

EXHIBIT B

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF INDIANA
INDIANAPOLIS DIVISION

| | | |
|---------------------------------------|---|--------------------------------|
| PLANNED PARENTHOOD OF |) | |
| INDIANA AND KENTUCKY, INC., |) | |
| |) | |
| Plaintiff, |) | |
| |) | |
| v. |) | Case No. 1:18-cv-01219-RLY-DLP |
| |) | |
| COMMISSIONER, INDIANA STATE |) | |
| DEPARTMENT OF HEALTH, <i>et al.</i> , |) | |
| |) | |
| Defendants. |) | |

**DECLARATION OF JAMES STUDNICKI, SC. D., MPH, MBA, IN
SUPPORT OF DEFENDANTS' MOTION FOR SUMMARY JUDGMENT**

1. I have been asked by the Defendants in this matter to offer my professional opinion regarding Indiana Code section 16-34-2-4.7 (the "Reporting Requirement"). I have reviewed the Reporting Requirement and the studies cited in this report. The opinions I express herein are based upon my training and more than four decades of public health and health services research. These opinions are my own and do not represent those of the institutions with which I am affiliated.

BACKGROUND AND EXPERIENCE

2. I am Dr. James Studnicki, VP for Data Analytics at the Charlotte Lozier Institute. From 2006 to 2016 I was the Irwin Belk Endowed Chair in Health Services Research, and Professor of Public Health Sciences, at the University of North Carolina, Charlotte, College of Health and Human Services. I was the first Director of the Master of Health Science (M.H.S.) Program in Health Finance and Management at the Johns Hopkins School of Hygiene and Public Health, where I

served as a faculty member for 13 years. Subsequently, I was Chairman, Department of Health Policy and Management, and Director, Center for Health Outcomes Research, at the University of South Florida Health Sciences Center. I have also been a senior hospital executive and President of a technology company which was started in a University incubator.

3. My research has focused on the use of large-scale databases, and associated information technology, in analyzing outcomes at the patient, hospital, and community levels. I have been a frequent contributor to the health services research and public health systems and services research literatures. My publications have appeared in some of the most influential journals in public health, medical care and information technology/sciences. I have been a winner of the Article of the Year award given annually by the Public Health Systems Research (PHSR) interest group of Academy Health.

4. My work has contributed to many important research domains: quality comparisons between U.S.- trained and foreign-trained physicians; the regionalization of complex surgical procedures; data pattern recognition strategies; sub-population analytics; racial disparity in years of life lost due to abortion; community health status and priority determination; hospital admissions from the emergency room; career phase, workload composition, and outcomes for general surgeons; community networks, websites, and report cards; complex adaptive systems and surgery; data warehousing in bioterrorism surveillance; rating the health status of American communities; malpractice claims against hospital

defendants; intensive care, survival, and treatment of terminally ill cancer patients; excessive clinical laboratory testing; state high-risk health insurance pools; cybernetic systems and inappropriate hospital utilization; multi-hospital systems; correlation, scaling, and sensitivity of medical audits; and state Certification of Need programs.

5. I hold both Doctor of Science (Sc.D.) and Master of Public Health (M.P.H.) degrees from Johns Hopkins University and a Master of Business Administration (M.B.A.) degree from the George Washington University.

6. For a complete listing of my professional background, experience, responsibilities, and publications, please see my Curriculum Vitae, which is attached to this Declaration as Exhibit A.

CASES IN WHICH I HAVE TESTIFIED AS AN EXPERT DURING THE PAST FOUR YEARS

7. During the past four years I have testified as an expert at trial or by deposition in the following cases:

Falls Church Medical Center, LLC et al., Plaintiffs, v. M. NORMAN OLIVER, et al., Defendants. No: 3:18-cv-428-HEH, United States District Court Eastern District of Virginia, Richmond Division.

COMPENSATION

8. I am being compensated at the rate of \$250 per hour.

STATEMENT OF OPINIONS AND THE BASIS AND REASONS FOR THEM

9. My report is organized into the following topics, including the specific numbered paragraphs:

- a. U.S. abortion reporting is inadequate largely because state collection and reporting of abortion data is voluntary and inconsistent (paragraph 10);
- b. The establishment and continuous development of reported data plays an essential role in the improvement of healthcare quality and safety (paragraph 11);
- c. The new statute will provide useful information to study the problem of abortion complications. The data elements are all congruent with published literature and provide significant opportunities for analysis of important questions (paragraphs 12 and 13);
- d. A robust international published literature demonstrates that the science on the short and long-term consequences and complications of induced abortion is far from being settled (paragraph 14);

U.S. ABORTION REPORTING

10. Abortion advocates argue that abortion procedures pose few health risks to women, but have shown almost no interest in improving abortion reporting requirements to produce better data on abortion related complications and deaths. The CDC Abortion Mortality Surveillance System is woefully inadequate, largely because of the incompleteness and inconsistency of state-level reporting of abortion data. States and reporting areas (i.e., New York City and the District of Columbia) voluntarily provide CDC with abortion data—there is no federal mandate. California,

Maryland and New Hampshire do not report any abortion data to the CDC. Since California likely accounts for nearly 20% of all abortions in the U.S. and Maryland has one of the highest rates of abortion in the U.S. according to survey data collected by the Guttmacher Institute (1), their exclusion from the CDC data undermines the validity of any national abortion metrics produced by the CDC. State level reporting requirements vary, and there is no standardized reporting form. In addition, some states report intermittently—collecting and reporting data in some years but not in others. States report by residency of their own citizens only which can lead to confusion about how many of their residents went elsewhere for their abortions. The overall result is that the source data used for analyzing abortion incidence and safety is fundamentally flawed.

IMPROVING HEALTH CARE QUALITY AND SAFETY

11. The establishment and development of reported data systems plays an essential role in the improvement of healthcare quality and safety. The history of advances in the quality and safety of medical care reflects a familiar scenario. The providers of service resist the scrutiny of surveillance, often by claiming that the data available for analysis cannot capture the subtleties of the diagnostic and treatment process accurately. Perhaps the best example of this phenomenon is the initial attempts at publishing mortality rates for certain surgical procedures for hospitals and surgeons. The providers said, in many cases, that the crude mortality rates did not reflect the relative risk factors of patient populations. That is, some hospitals were treating “sicker” patients who were older and had more complicating co-

morbidities (diabetes, vascular disease) than patients at other hospitals and therefore a higher crude mortality rate was expected. As the result of this lack of concordance between what the available data could then reveal versus the clinical realities, *the data systems and analytical methods were improved*. So, in our example, we have now effective means to “risk adjust” mortality and other outcomes in order to better compare the performance of hospitals and doctors. It should be noted that many providers and their professional associations actively fought against data collection and reporting. We see that same instinct to shut down disclosure and transparency reflected by the abortion industry. History shows very clearly that, if there is interest in improving the safety and quality of abortion care, we should establish and improve available data collection. In the absence of a perfect abortion data system, we should not let the “perfect” become the enemy of the “good”.

THE NEW LAW

12. The complication reporting statute in Indiana is intended to provide useful information on the volume and types of complications that may be experienced by women undergoing induced abortions. The terms include 26 specific categories of abortion complications including death and any adverse event as defined by criteria provided by the Food and Drug Administration (FDA) Safety Information and Adverse Event Reported (AER) Program. The Guttmacher Institute has compiled a list of states which actually collect and/or report complications (5). Currently, there are 27 states which collect complication data as indicated either by their reporting forms, their actual annual reports, or the state reporting law. The specific

complications identified vary somewhat from state to state but there is a core of indicators common among nearly all collecting states. There is no complication category on the Indiana list which does not appear in the published literature as a possible complication.

13. The Indiana system collects additional information in order to perform basic analysis of the complications identified: the date of abortion complication treatment; patient age, race and county of residence; the type of abortion obtained and on which date; the name of the clinic, facility or hospital where the abortion was obtained; whether the abortion medication was obtained via mail or internet and, if so, identification of the source; who managed the complication medically (abortion provider or back up); name of medications used in a pharmaceutical abortion regimen; and treated complications and treatments provided. Together, these data elements represent significant analytical opportunities. The incidence of different types of complications, associated with different abortion providers over time could form the basis of an analysis of the relationship between an abortion provider's volume and the likelihood of an adverse outcome. The volume/outcome relationship is one of the most persistent associations in health services research for many types of treatments and surgical procedures. Similarly, these associations between demographic factors such as race and age and the likelihood of various abortion complications could help to explain any racial disparities in abortion complication rates. This type of data base will focus attention on those areas which will require more granular data to advance our understanding of those preliminary observations.

It is worth remembering that John Snow, an epic name in the history of Public Health, proved his theory of the cause of Cholera by simply observing the geographical pattern of infected patients in relation to the Broad Street water pump in a London suburb. Could other unknown agents have been the cause of Cholera? Of course. But a simple bivariate association between infected patient and their proximity to an infected water source was the ultimate clue to causation.

LITERATURE REVIEW

14. There is a robust international literature on the short and long-term complications and consequences of induced abortion-suggesting that the “safety” of induced abortion is far from “settled” science. Countries with comprehensive databases and universal mandatory reporting of abortion related morbidity and mortality, Finland and Denmark, show up to a fourfold increase of mortality following induced abortion compared to childbearing (6)(7). Another study, using California Medicaid data, found that compared to women who gave birth, women with a history of abortion were more likely to die from suicide, accidents, homicide, mental disease and cerebrovascular disease over an eight year period (8). In fact, there is a vast literature associating induced abortion with various mental illness outcomes: alcohol misuse, suicidal behavior, partner violence, and repeated induced abortion (9). A British Journal of Psychiatry meta study on the mental health effects of abortion, covering 22 published studies and 877,181 participants, found that abortion increases the likelihood of depression, anxiety, alcoholism, drug use and suicide (10). Multiple

studies dating back to the 1950's show that abortion, especially late-term, increases the risk of breast cancer (11)(12).

CONCLUSION

15. Planned Parenthood argues that the Reporting Requirement “will make abortions appear more dangerous than they are and will fuel an anti-abortion narrative that will give the impression that abortions are not safe.” ECF No. 74 at 14. Planned Parenthood either fears spurious correlations between reported complications and abortion procedures or that valid concerns about the long term effects of abortions may be documented. In any case, the science of the safety of abortions, particularly medical abortions, is not settled, and we learn about and address risks by studying them, not by ignoring them.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Dated: 8/22/19

James Studnicki

James Studnicki, Sc. D., MPH, MBA

References

1. Jones RK, Jerman J. Abortion Incidences and Service Availability in the United States, 2014. *Perspectives on Sexual and Reproductive Health*. 2017; 49 (1): 17-27.
2. Schaible B. Improving the Accuracy of Maternal Mortality and Pregnancy Related Death. *Issues in Law and Medicine*. 2014; 29 (2): 231-242.
3. Esscher A, Hogberg U, Haglund B, Essen B. Maternal Mortality in Sweden 1988-2007: More Deaths Than Officially Reported. *Acta Obstet Gynecol Scand*. 2013; 92 (1): 40-46.
4. National Research Council (US) Committee on Population; Reed HE, Koblinsky MA, Mosley WH, editors. *The Consequences of Maternal Morbidity and Maternal Mortality: Report of a Workshop*. National Academies Press (US): 2000.
5. Abortion Reporting Requirements. As of July 1, 2019. State Laws and Policies. The Guttmacher Institute. <https://www.guttmacher.org/state-policy/explore/abortion-reporting-requirements>.
6. Gessler M, Kauppila R, Merilainen J, Toukonaa H, Hemminki E. Pregnancy Associated Deaths in Finland 1987-1994: Definition Problems and Benefits of Record Linkage. *Acta Obstet Gynecol Scand*. 1997; 76(7); 651-657.
7. Reardon DC, Coleman PK. Short and Long-Term Mortality Rates Associated With First Pregnancy Outcomes: Population Register Based Study for Denmark. 1980-2004. *Med Sci Monit Int Med J Exp Clin Res*. 2012; 18(9): 71-76.
8. Reardon DC, Ney PG, Scheuren F, Cogle K, Coleman PK, Strahan TW. Deaths Associated With Pregnancy Outcomes: A Record Linkage Study of Low Income Women. *Southern Medical Journal*. 2002; 95(8); 834-8.
9. Geisler M, Berg C, Bouvier-Colle MH, Buekens P. Injury Deaths, Suicides and Homicides Associated With Pregnancy, Finland 1987-2000. *European Journal of Public Health*. 2005; 15(5); 459-463.
10. Coleman PC. Abortion and Mental Health: Quantitative Synthesis and Analysis Research Published 1995-2009. *The British Journal of Psychiatry*. 2011; 199(3); 780-786.
11. Ozmen V, Ozcinar B, Karanlik H, et al. Breast Cancer Risk Factors in Turkish Women – A University Based Nested Case Control Study. *World Journal of Surgical Oncology*. 2009; 7, (37).
12. Lecarpentier J, Nogues C, Mouret-Fourme, et al. Variation in Breast Cancer Risk Associated With Factors Related To Pregnancies According to Truncating Mutation Location, in the French National BRCA1 and BRCA2 Mutation Carrier Cohort. *Breast Cancer Research BCR*. 2012; 14(4).
13. Haut ER, Pronovost PJ, Schneider ER. Limitations of Administrative Databases. *JAMA*. 2012; 307 (24): 2589-2590.
14. Ferver K, Burton B, Jesilow P. The Use of Claims Data in Healthcare Research. *Open Public Health Journal*. 2009; (2): 11-24.
15. Tyree PT, Lind BK, Lafferty WE. Challenges of Using Medical Insurance Claims Data for Utilization Analysis. *American Journal of Medical Quality*. 2006; 21 (4): 269-275.

16. Hicks J. The Potential of Claims Data to Support the Measurement of Healthcare Quality. Rand Corporation, 2003. Santa Monica, CA.
17. Romano P. Using Administrative Data to Identify Associations Between Implemented Medical Devices and Chronic Diseases. *Annals of Epidemiology*. 2000; 10(4); 197-209.
18. Dresser M, Feingold L, Rosenkranz S, Coltin K. Clinical Quality Measurement: Comparing Chart Review and Automated Methodologies. *Medical Care*. 1997; 35(6); 539-552.
19. Desmuke C. Underreporting of Computed Tomography and Magnetic Resonance Imaging Procedures in Inpatient Claims Data. *Medical Care*. 2005; 43(7); 713-717.
20. United States General Accounting Office. Consultants Billing Advice May Lead to Improperly Paid Insurance Claims. [Online Publication No. GAO-01-818]. June 2001. <http://www.gao.gov/new.items/d01818.pdf>
21. Quan H, Parsons G, Ghali W. Validity of Procedure Codes in International Classification of Diseases, 9th. Revision, Clinical Modification Administrative Data. *Medical Care*. 2004; 42(8); 801-809.
22. Steele L, Glazier R, Lin E, Evans M. Using Administrative Data to Measure Ambulatory Mental Health Services Provision. *Medical Care*. 2004; 42(10); 960-965.
23. Goldman, G. The Trouble With Science Funding. Union of Concerned Scientists. April 8, 2016. <https://blog.ucsusa.org/gretchen-goldman/the-trouble-with-science-funding> Accessed July 9, 2019

Exhibit A

James Studnicki, Sc.D., M.B.A., M.P.H.
(813)-495-9079
jstudnic11@gmail.com

Academic and Professional Appointments

2016-Present, Vice-President and Director of Data Analytics, The Charlotte Lozier Institute, Arlington, Virginia

2006-2016, The Irwin Belk Endowed Chair in Health Services Research, Professor, Department of Public Health Sciences, College of Health and Human Services, University of North Carolina, Charlotte

1998-2006, Director, Center for Health Outcomes Research, Health Sciences Center, University of South Florida.

1990-2006, Professor, Department of Health Policy and Management, College of Public Health, University of South Florida.

1990-1997, Chairman, Department of Health Policy and Management, College of Public Health, University of South Florida.

1985-1990, Vice-President for General Management and Chief Operating Officer, St. Joseph Regional Medical Center, Baltimore, Maryland.

1977-1985, Associate Professor, Department of Health Policy and Management, School of Hygiene and Public Health, Johns Hopkins University.

1975-1985, Joint Appointment, Department of Gynecology and Obstetrics, School of Medicine, Johns Hopkins University.

1974-1984, Director, Program in Health Finance and Management, Department of Health Policy and Management, School of Hygiene and Public Health, Johns Hopkins University.

1972-1977, Assistant Professor, Department of Health Policy and Management, School of Hygiene and Public Health, Johns Hopkins University.

Education

Doctor of Science, Johns Hopkins University, 1972 (Health Services Research)

Master of Public Health, Johns Hopkins University, 1970

Master of Business Administration, George Washington University, 1968

Bachelor of Science, University of Pittsburgh, 1965 (Psychology)

Commercial Enterprises

2000-2008, President, MEDEGY, USF Center for Entrepreneurship, Tampa, Florida.

1973-1977, President, Health Inquiry Inc., Baltimore, Maryland.

Professional Associations

American Hospital Association
American College of Hospital Administrators
American Public Health Association
American Association for Comprehensive Health Planning
American Association for the Advancement of Science
Johns Hopkins Medical and Surgical Association
Evaluation Research Society
Association for Health Services Research
Academy Health

Formal Courses Developed

Large-Scale Databases and Health Services Research
Quality Management in Healthcare Services Delivery
Healthcare Information Systems
Financial Management of Health Organizations
Elements of Management
Introduction to Health and Medical Care Administration
Theory and Practice of Management of Health Services
Comprehensive Health Planning 2017;
Public Health Practice
Managed Care
Healthcare Marketing
Introduction to Health Policy and Management

Peer Reviewed Publications

Studnicki J, Reardon DC, Harrison DJ, Fisher JW, Skop I. Improving the Metrics and Data Reporting for Maternal Mortality: A Challenge to Public Health Surveillance and Effective Prevention. *Online Journal of Public Health Informatics*. 2019; 11(2) in press July 2019.

Studnicki J, Fisher JW. Planned Parenthood: Supply Induced Demand for Abortion in the U.S. *Open Journal of Preventive Medicine*. 2018; (8), 142-145.

Studnicki J. Late-Term Abortion and Medical Necessity: A Failure of Science. *Health Services Research and Managerial Epidemiology*. 2019; (6), 1-3.

Studnicki, J, Longbons T, Fisher JW, Harrison DJ, Skop I, MacKinnon SJ. Doctors Who Perform Abortions: Their Characteristics and Patterns of Holding and Using Hospital Privileges. *Health Services Research and Managerial Epidemiology*. 2019; (6), 1-9.

Studnicki J, Fisher JW, Donovan CA, Prentice DA, Mac Kinnon SJ. Improving Maternal Mortality: Comprehensive Reporting for All Pregnancy Outcomes. *Open Journal of Preventive Medicine*. 2017; (7), 162-181.

Studnicki, J., MacKinnon, S.J. and Fisher, J.W. (2016) Induced Abortion, Mortality, and the Conduct of Science. *Open Journal of Preventive Medicine*, 6, 170-177.
<http://dx.doi.org/10.4236/ojpm.2016.66016>

Studnicki J, Fisher JW, German DC, Stout S, Honore PA. Demonstrating subpopulation analytics: a paradigm shift for improving population health. *Am J Prev Med*.2015; 49(4): e47-e52.

Shahbazi S, Studnicki J, Warner-Hillard CC. A cross-sectional retrospective analysis of the racial and geographic variation in cataract surgery. *PLoS One*.2015; 10(11) e0142459. Doi: 10.1371/journal.pone.0142459.

Debosree R, Studnicki J. Exploring gender differences in pre-operative ER use in an inpatient pacemaker insertion population. 2016. *Journal of Hospital Administration*. ISSN 1927-6990 (print), ISSN 1927-7008 (online).

Studnicki J, Craver C, Blanchette CM, Fisher JW, Shahbazi S. A cross-sectional retrospective analysis of the regionalization of complex surgery. *BMC Surgery*. 2014, Aug 16; 14:55. Doi: 10.1186/1471-2482-14-55.

Touati H, Ras ZW, Studnicki J. Meta-actions as a tool for action rules evaluation, in Feature Selection for Data and Pattern Recognition (Stanczyk and Jain, Eds.) Studies in Computational Intelligence, Vol. 584, Springer-Verlag 2014.

Touati H, Ras ZW, Studnicki J, Wiczorkowska A. Side effects analysis based on action sets for medical treatments. Proceedings of the Third ECML-PKDD Workshop on New Frontiers in Mining Complex Patterns. Nancy, France, September15-19, 2014: 172-183.

Hajja A, Touati H, Ras ZW, Studnicki J, Wiczorkowska A. Predicting negative side effects of surgeries through clustering. Post-Proceedings of the Third ECML-PKDD Workshop on New Frontiers in Mining Complex Patterns, *Lecture Notes in Artificial Intelligence*, Springer 2014 (will appear).

Touati H, Ras ZW, Studnicki J, Wiczorkowska AA. Mining surgical meta-actions effects with variable diagnoses numbers. 21st. International Symposium on Methodologies for Intelligent Systems (Roskilde, Denmark, June 25-27, 2014). *Lecture Notes in Artificial Intelligence (LNAI)*, Springer-Verlag, Vol. 8502, 2014, 254-263.

Studnicki J, Ekezue BF, Tsulukidze M, Honore P, Moonesinghe R, Fisher JW. Classification tree analysis of race-specific subgroups at risk for a central venous catheter-related bloodstream infection. *Joint Commission Journal of Patient Safety and Quality*. 2014;40(3): 134-143.

Studnicki J, Mackinnon SJ, Fisher JW. (2014) Racial disparity in years of potential life lost to induced abortions. *Open Journal of Preventive Medicine*. 2014; 4(1): 8-12.

Studnicki J, Fisher JW. Determining community health status priorities in an online analytic processing (OLAP) environment. *The Online Journal of Public Health Informatic*. 2013;5(2): 1-10.

Studnicki J, Ekezue BF, Tsulukidze M, Honore P, Moonesinghe R, Fisher JW. Disparity in race-specific comorbidities associated with central venous catheter-related bloodstream infection (AHRQ- PSI7). *American Journal of Medical Quality*. 2013; 8(6); 525-532.

Studnicki J, Platonova EA, Fisher JW. Hospital-level variation in the percentage of admissions originating in the emergency department. *The American Journal of Emergency Medicine*. 2012;30, 1441-1446.

Studnicki J, Platonova EA, Eichelberger CN, Fisher JW. Extent and patterns of community collaboration in local health departments: An exploratory survey. *BMC Research Notes*. 2011;4(1): 387.

Studnicki J, Fisher JW, Tsulukidze MM, Taylor YJ, Salandy S, Laditka JN. Career phase of board certified general surgeons: Workload composition and outcomes. *Archives of Surgery*. 2011;146(11):1307-1313.

Studnick J, Fisher JW, Eichelberger C, Bridger C, Angelon-Gaetz K, Nelson D. Beyond frameworks, web-sites and report cards: Evolving an analytic culture for population health improvement. *Journal of Healthcare Information Management*. 2011;25(3):68-73.

Studnicki J, Fisher J, Eichelberger C, Bridger C, Angelon-Gaetz K, Nelson D. NC CATCH: Advancing public health analytics. *Online Journal of Public Health Informatics*. 2010;2(3). Available: <http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/ojphi/article/view/3348/2754>

Studnicki J, Fisher JW, Kamble S. Race-differentiated outcomes in multiple special healthcare taxing districts. *American Journal of Preventative Medicine*. 2010;38(3): 311-316.

Platonova EA, Studnicki J, Fisher JW, Bridger C. Local health department priority setting: An exploratory study. *Journal of Public Health Management and Practice*. 2010; 16(2):140-147.

Studnicki J, Eichelberger C, Fisher JW. Complex adaptive systems: how informed patient choice influences the distribution of complex surgical procedures. *Advances in Information and Intelligent Systems*. (Ras Z and Ribarsky W, Eds.), SCI 251, pp. 3-19, Springer-Verlag, Berlin, Heidelberg 2009.

Bao Y, Studnicki J, Fisher JW. Racial differences in behavioral inpatient diagnosis: Examining the mechanisms using the 2004 Florida inpatient discharge data. *Journal of Behavioral Health Services and Research*. 2008;35(3)347-357.

Studnicki J, Fisher JW, Eichelberger CN. NC-CATCH: North Carolina's web-based data portal for community health assessment. *North Carolina Medical Journal*. 2008;69(2):122-126.

Studnicki J, Fisher JW. Improving community health status: The role of measurement. *Mecklenburg Medicine*. 2008; Vol. 38, No.4, pp. 16-17.

Studnicki J, Gipson L, Berndt D, Fisher J, Callandar M, Pracht E, Orban B. Special healthcare taxing districts: association with population health status. *American Journal of Preventive Medicine*. 2007;32(2):116-123.

Berndt DJ, Fisher JW, Craighead JG, Hevner AR, Luther S, Studnicki J. The role of data warehousing in bioterrorism surveillance. *Decision Support Systems*. 2007;(43):1383-1403.

Francois MR, Grivas PC, Williams CR, Johnson G, Studnicki J, Blair RC, Harbison RD. Predicting the risk of respiratory-related hospital admissions using an air pollution model. *Journal of Medicine*. 2005;36(1-6), 5-26

Studnicki J, Berndt D, Luther S. Hispanic health status in Orange County, Florida. *Journal of Public Health Management and Practice*. 2005;11(4):326-332.

Studnicki J, Berndt D, Luther S, Fisher, JW. The application of volume-outcome contouring in data warehousing. *Journal of Healthcare Information Management*. 2004; 18(4):49-55.

Berndt D, Bhat S, Fisher JW, Studnicki J. Data analytics for bioterrorism surveillance. *Intelligence and Security Informatics 2004, Lecture Notes in Computer Science 3073*:17-27.

Trembley M, Brendt D, Studnicki J. Doing more with more information: Changing healthcare planning with OLAP tools. *Decision Support Systems* 2006.

Trembley M, Berndt D, Studnicki J. Feature selection for predicting surgical outcomes. Proceedings of the 39th Hawaii International Conference on Systems Sciences, January 4-7, 2006.

Studnicki J, Berndt D, Hevner A. Bioterrorism surveillance with real-time data warehousing. *Proceedings of the 1st Annual National Science Foundation/National Institute of Justice Symposium on Intelligence and Security Informatics, ISI*. July, 2003.

Studnicki J, Hevner A, Berndt D. Using data to meet a policy objective: community health assessment practice with the C.A.T.C.H. data warehouse. *Public Health Informatics and Information Systems*. (O'Carroll P, Yasnoff W, Word M, Rubin R, Ripp L, Eds.), Springer-Verlag Publishing Co., 2003.

Luther S, Studnicki J, Kromrey J, Lamando-Frakes K, Grant P. A method to measure the impact of primary care programs targeting racial disparities. *Journal of Public Health Management and Practice*. 2003; 9(3): 243-248.

Berndt D, Fisher JW, Rajendrababu R, Studnicki J. Measuring healthcare inequities using the Gini index. *Proceedings of the 35th Annual Hawaii International Conference on System Sciences*. January, 2003.

Berndt D, Hevner A, Studnicki J. The C.A.T.C.H. data warehouse: Support for community health care decision-making. *Decision Support Systems*. 2003;35:367-384.

Studnicki J, Murphy F, Malvey D, Costello R., Luther S, Werner D. Toward a population health delivery system: First steps in performance measurement. *Health Care Management Review*. 2002;27(1):76-95.

Studnicki J, Hevner A, Berndt D, Luther S. Rating the health status of U.S. communities. *Managed Care Interface*. 2001;14(11):43-51.

Studnicki J, Hevner A, Berndt D, Luther S. Comparing alternative methods for composing community peer groups: A data warehouse application. *Journal of Public Health Management and Practice*. 2001; 7(6): 87-94.

Luther S, Steverson B, Studnicki J. Awareness and compliance with recommended screening procedures: A comparison of HMO and fee-for-service enrollees. *Managed Care Interface*. 2001;12(10):62-68.

Berndt D, Fisher J, Hevner A, Studnicki J. Healthcare data warehousing and quality assurance. *IEEE Computer*. 2001;34(12):33-42.

Luther S, Studnicki J. Physician practice volume and alternative surgical treatment for breast cancer in Florida. *Health Services Research*. 2001;36(6):166-179.

Berndt D, Hevner A, Studnicki J. Data warehouse dissemination strategies for community health assessments. *Informatik/Informatique, Journal of the Swiss Informatics Society*. 2001;1:27-33.

- Joint publication in Upgrade, *Journal of the Council of European Professional Informatics Societies*. 2001.
- Joint publication in Novatica, *Journal of the Spanish Informatics Society*. 2001; 149:54-60 (In Spanish).

Studnicki J, Luther S, Kromrey J, Myers B. A minimum data set and empirical model for population health status assessment. *American Journal of Preventive Medicine*. 2001; 20(1):40-49.

Berndt D, Hevner A, Studnicki J. Community health assessments: A data warehousing approach. *Proceedings of the Eighth European Conference on Information Systems, Vienna*. 2000;1276-1283.

Berndt D, Hevner A, Studnicki J. Hospital discharge transactions: A data warehouse component. *Proceedings of the 33rd Annual Hawaii International Conference on System Sciences*. Hawaii. 2000.

Berndt D, Hevner A, Studnicki J. C.A.T.C.H./IT: A data warehouse to support comprehensive assessment for tracking community health. *Proceedings of the American Medical Informatics Association (AMIA) Annual Symposium*. Orlando. 1998.

Studnicki J, Steverson B, Myers B, Hevner A, Berndt D. Comprehensive assessment for tracking community health (C.A.T.C.H.). *Best Practices and Benchmarking in Healthcare*. 1997;2(5):196-207.

Studnicki J, Rimmel R, Campbell R, Werner D. The impact of legislatively imposed practice guidelines on cesarean section rates: The Florida experience. *American Journal of Medical Quality*. 1997;12(1):1-7.

Studnicki J, Campbell R, Rimmel R., Werner D. Malpractice claims against hospital defendants in Florida: 1986-1993. *Journal of Health Care Risk Management*. 1996; 16(3):7-15.

Schapira D, Studnicki J, Bradham D, Wolff P, Aziz N. Survival and cost of treating cancer patients in the intensive care unit. *Cancer Practice*. 1995;3(2):21-26.

Studnicki J. Evaluating the performance of public health agencies: Information needs: Research and measurement in public health practice. *American Journal of Preventive Medicine*. 1995;II, 6:74-80.

Studnicki J, Schapira D, Straumfjord J, Clark R, Marshburn J, Werner D. A national profile of the use of intensive care by Medicare cancer patients. *Cancer*. 1994;4:2366-73.

Marshburn J, Bradham D, Studnicki J, Nemecek L, Luther S, Clark R. Mass mammography screening: Using an information system to track participation and identify target populations. *Cancer Practice*. 1994;2(2):1-8.

Studnicki J, Steverson B, Blais H, Richards T. An analysis of organizational practices: A methodology to describe the work activities of a local health department. *Public Health Reports*. 1994;109(4):485-490.

Studnicki J, Schapira D, Bradham D, Clark R. Response to the NCI alert: The impact of practice guidelines on two hospitals in the same medical community. *Cancer*. 1993;72:2986-92.

Schapira D, Studnicki J, Wolff P, Bradham D, Jarrett, A. Heroic measures when treating patients with hematologic malignancies: The economic cost of survival. *International Journal of Oncology*. 1993;3:987-993.

Schapira D, Studnicki J, Bradham D, Wolff P, Jarrett A. Intensive care, survival, and expense of treating critically ill cancer patients. *Journal of the American Medical Association*.

1993;269(6):783-786.

Studnicki J, Bradham D, Marshburn J, Foulis P, Straumfjord J. A feedback system for reducing excessive laboratory tests. *Archives of Pathology and Laboratory Medicine*. 1993;117:35-39.
Studnicki J. The medical waste audit. *Health Progress*. 1992;73(2):68-77.

Studnicki J, Bradham D, Marshburn J, Foulis P, Straumfjord J. Measuring the impact of standing orders on laboratory use. *Laboratory Medicine*. 1992;23(1):24-28.
Studnicki J. The management of hospital medical waste. *Hospital Topics*. 1992;70(2):11-20.

Studnicki J. Measuring service line competitive position. *Health Progress*. 1991;72(6):68-72.

Studnicki J. State high risk insurance pools: Their operating experience and policy implications. *Employee Benefits Journal*. 1991;16(2):32-36.

Anderson G, Studnicki J. Insurers competing with providers. *Hospitals*. 1985;1:64-66.

Studnicki J. Is your health benefits cost containment program really working? A prototype methodology. *Employee Benefits Journal*. 1985;10(2):2-8.

Studnicki J, Stevens C, Knisely L. The impact of a cybernetic system on inappropriate hospital use: The role of volume. *Journal of Medical Education*. 1985;60:454-60.

Studnicki J, Stevens C. Cybernetic appropriateness review: Does it change physician hospital utilization patterns? *Evaluation and Program Planning*. 1985;8:195-205.

Studnicki J, Stevens C. The impact of a cybernetic control system on inappropriate admissions. *Quality Review Bulletin*. 1984;10(10):304-11.

Studnicki J, Stevens C. The health benefits cost containment audit. *Employee Benefits Journal*. 1984;9(3):22-27.

Studnicki J, Honemann D. Pay source as a variable in utilization research: A review of the literature. *Quality Review Bulletin*. 1983; September: 258-66.

Studnicki J, Honemann D. Analyzing inpatient hospital duration and intensity: Part II, results of a pilot study. *Quality Review Bulletin*. 1983; May: 139-146.

Studnicki J. Regulation by DRG: Policy or perversion. *Hospital and Health Services Administration*. 1983.

Studnicki J, Stevens C. An approach to the assessment of emergency medical services utilization. *Maryland State Medical Journal*. 1982;31(9).

Studnicki J, Honemann D. Analyzing inpatient hospital duration and intensity: A methodology. *Quality Review Bulletin*. 1982;8(9).

Studnicki J. Hospital appointments, annual admissions, and patient distribution: A pilot study. *Journal of Health and Human Resources Administration*. 1982;5(2).

Studnicki J, Green J, Queen E, Tracy S, Kefe A. Length of stay review: Methodology and rationale. *Maryland State Medical Journal*. 1981.

Saywell R, Bean J, Ludke R, Studnicki J. An examination of intra-relationships of physicians clinical and utilization performance. *Health Services Research*. 1981;16(3).

Saywell R, Bean J, Studnicki J. A comparison of inappropriate hospital utilization: USMG-FMG attending physicians. *Philippine American Medical Bulletin*. 1981;20(9).

Saywell R, Studnicki J, Bean J. A performance comparison: USMG-FMG house staff physicians. *American Journal of Public Health*. 1980;70(1).

Studnicki J. Multihospital systems: A research perspective. *Inquiry*. 1979;16:315-22.

Studnicki J. Differences in length of stay for Medicaid and Blue Cross patients and the effect of intensity of services. *Public Health Reports*. 1979; 95(5).

Saywell R, Studnicki J, Bean J. A performance comparison: USMG-FMG attending physicians. *American Journal of Public Health*. 1979;69(1).

Studnicki J, Saywell R, Wiechetek W. Maryland Medicaid: FMG and USMG comparisons. *Maryland State Medical Journal*. March 1978.

Studnicki J, Saywell R. Comparing medical audits: Correlation, scaling, and sensitivity. *Journal of Medical Education*. 1978;53.

Studnicki J, Sapadin D, Carmel H. An experiment in voluntary systems integration: The health and education council of Maryland. *Maryland State Medical Journal*. 1977.

Studnicki J, Saywell R, Wiechetek W. Foreign medical graduates and Maryland Medicaid. *New England Journal of Medicine*. 1976;294:1153-57.

Studnicki J. Certification of need programs: Regulation in search of the evaluation process. *Evaluation*. 1975;2(2).

Studnicki J. The minimization of travel effort as a delineating influence for urban hospital services areas. *International Journal of Health Services*. 1975;4.

Studnicki J. The geographic fallacy: Hospital planning and spatial behavior. *Hospital Administration*. 1975;20(3).

Selected Research Reports and Monographs

Studnicki J, Fisher JW, Kamble S. Special Healthcare Taxing Districts in Florida: An Analysis of Race Differentiated Outcomes. Report submitted January 2008 to the Florida Association of Hospitals and Health Systems.

Studnicki J. Comprehensive assessment for tracking community health (C.A.T.C.H.): Miami-Dade County. Alliance for Human Services and the Miami-Dade Public Health Unit. June 2004.

Studnicki J. Environmental hazard exposure and its impact on the health status of geographically defined populations. Environmental Protection Agency. July 2004.

Studnicki J. Comprehensive assessment for tracking community health (CATCH): Orange County Hispanic Population. Primary Care Access Network (PCAN) and the Health Resources and Services Administration (HRSA-DHHS). May, 2003.

Studnicki J. Estimate of the number and healthcare utilization of the uninsured and underinsured in Orange County. Primary Care Access Network (PCAN) and the Health Resources and Services Administration (HRSA-DHHS). September, 2002

Studnicki J, Luther S. Evaluation of the impact of primary care services on the health status of defined populations. The North Broward Hospital District. September, 2002.

Studnicki J. Comprehensive assessment for tracking community health: Orange County Florida. Primary Care Access Network (P.C.A.N.) and the Health Resources and Services Administration (H.R.S.A.-D.H.H.S.). December, 2002.

Studnicki J. Comprehensive assessment for tracking community health (C.A.T.C.H.). Hardee County. Hardee County Board of Commissioners. June, 2001.

Studnicki J. Comprehensive assessment for tracking community health (C.A.T.C.H.). Pinellas County. Pinellas County Health Department. June, 2001.

Studnicki J. Comprehensive assessment for tracking community health (C.A.T.C.H.). Leon County. Leon County Health Department. September, 2001.

Studnicki J. Comprehensive assessment for tracking community health (C.A.T.C.H.). Dade County. Florida Department of Health. June, 2000.

Studnicki J. Comprehensive assessment for tracking community health (C.A.T.C.H.). Escambia County. Partnership for a Healthy Community. December, 2000.

Studnicki J. Comprehensive assessment for tracking community health (C.A.T.C.H.). Santa Rosa County. Partnership for a Healthy Community. December, 2000.

Studnicki J, Gipson L, Gilbert E. Estimate of the number and healthcare utilization of the uninsured and underinsured in Pinellas County. Baycare Health System. October, 2000.

Studnicki J, Gipson L, Luther S, Campbell R. The relationship between public hospitals, special taxing authority and population outcomes. Florida Association of Hospitals and Health Systems. February, 2000.

Studnicki J, Chirikos T, Luther S. East central Florida pilot program: Inpatient cost efficiency comparisons. Department of Veterans Affairs, Under Secretary for Health. March, 2000.

Studnicki J. The community health alliance performance impact reports (C.H.A.P.I.R.). The Baycare Health System, Inc. Clearwater, Florida. 2000.

Studnicki J. Comprehensive assessment for tracking community health (C.A.T.C.H.). Hillsborough County. Florida Department of Health. January, 1998.

Studnicki J. Comprehensive assessment for tracking community health (C.A.T.C.H.). Hendry and Glades Counties. Henry-Glade Indigent Task Force. February, 1998.

Studnicki J. Comprehensive assessment for tracking community health (C.A.T.C.H.). Marion County. Marion County Indiana Health Department. October, 1998.

Studnicki J. Comprehensive assessment for tracking community health (C.A.T.C.H.). Pasco County. Baycare Health System, Inc. December, 1998.

Studnicki J. Comprehensive assessment for tracking community health (C.A.T.C.H.). Volusia County. Halifax-Fish Community Health, Inc. December, 1998.

Studnicki J. Comprehensive assessment for tracking community health (C.A.T.C.H.). Lee County. Memorial Health Systems, Inc. September, 1998.

Studnicki J. Community health status and needs assessment: Collier County, Florida. The Collier Community Health Planning Council, the Collier County Public Health Unit, the Naples Community Hospital. March, 1995.

Studnicki J. The Environmental Quality Index Report (EQI). The Florida Office of Environmental Health and the Dade County Public Health Unit. February, 1995.

Studnicki J. Community health status and needs assessment: Volusia County, Florida. The Bert Fish Foundation, Inc. September, 1994.

Studnicki J. The Impact of the Immigration Nursing Relief Act of 1989 on the nursing labor markets of Hillsborough and Pinellas Counties, Florida. U.S. Department of Labor, Office of Policy. December, 1993.

Studnicki J. Utilization patterns, projections, and recommendations for primary care, mental health and public health services in Dade County, Florida: Pre-and post-hurricane Andrew. District XI, Florida Department of Health and Rehabilitative Services. February, 1993.

Studnicki J. The comparative performance reporting system: A national model for local health department performance appraisal. Centers for Disease Control and Prevention. October, 1992.

Studnicki J. The national health care data base applied to health care cost management. The International Foundation of Employee Benefit Plans, Inc., Brookfield, Wisconsin. 1986.

Studnicki J. The Blue Cross of Maryland admissions review program for Bethlehem Steel Corporation: An evaluation. Johns Hopkins University School of Hygiene and Public Health, Department of Health Policy and Management. January, 1985.

Studnicki J. The role of the foreign medical graduate in state and local health departments. Educational Commission for Foreign Medical Graduates. March, 1985.

Studnicki, J. Certificate of Need in Maryland: Development of an area-wide review process. Regional Planning Council. June, 1985.

Studnicki J. Direct costs of compliance to selected Medicare and Medicaid conditions of participation: Methodological overview and related issues. DHHS, HCFA, Division of Hospital Services, HSQB. March, 1982.

Studnicki J, Lichter K, Mason S. Financial linkages in not-for-profit multi-hospital systems: A conceptual framework. DHHS, HRA, Bureau of Health Facilities (HRA 232-79-0035). July, 1982.

Studnicki J. Evaluation of medical care utilization and unmet need in federal correctional institutions. Health Services Administration, USDHEW, (HSA 240-0A-17) (8) DLP. August, 1978.

Studnicki J, Saywell R. The USMG-FMG quality of care study. DHEW Bureau of Health Manpower, Division of Medicine, International Program Staff, NIH, (HRA 106 74-164). December, 1976.

Studnicki J. Study on statewide needs and priorities for the Department of Health of The Commonwealth of Virginia. Policy Research Incorporated. December, 1976.

Studnicki J. Health resource allocation project-Volume 1: Feasibility and system assessment report. Volume II: A conceptual outcome oriented programmatic decision making model. Health Planning Research Services, Fort Washington, Pennsylvania. 1975.

Studnicki J. A health services policy plan for the state of Maryland (3 volumes). Johns Hopkins University School of Hygiene and Public Health. June, 1972.

Studnicki J. An analysis of the spatial behavior of obstetrical patients in Baltimore City. Johns Hopkins University School of Hygiene and Public Health. June, 1972.

Studnicki J. A survey of the extent and quality of the current usage of programmed instructional materials in nursing schools in Pennsylvania, Ohio, and West Virginia. George Washington University School of Government and Business Administration. May, 1968.

**Grants and Contracts
(Principal Investigator Only)**

Non-small cell lung cancer survival, treatment patterns, and costs in a U.S. Medicare population. Sponsor: IMS Health Incorporated. (1/1 / 13-4/3/13). \$100,000.

Online Analytic Processing (OLAP) Hospital Decision Support. Partnership for a Healthy Community (PFHC) and affiliated organizations. (10/1/11-9/30/12). \$150,000.

Racial Disparity in Healthcare Acquired Infections. Office of the Secretary, DHHS (OS/OASH). (4/1/2011-12/30/2011). \$39,690.

The North Carolina Community Assessment Portal Project. North Carolina Division of Public Health, and Kate B. Reynolds Charitable Trust. (4/2007-5/2011). \$850,000.

Special Healthcare Taxing Districts and Race Differentiated Influence on Community Status. Association of Hospitals and Health Systems (Florida)/Halifax Medical Center. (5/2006-6/2007). \$125,000.

Data warehouse deployment and analytic processing capability. Central Valley Health Policy Institute, University of California, Fresno. (5/2005-7/2006). \$135,000.

Data warehouse development: characterizing human need. United Way of Tampa Bay. (5/2005-7/2005). \$16,000.

African-American cancer profiles for Florida: A Trans-Association project with Florida Agricultural and Mechanical University (FAMU). (6/2003-6/2005). Centers for Disease Control and Prevention. \$90,000.

Projecting need for a proposed hospital. North Broward Hospital District. (4/2005-10/2005). Phase I. \$30,000.

Comprehensive assessment for tracking community health (C.A.T.C.H.): Escambia/Santa Rosa Counties. Partnership for a Healthier Community. (12/2005-4/2006). \$ 55,000.

Assessing the impact of environmental hazard exposure on health status of geographically defined populations in Escambia and Santa Rosa Counties, Florida. Environmental Protection Agency. (8/1/2002-7/31/2003). \$199,445.

Orange County primary care access network evaluation. Orange County, Florida. (2/15/2002-2/14/2003). \$75,000.

Comprehensive assessment for tracking community health, Hardee County. Hardee County Board of County Commissioners. (1/2/2001-6/30/2001). \$30,000.

Comprehensive assessment for tracking community health in Pinellas County, Florida. Pinellas County Health Department. (1/4/2001-6/30/2001). \$55,000.

Comprehensive assessment for tracking community health, Leon County, Florida. Leon County Health Department. (11/1/2000-8/31/2001). \$24,999.

North Broward Hospital District benefits analysis and research evaluation project. North Broward Hospital District. (7/1/2001-9/30/2001). \$34,980.

Comprehensive assessment for tracking community health: Information technology initiative. U.S. Dept. of Commerce. (10/1/1998-9/30/2000). \$474,994.

ECF Care Study. Veterans Adm. Medical Center-James Haley, Tampa. (10/15/1999-1/31/2000). \$44,900.

Comprehensive assessment for tracking community health in Dade County. Florida Department of Health. (1/3/2000-6/30/2000). \$59,973.

Escambia and Santa Rosa County comprehensive assessment for tracking community health. Florida Department of Health. (6/5/2000-12/15/2000). \$54,168.

Pinellas County uninsured population estimation. Baycare Health System. (9/11/2000 - 10/11/2000). \$8,814.

Study of Florida hospitals and taxing authorities. Association of Community Hospitals and Health Systems of Florida. (8/1/1998-1/31/1999). \$119,261.

HRSA Public Health Practice Project #3. USPHS/Health Resources and Services Administration. (8/11/1999-12/31/1999). \$10,000.

Community Health Alliance performance impact report. Baycare Health System. (7/1/1998-10/31/1998). \$51,155.

HRSA Public Health Practice Project #4. USPHS/Health Resources & Services Administration. (9/18/1997-9/18/1998). \$10,000.

Marion County, Indiana comprehensive assessment for tracking community health. Marion County (Indiana) Health Department. (7/1/1998-10/30/1998). \$50,000.

Pasco County C.A.T.C.H. project. BayCare Health System. (9/1/1998-12/31/1998). \$45,573.

Lee County comprehensive assessment for tracking community health. Memorial Health Systems, Inc. (2/17/1997-6/16/1997). \$26,746.

Volusia County comprehensive assessment for tracking community health. Halifax-Fish Community Health. (8/1/1997-12/1/1997). \$49,908.

Comprehensive assessment for tracking community health (C.A.T.C.H.), Hillsborough County. Department of Health. (7/1/1996-9/30/1997). \$156,113.

Florida stroke education. Du Pont Merck Pharmaceutical Co. (7/1/1996-6/30/1997). \$55,000.

Hendry County comprehensive assessment for tracking community health. Hendry-Glades Indigent Task Force. (4/1/1997-8/1/1997). \$15,000.

Community health assessment methodology applied in Hillsborough County, Florida. Florida Department of Health and Rehabilitative Services. (7/1/96-6/30/97). \$157,000.

Analysis of community health purchasing alliances: Rates and market share. Florida Agency for Health Care Administration. (4/1/96-2/1/97). \$100,000.

Environmental health risk reduction activities benefiting minority communities in Florida. Association of Schools of Public Health/University of Illinois, Chicago. (9/30/95-9/30/96). \$20,000.

Community health status methodology applied in Pinellas County, Florida. Morton Plant-Mease Health Care, Inc. (5/1/95-4/30/96). \$151,914.

Public health practice case study. USPHS/Health Resources and Services Administration. (3/9/95-3/9/96). \$10,000.

Development of a public health practice monograph. USPHS/Health Resources and Services Administration. (6/1/94-5/31/95). \$9,967.

Community health assessment methodology applied to Escambia, Okaloosa, Santa Rosa, and Walton Counties, Florida. Florida Department of Health and Rehabilitative Services. (4/1/94-5/31/95). \$117,995.

Community health assessment methodology applied in Collier County, Florida. Collier County Government. (11/1/94-2/28/95). \$25,000.

Development of an environmental quality index: Pilot test and validation study. Florida Department of Health and Rehabilitative Services. (12/13/94-3/3/95). \$20,000.

Methods for enhancing collaboration with historically black colleges and universities. Association of Schools of Public Health/University of Illinois, Chicago. (2/1/95-9/29/95). \$20,000.

Community health assessment methodology applied in Flagler County, Florida. Memorial Health Systems, Inc. (5/1/95-9/30/95). \$47,884.

Evaluation of breast cancer screening program. H.L. Moffitt Cancer and Research Center. (7/1/93-6/30/94). \$30,576.

Development of public health practice office. USPHS/Health Resources and Services Administration. (10/1/93-9/30/94). \$10,378.

Community health assessment methodology applied to Volusia County, Florida. The Bert Fish Trust, Inc. (11/22/93-8/31/94). \$162,000.

The impact of the immigration Nursing Relief Act of 1989 on nursing employment in selected markets. The United States Department of Labor. (6/10/92-12/29/93). \$228,409.

Assessment of health needs of the medically indigent in Dade County following hurricane Andrew. Federal Emergency Management Administration and Florida HRS. (11/16/92-2/15/93). \$49,989.

Development of a hospital medical waste audit methodology. St. Joseph Hospital, Tampa. (1/30/93-12/30/93). \$10,000.

Evaluation of school nutrition education program. Hendry/Glades Bi-County Public Health Units. (7/1/93-9/30/93). \$10,000.

Development of a breast cancer surveillance and screening data base in Tampa Bay. American Cancer Society. (7/15/91-7/15/92). \$35,700.

Evaluation of financial reporting and budgeting within local public health departments. Centers for Disease Control and Prevention. (10/1/91-12/31/92). \$35,000.

Local health department manpower allocation analysis. Centers for Disease Control and Prevention. (10/1/91-12/30/92). \$35,000.

Evaluating the performance of local public health units. Centers for Disease Control and Prevention. (10/1/91-12/30/92). \$105,000.