

COMMENTARY

▲ An International Call to Arms to Improve Allied Health Workforce Planning

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Although the funding and organization of the health care systems in the United States and England are quite different, there are striking similarities in the allied health workforce planning challenges facing the two countries. This paper identifies some common issues facing workforce policy-makers in both countries and suggests key next steps to enhance workforce research and planning in both countries, including the creation of a national minimum data set for allied health professions. *J Allied Health* 2011; 40(1): 43–49.

Author's Note: The motivation for comparing the United States and England was born out of a year-long sabbatical at the National Health Service Workforce Review Team in England. It quickly became evident that the issues I had been working on at home in the US were strikingly similar to those challenges facing the allied health workforce in England. As reform efforts in both countries have sparked renewed interest in health workforce policy, this paper is an effort to reflect on the shared challenges the two countries face. We may have an ocean between us and markedly different health systems, but we have many common interests on which we can collaborate.—E.P.F.

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Allied Health Workforce Planning in England and the United States

THE NATIONAL HEALTH SERVICE (NHS) in England is the largest employer in Europe and one of the largest in the world.¹ Although the NHS is undergoing reorganization, the Department of Health, which governs the NHS, currently allocates resources based on the relative health needs within each catchment area. Thus, within the constraints of available resources, the number and skill mix of allied health professionals employed and the number of slots for trainees are determined by the health needs of the population. Such a system is inherently more centralized than the US one, where the numbers and skill mix of health care providers are determined by a series of decentralized, market-based decisions.

These fundamental differences aside, the need for timely, objective, and rigorous workforce data that support decisions is the same. Without this solid evidence base, allied health professionals have struggled to find a balance between speaking with a professional versus a data-driven voice when weighing in on policy debates. And arguably, in a system like the US's, in which no one employer or educational institution benefits from investing in the collection and analyses of workforce information, the need for workforce information is even greater.

However, the creation of such an infrastructure will have to be undertaken in the context of tightening budgets. In England, the NHS is expected to find £15 to 20 (\$22 to 29 USD) billion in cost reductions by 2013/2014, which will have significant ramifications for workforce planning in the NHS.² The US faces similar fiscal pressures at a time when the demand for health care services will likely increase due to demographic changes and the potential expansion of health insurance coverage brought about by health reform. These financial constraints place significant pressure on health care employers to reduce staffing costs, increase productivity, change skill mix configurations, and redesign the delivery of health care services.

Both countries have taken steps toward addressing the need for the data and analytical capacity required for high-quality workforce planning. In England, the Department of Health recently invested in the Centre for Workforce Intelligence (CfWI), a new national authority on workforce

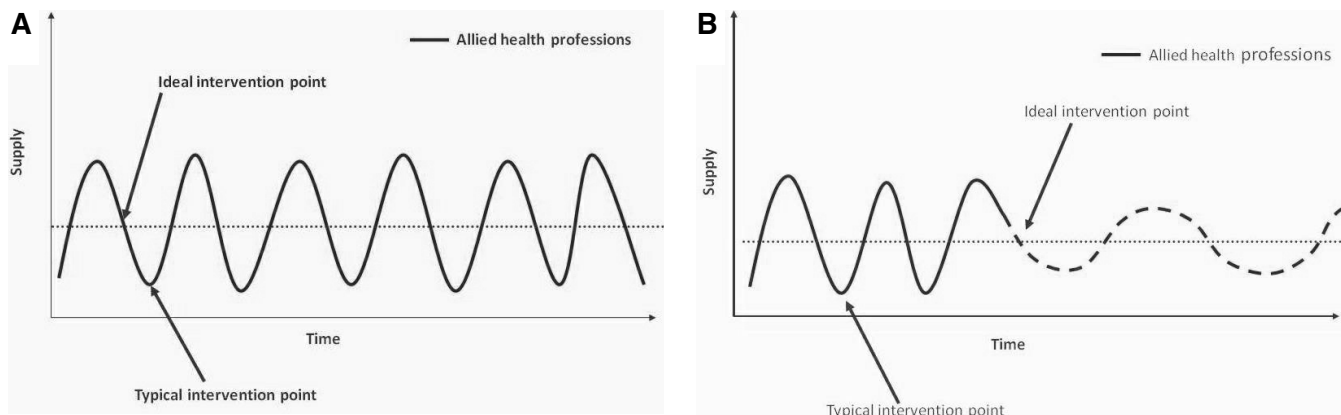


FIGURE 1. Current (panel A) vs ideal (panel B) allied health supply cycle. (From Fraher E, Summer P, Gaul K, Rutledge S. *The State of Allied Health Workforce in North Carolina*. Presented to the Council for Allied Health in North Carolina, Chapel Hill, NC; May 2, 2007. Available at: https://www.shepscenter.unc.edu/hp/presentations/CAHNC_050207.ppt, accessed February 4, 2011.)⁵

planning whose mission is to “become the primary source for workforce intelligence” for the NHS.³ In addition to providing intelligence, the CfWI will build the capacity for other organizations to collect, analyze, and act upon workforce data “to improve the effectiveness of workforce planning at the local, regional and national levels.”³ In the US, health reform legislation included provisions aimed at improving the ability for state and national policy-makers to gather, analyze, interpret, and act upon workforce data. The Patient Protection and Affordable Care Act (PL111-148) created a National Center for Health Workforce Analysis, which mirrors many of the same functions as England’s CfWI [Sec. 5103].⁴

To inform policy-makers in both countries of high-priority areas in all health professions, including allied health, better data and analysis will be needed. Such an approach requires investing resources in building a minimum data set, improving analytical methods, and developing an infrastructure that allows timely and objective health workforce data and analyses to be disseminated to employers, educators, policy-makers, and others. The remainder of this paper briefly discusses each of these key areas and specifically addresses:

- why better data are needed to support allied health workforce policy at all geographic levels in the US and England;
- how building a minimum data set for the allied health professions requires collaboration across multiple stakeholders;
- what challenges exist to enhancing the workforce data infrastructure; and
- what key next steps are needed to improve allied health workforce planning in both countries.

The Need for Better Allied Health Workforce Data

Without good data, policy-makers struggle to understand and forecast the effect of system-wide changes, causing

allied health workforce efforts to become fragmented and uncoordinated. Little collaboration currently exists between employers and educators in the US and England to monitor, plan, and implement workforce strategies, and thus, decisions are often made in a vacuum of data. The result has been that when a shortage hits, employers and educators independently gear up production of new allied health workers quickly, and these uncoordinated responses soon create an over-production of health professionals. The result is that many allied health professions lurch from shortage to oversupply in relatively short time periods (Fig. 1A). In an ideal system, data from disparate sources would be gathered, analyzed, and disseminated to decision-makers on a timely basis, resulting in a smoothing of the cycle so that pending imbalances between supply and demand would be recognized, and acted upon before they become problematic (Fig. 1B).⁵

Building a Minimum Data Set Requires Collaboration between Multiple Organizations

Developing the data sets needed to improve allied health workforce planning is challenging because each of the organizations that gather workforce data collects different types of information, in varying time periods, and for very different purposes. For example, regulatory bodies in both countries often do not have the resources, or consider it within their scope, to collect workforce information about licensees. Additionally, in the US, licensure is a state responsibility and some professions that are licensed in one state are not licensed in another one. There are also varying definitions of who falls under the allied health umbrella.⁶⁻⁸ Medical assistants, for example, are not always considered allied health professionals, yet they comprise one of the fastest growing health professions.^{9,10} Taken together, these challenges mean that unlike with physi-

cians, nurses, or pharmacists, one cannot use licensure data to enumerate fully the supply of allied health workers.

Much of the workforce data collection done in both England and the US has been done by professional associations as the basis for informing their lobbying efforts (and in England, to justify pay review body applications).^{*} This advocacy role has tended to reduce the objectivity of their data in the eyes of workforce planners and policy makers. There also is a lack of consistency in the type and quality of data collected for different health professions. Data from professional associations has the additional challenge of not being fully representative of the workforce since membership is voluntary. For all of these reasons, the approach needed is one that combines data from multiple sources, including data from licensure (i.e., registration) bodies, professional associations, employers, and institutions engaged in training and certifying the competencies of the workforce.

In the US, the Bureau of Health Professions in the Health Resources and Services Administration (HRSA) has responded to these concerns by working with an outside contractor to build a national minimum data set for the health professions. The scope of work calls for the contractor to work with state and national stakeholders to develop and adopt uniform minimum data standards, support the collection of health professions data, and provide technical assistance to enhance data collection efforts (Personal communication: Jean Moore, Director, Center for Health Workforce Studies, University at Albany–SUNY School of Public Health, Nov 8, 2010).

Data Collection Challenges

A number of key issues need to be considered in determining which minimum data elements are required to monitor the supply and demand of allied health workers adequately. On the supply side, the data must count the total workforce licensed or credentialed to practice, but also identify the number of hours one is actually actively engaged in clinical practice in order to understand the supply of full-time equivalents (FTEs) in the workforce. Data on specialty area and job function also need to be collected because while the supply of workers in one specialty area may be adequate to meet demand, supply in another one might not. The increasing focus in both countries on disparities in health professional supply by geographic areas—i.e., the work done by the Dartmouth Atlas in the US¹¹ and the “post-code lottery”¹² variations that exist in health provision in England—will put increased focus on the need for supply data at various geographic levels.¹³ In the US, in order to qualify for new federal funding earmarked for allied health training and recruitment programs in shortage areas (sec. 5205), states and counties will need a system that can meas-

ure their supply of allied health professionals in order to demonstrate that they are in shortage.¹⁴

Better data are available on the supply of allied health professionals in the educational pipeline in England than in the US, possibly because the training of allied health workers in England is funded by the Department of Health. There are some national data sets in the US (e.g., IPEDS,[†] ASAHP’s Institutional Profile Survey[‡]), but limited data are available at the state level or for 2-year programs. If one wants to collect education data, it must be collected from each individual program. Such data are essential to understanding whether the expected number of graduates by specialty and geography will be adequate to meet future demand. In both the US and England, limited feedback loops exist between the changing workforce practice patterns, skill mix and deployment of the current workforce, and the numbers feeding into the education pipeline each year who will comprise the future workforce.

Shifting from the supply to the demand side, an ideal workforce planning system requires having some barometer of not only current demand but also the ability to project future demand by profession, specialty, and geography. This is very difficult to do in a market driven-health economy such as the one in the US, and it is equally difficult within England’s NHS. For example, while the supply of new entrants to the medical workforce in England is planned centrally by the Department of Health, the number of new allied health professional positions needed is determined locally and driven by how different employers decide to deploy the allied health professional workforce.

Similarly in the US, decisions about the numbers and types of allied health professionals needed in the workforce are made by individual employers, and educational program decisions are made by individual schools. While this approach arguably allows for workforce planning that is driven by local market demands and populations, it can be problematic when local entities do not have either the data or analytic capacity to forecast their workforce needs accurately. In addition, due to the time it takes to train allied health professionals, decisions to develop or expand enrollment in educational programs need to be made years before that class of graduating professionals will enter the workforce. The result is that many health professions go through a boom and bust cycle as programs open or expand enrollment based on anecdotal evidence or in response to other pressures rather than based on data-driven workforce planning decisions.

Mechanisms to monitor the demand for allied health workers, such as tracking vacancy and turnover rates, time

[†]The Integrated Postsecondary Education Data System (IPEDS) is a set of annual surveys conducted by the National Center for Education Statistics that gathers information from all educational bodies that participate in federal student financial aid programs.

[‡]The Institutional Profile Survey by the Association of Schools of Allied Health Professions (ASAHP) is an annual, online survey that collects data from 21 ASAHP member institutions on faculty, students, and programs.

^{*}The NHS Pay Review Body, established in 1983, is an independent body that advises the government on pay for all staff in the NHS except doctors, dentists, and very senior managers.

to fill positions, amount spent on temporary and agency staff, and other demand measures, are difficult because of the number and diversity of employers who hire allied health professionals. Various attempts have been made to track demand through surveys,^{15,16} but these surveys are often plagued by low response rates that can result in data that are not representative of the demand for certain professions, in particular employment sectors or in local health care market geographies.

In both the US and England, allied health workers are employed in a variety of specialties across a spectrum of settings—from school systems, to hospitals, to outpatient clinics, to long-term care and community facilities. The fact that health care in England is delivered by one national health service should, theoretically, make tracking the demand and supply of allied health professionals easier, but in fact, a good portion of the health workforce is employed outside the NHS, particularly in care of the elderly, and is invisible to the workforce planning process.

For example, it is estimated that approximately one quarter of the qualified physiotherapy (i.e., physical therapy) workforce works exclusively outside the NHS.¹⁷ Without this information, demand projections become meaningless and modeling scenarios must resort to a wide range of “what if” options. This situation may become exacerbated as the English health care system moves toward a more market-based health care system in which an increasing amount of care is provided under NHS contract by foundation trusts, the private sector, voluntary sector organizations, or social enterprise.

Next Steps to Improving Workforce Planning for the Allied Health Professions

STEP 1: BUILD A MINIMUM DATA SET

The starting point for undertaking any allied health workforce analyses, both within and across professions, is a set of basic data elements on the supply, distribution, education, and demand for allied health professionals. In the US, efforts to create such a dataset can build on the initiative currently underway at HRSA as well as an excellent base of data elements previously constructed by the National Forum of State Nursing Workforce Centers.¹⁸ In the UK, Buchan et al. (2008)¹⁹ also have assessed nursing workforce data needs and argue that the effective use of the NHS Electronic Staff Record, the structured involvement of non-NHS employers, the development of the professional register as the fundamental source of workforce planning information, as well as improved education data would significantly improve the data infrastructure needed to support effective policy decisions. Table 1 outlines a proposed set of variables that could be collected from practitioners and educational programs on the supply side, as well as minimum variables needed to gauge the demand for allied health professionals.

STEP 2: BRING PARTNERS TOGETHER TO MAKE VISION A REALITY

In the US, HRSA's efforts to build a minimum data set include explicit mention of the need to bring together the diverse group of stakeholders needed to make the vision of a minimum data set a reality.²⁰ The Allied Health Professional Advisory Board in England has engaged in similar discussions about the need to work collaboratively. Partnership efforts will have multiple dimensions and will need to include collaboration between the many professions who fall under the allied health umbrella, collaboration across employment sectors to capture the diversity of allied health practice settings (and in the UK to capture allied health professionals who work outside the NHS), collaboration between educators so that data on the educational pipeline at all levels of training can be obtained without the need for contacting individual institutions, and collaboration between national and regional (i.e., SHA- or state-level) entities that collect data and engage in local workforce planning. The template outlined in Table 1 could be used by stakeholders as the basis for conducting an inventory of what data currently exist, which organizations hold which pieces of information, and what additional information would need to be collected in the future.

STEP 3: PROVIDE TECHNICAL ASSISTANCE TO IMPROVE DATA COLLECTION AND DISSEMINATE BEST PRACTICES

Though the quality and quantity of allied health workforce data in the US and England have been limited, various US states, including North Carolina, have tracked the supply of allied health workers for many years through licensure data^{21–26} and the demand for allied health professionals by tracking vacancies in newspaper and online sources, and these data are published in “Allied Health Vacancy Tracking Reports.”^{27–30} Supply data have been collected since 1979 and thus provide the ability to track longitudinal trends in supply relative to population growth. These state-led efforts can serve as “best practice” models for national and international efforts to improve the allied health workforce data infrastructure. They show how allied health worker data are utilized by 2- and 4-year educational institutions to identify which allied health professions and geographic areas they should develop or expand training; by local workforce development boards to determine the health care jobs for which they should be retraining laid-off workers³³; and by health care employers to identify ways to improve the recruitment and retention.

STEP 4: WORK TO SECURE FUNDING

Who bears the cost of developing a minimum data set for the allied health professions? Since no one player has the resources, the data, or expertise to mount a comprehensive

TABLE 1. Proposed Data Elements for an Allied Health Minimum Data Set

Practitioner Data (Supply)	Educational Institution Data (Supply)	Employer Side Data (Demand)
Demographic Information	Student/Faculty Profile	Current Occupancy
Unique identifier	Number of seats for new students	Full-time equivalent (FTE) positions currently occupied by grade and profession
Name	Number of qualified applicants	Average number of full-time workers employed
Home address (street, city, state, zip)	Number of admitted applicants	Average number of part-time workers employed
Date of birth	Number of new enrollees	Per diem workers employed
Gender	Number of graduates	Contract, agency, and traveling FTEs employed
Race and ethnicity	Total student enrollment	Workers leaving organization in set period
Country of birth	Student age, gender, race, and ethnicity	
	Number of faculty	
Licensure Information	Faculty vacancies	Current Vacancy
Licenses held in other professions and jurisdictions	Highest degree held by faculty	Vacant positions on set date as a percentage of total budgeted positions
Year of initial licensure	Faculty age, gender, race, and ethnicity	
Country of initial licensure		
License status		
Education Data		Desired Occupancy
Entry level degree (name of school, location, year of graduation)		Number of FTEs organization intends to employ in next year
Highest level of education		
Employment Information		
Principal and secondary employer		
• Clinical specialty		
• Type of position		
• Total hours worked per week		
• Average hours in direct patient care, research, and administration per week at that location		
Employment status		
Reason for being inactive		
• Unemployed—not seeking employment in profession		
• Retired		
• Working in another field and do not plan to return to profession		
• Working in another field but would like to return to profession		
• Not working in any field		
• Other		
Number of positions employed in		
Principal employer's address (street, city, state, zip) and type of employment setting		
Secondary employer's address (street, city, state, zip) and type of employment setting		

Note: The minimum data elements outlined in this table were drawn from the North Carolina Health Professions Data System at the Cecil G. Sheps Center for Health Services Research,³¹ work done by the The Forum of State Nursing Workforce Centers³² and meetings of England's Allied Health Workforce Professional Advisory Board.

data collection effort, funding to build a better allied health minimum data set will need to come from multiple sources, including national and local sources. One benefit of collaborating among various organizations is the ability for sharing resources. As part of the data inventory suggested in Step 1, organizations also will need to identify potential sources of funding within their entities or others that can be used for start-up costs as well as the costs of maintaining and updating the data regularly, as longitudinal data are crucial to understanding longer-term workforce trends. Potential sources of funding include the federal government in the US, the Department of Health in England, state and local governments, the regulatory bodies, professional associations, private foundations, and other entities in the US engaged in local workforce planning, such as workforce development boards and Area Health Education Centers Programs.

Conclusion

The next generation of workforce planning and research will be driven by large-scale policy change, financial limitations, and an increased emphasis on linking the supply and skill mix of allied health professionals to measures of quality, productivity, and cost. Without hard data to support evidence-based decisions the allied health professions will continue to struggle to have a seat at the policy-making table.

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