Producing evidence for Hellish Decisions in the Value Era

This session will focus on the type of evidence needed for decision making, evidence about opportunity cost, or to put it another way opportunity lost, as well as about effectiveness or cost effectiveness.

Evidence is one of the three types of knowledge that decision makers use. Evidence is knowledge derived from research with the other two types being evidence derived from data analysis sometimes called statistics or information, for example in the NHS Atlases of Variation and knowledge from experience. Better Value Healthcare is working with the BMJ to create a Value Improvement Casebook.

Evidence is the type of knowledge derived from research and about twenty years ago two significant moves were made to improve evidence. The first was the development of the National R&D Programme now the NIHR and its mission was to produce evidence both by commissioning research and, more important by supporting the development of the Cochrane Collaboration and other methods of producing systematic reviews. The aim was to produce evidence of effectiveness. The second initiative supported by the National R&D Programme was the development of Evidence Based Medicine and the key definition of Evidence Based Medicine is shown below

Evidence-based medicine (EBM) requires the integration of the best research evidence with our clinical expertise and our patient's unique values and circumstances."

Source: *Straus, S.E., Richardson, W.S., Glasziou, P., Haynes, R.B. (2000) Evidence-Based Medicine. How to practice and teach EBM. (3rd Edition). Elsevier Churchill Livingstone. (p. 1).*

This emphasises that evidence from best research needs to be supplemented by information about a particular patient or a particular population including the values of that patient or the values of that population.

The focus was on effectiveness, although of course the National R&D Programme did support health economic studies of cost benefit ratios and cost benefit, cost utility and cost analyses were all funded by the R&D Programme. However, the big lift in developing cost effectiveness organisation was NICE, which produces excellent information about the value of interventions, both old and new.

Information nevertheless is very helpful when appraising a new intervention but the evidence from data analysis published in the NHS Atlas of Variation showing huge variation in an intervention because sometimes there is evidence, for example hip replacement and sometimes variation in interventions for which there is no randomised controlled evidence for example thyroid tests. The evidence from NICE of cost effectiveness needs to be considered not only in isolation but also in context namely in considering what else can be done with those resources.

One way of developing this type of knowledge will be by developing the Value Improvement Casebook but another way is to use the expertise of researchers and their experience and deep knowledge about a particular health topic. People who pay for or manage healthcare usually know a little about a lot, indeed commissioners have to cover everything from antenatal care to end of life care. Thus when a new intervention comes along with strong evidence from a systematic review and a clear guidance from NICE the commissioner has to consider resources where they are going to fund it. Researchers, who often know a lot about a particular condition or group of patients need to give prepared to give advice to policy makers as well as producing high quality evidence.