Quality Evidence: Finding & Using

What is it?
Health professionals are increasingly being challenged by their clients, community and employers to provide evidence to support their decisions and therefore, they must use research literature as part of their clinical decision-making.

Why is it important?
Not all research is of sufficient quality to inform clinical decision making and some evidence-based practices have only been shown by research to be effective with very specific populations. Understanding the levels of evidence and how to critically appraise the strength and quality of evidence in a timely way is crucial, as is formulating a ‘searchable’ clinical question. Critically appraising your evidence will help you decide whether it’s appropriate for your setting and of sufficient quality to be used for effective decision making.

How do I do it?
Critical appraisal is the process of carefully and systematically examining research to judge its trustworthiness, and its value and relevance in a specific context. Evidence can be broadly grouped into two main categories: Filtered (secondary) information provides analysis, synthesis, interpretation, commentary and/or evaluation of original research studies (unfiltered information) and often make recommendations for practice and can be found in systematic review or meta-analysis of all relevant RCTs or evidence-based clinical practice guidelines based on systematic reviews of RCTs or three or more RCTs of good quality that have similar results. Unfiltered (primary) information contains original data and analysis from research studies with no external appraisal or interpretation provided. The bottom layer is basically anecdotal and is considered the least reliable source of evidence.

But first…
It is often very difficult to translate a clinical question into a form that can be answered from the literature. An ‘answerable’ question in research terms is one which seeks specific knowledge, is framed to facilitate literature searching and therefore, follows a semi-standardised structure. PICO is a framework that make the process of asking an answerable question easier. The general format of a ‘PICO’ question is: “In [Population], what is the effect of [Intervention] on [Outcome], compared with [Comparison Intervention]?” An investment of time at this point in the research process more than offsets the potential time and resources wasted in pursuing an inappropriate question, or one that has been comprehensively addressed already.
Who can help me?

Sometimes you don’t know what you don’t know! So, if you are not sure where or how to start in regard to gathering and using Quality Evidence there are some knowledgeable and helpful people available within Community and Oral Health;

- The Community and Oral Health Librarian - Jana Waldmann is available Wednesday and Thursday’s. Jana can provide advice on how to structure your search for evidence, will conduct the search across healthcare databases and present the results in an EndNote library. She can be contacted via email Jana.Waldmann@health.qld.gov.au or phone 07 3360 4783. You can also find information and resources on the Community and Oral Health Library page http://sas.health.qld.libguides.com/home

- The Clinical Evidence Development Officer (CEDO) is a member of the Community and Oral Health Safety and Quality Unit with specialised skills and knowledge in evidence-based practice (EBP) and Knowledge Translation (KT). The CEDO can provide leadership, mentoring and assistance to staff to identify and use evidence-based practice within their teams and services through one-on-one meetings or group education sessions. The CEDO can be contacted via email COH-CEDO@health.qld.gov.au or phone 07 3360 4783.

Helpful Resources

Internal: A wide range of education/training sessions are available to all staff within Metro North via videoconference and/or face to face sessions, and the intranet.

- The MNHHS Research education and events site is located at https://metronorth.health.qld.gov.au/research/education-and-events

- The Metro North Collaborative for Allied Health Research, Learning and Innovation (CAHRLI) offers a monthly lunchtime video-conference workshop series on research and quality improvement topics. Sessions are recorded and the April-16 presentation ‘How to Critically Evaluate the Literature’ by Dr Jenny Paratz https://qheps.health.qld.gov.au/metronorth/allied-health/cahrli/rqis/cahrli-research-and-qiseries-videos covers how to ensure significance and credibility when reviewing research articles

- The Allied Health Translating Research Into Practice (AH-TRIP) initiative is a training package designed to prepare clinicians to plan and undertake a translational research project in their practice. The Evidence to support change component of the package is accessible via https://www.health.qld.gov.au/clinical-practice/database-tools/translating-research-into-practice/evidence-to-support-change

External: There are also some excellent external sources to assist with finding and using good quality evidence;