MEDICAL EDUCATION AND THE NEW MEDICAL PRACTICE

Calls from the IHI, Leapfrog Group, health plans, purchasers, patients, and physician groups for improving quality and safety make it untenable to continue medical education as a status quo. Physicians and health care administrators must have a new skill and knowledge set to effectively manage and direct the change that is well upon the U.S. health care system. Challenges faced by health care professionals include low efficiency of delivery of care, low level of public accountability, unsustainable rate of rising cost of health care, quality and outcomes issues and the rising burden of chronic illness/disability.

Healthcare management engineering is the foundation of the new model for delivery of care. It is based on quantitative, engineering approach to analyzing, changing and improving the systems with complex interdependencies within hospitals and clinics. There is a visible increase in demand for healthcare management engineers, which are sometimes called performance engineers, process engineers, operation improvement or process improvement specialists. Yet, such specialists remain in short supply. They have to possess both the knowledge of engineering and mathematical disciplines and the knowledge of hospital and clinic operations.

While this book is not intended to serve as a college textbook, it provides the current state of affairs in methods and knowledge required today for the efficient healthcare management. This book can serve as the basis for both formal and informal education demonstrating a wide area of topics for the application of healthcare management engineering methodology.

On top of that, this book provides an international exposure to this challenging area. Researchers and healthcare practitioners not only from USA but also from Australia, Singapore, Japan, Italy, and Spain have contributed to this book. Despite different models of care delivery in these countries, the authors appreciate the power of healthcare management engineering and illustrate its use as a means of improving efficiency of care delivery and cost containment. These issues are not unique to USA, and international experience is instructive.

In summary, healthcare education system cannot afford to produce another generation of health care administrators and leaders in the current paradigm of traditional practice of management. This book contributes toward achieving the goal of producing that new generation.

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Ernie Yoder is currently Professor and Founding Dean, Central Michigan University College of Medicine. Prior to this, Dr. Yoder was Vice President for Medical Education and Research at St. John Health System and Clinical Professor of Medicine at Wayne State University School of Medicine. Ernie completed medical school at WSU in 1978, residency in internal medicine in 1981, and following a year as Chief Medical Resident, joined the WSU full time faculty. He completed his PhD in Education at WSU in 1997. Dr. Yoder has received many awards including the Association of American Medical colleges – CGEA Laureate, WSU – School of Medicine Academy of Scholars, and multiple times Best Doctors in America. His main clinical and academic efforts focus on improving primary care medical practice, medical education, educational program evaluation, evidence based medicine (EBM), and continuous quality improvement (CQI). He has published in these areas. Dr. Yoder has served on numerous Boards, including Governor for the MI Chapter of the American College of Physicians, a term on the Executive Committee of the ACP Board of Governors, Chair of the AAMC Central Group on Educational Affairs, and Chair for the AAMC-GEA Section on Undergraduate Medical Education. In 2006 Dr. Yoder was inducted as a Fellow of the Detroit Medical Academy, and in April 2010 was honored as a Master of the American College of Physicians. He was active in leading quality improvement studies and teaching CQI and EBM to students, residents, and faculty at St. John Health.