Planning the pharmacy workforce: the critical role of surveying pharmacists

In the first of five articles on the Royal Pharmaceutical Society's pharmacy workforce survey, David Guest, Ali Budjanovcanin and Patricia Oakley describe its development and outline its use in modelling different policy options and their potential impact on future workforce numbers.

Pharmacy is changing rapidly and so too are the demands on the profession. To decide how many pharmacists we should be training now it is vital to know how many Britain will need in five, 10 and 20 years' time.

An indispensable element in the analysis is the Royal Pharmaceutical Society's census, which will give us up-to-date information on the profile of the current pharmacy population. But to plan effectively for the future, other sources of data will also be needed. All the main factors that might affect the future demand for pharmacists need to be identified and quantified, and much more needs to be known about what will affect the numbers available to do the work. The most powerful forces for change right now include:

- The growing proportion of the population who are elderly or have complex needs
- The increasing use of technology in the routine supply of prescriptions, such as electronic transfer of prescriptions, robotic-aided dispensing and automated stock control
- The changing legal and regulatory requirements placed on pharmacists

Another crucial factor is the changing nature of the pharmacy workforce. The growing number of female pharmacists might affect the willingness to work long hours, moreover, a growing concern to achieve some sort of balance between work and life outside work can affect both working hours and career aspirations. Some may choose to take a career break while others may decide to move out of pharmacy practice altogether, or stop working.

Only specialist research-based surveys designed to collect information on individuals' career plans and the kind of working arrangements they seek can tell us whether the profession is likely to be able to meet the demands facing it over the next few years. That is why it is critically important to conduct more extensive surveys every three to four years.

The Society has for some years been working with the chief pharmacists for England, Wales and Scotland to develop a pharmacy workforce model based on reliable survey data to allow it to project the future pharmacy workforce requirements. It commissioned the department of management at King's College London to develop such a survey and to use the results to build a pharmacy workforce model. The original survey and model were developed in 2003–04 and covered both pharmacists and pharmacy technicians across England, Wales and Scotland. The full research report was published in 2005.

The next such survey is about to be launched and will be sent to a sample of pharmacists shortly. The information provided will present a rich picture of pharmacists' career aspirations, work experiences and current concerns and will form the basis for the analysis of whether the current workforce is likely to be able to meet the demands placed upon it.

Since the original survey, strategic workforce planning has become a high profile issue following a number of critical reports into workforce planning in general across the NHS. As a result, each country has developed plans to address the shortcomings. For instance in England, Lord Darzi's review has recommended that the whole of the medical and professional workforce planning system should be reformed and that future policies for the pharmacy workforce in England should be formulated by a new national board.

There will be more about this important development in a future article and it is one of the reasons why the pharmacy workforce model and survey need to be updated.

This article, the first of five, describes how the workforce survey was developed and outlines how the results are used to model different policy options and their potential impact on the number of pharmacists required over the next 10 years. The next three articles deal with the analysis of the pharmacy workforce's attitudes to their jobs and careers, looking in particular at the following questions:

- Do jobs in community pharmacy, the NHS, universities and the pharmaceutical industry deliver what pharmacists want? What are pharmacists' experiences of their "psychological contract" with employers and do these differ by gender, age and ethnicity?
- Will pharmacists stay or go? What are the projected impacts of changes in pharmacy practice over the next five years on pharmacists' commitment to their jobs, and how does this differ across the sectors?
- Which pharmacists are "happiest"? Are practising pharmacists happier than their non-practising counterparts? Are pharmacists whose first career choice was pharmacy happier than those for whom it was not? Are full-time pharmacists happier than part-time pharmacists? How do pharmacists compare with technicians?

The final article will assess how robust some of the original projections proved to be. Lessons learnt in the past few years will need to be fed into the current updating cycle to work in, for example, the 2008 census and the forthcoming survey of pharmacists' attitudes and experiences of their jobs "The careers and working lives of pharmacists".

The focus of a workforce survey

To develop a planning model, we need information about pharmacists that goes beyond the Society's census data to tell us about current patterns of work and preferences, as well as future aspirations. Will all pharmacists want to stay in pharmacy? How many want to work part-time? Do the right numbers want to work in, for example, hospitals or community pharmacy? We need to understand career aspirations and what motivates staff, as well as how and when these changes, and the effect of any changes on members of staff's commitment to their jobs, career, organisation and the profession.

We also need to know whether any of these differ according to background factors such as age, gender and ethnicity as the implications of the increasing diversity of the pharmacy workforce, which includes more females, members of ethnic minorities and a higher proportion of younger pharmacists than ever before, are not yet entirely clear.

The survey also provides an understanding of why pharmacists decided to pursue a profession in pharmacy, how and why they have arrived at their present working arrangements, perceptions of their current employment, and - critical for workforce planners - their future career-related plans. All this information can be combined with census data and information about the number of pharmacists graduating from universities as well as the number retiring to provide what we term "the supply side" of the planning model.

Theoretical background

The results of the initial 2004 survey of pharmacists were considered within a broad theoretical framework that assumes certain causal linkages. Using cross-sectional research these causal links cannot be firmly established. However, by drawing on existing theory and research, a plausible case for such linkages can be made. On this basis, key policy issues and...
influences can be identified that can have a bearing on the future supply of pharmacists.

The conceptual framework used in that survey is outlined in Figure 1 and it can also be largely applied to the new 2008 survey. In some important respects this is an incomplete framework. The need to address certain core issues in some depth in the survey and the constraints imposed by the limited space, meant that some factors that are likely to have an influence on work experiences are underplayed. Most notably, for those who are employees, we have had to exclude any systematic analysis of organisational climates and of human resource policy and practice. Set against this, however, we have a large amount of important information about career priorities and drivers and career and employment intentions. These receive particular attention in the new survey.

Career concerns and work-life balance

Two issues that emerged as being of considerable importance in the first survey are highlighted in more detail in the 2008 survey. They are career concerns and work-life balance.

On career concerns the survey requests information about careers and about career preferences both in general and in the context of pharmacy. Our interest lies in determining how well a career in pharmacy fits with pharmacists’ career values and what the implications are of a stronger or weaker fit. For example, the survey can explore how far values link to involvement in and commitment to the pharmacy profession and continuing professional development. We also explore the primary given to pharmacy as a choice of career. It is sometimes argued that for a minority of pharmacists, pharmacy was not a first choice and reluctant pharmacists, who might, for example, have preferred to be doctors or lawyers, may be less committed to staying in the profession. We can explore whether such people are less likely to intend to stay in pharmacy.

On work-life balance and employment flexibility, a major finding from the first survey was that many pharmacists, both male and female, wanted to work shorter hours. Many also commented that the desire for shorter hours is a result of “pull” factors outside work, such as a heavy involvement in family or leisure activities, or the result of disaffection with working life and the nature of the pharmacy role.

One of the questions we will explore is to what extent this is occurring and what kind of pharmacists are most likely to be affected.

As a result of the 2004 survey we developed the “supply side” of the pharmacy workforce model that incorporates personal background variables including biography, education and work values, as well as characteristics of current employment, description of current work experiences and, through the psychological contract, whether the current experiences meet expectations. We also assessed the consequences, first for a range of attitudes and also for employment in pharmacy. The 2008 survey will allow us to update the model and, by focusing on selected key issues, improve its value.

Ways of exploring future demand

This article has focused mainly on the role of surveys of pharmacists to improve our understanding of the “supply side” of a workforce planning model. The “demand side” offers its own challenges. In particular, it requires a detailed quantitative analysis of the key trends and drivers. There are a number of ways to explore these including analysing extrapolations from existing trends, evaluating the likely impact of current policies, assessing leading edge practices, assessing the potential impact of unanticipated shifts in consumers’ tastes and assessing the potential impact of innovations in technology and the use of technology.

The survey questionnaire

The 2008 pharmacy workforce survey, “The careers and working lives of pharmacists”, has been sent to a stratified random sample of pharmacists. The survey is being undertaken by an independent team from King’s College London, supported by the Royal Pharmaceutical Society. We hope that all those who receive a questionnaire will find time to complete and return it.

In building the initial model, extensive research was conducted using this set of methods in the key fields of pharmacy employment, i.e., community pharmacy, NHS pharmacy, schools of pharmacy and the pharmaceutical industry and related supply businesses.

An important issue arising from this initial demand-side analysis was the need for continued clarity and the separation of the demand for pharmacy services, the organisation of their provision (e.g., the growth of the multiples and the use of technology) and the implications of the above for the demand for pharmacists and technicians.

These issues therefore formed the framework for analysing the research findings that are discussed in detail in the 2005 report. In addition, it was recognised that information on the potential impact of leading edge practices and any unanticipated shifts in consumers’ tastes and the use of technology needed to be incorporated into the analysis.

As a result, we now have a pharmacy workforce model which has an in-depth evidence-based understanding of both the supply and demand-side forces. Because of the survey’s design, we are able to conduct robust statistical analysis of the relationships between the variables in the model and to draw conclusions about them in which we can be confident.

The 2008 survey will allow us to refine the model and improve our understanding of the future pharmacy workforce.

The next article will look at the changing world of work in community pharmacy, the NHS, the schools of pharmacy and the pharmaceutical industry and, using data from the 2004 survey, explore how far pharmacy jobs met, and will continue to meet, the expectations of pharmacists working in them.

References