
David H. Gustafson, Ph.D., Professor

University of Michigan, Ann Arbor, MI	B.S.	1962	Industrial Engineering
University of Michigan, Ann Arbor, MI	M.S.	1963	Industrial Engineering
University of Michigan, Ann Arbor, MI	Ph.D.	1966	Industrial Engineering

Research and Professional Experience

Dr. Gustafson is a professor of Industrial Engineering and Preventive Medicine at the University of Wisconsin-Madison, and the founder of the Center for Health Systems Research and Analysis (CHSRA), a multi-disciplinary research center employing approximately 50 professionals. Dr. Gustafson was a W.K. Kellogg Fellow in Health Administration while at the University of Michigan. He is listed in Who's Who in America, received the 1988 Ragnar Onstad Service to Society Award from the University of Wisconsin and a Fellow of the Association for Health Science Research and the Institute for Healthcare Improvement. The BARN computer-based health promotion system, aimed at teenage risk taking behaviors, (he was the Principal Investigator) received the American Medical Association Award of Excellence for Education and Prevention.

His research and teaching interests focus on the application of expert systems, computer mediated communication, decision analysis and quality management to improve health and reduce the burden of illness.

Dr. Gustafson has been principal investigator on numerous grants in areas of health system development, evaluation and dissemination. He used utility theory to create severity index development methodologies and subsequently developed and tested severity indices for topics including: heart disease, head trauma, burns, psychiatric emergencies, and substance abuse. His research on suicide, with John Greist M.D., produced a computer based interview and diagnostic tool. Recognition for this research includes two awards for the best paper of the year. Gustafson also used statistical decision theory to create a method for measuring quality of care. He developed and tested, using that methodology, indices for long term care and psychiatric emergencies.

Dr. Gustafson's extensive experience in leading federally funded multi-site research studies includes being the Principal Investigator for (1) the Functional Task Analysis Project (a nine university collaborative study to study work in primary care practices, (2) the Quality Assurance Project which employed a randomized experimental design to evaluate a new long term care regulatory system in over 150 nursing homes in Wisconsin, Massachusetts and New York, (3) the Emergency Medical Services Evaluation Project which involved 55 hospitals in Maine and Wisconsin (4) the BARN Project which evaluated the impact of a computer based support system on the substance abuse, sexual activity, and emotional well being of teenagers in Madison, Chicago and New York City, and (5) the several projects evaluating the effect of CHES people in Madison, Milwaukee, and Chicago.

Dr. Gustafson is a member of the board of the Institute for Healthcare Improvement and the Institute for Interactive Health Communications, organizations dedicated to the promotion of quality in healthcare and universal access to health information systems. He has been an advisory and speaker to organizations in countries such as the United States, Canada, Australia and the United Kingdom.

Current efforts focus on development and evaluation of CHES, the Comprehensive Health Enhancement Support System, a computer system intended to help people in crisis. CHES integrates expert systems, computer mediated communication, data bases and interface design with the intent of improving quality of life, health related behavior and use of health services. He is the author of over 100 research articles and books. A selection of those references follow.

Selected publications

Shaw, B.R., Gustafson, D.H., McTavish, F., Hawkins, R., Pingree, S., "Experiences of Women with Breast Cancer: Exchanging Social Support over the CHES Computer Network", Journal of Health Communication 5, pp. 135-159, 2000.

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