Evidence Based Health Care (EBHC) course - Royal Brompton and Harefield NHS Trust

- 6 days over 6 consecutive weeks, twice a year.
- Multiprofessional - participants from all disciplines

Devised a course which is experiential and innovative - moving away from the formal structure of lecture sessions to small group work particularly directed to explore areas of clinical interest to each participant

Each course can take 40 candidates - > 300 healthcare professionals
Objective

Enable students to gain knowledge and understanding in the theory and application of EBHC principles, acquiring skills in the application of these to contemporary clinical practice.

To pool professional experience in order that the multidisciplinary team can appraise evidence as they would when faced with complex multidisciplinary patient care challenges.

To develop critical appraisal and critical thinking skills, so that students are able to critically consume research and use this knowledge to shape their practice.
Variety of teaching and learning methods - including lead lectures, workshops, small group work and role-play.

Two core texts provide supportive material for students
The faculty includes an emeritus professor, a respiratory doctor, a research practitioner, a research department head, an education department head, a nursing sister/lecturer and a dietician.

In order to retain a multiprofessional faculty, we encourage previous students who performed well, to repeat the course and undertake training to facilitate small group work.
Course Assessment

✦ Students required to complete directed study on a weekly basis
   >> reviewed in small group sessions following week allowing
   students to explore EBHC principles & feedback their own work in
   a safe and supportive learning environment
✦ These methods enable faculty members to ensure that students
   have conceptualised and applied new knowledge into their clinical
   practice
✦ Students are required to search for the evidence, assess its
   validity and relevance to a clinical case/question of their choice
   and present this to the group on the final day
✦ This course is also a higher degree module (Imperial College) -
   MSc Cardiorespiratory, MSc Paediatric Critical Care, MSc Critical
   Care and Post Graduate Diploma. These students must provide a
   written assignment related to applying evidence based healthcare
   principles to their own clinical practice (3000 words) and to
   complete an end of year examination paper
Course Content

Core Lectures
• Diagnostic tests*
• Searching the literature
• Effectiveness of treatment*
• Prognosis*
• Systematic reviews*
• Clinical governance
* These areas are explored in more depth with homework and small group work.

INDICATIVE CONTENT
• Principles of EBHC
• Rigour in research – common criticisms, research design, data collection, interpretation, communication, plausible/coherent account of the phenomena under scrutiny
• Sampling - reliability, validity, data collection, bias
• The place of quantitative research in EBHC – current controversies, differing traditions
• Definition of evidence
• Introduction to the concept of using best evidence in clinical practice
• What is good evidence? What kind of questions, what kind of decisions? What is evidence based health care? How do I search the literature?
• Identifying the evidence
• Diagnostic tests and their value
• Prognostic indicators and their clinical application
• Future of evidence based health care – measuring outcomes so that pre test probability, post test probability and their likelihood ratios become more important
• Critical evaluation of a diagnostic test paper using questions related to a clinical scenario
• Effectiveness of treatment - critical appraisal of RCT’s, Calculation of NNT, RR, ARR. Explanation, calculation and use of CI’s
• Critical appraisal of systematic reviews - the Cochrane collaboration. Use of OR
• Clinical governance and audit
Each cohort of students evaluate their course
Combined results of evaluations for the last four courses:
Q1&2:

As you can see, the stated course objectives and the personal objectives of the students, are well met
The evaluation form goes on to ask students to rate each core lecture and small group activity as well as to give personal comments. Some of these comments are displayed in speech bubbles across the poster:

- "Small group work helped enormously to consolidate core lectures/workshops..."
- "Homework - Excellent idea!..."
- "Enjoyable to appreciate the perspectives of others - gave a degree of awareness of their roles and pressures and encouraged the forging of links..."
- "Extremely valuable course, I now have a good insight into EBHC..."
- "There was a clear and logical progression from each class & objectives were clearly achieved..."