

ECONOMIC ANALYSIS AND NIH CLINICAL RESEARCH

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Economic Analysis and Clinical Trials

- Economic evaluation methods such as cost-effectiveness analyses are occasionally added to clinical trials
 - The purpose is to offer evidence on whether a new intervention is likely to offer an efficient use of resources relative to existing treatments
- Such evaluations fit into concern with a larger economic question
 - Would introducing a particular intervention into practice result in an improved use of resources?

Cost Effectiveness and Clinical Trials

- ▣ Tell us the potential a particular intervention offers for efficient use of resources if used by the types of people in the trial and administered according to protocol
- ▣ In practice a range of patients receive specific treatments and they can differ from those observed in trials
- ▣ Interventions in trials are commonly administered according to very detailed protocols at high levels of fidelity

Applying Economic Evaluations

- ▣ When new interventions are introduced into practice they frequently produce disappointing results with regard to cost-effectiveness
- ▣ Challenge in stepping beyond narrower conceptions of CEA in clinical trials is to design a trial that can provide information that will inform the design of common practice

What types of information is important for efficiency in practice?

- ▣ The segments of the patient population that are willing to engage in treatment
- ▣ Understanding heterogeneity of impacts for the population of potential patients
- ▣ identifying the active ingredients of an intervention and which ones add costs, complexity and few gains in outcome
- ▣ The extent that designs aimed at multiple chronic conditions must step away from cost-effectiveness results on individual illness components (heart disease and depression)

Implications

- ▣ Trials may have broader inclusion criteria
- ▣ Trials may be larger
- ▣ Trial may have more arms (based on detailed stratification hypotheses)
- ▣ Pre-randomization data collection may be more extensive