## Generic Target group:

Health care decision makers who have to make policy or financial decisions but have little or no patient contact.

They need to understand what others are doing. They must be competent in understanding the evidence-based decisions. Must understand that standards should be based on evidence. Decision makers who may have to make funding or policy decisions based on submission of others will need to interpret these reviews and use them appropriately. [Possibly alternative target in the future may be consumers, media, etc.]

## **Needs of individuals:**

- 1) Understand what flaws have occurred in the public health care systems as a result of using flawed evidence or misinterpreting evidence. Rct of milk supplements(1959)
- 2) Elaborate concept above by creating understanding of the potential gap between the quality of what is produced [by people presenting to them] and what they need to have. Understand the implications of informed vs. non-informed decisions.
- 3) Benefits of doing reviews, such as outcomes, mortality, expenses, resource implications. E.g.'s ?
- 4) Rudimentary appreciation of what evidence-based numbers mean.

## **Content of Course**

1) Understand certain amount about statistical implications ('the meaning of the results');

what is the minimum?

Difference between relative and absolute risk reduction e.g. [beta-2 study in Lancet showed decrease in lung shrinkage—but very little effect]? False positives, false negatives and predictive values? [testing for micro-haematuria] in general practice. Sensitivity and specificity; OR ratio; confidence intervals in relation to driving home uncertainty and magnitude of effect. [eg, European review of laparoscopic herniorrhaphies; can locally useful information be taken from a systematic review.

2) Understand opportunities of resources that they could access or create to achieve their aims, i.e. review committee, etc.

- 3) Examples of good and bad reviews so that they understand the methodology (systematic reviews);
  - show classic examples of excellent reviews and that they need significant resources, e.g. paper of guidelines. [They want quality assurance as a manager.]
- 4) Can make decisions about screening and must understand what screening can and can't do. Need to understand what is important in evidence based health care.
- 5) health economics
- 6) Understand generalisability and applicability of research reports. [eg, mammography results used reports from expert radiologists; not same magnitude of effect; using PSA.]
- 7) Examples of poor quality control numbers.
- 8) Bias in studies.
- 9) Political, social and economic influences.
- 10) Wow factor of deconstructing a seemingly well known paper—which is fraud. [MMR and autism study—Wakefield]
- 11) Demonstrate calculation of numbers of lives that a manager could save with ebhc.
- 12) Scoop and run versus stay and play. Demonstrate paper and the fact that ambulance funding is a Mx decision.
- 13) Ncchta.org.uk—Dretzke—iv fluids in pre-hospital care
- stroke units systematic review

- 1 critical appraisal (stroke units) Making sense of scientific evidence
- 2 examples flawed evidence
- 3 ebm=making well informed (good) health care decisions
- 4 Name one decision that 'you' made that improved patients health

Now tell your neighbour why you thought that this would do more good than harm eg scoop and run

- 5 Pre reading red sheet on front there is only one hour's of reading
- 6 Managing doctors is like trying to heard cats
- 7 Course numbers 15 (so 3x5) small groups
- 8 Maternity services liason committee
- 9 Brain salts Do they work?- Back door design of trial
- 10 !00% confidence intervals with 20 sweets