the PubMed database as well as through other numerous search services that obtain the data from NLM’s Data Distribution program. In addition to the comprehensive journal selection process, what sets MEDLINE apart from the rest of PubMed is the added value of using the NLM controlled vocabulary, Medical Subject Headings (MeSH), to index citations.

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MeSH (Medical Subject Headings)

- MeSH is the NLM's controlled vocabulary thesaurus and used to describe the subject of each journal article in MEDLINE. It contains approximately 28,000 terms and is updated annually to reflect changes in medicine and medical terminology. The terms are arranged hierarchically (and alphabetically) by subject categories with more specific terms arranged beneath broader terms. PubMed allows you to view this hierarchy and select terms for searching in the MeSH Database. At the most general level of the hierarchical structure are very broad headings e.g. “Anatomy”. More specific headings are found at narrower levels of the thirteen-level hierarchy, such as “Ankle”.

- Entry terms – over 90,000 relating to the 28,000 terms. They assist you in finding the most appropriate MeSH heading(s). For example, ‘Vitamin C’ is an entry term to “Ascorbic Acid” (MeSH heading).
Have a look at the Quick Start Guide, Tutorials and MeSH database in addition to Clinical Queries tool.
- Sort by various format options e.g. summary, abstract
- Sort by e.g. most recent, best match, pub. date, author, journal, results per page
("nursing homes"[MeSH Terms] OR ("nursing"[All Fields] AND "homes"[All Fields]) OR "nursing homes"[All Fields]) AND ("infection control"[MeSH Terms] OR ("infection"[All Fields] AND "control"[All Fields]) OR "infection control"[All Fields])
Sample PICO 4

P: Nursing homes or Long-term Care Facilities

I: Handwashing or Hand-washing or Hand hygiene

C: No Comparison

O: Healthcare Associated Infections or HCAIs or Infection Control

HSE National PPPG Programme
Interventions to improve hand hygiene compliance in patient care.

Gould DJ, Moralejo D, Drey N, Chudleigh JH, Taljaard M.

Effect of antibiotic stewardship on the incidence of infection and colonisation with antibiotic-resistant bacteria and Clostridium difficile infection: a systematic review and meta-analysis.

Baur D, Gladstone BP, Burkert F, Carrara E, Foschi F, Dobele S, Tacconelli E.
Interventions to improve hand hygiene compliance in patient care.

Gould DJ1, Moralejo D, Drey N, Chudleigh JH, Taljaard M.

Author information

Abstract

BACKGROUND: Health care-associated infection is a major cause of morbidity and mortality. Hand hygiene is regarded as an effective preventive measure. This is an update of a previously published review.

OBJECTIVES: To assess the short- and long-term success of strategies to improve compliance to recommendations for hand hygiene, and to determine whether an increase in hand hygiene compliance can reduce rates of health care-associated infection.

SEARCH METHODS: We conducted electronic searches of the Cochrane Register of Controlled Trials, PubMed, Embase, and CINAHL. We conducted the searches from November 2009 to October 2010.

SELECTION CRITERIA: We included randomised trials, non-randomised trials, controlled before-after studies, and interrupted time series analyses (ITS) that evaluated any intervention to improve compliance with hand hygiene using soap and water or alcohol-based hand rub (ABHR), or both.

DATA COLLECTION AND ANALYSIS: Two review authors independently screened citations for inclusion, extracted data, and assessed risks of bias for each included study. Meta-analysis was not possible, as there was substantial heterogeneity across studies. We assessed the certainty of evidence using the GRADE approach and present the results narratively in a 'Summary of findings' table.

MAIN RESULTS: This review includes 26 studies: 14 randomised trials, two non-randomised trials and 10 ITS studies. Most studies were conducted in hospitals or long-term care facilities in different countries, and collected data from a variety of healthcare workers. Fourteen studies assessed the success of different combinations of strategies recommended by the World Health Organization (WHO) to improve hand hygiene compliance. Strategies consisted of the following: increasing the availability of ABHR, different types of education for staff, reminders (written and verbal), different types of performance feedback, administrative support, and staff involvement. Six studies assessed different types of performance feedback, two studies evaluated education, three studies evaluated cues such as signs or scent, and one study assessed placement of ABHR. Observed hand hygiene compliance was measured in all but three studies which reported product usage. Eight studies also reported either infection or colonisation rates. All studies had two or more sources of high or unclear risks of bias, most often associated with limiting or independence of the intervention. Multimodal interventions that include some but not all strategies recommended in the WHO guidelines may slightly improve hand hygiene compliance (five studies; 58 centres) and may slightly reduce
The Cochrane Library

http://www.cochranelibrary.com/

HSE National PPPG Programme
• http://cochranelibrary-wiley.com/cochranelibrary/search/
• http://www.cochranelibrary.com/help/how-to-use-cochrane-library.html
The Cochrane Library

- The Cochrane Library is a collection of seven databases, six that contain different types of high-quality, independent evidence to inform healthcare decision-making and a seventh that provides information about Cochrane groups:
  - Cochrane Database of Systematic Reviews (CDSR)
  - Cochrane Central Register of Controlled Trials (CENTRAL)
  - Cochrane Methodology Register (CMR)
  - Database of Abstracts of Reviews of Effects (DARE)
  - Health Technology Assessment Database (HTA)
  - NHS Economic Evaluation Database (EED)
  - About The Cochrane Collaboration

NB: CDSR is built throughout the month, with new and updated reviews and protocols being continuously published when ready. CENTRAL and the About The Cochrane Collaboration databases are published monthly. HTA is published quarterly according to a schedule.
Cochrane Database of Systematic Reviews: Issue 5 of 12, May 2018

Issue updated daily throughout month

There are 23 results from 10280 records for your search on 'nursing homes and infection control in Title, Abstract, Keywords in Cochrane Reviews'

Select all | Export all | Export selected

- Infection control strategies for preventing the transmission of meticillin-resistant Staphylococcus aureus (MRSA) in nursing homes for older people
  
  Carmel Hughes, Michael Tunney and Marie C Bradley
  
  Online Publication Date: November 2013

- Oral health educational interventions for nursing home staff and residents
  
  Martina Albrecht, Ramona Kupfer, Daniel R Reissmann, Ingrid Muehlauser and Sascha Kopke
  
  Online Publication Date: September 2016

- Home-based care for reducing morbidity and mortality in people infected with HIV/AIDS
  
  Taryn Young and Karishma Busheeth
  
  Online Publication Date: January 2010
Click on title for access

Search e.g. all text, author, abstract, keywords and title, abstract, keywords

Refine search by type of review

Sort by relevance, date or A to Z

Cochrane Database of Systematic Reviews: Issue 5 of 12, May 2018

Issue updated daily throughout month

There are 22 results from 10280 records for your search on ‘nursing homes and infection control in Title, Abstract, Keywords in Cochrane Reviews’

Sort by Relevance: high to low

Select all | Export all | Export selected
Infection control strategies for preventing the transmission of meticillin-resistant *Staphylococcus aureus* (MRSA) in nursing homes for older people

Carmel Hughes, Michael Tunney, Marie C Bradley

First published: 19 November 2013

Editorial Group: Cochrane Wounds Group

DOI: 10.1002/14651858.CD006354.pub4

Cited by (CrossRef): 7 articles

**Abstract**

**Background**

Nursing homes for older people provide an environment likely to promote the acquisition and spread of meticillin-resistant *Staphylococcus aureus* (MRSA), putting residents at increased risk of colonisation and infection. It is recognised that infection prevention and control strategies are...
Infection control strategies for preventing the spread of meticillin-resistant *Staphylococcus aureus* (MRSA) in nursing homes for older people

MRSA is a bacterium that can cause infection in people, particularly those who are in hospital. MRSA is now becoming a problem for older people (residents) who live in nursing homes. Nursing homes are ideal places for MRSA to spread: the residents live close to each other, many have a number of medical conditions and may receive several prescriptions for antibiotics, and some may have pressure sores and medical devices such as catheters. All of these factors increase the risk of residents getting MRSA, and so increase their risk of dying.

Many different ways of preventing the spread of MRSA have been studied, particularly in hospitals; however, we found only one study that looked at whether an infection control education and training programme influenced the spread of MRSA in nursing homes for older people. This study showed there was no difference between the group that was involved in the programme and the comparison group which continued with their normal practice.

Although there is some evidence for techniques that work well to prevent the spread of MRSA in hospital, it is not clear if these approaches will work in nursing homes for older people. Further research is needed to establish what will work in nursing homes.

Background

Meticillin- (the International Non-proprietary Name, and British Approved Name) or methicillin- (the United States Approved Name) resistant *Staphylococcus aureus* (MRSA) has been recognised since the
TRIP (Turning Research Into Practice)

• Clinical search engine
• Searchers multiple sources of evidence simultaneously
• Breaks results down by study type and level of evidence
• Results are colour-coded
• Can also search for images, videos, patient information leaflets, educational courses and news
• Freely available from www.tripdatabase.com
You can carry out a search but also note Trip’s PICO form/option, remember to sign up!
• You can sort your results by quality, date, relevance or popularity
• You can set up alerts, export citations and also use PICO form
• Different colours represent e.g. ‘Systematic Reviews’ (green), ‘Primary Research’ (orange), ‘Ongoing systematic reviews’ (yellow), ‘Key Primary Research’ (blue) etc.

• You can refine by evidence type using the panel on the right-hand side

• ‘Guidelines’ section can be useful – sort by geographic location (Aus. & NZ; Canada; UK; USA; Other)

1,937 results for (nursing homes OR long-term care facilities) AND (handwashing OR hand-washing OR hand hygiene) AND (healthcare associated infections OR HCAIs OR infection control)

1. [Building planning and infection control: hand hygiene dispensers and individual bathrooms in residential and long-term care centres]
   Health Technology Assessment (HTA) Database. 2014
   • Tweet this
   • Star this
   • Report broken link
   ▲ Systematic Reviews

2. The role of hand hygiene in controlling norovirus spread in nursing homes.
   BMC Infectious Diseases. 2016
   • Tweet this
   • Star this
   • Report broken link

3. Role of Hand Hygiene Ambassador and Implementation of Directly Observed Hand Hygiene Among Residents in Residential Care Homes for the Elderly in Hong Kong.
   Infection control and hospital epidemiology. 2018
   • Tweet this
   • Star this
   • Report broken link

4. What is the prevalence of multidrug resistant organisms (MDRO) on patient and healthcare worker hands in acute care hospitals and nursing homes? A systematic review of the evidence
   PROSPERO. 2017
   • Tweet this
   • Star this
   • Report broken link

5. The impact of Isolation on Healthcare Worker Contact and Compliance With Infection Control Practices in Nursing Homes.
   Infection control and hospital epidemiology. 2018
   • Tweet this
   • Star this
   • Report broken link

Evidence type

Secondary Evidence

Systematic Reviews

Evidence-based Synopses

Guidelines

• Aus & NZ
• Canada
• UK
• USA
• Other

Regulatory Guidance

Key Primary Research

Clinical Q&A

Controlled Trials

Primary Research

Ongoing systematic reviews

Ongoing clinical trials

Alerts

Export

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Click to show
CINAHL Complete
(Cumulative Index of Nursing and Allied Health Literature)

- CINAHL is a collection of nursing & allied health journals. It is a core research tool for all areas of nursing and allied health literature and also covers biomedicine, health sciences librarianship, alternative/complementary medicine, consumer health and many allied health disciplines

- Full text for more than 1,300 journals indexed in CINAHL Database
- Indexing for nearly 5,500 journals
- Searchable cited references for more than 1,500 journals
- Full text dating back to 1937
- More than 5.8 million records
- Author affiliations

Improve Patient Care with:
- Continuing education modules
- Evidence-based care sheets
- Quick lessons providing overviews of disease and conditions
- Research instruments
CINAHL Headings

- The CINAHL Subject Headings authority file is a controlled vocabulary thesaurus that assists in more effectively searching the database. Each bibliographic reference in the database is associated with a set of subject terms that are assigned to describe the content of an article.

- There are more than 15,000 main subject headings as well as thousands of cross-references that assist in finding the most appropriate subject heading. It also works with/accepts Medical Subject Headings (MeSH) as the standard vocabulary for disease, drug, anatomical, and physiological concepts.

- Based on the MeSH headings, with additional specific nursing and allied health headings added as appropriate. Each year, the headings are updated and revised relative to terminology needed in these fields. In addition, new terms from MeSH may be added. Total number of headings (May 2018) - 15,297.
CINAHL Headings

Search for: nursing homes

Options:
- Term Begins With
- Term Contains
- Relevancy Ranked

Browse
CINAHL Headings

Results For: nursing homes

- Nursing Homes
- Nursing Home Design and Construction

Nursing Homes Design and Construction Use: Nursing Home Design and Construction

Design and Construction Nursing Homes Use: Nursing Home Design and Construction

- Nursing Home Personnel
- Nursing Home Patients
- Home Nursing, Professional
- Home Nursing

Search Term

Check a box to select a subject heading to begin building your search strategy.
CINAHL Headings

Results For: nursing homes

Subheadings for: Nursing Homes

- Include All Subheadings
  Or select one or more subheadings to restrict your search

- Administration/AM
- Classification/CL
- Economics/EC
- Education/ED
- Ethical Issues/EI
- Evaluation/EV
- History/HI
- Legislation And Jurisprudence/LJ
- Manpower/MA
- Methods/MT
- Organizations/OG
- Psychosocial Factors/PF

Search Database

Search Term
Nursing Homes

Nursing Homes

Nursing Home Design and Construction

Nursing Homes Design and Construction Use: Nursing Home Design and Construction

Design and Construction Nursing Homes Use: Nursing Home Design and Construction

Nursing Home Personnel
1. Patient-centered mobility outcome preferences according to individuals with stroke and caregivers: a qualitative analysis.


ISSN: 0963-8288

Subjects: Patient Centered Care; Physical Mobility; Stroke Rehabilitation; Stroke Patients; Caregivers; Family; Occupational Therapy; Physical Therapy; Adult: 19-44 years; Middle Aged: 45-64 years; Aged: 65+ years; Aged, 80 & over; Male; Female
**Major & Minor Headings**

- Titles, abstracts and the full article are reviewed by indexers to determine what the article is about. Once the topic(s) are determined (either about a disease, procedure, concept, issue, etc.) a further determination is made as to what specific area of the topic is covered (specific type of therapy, diagnosis, etc.). The indexer will then decide which specific headings to use to cover the topic(s) and further qualify those headings with subheadings such as nursing, therapy, manpower, etc., to outline the specific area of the topic being discussed – these are described as "major" headings.

- If side topics or side issues outside of the main topic(s) are covered and headings are selected, they are “minor” headings. If the topic covers three or more specific areas of the main topic, then additional headings will become minor headings.

- **For example:** if an article on asthma covers diet therapy, surgery, and drug therapy, then the heading asthma-therapy will be assigned as a major heading and asthma-diet therapy, asthma-drug therapy and asthma-surgery will be assigned as minor headings.

- In research studies, all research methodology terms indicating the type of research undertaken (e.g. qualitative study, cohort study, clinical trial, odds ratio etc.) are assigned as minor headings, as is the population, age group and geographic area (unless they are part of main topic(s)/discussion, in which case they will be assigned as major headings).
(MH "Nursing Homes+")

Search Results: 1 - 50 of 24,322

1. Patient-centered mobility outcome preferences according to individuals with stroke and caregivers: a qualitative analysis.


ISSN: 0963-8288

Subjects: Patient Centered Care; Physical Mobility; Stroke Rehabilitation; Stroke Patients; Caregivers; Family; Occupational Therapy; Physical Therapy; Adult: 19-44 years; Middle Aged: 45-64 years; Aged: 65+ years; Aged, 80 & over; Male; Female

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HSE National PPPG Programme
‘Explode’ a term

**Explode**

- When you ‘Explode’ a term, you create a search query that ‘explodes’ the subject heading. The headings are exploded to retrieve all references indexed to that term as well as all references indexed to any narrower (more specific) subject terms. In a database with a tree structure (e.g. MeSH or CINAHL), exploding retrieves all documents containing any of the subject terms below (narrower than) the term you selected. In other databases, exploding retrieves all documents containing the selected term, as well as any of its first level of narrower terms. If a plus sign (+) appears next to a narrower or related term, there are narrower terms below it.

**Combining Explode and Major Concept**

- If you select both ‘Explode’ and ‘Major Concept’, you retrieve all references indexed to your term (and its narrower terms) and all articles for which the subject heading is a major point of the article.
Sample PICO 4

We are interested in the effect of handwashing on the prevention of healthcare associated infection in nursing homes

- P (Nursing home)
- I (Handwashing)
- C (No comparison)
- O (Prevention of healthcare associated infection)

For every search that you do, first think of all the alternative words, phrases and spellings that describe your different search terms. Make a note of them and then open up Medline or CINAHL Advanced Search screens. For the purposes of this search, we will perform a search for articles containing the following search terms:

nursing homes, long-term care facilities, handwashing, hand-washing, hand hygiene, healthcare associated infection, HCAI, infection control

HSE National PPPG Programme
1) In the first search box, type in ‘nursing homes or long-term care facilities’

2) In the next search box, type in the words ‘handwashing or handwashing or hand hygiene’

3) In the last search box, type in ‘healthcare associated infections OR HCAIs OR infection control’
1. Floor corners, bathroom floors, and ceiling vents are hottest spots for dangerous C. diff spores.


(includes abstract) Kwok, Kin On; Read, Jonathan M.; Tang, Arthur; Chen, Hong; Riley, Steven; Kam, Kai Man; BMC Infectious Diseases, 4/18/2018; 18(1): N.PAG-N.PAG. 1p. (journal article) ISSN: 1471-2334 PMID: 29569512

2. Effect of antibiotic stewardship on the incidence of infection and colonisation with antibiotic-resistant bacteria and Clostridium difficile infection: a systematic review and meta-analysis.

(includes abstract) Baur, David; Gladstone, Beryl Primrose; Burkert, Francesco; Carrara, Elena; Foschi, Federico; Döbele, Stefanie; Tacconelli, Evelina; Lancet Infectious Diseases, Sep2017, 17(9): 990-1001. 12p. (journal article) ISSN: 1473-3099 PMID: 28629876
A systematic review of transmission dynamic studies of methicillin-resistant Staphylococcus aureus in non-hospital residential facilities.

Authors: Kwok, Kin On; Read, Jonathan M.; Tang, Arthur; Chen, Hong; Riley, Steven; Kam, Kai Man

Affiliation: The Jockey Club School of Public Health and Primary Care The Chinese University of Hong Kong Shatin Hong Kong, Special Administrative Region of China Stanley Ho Centre for Emerging Infectious Diseases The Chinese University of Hong Kong Shatin Hong Kong, Special Administrative Region of China Shenzhen Research Institute of the Chinese University of Hong Kong Shenzhen China Centre for Health Informatics Computing and Statistics, Lancaster Medical School, Faculty of Health and Medicine Lancaster University Lancaster UK Institute of Infection and Global Health, The Farr Institute@HeRC University of Liverpool Liverpool UK Department of Software Sungkyunkwan University Seoul South Korea Centre for Health Protection Hong Kong Hong Kong, Special Administrative Region of China MRC Centre for Outbreak Analysis and Modelling, Department for Infectious Disease Epidemiology Imperial College London London UK

Source: BMC Infectious Diseases (BMC INFECT DIS), 4/18/2018; 18(1): N PAG-N PAG. (1p)
## Differences between versions of CINAHL® on EBSCOhost®

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LENUS
The Irish Health Repository

Welcome to Lenus

Lenus, the Irish health repository is Ireland’s leading source of health-related research and grey literature. Journal articles, dissertations, HSE publications and the collected output of more than 130 health organisations past and present are all freely accessible.

Why not add your research today?
Searching Lenus

Lenus, The Irish Health Repository

Search

Choose Collection
All of Lenus, The Irish Health Repository

What?
Add filters: Use filters to refine the search results.
Abstract
Contains

Add

Export

Issue Date Title

15 JUL 2009 A children's residential centre in the HSE Dublin Northern Area: final Health Information and Quality Authority (HIQA), Social Services Inspectorate (SSI) Author

12 JUN 2009 A children's residential centre in the HSE Dublin North East Area: final Health Information and Quality Authority (HIQA), Social Services Inspectorate (SSI) Author

Results 1 to 25 of 28180.
1 2 3 > >>

Authors:
Health Information and Quality Authority (HIQA) (1322)
Social Services Inspectorate (SSI) (1261)
Health Service Executive (HSE) (1030)
Eastern Health Board (EHB) (756)
Mental Health Commission (MHC) (608)
Lenus results

Sorting results:

• You can sort your results by Relevance, Title, Issue Date, Submit Date

Filtering results:

• You can filter your results by ‘Collections’ (All of Lenus, Health Care Professionals, Hospital Research, HSE, Library & Information Science, Other Irish Health Organisations, Research Articles, Special Collections)
Overall search tips

• PICO your clinical question
• What are your key concepts?
• Are there any synonyms/alternative terms for your key concepts & keywords?
• Become familiar with more than one resource; decide which resource(s) to use
• Create/decide on search strategy, apply & search
• Save citations/articles and assess results/material
Step 3: Appraise the evidence

What is Critical Appraisal?

“The process of carefully and systematically examining research to judge its trustworthiness, and its value and relevance in a particular context” (Burls, 2009)
Critical appraisal

- Critical appraisal is the process of weighing up the evidence to determine its usefulness, reliability and applicability. The critical appraisal process helps healthcare professionals cope with the problem of “information overload” by focusing on only the highest-quality studies that will guide their practice.
Appraising the Evidence

Valid?  Not Valid?
Pyramid of Evidence

Quality of Evidence

Cochrane Systematic Reviews
Other Systematic Reviews & Meta-Analyses
Evidence-Based Guidelines & Summaries
Critically-Appraised Individual Articles
Randomized Controlled Trials (RCTs)
Cohort Studies, Case-Control Studies
Case Reports, Case Series, Practice Guidelines etc.
Anecdotal Evidence, Clinical Reference Textbooks, Expert Opinion

EVALUATED INFORMATION

UNEVALUATED INFORMATION
Questions to ask

• What is the PICO of the study?
• Is it close to the PICO of your clinical question?
• Is the study methodology valid? Is the quality of the study good enough to produce results that can be used to inform clinical decisions?
• What are the results of the study? Do they make sense?
• Will the results help locally?
Bias

Sample Size Recruitment

Ethics

Conflict of interest

Results Replicable?
Group Exercise

• In groups or pairs, go through the assigned article and answer the questions on pg. 11 of the Critical Appraisal handout
To sum up

- **ASK** - construct a well built clinical question(s); develop your search strategy, decide on filters & limits
- **ACQUIRE** - collect the best evidence relevant to your questions; select the appropriate resource(s) and conduct search(es), apply filters & limits
- **ASSESS** - the material you have retrieved and critically appraise it
- **Contact your local information specialist!**
Thank you!