

**DAVID C. CLASSEN, M.D.
CURRICULUM VITAE**

3/1/2013

I. PERSONAL DATA

A. Name: David Carey Classen, M.D., M.S.

II. EDUCATION

A. Baccalaureate Degree: 1978, University of Virginia, B.A.

B. Advanced Degree: 1982, University of Virginia, M.D.
1993, University of Utah, Masters of Medical Informatics

C. Resident Training and Fellowship Training

1982-83 Internship in Internal Medicine, University of Connecticut Hospitals,
Farmington, Connecticut

1983-85 Residency in Internal Medicine, University of Connecticut Hospitals,
Farmington, Connecticut

1985-86 Chief Resident in Internal Medicine, University of Connecticut
Hospitals, Farmington, Connecticut

1986-88 Clinical Fellow, University of Utah Medical School and LDS Hospital,
Salt Lake City, Utah

D. Specialty and Subspecialty Board Certifications

Diplomate, American Board of Internal Medicine, 1987

Diplomate, American Board of Infectious Disease, 1989

E. American College of Physician Executives

Completed Core Courses PIM I-III, 1997

III. PROFESSIONAL EXPERIENCE

A. Full-Time Positions

2012- to Present, Chief Medical Information Officer Pascal Metrics

2008- 2011 Senior Partner and Chief Medical Officer CSC

1999-2008 Vice President and Chief Medical Officer, First Consulting Group,

1988-99 Infectious Disease Physician, LDS Hospital, Salt Lake City, Utah

1989-94 Assistant Professor, Department of Medicine, University of Utah, Salt Lake City, Utah

1995- to Present, Associate Professor, Department of Medicine, University of Utah, Salt Lake City, Utah

2002- to Present, Infectious Disease Physician VAHCS, Salt Lake City, Utah

B. Part-Time Positions

1985-86 School Physician, Avon Old Farms School, Avon, Connecticut

C. Editorial Experience

Referee: American Journal of Epidemiology, Journal of the American Medical Association, Clinical Infectious Diseases, New England Journal of Medicine, BMJ Journal of Quality and Safety in Healthcare

D. Research Awards

Co-investigator, Evaluation of a Computerized Infectious Disease Monitor, National Center for Health Services Research-OASH. R18-HS 05319 (1986-88).

Co-investigator, Clinical Applications of an Expert System, National Center for Health Services Research-OASH. R18-HS 06028 (1989-92).

Lead Investigator on Robert Wood Johnson and California Healthcare Foundation Award for Development of an Inpatient Computerized Physician Order Entry Flight Simulator for The Leapfrog Group (2002-4)

Consultant, HS-02-010 Partnerships for Quality, Implementing Pediatric Patient Safety Practices, funded by the Agency for Healthcare Research and Quality, Paul J. Sharek, M.D., principal investigator, September 2002-2006.

Lead Investigator on Agency for Healthcare Quality and Research Contract for the Development of an Ambulatory Computerized Physician Order Entry Flight Simulator for The Leapfrog Group (2005-7)

Co-Investigator Agency for Healthcare Quality and Research Contract for the Development of an Computerized Physician Order Entry Flight Simulator for The Leapfrog Group (2008-9)

IV. SCHOLASTIC HONORS

LDS Hospital Teacher of the Year "Golden Apple Award" 1990.

Priscilla M. Mayden Award in Medical Informatics for Masters Thesis in Medical Informatics, 1993. Awarded through the American Medical Informatics Association.

Intermountain Health Care Researcher of the Year, 1997.

Pete Conrad Global Patient Safety Award 2012

V. ADMINISTRATIVE EXPERIENCE

Member, Housestaff Selection Committee, University of Connecticut, School of Medicine, 1982-1986

Member, Medical Housestaff Committee, University of Connecticut, School of Medicine, 1983-1986

Member, Pharmacy and Therapeutics Committee, LDS Hospital, 1986-1991

Member, Medical Records Committee, LDS Hospital, 1990-

Vice Chair, Institutional Review Board, LDS Hospital, 1990-1997.

Chair, Institutional Review Board, Urban Central Region, Intermountain Health Care, 1997-1999

Member, Medical Housestaff Committee, LDS Hospital, 1989-1999

Member, Library Committee, LDS Hospital, 1994-1996

Member, Task Force on Outcomes Research, Infectious Disease Society of America, 1993-1999

Member, Clinical Quality Executive Task Force, Intermountain Health Care, 1995-1999

Chairman, Clinical Quality Committee Drug Use, Management and Education, Intermountain Health Care, 1994-1999

Member, Executive Task Force on Clinical Integration, Intermountain Healthcare, 1995-1999

Member, Intermountain Health Care Corporate Pharmacy and Therapeutic Committee, 1996-1999

Member, Salt Lake City Olympic Committee, Medical Branch, 1998-1999

Consultant, Outpatient Clinical Workstation Project, Intermountain Health Care, 1995-1999

Member, Intermountain Health Care Clinical Epidemiology Working Group, 1995-1999

Member, Hospital Professional Technical Advisory Council (Representing American College of Physicians) Joint Commission on Accreditation of Healthcare Organization, 1997-2003.

Chair, Utah Statewide Collaborative on Adverse Drug Event Reduction Sponsored by Health Insight (Utah Peer Review Organization) 1998

Chair, Institute for Healthcare Improvement (IHI)/Quality Interagency Task Force (QUIC) Federal Patient Safety Collaborative on Improving Patient Safety in High Hazard Areas (2000)

Faculty Member, Institute for Healthcare Improvement (IHI) Patient Safety Collaborative—Quantum Leaps in Patient Safety (2000-2002)

Member, Institute of Medicine Committee on Envisioning the National Healthcare Quality Report (2000-2001)

Member, Medicare Patient Safety Monitoring System Technical Advisory Panel (2002-8)

Member, Institute of Medicine Committee on Patient Safety Data Standards (2002-2003)

Co-Chair, Institute for Healthcare Improvement (IHI) Patient Safety Collaborative—Perioperative Safety Collaborative (2003-2004)

Chair, Institute for Healthcare Improvement (IHI) Surgical Site Infection Patient Safety Collaborative (2004-2005)

Senior Faculty Institute for Healthcare Improvement (IHI) Safer Patients Initiative in the United Kingdom National Health Service sponsored by the National Health Foundation (2005-7)

Co Chair National Quality Forum's Patient Safety Taxonomy Steering Committee. (2004-2006)

Co Chair National Quality Forum's Patient Safety Consensus Standards Maintenance Committee (2005-8)

Member National Quality Forum's Consensus Standards Maintenance Methods Committee (2006-8)

Co Chair Health Level 7 Pediatric Standards Workgroup (2003-2012)

Co Chair National Quality Forum's Patient Safety Taxonomy and Common Format Methods Committee (2008-Present)

Member Institute of Medicine Committee on HIT and Patient Safety 2010-2012

VIII. MEMBERSHIP IN PROFESSIONAL SOCIETIES

American College of Physicians
American Medical Association
American Medical Informatics Association
Infectious Disease Society of America
The Society for Hospital Epidemiology of America, Inc.

IX. TEACHING RESPONSIBILITIES/ASSIGNMENTS

Infectious Disease Attending, LDS Hospital
Supervise Fourth Year Students, Residents, Fellows - 1988-1999 average 4 1/2 months
per year

General Internal Medicine Attending, LDS Hospital - 1989-1999 average 4-6 weeks per
year

General Internal Medicine Morning Report, LDS Hospital - 1989-1999 average 4 weeks
per year

General Internal Medicine Curriculum Reform Task Force, LDS Hospital - 1997-99

General Internal Medicine Attending Salt Lake City VA Healthcare System - 2002-Present

Infectious Disease Attending Salt Lake VA Healthcare System - 2002-Present

BIBLIOGRAPHY

I. JOURNAL ARTICLES

1. Classen DC, Morningstar JL, Shanley JD. Detection of antibody to murine cytomegalovirus by Elisa and indirect immunofluorescence. *J Clin Micro* 1987; 25:604-15.
2. Manu PC, Matthews DA, Classen DC, Goodspeed RN. Medical subspecialty training and interest in cost containment education. *J Gen Int Med* 1987;2:229-31.
3. Evans RS, Gardner RM, Burke JP, Pestotnik SL, Larsen RA, Classen DC, Clayton PD. A computerized approach to monitor prophylactic antibiotics. *SCAMC* 1987;11:241-5.
4. Matthews DA, Classen DC, Willms JL, Cotton JP. A program to help interns cope with stresses in an internal medicine residency. *J Med Ed* 1988; 63:539-47.
5. Classen DC, Jacobson JA, Burke JP, Jacobson JT, Evans RS. Serious pseudomonas infections associated with endoscopic retrograde cholangiopancreatography. *Am J Med* 1988;84:590-6.
6. Classen DC, Burke JP, Smith CB. Treatment of coccidioidal meningitis with fluconazole. *J Infect Dis* 1988;158:903-4.
7. Larsen RA, Evans RS, Burke JP, Pestotnik SL, Gardner RM, Classen DC. Improved preoperative antibiotic use and reduced surgical wound infections through use of computer decision analysis. *Infect Control Hosp Epidemiol* 1989; 10:316-20.
8. Pestotnik SL, Evans RS, Burke JP, Gardner RM, Classen DC. Therapeutic antibiotic monitoring: surveillance using a computerized expert system. *Am J Med* 1990;88:43-8.
9. Kernodle DS, Classen DC, Burke JP, Kaiser AB. Failure of cephalosporins to prevent *Staphylococcus aureus* surgical wound infections. *JAMA* 1990;263:961-6.
10. Evans RS, Pestotnik SL, Burke JP, Gardner RM, Larsen RA, Classen DC. Reducing the duration of prophylactic antibiotic use through computer monitoring of surgical patients. *DICP/The Annals of Pharmacotherapy* 1990;24:351-4.
11. Classen DC, Burke JP, Ford CD, Evershed S, Aloia MR, Wilfahrt JK, Elliott JA. *Streptococcus mitis* sepsis in bone marrow transplant patients receiving oral antimicrobial prophylaxis. *Am J Med* 1990;89:441-6.
12. Evans RS, Burke JP, Pestotnik SL, Classen DC, Menlove RL, Gardner RM. Prediction of hospital infections and selection of antibiotics using an automated hospital database. *SCAMC* 1990;14:663-7.

13. Classen DC, Burke JP, Pestotnik SL, Evans RS, Stevens LE. Surveillance for quality assessment IV. Surveillance using a hospital information system. *Infect Control Hosp Epidemiol* 1991;12:239-44.
14. Classen DC, Larsen RA, Burke JP, Alling DW, Stevens LE. Daily meatal care for prevention of catheter-associated bacteriuria: Results using frequent applications of poly-antibiotic cream. *Infect Control Hosp Epidemiol* 1991;12:157-62.
15. Classen DC, Larsen RA, Burke JP, Stevens LE. Prevention of catheter-associated bacteriuria: Clinical trial of methods to block three known pathways of infection. *Am J Infect Control* 1991;19:136-42.
16. Burke JP, Classen DC, Pestotnik SL, Evans RS, Stevens LE. The HELP system and its application to infection control. *J Hosp Infect* 1991;18 (suppl A):424-31.
17. Classen DC, Pestotnik SL, Evans RS, Burke JP. Computerized surveillance of adverse drug events in hospital patients. *JAMA* 1991;266:2847-51.
18. Evans RS, Pestotnik SL, Classen DC, Bass SB, Menlove RL, Burke JP. Development of a computerized adverse drug event monitor. *Proceedings from the Fifteenth Annual Symposium on Computer Applications in Medical Care*. pp 23-27, 1991.
19. Huth TS, Burke JP, Larsen RA, Classen DC, Stevens LE. Randomized trial of meatal care with silver sulfadiazine cream for the prevention of catheter-associated bacteriuria. *J Infect Dis* 1992;165:14-18.
20. Classen DC, Evans RS, Pestotnik SL, Burke JP. The timing of prophylactic administration of antibiotics and the risk of surgical-wound infection. *N Engl J Med* 1992;326:281-6.
21. Evans RS, Burke JP, Classen DC, Gardner RM, Menlove RL, Goodrich KM, Stevens LE, Pestotnik SL. Computerized identification of patients at high risk for hospital-acquired infections. *Am J Infect Control* 1992;20:4-10.
22. Huth TS, Burke JP, Larsen RA, Classen DC, Stevens LE. Clinical trial of junction seals for the prevention of urinary catheter-associated bacteriuria. *Arch Intern Med* 1992;152:807-12.
23. Classen DC, Pestotnik SL, Evans RS, Stevens LE, Burke JP. Intensive surveillance of midazolam use in hospital patients and the occurrence of cardiorespiratory arrest. *Pharmacotherapy* 1992;12:213-6.
24. Classen DC, Pestotnik SL, Evans RS, Burke JP. Description of a computerized adverse drug event monitor using a hospital information system. *Hosp Pharm* 1992;27:774,776-779,783.
25. Evans RS, Pestotnik SL, Classen DC, Bass SB, Burke JP. Prevention of adverse drug events through computerized surveillance. *Proceedings from the Sixteenth Annual Symposium on Computer Applications in Medical Care*, 1992, pp 437-41.

26. Evans RS, Pestotnik SL, Classen DC, Burke JP. Development of an automated antibiotic consultant. *MD Computing* 1993;10:17-22.
27. Pestotnik SL, Classen DC, Evans RS, Stevens LE, Burke JP. Prospective surveillance of imipenem/cilastatin use and associated seizures using a hospital information system. *Ann Pharmacother* 1993;27:497-501.
28. Evans TG, Mayer J, Cotten S, Classen D, Carrol K. Fluconazole failure in the treatment of invasive mycoses. *J Infect Dis* 1991;164:1232-5.
29. Evans RS, Classen DC, Stevens LE, Pestotnik SL, Gardner RM, Lloyd JF, Burke JP. Using a hospital information system to assess the effects of adverse drug events. *Proceedings from the Seventeenth Annual Symposium on Computer Applications in Medical Care*, 1993, pp 161-5.
30. Evans RS, Pestotnik SL, Classen DC, Horn SD, Bass SB, Burke JP. Preventing adverse drug events in hospitalized patients. *Ann Pharmacother* 1994;28:523-7.
31. Evans RS, Classen DC, Pestotnik SL, Lundsgaard HP, Burke JP. Improving empiric antibiotic selection using computer decision support. *Arch Intern Med* 1994;154:878-4.
32. Classen DC. Information management in infectious diseases: survival of the fittest. *Clin Infect Dis* 1994;19:902-9.
33. Riley DK, Classen DC, Stevens LE, Burke JP. A large randomized clinical trial of a silver-impregnated urinary catheter: lack of efficacy and staphylococcal superinfection. *Am J Med* 1995;98:349-56.
34. Burke JP, Pestotnik SL, Classen DC, Lloyd JF. A retrospective analysis of twice-daily cefotaxime compared to conventional therapy for the treatment of infections in a USA hospital. *Diagn Microbiol Infect Dis* 1995;22:167-9.
35. Burgert SJ, Classen DC, Burke JP, Blatter DD. Candida brain abscess associated with vascular invasion; a devastating complication of vascular catheter-related candidemia. *Clin Infect Dis* 1995;21:202-5.
36. Burgert SJ, Classen DC, Burke JP, Veasy LG. Rheumatic pneumonia: reappearance of a previously recognized complication of acute rheumatic fever: case report and review, *Clin Infect Dis* 1995;21:1020-2.
37. Evans RS, Classen DC, Pestotnik SL, Clemmer TP, Weaver LK, Burke JP. A decision support tool for antibiotic therapy. *SCAMC* 1995;19:651-5.
38. Burke JP, Pestotnik SL, Classen DC, Lloyd JF. Evaluation of the financial impact of ketorolac tromethamine therapy in hospitalized patients. *Clin Therap* 1996;18:197-211.
39. Pestotnik SL, Classen DC, Evans RS, Burke JP. Implementing antibiotic practice guidelines through computer-assisted decision support: clinical and financial outcomes. *Ann Intern Med* 1996;124:884-90.

40. Classen DC, Pestotnik SL, Evans RS, Lloyd JF, Burke JP. Adverse drug events in hospitalized patients. Excess length of stay, extra costs, and attributable mortality. *JAMA* 1997;277:301-6.
41. Classen DC, Burke JP, Wenzel RP. Infectious diseases consultation: impact on outcomes for hospitalized patients and results of a preliminary study. *Clin Infect Dis* 1997;24(3):468-70.
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43. Classen DC, Classen JB. The timing of pediatric immunization and the risk of insulin-dependent diabetes. *Infect Dis in Clin Prac* 1997;6:449-54.
44. Kernodle DS, Classen DC, Stratton CW, Kaiser AB. Association of borderline oxacillin-susceptible strains of Staphylococcus aureus with surgical wound infections. *J Clin Microbiol* 1998;36:219-22.
45. Evans RS, Pestotnik SL, Classen DC, Clemmer TP, Weaver LK, Orme JF Jr, Lloyd JF, Burke JP. A computer-assisted management program for antibiotics and other antiinfective agents. *N Engl J Med* 1998;338:232-8.
46. Ford CD, Reilly W, Wood J, Classen DC, Burke JP. Oral antimicrobial prophylaxis in bone marrow transplant recipients: randomized trial of ciprofloxacin versus ciprofloxacin-vancomycin. *Antimicrob Agents Chemother* 1998;42:1402-5.
47. Classen DC, Clinical Decision Support Systems to Improve Clinical Practice and Quality of Care (Editorial) *JAMA* 1998;280:1360-1.
48. Classen DC, Burke JP, Pestotnik SL, Lloyd JF. Clinical and financial impact of intravenous erythromycin therapy in hospitalized patients. *Ann Pharmacother* 1999;33:669-73.
49. Evans RS, Pestotnik SL, Classen DC, Burke JP. Evaluation of a computer-assisted antibiotic-dose monitor. *Ann Pharmacotherapy* 1999;33:1026-31.
50. McKellar SH, Allred BD, Marks JD, Cowley CG, Classen DC, Gardner SC, Long JW. Treatment of infected left ventricular assist device using antibiotic-impregnated beads. *Ann Thorac Surg.* 1999 Feb;67(2):554-5.
51. Classen DC, Kilbridge PM. The roles and responsibilities of physicians to improve patient safety within healthcare delivery systems. *Acad Med.* 2002 ;77:963-72.
52. Classen DC. Medication Safety: Moving from Illusion to Reality. (Editorial) *JAMA* 2003;289:1154-56.
53. Stablein D, Welebob E, Johnson E, Metzger J, Burgess R, Classen DC. Understanding hospital readiness for computerized physician order entry. *Jt Comm J Qual Saf* 2003 29 (7):336-44.

54. Classen DC, Metzger JM. Improving medication safety: the measurement conundrum and where to start. *IntJQualHealthCare*.2003Dec;15Suppl1:i41-7.
55. Resar RK, Rozich JD, Classen DC. Methodology and rationale for the measurement of harm with trigger tools. *Qual Saf Health Care* 2003;12(suppl II):ii39-ii45.
56. Classen D. Grasping the opportunity to improve the safety of care. *Healthc Pap*. 2004;5(3):43-6; discussion 82-4.\
57. Classen DC, Pestotnik SL, Evans RS, Burke JP. Computerized surveillance of adverse drug events in hospital patients. 1991. *Qual Saf Health Care*. 2005 Jun;14(3):221-5; discussion 225-6.
58. Classen DC, Kanhouwa M, Will D, Casper J, Lewin J, Walker J. The patient safety institute demonstration project: a model for implementing a local health information infrastructure. *J Health Inf Manag*. 2005 Fall;19(4):75-86.
59. Longhurst C, Sharek P, Hahn J, Sullivan J, Classen D. Perceived increase in mortality after process and policy changes implemented with computerized physician order entry. *Pediatrics*. 2006 Apr;117(4):1450-1; author reply 1455-6.
60. Kilbridge P, Welebob E, Classen DC. Development of the leapfrog methodology for evaluating hospital implemented inpatient computerized physician order entry systems *Qual. Saf. Health Care* 2006;15:81-84.
61. Kilbridge P, Classen DC. Automated surveillance for adverse events in hospitalized patients: back to the future. (Editorial) *Qual Saf Health Care*. 2006 Jun;15(3):148-9.
62. Sharek PJ, Classen D. The incidence of adverse events and medical error in pediatrics. *Pediatr Clin North Am*. 2006 Dec;53(6):1067-77.
63. Sharek PJ, Horbar JD, Mason W, Bisarya H, Thurm CW, Suresh G, Gray JE, Edwards WH, Goldmann D, Classen D. Adverse events in the neonatal intensive care unit: development, testing, and findings of an NICU-focused trigger tool to identify harm in North American NICUs. *Pediatrics*. 2006 Oct;118(4):1332-40.
64. Kilbridge P, Bates DW, Classen DC, Denham C. The National Quality Forum Safe Practice Standard for Computerized Physician Order Entry: Updating Critical Patient Safety Practice. *J Patient Saf & Volume 2, Number 4, December 2006*
65. Classen DC, Avery TA, Bates DW. Evaluation and Certification of Computerized Physician Order Entry Systems. *JAMIA* Jan-Feb;14(1):48-55.
66. Thompson D, Classen D, Bisordi J, Novogoratz S, Garrido T, Zywiak W, "The Value of Vendor-Reported Ambulatory EMR Benefits Data" *Healthc Financ Manage*. 2007 Apr;61(4):82-6
67. Thompson DI, Osheroff J, Classen D, Sittig DF. A review of methods to estimate the benefits of electronic medical records in hospitals and the need for a national benefits database. *J Healthc Inf Manag*. 2007 Winter;21(1):62-8

68. Kuperman GJ, Bobb A, Payne TH, Avery AJ, Gandhi TK, Burns G, Classen DC, Bates DW Medication-related clinical decision support in computerized provider order entry systems: a review. *J Am Med Inform Assoc.* 2007 Jan-Feb;14(1):29-40.
69. Thompson DI, Classen DC, Haug PJ. EMRs in the Fourth Stage The Future of Electronic Medical Records Based on the Experience at Intermountain Health Care. *JHIM* 2007: 21:40-60.
70. Griffin FA, Classen DC. Detection of adverse events in surgical patients using the Trigger Tool approach. *Qual Saf Health Care.* 2008 Aug;17(4):253-8.
71. Classen DC. The quality of pediatric care--how will we cross the chasm? *J Healthc Qual.* 2008 May-Jun;30(3):4-6, 27. *J Healthc Qual.* 2008 May-Jun;30(3):4-6, 27.
72. Kilbridge PM, Classen DC. The informatics opportunities at the intersection of patient safety and clinical informatics. *J Am Med Inform Assoc.* 2008 Jul-Aug;15(4):397-407. Epub 2008 Apr 24.
73. Classen DC, Lloyd RC, Provost L, Griffin FA, Resar R. Development and Evaluation of the Institute for Healthcare Improvement Global Trigger Tool. *J Patient Saf* 2008. 4(3), 169-77.
74. Dubberke ER, Gerding DN, Classen D, Arias KM, Podgorny K, Anderson DJ, Burstin H, Calfee DP, Coffin SE, Fraser V, Griffin FA, Gross P, Kaye KS, Klompas M, Lo E, Marschall J, Mermel LA, Nicolle L, Pegues DA, Perl TM, Saint S, Salgado CD, Weinstein RA, Wise R, Yokoe DS. Strategies to prevent clostridium difficile infections in acute care hospitals. *Infect Control Hosp Epidemiol.* 2008 Oct;29 Suppl 1:S81-92.
75. Calfee DP, Salgado CD, Classen D, Arias KM, Podgorny K, Anderson DJ, Burstin H, Coffin SE, Dubberke ER, Fraser V, Gerding DN, Griffin FA, Gross P, Kaye KS, Klompas M, Lo E, Marschall J, Mermel LA, Nicolle L, Pegues DA, Perl TM, Saint S, Weinstein RA, Wise R, Yokoe DS. Strategies to prevent transmission of methicillin-resistant *Staphylococcus aureus* in acute care hospitals. *Infect Control Hosp Epidemiol.* 2008 Oct;29 Suppl 1:S62-80.
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79. Marschall J, Mermel LA, Classen D, Arias KM, Podgorny K, Anderson DJ, Burstin H, Calfee DP, Coffin SE, Dubberke ER, Fraser V, Gerding DN, Griffin FA, Gross P, Kaye KS, Klompas M, Lo E, Nicolle L, Pegues DA, Perl TM, Saint S, Salgado CD, Weinstein RA, Wise R, Yokoe DS. Strategies to prevent central line-associated bloodstream infections in acute care hospitals. *Infect Control Hosp Epidemiol*. 2008 Oct;29 Suppl 1:S22-30.
80. Yokoe DS, Mermel LA, Anderson DJ, Arias KM, Burstin H, Calfee DP, Coffin SE, Dubberke ER, Fraser V, Gerding DN, Griffin FA, Gross P, Kaye KS, Klompas M, Lo E, Marschall J, Nicolle L, Pegues DA, Perl TM, Podgorny K, Saint S, Salgado CD, Weinstein RA, Wise R, Classen D. A compendium of strategies to prevent healthcare-associated infections in acute care hospitals. *Infect Control Hosp Epidemiol*. 2008 Oct;29 Suppl 1:S12-21.
81. Yokoe DS, Classen D. Improving patient safety through infection control: a new healthcare imperative. *Infect Control Hosp Epidemiol*. 2008 Oct;29 Suppl 1:S3-11.
82. Spooner SA, Classen DC. Data standards and improvement of quality and safety in child health care. *Pediatrics*. 2009 Jan;123 Suppl 2:S74-9.
83. Troiano D, Morrison J, Federico F, Classen D. Safely automating the medication use process. Not as easy as it looks. *J Healthc Inf Manag*. 2009 Fall;23(4):17-23.
84. Classen DC, Jaser L, Budnitz DS. Adverse drug events among hospitalized Medicare patients: epidemiology and national estimates from a new approach to surveillance. *Jt Comm J Qual Patient Saf*. 2010 Jan;36(1):12-21.
85. Sittig DF, Classen DC. Safe electronic health record use requires a comprehensive monitoring and evaluation framework. *JAMA*. 2010 Feb 3;303(5):450-1.
86. Agarwal S, Classen D, Larsen G, Tofil NM, Hayes LW, Sullivan JE, Storgion SA, Coopes BJ, Craig V, Jaderlund C, Bisarya H, Parast L, Sharek P Prevalence of adverse events in pediatric ICUs in the United States**Pediatr Crit Care Med*. 2010 Mar 19.
87. Classen DC, Bates DW, Denham C. Meaningful Use Of Computerized Physician Order Entry. *J Patient Saf* 2010 Mar (1):15-23.
88. Metzger J, Welebob E, Levitz S, Bates D, Classen DC. Meaningful Use of EHRs and CPOE to Improve Medication Safety. *Health Affairs* 2010 29:4;1-8
89. Sittig DF, Classen DC. Safe electronic health record use requires a comprehensive monitoring and evaluation framework. *JAMA*. 2010 Feb 3;303(5):450-1.
90. Agarwal S, Classen D, Larsen G, Tofil NM, Hayes LW, Sullivan JE, Storgion SA, Coopes BJ, Craig V, Jaderlund C, Bisarya H, Parast L, Sharek P Prevalence of

- adverse events in pediatric ICUs in the United States**Pediatr Crit Care Med.* 2010 Mar 19.
91. Palma JP, Paul J, Sharek PJ, David C. Classen DC, Longhurst CA. Neonatal Informatics: Computerized Physician Order Entry. *Neoreviews.* 2011; 12: 393–396. doi: 10.1542/neo.12-7-e393
 92. Classen DC, Resar R, Griffin F, Federico F, Frankel T, Kimmel N, Whittington JC, Frankel A, Seger A, James BC. 'Global trigger tool' shows that adverse events in hospitals may be ten times greater than previously measured. *Health Aff (Millwood).* 2011 Apr;30(4):581-9. Erratum in: *Health Aff (Millwood).* 2011 Jun;30(6):1217.
 93. Classen DC, Phansalkar S, Bates DW. Critical drug-drug interactions for use in electronic health records systems with computerized physician order entry: review of leading approaches. *J Patient Saf.* 2011 Jun;7(2):61-5.
 94. Classen DC, Bates DW. Finding the meaning in meaningful use. *N Engl J Med.* 2011 Sep 1;365(9):855-8.
 95. Jha AK, Classen DC. Getting moving on patient safety--harnessing electronic data for safer care. *N Engl J Med.* 2011 Nov 10;365(19):1756-8.
 96. Singh H, Classen DC, Sittig DF. Creating an oversight infrastructure for electronic health record-related patient safety hazards. *J Patient Saf.* 2011 Dec;7(4):169-74.
 97. Wynia MK, Classen DC. Improving ambulatory patient safety: learning from the last decade, moving ahead in the next. *JAMA.* 2011 Dec 14;306(22):2504-5.
 98. Christian G, Classen D, Griffin FA. Leadership best practices to prevent hospital-associated infections *J Patient Saf.* 2012 Sep;8(3):144-8.
 99. Denham CR , Classen DC , Swensen SJ , Henderson JM , Zeltner TB , Bates DW Safe use of electronic health records and health information technology systems: trust but verify *J Patient Saf* 2013 9:

II. INVITED and REVIEW ARTICLES and other PUBLICATIONS

1. Classen DC, Burke JP. The computer-based patient record: The role of the hospital epidemiologist. *Infect Control Hosp Epidemiol* 1995;16:729-36.
2. Classen DC. Patient safety: thy name is quality. *Trustee.* 2000;53(10):12-15.
3. Kilbridge P, Welebob E, Classen DC. Overview of the Leapfrog Group Evaluation Tool for Computerized Physician Order Entry. 2001. The Leapfrog Group and First Consulting Group
4. Kilbridge P, Classen DC. Surveillance for Adverse Drug Events: History, Methods and Current Issues. [3]. 2002. Irving, TX, VHA Inc. VHA Research Series. VHA Inc.

5. First Consulting Group. Computerized Physician Order Entry: Costs, Benefits and Challenges, A Case Study Approach commission by the American Hospital Association and the Federation of American Hospitals 2003 Chicago American Hospital Association

III. LETTERS AND OTHER PUBLICATIONS

1. Matthews DA, Classen DC, Manu P. Interest in preventive medicine among housestaff and faculty members in internal medicine. *Ann Intern Med* 1985;103.
2. Kernodle DS, Classen DC, Burke JP, Kaiser AB. Failure of cephalosporins to prevent Staphylococcus aureus surgical wound infections. *The Yearbook of Infectious Diseases*, Chicago, Mosby-Yearbook Inc., 1991;267-8.
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7. Evans TG, Mayer J, Cottens, Classen D, Carrol K. Fluconazole failure in the treatment of invasive mycoses. *Yearbook of Infectious Diseases*, Chicago, Mosbey-Yearbook Inc., 1993:145-6.
8. Burke JP, Classen DC, Pestotnik SL, Evans RS, Lloyd JF. Adverse drug events in hospitalized patients [reply to letters to the editor]. *JAMA* 1997;277:1351-4.
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IV. BOOKS AND BOOK CHAPTERS

1. Classen DC and Smith CB. Management of herpes simplex and herpes zoster infections. In Selected Topics in General Internal Medicine, WB Saunders, Philadelphia, Pennsylvania, 1988.

2. Burke JP, Classen DC. Urinary catheter-associated infection. In Current Therapy in Infectious Disease 3, edited by Kass EH, Platt R. BC Decker Inc, Philadelphia, 1990:393-6.
3. Flinner RL, Classen DC. Infections in transplanted patients in major problems in pathology: Pathology of solid allografts, edited by Hammond EH. WB Saunders, Philadelphia, Pennsylvania, 1994.
4. Classen DC, Pestotnik SL. Computer-based medical records in hospital epidemiology and infection control, edited by Mayhall CG. WB Saunders, Philadelphia, Pennsylvania, 1994.
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6. Classen DC, Pestotnik SL. Computerized methods for institution wide antibiotic management programs. In Case Studies in the Organizational Aspects of Health Informatics, edited by Hannah K, Ball M. Springer-Verlag. New York, 1995:322-32.
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8. Classen DC, Burke JP. The computer-based patient record: the role of the hospital epidemiologist. In A Practical handbook for Hospital Epidemiologists, edited by Herwaldt LA, Decker MD. Slack Inc., New Jersey, 1998.
9. Classen DC, Tettlebach W. The computer-based patient record: An essential technology for hospital epidemiology. In Hospital Epidemiology and Infection Control, edited by Mahall GC. Williams & Wilkins. Baltimore, 2004.

V. ABSTRACTS

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2. Matthews DA and Classen DC. Personal and professional development during residency training, a pilot program. Presented at the 9th National SREPCIM Meeting, Washington, DC, May 1985.
3. Classen DC, Jacobson JA, Jacobson JT, Burke JP. Outbreak of serious pseudomonas infections associated with endoscopic retrograde cholangiopancreatography. Presented at the Annual Meeting of the Western Section, American Federation for Clinical Research, Carmel, California, 5 February 1987. *Clin Res* 1987;35:130A.
4. Classen DC, Johnston JF, Amber IA, Watson FD. Treatment of serious cytomegalovirus infections in heart transplant patients with DHPG. Presented at the 27th Interscience Conference on Antimicrobial Agents and Chemotherapy, New York, New York 1987.
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7. Burke, JP, Evans RS, Pestotnik SL, Classen DC. Inappropriate antibiotic therapy: detection using computer algorithms. *Clinical Research* 1988;36:98A.
8. Classen DC, Wilfahrt JK, Evans RS, Burke JP. Staph aureus sternal wound infections associated with failure of antibiotic prophylaxis in cardiac surgery: clinical relevance of beta-lactamase production. *Clin Res* 1988;36:99A.
9. Classen DC, Pestotnik SL, Evans RS, Stevens LE, Burke JP. Midazolam use and associated respiratory arrest in a hospital population. Presented at the 4th International Conference on Pharmacoepidemiology, Minneapolis, Minnesota, 6-9 September 1988.
10. Classen DC, Wilfahrt JK, Burke JP. Evaluation of the spiral system method for aerobic susceptibility testing. Presented at the 28th Interscience Conference on Antimicrobial Agents and Chemotherapy, Los Angeles, California, 23-26 October 1988.
11. Pestotnik SL, Classen DC, Stevens LE, Evans RS, Burke JP. Prospective monitoring for seizures associated with imipenem-cilastatin therapy. Presented

- at the 28th Interscience Conference on Antimicrobial Agents and Chemotherapy, Los Angeles, California, 23-26 October 1988.
12. Larsen RA, Evans RS, Pestotnik SL, Classen DC, Gardner RM, Burke JP. Improved perioperative antibiotic use through computer generated reminders to physicians. Presented at the 28th Interscience Conference on Antimicrobial Agents and Chemotherapy, Los Angeles, California, 23-26 October 1988.
 13. Classen DC, Pestotnik SL, Stevens LE, Evans RS, Burke JP. A computerized adverse drug event monitor using a large hospital database. Presented at the 5th International Conference on Pharmacoepidemiology, Minneapolis, Minnesota, 5 September 1989.
 14. Classen DC, Burke JP, Ford CM, Aloia MA, Pestotnik SL, Wilfahrt JK. Streptococcus mitis sepsis in bone marrow transplant patients receiving oral norfloxacin prophylaxis. Presented at the 29th Interscience Conference on Antimicrobial Agents and Chemo-therapy, Houston, Texas, 17 - 20 September 1989.
 15. Burke JP, Classen DC. Conveners, Seminar on "Clinical Research Using Automated Hospital Databases" sponsored by LDS Hospital and Intermountain Health Care, Inc., Park City, Utah, 30 November - 3 December 1989.
 16. Evans RS, Burke JP, Classen DC, Goodrich KM, Pestotnik SL, Stevens LE. Computerized identification of hospital-acquired infections and high-risk patients. Presented at the 3rd International Conference on Nosocomial Infections, Atlanta, Georgia, 31 July - 3 August 1990.
 17. Classen DC, Pestotnik SL, Evans RS, Stevens LE, Bass SB, Burke JP. Concurrent monitoring of adverse drug events through the use of a hospital information system. 6th International Conference on Pharmacoepidemiology, Anaheim, California, 10-13 August 1990.
 18. Burke JP, Classen DC, Pestotnik SL, Evans RS, Stevens LE. The HELP system and its application to infection control. Invited presentation for seminar "Data-Handling Systems for Hospital Infection Control," 2nd International Conference of the Hospital Infection Society, London, England, 2-6 September 1990.
 19. Classen DC, Stevens LE, Bass SB, Burke JP. Lack of efficacy of a silver oxide-coated urinary catheter in the prevention of catheter-associated bacteriuria: a large randomized clinical trial. Presented at the 30th Interscience Conference on Antimicrobial Agents and Chemotherapy, Atlanta, Georgia, 21-24 October 1990, Abstract no. 710.
 20. Classen DC, Burke JP, Pestotnik SL, Evans RS, Stevens LE, Bass SB. Antibiotic outcomes research: A large randomized trial of cephalosporin use in hospitalized patients. Clin Res 1991;373A.
 21. Classen DC, Pestotnik SL, Evans RS, Burke JP. Computerized surveillance of adverse drug events in hospital patients. Clin Res 1991;373A.
 22. Burke JP, Classen DC, Pestotnik SL, Stevens LE, Evans RS. Evaluation of therapeutic antibiotic substitution by microcosting using an automated hospital

- database. Poster presentation at the 31st Interscience Conference on Antimicrobial Agents and Chemotherapy, Chicago, Illinois September 30-October 2, 1991, Abstract no. 407.
23. Classen DC, Evans RS, Pestotnik SL, Burke JP. Practice variations in surgical prophylactic antibiotic use and the occurrence of postoperative wound infections. Poster presentation at the 31st Interscience Conference on Antimicrobial Agents and Chemotherapy, Chicago, Illinois September 30-October 2, 1991, Abstract no. 928.
 24. Burke JP, Classen DC, Pestotnik SL, Evans RS, Stevens LE. Therapeutic substitution of two cephalosporins in hospitalized patients. Poster presentation at conference "Clinical Microbiology-New Perspectives," Trinity College, Dublin, Ireland, 24-26 June 1992.
 25. Pestotnik SL, Classen DC, Evans RS, Stevens LE, Burke JP. Surveillance of imipenem-associated seizures in a large cohort of hospitalized patients. Poster presentation at the 32nd Interscience Conference on Antimicrobial Agents and Chemotherapy, Anaheim, California, 12-14 October 1992.
 26. Classen DC, Evans RS, Pestotnik SL, Burke JP. Clinical evaluation of a computerized antibiotic selection program in a large teaching hospital. Poster presentation at the 32nd Interscience Conference on Antimicrobial Agents and Chemotherapy, Anaheim, California, 12-14 October 1992.
 27. Carroll KC, Monroe P, Cohen M, Huffman M, Korgenski E, Daly J, Rufener ML, Classen DC, Reimer L, Hamilton L. Susceptibility of beta-hemolytic streptococci to ten antimicrobial agents. Poster presentation at the 93rd American Society of Microbiology Meeting. Atlanta, Georgia, 16-20 May 1993.
 28. Classen DC, Rufener ML, Saxon BA, Carroll KC, Moon AL, Burke JP. Evaluation of the spiral biotech method for aerobic susceptibility testing. Poster presentation at the 33rd Interscience Conference on Antimicrobial Agents and Chemotherapy, New Orleans, Louisiana, 17-20 October 1993, Abstract no. 276.
 29. Pestotnik SL, Riley DK, Classen DC, Evans RS, Stevens LE, Burke JP. A five-year analysis of parenteral anti-infective use at a tertiary care hospital. Oral presentation at the 33rd Interscience Conference on Antimicrobial Agents and Chemotherapy, New Orleans, Louisiana, 17-20 October 1993, Abstract no. 634.
 30. Riley DK, Pestotnik SL, Classen DC, Evans RS, Stevens LE, Burke JP. The effect of improved prophylactic and therapeutic antibiotic use on hospital microbial resistance patterns. Presentation at the 4th Annual Meeting of the Society for Hospital Epidemiology of America, New Orleans, Louisiana, 4-7 April 1994. *Infect Control Hosp Epidemiol* 1994;15:26.
 31. Classen DC. Information management in infectious disease. Presentation at the 31st Infectious Disease Society of America Annual Meeting, October 14-17, 1993, New Orleans, Louisiana.
 32. Nelson DP, Sause WT, Classen DC, Crandall BG, Yowell RL, Hammond EM. Cardiac irradiation as a method for sparing systemic immunosuppression during life-threatening infection. Submitted for presentation at the 14th Annual Meeting

and Scientific Sessions for the International Society for Heart and Lung Transplantation, Venice, Italy, 23-26 March 1994.

33. Classen DC, Burke JP, Pestotnik SL, Evans RS. The impact of managed care and capitation on the practice of infectious disease: strategies for managing clinical care. Invited presentation at Annual Meeting of Infectious Diseases Society of America, San Francisco, California, 16-18 September 1995.
34. Classen DC, Pestotnik SL, Lloyd JF, Burke JP. Adverse effects of intravenous erythromycin in hospital patients: attributable costs and excess length of stay. Oral presentation at the 36th Interscience Conference on Antimicrobial Agents and Chemotherapy, New Orleans, Louisiana, 15-18 September 1996, Abstract no. 19.
35. Classen DC, Pestotnik SL, Burke JP. Evaluation of the impact of a comprehensive computerized antibiotic management program at Intermountain Health Care. HIMSS Conference, San Diego, California, 17 February 1997.
36. Pestotnik SL, Classen DC, Lloyd JF, Burke JP. Adverse effects of intravenous vancomycin in hospital patients: attributable costs and excess length of stay. Poster presentation at 35th Annual Meeting of the Infectious Diseases of America, San Francisco, California, 13-16 September 1997.

VI. PRESENTATIONS

1. Classen DC. A Prospective Evaluation, Using a Hospital Information System, of Perioperative Antibiotic Use and Postoperative Wound Infection. Utah Society of Hospital Pharmacist's Annual Meeting. Marriott Hotel. Salt Lake City, Utah, 26 March 1988.
2. Classen DC. Both Sides of the Antibiotic Issue: Efficacy and Cost. Intermountain Health Care Pharmacy Program. Marriott Hotel. Salt Lake City, Utah, 12 November 1988.
3. Classen DC. New Antibiotics Areas of Appropriate Use. Brigham City Hospital Medical Staff Meeting. Brigham City Hospital. Brigham City, Utah, 27 May 1989.
4. Classen DC. New Antibiotics Areas of Appropriate Use. McKay Dee Hospital Housestaff Conference. McKay Dee Hospital. Ogden, Utah, 18 August 1989.
5. Classen DC, Burke JP Co-Conveners. Conference on Clinical Research Using Automated Hospital Databases. Stein Eriksen Lodge. Deer Valley, Utah, 30 November - 3 December 1989.
6. Classen DC. Unscheduled Surgical Readmissions. Quality Assessment Session: Conference on Clinical Research Using Automated Hospital Databases. Stein Eriksen Lodge. Deer Valley, Utah, 30 November – 3 December 1989.
7. Classen DC. A Randomized, Open-label, Comparative Study of the Efficacy, Safety, and Cost-Benefit of Cefotaxime vs Ceftizoxime. Clinical Trials Session: Conference on Clinical Research Using Automated Hospital Databases. Stein Eriksen Lodge. Deer Valley, Utah, 30 November – 3 December 1989.

8. Classen DC. Mechanisms and Clinical Implications of Antimicrobial Resistance. Intermountain Health Care's Salt Lake City Hospitals Antibiotic Update. Willow Creek Country Club. Sandy, Utah, 25 April 1990.
9. Classen DC. Computerized Empiric Antibiotic Ordering and Information Useful in Preparing Dosing Cards. Intermountain Health Care Symposium- Managing the Hospital Formulary in the 90's. Marriott Hotel. Salt Lake City, Utah, 19 July 1990.
10. Classen DC. Outpatient Antibiotic Treatment. Brigham City Hospital Medical Staff Meeting. Brigham City Hospital. Brigham City, Utah, 2 March 1991.
11. Classen DC. Symposium: Challenges for Pharmacy in the 1990's. Marriott Hotel. Salt Lake City, Utah, 4 September 1991.
12. Classen DC. Adverse Drug Events. Symposium: Total Quality Management at IHC. Cliff Lodge at Snowbird. Snowbird, Utah, 16 September 1991.
13. Classen DC. Computerized Surveillance of Adverse Drug Events in Hospital Patients. Clinical Information Systems: Strategies for Success. Joint Meetings of the Society for Clinical Data Management Systems and Computers in Critical Care and Pulmonary Medicine. Olympia Resort Hotel and Convention Center. Park City, Utah, 18 March 1992.
14. Classen DC. Computerized Surveillance of Adverse Drug Events in Hospital Patients. Department of Medical Informatics Seminar. University of Utah School of Medicine. Salt Lake City, UT, 5 May 1992.
15. Classen DC. Infectious Disease Applications in the HELP System. 3M/IHC HELP System Symposium. LDS Hospital Education Center. LDS Hospital. Salt Lake City, UT, 24 June 1992.
16. Classen DC. Infectious Disease Applications in the HELP System. 3M/IHC HELP System Symposium. LDS Hospital Education Center. LDS Hospital. Salt Lake City, UT, 23 September 1992.
17. Classen DC. The Impact of a Hospital Information System to Improve Outcomes Management. Medical Grand Rounds. University Medical Center. Las Vegas, NV, 20 November 1992.
18. Classen DC. Implementing CQI with Clinical Research. The Eisenhower Medical Center Grand Rounds, Palm Springs, 14 January 1993.
19. Classen DC. Implementing CQI with Clinical Research: Adverse Drug Events and Nosocomial Infections. Intermountain Health Care TQM Conference. Marriott Hotel, Salt Lake City, UT, 26 January 1993.
20. Classen DC. Implementing Outcomes Research. Presented at 3rd Society for Hospital Epidemiology of America meeting, Chicago, IL, 18-20 April 1993.
21. Classen DC. Prevention of Adverse Drug Events Through Computerized Surveillance. IHC Risk Management Council Conference: Risk Management of

- Medication Errors. LDS Hospital Education Center. Salt Lake City, UT, 10 September 1993.
22. Classen DC. Improving patient outcomes with clinical information systems. Alberta Ministry of Health. Kananaskis, Alberta, 6 October 1993.
 23. Classen DC. Outcomes Management Applied to Drug Therapy. Central New York Hospital Association Shared Services, Inc. Quarterly Meeting. Syracuse, NY, 9 November 1993.
 24. Classen DC. Outcomes and Information Management Applied to Clinical Practice. Roswell Park Cancer Institute. Buffalo, NY, 13 December 1993.
 25. Classen DC. Outcomes and Information Management Applied to Clinical Practice. Rochester General Hospital. Rochester, NY, 14 December 1993.
 26. Classen DC. Outcomes and Information Management Applied to Clinical Practice. Colorado Society of Hospital Pharmacists Continuing Education Meeting. Denver, CO, 15 December 1993.
 27. Classen DC. Outcomes and Information Management Applied to Clinical Practice. Housestaff Noon Conference. Baylor University Medical Center. Dallas, TX, 14 February 1994.
 28. Classen DC. Strategies for using Clinical Information Systems in the Health Care Setting. National Meeting Premier Health Alliance, 26-28 April 1994.
 29. Classen DC. Outcomes and Information Management Applied to Clinical Practice. Continuing Education Seminar: The Hospital Council of Western Pennsylvania. Warrendale, PA, 2 June 1994.
 30. Classen DC. Optimal Antibiotic Management in The Community and Tertiary Care Hospitals: A Virtual Reality? Joint Continuing Medical Education Program of the Division of Infectious Diseases and the Department of Pharmacy, Toronto Hospitals. Toronto, Ontario, 13 June 1994.
 31. Classen DC. Carbapenems – Maximizing Efficacy and Reducing Toxicity Using A Hospital Information System. University of Toronto Infectious Diseases – Microbiology Rounds. Toronto, Ontario, 14 June 1994.
 32. Classen DC. Managing Antibiotic Use Using Computer-assisted Decision Support. Surgical Grand Rounds, Dallas Baylor University Medical Center, Dallas, TX, 15 June 1994.
 33. Classen DC. Practical Examples of Application of Quality Principles to Clinical Care National Physicians Board Meeting, National Medical Enterprise. Squaw Valley, CA, 17-19 June 1994.
 34. Classen DC. Outcomes and Information Management Applied to Clinical Practice. Pharmacy Management Presentation: Amerinet/Vector Health Systems Northeast Membership Symposium. Sturbridge, MA, 22 June 1994.

35. Classen DC. Using Clinical Information System to Improve Patient Outcomes. University of Michigan Hospital, 14 July 1994.
36. Classen DC. Pulmonary Conference: Managing Care Through Information Management and Decision Support. University of North Carolina School of Medicine. Chapel Hill, NC, 17 August 1994.
37. Classen DC. Infectious Disease Conference: Managing Care Through Information Management and Decision Support. University of North Carolina School of Medicine. Chapel Hill, NC, 17 August 1994.
38. Classen DC. Pharmacy Conference: Managing Care Through Information Management and Decision Support. University of North Carolina School of Medicine. Chapel Hill, NC, 17 August 1994.
39. Classen DC. Duke University School of Medicine Round Table Discussion: Managing Care Through Information Management and Decision Support. Durham, NC, 17 August 1994.
40. Classen DC. Infectious Disease Conference: Managing Care Through Information Management and Decision Support. Duke University School of Medicine. Durham, NC, 18 August 1994.
41. Classen DC. Critical Care Conference: Managing Care Through Information Management and Decision Support. Duke University School of Medicine. Durham, NC, 18 August 1994.
42. Classen DC. Managed Care Through Information and Decision-Support. New Jersey Hospital Association. New Brunswick, NJ, 16 November 1994.
43. Classen DC. Managing Care Through Information Management and Decision-Support. Greater New York Hospital Association. New York, NY, 17 November 1994.
44. Classen DC. Managing Care Through Information Management and Decision-Support. Nassau-Suffolk Hospital Council, Inc. Hauppauge (Long Island), NY, 18 November 1994.
45. Classen DC. Economic and Clinical Outcomes of Antibiotic Management Programs Using Decision-Support. Orlando Regional Healthcare System Conference: How To Create Antibiotic Management Programs That Are Clinically Sound and Cost-Effective. Orlando, FL, 23 November 1994.
46. Classen DC. Antibiotic Management Programs: Moving From A Pharmacy Model To A Total patient Care Model. Orlando Regional Healthcare System Conference: How To Create Antibiotic Management Programs That Are Clinically Sound and Cost-Effective. Orlando, FL, 23 November 1994.
47. Classen DC. Antibiotic Outcomes Management. Pharmacy Conference. Carolinas Medical Center. Charlotte, NC, 13 December 1994.
48. Classen DC. Antibiotic Outcomes Management. Surgery Grand Rounds. East Carolina University School of Medicine. Greenville, NC, 14 December 1994.

49. Classen DC. Clinical and Financial Outcomes Associated with an Integrated Hospital Information System. Infectious Disease Symposium: Outcomes and Information Management Applied to Clinical Practice. Bethesda, MD, 15 December 1994.
50. Classen DC. Clinical and Financial Outcomes Associated with an Integrated Hospital Information System. Infectious Disease Symposium: Outcomes and Information Management Applied to Clinical Practice. Baltimore, MD, 16 December 1994.
51. Classen DC. Overview of Outcomes and Information Management. Internal Medicine Grand Rounds. St. Vincent Hospital. Carmel, IN, 15 March 1995.
52. Classen DC. Managed Care and Information Systems: Their Impact on Pharmacy. Indiana University Pharmacy Noon Conference. Wishard Memorial Hospital. Indianapolis, IN, 16 March 1995.
53. Classen DC. Outcomes and Information Management Applied to Clinical Practice. Cleveland Clinic-Case Western Sponsored Infectious Diseases Faculty Conference. Cleveland, OH, 17 March 1995.
54. Classen DC. Outcomes and Information Management Applied to Clinical Practice. Akron City-wide Infectious Diseases Conference. Akron City Hospital. Akron, OH, 17 March 1995.
55. Classen DC. Clinical Process Improvement Using Medical Information Systems. Massachusetts General Hospital. Boston, MA, 19 April 1995.
56. Classen DC. Managing Care Through Information Management and Decision-Support. New England Medical Center. Boston, MA, 20 April 1995.
57. Classen DC. Managing Care Through Information Management and Decision-Support. New England Deaconess Hospital. Boston, MA, 20 April 1995.
58. Classen DC. The Impact of Medical Informatics On The Practice of Pharmacy. Department of Pharmacy Practice, College of Pharmacy. University of Kentucky. Lexington, KY, 6 June 1995.
59. Classen DC. Managing Care Through Process-Oriented Decision-Support. Vanderbilt University Medical Center. Nashville, TN, 7 June 1995.
60. Classen DC. Seven-Year Results of Antibiotic Therapy Decision-Support Programs. Department of Medical Informatics Conference. Vanderbilt University Medical Center. Nashville, TN, 7 June 1995.
61. Classen DC. Expert Systems to Manage Antibiotic Use. Division of Infectious Diseases Noon Conference. University of Louisville. Louisville, KY, 8 June 1995.
62. Classen DC. Expert Systems to Manage Antibiotic Use. Division of Infectious Diseases Noon Conference. Wake Forest Medical Center. Raleigh, NC, 9 June 1995.

63. Classen DC. Implementing Antibiotic Clinical Practice Guidelines Through Computer-Assisted Decision-Support. Department of Surgery. University of Cincinnati Medical Center. Cincinnati, OH, 17 August 1995.
64. Classen DC. Managing Care Through Process-Oriented Decision-Support. Pharmacy Continuing Education Seminar. Sinai Samaritan Medical Center. Milwaukee, WI, 24 August 1995.
65. Classen DC, Burke JP, Evans RS. The impact of managed care and capitation on the practice of infectious disease: strategies for managing clinical care. Invited presentation at Annual Meeting of Infectious Diseases Society of America, San Francisco, California, 16-18 September 1995.
66. Classen DC. Managing Care Through Information Management and Decision-Support. Mountain Area Health Education Center: Departments of Pharmacy and Nursing Education Continuing Education Program. Asheville, NC, 26 November 1995.
67. Classen DC. Managing Care Through Information Management and Decision-Support. Northeast Tennessee Society of Hospital Pharmacists' Continuing Education Program. Kingsport, TN, 27 September 1995.
68. Classen DC. Antibiotic Therapy by Computer: Threat or Salvation? Medical College of Virginia School of Pharmacy. Richmond, VA, 28 September 1995.
69. Classen DC. The Next Millennium: Computer, Managed Care, Outcomes, and Antibiotics. Virginia Council on Pharmaceutical Education Seminar. Richmond, VA, 28 September 1995.
70. Classen DC. Computer-Assisted Decision-Support and Its Impact on Pharmacy Practice. University of Virginia Health Science Center. Charlottesville, VA, 29 September 1995.
71. Classen DC. Managed Care, Medical Informatics, and Clinical Process Improvement: The Role of the Pharmacist. Pharmacy Grand Rounds. Memorial Sloan Kettering Cancer Center. New York, NY, 16 October 1995.
72. Classen DC. Managed Care, Medical Informatics, and Clinical Process Improvement: The Role of the Pharmacist. Pharmacy Noon Conference. Columbia Presbyterian Medical Center. New York, NY, 17 October 1995.
73. Classen DC. Managed Care, Medical Informatics, and Clinical Process Improvement: The Role of the Pharmacist. New York City Hospitals' Pharmacy Directors Seminar. New York, NY, 17 October 1995.
74. Classen DC. Pharmacy Implications of Pharmacoeconomics. New York University Medical Center Symposium: Pharmaceutical Care in an Evolving Environment. New York, NY, 18 October 1995.
75. Classen DC. Managing Care Through Information Management and Decision-Support. Medical Grand Rounds. St. Luke's-Roosevelt Hospital Center. New York, NY, 18 October 1995.

76. Classen DC. Managed Care, Medical Informatics, and Clinical Process Improvement: The Role of the Pharmacist. Pharmacy Noon Conference. Stony Brook University Hospital. Long Island, NY, 19 October 1995.
77. Classen DC. Beyond Formulary Restriction: Use of Outcomes Indicators to Drive Appropriate Utilization. Xavier University of Louisiana College of Pharmacy Continuing Education Seminar: Innovative Strategies for Antimicrobial Formulary Planning: An Interactive Workshop. Kenner, LA, 11 November 1995.
78. Classen DC. Clinical Process Improvements: Expert Systems to Manage Antibiotic Use. Division of Infectious Diseases Clinical Conference. University of Texas Health Sciences Center at San Antonio. San Antonio, TX, 1 December 1995.
79. Classen DC. The Role of Expert Systems in Managing Care. Department of Clinical Pharmacology Research Conference. University of Texas Health Sciences Center at San Antonio. San Antonio, TX, 1 December 1995.
80. Classen DC. Outcomes and Computerized Information Management Applied to Clinical Practice. Department of General Surgery Conference and Case Presentations. University of Texas Health Sciences Center at San Antonio. San Antonio, TX, 1 December 1995.
81. Classen DC. The Role of Medical Information Systems in Infectious Diseases Management. Infectious Diseases Grand Rounds. The Ohio State University Medical Center. Columbus, OH, 8 February 1996.
82. Classen DC. Medical Information Systems, Outcomes Management, and Clinical Quality Improvement. The Cleveland Clinic Foundation Clinical Outcomes and Quality Committee Conference. Cleveland Clinic. Cleveland, OH, 9 February 1996.
83. Classen DC. The Role of Medical Information Systems in Infectious Diseases Management. Infectious Diseases Grand Rounds. University of Oklahoma Medical Center. Oklahoma City, OK, 14 February 1996.
84. Classen DC. Developing, Implementing and Measuring Outcomes Associated With Practice Guidelines. St. Francis Hospital Medical/Surgical Grand Rounds. St. Francis Hospital. Tulsa, OK, 15 February 1996.
85. Classen DC. Role of Medical Informatics in Infectious Diseases Management. Infectious Diseases Conference. M.D. Anderson Hospital. Houston, TX, 4 March 1996.
86. Classen DC. Clinical Process Improvement. CQI Department Conference. Hermann Hospital. Houston, TX, 4 March 1996.
87. Classen DC. Medical Informatics, Outcomes Management, and Clinical Process Improvement. Methodist Hospital Quality Council. Methodist Hospital. Houston, TX, 5 March 1996.

88. Classen DC. Developing, Implementing, and Measuring Outcomes Associated with Clinical Practice Guidelines. St. Luke's Episcopal Hospital Conference. St. Luke's Episcopal Hospital. Houston, TX, 6 March 1996.
89. Classen DC, Pestotnik SL, Lloyd JF, Burke JP. Adverse effects of intravenous erythromycin in hospital patients: attributable costs and excess length of stay. Oral presentation at the 36th Interscience Conference on Antimicrobial Agents and Chemotherapy, New Orleans, Louisiana, 15-18 September 1996, Abstract no. 19.
90. Presenter National Round Table in Quality. National Academy of Science Institute of Medicine, Washington, DC, 12 September 1996.
91. Presenter National Academy of Science National Meeting Session on clinical Medicine, Seattle, Washington, 1 February, 1997.
92. Classen DC. Pestotnik SL, Burke JP. Evaluation of the impact of a comprehensive computerized antibiotic management program at Intermountain Health Care. HIMSS Conference, San Diego, California, 17 February 1997.
93. Pestotnik SL, Classen DC, Lloyd JF, Burke JP. Adverse effects of intravenous vancomycin in hospital patients: attributable costs and excess length of stay. Poster presentation at 35th Annual Meeting of the Infectious Diseases of America, San Francisco, California, 13-16 September 1997.
94. Classen DC. Clinical Decision Support in Infectious Disease. Infectious Disease Grand Rounds Harbor UCLA Medical Center, September 17, 1998
95. Classen DC, Burke JP. Improving Medications Through Computerized Surveillance and management. Presented at Forum on Emerging Infections; Managed Care Systems and Emerging Infections. Institute of medicine National Academy of Science, Washington, DC, 22-24 March, 1998.
96. Lo TS, Classen DC, Burke JP. Assessing the effect of nosocomial surgical wound infections on the cost of hospitalization by using a hospital information system. Poster presentation at the 38th Interscience Conference on Antimicrobial Agents and Chemotherapy, San Diego, California, 24-27 September 1998.
97. Classen DC. Implementing Practice Guidelines. Joint commission on Accreditation of Health Care Organizations Satellite Television Network, Dallas, TX, September 22, 1998.
98. Classen DC. Clinical Decision Support in Infectious Diseases School of Medicine, October 12, 1998.
99. Classen DC. Clinical Decision Support and Information Systems Chime Annual Conference. Carlsbad, California, October 22, 1998.
100. Classen DC, Pestotnik SL. (Moderators) First Merck Advisory Board on Integrated Healthcare Delivery Systems. Orlando, Florida, November 5-7, 1998.
101. Classen DC. Errors in Medicine. The Second Annual Annenberg Conference on Patient Safety, Palm Springs, California, November 8, 1998.