Evidence-Based Practice: approaches to measuring the impact of therapy interventions.
Workshop outline

1. Definitions of Evidence-Based Practice (EBP)
2. Inherent challenges
3. Definitions of Practice-Based Evidence (PBE)
4. Research & service evaluations
5. Identifying opportunities
6. Personal action planning

Dr Hazel Roddam, 2014
Why do we need EBP?

“*It is not expected that all clinicians will be research-active,*

*but it is expected that all clinicians will be active users of research*”

Supporting Research and Development in the NHS
A.Culyer, 1994
What is the EBP agenda?

- Political
- Professional
- Clinical
  - Facing unfamiliar territory
  - Things are not working

*Skeat & Roddam, 2010*
Definition of EBP

“The conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients”

Sackett et al 1997
http://www.asha.org/members/ebp/intro/
Sackett’s 5 steps model of EBP

1. Frame a clinically-focused question
2. Search for the best quality evidence
3. Appraise the evidence
4. Implement changes – if appropriate
5. Evaluate effectiveness of practice

*Sackett et al 1997*
## Skills gaps and training needs

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<th>Skills</th>
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<th>Confidence 0-5 rating</th>
<th>Priority</th>
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What questions can research answer?

• *Does our practice work?*
  • Treatment efficacy
  • Treatment effectiveness

• *How well does it work?*
  • Statistical significance
  • Clinical significance

• *Is it worthwhile?*
  • Clinical effectiveness
  • Cost effectiveness
  • Client perceptions
Mapping the research gaps

- Reilly, Douglas & Oates “Evidence Based Practice in Speech Pathology” 2004

- Urgent need for ...
  - a more strategic approach for the future
  - to acknowledge complexity, heterogeneity, low incidence cases
  - relevant Outcome Measures for indirect interventions including education/training approaches
  - to address the limited evidence validated for local populations
Research evidence for local populations

- Don’t assume there is a lack of research evidence before you have looked carefully

- Don’t let colleagues use “lack of research” as a defence for not making any efforts to keep their practice updated

- Consider a working group to undertake a strategic mapping of the existing research evidence that is validated for local practice
Research

Clinician

Client
A new definition of EBP

It may be more helpful to consider EBP as a way of thinking, rather than as a body of “facts”

McCurtin & Roddam, 2012
Knowledge in practice

“The messy reality of practice”

“Knowledge-in-practice-in-context”

John Gabbay and Andree le May, 2011
Constructing “Clinical mindlines”

Clinicians ...

- Are aware of formal sources of evidence
- Don’t use those sources whilst in practice
- Don’t ignore them
- Acquire new information from wide range of sources
- Balance many competing roles in decision-making
- Don’t consciously apply deductive logic
- Rely on pattern recognition
- Co-construct mindlines within communities of practice
Research

Clinician

Client
Whose outcomes?

- Outcomes for the individual client/service user
- Outcomes for the patient/client group
- Outcomes for the service
- Outcomes for the commissioners
Range of research outcomes

- **Efficacy**
  - The outcome of an intervention that is administered and measured in an ideal setting

- **Effectiveness**
  - The outcome of an intervention that is administered and measured in a real world setting

- **Efficiency**
  - Is the intervention cost-effective and time-effective

- **Effect size**
  - Is intervention 1 better than intervention 2

- **Experience**
  - Patient and/or professionals
World Health Organisation, 2001

Impairment

Activity limitation

Social participation

Well-being & Quality of Life
Measuring patient experiences

- Patient reported outcome measure (PROM)
- Patient reported experience measure (PREM)

Psychometric aspects of tool development
  - Appropriaciy
  - Reliability
  - Validity
  - Sensitivity/responsiveness to change

- Inherent challenges to self-report measures
- Inherent challenges to proxy-report measures
Generating evidence for SLT practice

Methodological challenges

• Case presentation/populations
• Case management roles
• Interventions
• Concordance
• Contexts
• Ethical decision-making

1 Medical Research Council (2000, 2008) Complex interventions for health
2 David Seedhouse (2005) Values-Based Decision-Making in the Caring Professions
Chichester: Wiley

Dr Hazel Roddam, 2014
Defining Practice-Based Evidence

- Developing an evidence base for innovative, quality and safe practice (DH, 2012; Westwood, 2013)
- Improving health outcomes
- Enhancing experiences of healthcare
- Creating role models/champions
Building a research workforce
Whelan, 2013

- Leadership
- Leading research
- Collaboration
- Evidence-Based Practice
Contributing to the research evidence base

• Using systematic service evaluation approaches to capture good practice exemplars

• Using research designs for
  ◦ Single case studies
  ◦ Small group studies
  ◦ Replication studies of published clinical research
  ◦ Data collection on larger/multi-centre research projects
  ◦ Development and validation of assessment tools
Systematic reporting of cases from clinical practice

The CARE Guidelines set out quality criteria for how clinical cases can be reported and disseminated to make a valuable contribution to the collective research evidence base

Creating Practice-Based Evidence (PBE)

This is an easy-read book directed at busy therapists in clinical practice – it is not a textbook aimed at university students.

It covers practical guidance on collecting and using routine clinical outcomes data to demonstrate effective practice

“Creating Practice-based Evidence: a Guide for SLTs”
Corinne Dobinson and Yvonne Wren
2013 J& R Press Ltd
Sharing good practice through PBE

- Identifying good practice
- Documenting outcomes
- Listening to the patient/client voice
- Developing collaborative partnerships
- Disseminating the evidence
Effective partnership working

Dr Hazel Roddam, 2014
Key messages

• Be clear about the purpose of measuring outcomes

• Always use outcome measures with an understanding of their inherent limitations

• Ensure they meet the needs of your patient/client group and your service

• Identify how you will analyse and communicate the findings
Personal skills assessment

- **My experience in Outcome Measures**
  - Relevance to my team & organisation

- **My confidence**

- **My training needs**
  - Where I could access support?

- **Strengths**
  - How am I already using these skills?
  - How am I already sharing these skills?

- **What support could the SLT Association offer?**
Final thoughts ...

“The first step is to become reflective and critical reviewers of our own practice”

Professor Pam Enderby
in Roddam & Skeat, 2010
Additional sources and links

- ASHA – list of Guidelines and Systematic Reviews

- Cochrane Library of systematic reviews

- Speech Bite – free access to research publications
Useful References 1


- **Gabbay, J. and Le May, A.** 2011 *Practice-Based evidence for healthcare: Clinical Mindlines*. Routledge

Useful References 2

