



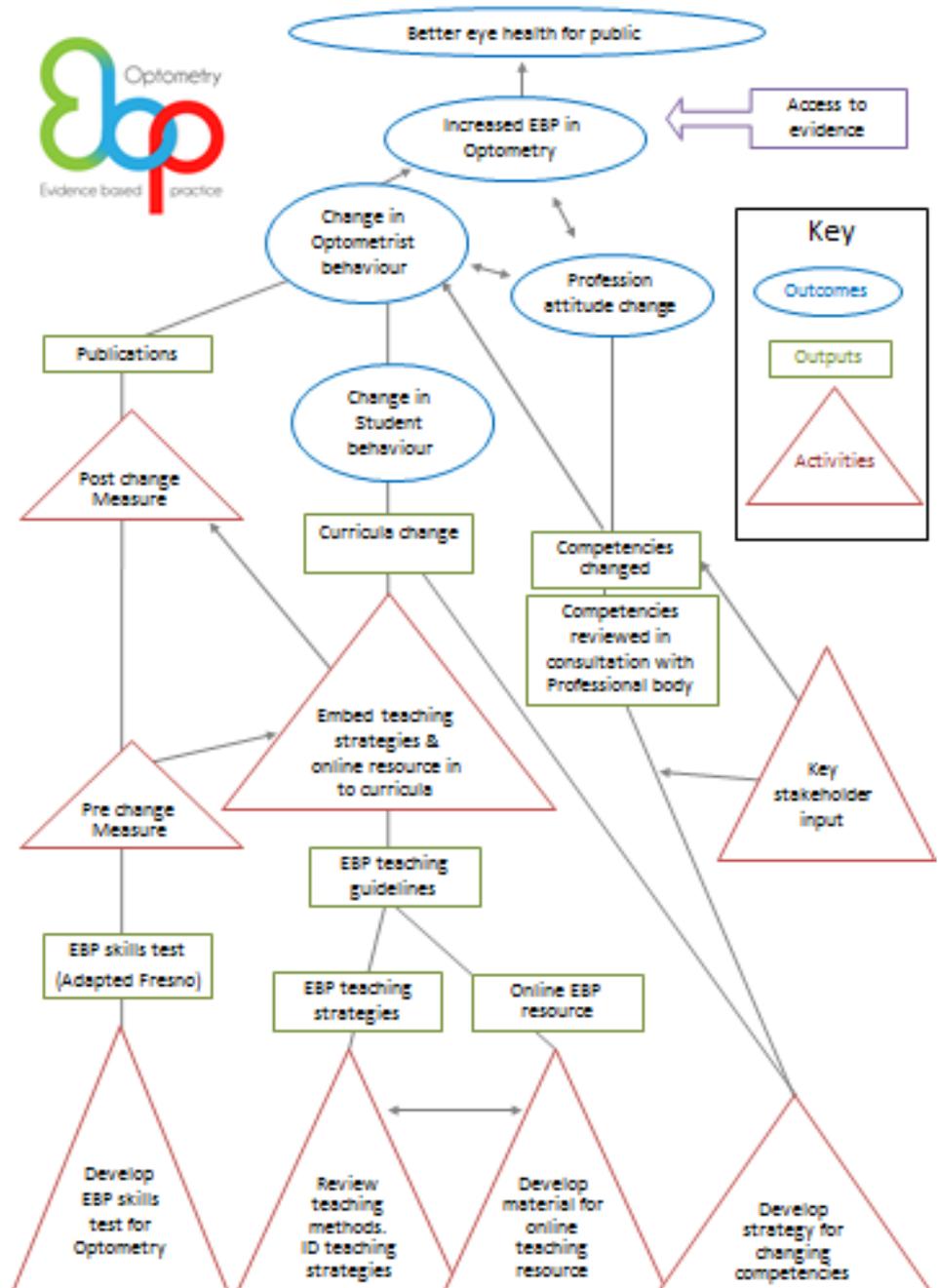
Embedding High Quality EBP Education into Australasian Optometry Curricula

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Aims:

- Develop a resource of high quality EBP teaching and assessment methods for shared use by optometry educators.
- Develop and validate a test for the assessment of EBP skills and knowledge for use by optometry educators and practitioners.
- Embed high quality EBP education into optometry curricula.



Developing an EBP resource for optometry: Identifying existing EBP learning and teaching methods

Methods:

- Optometry course convenors at UNSW and UoA were interviewed individually by one researcher
- Convenors provided descriptions of learning and teaching tasks, including assessments.
- Based on the above we identified any tasks likely to teach any of the EBP steps.
- Tasks were reviewed by four additional team members

EBP step	Task description
Ask	For each step: What does the task consist of? What are students expected to do? How are they assessed? What are they expected to learn?
Acquire	
Appraise	
Apply	
Audit	

Results:

- **No current tasks or teaching methods were considered 'ideal' EBP tasks**
- **Areas for improvement of existing tasks were identified**
- **Best practice example tasks were developed based on literature review and expertise within the team**

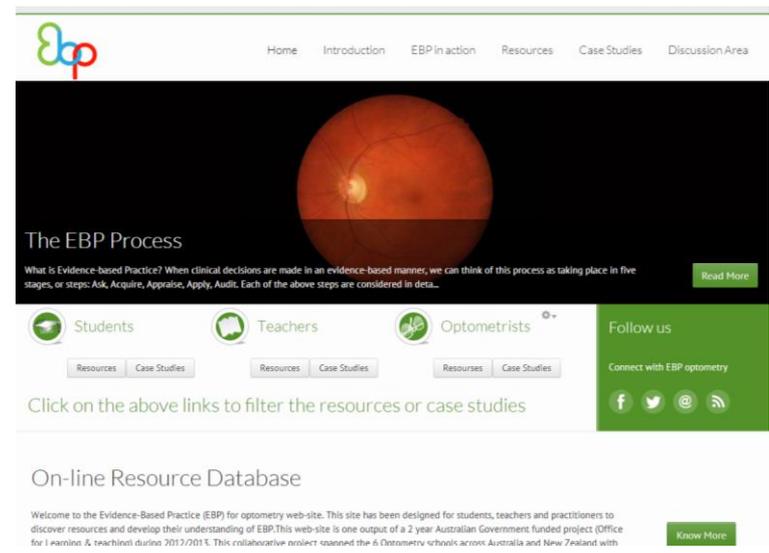
Developing an EBP resource for optometry: An open access online resource

Methods:

- The highest quality (in our view) EBP learning and teaching methods are now a new online resource.
- Additional resources, including case studies, were developed and are housed on the resource.
- Generic EBP learning and teaching resources developed and used by UNSW Medicine are also housed here for Optometry.

Results:

<http://www.eboptometry.com/>



Developing an optometry-specific test of EBP skills and knowledge

Methods:

- An existing Fresno test and marking rubric for physical therapy* were modified for optometry
- Optometry-specific clinical scenarios were written
- Reviewed by eight EBP educators (in optometry, medicine and speech pathology)
- Self-administered online under supervision by 81 EBP novices and 11 EBP experts
- Analysed using Rasch analysis

* Tilson J (2010) BMC Medical Education 10: 38.



Modified Fresno Test

Evidence Based Practice (EBP) involves knowledge and skills related to identifying and evaluating evidence to inform practice. This tool, the modified Fresno Test for Optometry is designed to assess your EBP skills

Instructions:

The test is divided into two parts:

Part A: 13-item modified Fresno Test of Evidence Based Practice for Optometry that includes 8 questions requiring brief descriptive answers, 2 questions that require a series of mathematical calculations, and 3 fill-in-the-blank questions. You may use a calculator and note paper whilst conducting the test however additional resources (internet sites, books, etc) are not permitted.

Part B: Demographic questions

Please complete the entire test in one sitting and allow yourself up to 60 minutes to complete the test.

Part A. 13-item modified Fresno Test of Evidence Based Practice for Optometry

Answer questions 1-8 based on ONE of the following two clinical scenarios:

Scenario 1: You have just examined a 4 year old boy who has unilateral amblyopia. You are about to prescribe occlusion of his non-amblyopic eye, and are considering whether near-work activity should be included in the treatment regimen.

Scenario 2: Adam is a 7 year old boy who complains of difficulty in seeing the small print on the blackboard at school. Refraction indicates that Adam has mild myopia of $-0.25DS$ in both eyes. You are considering prescribing glasses for vision correction, but a colleague suggests to you that it would be better to leave the patient undercorrected to avoid further myopia progression.

1. Choose one of the above clinical scenarios. Write a focused clinical question for that scenario that will help you organise a search of the available literature to address that question. (6 marks)

Embedding EBP education into curricula via entry-level competencies

Competencies currently state: “Developments in clinical theory... are critically appraised and evaluated for their efficacy and relevance to clinical practice”



More explicit wording could ensure EBP teaching. For example, Speech Pathology competencies include a definition and statement on EBP, and state that practitioners must: “...implement an evidence-based speech pathology intervention ...”



Methods:

- Strategy: Optometrists Association and the New Zealand Association of Optometrists are part of our reference group.
- Timing: By coincidence, the Optometrists Association Australia (OAA) is currently reviewing their competencies.
- We have:
 - Suggested to the OAA that EBP should be made more explicit in the competencies
 - Volunteered to assist in the process.
 - Suggested modified competency wording

Results

- The review is on-going

Embedding via a Train-the-Trainers EBP Workshop for Optometry Teachers

Sessions	Description
What is EBP?	Small groups: What is EBP and its significance to optometry?
The world view of EBP	Short lecture on accepted definitions of EBP and the Sicily statements
EBM	Lecture on EBM and teaching EBM to medical students
Teaching EBP in eye care	Lecture on EBP in eye care, and teaching EBP to optometrists and ophthalmologists
Experiences of teaching EBP in optometry	Brainstorming session seeking participants' experiences of teaching EBP in optometry
Barriers to EBP in optometry	Nominal group technique – barriers to practicing and teaching EBP in optometry
Overcoming barriers	Panel discussion on overcoming barriers
Introduction to EBP optometry web site	Raising awareness of web site and seeking participants' feedback for improvements

Train-the-Trainers Workshop: Results

- What EBP means
 - Scientific trials
 - Applying high level evidence to practice
 - Patient-informed decision-making
 - Medico-legal
 - Profession credibility
 - Help combat commercial pressures
 - Lifelong learning
 - May delay beneficial treatment while waiting for evidence
 - Guidelines/direction
 - Stifles creativity?
 - Top 5 Barriers
 1. Time
 2. Getting clinicians to change
 3. Volume of evidence
 4. Integrating evidence with clinical practice
 5. Changing mindset toward lifelong learning
- Results were discussed at the American Academy of Optometry meeting this month with a call for an online evidence database to support EBP in optometry.

Bottom Line

This project ends December 2013; most intended outputs will be achieved:

- Curriculum modifications have taken place
- Modified Fresno test developed, validated and applied
- Online resource complete
- Competency review under way

Further work now in progress includes:

- Formation of an optometry EBP interest group
- Seeking support for an online evidence database for optometry
- Continuing to populate and raise awareness of the EBP optometry web site and resources

