Evidence Based Pyramid & 6S

Best Research Evidence: Best Clinical Experience: Consistent with Patient Values

EPOCH [Electronic Portal for Online Clinical Help) platform, available at www.epoch.health.tas.gov.au, provides a structured gateway to evidence-based healthcare resources. These resources align closely with the hierarchy of evidence represented in the Evidence Pyramid, which organizes research from foundational studies to integrated decision-support systems. This synthesis maps EPOCH's key resources to each level of the pyramid.

EPOCH ePortal for Online Clinical Help

EPOCH's structure mirrors the evidence hierarchy, guiding users from foundational research studies to integrated clinical systems. This alignment ensures that healthcare professionals can efficiently locate, appraise, and apply the highest level of evidence appropriate to their clinical context. By embedding these resources within the evidence pyramid framework, EPOCH supports a systematic approach to evidence-based practice across Tasmania's health system.

HOW TO DETERMINE THE RIGHT LEVEL TO ANSWER A CLINICAL QUESTION

Quality of Evidence in Clinical Research Increases Up the Levels : Search Evidence Top Downwards

Search evidence with PICOT Framework

Cochrane Library – a core EPOCH resource offering systematic reviews across healthcare topics

JBI (Joanna Briggs Institute) Systematic Reviews

PubMed Clinical Queries – filters for systematic reviews and meta-analyses

AHRQ Evidence Reports

Clinical Decision Support Tools within EPOCH link evidence-based guidelines directly to clinical workflows, supporting point-of-care decision-making tools

Trip Database (Turning Research into Practice) -filtered to systematic reviews

Evidence-Based Summaries from sources like DARE (Database of Abstracts of Reviews of Effects) and Cochrane Clinical Answers, which provide brief, clinically focused synopses of systematic reviews

Embase -systematic review publication types

Campbell Collaboration

Meta - Analysis
a pooled-estimate of effects across studies; that range in quality

Systematic Reviews
with summaries of high quality (e.g. RCTs) primary research studies typically conducted by experts

Filtered Research

Synthesized Evidence

Secondary research over many time periods

Therapeutic Guidelines [ETG] – concise, regularly updated summaries for clinical management.

JBI evidence summaries

CINAHL Guidelines

UpToDate and BMJ Best Practice Evidence summaries -

Clinical Key Guidelines

DynaMed Point of Care

ACORN Standards

NIHR Evidence

NICE Clinical Guidelines

EPOCH Speciality Guides

MEDLINE Guidelines

Sax Institute Evidence Checks

Trip Database - filtered to guidelines & evidence summaries

NHMRC Australian Clinical Practice Guidelines Portal – provides access to national, evidence-based guidelines

Tasmanian HealthPathways integrates local clinical guidance with evidence summaries for system-level application

Critically Appraised Literature, Evidence Summaries & Guidelines
Pre-appraised, quality-checked evidence intended for direct clinical use - this level bridges research and practice

Secondary

Critical Appraisal

DETERMINE DOMAIN: THERAPY | ETIOLOGY/HARM | PROGNOSIS | DIAGNOSIS | ECONOMIC ANALYSIS

PubMed and CINAHL databases – access to primary research articles across medical and allied health disciplines

PEDro - physiotherapy trials

Cochrane Library

Clinical Key - Elsevier

speechBITE

UptoDate

Embase

Trip Database - RCT filter

MEDLINE – comprehensive database for peer-reviewed biomedical research

Randomized Controlled Trials & Non Randomized Controlled Trials
Primary experimental studies evaluating interventions.
At least two groups randomly assigned to intervention or control group reducing bias

Quantitative Research

Experimental Studies

Prospective gold standard for observations

MEDLINE
Embase
CINAHL
Medication Safety
OTseeker Occupational Therapy

EBP 6S Pyramid Guided Search

Systems
Decision-support systems that combine patient data with the best available evidence to guide clinical decisions in real time

Summaries
Evidence-based clinical guidelines and summaries that synthesize multiple sources into actionable recommendations

Cohort Studies & Case Control Studies
Observational analytical research,
Non - experimental studies of a homogeneous population

Qualitative Evidence
Considerations for assessing the quality of qualitative research

Researcher Reflexivity
Steps taken to mitigate bias and assumptions research methods include member checks or co-coding

Single point in time snapshot

Retrospective by design

Unfiltered Research

Observational Studies

eMIMS

Australian Injectable Guideline

Therapeutic Guideline

AMH

Key Resources Integrated into workflows

Mobile Apps

Dictionaries

Drug Resources

Clinical Calculators

MEDLINE

Clinical Key Journals

Embase

CINAHL

Cross-Sectional Studies, Case Reports & Case Series
Descriptive or exploratory research
Useful for rare conditions, early signals, adverse events.
Single group study describes a novelty or peculiarity.
Data can be qualitative, quantitative or mixed

Syntheses
Concise summaries of systematic reviews and meta-analyses, offering key findings and clinical implications

Synopses
Systematic reviews and meta-analyses that combine results from multiple studies to provide high-level evidence

Stakeholder Involvement
Involvement of patients and caregivers in defining research question, collecting data or analysing results

Descriptive Richness
Are methods , findings clear, credible and complete?
Enough information to relate findings to other contexts?

Post-hoc reflection

Original Research

Qualitative Research

Evidence-Based Nursing and Evidence-Based Medicine Journals – accessible via BrowZine

LibKey Nomad

Zotero

Access Medicine

ClinicalTrials. registry of ongoing and completed clinical trials

Studies
Summaries of individual high-quality studies, often peer-reviewed and critically appraised

Sources
Original research, including randomized controlled trials (RCTs), cohort studies, case-control studies, and case reports

Background Information, Expert Opinion & Data Sources
Textbooks, eBooks, Patient's Electronic Records - Not research based - High internal validity - Novel molecule or tool development

Methodology
Are study methods iterative, analysis and data collection inform each other?
Variants represented in sample. Methods logically follow selected theories.

Clinical Relevance
Do the finding make sense and add to knowledge base?
Are the findings applicable to clients and practice?

Primary

Single Studies

Search Plus
Local policies protocols

NSQHS

Number of Papers