book is recommended for anyone with an interest in the social welfare/social insurance programs. Both academics and policymakers should find this a valuable work in which to invest study time.

Although *Creating the Welfare State* does not provide any specific solutions for today's health care crises, it puts into perspective the "whys" and "hows" of our present system. Programs designed for one era become ineffective as our social structure changes. The relief systems must also change. Today we need to understand that utilization increases costs, and as costs become unmanageable alternatives must be found. We are in such a crossroad. Demand is high, expectations are great, costs are out of control. Can we afford to leave this dilemma to the whims of market place forces? The health and general welfare of our population are at stake. Can we look to the past to learn from our mistakes and benefits from the successes?

Medical Malpractice, Edited by Duncan Yaggy and Patricia Hodgson, Duke University Press, Durham, North Carolina, 1987

Reviewed by: Cynthia L. Gallup (Department of Economics, University of California, Berkeley) and Thomas G. McGuire (Department of Economics, Boston University)

Medical Malpractice is an edited transcript of the Eleventh Private Sector Conference. The conference, held at Duke University in 1986, focused on the current state of the malpractice liability system and possible reforms. Experts in malpractice and health policy complemented the experience of practicing lawyers and physicians, and the insight of insurance and medical groups' representatives. The book contains 19 short, non-technical statements, averaging 3–4 pages by presenters, and the comments of assigned discussants and other participants at the conference.

Following the format of the conference, the book starts with a discussion of both the benefits and costs of the malpractice liability system and then presents recent trends and developments. An exploration of possible reforms comprises the remainder of the book. The reforms analyzed range from relatively minor changes within the existing liability system, such as capping liability awards, to more radical reforms, such as no-fault insurance. Alternative methods of resolving malpractice disputes also received discussion. With Jeffrey O'Connell, the designer of the Moore-Gephardt bill at the conference, the bill received considerable attention. The Moore-Gephardt bill which was not passed, proposed that physicians be able to preclude Medicare patients from suing for malpractice by tendering an offer to pay a patient's economic damages.

The diversity of the discussants constitute one strength of the book. Academics as well as those working within the insurance, legal, and medical fields provide their knowledge and impressions of the malpractice liability system. Patricia Danzon, Robert Brook, and Jeffrey O'Connell especially help guide the reader by providing pithy summaries of the issues at hand. Danzon's four-page statement of the core policy issue in malpractice—finding the right balance of policies to adequately compensate victims and to effectively deter malpractice—is an excellent accessible introduction to these difficult issues.

A researcher interested in medical malpractice will probably not find the book useful. Most of the ideas and facts presented in the book have been presented in more detail (by the conference participants themselves) elsewhere. Numerous unsubstantiated and sometimes contradictory assertions weaken the book. No references appear, frustrating the reader who wants to find the source of a quoted statistic or research an issue further. The lack of references is especially frustrating given the controversial and contradicted assertions repeatedly made throughout the book. One speaker cites the source of a statistic as the American Medical Association. Two pages later, a representative of the AMA refutes quoted statistic and states that its source is definitely not the AMA.

We do recommend the book to those with a general interest in medical malpractice. Through spicy dialogue, the book presents a broad overview of the issues in the malpractice liability system and the perspectives of the various parties within the system: lawyers, physicians, and malpractice insurers.

Actuarial Mathematics, by Newton Bowers, Hans Gerber, James Hickman, Donald Jones, and Cecil Nesbitt. (Society of Actuaries, 475 N Martingale Road, Schaumburg, Illinois, IL 60173, U.S.A., 1986). xxiv + 624 pages.

Reviewer: Jean LeMaire, University of Pennsylvania

The new monumental textbook Actuarial Mathematics, sponsored by the Society of Actuaries, has finally appeared after years of preparation by the five authors. Its study is required for all future North American actuaries, as preparation for their examination on life contingencies. Very little of the material is specific to the United States or Canada, so the book could be adopted by other Associations of Actuaries and non-American universities. The reviewer has taught chapters 2 to 15 to undergraduate students in actuarial science in approximately 75 hours. A 20-hour introduction to financial mathematics preceded the latter material.

Basic knowledge of financial mathematics is assumed at all times, as well as a solid background in undergraduate calculus and probability theory. A 3-page appendix reviews the most common probability distributions and some calculus formulas for finite differences; but otherwise many theorems from calculus and probability theory are routinely used without an explanation. The reader should be prepared for constant use of conditional expectations, moment-generating functions, integration by parts, etc. Quite often only the key steps of a mathematical derivation are provided, and some computation is required to "move from one line to the next."

From a pedagogical point of view, the presentation of the book is impeccable; interesting examples illustrate each new concept. An interpreta-