Improving collection and use of interprofessional health workforce data: Progress and peril

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ABSTRACT

Background: Policymakers and other stakeholders need robust data to understand how health care system changes affect the health care workforce and the care it provides, evaluate the effectiveness of health care finance and delivery innovations, and build an adequate supply of nurses and other health professionals to care for an aging and diverse population of patients. In 2011, the Institute of Medicine released a report that called for the creation of an infrastructure to collect and analyze interprofessional health workforce data and issued specific recommendations to reach that overarching goal.
Purpose: This paper examines progress toward each of the main data-related recommendations of the Institute of Medicine Committee on the Future of Nursing, and identifies strategies that can achieve further gains in health workforce data collection.
Methods: Multiple documents and websites were reviewed to identify the extent to which each of the Institute of Medicine's recommendations have been implemented.
Discussion: There has been little progress toward the Institute of Medicine recommendations regarding data collection, with a few exceptions related to improvements in national data on ambulatory care. This can largely be attributed to a lack of funding.
Conclusion: Although there are active and strong collaborative relationships across many key stakeholders, there have not been sufficient resources dedicated to ensuring that new programs advance. More leadership, advocacy, and resources will be needed to build the robust data infrastructure called for by the Institute of Medicine.

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Introduction

Well-coordinated, evidence-based health workforce planning programs are required to ensure the United States has an adequate workforce to meet future health care needs. The Institute of Medicine (IOM) committee on the Future of Nursing recognized the importance of effective policy-making in this area and the need for timely, accurate, and comprehensive data to support it (IOM, 2011). They highlighted the need for robust data and information systems for all health professions not only to identify and remedy current and emerging shortages but also to evaluate the role of nurses and other health professionals in the effectiveness of health care financing and delivery innovations such as bundled payments, medical homes, accountable care organizations, and health information technology. Their recommendations for improved data collection and analysis were explicitly linked to the work of the National Health Workforce Commission and the National Center for Health Workforce Analysis (NCHWA), both of which were established as part of the Affordable Care Act.

The overarching data recommendation of the IOM committee was:

> Recommendation 8: Build an infrastructure for the collection and analysis of interprofessional health care workforce data. The National Health Care Workforce Commission, with oversight from the Government Accountability Office and the Health Resources and Services Administration, should lead a collaborative effort to improve research and the collection and analysis of data on health care workforce requirements. The Workforce Commission and the Health Resources and Services Administration should collaborate with state licensing boards, state nursing workforce centers, and the Department of Labor in this effort to ensure that the data are timely and publicly accessible.

Three main areas of health workforce data needs were identified by the committee. The first area is on core data sets on health care workforce supply and demand. The committee recommended both that state health professional licensing agencies collect data as part of the license renewal process and that the federal government enhance their comprehensive National Sample Survey of Registered Nurses (NSSRN). These data should support both national and regional analyses and measure the numbers of health professionals, their education and training, their places of employment, the roles they play, and the services they provide. The committee emphasized the importance of data collection and analysis across all health professions—not just nursing—because no single health profession works in isolation.

Second, the committee recommended that there be surveillance of health care workforce market conditions, supported by the core data sets. A national strategy is needed to monitor health care labor markets on a frequent basis so that emerging trends can be identified and problems can be addressed early. Many federal agencies routinely monitor economic trends to identify the potential emergence of economic recessions, rising unemployment, expansions of trade deficits, and other concerns. Similarly, regular analysis of new health workforce data could alert policymakers and industry leaders of emerging issues and assess the potential impact on access to high-quality health care services. Such data collection and surveillance systems will require collaboration between multiple federal and state government agencies, employers, professional associations, educational institutions, and state nursing workforce centers.

Finally, the committee recommended that there be coordination across federal and state agencies to ensure that data systems support health care workforce effectiveness research. Research on how the health workforce contributes to access to and quality of patient care requires multiple sources of data to generate knowledge about the roles of health professionals and interprofessional teams on the delivery of high-quality, efficient health care. Enhanced data from federal surveys such as the National Ambulatory Medical Care Survey, insurance claims, and clinical information systems are necessary for meaningful research. At present, many of these data sources are focused on physicians, and it is difficult or impossible to identify the unique roles of nurses and other health professionals in the delivery of health care. Research that explores the comparative effectiveness of different models of care delivery requires that each type of health professional be identifiable. Ideally, data would identify complementarities in the roles of those providing care.

In 2015, the IOM convened the Committee for Assessing Progress on Implementing the Recommendations of the Institute of Medicine report, The Future of Nursing: Leading Change, Advancing Health (IOM review committee). The committee concluded that "Little progress has been made on building a national infrastructure that could integrate the diverse sources of the necessary data, identify gaps, and improve and expand usable data not just on the nursing workforce but on the entire health care workforce." This article reviews progress toward the original IOM recommendations and identifies changes needed to achieve the IOM committee's vision for the future of nursing data collection. It also highlights best practices of states in data collection, to guide nursing leaders in their advocacy for and implementation of local data collection systems.

Progress Toward the Recommendations

The committee's recommendations regarding data revolved around the role of the National Health Care