

## **A Syllabus for Evidence Based Medicine**

*One session equates to approximately 3 hours. Total syllabus 10sessions or 30 hours.*

### **1. Implementing Change** *(two sessions)*

#### **Aims**

1. Have an understanding of the force field model and its relationship to the expectancy balance theory of motivation.
2. Understand factors that can block and facilitate change.
3. Understand the importance of teamwork in implementing change.
4. Understand the importance of project management in implementing change.
5. Understand the role of audit in helping with implementing change.

#### **Objectives**

1. Be able to describe the force field model and the expectancy – valance theory of motivation.
2. Be able to describe factors that contribute to a good team.
3. Be able to draw up a project plan.
4. Be able to describe the audit cycle and define criteria and standards.
5. Be able to carry out a simple, complete-cycle audit.

### **2. Introduction to Evidence Based Medicine** *(one session)*

#### **Aims**

1. Obtain an overall view of EBM.
2. Understand the problems of implementing EBM, and possible solutions.
3. Have an understanding of the tension between clinical effectiveness of a treatment, and the cost of implementing the treatment.
4. How to function when there is no available evidence for a particular action.

#### **Objectives**

1. Be able to identify possible blocks to implementing EBM at the personal level, at the practice level, and amongst patients.
2. To be able to identify possible solutions to the identified blocks.
3. Be able to describe the process of seeking and using evidence: the ability to develop an answerable question, develop a search strategy to answer the question, and critically appraise and use the evidence.

### **3. Statistical Methods** *(two sessions)*

#### **Aims**

1. Understand the principles behind:

sample size	standard deviation
statistical significance	normal distribution
calculation of risk	Chi square test
confidence intervals	Student's <i>t</i> test
publication bias	
2. Understand the principle behind and use of ANOVA and linear regression.

#### **Objectives**

1. Be able to define and calculate odds ratios, absolute risk, relative risk, NNT correctly in a given piece of work.

#### **4. Critical Appraisal** *(two sessions)*

##### **Aims**

1. Feel encouraged towards reading of greater number of journal articles.
2. Understand what constitutes a good quality RCT, meta-analysis, and qualitative study.

##### **Objectives**

1. Be able to use appraisal systems such as CASP.
2. Be able to critically appraise literature reviews.
3. Be able to appraise RCTs.
4. Be able to appraise qualitative studies.

#### **5. Literature Reviews** *(two sessions)*

##### **Aims**

1. Understand the problems behind carrying out a search of the literature from databases such as Cochrane and Medline.
2. Have an understanding of the different types of literature reviews.
3. Understand the different methods of referencing a document.
4. Understand the principle behind conducting a literature review.
5. Understand the concept of publication bias.

##### **Objectives**

1. Be able to ask a focused research question.
2. Be able to carry out a literature search.
3. Be able to write a literature review.
4. Be able to reference a document appropriately.
5. Be able to search the Medline or equivalent database on the internet.
6. Be able to search the Cochrane database.

#### **6. Screening** *(one session)*

##### **Aims**

1. Understand the principles of screening, and what constitutes a good screening programme.

##### **Objectives**

1. Be able to describe what constitutes a good screening programme.
2. Be able to define and calculate sensitivity and specificity correctly in a given piece of work.