

# Addressing the importance of pharmacy in diabetes care

Natasha Jacques

## Article points

1. Changes in the community pharmacy contractual framework have enabled PCTs to commission services for the benefit of their local population.
2. Pharmacist-led improvements in medicines management may generate significant savings from reducing medicines wastage, as well as delivering improved health and wellbeing
3. This article discusses some current examples of good practice for pharmacy involvement in delivering diabetes care and the drivers behind this.

## Key words

- Pharmacist
- Concordance
- Diabetes clinic

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There have been many changes in England recently, with the new contractual arrangements in community pharmacies, the development of the pharmacist with a special interest (PwSI) competency, consultant pharmacists and the advent of independent prescribing. This article explores whether any of these changes could be of benefit for people with diabetes and the diabetes team. It discusses the current role of pharmacists in diabetes, highlighting examples of good practice, and considers potential future roles.

The diabetes National Service Framework (NSF; Department of Health [DH], 2003a) recognises the central role of the safe and effective use of medicines and the important contribution of pharmacy. Diabetes NSF Standard 12 (DH, 2001) states that “all people with diabetes requiring multi-agency support will receive integrated health and social care”. The NSF delivery strategy (DH, 2003a) states that “diabetes services are well positioned to take advantage of the extension of prescribing to nurses, pharmacists and allied health professionals. Pharmacists are a regular point of contact for people and can play a central role in improved medicines management.”

An average pharmacy will serve 156 people with diabetes, 133 of whom will have type 2 diabetes, and many will have co-morbidities (Royal Pharmaceutical Society of Great Britain [RPSGB], 2007). Regular contact with a pharmacist (without the need for an appointment), along with the community pharmacy accessibility, extended opening hours and a wide variety of locations, makes pharmacy services convenient.

The National Diabetes Support Team (NDST;

2006) reported that nearly 60% of people with diabetes do not fully understand the meaning of their diagnosis or as much as they would like about the medicines that are available to treat their condition. Also revealed was the fact that one in three people do not understand what their insulin or tablets are for, or how to take them, because they feel stupid asking questions. In addition, only 35% of people with diabetes take their medicines as prescribed (NDST, 2006). There is still plenty of work to do to improve the care and knowledge of people with diabetes, and perhaps this is where pharmacy could play a larger part to complement and support the work already done by “traditional” diabetes teams.

In 2005, *Choosing Health Through Pharmacy* published by the DH, identified several key features that would have an impact on long-term conditions such as diabetes, including:

- Developing pharmacy’s contribution to tackling obesity.
- How pharmacy staff can identify individuals with risk factors and offer lifestyle assessments.
- Encouraging effective use of medicines.
- Promoting of health lifestyles.

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1. From May 2005, pharmacists who had successfully completed a relevant training course were able to qualify as a supplementary prescriber, and from May 2006 as independent prescribers.
2. Changes in the community pharmacy contractual framework have enabled PCTs to commission services for the benefit of their local population.

- Supporting self-care.
- Carrying out medication reviews.
- Managing conditions systematically within multidisciplinary teams.
- Working in partnership with case managers (DH, 2005).

From May 2005, pharmacists who had successfully completed a relevant training course were able to qualify as a supplementary prescriber, and from May 2006 as independent prescribers (DH, 2005). It should be noted that pharmacist prescribers must only ever prescribe within their own level of experience and competence. Therefore, not all pharmacist prescribers would be able to prescribe for the person with diabetes.

### Changes in the community pharmacy contract

The changes in the contractual framework for community pharmacy in April 2005 categorised services as essential, advanced and enhanced, with a focus on quality and outcomes (NDST, 2006).

Essential services are those normally provided by all community pharmacy contractors, and include signposting to health education and health promotion services; participation in six national or local campaigns as agreed with the relevant PCT; promotion of important public health messages and healthy lifestyles for people presenting prescriptions who have diabetes or coronary heart disease or who smoke or are obese; support for self-care; and disposal of waste medicines.

Advanced services are those that require accreditation of the pharmacist providing the service. An example of this is the medication use review (MUR), where a pharmacist reviews a person's use of their medicines, offers advice on appropriate use to promote adherence, and may make recommendations for changes to the person's GP.

Enhanced services are locally commissioned by PCTs according to the needs of the local population. An example of this is the provision of stop smoking schemes and the use of Patient Group Directions to supply nicotine replacement therapy.

So how can the changes in the community pharmacy contractual framework be of benefit

to people with diabetes? Firstly, they have enabled PCTs to commission services for the benefit of their local population. There are many good examples of this, including Southall PCT setting up a screening project in community pharmacies to find and help people at a high risk of developing diabetes (RPSGB, 2007). Twenty-two pharmacies across Greater Manchester are regularly monitoring patients with diabetes and providing point of care testing. Data collected from community pharmacies is entered on the GP's quality and outcomes framework (QOF) record (RPSGB, 2007).

As another example, Adams and Stafford (2008) described an NHS-commissioned community pharmacy weight-management service in Lancashire, consisting of a structured, patient-centred programme based on delivering brief interventions and motivational interviewing, setting achievable goals over a 12-month period and reviewing maintenance. The pharmacy-based obesity service in Coventry reported that 68% of participants had lost weight, which was statistically significant (DH, 2008).

A PCT-commissioned service in Hillingdon (Working in Partnership Programme, 2005) aimed at improving people's understanding of their medicines, diabetes and other health issues through a pharmacy-based intervention programme. Evaluation showed that diabetes control improved in almost all people receiving the pharmacy service. Half of those people whose diabetes was uncontrolled at baseline reached target levels during the first year of the service. Positive effects were also seen on blood pressure and total cholesterol.

If local need is identified then a PCT could explore developing the MUR service by encouraging the use of a series of more frequent MURs. For example, quarterly MURs for individuals with diabetes who would benefit from increased and more systematic monitoring and support.

The advanced and enhanced services discussed earlier would require funding to meet the additional costs. This should be considered along with the wider picture that 2 million people with diabetes in England received 28 million prescription items with a reimbursement

value of £563 million (DH, 2008). A significant proportion of all medicines are not taken as intended. Pharmacist-led improvements in medicines management may therefore generate significant savings from reducing medicines wastage, as well as delivering improved health and wellbeing (DH, 2008).

### Other sectors of pharmacy

This article has concentrated on the potential of the community pharmacist to help people with diabetes. Where do the other pharmacy sectors, such as primary care pharmacists, GP practice pharmacists and hospital pharmacists fit into the provision of diabetes care?

An innovative service has been set up in the Hyndburn and Ribble Valley area where people experiencing difficulty with their medicines can be referred to the Domiciliary Medicines Management Service. A pharmacist will make an assessment visit to the person's home and undertake a medicines review, identify pharmaceutical needs and make recommendations by liaising with the GP and community pharmacist. The pharmacist may arrange to visit on an ongoing basis to ensure the person is continuing to get the most benefit from their medicines (NDST, 2006).

Case management pharmacist posts have also been created, such as the one at Solihull Care Trust. This pharmacist works in close partnership with the community matrons for patients with complex conditions and provides domiciliary visits, medication reviews and advice on medicines management and healthy living.

Pharmacists have been employed by GP practices or PCTs to run clinics based in the practice. One example of this is the pharmacist employed by The Old School Surgery in Bristol as an independent prescriber. Type 2 diabetes is her speciality area and she has been trained to initiate insulin. She runs chronic disease clinics, reauthorises repeat medication and also runs a minor ailments scheme (Hall, 2007).

It was recently reported that a specialist hospital pharmacist at the County Durham and Darlington Acute Hospitals NHS Trust won an award in improvement in patient care. He provides a clinic in a local GP's surgery

for people with uncontrolled type 2 diabetes who would otherwise be referred to a hospital consultant for treatment. The pharmacist establishes a clinical management plan for each patient, evaluates their drug therapy and gives advice on issues such as self-monitoring of blood glucose levels. Over 12 months improvements in a number of key parameters were observed across all patients: HbA<sub>1c</sub> levels had reduced from 10.8 to 7.4%; mean cholesterol from 7.9mmol/l to 4.1mmol/l; and mean systolic blood pressure from 174 to 133mmHg (Hospital Pharmacist, 2006).

There are also a number of hospital pharmacists in the UK delivering diabetes clinics to patients in secondary care. Mcgowan et al (2008) described one example of a pharmacist-led cardiovascular (CV) risk clinic in hospital aimed at patients with diabetes not achieving blood pressure or lipid targets and deemed to be at high CV risk. During the clinic the pharmacist addressed any concordance issues, undertook relevant blood tests and made treatment recommendations. A statistically significant reduction in blood pressure (mean 23/10mmHg) was demonstrated, and was sustained for at least 6 months after discharge from the clinic.

### The author's experience as a hospital diabetes pharmacist

For the last 18 months, the author has worked in a hospital-based diabetes outpatient clinic and run a pharmacist-led clinic twice a week. Patients are referred into the clinic from secondary care diabetes doctors and nurses, or direct from GPs. To be referred, people must have diabetes and two or more of the following problems:

- Suboptimal blood pressure levels.
- Suboptimal cholesterol levels.
- Suboptimal HbA<sub>1c</sub>.
- Concordance issues.

Preliminary results have shown that 88% of people attending this clinic have a lower HbA<sub>1c</sub> level, with mean decrease of 1.35 percentage points, 71% have a lower systolic blood pressure, 67% have a lower diastolic blood pressure, 64% have lower total cholesterol levels, with a mean decrease of 0.99mmol/L.

The author has used her independent prescribing qualification to initiate and titrate

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1. In 2003, the consultant pharmacist role was identified in "A Vision for Pharmacy in the New NHS". This new role offers an opportunity to make a greater difference to patient care and builds on the success of pharmacists in developing clinical and other specialist roles.
2. Both the creation of consultant pharmacists and pharmacists with a special interest in diabetes could be used to improve and support the delivery of diabetes care across primary and secondary care.

drug therapy, and her pharmacist skills to try to address concordance issues and support self-management and goal-setting. Although the author led this clinic, she works very closely with the diabetes nurses and doctors, and is part of the multi-disciplinary diabetes team.

Other parts of the author's role within diabetes include helping with the development of guidelines on, for example, management of hypoglycaemia and diabetic ketoacidosis. She also helps with supporting the formulary submissions for new drugs in diabetes to the drugs and therapeutics committees, and is a member of the local diabetes network group.

The author is also on the committee for the diabetes subgroup of the United Kingdom Clinical Pharmacy Association. This is a national organisation and has facilitated networking for diabetes pharmacists to share good practice and guidelines, and to receive help with clinical questions. Furthermore, the author is involved with updating the continuing education packages for pharmacists on diabetes for the Centre for Pharmacy Postgraduate Education.

### Community-based pharmaceutical care

The government believes that alliances between hospitals and community pharmacists can and should go further. The next transition is for a specialist hospital-based diabetes pharmacist to provide expertise in the community. This may encompass education for community pharmacists, or the delivery of clinical services in the community as a member of a "health community clinical pharmacy team" (DH, 2005). The idea behind these teams is that they will bring together the expertise and experience needed to support people with long-term conditions such as diabetes, and provide an overview of medicines and health-related care across both primary and secondary care settings. This may mean that in some areas specialist hospital diabetes pharmacists become involved with supporting and training community pharmacists in diabetes, and may move towards working in primary care.

### Consultant pharmacists

In 2003, the consultant pharmacist role was identified in "A Vision for Pharmacy in the New

NHS" (DH, 2003b). This new role offers an opportunity to make a greater difference to patient care and builds on the success of pharmacists in developing clinical and other specialist roles. The first consultant pharmacist in cardiovascular medicine was appointed in Harrogate this year, and works closely with people with diabetes. A national framework for pharmacists with special interests (PwSIs) was developed in 2006. This offers the potential for people to gain better access to more specialist services in convenient locations, as well as making good use of the skills available in community pharmacies. Both the creation of consultant pharmacists and PwSIs in diabetes could be used to improve and support the delivery of diabetes care across primary and secondary care.

### Conclusion

The government stated in the pharmacy White Paper that support for people with long-term conditions such as diabetes should develop beyond what is currently offered within the community pharmacy contractual framework (DH, 2008). An increased contribution at all three levels of care, including supporting self-care, disease management and case management, could be made by pharmacy and many examples have been discussed earlier. There is much that all sectors of pharmacy could do to help people with diabetes. Could a pharmacist help you and your diabetes team? ■

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