Institution: The University of Manchester

Unit of Assessment: 3

Title of case study: Community pharmacy: improving access to medicines and pharmacists. (*ICS-01*)

1. Summary of the impact

Research at the University of Manchester (UoM) has, and continues to have, a direct impact on pharmacy policy and practice. From 1993, our work on the contribution of pharmacists to primary health care has helped improve patients' access to medicines and pharmacies. Our 'Care@TheChemist' trial led to changes in the national pharmaceutical contract and now almost 5,000 pharmacies offer the service to several million primary care patients. Our skill mix research is used to inform regulatory control of pharmacies and our wider workforce research continues to inform national governments about how to forecast future requirements for pharmacist numbers.

2. Underpinning research

See section 3 for references [1-5]; see section 5 for corroborating sources (S1-S6); UoM researchers are given in bold. In REF3a and REF5 this case study is referred to as ICS-01.

The impact is based on research that took place at the UoM from 1993-date. The key researchers are:

- **Peter Noyce** (Professor, 1991-date)
- **Karen Hassell** (Research Associate, 1991-1997; Research Fellow, 1997-2001; Senior Research Fellow, 2001-2006; Professor, 2006-date)
- **Anne Rogers** (Senior Lecturer,1992; Professor, 1999-2012)
- **Judith Cantrill** (Senior Lecturer, 1993-2001; Professor, 2001-2011)
- **Ellen Schafheutle** (Research Associate, 1998-2003; Research Fellow, 2003-2009; Lecturer, 2009-2013; Senior Lecturer, 2013-date)
- **Darren Ashcroft** (Senior Lecturer, 2002-2007; Reader, 2007-2010; Professor, 2010-date)
- **Fay Bradley** (Research Associate, 2003-date)
- **Rebecca Elvey** (Research Associate, 2003-date)

The aim of the research was to identify how patients viewed and experienced care delivered through community pharmacy, how barriers to increasing the use of community pharmacists could be eliminated and how that care could be conceptualised theoretically so that dimensions of care important to patients could be identified and understood in relation to NHS-reimbursed services. The key research was:

1. From 1993-1999 the research focussed on theoretical and empirical work with patients to explore how and why they utilised pharmacies and the barriers to that use [1]. Convenience and easy access emerged as key reasons, but exemption from the prescription charge and the cost of medicines were found to be major barriers to utilising pharmacists more effectively. In fact, they actually served to incentivise patients to visit the general practitioner for minor ailments which could be treated by a pharmacist.

2. These insights led the team to design an intervention study which tested whether pharmacists could substitute for GPs in the treatment of minor ailments and whether patients would find this acceptable. In the *'Care@TheChemist'* scheme, (2000-2), pharmacists were reimbursed when patients, including those who were exempt from prescription charges, consulted them instead of their GP for specified minor ailments. The trial resulted in the transfer of 38% of GP workload for the 12 conditions included [2].

3. During 1998-2001 the team also worked with EU colleagues to compare the impact of different patient and prescription charge systems on the uptake and use of medicines and

pharmacy services in six European nations. This work demonstrated variation and inequality in the uptake of medicines according to different reimbursement systems and provided evidence that patients frequently chose not to have prescriptions filled to avoid the associated costs [3].

4. Arising from this portfolio of work the team has also examined the effectiveness and efficiency of specific pharmaceutical services, including the new Medicine Use Review (MUR), intended to maximise the benefits patients gained from their prescribed medication. The research demonstrated that patients invited into the scheme were often those who could be processed expeditiously rather than those who might benefit most; that there was marked unevenness in the uptake of MUR across different types of pharmacies; and there was little engagement of GPs [4].

5. Alongside building the evidence base for NHS pharmaceutical service development, the team has undertaken a linked programme of work on pharmacy workforce and skill mix. Work starting in 2000, in Sweden, Denmark and the Netherlands, compared pharmacy skill mix and role diversification with initiatives in the UK. The team showed the variation which existed in qualifications and regulation for pharmacy technicians and dispensary staff in the UK and work has since evolved to include: (a) pharmacy staff perceptions of the risks associated with undertaking key professional tasks and the scope for reconfiguring the supervision of NHS dispensing practice in community pharmacy [5]; and (b) the impact of the new contract on job satisfaction and workload [6].

3. References to the research

1. **Hassell K, Noyce PR**, **Rogers AE**, **Harris J**, **Wilkinson J**. (1997). A pathway to the GP: the pharmaceutical 'consultation' as a first port of call in primary health care. *Family Practice*, 14; 6, 498-502. DOI:10.1093/fampra/14.6.498
2. **Hassell K**, **Whittington Z**, **Cantrill JA, F Bates**, **Rogers AE**, **Noyce PR**. (2001). Managing demand: transfer of management of self-limiting conditions from general practice to community pharmacies. *British Medical Journal*, 323(7305)146-147 DOI:10.1136/bmj.323.7305.146
3. Atella V, **Schafheutle E**, **Noyce PR**, **Hassell K** (2005) Affordability of medicines and patients' cost reduction behaviors: empirical evidence based on SUR estimates from Italy and the United Kingdom. *Applied Health Economics and Health Policy*; 4: (1); 23-45. DOI: 10.2139/ssrn.648009
4. **Bradley F**, **Wagner AC, Elvey R, Noyce PR**, **Ashcroft DM** (2008). Determinants of the uptake of medicines use reviews (MURs) by community pharmacies *in England: A multi-method study. Health Policy*, 88: 258-268. DOI:10.1016/j.healthpol.2008.03.013.
5. Bradley F, **Schafheutle E Willis SC**, **Noyce PR** (2013) Changes to supervision in community pharmacy: pharmacist and pharmacy support staff views. *Health and Social Care in the Community* DOI:10.1111/hsc.12053
6. **Hassell K, Seston E**, **Schafheutle E**, **Wagner A**, **Eden M**. (2011) Workload in community pharmacies in the UK and its impact on patient safety and pharmacists' well-being: a review of the evidence. *Health and Social Care in the Community*, 19, 6: 561-575 DOI: 10.1111/j.1365-2524.2011.00997.x

4. Details of the impact

See section 5 for numbered corroborating sources (S1-S6).

Context and pathways to Impact

This work began in 1993 through collaboration with researchers at the National Primary Care Research and Development Centre at the University of Manchester. The aim was to address how to improve patient choice in relation to access to primary care, which was a key concern for health care policy makers. However, the contribution of community pharmacy in the delivery of primary health care was a neglected topic; of interest to policy makers was how patients viewed and experienced care delivered through community pharmacy, how barriers to increasing the use of community pharmacists could be eliminated, and how that care could be conceptualised

theoretically so that dimensions of care that were important to patients could be identified and understood in relation to NHS-reimbursed services.

Reach and Significance

Impact on pharmacy and GP services

Our findings from the *'Care@TheChemist'* scheme by the DH were used to inform discussions about changes to pharmacists' reimbursement system, and the design and delivery of services under the new community pharmacy contract. As a direct result of the trial, the English and Scottish governments introduced national minor ailments services (S1). The Head of Pharmacy at the DH confirmed "*On the strength of this research, Minor Ailments Schemes (MAS) were introduced as NHS Pharmaceutical Services for the first time in 2005 through Directions for NHS locally commissioned Enhanced Services. Through the Pharmacy White Paper "Pharmacy in England: Building on the strengths – delivering the future" published in 2008, NHS Employers were mandated to explore and negotiate the inclusion of MAS into the national community pharmacy contractual framework (paragraph 4.25)".* The DH in England agreed in 2005 to include the "minor ailment scheme" (MAS) in tier 3 of the new NHS community pharmacy contract, and of the 20 enhanced services pharmacists can now provide, the MAS scheme is ranked third in relation to the number of community pharmacies in England delivering the service (3,537 in 2011-12) (S2). In Scotland, virtually all pharmacies provide a MAS service to over 790,000 people involving an average of over 11,500 consultations per day (June 2011) (S3). The pilot and subsequent roll out of the service nationally also received accolade from peers, when it was cited as 'a rare example of an evidence based service' (Blenkinsopp and Bond, 2010) (S4).

Impact on prescription charges

Recommendations on prescription charges made by the researchers helped to inform government and professional discussions about whether the prescription charge system should be abolished or amended. In 2009 **Schafheutle** presented written and oral evidence on the research findings to the Royal College of Physicians Working Party (S5) as part of their deliberations concerning charges in relation to the treatment of long standing conditions (having earlier been called before the Health Select Committee). Our recommendation to look at amending the pre-payment certificate scheme led to significant changes in the scheme implemented. To make them more affordable pre-payments certificates can now be obtained by patients for shorter time periods and a direct debit scheme has also been introduced to help minimise the cost burden. Another major change was the recognition that cancer should be treated as a long term condition exempt from prescription charges.

Impact on policy

Over a sustained period of time our policy evaluation and skill mix work has been pivotal in shaping the DH's modernisation of the operation of NHS community pharmacies (S1). Specifically, our MUR evaluation has informed implementation of the subsequent New Medicines Service and our skill mix research was used to secure the necessary changes in primary legalisation (through the 2006 Health Act), to allow the Responsible Pharmacist (RP) Regulations (SI 2008:2789) to be laid in 2008. This was the first stage in introducing flexibility within the legal framework for operating community pharmacies, allowing the RP to be absent from the pharmacy to undertake clinical activities off-site. Impact on policy continues with our recent work on risk perception and its relation to supervision in community pharmacy, since this informs the second stage of the modernisation of regulation of pharmacies by the General Pharmaceutical Council, through providing essential evidence to the recently established DH "Rebalancing Medicines Legislation and Pharmacy Regulation" programme board (Chair: Ken Jarrold CBE).

Finally, our workforce research has had a key impact on shaping discussions about a number of contemporary labour market issues for pharmacists and their support staff, in particular questions about supply and demand and forecasting future requirements for pharmacists numbers, the supply of undergraduate training places, pre-registration training, education, and career development, and the management of workplace pressures in community pharmacy. The research findings have had impact for employing organisations in both the public and private sectors, and

have been widely used by a range of professional and government bodies, including DH, GPhC, RPS, and CfWI, and the All Wales Modernising Pharmacy Board. For example, findings from our longitudinal studies and other commissioned research work forms the basis of almost a third of the citations in a recent report by the CfWI to inform government pharmacy workforce development policy (S6).

5. Sources to corroborate the impact

S1 Evidence from DH Head of Pharmacy of supporting papers for service development and workforce efficiency.

S2 NHS The Information Centre for Health and Social Care: General Pharmaceutical Services in England https://catalogue.ic.nhs.uk/publications/primary-care/pharmacy/gen-pharm-eng-2002-03-2011-12/gen-pharm-eng-2002-03-2011-12-rep.pdf *Table 15 provides information on provision of NHS Minor Ailments Services in England*.

S3 Evidence from Scottish Govt of national MAS scheme http://www.isdscotland.org/Health-Topics/Prescribing-and-Medicines/Publications/2011-06-28/2011-06-28-PrescribingMAS-Report.pdf

S4 Blenkinsopp A, Bond C (2010) *Pharmaceutical Journal*; 84:500. Broad Spectrum article that cites NHS Pharmaceutical Enhanced Service of "Minor Ailments Service", as rare example of evidence based service based on the "*Care @ Chemist*" study.

S5 Prescription charges review: implementing exemption from prescription charges (2009) http://www.dh.gov.uk/*en/Publication*sandstatistics/Publications/PublicationsPolicyAndGuidance/DH_*116366* In Professor Ian Gilmore's report to the Secretary of State for Health, two of our papers have been cited in a list of just five key references.

S6 The Centre for Workforce Intelligence (2012) *Pharmacy Workforce Risks and Opportunities*. (http://www.cfwi.org.uk/publications/pharmacy-workforce-workforce-risks-and-opportunities-education-commissioning-risks-summary-from-2012