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Education

School	Major Subject, Degree, and Date
Stanford University, Stanford, CA	Medical Information Sciences, Ph.D., 1998
Princeton University, Princeton, NJ	Mathematics, A.B., 1993

Research Experience

9/1999 – present	Assistant Professor (Research) in the Department of Medicine/ Center for Primary Care and Outcomes Research and in the Department of Health Research and Policy (by courtesy)
10/1998 – 8/1999	Acting Assistant Professor (Research) in the Department of Medicine/ Center for Primary Care and Outcomes Research
1998	Engineering Research Associate in the Department of Health Research and Policy, Division of Health Services Research.
1993 – 1998	Doctoral dissertation: “Automated creation of clinical-practice guidelines from decision models”. Primary advisor: Douglas Owens M.D., M.Sc. (Associate Professor of Medicine, Stanford University, Stanford, CA). Readers: Edward Shortliffe M.D., Ph.D. (Professor of Medicine, Stanford University, Stanford CA) and Robert Nease Jr. Ph.D. (Associate Professor of Medicine, Washington University, St. Louis, Missouri).
1994 – 2000	Research with Douglas Owens M.D., M.S. and Mark Hlatky M.D. (Professor and Chair of Health Research and Policy, Stanford University, Stanford, CA) as a member of the Cardiac Arrhythmia and Risk of Death Patient Outcomes Research Team (CARD PORT). Research includes decision modeling, methods for distributing decision models using a web-based interface, and development of guidelines for the screening and treatment of sudden cardiac death.
1994 – 1995	Research with Douglas Owens M.D., M.S. on the cost effectiveness of site-specific HIV screening and the use of computer-based interviews to assess patient preferences.
1994	Research with Max Henrion Ph.D. (Director of the Institute for Decision Systems Research, Palo Alto, CA) on the use of infinitesimal probabilities and their comparison with other methods of probabilistic reasoning.
1992 – 1993	Senior Thesis “The Use of Neural Networks and Back Propagation for the Screening of Magnetic Resonance Imaging Requests” (Princeton University, Princeton, NJ). Advisors: Elisha Sacks Ph.D. (Associate Professor of Computer Science, Princeton University, Princeton, NJ), and Hale Trotter Ph.D. (Professor of Mathematics, Princeton University, Princeton NJ)
1992	Research Assistant to Edward Lyons M.D. (Radiologist-in-chief, Health Sciences Centre, Winnipeg, Manitoba). Produced a report documenting the present diagnostic imaging policy for deep vein thrombosis along with a proposed management strategy to be implemented into the Radiology Department.

- 1991 Research Assistant to Edward Lyons M.D. and Charles Kahn Jr. M.D. (Associate Professor of Radiology and Health Services Research, Medical College of Wisconsin, Milwaukee, Wisconsin). Assisted with the development of the PHOENIX radiology expert system.
- 1989 Research Assistant to Edward Lyons M.D. and Charles Kahn Jr. M.D. Produced a study of the feasibility of completing the development of the PHOENIX radiology expert system, for Winthrop Diagnostic Imaging, Division of Sterling Drug Ltd., and the Health Sciences Centre, (Winnipeg, Manitoba).

Professional Experience

- 2002 Consultant for Celera Diagnostics (Alameda, CA)
- 1997 – 1998 Consultant for Technology Assessment Group (San Francisco, CA). Literature review, data analysis, and decision modeling for diagnosis of patients who present to the ER with suspected myocardial infarction.
- 1996 Consultant for Shelley Salpeter M.D. (Santa Clara Valley Medical Center) providing risk-benefit and cost-effectiveness decision modeling for the use of Isoniazid prophylaxis for tuberculin reactors over age 35.
- 1995 – 1996 Consultant for Technology Assessment Group (San Francisco, CA and Montreal, Quebec). Performed data analysis, and decision modeling for a budgetary impact study.

Honors and Awards

- 2001 Outstanding Paper by a Young Investigator, Society of Medical Decision Making (for: Sanders GD, Nease RF, Owens, DK. Design and pilot evaluation of a system to develop computer-based site-specific practice guidelines from decision models. Medical Decision Making 2000; 20:145-159)
- 1997 1st Place, Fifteenth annual Lee Lusted National Student Research Competition, Nineteenth Annual Meeting, Society for Medical Decision Making
- 1989-1993 Princeton University Scholarship
Unisys Canada Inc. National Merit Scholarship
John B. Lynch Scholarship

Research Interests

Cost-effectiveness analysis of chronic diseases and the automated translation of such evidence-based decision models into computer-based clinical-practice guidelines that can be tailored for specific patient populations or sites, or updated as the clinical evidence evolves.

Professional Memberships

Member, Society for Medical Decision Making
Member, American Medical Informatics Association
Member, Academy for Health Services Research and Health Policy
Member, Society of General Internal Medicine

Academic Service and Activities

- 1997 – Medical Informatics Interest Group (Group Leader), Society for Medical Decision Making
 1997 – Reviewer for *Medical Decision Making* Journal, *American Journal of Medicine*, *Lancet*, *Society of General Internal Medicine*, *JAMA*
- 1999 – Admissions committee, Medical Information Sciences Training Program, Stanford University
 1999 – 2002 Education Committee, Society for Medical Decision Making
 1999 – Publications Committee, Society for Medical Decision Making
 1999 – Web Editor, Society for Medical Decision Making
 1999 – 2001 AHRQ Study Section member, Health Care Technology and Decision Sciences
 2000 – 2002 Trustee, Society for Medical Decision Making
 2000 – 2003 Editorial Board, *Medical Decision Making* Journal
 2000 – Executive committee, Biomedical Informatics, Stanford University
 2001 AHRQ Special Emphasis Panel member, Patient Safety
 2001 – Doctoral dissertation qualifying examination committee, Biomedical Informatics, Stanford University
 2001 Co-chair, Society for Medical Decision Making Task Force on Cost-Effectiveness Analysis Reporting Guidelines
- 2003 Annual Meeting Co-chair abstract selection committee (Decision and Economic Analysis), *Society of General Internal Medicine*
- 2004 Chair, scientific review committee, 26th Annual Meeting of the Society for Medical Decision Making
 2005 Meeting chair, 27th Annual Meeting of the Society for Medical Decision Making

Selected Teaching Experience

- 2000 – 2002 Co-instructor, Economics 332, "Analysis of Costs, Risks, and Benefits in Health Care" (Stanford University, Stanford, CA).
- 2000 – 2002 "Introduction to Medical Decision Making" Stanford Medical Informatics Short Course. Stanford University, Stanford CA.
- 2000 "Medical informatics tools for clinical-practice guideline development" (short course) Twenty-second Annual Meeting, Society of Medical Decision Making; Cincinnati, OH.
- 1999 "Workshop on implementing cost-effectiveness analyses", Economics 332, "Analysis of Costs, Risks, and Benefits in Health Care" (Stanford University, Stanford, CA).
- 1999 "Introduction to Markov models for medical decision making", Economics 332, "Analysis of Costs, Risks, and Benefits in Health Care" (Stanford University, Stanford, CA).
- 1999 "Automated creation of clinical-practice guidelines from decision models", Medical Information Sciences 210, "Computer Applications in Medical Care" (Stanford University, Stanford, CA).
- 1999 "Medical informatics tools for clinical-practice guideline development" (short course) Twenty-first Annual Meeting, Society of Medical Decision Making; Reno, NV.
- 1997 "Automated creation of clinical-practice guidelines from decision models" Medical Information Science Short Course, Stanford University; Stanford, CA.
- 1997 "The use of medical informatics to develop and implement clinical-practice guidelines" (short course) Nineteenth Annual Meeting, Society of Medical Decision Making; Houston, TX
- 1996 Teaching Assistant to Edward Shortliffe M.D., Ph.D. for "Computer-Assisted Medical Decision Making" (Stanford University, Stanford, CA).
- 1995 Teaching Assistant to Larry Fagan M.D., Ph.D. (Associate Director, Medical Information Sciences Program) for "Computer Applications in Medical Care" (Stanford University, Stanford, CA).

Invited Lectures and Presentations

1. "A computer-based interview to identify HIV risk behaviors and to assess patient preferences for HIV-related health states" Eighteenth Annual Symposium on Computer Applications in Medical Care; Washington DC; October 1994.
2. "Prevention of sudden cardiac death: a probabilistic model for decision support" Nineteenth Annual Symposium on Computer Applications in Medical Care; New Orleans, Louisiana, October, 1995.
3. "Reflecting uncertainty in cost-effectiveness analysis" Section on Medical Informatics Seminar Series, Stanford University, Stanford, California, October, 1996.
4. "Presentation and explanation of medical decision models using the World Wide Web" Annual Fall Symposium, American Medical Informatics Association; Washington DC, October, 1996.
5. "Cost effectiveness of monitored isoniazid prophylaxis for low risk tuberculin reactors over age 35" (poster presentation) Nineteenth Annual Meeting, Society for Medical Decision Making; Houston, Texas, October, 1997.
6. "Distributed dynamic decision support using a web-based interface for prevention of sudden cardiac death" Nineteenth Annual Meeting, Society for Medical Decision Making; Houston, Texas, October, 1997.
7. "Cost effectiveness of implantable cardiac defibrillators (ICDs) after myocardial infarction (MI)." Nineteenth Annual Meeting, Society for Medical Decision Making; Houston, Texas, October, 1997.
8. "Automated creation of clinical-practice guidelines from decision models" Department of Ambulatory Care and Prevention, Harvard Medical School, February 1998.
9. "Automated creation of clinical-practice guidelines from decision models" VA Puget Sound Health Care System, HSR&D Field Program and the Department of Health Services, University of Washington, April 1998.
10. "Development and pilot evaluation of automated computer-based creation of site-specific clinical-practice guidelines from decision models." (poster presentation) Twentieth Annual Meeting, Society for Medical Decision Making; Boston, Massachusetts, October, 1998.
11. "Design and implementation of a computer-based system to annotate decision models for use in guideline development." Twentieth Annual Meeting, Society for Medical Decision Making; Boston, Massachusetts, October, 1998.
12. "Cost effectiveness of implantable cardioverter defibrillators and amiodarone after myocardial infarction." (poster presentation) American College of Cardiology 48th Annual Scientific Session; New Orleans, LA, March 1999.
13. "Use of decision models to extrapolate results from clinical trials: Cost effectiveness of the implantable cardioverter defibrillator (ICD). Twenty-first Annual Meeting, Society for Medical Decision Making, Reno, Nevada, October, 1999.
14. "Automated Development of Clinical-Practice Guidelines from Decision Models" Agency for Health Care Policy and Research Methods Conference, Arlington, Virginia, October 1999.
15. "Automated creation of clinical-practice guidelines from decision models" Stanford Department of Health Research and Policy Research in Progress Seminar; Stanford, CA: March 2000.
16. "Development of interactive web-based guidelines for prevention of sudden cardiac death" (poster presentation) North American Society for Pacing and Electrophysiology 21st Annual Scientific Meeting; Washington D.C.; May, 2000.
17. "Decision modeling for cost-effective analysis of diagnostic strategies" Department of Public Health Sciences. London, England: August 2000.

18. "Publishing web-based guidelines using interactive decision models". (poster presentation) American Medical Informatics Association Annual Fall Symposium; Los Angeles, CA; November 2000.
19. "Development and dissemination of computer-based guidelines to prevent sudden cardiac death" Stanford Department of Medicine Research Conference; Stanford, CA, December 2000.
20. "Cost effectiveness of a PET-FDG diagnostic strategy before hepatic resection for colorectal metastases" Stanford Department of Health Research and Policy Research in Progress Seminar; Stanford, CA; February 2001.
21. "Prevention of sudden cardiac death: Cost effectiveness of available treatments and of customizable computer-based guidelines" Department of Health Research and Policy: Biostat Workshop; Stanford, CA; February 2001.
22. "Translating evidence into clinical practice: Using decision models for guideline development and dissemination" Stanford Medical Informatics: Research Colloquia; Stanford, CA; April 2001.
23. "Introduction to medical decision making and decision analysis" Veterans Affairs Health Economics Resource Center Teleconference Series; Menlo Park, CA; May 2001.
24. "Cost effectiveness of a potential human papillomavirus vaccine" Stanford Department of Health Research and Policy Research in Progress Seminar, Stanford, CA; May 2001.
25. "Use of decision models in clinical-practice guideline development" (poster presentation) Academy for Health Services Research and Health Policy Annual Meeting, Atlanta, GA; June 2001.
26. "Cost effectiveness of a potential human papillomavirus vaccine" 19th International Papillomavirus Conference, Florianopolis, Brazil, September 2001.
27. "Cost effectiveness of a potential human papillomavirus vaccine" Twenty-third annual meeting, Society for Medical Decision Making; San Diego, California; October 2001.
28. "Implementing prevention guidelines: Practicing amid conflicting recommendations" Preventive Medicine 2002; San Antonio, Texas; February 2002.
29. "Cost effectiveness of a potential human papillomavirus vaccine" Second International Cervical Cancer Meeting; Houston, Texas; April 2002.
30. "Cost-effectiveness of vaccinating college freshmen against meningitis" Stanford Department of Health Research and Policy Research in Progress Seminar, Stanford CA, June 2002
31. "Evaluation of potential human papillomavirus vaccine rollout strategies using a dynamic transmission model" Stanford Department of Health Research and Policy Research in Progress Seminar, Stanford CA, June 2002
32. "Health Services Research 102: Integrating medical informatics and health services research" Stanford Department of Health Research and Policy Research in Progress Seminar, Stanford CA, July 2002.
33. "Automated customization of recommended strategies for management of solitary pulmonary nodules" (poster presentation) Twenty-fourth annual meeting, Society for Medical Decision Making; Baltimore, Maryland; October 2002.
34. "Automated and evidence-based site-specific guidelines for HIV screening" (poster presentation) Twenty-fourth annual meeting, Society for Medical Decision Making; Baltimore, Maryland; October 2002.
35. "Cost effectiveness of positron emission tomography (PET) before hepatic resection for colorectal metastases" Twenty-fourth annual meeting, Society for Medical Decision Making; Baltimore, Maryland; October 2002.

36. "Cost effectiveness of HIV screening in acute care settings in the era of highly active antiretroviral therapy"
Twenty-fourth annual meeting, Society for Medical Decision Making; Baltimore, Maryland; October 2002.

Grants and Awards

Completed

1. Cardiac Arrhythmia Patient Outcomes Research Team (PORT)
Principal Investigator: Mark A. Hlatky MD
Decision Analyst: Gillian D. Sanders, Ph.D.
Agency for Health Care and Policy Research (HS08362)
Period: 08/01/94 – 11/30/00
Total Award: \$6,015,512—\$3,728,700 (Direct), \$2,286,812 (Indirect)
The major goal of this project is to develop a comprehensive decision model for screening and treatment of patients at risk for sudden cardiac death.

2. An Economic Analysis of a Potential Vaccine Against *Coccidioides Immitis*
Principal Investigator: Douglas K. Owens MD, MS
Co-Investigator: Gillian D. Sanders, Ph.D.
California Department of Health Services (via the Valley Fever Vaccine Project)
Period: 05/01/99 – 10/30/99
Total Award: \$22,415 (total)
The major goal of this project is to develop a cost effectiveness analysis of a *C. immitis* vaccine that is currently under development.

3. A cost-benefit analysis of the fortification of grain with vitamin D and calcium for the prevention of osteoporosis
Principal Investigator: Gillian D. Sanders, Ph.D.
Iris F. Litt M.D. Fund, Stanford University
Period: 6/1/00-5/31/01
Total Award: \$2,900 (direct)
The major goal of this project is to examine the effectiveness of fortifying grain with vitamin D and calcium for the prevention of osteoporosis.

4. The development of a computer simulation model for the evaluation of diagnostic guidelines
Principal Investigator (Stanford Subcontract): Gillian D. Sanders, Ph.D.
Guy's, King's, and St. Thomas School of Medicine, London
Period: 04/01/99 – 03/31/2000
Total Award: \$56,680 (total)
The major goal of the prime grant (Michael Maisey MD, Principal Investigator) is to develop a modeling capacity using computer simulation to assess the clinical and cost effectiveness of different diagnostic guidelines for the investigation of common clinical situations. The goal of the Stanford subcontract is to develop a model to evaluate the cost effectiveness of a PET-FDG strategy before hepatic resection for colorectal metastases.

5. Economic Evaluation of the Wearable Cardioverter Defibrillator
Principal Investigator: Gillian D. Sanders Ph.D.
Berlex Laboratories, Inc.
Period: 10/01/00 – 4/30/01
The goal of this project is to evaluate the cost effectiveness of a wearable cardioverter defibrillator in post-myocardial infarction patients who have depressed left ventricular function.

6. Cost Effectiveness of and HPV Vaccine for Cervical Cancer
Principal Investigator: Gillian D. Sanders PhD
Stanford Cancer Council
Period: 10/1/00 -- 9/30/01
Total Award: \$50,000

The major goal of this project is to evaluate the cost effectiveness of a potential HPV vaccine to prevent cervical cancer

Ongoing

7. 18-F-Fluorodeoxyglucose (FDG) Positron Emission Tomography (PET) Imaging in Patients with Solitary Pulmonary Nodules: Economic Study

Principal Investigator: Paul Barnett PhD

Decision Analyst: Gillian D. Sanders, Ph.D.

Department of Veterans Affairs, Cooperative Studies Program

Period: 06/01/98 – 12/31/04

Total Award: \$377,500 (direct)

The major goal of this project is to evaluate the cost effectiveness of PET scanning for the diagnosis of solitary pulmonary nodules.

8. Identification of HIV Infection Among Veterans

Principal Investigator: Douglas K. Owens MD, MS

Co-Investigator: Gillian D. Sanders Ph.D.

Department of Veterans Affairs

Period: 10/1/99 – 9/31/03

Total Award: \$745,700 (direct)

The major goals of this project are to examine current testing practices for HIV in the VA and to develop a national guideline for screening for HIV in the VA.

9. Computer-Based Guidelines to Prevent Sudden Cardiac Death

Principal Investigator: Gillian D. Sanders Ph.D.

Agency for Healthcare Research and Quality

Period: 10/1/00 – 8/31/03

Total Award: \$648,031 (direct)

The major goal of this project is to extend our prior work on the automated creation of clinical-practice guidelines from evidence-based decision models, to create and validate a guideline based on the findings of the Cardiac Arrhythmia PORT, and to evaluate clinicians' use and satisfaction with the developed web-based guideline system. The project aims to improve access to decision-making tools and to foster appropriate use of medical evidence by providing a link between clinical-practice guidelines and decision models.

10. Optima: Tri-National Trial 1 (Options in Management with Anti-retrovirals): Economic Study

Decision Analyst: Gillian D. Sanders Ph.D.

Department of Veterans Affairs, Cooperative Studies Program

Period: 06/01/01 – 05/31/05

This is a tri-national (Canada, UK, USA) randomized controlled trial to determine the optimal management of patients with HIV infection for whom first and second-line highly active anti-retroviral therapy has failed. The economic study of the trial will look at the cost effectiveness of the different treatment strategies.

11. Making Better Decisions: Policy Modeling for AIDS and Drug Abuse

Co-investigator: Gillian D. Sanders Ph.D.

National Institute on Drug Abuse

Period: 7/1/02 – 6/30/07

Total Award: 3,163,554 (total costs)

The goal of this grant is to promote reasoned planning and policy making in the realm of HIV and substance abuse prevention via the development of mathematical and economic models.

12. Cost Effectiveness of Genetic Tests in Coronary Artery Disease

Principal Investigator: Gillian D. Sanders Ph.D.

National Institute on Aging

Period: 8/1/02-7/31/03

Total Award: \$33,435

The goal of this proposed research is to develop a model of coronary disease in the elderly that incorporates current treatment and prevention recommendations to evaluate the cost-effectiveness of genetic profiling in coronary disease management.

13. Cost Effectiveness of HIV Screening and Treatment in the Elderly

Co-Principal Investigator: Gillian D. Sanders Ph.D.

National Institute of Aging

Period: 10/1/02 – 9/30/03

Total Award: \$77,000 (direct)

The goal of this project is to address the cost effectiveness of both treatment and screening in the elderly in a variety of practice settings

14. Stanford-UCSF Evidence-Based Practice Center

Governing Council Member: Gillian D. Sanders Ph.D.

Agency for Healthcare Research and Quality

Period: 07/01/02 - 06/30/07

The goals of the contract are to provide an infrastructure for efficiently conducting systematic literature reviews, performing supplemental syntheses, and completing technology assessment and evidence reports of the highest quality.

Pending

15. Trial of Guidelines to Prevent Sudden Cardiac Death

Principal Investigator: Gillian D. Sanders Ph.D.

National Heart, Lung, and Blood Institute

Period: 7/1/03 – 6/30/07

Total Award: \$1,814,203 (direct)

The major goal of this project is to extend our prior work on the automated creation of clinical-practice guidelines from evidence-based decision models for the prevention of sudden cardiac death in the form of a randomized clinical trial. In completing our specific aims, we will accomplish the following: (1) assess, in diverse clinical environments, barriers to cardiologist adherence to a guideline for management of patients who have ventricular arrhythmias; (2) develop an innovative guideline intervention that uses guidelines that can be tailored to specific patients or populations and that are founded on evidence-based decision models; (3) evaluate the effects and cost-effectiveness of implementing such a guideline intervention into clinical practice; and (4) laid the groundwork for expanding this guideline intervention into additional clinical domains.

16. Computerized Decision Support for Managing Lung Nodules

Co-Principal Investigator: Gillian D. Sanders Ph.D.

Agency for Healthcare Research and Quality

Period: 12/1/03-11/30/06

Total Award: \$682,228 (direct)

The goal of this project is to extend previous work in which we developed and tested a computer-based decision support system that generates evidence-based, patient-specific recommendations for the management of sudden cardiac death in at-risk populations. In the proposed research, we adapt our system and evaluate its impact on the management of patients with solitary pulmonary nodules. We aim to demonstrate that decision support can improve both the efficiency of the diagnostic evaluation and clinical outcomes for patients with lung nodules.

BIBLIOGRAPHY

Journal Articles

1. **Sanders GD**, Lyons EA. The potential use of expert systems to enable physicians to order more cost-effective diagnostic imaging examinations. *Journal of Digital Imaging*, May 1991; 4(2): 112-122.
2. Kahn CE, **Sanders GD**, Lyons EA, Kostelic JK, MacEwan DW, Gordon WL. Computed tomography for nontraumatic headache: current utilization and cost-effectiveness. *Canadian Association of Radiologists Journal*. 1993 June 44(3): 189-93.
3. **Sanders GD**, Owens DK, Padian N, Cardinali, AB, Sullivan AN, Nease RF. A computer-based interview to identify HIV risk behaviors and to assess patient preferences for HIV-related health states. *Journal of the American Medical Informatics Association* 1994; Annual Supplement: 20-24.
4. **Sanders GD**, Harris RA, Hlatky MA, Owens DK. Prevention of sudden cardiac death: a probabilistic model for decision support. *Journal of the American Medical Informatics Association* 1995; Annual Supplement 258-262.
5. **Sanders GD**, Dembitzer AD, Heidenreich PA, McDonald KM, Owens DK. Presentation and explanation of medical decision models using the World Wide Web. *Journal of the American Medical Informatics Association* 1996; Annual Supplement: 60-64.
6. Owens DK, **Sanders GD**, Harris RA, McDonald KM, Heidenreich PA, Dembitzer AD, Hlatky MA. Cost effectiveness of implantable cardioverter defibrillators (ICDs) compared with amiodarone for prevention of sudden cardiac death. *Annals of Internal Medicine* 1997; 126: 1-12.
7. Salpeter SR, **Sanders GD**, Salpeter EE, Owens DK. Monitored isoniazid prophylaxis for low-risk tuberculin reactors over age 35: A risk-benefit and cost-effectiveness analysis. *Annals of Internal Medicine* 1997; 127:1051-1061.
8. Cheng CHF, **Sanders GD**, McDonald KM, Heidenreich PA, Hlatky MA, Owens DK. Design of a modular, extensible decision support system for arrhythmia therapy. *Journal of the American Medical Informatics Association* 1998; Annual Supplement: 693-697.
9. Gould MK, Dembitzer AD, **Sanders GD**, Garber AM. Low molecular weight heparins compared with unfractionated heparin for the treatment of acute deep vein thrombosis: A cost-effectiveness analysis. *Annals of Internal Medicine* 1999; 130:789-799.
10. **Sanders GD**, Hagerty CG, Sonnenberg FA, Hlatky MA, Owens DK. Distributed decision support for using a web-based interface: Prevention of sudden cardiac death. *Medical Decision Making* 1999; 19(2): 157-166.
11. McConnell LM, **Sanders GD**, Owens DK. Evaluation of genetic tests: APOE genotyping for the diagnosis of Alzheimer disease. *Genetic Testing* 1999; 3(1): 47-53.
12. **Sanders GD**, Nease RF, Owens, DK. Design and pilot evaluation of a system to develop computer-based site-specific practice guidelines from decision models. *Medical Decision Making* 2000; 20(2): 145-159. (Reprinted in the 2002 IMIA Yearbook of Medical Informatics)
13. Cheng CHF, **Sanders GD**, Hlatky MA, Heidenreich PA, McDonald KM, Lee BK, Larson MS, Owens DK. Cost effectiveness of radiofrequency ablation for supraventricular tachycardia. *Annals of Internal Medicine* 2000; 133(11): 864-876.
14. **Sanders GD**, Nease RF, Owens DK. Publishing web-based guidelines using interactive decision models. *Journal of Evaluation in Clinical Practice*. 2001; 7(2). 175-189.
15. Barnato AE, **Sanders GD**, Owens DK. Cost effectiveness of a potential vaccine for *Coccidioides immitis* Emerging Infectious Diseases. 2001; 7(5). 797-806.

16. **Sanders GD**, Hlatky MA, Every NE, McDonald KM, Heidenreich PA, Parsons LS, Owens DK. Cost effectiveness of prophylactic use of the implantable cardioverter defibrillator or amiodarone after myocardial infarction. *Annals of Internal Medicine*. 2001; 135: 870-883.
17. Groeneveld PW, Kwong JL, Lie Y, Rodriguez AJ, Jones MP, **Sanders GD**, Garber AM. The Cost-Effectiveness of Automated External Defibrillators on U.S. Airlines. *JAMA* 2001; 286(12): 1482-1489.
18. Sim I, **Sanders GD**, McDonald KM. Evidence-based practice for mere mortals: the role of informatics and health services research. *JGIM* 2002; 17: 302-308.
19. Haberland CA, Benitz WE, **Sanders GD**, Pietzsch JB, Yamada S, Nguyen L, Garber AM. Perinatal screening of group B strep: Cost-benefit analysis of rapid PCR. *Pediatrics* 2002;110 (3):471-80.
20. Owens DK, **Sanders GD**, Heidenreich PA, McDonald KM, Hlatky MA. Effect of risk stratification on the cost effectiveness of the implantable cardioverter defibrillator (ICD). *American Heart Journal* 2002;144(3):440-8.
21. **Sanders GD**, Taira AV. Potential cost-effectiveness of a HPV vaccine. *Emerging Infectious Diseases* 2003; 9(1): 37-48.
22. Gould MK, **Sanders GD**, Barnett PG, MacLean CC, Rydzak CE, McClellan MB, Owens DK. Cost-effectiveness of alternative management strategies for patients with solitary pulmonary nodules. *Annals of Internal Medicine* 2003 (in press).
23. Fowler RA, Hill-Popper M, Petrou C, Stasinis J, **Sanders GD**, Garber AM. Cost-effectiveness of recombinant human activated protein C in the treatment of patients with severe sepsis. *Journal of Critical Care* 2003 (in press).
24. Cantor SB, Fahs MC, Mandelblatt J, Meyers ER, **Sanders GD**. Decision science and cervical cancer. *Cancer* (in press).

Peer-Reviewed Conference Proceedings

1. Henrion M, Provan G, del Favero B, **Sanders GD**. An experimental comparison of numerical and qualitative probabilistic reasoning. *Proceedings of the Tenth Conference in Uncertainty in Artificial Intelligence*, Edited by Ramon Lopez de Mantaras and David Poole, Morgan Kaufmann Publishers, San Francisco, 1994: 319-326

Theses

1. **Sanders GD**. The Potential Use of Neural Networks and the Backpropagation Learning Algorithm in the Evaluation and Screening of Requests for Magnetic Resonance Imaging (MRI). Undergraduate Senior Thesis, Princeton Department of Mathematics (#3859). Princeton University, Princeton, NJ, April 1993.
2. **Sanders GD**. Automated creation of clinical-practice guidelines from decision models. Ph.D. Dissertation, Stanford Medical Informatics, SMI Report No. SMI-98-0712, Department of Computer Science Report No. STAN-CS-TR-98-1609. Stanford University, Stanford, CA. July 1998.

Abstracts

1. Owens DK, **Sanders GD**, Harris RA, McDonald KM, Hlatky MA. Cost-effectiveness of third-generation implantable cardioverter-defibrillators for prevention of sudden cardiac death. *Medical Decision Making* 1995;14:420.
2. Owens DK, **Sanders GD**, Heidenreich PA, McDonald KM, Dembitzer AD, Hlatky MA. Identification of patients at high risk for sudden cardiac death. *Medical Decision Making* 1996; 16:456.
3. Dembitzer A, **Sanders GD**, Owens DK. Medical management of BRCA-1 mutation carriers: A decision analysis of

- breast cancer detection and prevention strategies. *Medical Decision Making* 1996; 16:456.
4. Gould M, Dembitzer A, **Sanders G**, Large A, Milius MS, Garber A. Low molecular weight heparin for the treatment of acute deep vein thrombosis: A cost-effectiveness analysis; *JGIM* 1996; vol 11 suppl 1 p 58.
 5. **Sanders GD**, Every NR, McDonald KM, Parsons LS, Heidenreich PA, Hlatky MA, Owens DK. Cost effectiveness of implantable cardiac defibrillators (ICDs) after myocardial infarction (MI). *Medical Decision Making* 1997; 17(4): 531.
 6. **Sanders GD**, Hagerty CG, Sonnenberg FA, Hlatky MA, Owens DK. Distributed dynamic decision support using a web-based interface for prevention of sudden cardiac death. *Medical Decision Making* 1997; 17(4): 524.
 7. Salpeter SR, **Sanders GD**, Salpeter EE, Owens DK. Cost effectiveness of monitored isoniazid prophylaxis for low risk tuberculin reactors over age 35. *Medical Decision Making* 1997; 17(4): 521.
 8. Dembitzer AD, **Sanders GD**, Owens DK. Cost effectiveness of screening of breast cancer with BRCA1/BRCA2. *Medical Decision Making* 1997; 17(4): 531.
 9. **Sanders GD**, Nease RF, Owens, DK. Development and pilot evaluation of automated computer-based creation of site-specific clinical-practice guidelines from decision models. *Medical Decision Making* 1998; 18(4): 462.
 10. **Sanders GD**, Nease RF, Owens, DK. Design and implementation of a computer-based system to annotate decision models for use in guideline development. *Medical Decision Making* 1998; 18(4): 469.
 11. Cheng CHF, **Sanders GD**, Heidenreich PA, McDonald KM, Lee BK, Larson MS, Hlatky MA, Owens DK. Cost effectiveness of radiofrequency ablation for treatment of paroxysmal supraventricular tachycardias. *Medical Decision Making* 1998; 18(4): 458.
 12. **Sanders GD**, Every NR, McDonald KM, Parson LS, Heidenreich PA, Hlatky MA, Owens, DK. Cost effectiveness of implantable cardioverter defibrillators and amiodarone after myocardial infarction. *Journal of the American College of Cardiology* 1999; 33(2): Supplement A: 307A.
 13. **Sanders GD**, Hlatky MA, Heidenreich PA, McDonald KM, Owens DK. Use of decision models to extrapolate results from clinical trials: Cost effectiveness of the implantable cardioverter defibrillator (ICD). *Medical Decision Making* 1999; 19(4): 519
 14. Haug CJ, **Sanders GD**, Luu V, Cody SH, Barnato AE, Owens DK. Cost effectiveness of screening women for *chlamydia trachoma*. *Medical Decision Making* 1999; 19(4): 539
 15. Dembitzer AD, **Sanders GD**, Goldstein MK, Owens DK. Cost effectiveness of programs that screen for BRCA mutations in women. *Medical Decision Making* 1999; 19(4): 526
 16. Heidenreich PA, **Sanders GD**, Hlatky MA, McDonald KM, Owens DK. Cost effectiveness of screening survivors of myocardial infarction for prophylactic defibrillator implantation. *Medical Decision Making* 1999; 19(4): 519
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