



Government of Western Australia
Child and Adolescent Health Service



CAHS Research Education Program

Research Skills Seminar

Research Fundamentals

9th Feb 2024



Presented by

Dr Kenneth Lee

Senior Lecturer, Pharmacy Practice,
UWA



THE UNIVERSITY OF
**WESTERN
AUSTRALIA**



Neonatology | Community Health | Mental Health | Perth Children's Hospital





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Child and Adolescent Health Service, Department of Research

Department of Health, Government of Western Australia

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Research Fundamentals



PRESENTATION SLIDES

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Government of Western Australia
Child and Adolescent Health Service

Research Fundamentals



Dr Kenneth Lee

Senior Lecturer in Pharmacy Practice, UWA

9 February 2024

Compassion

Excellence

Collaboration

Accountability

Equity

Respect



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Acknowledgement of Country

The Child and Adolescent Health Service acknowledge
Aboriginal people of the many traditional lands and
language groups of Western Australia.

We acknowledge the wisdom of Aboriginal Elders
both past and present and pay respect to
Aboriginal communities of today.

2




CAHS Research Education Program

Research Skills Seminar Series

-  Over 20 topics across the research process
 - 1h overview
 - Handouts are provided
-  Recorded and uploaded
-  Feedback
 - Back of handout
 - Emailed link
-  Please hold questions to the end
 - Use provided microphone





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Overview



Compassion Excellence Collaboration Accountability Equity Respect

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Overview



WHY
RESEARCH?



EIGHT STEPS OF
THE RESEARCH
LIFECYCLE



TIPS

5



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Why research?

Compassion Excellence Collaboration Accountability Equity Respect

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Why research?

- To **create** new knowledge (that is hopefully trustworthy)
- To **share** the new knowledge with others
- To **help** others (e.g. patients, policymakers)

When you conduct research, know YOUR why.

Who are you doing this for?

Ensure your research reaches the people
who can help you achieve your why.

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Eight steps of the research lifecycle

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Eight steps of the research lifecycle

Overview

1. Identify the problem
2. Learn about the problem's context (ie literature review)
3. Design the study (ie **protocol**)
4. Plan the project (ie proposal)
5. Execute the study & project
6. Evaluate the study & project
7. Summarise your work
8. Disseminate your work

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Eight steps of the research lifecycle

1. Identify the problem

- What is the problem?
 - Can you articulate it? If not, consider tools such as P.I.C.O. (Population, **Intervention/Interest**, Comparator, **Outcome**).
 - E.g. What is the **level of satisfaction** of patients who receive **wound care consultations** for their acute wounds, from a pharmacy-based wound clinic?
 - E.g. What **types of information** do Australian consultant pharmacists receive on **HMR referrals**?
 - Frame the problem as a **useful** answerable question (this is your **working** research question).

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Eight steps of the research lifecycle

1. Identify the problem



- Is it actually a problem?
 - Unsure? Have a read through the literature (cursory search). Consider tools like Google Scholar, PubMed, J.A.N.E., Connected Papers, ResearchRabbit for an initial search.

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The screenshot displays the JANE (Journal/Author Network Explorer) web application. At the top, the JANE logo is visible. Below it, a search bar contains the text "Clinical pharmacists' role in Home Medicines Review services". To the right of the search bar, a blue button labeled "Jane" is present. Below the search bar, a section titled "These articles are most similar to your input:" lists several articles. Each article entry includes a checkbox, a similarity score bar, the article title, authors, and publication details. The articles listed are:

- ☐ Swain L, Griffiths C, Pont L, Barclay L. Attitudes of pharmacists to provision of Home Medicines Review for Indigenous Australians. International journal of clinical pharmacy. 2014
- ☐ Chen TF. Pharmacist-Led Home Medicines Review and Residential Medication Management Review: The Australian Model. Drugs & aging. 2016
- ☐ Wright DJ, Maskrey V, Blyth A, Norris N, Alldred DP, Bond CM, Desborough J, Hughes CM, Holland RC. Systematic review and narrative synthesis of pharmacist provided medicines optimisation services in care homes for older people to inform the development of a generic training or accreditation process. The International journal of pharmacy practice. 2019
- ☐ Savickas V, Foreman E, Ladva A, Bhamra SK, Sharma R, Corlett SA. Pharmacy services and role development in UK general practice: a cross-sectional survey. The International journal of pharmacy practice. 2021
- ☐ Solinks J, Birch S, Wheeler AJ, Nissen L, Freeman C, Thal T, Byrnes J. Provision of home medicines reviews in Australia: linking population need with service provision and available pharmacist workforce. Australian health review : a publication of the Australian Hospital Association. 2020
- ☐ Latter S, Campolingo N, Birtwistle J, Richardson A, Bennett MJ, Ewings S, Meads D, Santer M. Supporting patient access to medicines in community palliative care: on-line survey of health professionals' practice, perceived effectiveness and influencing factors. BMC palliative care. 2020
- ☐ Edwards Z, Mulvey MB, Chapman EJ, Bennett MJ. A national survey of hospice pharmacists and a comparison with international models. The International journal of pharmacy practice. 2021
- ☐ Weir KR, Bonner C, McCaffery K, Naganathan V, Carter SM, Rigby D, Trevena L, McLachlan A, Jansen J

Below the list of articles, there are buttons for "Scramble", "Clear", and "Show extra". At the bottom, there are buttons for "Find journals", "Find authors", and "Find articles". A URL is displayed at the bottom: <https://jane.biosemantics.org/>. A small text block at the bottom right explains that JANE tags journals currently indexed in MEDLINE and open access journals approved by the Directory of Open Access Journals (DOAJ).

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Clinical pharmacists' reported approaches and processes for undertaking Home ... **Prior works** **Derivative works** Sponsored by **Azure**

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Origin paper
Clinical pharmacists' reported approaches and processes for...
 Kenneth Lee, L. K. O'Donnell, A. Cross,... 2023

Home medicines reviews: a qualitative study of GPs.
 K. Weir, V. Naganathan, D. Rigby, K.... 2019

Pharmacists' and older adults' perspectives on the benefits and...
 K. Weir, V. Naganathan, C. Bonner, K.... 2020

Home medicines reviews and residential medication management...
 P. Czarniak, L. Hattingh, T. F. Sim, R.... 2020

Home Medicines Reviews: Extent of

Created on Feb 21 2023

2012 2023

Clinical pharmacists' reported approaches and processes for undertaking Home Medicines Review services: A national survey
 Kenneth Lee + 3 authors A. T. Page
 2023, Archives of gerontology and ...

0 Citations Save

Open in:

<https://www.connectedpapers.com/>

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Filter Custom

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Select None Select All

Demo

☒ Lee ... Page 2023
Clinical pharmacists' reported approaches and processes for undertaking Home Medicines Review services: A national survey
 Archives of gerontology and geriatrics (Print)

☒ Weir ... Jansen 2019
Pharmacists' and older adults' perspectives on the benefits and barriers of Home Medicines Reviews - a qualitative study.
 Journal of Health Services Research & Policy

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Chen 2016 L 85
Pharmacist-Led Home Medicines Review and Residential Medication Management Review: The Australian Model
 Drugs & Aging

Scott ... Cumming 2004 L 51
Prescribing in older people.
 Australian Family Physician

Alhmoud ... Bahl 2015 L 27
Prevalence and predictors of potentially inappropriate medications among home care elderly patients in Qatar
 International Journal of Clinical Pharmacy

Connections
 Click to Hide

Connections between your collection and 50 papers

Graph Type: **Network** Timeline

Labels: **First Author** Last Author

Filter these items

Zoom Out Fit All Zoom In

<https://researchrabbitapp.com/>

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Eight steps of the research lifecycle

2. Learn about the problem's context (ie literature review)

- Formally vs informally:
 - If informal: could use the same tools as per previous step (e.g. PubMed etc), but with the **main purpose** to learn about **what's been done** and where the **gaps** are.
 - If formal: consider what type of literature review you would like to do, e.g. scoping vs systematic review (see handout), and consider software (e.g. Research Screener, Covidence)
- Learning the context can help you **refine** your research question.

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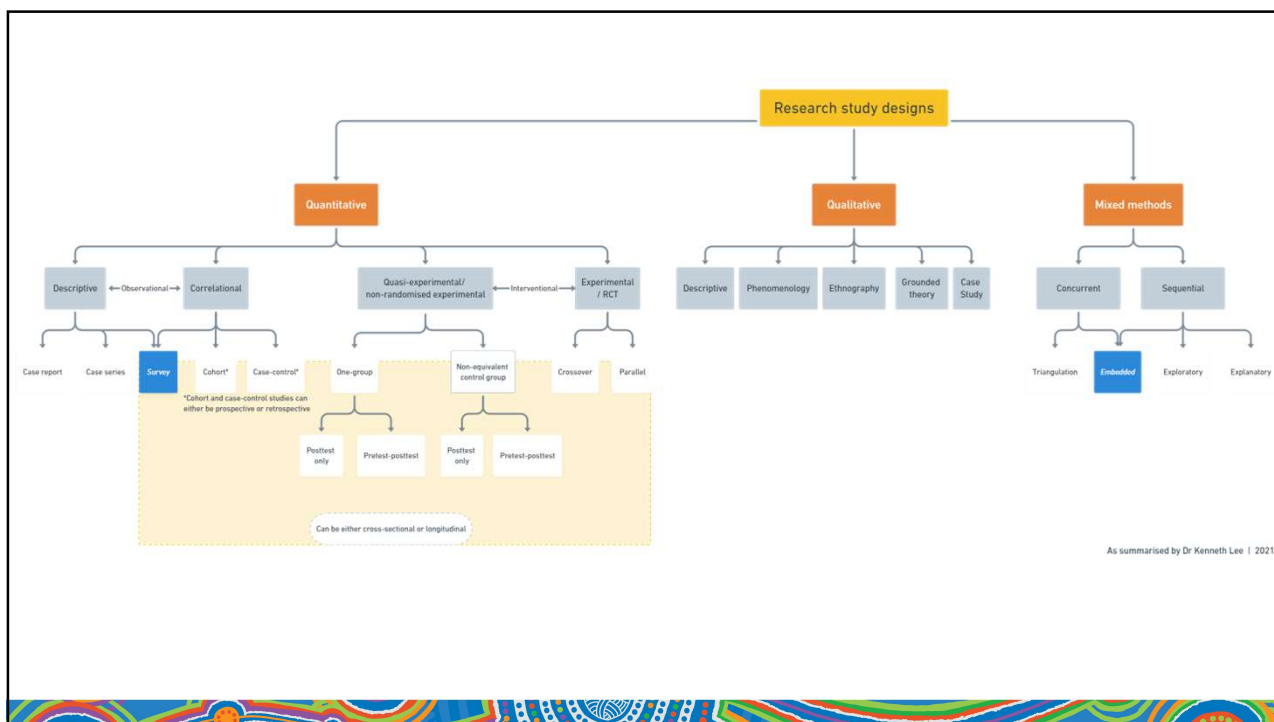
Eight steps of the research lifecycle

3. Design the study (ie protocol)

Key considerations

1. Define your aims & objectives
2. Select a study design* (e.g. experimental vs observational)
3. Consider who your participants are and how you will recruit
4. Consider how you will collect your data (e.g. questionnaire, interview, focus group)
5. Consider how you will analyse your data
6. Consider ethics – application vs approach

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Eight steps of the research lifecycle

3. Design the study (ie protocol)

Once you've identified a suitable study design, find a relevant reporting guideline: <https://www.equator-network.org/>

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<div><div>STANDARD PROTOCOL ITEMS: RECOMMENDATIONS FOR INTERVENTIONAL TRIALS</div><div>SPRIT</div><div></div></div>				
SPIRIT 2013 Checklist: Recommended items to address in a clinical trial protocol and related documents*				
Section/Item	Item No.	Description		
Administrative information				
Title	1	Descriptive title identifying the study design, population, interventions, and, if applicable, trial acronym		
Trial registration	2a	Trial identifier and registry name. If not yet registered, name of intended registry		
	2b	All items from the World Health Organization Trial Registration Data Set		
Protocol version	3	Date and version identifier		
Funding	4	Sources and types of financial, material, and other support		
Roles and responsibilities	5a	Names, affiliations, and roles of protocol contributors		
	5b	Name and contact information for the trial sponsor		
	5c	Role of study sponsor and funders, if any, in study design; collection, management, analysis, and interpretation of data; writing of the report; and the decision to submit the report for publication, including whether they will have ultimate authority over any of these activities		
	5d	Composition, roles, and responsibilities of the coordinating centre, steering committee, endpoint adjudication committee, data management team, and other individuals or groups overseeing the trial, if applicable (see Item 21a for data monitoring committee)		
Introduction				
Background and rationale	6a	Description of research question and justification for undertaking the trial, including summary of relevant studies (published and unpublished) examining benefits and harms for each intervention		
	6b	Explanation for choice of comparators		
Objectives	7	Specific objectives or hypotheses		
Trial design	8	Description of trial design including type of trial (eg, parallel group, crossover, factorial, single group), allocation ratio, and framework (eg, superiority, equivalence, noninferiority, exploratory)		
			Methods: Participants, interventions, and outcomes	
Study setting	9	Description of study settings (eg, community clinic, academic hospital) and list of countries where data will be collected. Reference to where list of study sites can be obtained		
Eligibility criteria	10	Inclusion and exclusion criteria for participants. If applicable, eligibility criteria for study centres and individuals who will perform the interventions (eg, surgeons, psychotherapists)		
Interventions	11a	Interventions for each group with sufficient detail to allow replication, including how and when they will be administered		
	11b	Criteria for discontinuing or modifying allocated interventions for a given trial participant (eg, drug dose change in response to harms, participant request, or improving/worsening disease)		
	11c	Strategies to improve adherence to intervention protocols, and any procedures for monitoring adherence (eg, drug tablet return, laboratory tests)		
	11d	Relevant concomitant care and interventions that are permitted or prohibited during the trial		
Outcomes	12	Primary, secondary, and other outcomes, including the specific measurement variable (eg, systolic blood pressure), analysis metric (eg, change from baseline, final value, time to event), method of aggregation (eg, median, proportion), and time point for each outcome. Explanation of the clinical relevance of chosen efficacy and harm outcomes is strongly recommended		
Participant timeline	13	Time schedule of enrolment, interventions (including any run-ins and washouts), assessments, and visits for participants. A schematic diagram is highly recommended (see Figure)		
Sample size	14	Estimated number of participants needed to achieve study objectives and how it was determined, including clinical and statistical assumptions supporting any sample size calculations		
Recruitment	15	Strategies for achieving adequate participant enrolment to reach target sample size		
			Methods: Assignment of interventions (for controlled trials)	
			Allocation:	
			Sequence generation	16a
				Method of generating the allocation sequence (eg, computer-generated random numbers), and list of any factors for stratification. To reduce predictability of a random sequence, details of any planned restriction (eg, blocking) should be provided in a separate document that is unavailable to those who enrol participants or assign interventions

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Eight steps of the research lifecycle

4. Plan the project (ie project proposal)

Key considerations (in addition to the protocol)

- Project methodology:
e.g. Waterfall vs Kanban vs Scrum

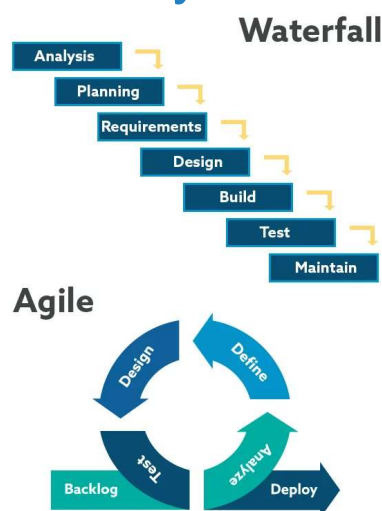


Image source: <https://www.revgenpartners.com/insight-posts/when-does-waterfall-project-management-make-sense/>

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Eight steps of the research lifecycle

4. Plan the project (ie project proposal)

Key considerations (in addition to the protocol)

- Personnel & responsibilities
- Project risk evaluation and mitigation strategies
- Timeline
- Budget



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Eight steps of the research lifecycle

5. Execute the study & project

- Continue to monitor the study and the project progress throughout the execution. E.g. weekly meetings
 - Consider 'stand-up' meetings where each team member reports on:
 - 1) what they did last week,
 - 2) what roadblocks they encountered,
 - 3) what they plan to do next.

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Eight steps of the research lifecycle

6. Evaluate the study & project

- Statistical analysis vs qualitative analysis (or a mix of both)?
 - Regardless of the type of evaluation, involve relevant personnel from near-conception of the study as
poor/inappropriate study design
+
poor/inappropriate data collect
= **unreliable data analysis**
- Irrespective of the study findings, was the project a success?
E.g. did you complete it on time and appropriately spend resources?

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Eight steps of the research lifecycle

7. Summarise your work

- Write ≥ 1 manuscript / report
- Consider a lay summary
(depends on your intended audience)
- Consider a visual abstract



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Clinical pharmacists' reported approaches and processes for undertaking Home Medicines Review services: A national survey

AIM: TO DESCRIBE THE TYPES OF INFORMATION CONSULTANT PHARMACISTS REPORT DURING HOME MEDICINES REVIEWS (HMR)

- Receive on referral from medical practitioners
- Collect prior to the consultation
- Collect during the consultation
- Include in written reports

INTRODUCTION

COMPREHENSIVE MEDICINES REVIEWS ARE A STRATEGY TO REDUCE MEDICINES-RELATED HARM.

Home Medicines Review services (HMRs) are provided by consultant pharmacists to community-dwelling consumers, on referral from the consumer's medical practitioner.

METHODS

National online survey

Target population: The 1300 consultant pharmacists actively delivering Home Medicines Reviews (HMRs) services

Recruitment: Broad advertising strategy (social and traditional media, snowballing)

RESULTS

179 PARTICIPANTS

REFERRAL



PRIOR TO THE CONSULTATION

Most (71%) sought information prior to consultations:



DETAILS OF, AND HISTORY FROM, COMMUNITY PHARMACY

DURING THE CONSULTATION



LESS THAN A QUARTER OF PARTICIPANTS

measured adherence formally using a validated instrument

REPORT

INFORMATION INCLUDED IN THE WRITTEN REPORT



CONCLUSIONS

Consultant pharmacists collect a broad variety of information, beyond medicines-related content. Written HMR reports by consultant pharmacists were often reported to be consumer-centric.

Citation: Kenneth Lee, Lisa Kouladjian O'Donnell, Amanda J Cross, Deborah Hawthorne, Amy Theresa Page. Clinical pharmacists' reported approaches and processes for undertaking Home Medicines Review services: A national survey. Archives of Gerontology and Geriatrics 2023. doi.org/10.1016/j.archger.2023.104965

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Eight steps of the research lifecycle

8. Disseminate your work

- Publish in peer review journals
 - Consider using J.A.N.E. to decide on a target journal
- Present at conferences
- Share on social media
- Contact media outlets



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Tips

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Tips

- Find a team!
 - Research librarian
 - Academic
 - Clinician
 - Biostatistician
 - Science communicator
 - Project manager
 - Research assistant
 - Communications strategist
- Ensure your research can be replicated (at least in theory), and that your analyses can be reproduced.



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Coming up next

16 Feb Introductory Biostatistics

Michael Dymock, Telethon Kids Institute

8 Mar Using Social Media in Research

Dr Amy Page, UWA

Register → researcheducationprogram.eventbrite.com.au

We love feedback

A survey is included in the back of your handout, or complete online

<https://tinyurl.com/surveyResearchFundamentals>

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Research Fundamentals



RESOURCE NOTES

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1. Formulating a research question

Aslam S, Emmanuel P. Formulating a researchable question: A critical step for facilitating good clinical research. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3140151/>

PICO: Formulate an answerable question. Cochrane Collaboration.
http://ph.cochrane.org/sites/ph.cochrane.org/files/public/uploads/Unit_Five.pdf

Asking Focused Questions. Centre for Evidence-Based Medicine, University of Oxford.
<https://www.cebm.ox.ac.uk/resources/ebm-tools/asking-focused-questions>

2. Literature review

Approaches to your Literature Review - E-Learning Research Methods BMJ
<https://generic.wordpress.soton.ac.uk/researchmethods/>

Grant MJ, Booth A. A typology of reviews: an analysis of 14 review types and associated methodologies. Health Info Libr J. 2009;26:91-108.
<https://doi.org/10.1111/j.1471-1842.2009.00848.x>

Accessing the PubMed database (and other health resources)
<https://pubmed.ncbi.nlm.nih.gov/>

PubMed tutorials are at:
<https://learn.nlm.nih.gov/documentation/training-packets/T0042010P/>

Finding the Evidence. Centre for Evidence-Based Medicine, University of Oxford.
<https://www.cebm.ox.ac.uk/resources/ebm-tools/finding-the-evidence-tutorial>

Levels of Evidence. Centre for Evidence-Based Medicine, University of Oxford
<https://www.cebm.ox.ac.uk/resources/levels-of-evidence/oxford-centre-for-evidence-based-medicine-levels-of-evidence-march-2009>

Critical Appraisal Tools. University of South Australia.
<https://www.unisa.edu.au/research/Health-Research/Research/Allied-Health-Evidence/Resources/CAT/>

3. Study design

Ioannidis JPA, Greenland S, Hlatky MA et al. Increasing value and reducing waste in research design, conduct, and analysis. *Lancet* 383: 166-75. Jan 14
[http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(13\)62227-8/fulltext](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(13)62227-8/fulltext)

Aslam S, Georgiev H, Mehta K, Kumar A. Matching research design to clinical research questions. *Indian J Sex Transm Dis*. 2012 Jan-Jun; 33(1): 49–53.
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3326852/>

Checkoway H, Pearce N, Kriebel D. Selecting appropriate study designs to address specific research questions in occupational epidemiology. *Occup Environ Med*. 2007 September; 64(9): 633–638. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2092571/>

Study designs: strengths and weaknesses. Centre for Evidence-Based Medicine, University of Oxford. <https://www.cebm.ox.ac.uk/resources/ebm-tools/study-designs>

Epidemiological research: the six types of study design you need to know. *Student BMJ* 2001;09:261-304 August ISSN 0966-6494
http://www.vhpharmsci.com/decisionmaking/Therapeutic_Decision_Making/Intermediate_files/Epidemiological%20research-studentBMJ.pdf

4. Project planning

Eston RG, Rowlands AV. Stages in the development of a research project: putting the idea together. <http://bjsm.bmj.com/content/34/1/59.full>

Developing a project plan: Flinders University Planning and Evaluation Wizard.
<http://www.flinders.edu.au/medicine/sites/pew/developing-a-project-and-evaluation-plan/planning-zone/>

Eye on Tech. What is the Waterfall Model and How Does it Work?
<https://www.youtube.com/watch?v=bNLCrDrSQUU>

Atlassian. What is Kanban? – Agile Coach (2019).
<https://www.youtube.com/watch?v=iVaFVa7HYj4&t=28s>

Organize Agile. Scrum in under 5 minutes.
<https://www.youtube.com/watch?v=2Vt7Ik8Ublw>

5. Writing a research protocol

Guide for writing a Research Protocol for research involving human participation. WHO.
<http://hub.ucsf.edu/protocol-development>

Recommended Format for Writing a Research Protocol. WHO
<https://www.who.int/groups/research-ethics-review-committee/recommended-format-for-a-research-protocol/>

Writing an Effective Research Proposal. Verheof MJ, Hilsden RJ. University of Calgary, Alberta, Canada. 2004 <http://www.ais.up.ac.za/health/blocks/block2/researchproposal.pdf>

6. Data management

Note: The Research Skills Seminar Series has a seminar on data management for which materials are available.

“Data Collection and Management” will be presented on **11 October, 2024 tbc**

Watch the 2023 presentation from our Past Seminars page:

<https://www.cahs.health.wa.gov.au/Research/For-researchers/Research-Education-Program/Seminars>

WA Health Research Governance Policy and Procedures Handbook (internal CAHS)
<https://ww2.health.wa.gov.au/About-us/Policy-frameworks/Research/Mandatory-requirements/Research-Governance-Policy>

Also see the Research Governance Service website for WA for additional information:
<https://rgs.health.wa.gov.au/Pages/Home.aspx>

Souhami R. Governance of research that uses identifiable personal data.
<http://www.bmj.com/content/333/7563/315>

7. Translating results into action

Note: The Research Skills Seminar Series has a seminar on knowledge translation for which materials are available. .

“Knowledge Translation” will be presented on **23 August, 2024**

Watch the 2023 presentation from our Past Seminars page:

<https://www.caHS.health.wa.gov.au/Research/For-researchers/Research-Education-Program/Seminars>

How to put the evidence into practice: implementation and dissemination strategies NHMRC 2000 CP71 http://www.nhmrc.gov.au/files_nhmrc/publications/attachments/cp71.pdf
<https://catalogue.nla.gov.au/Record/2292903>

How to use the evidence: assessment and application of scientific evidence. NHMRC 2000 CP69. <http://www.nhmrc.gov.au/guidelines/publications/cp69>

8. Research Screener

The Department of Research at CAHS is offering a limited number of places for research staff to use Research Screener. **What is Research Screener?**

Research Screener is a web-based application that semi-automates the process of conducting literature and systematic reviews. It does this by ranking research articles based on their relevance using machine learning and natural language processing to improve the research screening process.

When undertaking literature and systematic reviews you can spend the majority of your time screening thousands of articles for relevance. On average it takes 63 weeks to publish a systematic review article and the time and productivity lost cost up to \$10,000 for each paper.

From early validation of Research Screener on 9 previous systematic review studies, the algorithm/AI model was able to potentially save the researchers between 63 to 92% of the manual screening time reading irrelevant abstracts. For example, for one systematic review, the algorithm ranked all the relevant abstracts in the first 2,950 abstracts out of 23,423 (ie 13% would only need to be read by the researchers). For more information go to:

www.researchscreener.com

More information and a recorded training session is available on the CAHS REP healthpoint (internal DoH users only): [Additional Resources \(health.wa.gov.au\)](https://health.wa.gov.au)

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Research Skills Seminar Series

A free, open-access resource designed to upskill busy clinical staff and students and improve research quality and impact.

Interactive in pdf format
Last updated 6/2/24

2024 Seminar Schedule

#	DATE	TOPIC	PRESENTER	ENROL	WATCH
1	9 Feb	Research Fundamentals	Dr Kenneth Lee, UWA	REGISTER	2023
2	16 Feb	Introductory Biostatistics	Michael Dymock, TKI	REGISTER	2023
3	8 Mar	Social Media in Research	Dr Amy Page, UWA	REGISTER	2023
4	22 Mar	Introduction to Good Clinical Practice	Alexandra Robertson, CAHS	REGISTER	2023
5	19 Apr	Research Governance	Dr Natalie Giles and Tracy Chapman CAHS	REGISTER	2023
6	3 May	Scientific Writing	A/Prof Tony Kemp, UWA	REGISTER	2023
7	17 May	Project Management	Melanie Wright, SMHS	REGISTER	2023
Mon	20 May	World Clinical Trials Day Workshop	tbc	REGISTER	2023
8	24 May	Getting the Most out of Research Supervision	A/Prof Sunalene Devadason, UWA/CAHS	REGISTER	2022
9	7 Jun	Research Impact	Dr Tamika Heiden, Vic	REGISTER	2023
10	21 Jun	Conducting Systematic Reviews	Prof Sonya Girdler, Curtin Uni	REGISTER	2023
11	19 Jul	Consumer & Community Involvement in Research	Belinda Frank, TKI	REGISTER	2023
12	26 Jul	Oral Presentation of Research Results	Dr Giulia Peacock, CAHS	REGISTER	2023
13	2 Aug	Sample Size Calculations	Michael Dymock, TKI	REGISTER	2023
14	9 Aug	Rapid Critical Appraisal of Scientific Literature	Dr Natalie Strobel, ECU	REGISTER	2023
15	16 Aug	Media and Communications in Research	Peta O'Sullivan, CAHS	REGISTER	2023
16	23 Aug	Knowledge Translation	Prof Fenella Gill, Curtin/CAHS	REGISTER	2023
17	30 Aug	REDCap for Data Capture and Management	Dr Giulia Peacock, CAHS	REGISTER	2023
18	6 Sep	Involving Aboriginal Communities in Research	Cheryl Bridge, TKI and co.	REGISTER	2023
19	11 Oct	Data Collection and Management	Dr Giulia Peacock, CAHS	REGISTER	2023
20	18 Oct	Grant Applications and Finding Funding	Dr Tegan McNab, TKI	REGISTER	2023
21	25 Oct	Statistical Tips for Interpreting Scientific Claims	Michael Dymock, TKI	REGISTER	2023
22	1 Nov	Survey Design & Techniques	Dr Giulia Peacock. CAHS	REGISTER	2023
23	15 Nov	Ethics Processes for Clinical Research in WA	Dr Natalie Giles, CAHS	REGISTER	2023
24	22 Nov	Qualitative Research Methods	Dr Lorna Davin, Notre Dame	REGISTER	2023
25	29 Nov	Innovation and Commercialisation	Dr Helga Mikkelsen (Brandon BioCatalyst) & Ashley Schoof (TKI)	REGISTER	2022

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Research Skills Seminar Series

A free, open-access resource designed to upskill busy clinical staff and students and improve research quality and impact.

Introductory Biostatistics



16th February 2024 12.30 - 1.30pm

Understanding and reporting research results

This seminar covers fundamental statistical concepts for clinical researchers, including why we use significance testing, how to interpret confidence intervals and p-values, how sample size and variability affect results, why bias and confounding factors are important considerations in designing studies, and when to seek statistical support.



Meet the presenter

Michael Dymock
Biostatistician, Telethon Kids Institute



Michael is a biostatistician and PhD candidate based at the Telethon Kids Institute. His research interests involve the use of Bayesian methods in adaptive clinical trials, computational statistics, and novel methods for vaccine safety surveillance. He aims to bridge the gap between clinical research design and decision-making by enhancing research methodology and encouraging statistical literacy and communication.

Perth Children's Hospital Auditorium

Level 5, 15 Hospital Ave Nedlands
Accessible via pink or yellow lifts
or

Access online via Teams or Avaya or
Watch from a hosted video-conferencing site

- Fiona Stanley Hospital
- Lions Eye Institute
- Pathways in Shenton Park
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A light lunch is provided for
our in-person attendees.
Bookings are essential.





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Using Social Media in Research

8th March 2024

12.30 - 1.30pm



Building and maintaining your 'brand'

As a researcher, it is difficult to reach the public and broadcast your work. Building and maintaining your "brand" will help set you apart. This seminar provides the tools to connect with other researchers, build your network, and in the long run, effectively translate your research to a wider audience.



Meet the presenter

Dr Amy Page
Senior Lecturer – School of Allied Health, UWA



Dr Amy Page is a registered consultant pharmacist and qualified biostatistician. Her vision is to reduce medicines-related harm while balancing symptom control to align with individualised treatment goals for older people to improve well-being. She undertakes knowledge creation and translation through implementation, practitioner development, communication and media, engagement with professional bodies and policy for sustained impact on pharmacy practice.

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Research Fundamentals

Thank you for your interest in this seminar

Please complete this 1-minute evaluation.
Your feedback will help guide future presentations and educational activities.

How did you attend the seminar?

- ☐ Live seminar at Perth Children's Hospital
- ☐ Hosted video-conference on-site (e.g. FSH, Lions Eye, RPH etc.)
- ☐ Online via Avaya or Teams
- ☐ Viewed online recording

Please rate your agreement with the following statements:

	N/A	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
The aims and objectives were clear	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The session was well structured	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Presentation style retained my interest	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The speaker communicated clearly	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The material extended my knowledge	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The additional resources were helpful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

What were the best aspects of the seminar?

What changes or improvements would you suggest?

How did you hear about the seminar?

(you can select multiple answer)

- ☐ Email invitation from Research Education Program
- ☐ CAHS Newsletters e.g. The Headlines, The View, CAHS Research Newsletter
- ☐ "Health Happenings" E-News
- ☐ Healthpoint Intranet Upcoming Events
- ☐ Collegiate lounge screen or other posted promotional material
- ☐ Telethon Kids Institute screen or other posted promotional material
- ☐ Telethon Kids Institute Newsletter
- ☐ Other

Thank you!

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