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Planning Clinical Experiments
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Preamble
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Aims
The quantity of new knowledge on medical techniques and treatments has risen in the last decade almost to outstrip the capacity of a clinician to encompass the relevant literature, let alone to analyze it critically, to incorporate it in his information store and to apply it to appropriate patients. Yet we are only at the beginning of an acceleration, and the task will be ten times greater in ten more years, for the support of basic and applied research by government, university and industry is accelerating, and vast gaps still remain in our knowledge of human biology and pathology. This increasing expansion of biologic knowledge forces the need for more applied clinical research than ever before. No substitute is available to replace the human subject, if the advances are to be carried into regular clinical management. This flood of new techniques and tests and drugs meets a bottleneck at the clinical level, for many inhibitory factors come into play when unproven methods are to be applied to patients. Somebody must be the first to use a new method, and some patient must be the first exposed to the risks of that method, be they great or small. Clinical experimentation is inhibited by the apparent conflict of loyalties between care for this patient and the search for truth, by the organization of clinical practice by individuals when a team approach is necessary, and by a general lack of education in clinical experimental method. This primer aims to educate practising clinicians in the application of experimental method to the solution of clinical problems, to ensure that the results are reliable and meaningful, and provide a valid basis for generalization (Preface, pages ix and x).

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