(51) John M Weiner (1980) *Issues in the Design and Evaluation of Medical Trials* Boston: GK Hall Medical Publishers

Aims

Clinical research represents an integration of many procedures from the social, biological, and natural sciences. Critical examination of the spectrum of medical inquiries will reveal the full gamut of research activities. Understanding the processes involved in the integration of these investigative and cognitive functions may lead to further advances in creative behavior. The purpose of this book is to formalize this process by identifying, collecting, and organizing the elements and issues involved. During the past thirty years, there have been significant advances in research methodology, many of them stimulated by multi-disciplinary collaboration. The anticipated barriers to communication were not realized in practice. Scientists engaged in mutual problem-solving could accomplish more than their colleagues working in relative isolation. In their productive fashion, these multi-disciplinary teams, by pooling their knowledge sets and by developing communication mechanisms, created the interfaces between the clinical, analytical, and communication sciences. These interfaces, while neither complete nor perfect, represent the methodology of interest in accomplishing the capture, evaluation and utilization of information, or information processing (Preface, page ix).

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Evaluation Summary Chapter 5: Information processing Introduction Scientific concepts and information processing Procedural details in providing an information processing service Summary Chapter 6: Analysis of functions Introduction Functions and behavior Functional analysis and physical examination Functional analysis in clinical studies Functional analysis and scientific method Summary Chapter 7: Allocation and monitoring Introduction Allocation Monitoring conduct and performance Summary Chapter 8: Multi-institutional and multi-disciplinary research Introduction Organizational structure Descriptions of the study Feasibility analyses Summary References Appendix Section 1: Computer applications Section 2: Management procedures with direct access binary files Section 3: The analytical data file Section 4: Changing data values Section 5: Management procedures with the analytical file Section 6: Relationships among variables Index

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