Institution: King's College London

Unit of Assessment: 19, Business and Management Studies

Title of case study: Improving Workforce Planning in Pharmacy

1. Summary of the impact (indicative maximum 100 words)

Research at King's has had a direct influence on the perceived value of workforce planning in the Department of Health and the Royal Pharmaceutical Society of Great Britain (RPSGB) and has resulted in its use in relation to pharmacists. Building on long-term research, King's academics developed a model to predict the demand for and supply of pharmacists in the UK over a five and ten year period. These findings changed thinking in the Department of Health and the RPSGB in 2006, and underpinned a change in UK policy. A national policy decision was taken to support the opening and accreditation of up to eight new university Schools of Pharmacy to help to address the anticipated shortfall in the supply of pharmacists predicted by the research.

2. Underpinning research (indicative maximum 500 words)

Building on long-term research on workforce patterns, King's staff were commissioned by the Department of Health through the Royal Pharmaceutical Society of Great Britain (RPSGB) and an ESRC Case Award in collaboration with the RPSGB between 2004-6 to develop a workforce planning model that could be used to identify the future supply of and demand for pharmacists. The director of the research throughout was Professor David Guest. The part-time Research Fellow on the project was Dr Pat Oakley. The main research assistant was Dr Alexandra Budjanovcanin, and there was additional support through a grant for a PhD for Ricardo Rodrigues. In 2010, this research received a further grant from the Department of Health to undertake a validation of the planning model as a five year follow up. This was completed by April 2011.

The research brought together two existing areas of expertise in King's College London's Department of Management: one concerned with career theory, the other concerned with workforce planning. This had two related aims. The first was to establish the best methods available in the research literature and to utilise them to develop and test the utility of a workforce model to assess the future demand for and supply of pharmacists. It revealed an increasing shortage of pharmacists for a number of years and therefore a need to increase the supply of pharmacists through the education system. This was based on known factors such as current numbers of pharmacists and their expressed intention to reduce working hours, the education throughput of newly qualified pharmacists and developments in technology together with the estimated 5 per cent per annum growth in demand. The follow-up review and surveys, including data up to 2009, confirmed that over the subsequent five year period the predictions from the first planning model had proved to be very robust. This served as confirmation that over the relatively short term, careful workforce planning in this part of healthcare can be effective.

The second aim was to develop theory and empirical research in three related areas of research which focussed on career orientations, career boundaries and career regret. This has resulted in new insights on how each of these career issues affect labour market behaviour. We now know more clearly how career aspirations relating to remaining within the profession, to working part time, to reducing working hours and to the desire for career breaks, all affect the supply of labour. For example, the career study revealed risks to supply resulting from the porous boundaries between jobs and between work and non-work and found that in 2005, 23 per cent of pharmacists

had more than one job, 38 per cent worked part-time and 45 per cent expected to reduce their working hours within the next five years. These findings were used to inform the planning model.

3. References to the research (indicative maximum of six references)

1. Guest, D., Oakley, P., Clinton, M. and Budjanovcanin, A. (2006) "Free or precarious? A comparison of the attitudes of workers in flexible and traditional employment contracts". Human Resource Management Review, 16, 107-124.

2. Guest, D., Budjanovcanin, A. and Oakley, P. (2009). "Pharmacy workforce country case study: Great Britain". In FIP 2009 Global Pharmacy Workforce Report: 40-48.

3. Guest, D., Budjanovcanin, A. and Oakley, P. (2010) "Planning the pharmaceutical workforce: what pharmacists want in their careers and what they have got". The Pharmaceutical Journal, 281, 22 Nov., 598-600.

4. Guest, D, Budjanovcanin, A and Oakley, P. (2010) "Planning the pharmacy workforce: Will pharmacists stay in pharmacy?" Pharmaceutical Journal, 281, 6 Dec., 672-676.

5. Guest, D., Budjanovcanin, A., and Oakley, P. (2010) "Planning the pharmacy workforce: Is there a shortage of pharmacists?" Pharmaceutical Journal, 281, 13 Dec., 696-698.

6. Rodrigues, R and Guest, D. (2011) "Have careers become boundaryless?" Human Relations, 63:1157-1175.

Supporting Grants

Guest, D. and Oakley, P. (2010-2011) 'An update of the pharmacy workforce model', Department of Health, (£74,937).

Guest, D. with Budjanovcanin, A. (2007-2010) 'Future workforce planning for the Pharmacy profession: A study of issues pertaining to gender and ethnicity in careers in Pharmacy', ESRC Case Award with Royal Pharmaceutical Society of Great Britain, (£63,500).

Guest, D. (2004-2005) 'Study of staff working in university departments of Pharmacy', Royal Pharmaceutical Society of Great Britain, (£47,399).

4. Details of the impact (indicative maximum 750 words)

King's research changed thinking at the Department of Health and the RPSGB, leading them to focus on the issue of workforce planning for the first time. This subsequently led to action to address a shortage of pharmacists identified in the research. This action included the establishment of eight new Schools of Pharmacy, the generation of sufficient numbers of pharmacists by 2013, and changes to regulations on the hours that community pharmacies could open.

There was engagement with beneficiaries from the outset, because the research in question was commissioned by the Department of Health through the RPSGB. The academic team placed great importance on establishing a constructive dialogue and there was extensive involvement of a wide range of stakeholders in an advisory group from research design through to presentation of results, with initial results communicated to the RPSGB and the Department of Health ahead of the resulting academic publications. The findings were presented in a detailed report, a workforce model and in a summarised, accessible form to the advisory group. In addition the research was

presented in full and formally to the RPSGB and Department of Health.

King's research provided the Department of Health with a carefully developed and tested workforce model for pharmacy and also drew their attention to the generalisability of this approach for other parts of the health workforce. For relevant policy-makers in the Department, the quality of the analysis provided a specific benefit in that it provided a strong analytic evidence base for policy decisions. As the Head of Education and Training, of the Department of Health wrote:

> … real impact came from making people think about workforce at all. Being able to show what happens if participation rates go up or attrition in universities goes up, for example, was incredibly powerful. (Source A)

Specifically, the model and its findings underpinned and provided crucial evidence in support of the decision to open eight new Schools of Pharmacy and strengthen some existing ones. Findings in 2004 had already identified a shortage of pharmacists that was likely to get worse for some years unless the supply of pharmacists improved. In addition, the study also provided an assessment of the risk of relying on the goodwill implied by the finding that pharmacists typically worked an average of four hours longer than they were formally paid to work. The survey revealed evidence of the strong desire to reduce work commitments, including working hours, suggesting that this goodwill should not be taken for granted, and further confirming the need to increase supply of pharmacists. Three direct changes resulted in the assessment period after 2008. (1) The anticipated shortage of pharmacists and the strain identified on the existing workforce was considered sufficiently serious to lead to support for the opening and accrediting of eight new Schools of Pharmacy at UK universities, initially including East Anglia, Keele, Kent Medway, Reading and Wolverhampton as well as some expansion of provision at existing Schools of Pharmacy. The new schools started to operate in 2009. (2) A report from the Centre for Workforce Intelligence, which updated the forecasts of workforce demand and potential supply up to 2040, confirmed that in 2013 supply of pharmacists now broadly matches demand (Source B). Thus, as an impact of King's research, the significant shortfall in pharmacists had been addressed by the generation of additional new capacity in the new Schools. (3) King's findings additionally confirmed the need to change the national regulations to extend the hours that community pharmacy services could operate. In addition, the regulations affecting opening hours of pharmacies were changed in 2008 following a related OFT study (Source C).

There were four significant contingent impacts of King's pharmacy workforce research. 1. The universities that received support and accreditation to open new Schools of Pharmacy benefitted by being able to introduce popular new courses in high demand from potential students. 2. The public at large benefitted through improved capacity and the availability of more pharmacists to meet the expanding demands for pharmacy services to protect and promote the health of the nation. 3.The RPSGB benefitted from King's research as a research sponsor and key stakeholder through its strengthened ability to contribute to policy decisions through the research. 4. The decision to increase the number of individuals entering pharmacy also benefitted the RPSGB by increasing its membership. The Head of Professional Development confirmed this impact on the RPSGB and the wider impact of the research in correspondence. She wrote:

> This research programme was the RPSGB's first attempt [at modelling the demands for pharmacists] and the Society was able for the first time to understand the workforce projections under different policy assumptions. As a result the Society now employs a

dedicated policy officer to carry forward its workforce policy programme using the methodology developed for this research project.

The workforce survey identified important factors concerning pharmacists' professional identity and the importance they place on participating in Continued Professional development. As a result, the Society has made this a central part of its support for pharmacists and underpinned the development of the Society's role for the future. (Source D)

This confirms the transformation of understanding, policy, educational provision and capacity regarding the pharmacist workforce, as well as indirect wider healthcare impact in society, resulting from the King's research.

5. Sources to corroborate the impact (indicative maximum of 10 references)

A. Email from Head of Education and Training, Health Education England/Department of Health England and ex Director of Research for the Royal Pharmaceutical Society of Great Britain to Professor David Guest, 2nd June 2012. Available on request.

B. Centre for Workforce Intelligence (CFWI) 'A Strategic Review of the Future Pharmacist Workforce: Informing Pharmacy Student Intake'. CfWI, UK, 2013. http://www.cfwi.org.uk/publications/a-strategic-review-of-the-future-pharmacist-workforce

C. Office of Fair Trading (OFT) 'The control of entry regulations and retail pharmacy services in the UK. A report of an OFT market investigation'. OFT, 2003. http://www.oft.gov.uk/shared_oft/reports/comp_policy/oft609.pdf

D. Correspondence from Head of Professional Development, Royal Pharmaceutical Society of Great Britain to Professor Guest, 27 September 2013.

E. Chief Scientific Officer, NHS England will corroborate the policy impact if contacted.

F. Chief Pharmaceutical Officer, Department of Health England will corroborate the policy impact if contacted.