



STEVE MURAZ/STONE/GETTY IMAGES

Community pharmacy: moving from dispensing to diagnosis and treatment

Changes to the NHS community pharmacy contract have meant a shift of services from NHS primary care to the for profit community pharmacy sector. **Elizabeth Richardson** and **Allyson M Pollock** look at the extent of the changes to community pharmacy in the UK, and explain the implications

Deregulation and changes to the NHS community pharmacy contract in England and Wales have allowed for the shift of clinical services from NHS primary care to the for profit community pharmacy sector.

In 2005 the UK government implemented reforms to the organisation and delivery of community pharmacy services and the rules governing market entry in England.^{1,2} The government argues that expanding the range of services provided by community pharmacies will increase access and patient choice, reduce general practitioner workload, and lower costs to the NHS.³ Whereas the 2003 Health and Social Care Act enabled primary care organisations to contract with the private sector for the provision of primary care services,⁴ the 2005 NHS (pharmaceuticals services) regulations allow community pharmacies in England and Wales to provide a new range of services to the NHS, some of which were once the reserve of general practitioners.

Changes to the UK community pharmacy sector

The community pharmacy market

Community pharmacies have been independent contractors to the NHS since 1948. A pharmacy can only dispense NHS prescriptions under contract with a primary care organisation. By law, a pharmacy must be owned by a pharmacist or a company that employs a designated superintendent pharmacist.⁵ No limits are placed on how many pharmacies one company may own.

There are three classes of drugs in the United Kingdom: prescription, pharmacy (sold without prescription but under the general supervision of a pharmacist), and general sales list. The first two can be provided only in a pharmacy, but general sales list drugs may be sold in any retail outlet.⁴ The range and availability of over the counter drugs—that is, pharmacy and general

sales list—is increasing; since 2002, the government has authorised the switch of 69 substances from prescription to over the counter status,⁶ lifted advertising restrictions on many over the counter drugs,⁷ and eliminated resale price maintenance on branded generics.

Competition on non-prescription items has increased dependence on NHS funding; pharmacies now derive at least 80% of their income from the NHS.⁸ The structure of the pharmacy market is also changing. Between 1998 and 2008, pharmacies in England and Wales comprising five or fewer outlets declined from 57% to 39%.⁹ Across the United Kingdom, large chains (>30 outlets) now own 51% of all 12 974 pharmacies¹⁰ and employ 54% of all community pharmacists.¹¹

Extending the range of NHS pharmaceutical services

Of the 41 768 practising pharmacists registered in the United Kingdom,¹² 71% work in the for profit community pharmacy sector¹³—that is, as either a salaried employee of a company owning multiple pharmacies, such as Boots, often referred to as “multiples”; or as an owner or employee in an independent pharmacy. The industrialisation of pharmaceutical manufacturing and the development of new dispensing technologies largely eliminated the traditional compounding and dispensing roles of community pharmacists,¹⁴ and pharmacists have responded by expanding the range of professional services provided to the NHS.

These services included smoking cessation, needle exchange, and supervised methadone administration, and were typically arranged through service level agreements with primary care organisations. Government policy towards pharmacy services began to change with the publication of the NHS plan in 2000 (see table 1 for a list of key policy developments). In 2005, the

statutory provisions governing pharmaceutical services supplied to the NHS were restructured, and a new pharmacy contract was introduced which incorporated a range of new services.

As with primary care services provided to the NHS under the UK general medical services contract, pharmacy services in England and Wales are now divided into three categories: essential, advanced, and enhanced. Every contracting pharmacy must offer seven “essential” pharmacy services. Advanced and enhanced services are optional, and they require additional certification for the pharmacist and a private consultation area for patient use. Currently one “advanced” service—the Medicines Use Review and Prescription Intervention—is nationally agreed. The statute lists 19 “enhanced” services, which are defined and commissioned by local trusts (see table 2 on bmj.com).² The government has announced an additional service category—directed enhanced services—which will be mandatory and nationally funded,³ but it has yet to determine which services will be designated under this category.

NHS funding for pharmaceutical services

Essential and advanced services are funded nationally. For 2008-9, total central funding was about £2.2bn (€2.54bn; \$3.35bn).¹⁵ (Central funding for 2009-10 will increase to £2.3bn, a 3.9% rise in total funding.) This figure covers an agreed national capitation payment known as the global sum, which is allocated through dispensing fees and payments tied to dispensing levels. It also covers some payments that are allocated through primary care trust budgets, such as the fee for medicine use reviews; and an agreed level of profit paid to pharmacies for the generic drugs they procure on behalf of the NHS, known as retained purchase profit (see table 3).

Table 1 | Policy milestones for pharmacy in England

Milestone	Key points for pharmacy
NHS Plan: a plan for investment, a plan for Reform. DoH 2000	Pledged to involve pharmacists more closely in provision of health services, and include community pharmacy in NHS Direct referrals
Pharmacy in the Future: implementing the NHS plan. DoH 2000	Extended pledges in NHS Plan. This included increasing access to medicines by shifting more drugs to over the counter status, and introducing repeat and electronic prescribing. It also included the introduction of pharmacist prescribing and Patient Group Directions
A Vision for Pharmacy in the new NHS. DoH 2003	Identified ten key roles for pharmacy, including that it should be the first point of contact with healthcare services; prescribe medicines and monitor clinical outcomes; be a public health resource and tackle health inequalities
OFT report: The control of entry regulations and retail pharmacy services in the UK March 2003	Recommended that control of entry be abolished
National Health Service (General Medical Services Contracts) Regulations 2004 http://www.opsi.gov.uk/si/si2004/20040291.htm	Ended GP monopoly over the provision of primary care. It also separated clinical services into discrete elements that could be contracted out to the private sector; including pharmacy
Supplementary and independent prescribing rights extended to pharmacists, 2003 and 2006 respectively	After qualification, supplementary prescribers can prescribe from a formulary developed within a tripartite agreement between GP, pharmacist, and patient. Independent prescribers can prescribe any drug on the BNF, with the exception of Controlled drugs
The National Health Service (Pharmaceutical Services) Regulations 2005 No 641 www.opsi.gov.uk/si/si2005/20050641.htm The National Health Service Act 1977. The Pharmaceutical Services (Advanced and Enhanced Services) (England) Directions 2005. www.psn.org.uk/data/files/advanced_and_enhanced_directions_december_2007.pdf	Divided pharmaceutical services into three tiers. Allowed for extension of clinical services into the pharmacy. Relaxed control of entry and introduced four exemptions. Restructured funding
Pharmacy in England—building on strengths, delivering the future 2008	Continued drive to extend services into the pharmacy. Pharmaceutical Needs Assessment mandate and reform to market entry rules. Directed Enhanced Services category announced. Restructuring of funding proposed
Health Act 2009 http://www.opsi.gov.uk/acts/acts2009/ukpga_20090021_en_1	Replaces current control of entry procedures with a Pharmaceutical Needs Assessment

Enhanced services are negotiated locally with trusts in competition with other healthcare contractors, and are funded from local budgets.

Changes to control of entry regulation

Since 1987, control of entry regulations have governed supply of pharmacies across the country. However, in 2005, England—but not Scotland or Wales—partially deregulated the market in response to an Office of Fair Trading report, which argued that control of entry regulations impeded fair competition and service innovation.⁸

In England, a pharmacy contractor is exempt from the control of entry test if it is established in a large retail area (15 000 m² or more); internet based; established within a one stop primary care centre; or open more than 100 hours a week. These criteria favour chain and super-market pharmacies. The Health Act 2009 was a partial response to concerns that deregulation had impeded primary care trust planning and led to a clustering of pharmacies in some areas.¹⁶ Under the act, primary care trusts will be required to conduct a Pharmaceutical Needs Assessment, which will replace control of entry as the basis for granting pharmacy contracts.³ Draft regulations are expected shortly, to be implemented by April 2011.¹⁷

Implications for primary care and pharmacists

Fragmentation of NHS primary care services

The 2003 general medical services contract and 2005 community pharmacy contract are complementary reforms. The unbundling of primary care under the general medical services contract allows services to be contracted out to alternative providers, whereas the pharmacy contract permits pharmacies to undertake some of these services. The two contracts, however, are treated in isolation from each other, with little consideration of

how continuity of care, quality, and patient safety will be managed and regulated. Few mechanisms exist to encourage interprofessional communication and collaboration between pharmacists and other health professionals,¹¹ and there is a risk of fragmentation of services, which could lead to duplication of efforts, the undermining of access, and increased cost through inefficiencies.

For example, the National Audit Office evaluation of the National Chlamydia Screening Programme found that local commissioning of opportunistic screening in general practices, family planning clinics, and pharmacies had led to duplication of efforts and costs, and that primary care trusts were not meeting targets for testing and treatment follow-up.¹⁸ Costs varied widely between trusts, ranging from £21 to £255 per test. A survey of primary care trust commissioners also found that pharmacy screening was the least effective in achieving screening targets.¹⁹

Expanding pharmacy services: accountability, data, and evidence

By 2007-8, the number of enhanced services commissioned by the NHS in England had increased from 17 745 in 2005-6 to 25 229,⁹ a 42% increase. Most fall into five categories: smoking cessation

(18.8%), methadone administration (17.9%), patient group directions (11.3%), minor ailment schemes (10.9%), and drug review (9.5%).⁹ Distribution of these services both across and within NHS trusts is uneven; in 2007-8 the highest service commission rate within one trust was 575 services, and the lowest was 10.²⁰ A 2006 survey of primary care trusts showed that 216 had commissioned at least one enhanced service, whereas the median number of commissioned services was six.²¹ Another survey of 31 trusts found that more than 40% of pharmacies are providing three or more enhanced services, whereas 13% are not providing any.¹¹ Most services predate the implementation of the contract; only an estimated 20% of enhanced services were established after the contract.¹¹

Data on the specification, funding, and monitoring of enhanced pharmacy services are not centrally collected by the Department of Health, making it difficult to draw general conclusions about their effectiveness and efficiency. Value for money is also difficult to determine, because the true costs of providing pharmaceutical services are obscure, especially in relation to premises and staff.

Good evidence supports the provision of some extended services, like smoking cessation and emergency hormone contraception supply,²² and early evidence suggests that asthma targeted Medicine Use Reviews are beneficial.²³ However, the evidence base on value for money and effectiveness of more complex services—such as screening and minor ailment clinics—is limited and more research is needed.^{22,24}

Commercial conflicts of interest

The effects of deregulation and changes in ownership structure on access, coverage, and provision are not clear. Although service provision does seem to vary by ownership,²⁵ these variations may

Table 3 | Central funding for pharmaceutical services, 2008-9

Type of funding	Amount (£m)*
Fees and allowances:	
Global sum (dispensing fees and item fees, establishment payments)	1648
Payments allocated through primary care trust budgets (practice payments and advanced services)	
Retained purchase profit	500
Preregistration training grants	18
Total funding	2231

Adapted from PSNc.¹⁵
*£1=€1.15=\$1.53.

have multiple explanations, including willingness and ability of the contractor to provide them, as well as their appropriateness for a given location. Bush and colleagues suggest that corporate chains are likely to attract a greater proportion of commissioning income.²⁵ This has implications for accountability, because service contracts between the NHS and the private sector are often confidential.

For example Boots, the UK's second largest chain, was chosen to operate a two year chlamydia screening pilot project in 2005, as part of the National Chlamydia Screening Programme. Both the contract value and the final economic evaluation of the service were deemed commercially sensitive and were not made publicly available.²⁶

Corporations also have obligations to shareholders that can conflict with public health priorities. In 2002 Tesco withdrew an emergency contraceptive service after criticism from pro-life groups.²⁷ In 2008 a review of the Medicines Use Review service found that chains had implemented the service more rapidly, but it also noted a weak, negative association between levels of provision and levels of deprivation and long term illness.²⁸ Reports also suggest that chain pharmacies pressure employees to conduct as many reviews as possible.²⁹ The government's evaluation showed that the number of reviews conducted was highest in the final month of the fiscal year, partial evidence that provision is being driven by profit rather than patient need.³ Further research is needed to determine the relation between ownership, service provision, patient access, and quality of care.

All practising pharmacists and all pharmacy premises must be registered with the Royal Pharmaceutical Society of Great Britain, which is the professional and regulatory body—regulatory oversight will be passed to a new body, the General Pharmaceutical Council in 2010.

The society has limited jurisdiction over the terms and conditions of employing pharmacists, an area for concern in a workforce that increasingly comprises salaried employees of corporate chains. As the sector becomes more corporate, some are concerned that professional autonomy may be constrained, and that pharmacists may become deskilled and lose their professional status.^{25 30 31}

The new pharmacy contract was intended to shift pharmacy's focus to services, but funding is still tied primarily to dispensing and drug margins, rather than service quality or clinical outcomes.³² A full cost of service inquiry is being conducted, the results of which are expected to inform new funding mechanisms.

Conclusion

Together with the UK general medical services contract, the new pharmacy contract allows a shift

of NHS services from general practice to private for profit community pharmacies in England. This reflects broader government policy to incorporate the private sector into the provision of NHS care, and transfer tasks away from general practitioners.⁴ As more services are contracted out, the boundaries between private and public funding and provision may become blurred and difficult

As more services are contracted out, the boundaries between private and public funding and provision may become blurred

to monitor and regulate. The role of the pharmacist is changing, as is seen by the extension of prescribing rights to pharmacists and other alternative providers,³³ referrals from NHS Direct,³⁴ and the progressive deregulation of the pharmaceutical and pharmacy markets. Market competition and reform of control of entry have allowed the dominance of large corporate providers, which has implications for service provision that are not well understood in the UK, and which could undermine attempts at expanding pharmacists' professional role. As the health systems of Scotland, England, and Wales diverge it will be important to monitor these changes and their implications for the NHS. The absence of national data, central monitoring, and research into these changes means that the effectiveness, equity, efficiency, value for money, and above all the implications for access, safety, and quality of patient care are not known.

Elizabeth Richardson research assistant

Allyson M Pollock professor, Centre for International Public Health Policy, University of Edinburgh, Edinburgh EH8 9AG

Correspondence to: A M Pollock allyson.pollock@ed.ac.uk

Accepted: 11 April 2010

Competing interests: All authors have completed the Unified Competing Interest form at www.icmje.org/coi_disclosure.pdf (available on request from the corresponding author) and declare: (1) No financial support for the submitted work from anyone other than their employer; (2) No financial relationships with commercial entities that might have an interest in the submitted work; (3) No spouses, partners, or children with relationships with commercial entities that might have an interest in the submitted work; (4) No non-financial interests that may be relevant to the submitted work.

Provenance and peer review: Not commissioned, externally peer reviewed.

- 1 The National Health Service (Pharmaceutical Services) Regulations 2005. No 641. Stationery Office, 2005.
- 2 The National Health Service Act 1977. The Pharmaceutical Services (Advanced and Enhanced Services) (England) Directions 2005. London: Office of Public Sector Information, 2005.
- 3 Department of Health. Pharmacy in England: Building on strengths, delivering the future. DoH, 2008.
- 4 Pollock A, Leys C, Price D, Rowland D, Gnani S. NHS, plc. 2nd ed. Verso, 2005.
- 5 Noyce P. Providing patient care through community pharmacies in the UK: Policy, practice, research. *Ann Pharmacother* 2007;41:861-8.
- 6 Medicines and Healthcare products Regulatory Agency. List C: Consolidated list of substances which are present in authorised products which have been reclassified since 1 April 2002. www.mhra.gov.uk/Howweregulate/Medicines/Licensingofmedicines/Legalstatusandreclassification/Listsofsubstances/CON2015073.
- 7 Medicines and Healthcare products Regulatory Agency. Advertising restrictions on non-prescription medicines to be swept away (press release). MHRA, 2003.
- 8 Office of Fair Trading. The control of entry regulations and

retail pharmacy services in the UK: a report of an OFT market investigation. London: OFT, 2003.

- 9 NHS Information Centre. General Pharmaceutical Services in England and Wales, 1998-99 to 2007-08. London: NHS Health and Social Care Information Centre, 2008. www.ic.nhs.uk/statistics-and-data-collections/primary-care/pharmacies/general-pharmaceutical-services-in-england-and-wales-1998-99-to-2007-08.
- 10 Royal Pharmaceutical Society of Great Britain. Pharmacy premises by major chains. RPSGB, 2010. www.rpsgb.org/pdfs/regstatpremchain.pdf.
- 11 Blenkinsopp A, Bond C, Celino G, Inch J, Gray N. National evaluation of the new community pharmacy contract, June 2007. Pharmacy Practice Research Trust, 2009.
- 12 Royal Pharmaceutical Society of Great Britain. Pharmacist Register as at 30 September 2009. www.rpsgb.org.uk/pdfs/regstatpharm.pdf.
- 13 Seston L, Hassell K. Pharmacy Workforce Census 2008: Main findings. University of Manchester School of Pharmacy and Pharmaceutical Sciences and Royal Pharmaceutical Society of Great Britain. London: RPSGB, 2009.
- 14 Anderson S. Community pharmacy and public health in Great Britain, 1936 to 2006: how a phoenix rose from the ashes. *J Epidemiol Community Health*, 2007; 6: 844-8.
- 15 Pharmaceutical Services Negotiating Committee (Online). National Contract Funding. www.psn.org.uk/pages/national_contract_funding.html.
- 16 Galbraith A. *Review of NHS Pharmaceutical Contractual Arrangements*. London: DoH, 2007.
- 17 Malson G. Does PNA-based control of entry represent a threat or an opportunity? *Pharm J* 2009;283:326.
- 18 National Audit Office. Department of Health. Young people's sexual health: the National Chlamydia Screening Programme. HC 963 Session 2008-09. Stationary Office, 2009.
- 19 National Audit Office. National Chlamydia Screening Programme: National Audit Office Survey of Primary Care Trusts (PCTs). NAO, 2009.
- 20 NHS Information Centre. General Pharmaceutical Services, England and Wales 2007-08: PCT-LHB Level Appendix. London: NHS Health and Social Care Information Centre, 2008. www.ic.nhs.uk/statistics-and-data-collections/primary-care/pharmacies/general-pharmaceutical-services-in-england-and-wales-1998-99-to-2007-08.
- 21 Bradley F, Elvey R, Ashcroft D, Noyce P. Commissioning services and the new community pharmacy contract: (3) Uptake of enhanced services. *Pharm J* 2006;277:224-6.
- 22 Anderson C, Blenkinsopp A, Armstrong M. The contribution of community pharmacy to improving the public's health: Summary report of the literature review, 1990-2007. *Pharmacy Health Link* 2009. www.pharmacyhealthlink.org.uk.
- 23 Portlock J, Holden M, Patel S. A community pharmacy asthma MUR project in Hampshire and the Isle of Wight. *Pharm J* 2009;282:109-12.
- 24 Pharmacy Practice Research Trust. Workshop participants and stakeholder recommendations for research priorities for pharmacy practice research. London: PPRT, March 2009.
- 25 Bush J, Langley C, Wilson K. The corporatization of community pharmacy: Implications for service provision, the public health function, and pharmacy's claims to professional status in the United Kingdom. *Social and Administrative Pharmacy*. (in press) 2009:1-14.
- 26 TNS Healthcare. Pharmacy Chlamydia Screening Pathfinder Evaluation (PCSP). TNS Healthcare, 2007. www.dh.gov.uk/en/PublicHealth/Healthimprovement/SexualHealth/DH_4001942.
- 27 Tesco stops supply of EHC to under 16s. *Pharm J* 2002;269:124.
- 28 Bradley F, Wagner A, Elvey R, Noyce P, Ashcroft D. Determinants of the uptake of medicines use reviews (MURs) by community pharmacies in England: A multi-method study. *Health Policy* 2008;88:258-68.
- 29 Murphy JA. Employers applying pressure to conduct MURs. *Pharm J* 2007;279:258.
- 30 Taylor K, Harding G. Corporate pharmacy: implications for the pharmacy profession, researchers, and teachers. *Pharmacy Education* 2003;3:141-7.
- 31 Harding G, Taylor K. The McDonaldisation of pharmacy. *Pharm J* 2000;265:602.
- 32 Phillips G. Pharmacy funding needs radical reform. *Pharm J* 2009;283:443.
- 33 Department of Health. The Non-Medical Prescribing Programme. DoH. www.dh.gov.uk/en/Healthcare/Medicinespharmacyandindustry/Prescriptions/TheNon-MedicalPrescribingProgramme/index.htm.
- 34 Pandya A. The NHS Direct community pharmacy referral scheme. *Pharm J* 2002;268:814.

Cite this as: *BMJ* 2010;340:c2298