

COMPELLED BY DATA: JOHN D. THOMPSON

Nurse, Health Services Researcher, and

Health Administration Educator



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William D. White, *Editor*

Cover: John Devereaux Thompson, 1917 – 1992





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DEPARTMENT OF EPIDEMIOLOGY AND PUBLIC HEALTH

YALE SCHOOL OF MEDICINE

YALE UNIVERSITY · 2003

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ISBN 0-9726959-0-7

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Sources for texts reprinted in this volume are found at the beginning of each of the
articles in Part II.

PREFACE

This volume celebrates the life and accomplishments of Professor John D. Thompson. Thompson's career spanned more than forty years, including over thirty years as a member of the faculty of the Department of Epidemiology and Public Health (School of Public Health) at the Yale University School of Medicine. He was a distinguished leader in the fields of health services research and health administration education. He was also an inspiration to generations of health administration students and health service researchers. The goal of this volume is twofold. First, to provide a sense of Professor Thompson as a man and a historical figure. Second, to convey enduring themes in his research: the ability of empirical evidence to empower administrative decision making in health care; and the importance of understanding health care institutions and their historical context in order to successfully implement change.

The volume has been made possible by the generous support of the W.K. Kellogg Foundation. It reflects a combined effort by former students, colleagues, and friends. Warm thanks are particularly due to members of the volume advisory committee, Donna Diers, Gary Filerman, Edward Halloran, William Kissick, Barbara Lee, Rosemary Stevens, and Elizabeth Bradley, who not only offered thoughtful guidance, but contributed extensively to the volume. Warm thanks are also due to those assisting in the production of the volume, including David Baker, Carolyn Cummings, and Elizabeth Naldi. As a member of the faculty of the Yale School of Public Health and as Director of the Yale Health Management Program from 1998 to 2001, I have found it both a privilege and a pleasure to work on this project.

William D. White
New Haven, Connecticut



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Part I

HISTORY AND LIFE



INTRODUCTION

William D. White

John Devereaux Thompson (1917–1992) was a man of many parts—nurse, health care administrator, student of hospital architecture, health services researcher, historian of hospitals, educator, and mentor. Starting out his career in health care as a nurse, he was imbued not only with a deep sense of compassion, but a fascination with the challenges of health management. After obtaining a master’s degree in hospital administration at Yale in 1950, he went on to pioneer the use of operations research and computer simulation techniques in hospital design. Later, he played a central role in the development of Diagnosis Related Groups (DRGs) as a health management tool to identify product lines for hospital services and to provide a basis for assessing hospital performance and for reimbursing for services. In his seminal work on the history of hospital architecture, Thompson probed deeply into the role of social, economic, and technological forces in the evolution of the modern hospital. As an educator and longtime member of the faculty of the Department of Epidemiology and Public Health at the Yale University School of Medicine, Thompson was a powerful presence as a teacher and mentor. He was also a national leader in the development of the field of health administration education and is appropriately remembered in the Association of University Programs in Health Administration (AUPHA) annual John D. Thompson Prize for Young Investigators. As a person, he was known for his unconventional style and earthy language, as well as a bristling mustache, a penchant for pungent cigars, and interests which ranged from cribbage to opera.

This volume has three objectives. The first is to celebrate John Thompson’s life as a scholar, teacher, and unique individual. A decade after his death in 1992, he remains a beloved figure among former students and colleagues. This volume provides an opportunity to honor him. The second objective is to provide a sense of Professor Thompson as a historical figure. The third is to make Thompson’s writings accessible to a new generation of scholars and students.

Thompson’s career offers a fascinating window on the evolution of health care administration research and education during the post-World War II era. Thompson both reflected and helped shape his times during a period of rapid growth and increasing government involvement. Entering health care in 1950

amid a hospital building boom in part financed by the federal Hill-Burton program, Thompson's early work focused on hospital design and facilities planning. His pioneering research on DRGs in the 1960s and 1970s took place during a period of growing government interest in employing planning tools to improve efficiency and control costs. Thompson himself emerged as a strong advocate of using health services research as a basis for formulating policy and for providing a rigorous foundation for health administration education. Later, amid a shift toward greater reliance on market-oriented strategies to contain costs, Thompson played an important role in shaping public policy through his promotion of the use of DRGs for hospital reimbursement. These efforts culminated in the adoption of DRGs as the basis of the Medicare Prospective Payment System (PPS) in 1983. At this writing in 2003, they remain in use.

Thompson's career and accomplishments are not, however, just of historical interest. They offer an enduring message through the values Thompson embodied and his intellectual vision. Throughout his long career, Thompson was passionately concerned about patient welfare. This was combined with profound intellectual curiosity and a strong sense of pragmatism. For Thompson, research and teaching were not simply cognitive exercises. Health care was a vocation and a form of service. Patients came first and this belief suffused his entire agenda. At the same time, Thompson was interested in how things work and in making them work better. His objective was not just to ensure good care, it was to systematically improve the quality and efficiency of health care delivery. As Rosemary Stevens observes in her tribute to Thompson in Part III, at heart he was an inventor as well as a practitioner and scholar.

Thompson's efforts to improve health care delivery were guided by an intellectual vision entailing two key elements. The first was a belief in the ability to empower management decision making in health care by linking clinical and administrative data. The second was a belief in the value of history in understanding health care institutions. In many respects, both aspects of this vision remain as relevant today as they were a half-century ago when Thompson began his work.

Data were a compelling force in Thompson's work. He responded powerfully to what Edgar Sydenstricker, a pioneering advocate of the use of measurable outcomes in evaluating public health programs, called "the stimulating challenge of facts."¹ As Gary Filerman observes in his chapter of this volume, the refrain "Where are the data?" marked Thompson as both a teacher and scholar. He was constantly seeking out quantitative data to assess health care quality and efficiency, pursuing his quarry wherever he could find them, and reveling in their analysis. In this, he drew inspiration from his heroine, that

“rather intense gentlewoman”² and founder of modern nursing, Florence Nightingale. Not only did Nightingale provide a role model as a dauntless advocate of the interests of patients; she also offered an intellectual inspiration through her use, nearly a century before, of clinical and administrative data and rigorous statistical tools to evaluate hospital performance.

Thompson’s central intellectual contribution in his own time was to combine standardized clinical and financial data with modern quantitative tools from epidemiology and operations research. This led him to his path-breaking research on hospital design and ultimately to the development of DRGs. As an educator, it also led him to be a tireless advocate of simultaneously grounding health administration education in epidemiology and management science.

Thompson’s research offers cogent insights into the complex methodological issues involved in successfully linking clinical and financial data. It suggests as well a wide array of practical applications to health care management. If anything, with the increased availability of data and computing power, the opportunities Thompson and his colleagues describe are even more exciting today than when they were originally proposed.

Thompson’s work also offers keen insights into the importance of understanding history in attempting to implement organizational change in health care. While advocating rigorous statistical analysis, Thompson was no slave to technique. In a policy environment typically focused on the latest crisis, he consistently championed taking a long view. For Thompson history was a palpable presence—an invaluable resource not only for assessing the genesis of current problems and gaining perspective on the underlying challenges faced in health care management, but also a source of deep intellectual interest in its own right.

Harking back to the work of Nightingale, Thompson liked to emphasize that extensive clinical and financial data have been available for a long time. For Thompson, the challenge of successfully unlocking their combined power was not simply technical. It was also organizational. Understanding the historical roots of problems was critical. Thus, in his work on the use of DRGs as a management tool, Thompson repeatedly emphasized the problems posed by traditional division of clinical and financial responsibilities in hospitals between doctors and administrators. He argued that this division created a major barrier to the successful implementation of DRGs, which needed to be addressed at an institutional level. Likewise, in his work on the history of hospital architecture, Thompson stressed the importance of looking beyond hospitals as physical structures to see them as living institutions, their evolution shaped by a confluence of social, political, economic, and technological forces.

Part I of this volume seeks to introduce John Thompson as the man and his work. It includes a short biography by Edward Halloran, a former student of Thompson's and Professor of Nursing at the University of North Carolina at Chapel Hill. Complementing this biography, Donna Diers, Professor and former Dean of the School of Nursing at Yale, discusses Thompson's contributions to hospital design and operations. The section concludes with an appreciation of Thompson's contributions as an educator to the field of health administration studies by Gary L. Filerman, Professor of Health Studies at Georgetown University and former president of the Association of University Programs in Health Administration (AUPHA).

Part II contains a selection of Professor Thompson's work. He was a prolific writer. The choice of pieces is necessarily somewhat arbitrary. Three goals guided the selection of the papers presented here: 1) to provide an overview of the scope and depth of Thompson's work; 2) to illustrate how he approached problems; 3) to provide a sense of the way his thinking evolved over time. In addition, of course, an important aim is to allow Thompson to speak for himself.

Selections are organized around two themes: the combined use of epidemiological and administrative data to address managerial issues in health care; and the use of history to inform understanding of health care issues. Thompson's work on contemporary hospital design was also very influential in its time. But these publications tend to be highly topical, and in the interest of conserving space, none are included here. As a guide to the reader, each article is accompanied by a brief introductory note on its context and contribution.

The first selection in Part II, "Epidemiology and Health Services Administration: Future Relationships in Practice and Education," was published in 1978, well along in Thompson's career. It comes first because it presents his Nightingale-inspired mature vision of the value of combining clinical and financial data with rigorous quantitative methods to empower health care decision making.

"The History of the Development of DRGs" is Thompson's unpublished account of how DRGs came to be through a combination of complementary research at Yale. Very early in this process, Thompson sought out the operations researcher Robert Fetter, in Yale's Department of Administrative Sciences. Their first paper together, "The Economics of the Maternity Service," combines operations research with clinical and administrative data to examine the relationship between volume and cost in maternity services.

“Case Mix and Resource Use,” with Robert Fetter and Charles Mross, lays out the methodological basis for constructing DRG categories for hospital services. “Planning, Budgeting and Controlling—One Look at the Future,” with Richard Averill and Robert Fetter, describes a methodological basis for linking DRGs to existing cost accounting systems to develop “product”-specific cost estimates. Both papers, published in 1975 and 1979 respectively, are striking in their prescience.

Thompson’s best-known piece of historical research is unquestionably his seminal book in 1975 with Grace Goldin, *The Hospital: A Social and Architectural History*.³ Here we reprint his article “Caring and Curing: The Evolution of Hospital Design,” which distills some of the central themes of the larger book from which it is drawn. The section ends with Thompson’s antepenultimate article, “The Great Stench or the Fool’s Argument,” in which he explores lessons from a policy crisis provoked by a prodigious odor arising from the Thames in London in the summer of 1858.

Thompson’s eloquent and unpublished assessment of his career, “The Privilege of Making a Difference,” begins Part III, Epilogue. It is followed by a selection of tributes by friends and colleagues. The volume ends with a bibliography of Thompson publications and a note on the archival sources available in the John Devereaux Thompson papers in the Yale University Library.

NOTES

- 1 Edgar Sydenstricker (1931), quoted in Richard V. Kasius (ed.) (1974) *The Challenge of Facts: Selected Public Health Papers of Edgar Sydenstricker*. New York: Milbank Memorial Fund/Prodist.
- 2 J.D. Thompson (1978) “Epidemiology and Health Administration: Future Relationships in Practice and Education,” *Milbank Memorial Fund Quarterly* 56: 3, 253–273.
- 3 J.D. Thompson and G. Goldin (1975) *The Hospital: A Social and Architectural History*. New Haven, CT: Yale University Press.



JOHN DEVEREAUX THOMPSON, R.N., M.S.

Edward J. Halloran, R.N., M.P.H. '75, PH.D., F.A.A.N.

John Devereaux Thompson, R.N., M.S., “found” Diagnosis Related Groups. That he did so after spending nearly forty years in the study of hospitals is testament to his perseverance. Interested not only in hospitals’ performance, but also in the history of their origin, Thompson involved his students, his colleagues, and all acquainted with him in his quest for understanding the hospital in the twentieth century.¹ Like no other single individual, John D. Thompson altered the way American hospitals operated.

John Devereaux Thompson was born on August 6, 1917 in Franklin, Pennsylvania and raised in Canton, Ohio.² He was the oldest child of William McKinley Thompson and Margaret Lucille Devereaux. His father attended Mount Union College in Alliance, Ohio, and was a vice president in the Allegheny Arrow Oil Company prior to the Depression. Thompson’s mother, born in 1886, was a graduate of Ohio State University and a mathematics teacher. Thompson had a younger brother, William, Jr., a career Air Force officer who predeceased him, and a sister, Martha Carrick. John attended local parochial schools in Canton, and his first year at Ohio State University was cut short by a serious illness.

Thompson’s mother’s faith helped shape the man. She was Irish-Catholic, notwithstanding her French surname (her ancestors being among the French who attempted to restore James II to English rule in Ireland’s Battle of the Boyne in 1690). John inherited his mother’s facility for mathematics, and her sudden death in childbirth when he was twelve imbued him with a lasting fascination with all manner of things Catholic and countable. His father influenced him as well. As Thompson’s sister, Martha, recalls, their father “was a great raconteur, who also, as did John, valued the friendship of individuals, regardless of race, color, or creed – rather rare in those times.”³

Thompson at age nineteen went to study nursing at Bellevue Hospital’s Mills School of Nursing for Men in New York City. His stepmother, Eileen, a nurse, encouraged him to attend nursing school as a means of obtaining marketable skills which he could use later to put himself through college. Her brother, Dr. James P. Clooney, a general in the Army Medical Corps, recommended Bellevue, where Thompson could obtain free education, room, and board. John “Curley” Thompson was president of his Mills School class and, to judge from the 1939 edition of *Crane & Cross*, the Bellevue Hospital and Mills School of Nursing yearbook, he was a very active and popular student. The first book Thompson participated in writing was *My Oath*, the 1937 fiftieth anniversary

publication of the Mills School of Nursing, for which he was art director.⁴ At Bellevue Thompson developed splendid social skills, especially conversation, dancing, and a love for music, very likely because the good looks and tall stature that his brother inherited eluded him.

He completed the Mills training school program in 1939. Thompson was one of a number of distinguished men of his generation who found their way to the nursing profession for economic opportunity, as did most women members of the profession in the decades before and since the Depression. Thompson said later: “What I didn’t realize was that the experience would mark me forever. It is impossible to become a nurse in a place like Bellevue and not have the imprint remain with you the rest of your life.”⁵

After a short stint in hospital practice (nights – urology and prison psychiatry), Thompson enrolled in the Navy prior to the start of World War II and served throughout (four years, nine months, twenty-six days, as he was wont to say).⁶ While other graduates of Bellevue received a commission in the Army or Navy Nurse Corps, the male nurses were treated differently. Those who joined the Navy, as Thompson did, entered as pharmacist’s mates. Thompson served out the war in the Atlantic on the aircraft carrier *Ranger* and achieved the rank of warrant officer. His father had taught him cribbage, a card game that brought him a trophy from his shipmates. After the war he returned to New York and enrolled at City College of New York, again working nights on the Bellevue Prison Ward, receiving his bachelor’s degree in 1948 in business, with distinction. Thompson had decided to become a hospital administrator, applied too late for the University of Chicago program, and, on the recommendation of a mentor, Larry Bradley, went to the new program at Yale.

Albert W. Snoke, M.D., headed both the Hospital Administration program and the Grace–New Haven Hospital, succeeding James Hamilton in both.⁷ The course of study was one year, but a second year of residency was required. Thompson completed his training at Montefiore Hospital in 1950 and stayed on for the next six years, working first for Dr. E.M. Bluestone and later for Dr. Martin Cherkasky, both Montefiore Hospital directors. Bluestone encouraged Thompson to write on home care for his 1950 master’s essay and later suggested he submit a version of it for publication.⁸ Bluestone also sent Thompson to Europe on a tour with the International Hospital Federation. There he spent three months visiting very old and very new hospitals, acquiring a lifelong interest in hospital architecture. As assistant director at Montefiore, Thompson became a specialist in physical and programmatic planning. After meeting her on a plane trip, Cherkasky directed Thompson to hire Lydia Hall, who developed the Loeb Center for Nursing and Rehabilitation, which, in 1966, became a model for the Medicare extended care benefit.⁹

Thompson was married in 1955 in Staten Island, New York, to Andrianna Natale, M.D., a surgeon he met at Montefiore. Together they produced seven children (Margaret, Monica, Anthony, Andrianna Siobhan, Deirdre, Julie Daria, and Maere Clare), all raised in New Haven and educated at Catholic schools there. For years the family would summer at Lake Winnepesaukee in New Hampshire, where Thompson did the *New York Times* crossword puzzles and taught all his children how to play cribbage. He once recounted the extended *New York Times* strike when vacationing easterners would mill about the drugstore on Sunday morning waiting in vain for the paper and its crossword puzzle.

Thompson had a grasp for numbers and their meaning. His interest in quantitative analysis led him to pathbreaking work in the areas of hospital design and in what was to become health services research. Indeed, he was the first nurse since Nightingale to apply advanced statistical sciences to the design and control of hospital operations.¹⁰

These interests received a major impetus when Dr. Snoke recruited Thompson back to Yale in 1956 after Snoke obtained Hill-Burton research monies to study hospital function and design.¹¹ In 1957, early in his tenure at Yale, Thompson went to Johns Hopkins University School of Engineering for a summer course in operations research (OR) techniques. There Thompson was introduced to Drs. Charles Flagle, Robert Connors, Harvey Wolf, and John Young. In addition to their teaching appointments at Johns Hopkins, all were jointly appointed to the Johns Hopkins Hospital systems engineering department and were in the midst of nurse staffing studies. Thompson was interested in the application of OR techniques to hospital design and used them in the Yale Traffic Studies of hospital ward function and design. His studies measuring the efficiency (in terms of trips by staff) of hospital inpatient wards concluded that ward design was a much more important factor in efficiency than was either ward size or patient privacy (number of single bedded rooms).

Thompson sought out a partner in Robert B. Fetter, a new assistant professor in what was then Yale's Department of Administrative Sciences, who was schooled in mathematics, and together they produced an amazing array of statistics applied to hospital operations. Their work together improved with every new development in calculating; machines at first, then computers.¹² Thompson was fond of saying that "happiness was a warm tape" (the predecessor of disks and diskettes). He could always be seen with a table of data from which he would draw a line graph demonstrating relationships. Thompson and Fetter's early work together created a furor among Connecticut hospitals.¹³ (It is reprinted in Part II of this volume.) They used simulation based on the Poisson distribution to recommend the consolidation of maternity services to

achieve cost savings. Demonstrations took place in at least one Connecticut hospital, protesting the recommended closure of the maternity service.¹⁴ (It remained open.)

In addition to being a professor and Director of the Program in Hospital Administration, Thompson also served as Associate Dean for Planning at the Yale School of Medicine with Deans Frederick Redlich and Lewis Thomas. Thompson was a confidant of Yale President Kingman Brewster, for whom he reorganized the hospital bylaws to accommodate the merging of Grace and New Haven hospitals. He also participated in the design and construction of the Laboratory of Epidemiology and Public Health, a building without any permanent interior walls.

As head of the Hospital Administration program, Thompson had a major voice in who was admitted to the Department of Epidemiology and Public Health's (EPH) Master of Public Health (M.P.H.) Hospital Administration track (HA), as well as what was taught. Eight places were typically reserved for the HA students, among them a disproportionate share of nurses and clergy from Catholic hospitals. Finance, medical staff relations, law, and hospital operations were addressed through case analyses and discussion of public policy. The main programmatic emphasis was on two research projects, one a group experience and the other culminating in the essay. As computing replaced calculating, these essays were sometimes quite sophisticated. The thesis of Charles Mross, M.P.H. '73, on case mix and resource use, which was the basis for the joint 1975 paper with Thompson and Fetter (reprinted in Part II of this volume) was an important step in the development of Diagnosis Related Groups.¹⁵

In 1973, on sabbatical in Belgium at the Katholieke University in Leuven, Thompson authored the 1973 Leuven Lectures, a review of classic and contemporary efforts to merge mathematics with hospital care.¹⁶ His influence there has endured; one of his students, Lucas Delesie, persisted in using clinical and financial data to reimburse Belgian hospitals. Ed O'Neill, M.P.H. '75, then a director of the Yale Computer Center and an EPH student, analyzed Delesie's medical and financial data from Belgium to produce a Belgian version of DRGs. Delesie's student, Dr. Walter Sermeus, a nurse, was successful in persuading the Belgian government to add data from nurses to the DRGs, making Belgium so far the only country in the world to reimburse hospitals using information from nurses, physicians, and hospitals.

John Thompson and Robert Fetter "found" the Diagnosis Related Groups (DRGs). Webster lists three separate meanings for the word "found." Two seem relevant: "to begin the construction of; establish" and "past tense of find." Robert Fetter and John D. Thompson no doubt constructed and established

DRGs. In doing so, they provided the basis for changing the system of hospital payment from one based on hospital cost per patient to a flat rate based on the diagnosis and treatments determined by physicians for patients.¹⁷ Thompson, however, may have been using the second definition, implying it had been lost. His study of history, particularly Nightingale's writings on mortality differences among London hospitals being explained by dissimilarities in both case mix and sanitary state, may have caused him to use the word "found" more specifically. The logic of comparing mortality rates of disparate London hospitals (Fever, Consumption, Lying-In, etc.) by first controlling for disease case mix is Nightingale's.¹⁸ Even extending the logic to hospital economics was hers in *Notes on Hospitals*,¹⁹ and thus available for finding.

In 1986 Dr. William L. Kissick, along with Dr. Samuel B. Webb, former students and long-time colleagues of Thompson's, were charged by the Association of University Programs in Health Administration with finding a suitable gift for him, to acknowledge his receipt of their 1986 Distinguished Service Award. They presented him with a copy of the third edition of Nightingale's *Notes on Hospitals*. Thompson flipped open *Notes* about two-thirds of the way through the text, opened a foldout page entitled "Hospital General Statistical Form," and said: "...this is where DRGs were found." Thompson was particularly moved by this gift because it came from former students.

DRGs have had a profound effect on hospital management in America and in many other countries. First, by grouping disease diagnosis and treatments, and using the patient's discharge as the unit of analysis, distinctions between medical and surgical treatment and their effects now emerged from hospital records, available for the examination of hospital end results. The Dartmouth group regularly uses these analyses to chide Harvard and Yale hospitals for providing too much or too little care for patients in any number of categories.²⁰ Second, by linking costs to International Classification of Diseases (ICD) and DRG records, major steps have been taken in rationalizing hospital economics. These are precisely the cost and quality elements required in order to assess how hospitals are performing.

One of Professor Thompson's students in Public Health, Dr. Joanne Finley, assumed responsibility for the Health Department in the State of New Jersey. Thompson, Fetter, and their team at Yale's newly established School of Organization and Management,²¹ which incorporated the old Department of Administrative Sciences at Yale, had just completed an examination of the utility of the use of DRGs in hospital reimbursement. This work, performed for the Health Care Financing Administration (HCFA) by Youngsoo Shin, a Korean physician working on his Dr.P.H. at Yale, confirmed the superiority of DRGs over the

existing cost-based system for hospital reimbursement.²² Finley adopted the DRG system for reimbursing New Jersey hospitals and soon provided a demonstration site for prospective payment. Soon thereafter, in 1981, the new Reagan administration and Congress, seeking an end to hospital cost inflation, began exploring use of the DRG-based Prospective Payment System for payment of hospitals under the Medicare program. Whether they would adopt DRGs was uncertain. Thompson likened the policy process to “the non-stop Chicago mail train steaming through Canton, snatching up the mail (DRGs) from a station on the side of the track. I think HCFA decided we’ll put DRGs on the mail hook and see whether that train, when it comes down the track, will pick up the bag.”²³ It did, and after twenty years, DRGs continue to be the basis for Medicare hospital reimbursements and most managed care contracts.

As a teacher of hospital administration at Yale for nearly forty years, Thompson’s collaborative working relationship with Robert Fetter resulted in the use of operations research techniques in the field of hospital management. The implications of these innovations may take some time to be rediscovered and extended. Pairing up the OR techniques with available hospital data and medical and nursing textbooks waits for further extension of this pioneering work on understanding of, and management for, the cost and quality of hospital care.²⁴

As a student of history, Thompson regularly read and wrote on the history of hospitals, nursing, and medicine. Together with Grace Goldin, he produced a well-known book on the social and architectural history of the hospital.²⁵ He repeatedly returned to the reading room of the British Library of the British Museum, where he poured over nineteenth-century letters, books, and documents in an effort to understand the genesis of, and then expand on, the work of Nightingale, his heroine. (“Turn left at the Magna Carta” to find the reading room, he was fond of saying.)²⁶ He gravitated to history later in his academic life and produced a number of papers. Among them are “The Great Stench,”²⁷ reprinted in Part II, describing the Victorian use of the Thames as a sewer, and an unfinished manuscript on Nightingale and her opponents’ use of statistics to determine the most salubrious location for the new St. Thomas’s Hospital (she lost). That Thompson would be the source of the turmoil that caused one of his students, Professor Rosemary Stevens, to revise her 1989 history of the American hospital in the twentieth century, is ironic. Her 1999 preface suggests that the two changes that altered the landscape of hospitals in the last decade of the century were prospective payment and managed care.²⁸ Rarely does the historian, even a minor one, create history.

Thompson and Professor Arthur Viselpear, Yale's late historian of medicine, would often joust on various points about obscure historical facts. One of Nightingale's archrivals, Sir John Simon, was another of Thompson's nineteenth-century interests. Simon, it seems, came over to the contagionist side of statistical arguments, while Nightingale remained a staunch anti-contagionist, preferring preventive measures to halt the spread of infection. Simon even led a contingent of men nurses to the front in the Franco-Prussian War, spurning the involvement of women nurses, one of Nightingale's creations.²⁹ Thompson commented that Dr. George Rosen, another Yale historian and colleague, died as he would have wished, on the steps out of the library at Cambridge University after a day in the stacks.

Thompson was a colorful teacher, sporting a distinctive mustache, a cigar, and in later years a sportsman's vest that, after DRGs were adopted for use in Medicare reimbursement, he referred to as his "flak jacket." He used the language of the Navy to illustrate important points, always a concern to the members of religious communities who were invariably admitted to his program. He imbued his students with the need for evidence to buttress any professional argument. At the same time he never let anyone forget that the patient came first. Thompson was very proud of the essays students wrote to fulfill the research requirement of Yale's Program in Hospital Administration. Accreditation visitors were forced to read selected essays as a demonstration of the program's rigor. He was also proud of the residency requirement that served as a link between the University program and the hospitals, and mourned its passing.

Thompson had a long and productive professional association with the Yale School of Nursing and the professional nursing community in New Haven. His joint appointment to the faculty there was begun with Dean Florence Wald and developed under the clinical programs of scholarship and care that flourished under the leadership of Thompson's special friend and fellow opera lover, Dean Donna Diers. Thompson received the Virginia Henderson Award from the Connecticut Nurses Association, after which Henderson wrote him: "...you deserved better." He served for years on the Board of Directors of the Visiting Nurses Association of New Haven and was an adviser to and member of the Board of Trustees of Connecticut Hospice, the nation's first edifice constructed for that purpose. After his death, Rosemary Johnson-Hurzeler, M.P.H. '75, President of the Connecticut Hospice, named its teaching arm the John D. Thompson Institute. Thompson also served on the board of the Alexian Brothers Hospitals at the request of one of his Yale graduates, Brother (Fideles) Philip

Kennedy, '75. He urged them to sell the Alexian Brothers Hospital in Elizabeth, New Jersey and to use the proceeds to construct a retirement facility for the Brothers in Signal Mountain, Tennessee.

John Thompson, in the tradition of the active nurse, looked after his family and friends. His nursing diploma and active nurse license propelled him to the hospital when any of his family, friends, and colleagues was admitted to Yale–New Haven. His interest in their welfare had a calming effect, perhaps on the visitor as well as the patient.

Thompson loved classical music, especially the opera. On his official retirement from Yale (he never stopped working there) in 1988, his students entertained him with the Whiffenpoofs and presented him with a round-trip ticket to Vienna, where he enjoyed the opera season. Thompson died in 1992 on August 13, just after his seventy-fifth birthday (August 6). He is buried at St. Lawrence Cemetery, right across the street from the Yale Bowl.

John Devereaux Thompson will be remembered for his DRG work. He was, however, a unique and special nurse, teacher, scientist, and historian. While it seemed the breadth of his interests was without bounds, John D. Thompson's professional work was focused, consistent, and persistent. He was an authority on every aspect of hospitals, their history, construction, management, and financing. It was as if he never left the hospital institution that he had walked into as a nineteen-year-old nursing student. He derived his interest from a wide array of texts, heroes, and heroines, prominently among them Florence Nightingale. Dr. Joyce Clifford, an eminent American nurse, said that Thompson had humanized the hospital administration field.

NOTES

- 1 R. Stevens (1999) *In Sickness and in Wealth: American Hospitals in the Twentieth Century*. Baltimore, MD: Johns Hopkins University Press.
- 2 Thompson's middle name, Devereaux, is also spelled Deveraux in some of his papers and elsewhere in family records. The spelling Devereaux is used here.
- 3 Personal communication from Martha Carrick to author.
- 4 Mills School of Nursing for Men, Bellevue Hospital (1938) *Fifty Years at the Mills School of Nursing [1888–1938]*. Bellevue Hospital, New York.
- 5 L.E. Weeks (1989) *John D. Thompson in First Person: An Oral History*. American Hospital Association Resource Center, Chicago, p. 2.
- 6 Weeks, p. 20.

- 7 A.W. Snoke (1987) *Hospitals, Health and People*. New Haven, CT: Yale University Press. Hamilton was responsible for obtaining original funding for the Yale program from the W.K. Kellogg Foundation, but left before the program actually opened. Weeks, p. 25.
- 8 J.D. Thompson (1951) Nursing Service in a Home Care Program. *American Journal of Nursing*, 51: 233–235.
- 9 Hall is also given credit by Dr. Joyce Clifford for the development of a nurse-patient assignment system used throughout the Loeb Center, later called primary nursing. See B.C. Vladek and G.J. Alfano, eds. (1987) *Medicare and Extended Care: Issues, Problems and Prospects*. Owings Mills, MD: National Health Publishing.
- 10 For Nightingale's interests in statistics see: M. Diamond and M. Stone (1981) Nightingale on Quetelet. *J R Statistical Soc*, 144 (1): 66–79; 144 (2): 176–213; 144 (3): 332–351 and J. M. Eyler (1979) *Victorian Social Medicine: The Ideas and Methods of William Farr*. Baltimore, MD: Johns Hopkins University Press, pp. 159–189.
- 11 A.W. Snoke (1987) *Hospitals, Health and People*. New Haven: Yale University Press, p. 137. Thompson received grant support for this and all his subsequent work at Yale before retirement.
- 12 J.D. Thompson and R.B. Fetter (1965) Simulation of Hospital Systems. *Operations Research*, 3(5): 689–711. R.B. Fetter, J.D. Thompson, and R.E. Mills (1976) A System for Cost and Reimbursement Control in Hospitals. *Yale Journal of Biology and Medicine*, 49:123–126.
- 13 J.D. Thompson and R.B. Fetter (1963) The Economics of the Maternity Service. *Yale Journal of Biology and Medicine*, 36 (1): 91–103.
- 14 Winsted Evening Citizen (1969) Hospital Faces Loss of Maternity Service. Winsted, CT: Author.
- 15 See J.D. Thompson, R.B. Fetter, and C.D. Mross (1975) Case Mix and Resource Use. *Inquiry*, 12(4): 300–312.
- 16 J.D. Thompson (1977) *Applied Health Services Research*. Lexington, MA: D.C. Heath and Company.
- 17 D. Diers (1986) Editor's Note in Book Review by John D. Thompson. *Image*, 18(2): 79.
- 18 F. Nightingale (1863) *Notes on Hospitals*, 3rd edition. London: Longman, Green, Longman, Roberts and Green.
- 19 Nightingale, p. 163.
- 20 J.E. Wennberg, J.L. Freeman, R.M. Shelton, and T.A. Bubolz (1989) Hospital use and mortality among Medicare beneficiaries in Boston and New Haven. *New England Journal of Medicine*, 321(17): 1168–73. E.S. Fisher, J.E. Wennberg, T.A. Stukel, and S.M. Sharp (1994) Hospital readmission rates for cohorts of Medicare beneficiaries in Boston and New Haven. *New England Journal of Medicine*, 331(15): 989–995. Interestingly, they never specified the "right" amount but rather inferred the Yale influenced data were

preferable to the Harvard. Of note is the influence of Yale's School of Nursing on these data. Advanced clinical nurses have been known to reduce costs of in and out patient care and Yale has been producing them for nearly eighty years. Harvard has no equivalent program as yet.

- 21 Initially dedicated to the management of non-profit organizations.
- 22 R.B. Fetter, Y. Shin, J. Freeman, R.F. Averill, and J.D. Thompson (1980) Case Mix Definition by Diagnosis Related Groups. *Medical Care*, 18(2), Supplement.
- 23 Weeks, p. 54
- 24 J.D. Thompson (1984) The Measurement of Nursing Intensity. *Health Care Financing Review*, November, pp. 47–55.
- 25 J.D. Thompson and G. Goldin (1975) *The Hospital: A Social and Architectural History*. New Haven, CT: Yale University Press.
- 26 J.D. Thompson (1980) The Passionate Humanist: From Nightingale to the New Nurse. *Nursing Outlook*, 28(5): 290–295.
- 27 J.D. Thompson (1991) The great stench or the fool's argument. *Yale Journal of Biology and Medicine*, 64: 529.
- 28 R. Stevens (1999) *In Sickness and in Wealth: American Hospitals in the Twentieth Century*. Baltimore, MD: Johns Hopkins University Press, p. xiii. Both of these innovations were due to the Yale research on DRGs. In the case of managed care, DRG technology and data about hospital costs per patient, publicly available through Medicare MEDPAR tapes and cost reports, gave the HMOs and managed care organizations as much information about case costs as the hospitals had. These data gave informed managed care organizations an edge in negotiations.
- 29 E. Halloran and J. Welton (1994) Why aren't there more men in nursing? In J. McCloskey & H. Grace, eds. *Current Issues in Nursing*. 4th ed., St. Louis: Mosby.

JOHN D. THOMPSON IN BUILDINGS AND OPERATIONS

Donna K. Diers

To a nurse, “operations,” and by extension operations research and management, is not even a stretch. As a nurse, John Thompson knew how hospitals worked as buildings and as services:

Once a hospital opens it is never static; it crawls with life because it is used by people, and sick people at that—people with their guard down, helpless, indignant, worried, in pain or anguish, inpatients, outpatients, frantic relatives; people whose humanity is intensified by trouble. The staff has its own inter-relationships, rivalries, and hierarchies. In dealing with human beings instead of building materials or mathematical formulas, precision becomes impossible, prediction difficult. A hospital runs like the croquet game in *Alice in Wonderland*—the flamingos serving as mallets peer around at you, the hedgehog balls run away. Everything’s alive. How, then, can one attempt hospital research?¹

John Thompson’s career answers his own question. He understood not only operations but also the contexts in which they locate themselves as policy and politics. In his essay for the *Encyclopaedia Britannica* (“Caring and Curing,” in Part II), he predicted that hospitals would become larger, fewer new hospitals would be constructed, and other types of caring institutions and programs would be developed as hospital adjuncts. That being the case, “The designer in such projects must become intimately familiar with the operations...because he must identify what is to be renovated or replaced...”²

Thompson’s formative experiences in operations and buildings came, as did many of his other ideas, in the very special time he worked as an administrative assistant to Eliot Bluestone at Montefiore Hospital in the Bronx, New York. Indeed, Bluestone provided him with his formal opportunity to study hospitals by sending him to postwar Europe for a three-month tour. Thompson was classically educated by the Roman Catholic Church, and informally by his love of both history and opera.³

When [Bluestone] hired me on after I was finishing my residency, he said, “I want you to go to England and France and Sweden...Go there and come back and start to work.” Wasn’t that wonderful? I saw a lot. I had an interest in architecture and it was the first time that I was able to see some of the old, old hospitals and some of the new hospitals, particularly the ones in Sweden. The Swedish had built a hospital in Oslo for the Norwegians, a big children’s hospital. It was just beautiful. These were modern. You see, in the U.S., we had not...begun to build. This postwar boom hadn’t hit yet. So I became extremely interested in architecture as a results of that trip. knew that I would have to take over the expansion plans of Montefiore.⁴

Thompson entered the field of hospital administration just as the industry was poised for a major construction boom, in part fueled by the Hill-Burton program. Between 1946 and 1970, the number of U.S. hospitals grew from 4,444 to 5,859 (up 32%) and the number of beds increased 79%, from 473,000 to 848,000.⁵ His work in hospital planning in New York led to an invitation from Albert Snoke at what became Yale–New Haven Hospital⁶ to return to Yale to work on planning problems.

The trip to Europe and subsequent ones eventually produced *The Hospital: A Social and Architectural History*, published in 1975 and dedicated to “E.M. Bluestone, M.D., who never lost sight of the patient in the plan.” That might as well have been Thompson’s mantra.

The Hospital is two volumes in one, in three parts. The first volume, done with Grace Goldin,⁷ traces hospital designs from the very earliest Greek and Roman to later hospitals such as Johns Hopkins which had to adapt to the “loud, loud cry for privacy”⁸ and Guy’s in London in the 1970s, which had to adapt to the need for intensive care. Part I is a history of hospital ward design in Europe and the United States. Part II deals with twentieth-century ward planning in the United States and Great Britain.

The focus on ward planning, as opposed to the bricks-and-mortar approach to understanding or designing hospitals, grew from Thompson’s experience as a nurse. The ward (or today, the hospital unit) is the operational focus for the delivery of patient care. Wards develop personalities and ways of operating on their own which sometimes today frustrate the attempts of managers to create “service lines” based not on geography but on shared patient characteristics or physician practice patterns. Thompson understood that where the work of the institution takes place is at the nursing ward or unit, and thus the hospital must be built with the ward as the central organizing focus.

As Thompson’s work expanded from hospital design to teaching about it, he also had a consulting practice with various architects and, for a brief time, a “salon” as he called it, in the School of Architecture with Robert Pelletier.⁹ He even consulted internationally on hospital design, including one adventure in Yugoslavia which became one of his favorite stories.¹⁰

Part III of *The Hospital* is very different.

The Yale Studies in Hospital Function and Design, only some of which are contained in this part of the book, were collectively methodological exercises intended to help administrators determine their own needs. As he recalled when he came back to Yale in 1956,

The problem with administration at that time...was that when a situation came up, you would remember you thought you solved that problem last year. It just didn't stay solved, but there is nothing new so I'll solve it again. I wanted to know how you solve these problems better with more lasting results.¹¹

Thompson was searching for explanations or theories that transcended the immediate and often compelling clinical or administrative need. The studies, many of which were done by students as master's theses, seized the moment, knowing what the moment was an *instance* of. A hospital was changing from a centralized to a decentralized food service system; a hospital introduced an intercom voice communication system from a central nurses' station to patient rooms; a hospital needed to predict the size of an obstetrical service; the changing social system put the question of multiple bedded rooms in play; the number of oxygen outlets needed to be calculated for a new service; how many recovery room beds were needed for how many operating rooms—all these are problems in operations, the way things work.

In 1957, Thompson spent a summer at Johns Hopkins University, taking a course in operations research taught by Russell Nelson in the School of Engineering. Operations research was fledgling science, building on what are now traditional statistical theories about patterns of events and Poisson distributions that allow the use of means, standard deviations, variances, and similar statistical properties. While at Hopkins, Thompson met Charles Flagle of the Hopkins School of Hygiene, who was doing research at the time on nurse staffing—how to predict from patient requirements how many nurses would be needed. Thompson would later recall that the Hopkins experience was a turning point in his intellectual work.¹² It gave him the methodological tools that underlie nearly all of his subsequent work, including DRGs. He may have been among the first to apply operations research strategies to patient care and hospital performance.

Thompson's studies applying operations research to problems in hospitals were at the micro level, an innovation in itself, directly related to his understanding of the hospital ward as the unit of analysis. In addition, he made use of his clinical knowledge to choose pragmatic variables that really make a difference: Is the food *hot*? How many steps does it take a nurse to get from here to there? Is the intercom really used for patient communication or to speak to staff? Further, he actually studied the *effects* of hospital design, planning, and architecture, not being content that when the building was built that was the end of the interest. He understood buildings to be purposeful, not simply functional or beautiful. Plans needed to be tested by the hard reality of their use by real people.

An appreciation of epidemiology was born in his master's degree program at Yale in hospital administration, which was then and still is located in the Department of Epidemiology and Public Health. Epidemiology and operations come together in, for example, his study of the demand and supply of obstetrical services (see Part II) as a problem in economies of scale. Epidemiology not only gave him population definitions, it also provided a context for measurement. Epidemiology is a science based in individual human experience. Thompson's work in hospital management was always based on the clinical or operational unit of analysis. His later work in facilities planning and health system information development grew from these foundational bases. DRGs are, after all, classifications of patient types, and his late hospice and AIDS work was about patients and dedicated services.

With others, he took hospital epidemiology and financial administration to a new level by creating a statewide hospital database in Connecticut called CHIME (Connecticut Hospital Information Management Exchange), administered by the Connecticut Hospital Association. CHIME, however, was not simply an "exchange" — the database was designed to be used to compare hospitals for performance.

CHIME became the model for other statewide databases, principally in New York. It allows the merger of patient data such as demographics, diagnoses, procedures, and selected outcomes, with hospital financial data based in an agreed-upon standard chart of accounts. Achieving agreement on a chart of accounts and on the standard data elements eventually contributed to the ability to help link patients in DRGs to costs.

One of the operations theories he encountered at Hopkins was queueing theory — the study of waiting list time. In the fall of 1958, he found Robert Fetter, then a new faculty member at Yale in the Department of Administrative Sciences. He went to see Fetter with his usual bluster, cigar in hand. He had read a paper Fetter had written about applications of queueing theory and wanted to apply the theory to determine the proper number of maternity, labor, and postpartum beds.¹³ The first paper they wrote together was about this work.¹⁴

Fetter recalls that in his work with Thompson, he learned that "there were no standards for either length of stay or quality of care."¹⁵ To have standards would have to begin with agreed-upon definition of patients — the "work" — the epidemiology. Without a definition of patients as case types it is not possible to ask the really interesting questions about differences in resource utilization or quality. Thompson's DRG work was more in the service of inventing tools to under-

stand the processes of care (in the current vernacular) than in the applications in payment systems that caused so much controversy.

Fetter and Thompson often regaled students with stories of the early use of mainframe computers. The initial work on DRGs was done with about 13,000 discharges from Yale–New Haven Hospital, an enormous sample at the time. There was only one computer on the east coast big enough to run the queueing and Monte Carlo solutions, and it was at MIT. (Fetter had come to Yale from MIT.) They would load cartons of IBM punched cards into one of their cars, drive to Boston, and feed them to the MIT computer often for a whole weekend, never a run without problems.¹⁶

Thompson's work crossed many disciplinary boundaries. More accurately, he put together his diverse interests and disciplines into wholes that made sense. When he discussed the cross-shaped hospital design of the Middle Ages—a chapel in the middle for worship and funerals—it was in the context of infectious disease epidemiology. His intellectual love affair with Florence Nightingale was less about the clinical work of nursing than about her notions of healthy spaces—high ceilings and good ventilation¹⁷—and her notions of disease causation as miasma. His antepenultimate publication (see “The Great Stench” in Part II) stitches together these ideas.

In 2000, Stephen Verderber and David J. Fine produced a book deliberately designed to be a follow-up to Thompson and Goldin.¹⁸ These authors are from health administration, engineering, planning, and architecture backgrounds and they came together because they accidentally discovered they both used Thompson and Goldin in their courses at Tufts.¹⁹ They note that all contemporary discussions of the history of the hospital have been based nearly entirely on Thompson and Goldin.²⁰

These scholars note Thompson's focus on “ward design” and the notion of the “designed hospital”—one in which there was an attempt to plan for the function of nursing care. The “landmark” studies in hospital planning and administration that form the second half of Thompson and Goldin's book are still of interest.²¹ But they do not connect these kinds of studies with what is now apparently codified (if not often conducted formally) as post-occupancy evaluation (POE) in hospital architecture.²² One can imagine John Thompson reading this new book with excitement and pleasure, then writing a letter to the authors to begin a dialogue on what's new and old in operations and architecture and what the next steps should be. One of the steps surely would be to return to the notion of ward (operational) design.

John Thompson had the gift to make what others might consider disparate ideas fit together. That talent found particular expression in his work on buildings and operations. His interest was always in making things *work*, making them work better, and, in the words of another important nurse in history whose work he discovered late in his life: “this to the end that a new social order to which we are committed by our forefathers may be realized.”²³

NOTES

- 1 J.D. Thompson and G. Goldin (1975) *The Hospital: A Social and Architectural History*. New Haven CT: Yale University Press, p. 253.
- 2 J.D. Thompson (1978) Caring and Curing: The evolution of hospital design. *Encyclopaedia Britannica, 1979 Medical and Health Annual*. Chicago: Encyclopaedia Britannica, p. 71.
- 3 As Halloran notes (preceding chapter), upon Thompson’s alleged retirement from the Yale Department of Epidemiology and Public Health, friends, former students, and others provided him with tickets for the Vienna season. They covered eight operas and one ballet. He stayed at a hotel just opposite the Vienna Opera House on the Opernring. He explored churches and museums. But he really wanted to and did visit the Allgemeines Krankenhaus, the hospital in which Semmelweiss had done his work. In the courtyard there is the “Fools Tower,” the mental hospital with circular units of locked rooms. He also found number 19 Bergestraße – Freud’s consulting rooms.
- 4 L.E. Weeks (1989) *John D. Thompson in First Person: An Oral History*. American Hospital Association Resource Center, Chicago, p. 32.
- 5 W.D. White (1982) The American hospital industry since 1900: A short history. *Advances in Health Economics and Health Services Research*, 3: 143–170
- 6 The change of name from Grace–New Haven to Yale–New Haven Hospital represented the end of a bloody affiliation agreement orchestrated in large part by Thompson in his role as an Associate Dean of the Medical School under Dr. Fritz Redlich.
- 7 Grace Goldin (d. 1995) spent every summer for twenty-five years visiting and photographing hospitals founded from the Middle Ages to the twentieth century as a research assistant to Thompson. Her research on the history of hospitals was a labor of love. In addition to *The Hospital*, she published *Work of Mercy: A Pictorial History of Hospitals* (Toronto: Associated Medical Services, 1994) and several volumes of poetry. See T. Appel (1998, Fall) *Nota Bene* (News from Yale Library), 12(3).
- 8 *The Hospital*, Chapter 7, pp. 207–225.
- 9 Thompson also had a consulting relationship with Bruce Arneill, a New Haven architect who designed Sharon Hospital in northwest Connecticut.

- 10 He traveled with Dr. William Kissick to Yugoslavia. As he told the story, he and Kissick were invited to an early morning meeting to meet with the group planning a new hospital. The architectural drawings for the hospital were posted all around the room. While Kissick talked, Thompson wandered around the drawings, cigar at the ready. Slivovitz was being served. Finally, Thompson took Kissick aside and in a stage whisper said, "Willy, we have a problem." The problem was that the hospital was designed as the first treatment tower in the country, some fourteen stories high. With only one elevator. And there was only one elevator repairman in the whole country—in Trieste.
- 11 Weeks, p. 25.
- 12 Weeks, p. 37.
- 13 E-mail, Fetter to Diers, January 28, 2002.
- 14 J.D. Thompson and R.B. Fetter (1963) The economics of the maternity service. *Yale Journal of Biology and Medicine*, 36: 91–103.
- 15 Fetter e-mail as above.
- 16 Weeks, p. 38.
- 17 One of the retirement gifts he received (courtesy of William Kissick, M.D.) was an original letter from Florence Nightingale to someone who had asked if there was a machine that could detect bad or unhealthy air quality. Her typical acerbic response was, "If there is a machine, it is called a nose."
- 18 S. Verderber and D.J. Fine (2000) *Healthcare Architecture in an Era of Radical Transformation*. New Haven, CT: Yale University Press.
- 19 Verderber and Fine, pp. ix–x.
- 20 Verderber and Fine, n. 12, p. 354.
- 21 Verderber and Fine, pp. 8–9.
- 22 Verderber and Fine, p. 349.
- 23 Annie W. Goodrich (1933) *The Social and Ethical Significance of Nursing*. New York: Macmillan, p. 14. Republished by permission on the occasion of the 50th anniversary of the Yale University School of Nursing, 1973.



THE SEARCH FOR THE EVIDENCE GIVES COHESION TO LEARNING

Gary L. Filerman

“Where is the evidence?” That is the question that all of his former students remember. It is what they carried away from his classroom, and from all of their other encounters with him, into their own administrative practice. And that is the evidence that John D. Thompson was an extraordinarily effective educator.

Describing how a great teacher whom you did not personally experience successfully engaged his or her students is like trying to describe the sound and the fury of a battle that you did not fight. The essential and distinctive features of the engagement can be seen and felt only through the eyes of those who were there. This chapter is built upon the remembrances by several of Thompson’s former students and colleagues who agreed to be interviewed and/or to contribute written comments.

The consistency of their observations, assessments, and feelings is striking. They identify the same concept as central to his message and to its enduring impact on their own administrative behavior and competencies. It is clear that Thompson achieved the elusive goal of integration. The concept did not emerge from a single class, or several classes, but from the totality of their relationship with him and the program. A typical observation is that “My concept of the manager’s role in health services is a direct reflection of what I learned from him. I find myself responding as he would have expected me to respond.”¹

That concept has two complementary dimensions. The first is that the effective health administrator is an evidence-based decision maker. The decision is no better than the evidence upon which it is based. The second is that every administrative decision has clinical implications and every clinical decision has administrative implications. Making those implications explicit and subject to scrutiny will improve public health and patient care. That administrative and clinical decision making are inextricably interwoven will become clearer as the evidence grows.

A second key theme running through Thompson’s teaching was the value of history. For Thompson, the past was an invaluable resource in understanding the present. As a distinguished historian of hospitals and Florence Nightingale, he brought into the classroom not only a spirit of rigor and demanding inquiry,

but also a sense of the sweep of history and role of political, social, technological, and economic forces in shaping health care institutions. And in this context, he was a strong advocate of considering public policy as well as management dimensions in the health administration curriculum.

Drawing on his students' experiences, this chapter offers an appreciation of Thompson's teaching style, then goes on to consider major aspects of his teaching philosophy and vision, and concludes with a discussion of his contributions to health administration education and the extent to which his vision has been realized.

DATA AND THE HUMAN SIDE OF DECISION MAKING

"Where are the data?"

As Barry R. Greene, who was a faculty member at Yale in the mid-1970s and a former chairman of the board of the Association of University Programs in Health Administration (AUPHA), recalls,

I would put him on the side of an inductive thinker. He looked at whatever data he was working on at the time, up to the broader issues, thinking out loud (often in class) about the direction in which the data pointed. Data of particular interest to him were the interaction of clinical and business processes. For example, he did not teach systems theory, but he was teaching the importance of identifying uniform hospital outputs (products) and the transformation processes making up important clinical and business decisions. Thompson was always easy to understand because he could simplify concepts without losing information.

Much of his early career coincided with that of the generation of hospital executives who were convinced that great administrators were born firm and bold decision makers with instinctive talents at decision making. It was a highly personalistic process, based on insights into human characteristics, charisma, and salesmanship. The speed of decision making reflected decisiveness. To make the decision and never look back was the mark of a true manager, particularly if it got past the medical staff. Thompson often described that school of management in the past tense. He also mentioned some of the best-known leaders of the field, by name, who exemplified it.

Some observers attribute his departure from that tradition to the influence of A.L. Cochrane's famous 1971 Rock Carling Fellowship lecture, "Effectiveness and Efficiency," in which Cochrane insisted upon basing decisions on data based on solid research design.² He quoted the lecture in class, with the admonition that you need solid data, informed judgment, and "real compassion for those whom your decision may affect."

At the same time, as Stephen Mick, former Yale faculty member, remembers, he was an avid proponent of the “human relations” school of management. He loved to regale his students with various stories, repeated to cohort after cohort of shiny-faced students, about the importance of being “in touch” with what the common person thought and did in a hospital. One of his favorite stories was about a beloved barber at the old Grace–New Haven Hospital. This barber knew what everyone was thinking about in the hospital, so John recounted. If upper administration wanted any ideas about what to do about such and such an issue or problem, one only had to go get a haircut and ask. You’d get not only the barber’s answer but also the distillation of answers from many others. It worked the opposite way too. When administration wanted to get the word out on something, one only had to give the word to the barber. The rest was assured. For John, this illustrated the central importance of the informal compared to the formal organization chart.

THE LEARNING ENGAGEMENT

Thompson loved to turn a discussion with students, be it in class, in the hallway, in his office, or over a beer, into a “teaching moment.” He would let the student say something with conviction and then draw them into a pointed, challenging discussion or even a debate. It was never demeaning, but an exchange between inquiring minds seeking a better, more fully understood answer. The other students would gather around and listen, sometimes joining in. They knew that he valued the process, particularly if it allowed him to introduce the student to another idea, tell a story from his own experience, or stimulate the student to “go look it up.” Thus the students were exposed to an important style of inquiry, and shown how to challenge and grow an idea without personal confrontation. He was a great storyteller and he never delivered a punch line without looking you straight in the eye and reaching out to touch you on the shoulder. So the student and the teacher learned together, and so would the manager and his or her colleagues.

Peter J. Levin, Yale M.P.H. ’76, remembers:

Class with Thompson was contextual. He was interested in what we were doing in other classes and what was going on around us. He wanted our reactions to what we were learning elsewhere. From the first day of class he probed us as to what we knew and thought. He wanted to know what *you* thought and didn’t hesitate to question you in a direct and humorous way about what you said, observed, or believed. He approached you knowing your background and put that into the question or drew it in a positive way from your answer. At the same time, he wanted you to transcend your personal experience and bias to look at a problem with an open mind and fresh approach. That is why he loved data so much, because it might reveal information or a method for improvement. Some students were very frightened by him and this approach. I was enchanted and stimulated by it. It was a fabulous way to learn and completely different from the huge lecture courses I had experienced as an undergraduate. It was as close to the Socratic approach as I ever experienced,

but this was his way of looking at life and was not just a classroom method. He wanted you to look at the evidence before reacting. Right from the beginning, he began to set you up to need data for decision making.

As Barry Greene recalls, often Thompson's teaching style in seeking to realize his goals was less than systematic. The results, however, were. "He sometimes figured out what he was going to say going down the hall. He was one the first evidence-based thinking teachers, free of textbook, theory, sources, or outline. I'm not sure that he knew what textbook he was using. One result was that he didn't know later everything that he had talked about in class. More importantly, his students did."

In the end, and predictably, student reactions to his teaching and to his personal interaction style varied. Several came away with the impression that Thompson either liked you or not, based on a subjective impression of whether you were smart or not. He liked style and there were some clear favorites. He admired presence, they recall, but too much presence and not much content was deadly.

THE IMPORTANCE OF EXPERIENCE

Many of the students entered the program with operating experience, or at least some work in a hospital setting. When the class arrived, an early exercise was to go around the room and have everyone describe their experience in the field. This of course separated the "kids" (Thompson's term) from the others, who were usually older. The younger, inexperienced students felt outgunned and wondered what they were doing surrounded by such "seasoned" individuals. The kids remained the kids for the duration of the program, but they received special attention that was a source of great encouragement, and they quickly overcame any feelings of inferiority.

Frequently, he would draw upon the class, asking specific students to relate the topic of the day to their own experiences. This process enriched the discussion and made the contributors feel valued. He made it clear from the beginning of the program that practical experience was essential for successful entry into the field. The course in hospital operations was organized around the participation of the heads of departments from the Grace–New Haven Hospital and a few others who described the functions of their units in some detail. Thompson would then lead them, and the class, into discussions about what data their operations generated and its use, relations among departments, and always, the implications of their functions for quality of care. So the students

came to understand not only the functions, but also the value of the experience and the expertise of department heads. The textbook would not suffice.

In the early years the program included a one-year administrative residency, and later the “Praxis” between the two academic years, which was followed by an administrative fellowship. From the time that the students entered the program, he focused their attention upon getting ready for these practical experiences. Preceptors were brought into classes to lecture, and to form personal relationships that led to placements. This was not a casual process of students turned loose to find their own places. The preceptors were individuals that he knew well, from institutions that he knew well and frequently wanted to know better. Each site contained explicit learning objectives, both for the student and for the professor.

An important complementary concern was the need for practical experience by faculty. Thompson felt strongly that faculty needed to get out of the ivory tower. He was particularly worried about the rise of doctoral programs in the field, and the fact that they led to faculty with little or no practical experience. Laying out these concerns in a revealing statement of the educational philosophy that defined the Yale program, Thompson wrote in 1977:

My main concern with the relationship of the educational program to the practice field is based on two aspects of such involvement, those of selectivity and role definition. As in the expenditure of any resource, allocation of faculty time to specific areas is critical. In selecting faculty activities, I would plead not simply for the relevance of the practice area to curriculum content, but for the careful choice of specific problems within these areas. Such faculty investments must be directed toward the changing aspects of health services, must have as a focused objective the creation of new teaching materials and the testing of new concepts, must be based on the research interest of the program, and must involve students...our students need training in challenging. It follows that the educator must design his curriculum in both an informative and critical frame. That...is the contribution that involvement in practice can offer if faculty people are one step removed from practice.

At the same time, always pragmatic, he recognized that this was no simple task, concluding his remarks with the admonition:

We should not be misled into assuming that such an educational approach is without its own problems. There is real danger that the programs will lose their practice constituencies. No one likes to be challenged. No institutional or program manager will appreciate a critical examination of his performance. The frostiness between the field of practice and academia is already apparent. The placement of students in practice settings for various periods of time is considered an essential component of the curriculum; if students and faculty are frozen out of such experience, education will suffer.³

THE STUDENT AS RESEARCHER

The Yale program had a well-earned reputation for turning out graduates who understood the importance of operational research. In fact, it may be argued that this was a unique strength of the program. In class there was a consistent emphasis on reading raw data to tease out the implications, and thereby to appreciate the importance of the design and data collection process. Readings exposed the student to contemporary research-based writing for managers. They were challenged to assess if the right question had been asked the right way, with the clear objective of making the point that managers must know how to identify a research question, describe it to researchers, and evaluate the applicability of the product. As a result Yale graduates were familiar with the journals and the state-of-the-art.

The emphasis upon data for decision making was carried into the field experience through the essay. In most programs it was called a thesis, but perhaps the novel label enabled the program to escape the bureaucracy of the graduate school. It was the major paper of the program and was based on a real question of importance to the institution or to the field. He put great importance on the essay, which pressed the student to integrate the puzzles that he had posed in class. Thompson often directed the students to where the data might be found. He invested an immense amount of time working with individual students. Outlines and drafts were worked over through iterations that were intense learning encounters. The discussion always came back to the data, and he insisted on tight, well-reasoned inductive writing. Several were published, often under co-authorship with him, and contributed to his major projects, such as the development of DRGs. Several graduates cite the essay-writing experience as pivotal in their careers.

Thompson felt that student writing was the most important measure of the concrete learning outcomes of a graduate program. It was demonstrated through his avid participation in the accreditation process, particularly when making site visits to other programs. In advance of the visit, programs were instructed to assemble folders of student writing, keyed to each of the core courses. When the visit started, he would gather up a pile of the folders. Sometimes, to the dismay of the site visit team, he would begin reading them during presentations and meetings. He would take a stack back to the hotel and read well into the night. He would then refer to them to assess the content and effectiveness of the courses. And he paid particular attention to evidence that the faculty had given the student feedback on the adequacy of the data, the use of

the literature, and, always, the quality of the conclusions, applying the same rigor that he expected from his own students.

EPIDEMIOLOGY FOR MANAGEMENT

Thompson was a strong advocate not only of intellectual rigor and the importance of technical tools, but also of the “public health point of view.” It was this that particularly distinguished the Yale program graduate from general managers. It had a specific meaning. Health administrators must approach their mission with an eye on the implications of their actions for the health status of the public, be it the general public or the specific public for which they had some direct responsibility. He was convinced that epidemiology was a management science, but that was not the epidemiology that was typically taught in schools of public health. What was typically taught was too narrow, and lacked a policy and resource allocation perspective.

He was the leader in efforts by AUPHA to expand the discipline to embrace the managerial perspective. It bothered him that “epi” was among the students’ least favored subjects, that they did not see its application to hospital/health administration, and that it was often considered to be not well taught from the student perspective. He chaired a national committee composed of prominent faculty epidemiologists and health administration faculty members that was assembled to address the issue. His public health credentials made him the ideal person to convene the committee and to explain the need. The effort was not successful, with the epidemiologists sticking to the position that the students needed the classic introductory courses along with all other public health students, and that they should learn to call in a professional epidemiologist when confronted with a problem instead of assuming they had a sufficient level of competence to deal with it. It was a disappointment to him, and he continued to advocate the development of new approaches to teaching, even suggesting that programs go outside the schools if necessary to find teachers who understood the managerial role.

THE INFLUENCE AND ROLE OF NURSING

Thompson was an intense student of Florence Nightingale, reading all of her writing and much of what was written about her. He saw her as one of the first, if not the first, to understand the centrality of a system for patient classification. Her design of hospital wards to separate the patients according to disease was

introduced when little was known about contagion. Her theories of patient management were reflected in hospital architecture, another of his areas of expertise.

He wove his nursing background, respect for the nursing role, and lifelong romance with Florence Nightingale into a theme that had a powerful influence upon how his students came to view the contribution of nursing. It was one of the defining characteristics of the Yale program. He combined a historical perspective with an analytic approach to the centrality of nursing to quality of care. Nurses participated in classes to give first-hand exposure to their perspectives. He identified with the issues facing the profession; relationships with doctors, specialization, and especially the drive to raise the level of education from hospital-based training to baccalaureate programs.

Close communication with nursing leadership was essential for successful management of the institution. Students going out for residencies were urged to cultivate friendships with nurses in order to learn the realities of the institution and to closely observe how senior management interacted with nursing leaders. There would be no chance that they would leave the program underestimating the importance of the nurses to their own careers.

THE IMPORTANCE OF HISTORY AND PUBLIC POLICY AND THOMPSON'S EDUCATIONAL PHILOSOPHY

In 1974 the Commission on Education for Health Administration published a report that included a series of findings and recommendations for advancing the field. Two years later, the W.K. Kellogg Foundation, which had supported the commission, sponsored a follow-up conference that brought together leaders in practice and in education. Perhaps the most comprehensive explication of Thompson's philosophy, approach to teaching, and aspirations for the future of the field is his 1977 essay "Improving the Content of Education for Health Administration: A Future Agenda," which grew out of a paper written for the follow-up conference. This essay remains an important reference and is an invaluable resource in understanding his contribution to professional education and in particular capturing his historical approach and his emphasis on taking a broad view of management issues to include the public policy context.⁴

Employing his method of dipping back into history to frame the present, Thompson began this essay by describing the historical conflict between the physician and the administrator, how it was embodied in the locus of the early programs in hospital administration, and how the conflict was later extended to

include the competing interests of consumers and consumer surrogates. He said, "The new curriculum must address these conflicts in both its content and teaching mode." He continued:

Let us first address the conflict between the physician and the administrator in health services delivery. It is now time to examine all facets of this problem with the irony and detachment they so richly deserve. Such an examination reveals the real conflict is between the concepts of the patient's clinical management carried out by physicians, and the institutional or program management carried out by health service administrators. The old conflict between the physician administrator and the steward was essentially due to the fact that the latter was unable to understand the clinical management process. The cloak of the physician's professional prerogative covered all aspects of direct patient care. This cover was later extended by those administrators trained in schools of public health, who, although not always physicians, were at least exposed to selected medical problems and, therefore, were supposed to be more aware of the factors in clinical management. In the meantime, the decibels of discord between those who managed the care of patients and those who managed the institutions within which patient care took place steadily rose, amplified by what were regarded as severe ideological differences between two factions of health services administrators, depending on the site of their training.

Thompson was revered for many things, not the least of which was a talent for turning a memorable phrase. Some of the phrases, attributed to his experience in the Navy, are not suitable for reprinting. One of the most colorful that does merit reprinting captures the dynamic he is describing in the paper; he called it "the gauze curtain."⁵

"In the meantime, hospital administrators...began to apply many of the principles of modern management to their institutions...The systems were applied in all areas of the hospital, except those functions carried out by the medical staff...the medical staff remained the primary resource allocator of the hospital, through its control of the clinical management of individual patients...The medical staff," he continued, "continued to be unconcerned about institutional costs, however well defined..."

He goes on to argue:

Until costs or revenue could be expressed in terms consistent with the treatment of patients received, the physician could not, even if he wished, determine the effect of his treatment patterns or caseload on the resources expended by the hospital. The administrator was equally unable to assess this effect, since his reference frame continued to be that of functional departmental cost and revenues. This inability to express runaway institutional costs in terms that were mutually understandable to the two critical managers fostered the distrust of each other...

The new content in health services administration must address these problems head on...and explore the curriculum implications...of research that was demonstrating that the output of patient care can be expressed in terms understood by both clinicians and administrators...

As an illustration of this type of approach for the future, he offers ongoing research at Yale on DRGs. Ironically in light of subsequent events, he says of this research: "All I anticipate is sufficient conflict dampening through the use of common products so that a rational health service administration theory can be constructed, tested, and taught. Such a theory, with clinical management as its base, could then begin to derive production functions for each diagnosis-related group and uncover valid costing, pricing, corporate planning, and evaluative strategies for health care institutions which will radically change curriculum content for the future."

Turning to the issue of public policy content, he argues that the forces of change, and particularly the new understanding of the relationships between clinical decisions and resource consumption, mandate public accountability at the political or community level. He said:

The curriculum implications...are obvious. First, both the regulators and the regulated will be trained by programs in health services administration if these decisions by a superseding level of authority are to be related to the field; and second, these authorities will be public or quasi-public organizations.

In many of the program settings, health services administration has been an extension of hospital administration. Consequently, much of the present curriculum has been focused on institutional management, not on the public control of those institutions. Planning content has, for example, been primarily devoted to corporate planning in an attempt to achieve the goals and objectives of a single institution. The faculty has too often adopted the posture of apologist for the hospital rather than of critic. This attitude must change substantially, in framing new curriculum offerings, if programs are to prepare administrators for the various control bodies even now in place.

The setting of most of these agencies has resulted in the generation of a new "word fact" in our profession known as *public policy*...*Public policy* should, at the very minimum, make us conscious that the various levels of government are our partners and that we had better include legal and political content in our new curriculum.

In examining the educational problems of training both generalists and specialists in health services administration, we (again) find ourselves prisoners of our own history. Many existing programs in health services administration developed from one specialty, that of hospital administration. Others represent new coalitions of a variety of specialty programs, ranging from health education to maternal and child health. In both types of settings, and in contrast to other professional education, the progression was from preparation in the specialties to a more general format. Many students, at least in my own university, are interested in a general program, rather than a major in one of the specialties...these generalists are considering courses in evaluation as their most applicable skill area, along with electives in the institutional and programmatic areas...courses in ambulatory care are frequently selected, as are electives in environmental health.

JOHN D. THOMPSON'S LEGACY AND HEALTH ADMINISTRATION
EDUCATION TODAY

Graduates of the Yale program under John Thompson were well prepared for the crescendo of evidence-based decision-making processes that revolutionized the business functions of hospitals in the 1970s and 1980s. Computerized analysis produced a new level of comprehensiveness to manage the large databases that facilitated the spate of mergers and hospital system developments. During the same period, computer-based systems applications proliferated for operating rooms, laboratories, radiology programs, and other functional units. Many of these stand-alone systems were designed by creative administrators and clinicians. By the late 1980s, national MIS (management information system) companies, some growing out of the pioneering systems, began to weave them together, selling more comprehensive systems or servicing them on a contractual basis.

Two forces converged, both influenced by the work of Thompson and his students. Demand for more comprehensive systems was propelled by administrators who shared his vision of evidence-based decision support. And the health information systems industry began to supply them.

Today the concept of evidence-based decision support integrates much of the content of health services administration education. The theme begins with management information systems and follows through finance, accounting, health economics, managerial epidemiology, strategic planning, marketing, quantitative analysis, and health services research. Capstone courses, theses, and residency projects follow the approach that Thompson pioneered at Yale.

The ideal curriculum is approaching John Thompson's vision of a synthesis of administrative and clinical evidence-based decision-making competency that transcends the gauze curtain. Most of the components are in place, and the research and development agenda is clear. The specification of data requirements and quantitative analysis are fundamental competencies that the program graduate brings to the management of operations. The limitations on fully realizing the vision are two: the need to develop more powerful tools to assess and control quality of care and the preparation of faculty who can facilitate learning. John Thompson's agenda remains the guide.

The result is a new management generation of administrative and clinical leaders that emerged in the 1990s who are poised to push back on the final challenge, the management of quality of care. Courses in quality assessment and improvement are beginning to appear. That is the ultimate legacy of John Thompson to professional education.

With appreciation to Barry R. Greene, Thomas Chapman M.P.H. '71, John Kimberly, Peter J. Levin M.P.H. '76, Joseph Napolitano M.P.H. '87, Stephen S. Mick, and David Pearson M.P.H. '70 for sharing their memories of John Thompson.

NOTES

- 1 Joseph Napolitano, Yale M.P.H. 1987.
- 2 A.L. Cochrane (1971) *Random Reflections on Health Services*. Cambridge: Cambridge University Press.
- 3 J.D. Thompson (1977) Improving the Content of Education for Health Administration. *A Future Agenda: Education for Health Administration*, Vol. 3. Ann Arbor, MI: Health Administration Press, The University of Michigan, pp. 79–92.
- 4 Thompson, op. cit.
- 5 Quoted in Rosemary Stevens (1999) *In Sickness and in Wealth*. Baltimore, MD: Johns Hopkins University Press, p. 73 and n. 69, pp. 377–378.

JOHN D. THOMPSON: MENTOR AND INVENTOR

Rosemary A. Stevens, PH.D., M.P.H.

*Address, First Annual John Thompson Health Management Dinner
New Haven, June 2, 2000*

How does one describe John? Mentor and inventor does it for me.

John was my mentor. I met him in January 1961, soon after he had taken over Yale's hospital administration program, and he accepted me as an M.P.H. student. He was a man of enormous intellect, wide-ranging curiosity, and a wonderfully tousled appearance. He had practical judgment. He asked probing questions. He had a wide-ranging curiosity. He was a practical idealist. In any discussion of health care the patient came first. John was a man of great kindness, not least to his students—as many of us can attest.

John understood the importance of mentorship. In his oral history he pays tribute to his own mentors: Martin Cherkasky, E.M. Bluestone, and Al Snoke in particular. Our class knew Al Snoke, but Cherkasky and Bluestone also became familiar names to us, not unlike grandparent mentors. John's experiences at Bellevue Hospital in the 1930s, he said, would mark him forever. He learned about the importance of service in these years, and his observations at Bellevue of human behavior and how organizations work would enrich his whole career. (He did his degree in business administration while working as a night nurse on the prison ward.) John was at Bellevue when the sulfonamides were introduced in the late 1930s: miracle drugs that could cure Type III pneumonia. He described to his students in the 1960s the unbelievable change on the Bellevue wards as pneumonia was virtually eliminated overnight. It was a nice (unexpected, perhaps ironic) parallel that several decades later, John's work on DRGs would also transform the culture of the hospital, by standardizing the classification of patients and reducing the length of hospital stay.

How does one describe John Thompson as a mentor? It's easy to describe his gruff exterior, his gravelly voice, his omnipresent cigar, his messy desk, and his dramatic use of profanity: the outraged "Jesus Christ!" followed by the meek "Excuse me, sister," directed to the nun in class. Beneath these trappings he was complex. Different students probably remember him in different ways. I saw him as erudite, and courageous in pursuit of his intellectual interests. He was a student of Victorian and post-Victorian Britain, who insisted on calling me

Ottoline (Morrell), in memory of the Bloomsbury group. John was a published scholar (and admirer) of Florence Nightingale, the reformer and statistician who, like him, was interested in change and understood the strategic force of numbers. John was also a master historian of hospital architecture. His book with Grace Goldin made a unique contribution to hospital history and is widely cited.

But, of course, he left his greatest mark on students through contemporary, cutting-edge health services research. John's interest in operations research and economic modeling on the one hand, and his grasp of hospital practice on the other was basic to his work on DRGs. Why did hospital charges assume that the modern hospital was analogous to a hotel, charging inclusive rates per bed irrespective of what nursing and other support services a patient used? You don't go into a supermarket, he would say, fill up a basket of groceries and pay an average charge per bag; you pay for what you purchase. He involved his students in pursuit of better measures, just as he organized them in research teams for other potentially reformist roles. In the sixties and seventies, when I was at Yale as a student and then a faculty member, he masterminded numerous projects in the community, in planning for health care, and in bringing diverse groups together. I was personally involved in at least two, which provide an illustration of their range: one was whether the Connecticut Hospital Association should purchase a then new-fangled computer (our team opted for hiring a statistician first); the second was whether the medical staffs of two hospitals in Bridgeport could work together to share hospital services (No). John stood behind the conclusions of his teams. He was an incomparable teacher, who treated students with respect, pushed them into responsible roles, and groomed them relentlessly through the two-year M.P.H. from neophyte to junior colleague.

Health services research is invention. John Thompson was an inventor who believed that managers, researchers, and teachers are morally responsible for improvement. As such an inventor, one should draw on any research methods and any source of power to improve the health system on behalf of individuals, taxpayers, and communities.

John is rightly remembered for his role as an inventor of DRGs, with Bob Fetter. But he was appalled at the early, limited use to which DRGs were put; that is, as agents of cost control and top-down management rather than as a base for quality assessment designed to improve care for patients, including nursing care. He probably would have been disappointed at the way in which health services research became a relatively narrow set of skills, based on the management sciences, in the 1990s, rather than an openly diverse set of fields focusing

on clinical experience, human behavior, and public health—and including at least a dollop of history. Now, I think, the tide is turning his way. John’s life and work continue to be relevant to the field at large, extending far beyond the United States.

John’s legacy includes his many students for whom he was an amazing mentor; but his legacy also includes a program and a mid-set for the future. He wrote an article called the “Pasionate Humanist.” That is John Thompson to a T. Program directors, teachers, and investigators in health services research are well advised to heed this message. It is not enough that managers and researchers are technically well trained and financially savvy. They must also ask fundamental questions, seek alliances, motivate others, and be inventive. History can help see problems in new ways, crystallize issues, and allow for a long view. Financial processes should be tailored to achieve desired outcomes for patient care. And while private entrepreneurs such as John are needed to improve services in both the public and private sector, all hospitals and other health care organizations are fundamentally public institutions. We are all engaged in public service.

John Devereaux Thompson, we salute you.

—Rosemary A. Stevens

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A NOTE ON THE THOMPSON PAPERS,
YALE UNIVERSITY ARCHIVES

The Yale University Library Manuscripts and Archives collection holds the gift of John Thompson's papers. Accession of the majority of the papers occurred in 1989, as his own selection. After he died, colleagues packed up other materials and added them to the collection. The entire collection is called "John Deveraux Thompson Papers," Manuscript Group 1498, consisting of 78.5 linear feet (76 boxes, 1 folio). Yale University Library has produced a guide to the Thompson papers (Manuscripts and Archives, Yale University Library, PO Box 208240, New Haven, CT, 06520-8240). The catalog was compiled by Diane Kaplan and Carol King. Copyrights have been transferred to Yale University.

The Thompson papers span the period 1931–1992. A large proportion deal with his years at Yale, including important sources for Yale–New Haven Hospital history and the Yale Schools of Medicine and Nursing, but the collection also includes material from before Thompson came to Yale. Not surprisingly for an individual who had so many interests and connections, they are a rich and varied collection. For those interested particularly in the history of Diagnosis Related Groups (DRGs), the Thompson files contain behind-the-scenes material and early work that became important in their development. These materials complement other important resources on DRGs available at Yale, for example the papers of Robert Fetter.* There is also a huge archive of hospital-related matter. This includes drafts of articles, unpublished reports of site visits as part of the Regional Medical Program or consultations to health service systems, schools of health administration and governments. There are files as well of wide-ranging correspondence with leaders in public health, hospital administration, and health services research and policy. Finally, the papers include extensive material from Thompson's historical research and even files about the Bellevue Hospital School of Nursing, his alma mater.

* Robert Barclay Fetter Papers, 1978–1989 (inclusive), 3.75 linear ft., Manuscript Group 1496, Manuscripts and Archives, Yale University Library.

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