

Health Research the PICO Way

- P:** **Problem** or **Patient** or **Population** (a condition of interest)
- I:** **Intervention** (e.g. a treatment, procedure, diagnostic test, drug therapy, monitoring)
- C:** **Comparison** (e.g. another intervention may be “nothing” or a placebo or specific treatment)
- O:** **Outcome** (could be positive, e.g. improvement of condition/disease/patient, or negative, e.g. adverse effects from treatment or therapy)

Example: Complementary medicine is more and more frequently being incorporated into “standard” treatment protocols. You’ve heard that your local hospital and several long term care facilities near you are “employing” service animals and/or allowing patients to be visited by “pets” (e.g. birds, dogs, cats) during the course of their inpatient treatment. You can think of several pros and cons related to this idea and want to find some evidence-based medical literature that shows why some facilities have added this type of therapy. You want to know if hospital patients benefit from animal-assisted therapy.

PICO question: Do inpatients (P) exposed to therapeutic animals (pets) (I) experience decreased psychosocial and physical adverse effects of hospitalization (O) than inpatients not exposed to pets (C)?

Possible CINAHL search strategy:

((MH "Pet Therapy") OR (MH "Service Animals")) AND (MH "Inpatients") AND (benefit* OR benefic*)

Limited to: English Language; Peer Reviewed; Publication Type: Research

1. The Role and Impact of Animals with Pediatric Patients.



(includes abstract) Tielsch Goddard, Anna; Gilmer, Mary Jo; Pediatric Nursing, Mar/Apr2015; 41(2): 65-71. 7p. (Journal Article - pictorial, research, systematic review, tables/charts) ISSN: 0097-9805
Subjects: Pet Therapy in Infancy and Childhood; Dogs; Child: 6-12 years; Adolescent: 13-18 years; Child, Preschool: 2-5 years
Cited References: (35)
[PDF Full Text](#)

2. Palliative Care and Use of Animal-Assisted Therapy.



(includes abstract) Engelman, Suzanne R.; Omega: Journal of Death & Dying, 2013; 67(1/2): 63-67. 5p. (Journal Article - research) ISSN: 0030-2228 PMID: 23977780
Subjects: Palliative Care; Pet Therapy; Patient Attitudes
[PDF Full Text](#)
Notes: This title is held locally

3. Animal-assisted therapy as a pain relief intervention for children.



(includes abstract) Braun C; Stangler T; Narveson J; Pettingell S; Complementary Therapies in Clinical Practice, May2009; 15(2): 105-109. 5p. (Journal Article - research, tables/charts) ISSN: 1744-3881 PMID: 19341990
Subjects: Dogs; Pain Therapy; Pet Therapy in Infancy and Childhood; Adolescent: 13-18 years; Child: 6-12 years; Child, (Journal Article - clinical trial, research, tables/charts) ISSN: 0190-535X PMID: 18321834
Subjects: Affect; Cancer Fatigue; Cancer Patients; Health; Pet Therapy; Radiotherapy; Adult: 19-44 years; Aged: 65+ years; Middle Aged: 45-64 years; Female; Male
Cited References: (35) Times Cited in this Database: (6)
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Notes: This title is held locally

5. Acceptability and impact of pet visitation on a pediatric cardiology inpatient unit.



(includes abstract) Wu AS; Niedra R; Pendergast L; McCrindle BW; Journal of Pediatric Nursing, 2002 Oct; 17(5): 354-362. 9p. (Journal Article - research, tables/charts) ISSN: 0882-5963 PMID: 12395303
Subjects: Child, Hospitalized Psychosocial Factors; Pet Therapy in Infancy and Childhood; Adolescent: 13-18 years; Child: 6-12 years; Child, Preschool: 2-5 years; Infant: 1-23 months; Female; Male
Cited References: (10) Times Cited in this Database: (12)
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Cited References: (44) Times Cited in this Database: (1)
[Find this!](#)

7. The therapeutic value of the human-animal connection.



(includes abstract) Roenke L; Mulligan S; Occupational Therapy in Health Care, 1998; 27-43. 17p. (Journal Article - research) ISSN: 0738-0577
Subjects: Pet Therapy; Nursing Home Patients New Hampshire; Aged: 65+ years; Aged, 80 & over; Female
Cited References: (11)
[Find this!](#)
Notes: This title is held locally

8. A pilot survey of animal-facilitated therapy in southern California and South Dakota nursing homes.



Sample search form based on the PICO model. The major areas are modeled not only after PICO but also are crafted to resemble the refinements available in CINAHL (CINAHL headings, subheadings and limits) or other Medical databases with controlled vocabulary like PubMed and Medline.

APPENDIX

Mediated literature search form

Ref. No. _____

Name: _____ Date: _____

Department: _____ Deadline for completion of search: _____

Contact: _____ Extension _____ Bleep _____ Ticket number _____

University staff (a)/Postgraduate research (b)/Postgraduate course (c)/GP (d)/NHS (e)/Other user (f)

In your own words, please state the information you are seeking _____

Please structure your query under the following headings:

1. Patients or Condition:

About the patient/population:

Male ☐ Female ☐ Both ☐

All ages ☐

Age group:

Newborn (up to 1 month) ☐ Infant (1-23 months) ☐ Pre-school (2-5 years) ☐

Child (6-12 years) ☐ Adolescent (13-18 years) ☐ Adult (19-44 years) ☐

Middle aged (45-64 years) ☐ Elderly (65-79 years) ☐ Aged (80 years and over) ☐

About the condition: _____
2. Intervention (form of treatment, diagnostic test) or Exposure (risk factors, lifestyle):

Therapy:

Diet ☐ Drugs ☐ Psychological ☐

Radiotherapy ☐ Rehabilitation ☐ Surgery ☐

Transplantation ☐ All therapies ☐ Preventative ☐

Other (please specify): _____

Health care delivery:

Economics ☐ Education ☐ Legislation ☐

Manpower ☐ Trends ☐ Standards ☐

Use of services ☐ Organization of services ☐

Other (please specify): _____

Nursing: _____

Diagnostic technique (please specify): _____
3. Outcome: Please specify the outcome(s) that you are particularly interested in:

Positive outcomes (improvement in health, prevention of illness etc). _____

Negative outcomes (adverse effects, side effects, etc.): _____
4. Comparison: Do you wish to compare this intervention with:

No intervention ☐ Placebo studies ☐ Other interventions (please specify): _____
5. Do you wish to restrict your search to:

Articles of a particular type (e.g., reviews, meta-analyses, clinical research, randomized control trials): _____

Language English only ☐ Other (please specify): _____

Year of publication _____

Last 5 years ☐ All ☐ Other (please specify): _____

Human studies only: Yes ☐ No ☐

Only items held in this library: Yes ☐ No ☐

(For librarian use) MeSH terms to be searched: _____

Source: Booth et al., Structuring the pre-search reference interview. BMLA July 2000; 88(3):246. Reprinted from the July issue of the BMLA with permission of the Medical Library Association.

[Evidence-Based Practice an Interprofessional Tutorial](#)

< <https://www.lib.umn.edu/apps/instruction/ebp/> >

An evidence-based practice tutorial from the University Of Minnesota Health Sciences Libraries. [Step 1](#) contains excellent examples of formulating PICO questions.