

STEVEN T. FLEMING

213C College of Public Health Building
121 Washington Avenue
Department of Epidemiology
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EDUCATION

- 1982-1989 University of Michigan, Ph.D. in Health Services Organization and Policy, dissertation: "Toward an understanding of the relationship between the quality and cost of hospital care"
- 1982-1985 University of Michigan, A.M. in Applied Economics
- 1975-1977 University of Hartford, M.P.A. with a major in Health Administration
- 1968-1972 Rutgers University, B.S. in Environmental Sciences

MILITARY

Certificate (1972) from U.S.A.F. School of Aerospace Medicine: San Antonio, Texas. Member of the Connecticut Air National Guard (1972-1978).

EMPLOYMENT EXPERIENCE (ACADEMIC SETTING)

- 2001-02 Visiting Research Fellow, Centre for Public Health Research, Queensland University of Technology, Kelvin Grove, Queensland, Australia
- 1995- Associate Professor with tenure (March 1998) of Epidemiology, The University of Kentucky: Lexington, Kentucky.
- 1989-95 Assistant Professor of Health Services Management, The University of Missouri-Columbia: Columbia, Missouri
- 1980-82 Assistant Professor of Health Services Administration, Quinnipiac College: Hamden, Connecticut, Acting Director, 1981-82.
- 1977-80 Instructor of Health Services Administration, Quinnipiac College: Hamden, Connecticut

EMPLOYMENT EXPERIENCE (OTHER SETTINGS)

- 1990-94 Faculty for Executive Program in Managed Care for the National Center for Managed Health Care Administration: Kansas City, Missouri
- 1987-89 Research Associate II in the Department of Research Services, The Commission on Professional and Hospital Activities: Ann Arbor, Michigan

- 1985-87 Research Associate in the Department of Research Services, The Commission on Professional and Hospital Activities: Ann Arbor, Michigan
- 1984-85 Research Assistant in the Department of Research Services, The Commission on Professional and Hospital Activities: Ann Arbor, Michigan
- 1983-84 Part-time Research Assistant in the Department of Medical Care Organization, The University of Michigan: Ann Arbor, Michigan
- 1974-76 Research Assistant in the Departments of Biochemistry and Medicine, University of Connecticut Health Center: Farmington, Connecticut
- 1973-74 Laboratory Technician in the Isotope Laboratory, St. Francis Hospital: Hartford, Connecticut

GRADUATE TEACHING EXPERIENCE

- 1997-1999 Introduction to the Health Care System
- 1998- Managerial Epidemiology
- 2000- Introduction to Epidemiology
- 2001- Advanced Epidemiology
- 2003-2004 Research Methods
- 2004- Decision making in Health and Medicine
- 2005- Epidemiology Applied to the Design and Evaluation of Nursing and Health Services
- 2006- Managerial Epidemiology (Zayed University, United Arab Emirates)
- 2007- Cancer Epidemiology
- 1999 Member: PhD Dissertation Committee, Matthias Akomaye Udie, The effect of market structure on the stage of breast cancer diagnosis for Medicare HMO enrollees.
- 2003 Member: PhD Dissertation Committee, Terry Wiant, Policy and its impact on medical record security.
- 2002 Member: MPH capstone Committee, Brian Dean, A question of access: comparing barriers to oral health services between nursing home residents and well-elders in Kentucky.
- 2003 Chair: MPH capstone Committee, John M Bennett, Improving compliance for colon cancer screening through education outreach and a practice based intervention.
- 2003 Chair: MPH capstone Committee, Rishika Basappa, Continuity of patient care and tobacco cessation counseling.
- 2003 Chair: MPH Capstone Committee, Mef D. Galle, Impact of antimicrobial control program on the incidence of candidemia in a university affiliated hospital.
- 2003 Member: MPH Capstone Committee, Xuejing Wang, The effect of folic acid based supplements on lowering blood homocysteine : meta analysis of randomized trials.
- 2004 Co-chair: MPH Capstone Committee, Amber Bryn Riba, West Virginia laboratory capacity for Hepatitis C virus testing: an evaluation of adherence to the Centers for Disease Control and Prevention guidelines.
- 2004 Member: MPH Capstone Committee, Cheryl Leanne Ashby, Association of patient age and body mass index with delivery of preconception and sexual health counseling to adolescent females.
- 2004 Member: MPH Capstone Committee, Mehjabeen Chowdjury, Fayette county eating establishment smoking policy survey 2002.
- 2004 Member: MPH Capstone Committee, Laura Elizabeth Hackett, The epidemiology of West Nile virus in the commonwealth of Kentucky.
- 2004 Member: MPH Capstone Committee, Rondeen Gordon. Is Suicide More Likely in Older Adults with a Chronic Disease or Mental Illness?

- 2004 Member: MPH Capstone Committee, Shulin Dong. The role of radiotherapy in improving survival in patients with small cell lung cancer.
- 2004 Member: MPH Capstone Committee, Brandon Hurley.
- 2005 Member: MPH Capstone Committee, William Porter, Attending physicians' perceptions of computerized physician order entry (CPOE) implementation.
- 2005 Member: MPH Capstone Committee, January Breedon. The relationship between clinician diagnoses and clinician perceived depression and anxiety in community primary care practice
- 2005 Member: MPH Capstone Committee, Jennifer Rene Olges, A survey of Kentucky prenatal care provider testing practices and knowledge of human immunodeficiency virus.
- 2005 Chair: MPH Capstone Committee, Rafael Rangel, Pregnancy prevention in Pike county: a focus on teenage males.
- 2005 Member: MPH Capstone Committee, Jessica Berres Houlihan, Determination of risk factors for developing community-acquired pneumonia in HIV/AIDS patients since the era of HAART
- 2006 Outside Member: PhD Dissertation Committee, Theodore Wesley Randall Jr. Malaria Etiology, Prevention, and Treatment in the Gambia.
- 2006 Member: MPH Capstone Committee, Yvonne Konner. Public Health Approach to Overweight and Obesity: An Evaluation of Formal Weight Loss Programs here at the University of Kentucky (The Health and Wellness Weight Loss Matters and BeHIP's Weight Loss for Life Programs)
- 2006 Member: MPH Capstone Committee, Donald J. Covell, Assessing the Influence of Non-Clinical Factors on Brain Cancer Treatment.
- 2006 Member: MPH Capstone Committee, Elizabeth L. Stevie, Obtaining Mammography Screening in Three Kentucky Primary Care Clinics.
- 2006 Member: MPH Capstone Committee, Richard Meir, Predictors of Poor Outcomes of Uveitis Associated with Juvenile Idiopathic Arthritis.
- 2006 Co-Chair: MPH Capstone Committee, Frank Rominelli, Risk Factors for Community Acquired Methicillin Resistant Staphylococcal Aureus (cMRSA) Among a Mixed Urban-Rural HIV Infected Population
2007. Member: MPH Capstone Committee, Justin L. Blackburn, Changes in Clinical Health Indicators in a Cohort of Australian Farm Families.
2007. Member: PhD Dissertation Committee, Lynne Jensen, "Cognitive and Psychological Factors That Influence Outcomes in Coronary Heart Disease Patients"
- 2007 Chair: MPH Capstone Committee, Erin Miller Reid, Sociodemographic Risk Factors Associated with the Late-Stage Diagnosis of Colorectal Cancer.
- 2007 Chair, MPH Capstone Committee, Andrew Kinch. Kentucky's Male HIV/AIDS Population: the Challenge Facing a Predominantly Rural State.
- 2007 Member, MPH Capstone Committee Maya McDoom. Patient and Caregiver Evaluation in a Hospice Setting Utilizing the Social Worker Assessment Tool.
- 2007 Member, MPH Capstone Committee, Carol Mclay. A Prolonged Outbreak of Day-Care Associated Shigella Sonnei: A Case-Control Study.
- 2007 Member, MPH Capstone Committee, Dana Hazen. Gender Specific Differences in the Pros and Cons of Smoking among Current Smokers in Eastern Kentucky.
- 2007 Member, MPH Capstone Committee, Amanda Wilburn. Hepatitis C Infection in Three Eastern Kentucky Counties: Risk Factors and Predictors.

COMMITTEES

- 2003 Member: Six-year Review Committee for UK Center for Health Services Management and Research
- 2004-2006 Chair: Appointment, Promotion, and Tenure Committee, College of Public Health

2004- Member: Faculty Council, College of Public Health
2005-2006 Member: Service Committee, College of Public Health
2005 Academic Council of the Medical Center Review Committee
2005- Cancer Prevention and Control Program Scientific Advisory Committee
2006- Member: Research Committee, College of Public Health

PUBLICATIONS

- Killip S, Ireson CL, Love MM, Fleming ST, Katirai W, Sandford K. 2007. Patient Safety in After-hours Telephone Medicine. *Family Medicine Journal* 39(6): 404-409
- Schoenberg NE, Kim H, Edwards W, Fleming ST. 2007. The burden of common multiple morbidity constellations on out-of-pocket medical expenditures among older adults. *The Gerontologist*. 47(4): 423 – 437.
- Fleming ST. Data Sources for Measuring Comorbidity: Response to Klabunde et al, October 2006 *Medical Care*. *Medical Care*. 45(3): 274.
- Fleming, S.T., McDavid, K., Pearce, K., and Pavlov, D. (2006) Comorbidities and the risk of late-stage prostate cancer. *TSW Urology* 1, 163–173. DOI 10.1100/tswurol.2006.142.
- Fleming ST, Pursley HG, Newman B, Pavlov D, Chen K. 2005. Comorbidity as a predictor of stage of illness for patients with breast cancer. *Medical Care* 43(2):132-140.
- Fleming ST, Pearce KA, McDavid K, Pavlov D. 2003. The development and validation of a comorbidity index for prostate cancer among Black men. *Journal of Clinical Epidemiology*. 56(11): 1064-1975.
- Beaulieu J, Galland J, Fleming S, Chen K, Peng Xuejun. 2002. Geographic variation in breast-conserving surgery in Kentucky's Medicare population *J Kentucky Medical Association* 100: 99-103
- Fleming, ST, Scutchfield, FD, Tucker, TC. 2000. Managerial Epidemiology, Chicago: Health Administration Press, 277 pages.
- Fleming, ST, Dmitrienko A, Rastogi A. 1999. A Comprehensive Prognostic Index to predict mortality based on multiple comorbidities: A Focus on Breast Cancer. *Medical Care*. 37(6): 601-614
- Fleming ST. and Kohrs, FP. (1998). Linking claims data and cancer registry data: is it worth the effort? *Clinical Performance and Quality Health Care*, 6(2): 88-96.
- Boles KE and Fleming ST (1997) Why traditional breakeven analysis doesn't work with managed care, *Health Care Systems Economics Report*, 1(9): 7-12.
- Fleming ST. (1996). Complications, adverse events, and iatrogenesis: classifications and quality of care measurement issues, *Clinical Performance and Quality Health Care*, 4(3): 137-147.
- Boles KE and Fleming ST. (1996). Breakeven under capitation.: pure and simple? *Health Care Management Review*, 21(1): 38-47.
- Fleming ST. (1995). Multiple Sclerosis as a comorbidity: a study of resource utilization and outcomes of care. *Clinical Performance and Quality Health Care*, 3(1): 23-30

- Fleming ST, Williamson H, Hicks L, Rife I. (1995). Rural hospital closures and access to services, *Hospital & Health Services Administration*, 40(2): 249-264.
- Fleming ST. (1995). Primary care, avoidable hospitalization, and outcomes of care: a literature review and methodological approach., *Medical Care Research and Review*, 52(1): 88-108.
- Fleming ST, Hicks L, Bailey RC. (1995) Interpreting the Health Care Financing Administration mortality statistics, *Medical Care*, 33(2): 186-201.
- Fleming ST, Blake R. (1994). Patterns of comorbidity in elderly patients with multiple sclerosis. *Journal of Clinical Epidemiology*, 47(10): 1127-1132. .
- Fleming ST and Boles KE. (1994). Financial and clinical performance: bridging the gap. *Health Care Management Review*, 19(1): 11-17.
- Long MJ, Fleming ST, Chesney, JD. (1993). The impact of diagnosis related group profitability on the skimming and dumping of psychiatric DRGs. *International Journal of Social Psychiatry*, 39(2): 108-120.
- Long MJ, Chesney JD, Fleming ST. (1993). Profitable and unprofitable DRGs: the implications for access. *Health Services Management Research*, 6(1): 61-69.
- Fleming ST, Bopp KD, Anderson KG. (1993). Spreading the good news of total quality management: faith, conversion, and commitment. *Health Care Management Review*, 18(4): 29-33.
- Fleming ST. (1992). Outcomes of care for anesthesia services: a pilot study. *Quality Assurance in Health Care*, 4(4): 289-303.
- Fleming ST. (1992). Toward the development of integrative risk-adjusted measures of quality using large clinical databases: the case of anesthesia services. *Evaluation & the Health Professions*, 15(1): 43-58.
- DesHarnais S, Hogan AJ, McMahon LF, Fleming S. (1991). Changes in rates of unscheduled hospital readmissions, and changes in efficiency following the introduction of the Medicare Prospective Payment System: an analysis using risk-adjusted data. *Evaluation & The Health Professions*. 14(2): 228-252.
- Fleming ST. (1991). The relationship between quality and cost: pure and simple? *Inquiry*, 28(1): 29-38. [The August 5, 1991 issue of U.S. News and World Report made reference to the results of this study.]
- Fleming ST et al. (1991). The measurement of mortality: a risk-adjusted variable time window approach. *Medical Care*, 29(9): 815-828.
- Long MJ, Chesney JD, Fleming ST. (1990). A reassessment of hospital product and productivity changes over time. *Health Care Financing Review*, 11(4): 69-78.
- Fleming ST. (1990). The relationship between the cost and quality of hospital care: a review of the literature. *Medical Care Review*, 47(4): 487-502.
- Long MJ, Chesney JD, Fleming ST. (1989). Were hospitals selective in their product and productivity changes: the top 50 DRG's after PPS. *Health Services Research*, 24(5): 615-642.

- DesHarnais SI, Chesney JD, Wroblewski RT, Fleming ST, McMahon LF. (1988). The risk adjusted mortality index: a new measure of hospital performance. *Medical Care*, 26(12): 1129-1148.
- DesHarnais SI, Chesney JD, Fleming ST. (1988). Trends and regional variations in hospital utilization and quality during the first two years of the Prospective Payment System. *Inquiry*, 25(3): 374-382.
- DesHarnais SI, Chesney JD, Fleming ST. (1988). Should DRG assignment be based on age? *Medical Care*, 26(2):124-131.
- DesHarnais S, Kobrinski E, Chesney J, Long M, Ament R, Fleming S. (1987). The impact of PPS on inpatient utilization and the quality of care: the early effects. *Inquiry*, 24(1):7-16.
- Long MJ, Ament RP, Chesney JD, DesHarnais SI, Fleming ST, Kobrinski EJ, Marshall BS. (1987). The effect of PPS on hospital product and productivity. *Medical Care*, 25(6):528-538.
- Fleming ST, Kobrinski EJ, Long MJ. (1985). Multidimensional analysis of the impact of high-cost hospitalization. *Inquiry*, 22(2):178-187.

PRESENTATIONS/POSTERS – INTERNATIONAL

- Fleming ST, Newman B, Purlsey HG, Chen K, Pavlov D. Measuring Comorbidity Burden to Predict Stage of Illness in Breast Cancer Patients in the United States. Cancer Council of Victoria and University of Melbourne. Melbourne, Victoria. March 21, 2002.
- Fleming ST, Purlsey HG, Chen K, Pavlov D. Modelling Comorbidity Burden as a Predictor of Stage using the SEER Cancer Registry Linked to Medicare Insurance Claims. The Cancer Council of New South Wales. Sydney, New South Wales, Australia. January 23, 2002.
- Fleming ST, Purlsey HG, Chen K, Pavlov D. Comorbidity Burden and Stage at Diagnosis for Breast Cancer. ChristChurch School of Medicine, Christchurch, New Zealand. November 24, 2001.
- Fleming ST, Purlsey HG, Pearce K, McDavid K, Chen K, Pavlov D. Comorbidity Burden and Stage at Diagnosis for Breast and Prostate Cancer. Queensland Institute for Medical Research. Brisbane, Queensland, Australia. October 30, 2001.
- Fleming ST. Managerial Epidemiology: the Case for Evidence-Based Management. Australian College of Health Service Executives (Qld) & The Queensland Centre for Public Health. Brisbane, Queensland, Australia. September 13, 2001.
- Fleming ST, McDavid KA, Pearce KA, Pavlov D. A Comorbidity Index Specific to Black Men with Prostate Cancer (Poster). Congress of Epidemiology 2001. Toronto, Canada. June 13-16, 2001.
- Fleming ST. Casemix, Resource Utilization and Outcomes of Hospitalizations for MS Patients: A Case-Control Study. presented at the Eighth Annual Consortium Conference of the Consortium of Multiple Sclerosis Centers. Victoria, British Columbia. September 11-13, 1993.
- Fleming, ST. et al. Anesthesia-Related Outcomes: A Pilot Study. presented by S. Fleming at the International Society for Quality Assurance 8th International Symposium. Washington D.C. May 29-31 1991.

PRESENTATIONS/POSTERS – NATIONAL

Killip S, Ireson C, Love M, Fleming S, Katirai W, McLay C. Patient Safety in Telephone Medicine. North American Primary Care Research Group Annual Meeting, Quebec City, Quebec Canada October 15-18 2005.

Fleming, ST, Pursley, HG. Comorbidities, Race, and Stage of Breast Cancer. 37th Annual Meeting Society for Epidemiologic Research, June 15-18, 2004, Salt Lake City, Utah.

Fleming, ST, Pursley HE, Newman B, Pavlov D, Chen K. Comorbidity as a Predictor of Stage of Illness for Breast Cancer Patients. American Public Health Association 131st Annual Meeting, 16-19 November 2003, San Francisco, CA

Fleming, ST, Pursley HE, Newman B, Pavlov D, Chen K. Comorbidity as a Predictor of Stage of Illness for Breast Cancer Patients. AcademyHealth Annual Meeting, Poster Session 27-29 June 2003, Nashville, TN.

Fleming, Steven, Kathleen McDavid, Kevin Pearce, Dmitri Pavlov. Predictors of Treatment for Black and White men at least 67 years old with prostate cancer. American College of Epidemiology Annual Meeting 2002. Poster Session Sept 23, 2002. Albuquerque, NM.

Fleming ST, Hicks L, Bailey C. Toward an Understanding of the Health Care Financing Administration Mortality Methodology: A case Study. presented at the 11th Annual Meeting of the Association for Health Services Research. San Diego, CA. June 12-14, 1994.

Boles, KE and Fleming, ST. Financial and Clinical Performance: Bridging the Gap. presented by K. Boles at the 1992 Annual Meeting of the Association for University Programs in Health Administration. Washington, D.C. March 19-22, 1992.

Fleming ST. The Risk-Adjusted Mortality Index: Some Enhancement. Poster Session at the 118th Annual meeting of the American Public Health Association. New York, New York. September 30 - October 4, 1990.

Long MJ, Fleming ST, Chesney JD. The Impact of DRG Profitability on the Skimming and Dumping of Psychiatric DRGs. presented by M. Long at the 1990 annual meeting of the Association of University Programs in Health Administration, Chicago, Illinois.

Long MJ, Chesney JD, Fleming ST. Skimming Profitable and Dumping Unprofitable DRGs. presented by M. Long at the 117th Annual Meeting of the American Public Health Association, Chicago, Illinois, October 22-26, 1989.

Fleming ST. A Hospital Variable Cost Function that Measures Product Differentiation on the Basis of Quality. presented at the 64th Annual Western Economic Association meetings, Lake Tahoe, Nevada, June 18-22, 1989.

RESEARCH AND PROFESSIONAL ACTIVITIES

Centers for Disease Control and Prevention, 2005-2008. Principal Investigator, Breast and Prostate Cancer Patterns of Care in Kentucky. \$655,789.

Agency for Health Care Policy & Research, 2003-2006. Principal Investigator. Kentucky HSR Development (BRIC) II. \$570,000.

Agency for Health Care Policy & Research, 2001-2003. Principal Investigator (2002-2003). Kentucky

| HSR Development (BRIC). \$388,998.

ATPM/CDC/ATSDR, 1999-2001. Principal Investigator. Comorbidities and Prostate Cancer in Elderly Black Men. \$106,449.

National Cancer Institute, 1999-2001. Principal Investigator. The Comorbidity Factor and Breast Cancer. \$98,498.

University of Kentucky Medical Center Research Fund, 1997-1998. Principal Investigator. The Comorbidity Factor in Elderly Breast Cancer Patients in Kentucky. \$10,000.

American Cancer Society Institutional Research Grant, 1996-1997. Principal Investigator. The Costs and Outcomes of Breast Cancer: Merging Claims and Registry Data. \$10,000.

Social Services Financing grant, Office of International Affairs, 3/16/96-4/6/96. Taught an overview of the U.S. health care system, financing arrangements in healthcare, and cost-effectiveness analysis to a small delegation of Russians.

Management of Rural Social Services and Rural Community Development grant, Office of International Affairs, 10/30/95-11/17/95. Taught an overview of the U.S. health care system, total quality management, and decision theory to a delegation of 13 Russians.

Osteopathic Hospital of Texas, 1992-93: Consultant with Lanis Hicks, analysis of the 1990 Medicare Hospital Mortality Report

Department of Family and Community Medicine, 1992: Principal Investigator, small seed money grant to study rural hospital closures and access to care. (<\$1000)

National Multiple Sclerosis Society, 1992-1993: Principal Investigator. Comparative Analysis of Multiple Sclerosis Patients to Other Hospitalized Patients. \$19997

Missouri Health Care Association, May 1992, four hour seminar with Keith Boles, Total Quality Management in Nursing Home Care.

Health Care Financing Administration, 1984-1987: Research Associate. Evaluation of the Impact of the Medicare Prospective Payment System.

Health Care Financing Administration, 1985-1987: Co-author and Research Associate. Indexes of Hospital Quality and Efficiency.

Prospective Payment Assessment Commission, 1985-1987: Research Associate. The Measurement of Real Change in Case Mix.

National Institute of Mental Health, 1988-1989: Research Associate. The Effect of PPS on Psychiatric Admissions in General Hospitals.

Reviewer for Cancer, Medical Care, Inquiry, Hospitals & Health Services Administration, Clinical Performance and Quality Health Care, American Journal of Preventive Medicine, AUPHA 1991 Annual Meeting, Annals of Epidemiology(2006), Journal of the American Geriatrics Society (2006), Journal of General Internal Medicine