<u>Discourse</u>

Reflections on Nursing Health Services Research: Where the Idealism of Research Meets the Realities of Practice

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Introduction

There is no question that nurses and nursing are central to health care, particularly at the "sharp end" of care delivery. Nurses and nursing care have been recognized as critical influences on patient, system, and societal outcomes (Burstin, Lewis, & Hubbard, 2001; Hubbard, Walker, Clancy, & Stryer, 2002; Jones & Lusk, 2002; Jones & Mark, 2005) and as playing key leadership roles in a changing, global, patient-centred health-care system (Institute of Medicine [IOM], 2010). Yet, despite the importance of nurses in the delivery of health care, regulatory, financial, and political barriers may prevent societies from fully appreciating the positive effects of nurses and nursing care on outcomes at all levels.

Recently, nurses have been recognized by leaders at the "blunt end" of care as "the new rainmakers" (Betbeze, 2007; PricewaterhouseCoopers Health Research Institute, 2007). As described in the context of the American health-care system, nurses are expected to make a "significant impact on the key metrics that will drive reimbursement" (PricewaterhouseCoopers Research Intitute, 2007, p. 2). The connection between nurses and key reimbursement metrics places nurses front and centre in the financial health of American health-care organizations, and suggests that the discipline will play a much larger — and more publicly acknowledged — role in the health-care system of the future. This view is likely held outside of the American health-care system as well, as the body of evidence has evolved, linking nurses to the quality, safety, and outcomes of care, including organizational financial performance.

A recent US report, *The Future of Nursing: Leading Change, Advancing Health* (IOM, 2010), has generated great interest globally because it not only envisions nurses' role in a transformed and patient-centred health-

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care system, but also highlights their contributions to value-based care. However, evaluating nurses' role in a re-envisioned health-care system will require new approaches in order to value nurses' contributions to care delivery. The report identifies health services research (HSR) as a means of examining nurses' contributions to health care (IOM, 2010). HSR allows researchers to study problems in clinical practice and healthcare systems that are associated with errors in care delivery, patient safety, and quality (IOM, 2001). While the HSR community is interdisciplinary in nature and clearly understands health-care issues on many levels, it must include nurses, as the single largest group of health-care providers worldwide, to ensure that nursing practice is adequately studied and that the nuances of nursing practice are adequately represented in HSR.

Nursing health services research, or NHSR, has been identified as a means of contributing knowledge at the intersection of nursing and HSR (Jones & Mark, 2005), as depicted in Figure 1. In order for the reader to fully appreciate the role of NHSR in evaluating nurses' contribution to health-care delivery, this article will describe first the field of HSR and then NHSR as a means of studying the contributions of nurses and nursing in the context of health-care research. The article will end with a challenge to the discipline to embrace the full integration of NHSR into nursing research. If it accepts the challenge, the discipline will be better able to address those questions that are critical to a full



understanding of the effects of health care on society, locally and globally; our interdisciplinary research colleagues will better understand the contributions of nursing services to health-care research; and policy-makers will better understand nurses' contributions to organizational and industry performance.

The Nursing-HSR Connection

HSR has been defined as "a multidisciplinary field of inquiry, both basic and applied, that examines the use, costs, quality, accessibility, delivery, organization, financing, and outcomes of health care services to increase knowledge and understanding of the structure, processes, and effects of health services for individuals and populations" (Field, Tranquada, & Feasley, 1995, p. 3), and, more recently, as "the multidisciplinary field of scientific investigation that studies how social factors, financing systems, organizational structures and processes, health technologies, and personal behaviors affect access to health care, the quality and cost of health care, and ultimately our health and well-being" (Lohr & Steinwachs, 2002, p. 16). HSR is viewed as part of the health-research continuum because it uses the findings from biomedical research to ask questions about the broader aspects of health-care delivery, and because it is a means of informing health-care decision-making at the levels of clinical practice, health-care systems, and public policy (Eisenberg, 1998). While biomedical (or basic clinical) research has traditionally focused on mechanisms of human disease and treatment, HSR takes what we know from biomedical research and advances that knowledge to focus on questions related to the organization, delivery, and financing of care for patients and patient populations. HSR complements biomedical research by addressing issues of importance for health-care delivery and society that cannot be addressed through traditional biomedical research methods (Eisenberg, 1998).

HSR uses research methods and techniques from a variety of disciplines to examine health-care delivery problems encountered in real-world situations (Black, 1997; Bradham et al., 2000; Kane, 1997; Shi, 2007). Tools and techniques common to HSR can be used to evaluate and test theory-based interventions and innovations in clinical practice, and to determine the impacts of those interventions on clinical practice and outcomes of care (Bradham et al., 2000; Ingersoll, Hoffart, & Schultz, 1990; Sidani & Braden, 1998). In combining a clinical perspective with research methods, HSR narrows the gap between research and practice by asking, Does this innovation work? For whom, why, and at what cost? (Black, 1997; Eisenberg, 1998).

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Given that HSR has the potential to address questions pertaining to clinical and health-care delivery, it is reasonable to assume that it holds great promise for addressing similar issues pertaining to the organization of nursing practice and the organization and delivery of nursing care. Bringing HSR into nursing allows us to advance what we know from basic research — including nursing research on human responses to health, illness, and disease — in order to consider the effects on individuals and families. It also helps to bridge the gap between research and clinical nursing practice, to advance our knowledge of what works in nursing-care delivery and why, and to better determine the effectiveness, costs, quality, and outcomes of care.

In 2005 an interdisciplinary conference was convened to develop an NHSR agenda. NHSR was considered a means of developing both basic and applied knowledge in five areas: improving access to nursing services and ensuring an adequate health workforce; improving health and reducing health disparities in minority and vulnerable populations; addressing key issues in quality of care and patient safety; examining the cost, effectiveness, and efficiency of nursing and health care; and improving the organization, delivery, and environment of care (Jones & Mark, 2005). Others have advocated the use of NHSR for studying problems in nursing practice and health-care systems that are associated with concerns about errors in care delivery, patient safety, and quality of care. For example, Blegen, Donaldson, Seago, and Shapiro convened an international conference, The Impact of Patient Safety Initiatives on Nursing Workflow and Productivity, for the purpose of developing a research agenda addressing the effects of implementing quality-improvement initiatives on the organization, costs, and outcomes of nursing care. Both conferences were based on two assumptions: for those aspects of healthservices delivery in which nursing is directly involved, nursing practice must be examined; and failure to examine nursing practice will result in the omission of important aspects of care delivery that could affect decision-making. Thus, given the importance of nursing care in the context of overall health-care delivery, NHSR is consistent with mainstream research.

NHSR: "Old Wine in New Bottles"?

Dr. Kerr White (1993), considered by many to be the father of HSR, contends that health-care research is "old wine in new bottles." White recounts the history of HSR and builds the argument that it is derived from and grounded in known and established scientific methods, includ-ing epidemiology, statistics, economics, demography, survey research, anthropology, sociology, and psychology. He then argues that HSR aims

to improve clinical practice, advance the organization and management of care, demonstrate "value for money spent," and elucidate the therapeutic effects of various interventions. White also draws a line between HSR and caring, noting that HSR can help us to better understand the contribution of caring to processes and outcomes. He traces the history of HSR from Sir William Petty to Ernest A. Codman, Avedis Donabedian, Archie Cochrane, and beyond, to illustrate how HSR has evolved from a curiosity to know and better understand why and how care impacts on those who receive it.

The emphasis on caring in HSR provides a logical link to nursing. White (1993), along with many prominent health services researchers, recognizes the essential contributions of Florence Nightingale to HSR. Nightingale, widely acknowledged to be the originator of professional nursing, showed an intense interest in and reliance on statistics, and her attention to detail provided a strong foundation not only for the evolution of the nursing profession and nursing research, but also for innovations to enhance the care of hospitalized patients. Her groundbreaking efforts to develop a standard method for tracking and reporting hospital statistics gave the world a better understanding of how to prevent and treat infections and solidified her role in the evolution of HSR. "No account of Health Care Research should omit the seminal contributions ... of that remarkable nurse, statistician, administrator, and political advocate Florence Nightingale" (White, 1993, p. 13).

This point is illustrated in a frequently quoted Nightingale passage that conveys her perspective on the importance of using statistics and research to manage hospital care and of being responsible to those who receive and pay for care:

I am fain to sum up with an urgent appeal for adopting this or some uniform system of publishing the statistical records of hospitals. If they could be obtained . . . they would show subscribers how their money was being spent, what amount of good was really being done with it, or whether the money was doing mischief rather than good. (Nightingale, 1863, pp. 175–176)

Nightingale has even been credited with having the discipline apply research findings in practice, which has evolved into what we know today as evidence-based practice (Titler, 2008).

Thus Nightingale's work not only made her the first nursing scholar and one of our most recognized nurse researchers, but has given nursing a prominent place in the evolution of HSR. Nightingale's role in the evolution of HSR also suggests that NHSR is not new to nursing; in fact one could argue that, because of her part in it, NHSR may have contributed in substantial ways to the origins of contemporary nursing science.

Jennings (2004) makes a strong case for a link between HSR and the evolution of nursing administration research, highlighting both the overlap and the distinctions. Nursing administration research (NAR) has a deep-rooted history of agenda-setting, which has helped to shape the ways that nursing services are managed, the approaches used to examine problems in nursing care, and the resulting evidence base for policymaking. NAR has been described as much narrower than HSR, with research questions focusing on issues in nursing practice, whereas HSR questions concern broader issues such as the organization and financing of health services.

Even when NAR and HSR focus on similar phenomena — for example, quality — NAR tends to be more narrowly focused on nursing practices related to quality, whereas HSR is likely to take a broader perspective by concentrating on quality at an organizational level, its financing, and/or methods for implementing quality-improvement initiatives (Jennings, 2004). However, NHSR allows us to bridge even these distinctions, as nurse researchers have taken on and examined nursing-relevant issues from the broader perspective of HSR. The more recent focus on nursing-related issues by health services researchers also indicates an appreciation for nursing-related issues that one must consider when studying various aspects of health-care delivery and clinical practice. As Jennings notes, when variables pertaining to nursing care and practice are excluded, evidence on the relationship between structural measures and patient/system outcomes viewed solely from an HSR perspective is weak at best. The point is that the two areas complement each other and allow researchers to study phenomena in ways that would exceed their individual capacities. The connection between NAR and NHSR also implies that NHSR is more established in the discipline than might appear on the surface.

Exploring Emergent Issues With NHSR

The 2005 NHSR conference identified five areas of concern. These agenda items are still relevant today:

- improving access to nursing services and ensuring an adequate health workforce
- improving health and reducing health disparities for minority and vulnerable populations
- addressing key issues in quality of care and patient safety
- examining the cost, effectiveness, and efficiency of nursing and health care, which can be expanded to include economic analyses to deter-

mine nurses' contributions to value-based care and the financial performance of health-care organizations

· improving the organization and environment of care delivery

Building on this work and on emerging issues in nursing, health care, and HSR, the following represent both areas of critical need and opportunities for NHSR:

- comparative effectiveness analysis research to determine which nursing investments improve care outcomes (IOM, 2010)
- implementation science, including the translation and uptake of research findings into everyday nursing and health-care practice
- informatics and health information technology to better understand the systems for managing and exchanging information to protect patients, while delivering care more efficiently and effectively

As nursing and health care continue to evolve, the list of NHSR needs will evolve with them: Some items will be revised, some will be dropped from the list, and yet others will be added to the list as we continue to improve our practice and the delivery of care. The NHRS agenda is expected to change as the science evolves, both methodologically and substantively; as our world evolves economically, socially, and politically; and as the health needs of societies evolve.

The NHSR Challenge

Given the current global economic crisis, the increasing demand for health care, growing concerns about the future supply of health human resources, and the limited ability of individuals and nations to pay for health care, it is likely that nursing will play a critical role in the delivery of safe, high-quality care in transformed health-care systems. As the future unfolds, the need for nurses to lead and be a part of teams that study and evaluate organizational, delivery, and financial aspects of care delivery will increase. As Pauly points out in the IOM (2010) report, "For nursing to achieve parity with other health services research ... it must be managed by interprofessional teams that include both nurse scholars and scholars from methodological and modeling disciplines. For nurse researchers to achieve parity with other health services researchers, they must develop the skills and initiative to take leadership roles in this research." (p. 5-14) This calls for the integration of NHSR into our education programs, particularly at the doctoral level, and the mentoring of future nurse health services researchers so they will be able to fill these important leadership roles (Jones & Lusk, 2002).

It is imperative as well that NHSR not only disseminate research findings, but also be a part of efforts to translate knowledge and diffuse

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research findings — and innovations — in practice. This will entail not only the generation of evidence from NHSR to inform policy-making at all levels, but also the provision of leadership to address the barriers to practice changes and transformation. Overcoming these barriers will require determination worthy of Florence Nightingale and acceptance of NHSR and the role it can and will play in a transformed health-care system in evaluating the contribution of nursing to value-based care.

Although many may analyze nursing-related issues via HSR, if nurses are not trained and engaged in HSR we run the risk of being absent from studies that have the potential to document the contributions of nurses to patient care. As so eloquently articulated by Dr. Donna Diers over 30 years ago, "If nurses don't do [it] ... no one else ... can. It's our special privilege and obligation" (Diers, 1979, p. 4). In other words, NHSR is our responsibility to society. If we do not embrace and get on with the work of NHSR, we fail to fulfil that responsibility; moreover, we leave our future to fate.

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