Offering a home delivery service for HIV medication can increase patient choice

Introduction

The Harrison Wing at Guy's & St. Thomas' NHS Foundation Trust (GSTT) is one of the largest human immunodeficiency virus (HIV) clinics in London. It provides a comprehensive and high quality service for patients infected with HIV. Patients usually attend clinic every three to four months for blood tests, appointments with medical staff and prescription of medicines. There is a dedicated HIV pharmacy within the clinic with specialist HIV pharmacy staff who work closely within the multidisciplinary team. The pharmacy layout is designed to facilitate patient privacy and confidentiality and has shorter waiting times than the main pharmacy. This makes the HIV pharmacy service very convenient for patients.

The London HIV Consortium is a collaboration between London PCTs and NHS providers for the planning, procurement and performance management of HIV treatment and care services. In 2004/5 the London HIV Consortium recommended that HIV patients registered in London HIV clinics should be offered the opportunity to receive their antiretroviral therapy through a home supply arrangement.[1]

HIV has become a complex but chronic medical condition and many patients are in the workplace and want to minimise interruption to their busy lives. The use of a home supplier to dispense and deliver medicines adds benefits to the care and management of patients because it provides patient choice, provides an alternative pathway for patients and helps maximise the quality of their lives. Home delivery also addresses the inability of some secondary care pharmacy services to cope with increasing patient numbers and dispensing workloads. In addition, there are financial benefits to home supply from the zero VAT rating on medicines that are dispensed and supplied directly to patients in the community. This strategy is in line with the *Standards for HIV Clinical Care*,[2] which recommend efficient use of public resources through streamlining and modernising service provision without detriment to patient care. It was agreed by the London HIV Consortium that some of the savings resulting from home delivery could be retained by local providers for investment in the infrastructure costs of supporting the processing of prescriptions, delivery notes and invoices.

In October 2006 GSTT decided to offer home delivery services (HDS) to HIV patients and GSTT contracted a large, specialist home delivery company to provide HDS. Key performance standards[4] were agreed with the HDS provider.

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A standard operating procedure for homecare (SOP)[3] and a homecare database was set up. The HDS was optional and eligible patients had the option of continuing to receive their medicines from the HIV clinic-based pharmacy. Patients could also withdraw from the scheme if they wanted to.

The service has been in operation for more than one year. This paper reports patients' early impression of the service.

The home delivery service

Patients were eligible for home delivery of their HIV medicines if they:

- ☐ were prescribed highly active anti-retroviral therapy (Haart)
- ☐ received the same drug regimen for the previous three to six months
- ☐ had an undetectable HIV viral load for the last six months
- ☐ had stable blood parameters for the past six months (FBC, renal function liver function)
- ☐ had no co-morbidities that may impact on the stability of their Haart regimen (such as Hepatitis C co-infection that needed treatment with ribavirin, which would require switching off medicines like abacavir because of drug interactions)
- ☐ had not missed blood test or doctor appointments in the six months before starting HDS.

When patients who met the inclusion criteria attended clinic, pharmacy staff explained the HDS scheme. Patients' willing to join the scheme were provided with patient information leaflets describing how the service worked. Signed informed consent was obtained. Patient details, current drug regimen and delivery details were recorded.

Haart drugs were prescribed by medical staff in the HIV clinic at the time of the patient's appointment. The prescription was taken to the pharmacy, either by the patient or the prescriber, clinically screened by specialist HIV pharmacists and sent to HDS provider. The provider dispensed and delivered, in three or four monthly instalments, the medicines to patients. The service was co-ordinated by a pharmacy-based homecare co-ordinator at the hospital HIV clinic and

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close working links were established with the HDS provider to ensure a seamless service. The HDS provider liaised with patients with regard to delivery dates and times and provided the appropriate support to patients. Patients had a choice of delivery by the Royal Mail Special Delivery postal service (next day delivery before 12 noon, which has to be signed for) or by the provider's van delivery (a window period of time of delivery on a specified day with signed delivery). Patients receiving refrigerated items had to have the provider's van delivery method to ensure maintenance of the cold chain.

Objectives

These were:

- ☐ To assess patient satisfaction with the HIV home delivery service.
- ☐ To evaluate problems identified since the start up of HDS.

Method

This work was a service evaluation and as such was felt not to need Research Ethics Committee review. A patient satisfaction questionnaire was designed, piloted and reworded to improve clarity of questions. Questionnaires were anonymous, to increase the response rate. The questionnaire mostly used a 5-point scale (one being excellent, five being very poor) to elicit patients' responses for satisfaction with the service of the hospital HIV clinic pharmacy and the home delivery company, including convenience, adequacy of information provided, communication, driver delivery service, postal delivery service.

Patients who received the two different modes of delivery (postal and van) were randomly selected from the hospital pharmacy HIV homecare database. These patients were telephoned and asked if they were willing to take part in the survey, which was sent to them by post in January 2008. To monitor performance and identify risk patterns a log of non-routine telephone calls and emails regarding the home delivery service, between January 2007 and January 2008 was kept on the pharmacy homecare database.

Results

Patients

At the time of survey, 240 patients out of approximately 1300 clinic patients prescribed Haart (18%) were obtaining their medicines through the home delivery service. All 50 patients that were telephoned agreed to take part. Of the 50 questionnaires sent, 42 (84%) were completed and returned. Of these, 19/42(45%) received their medicines by post and 22/42(52%) by van.

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Seventeen percent (7/42) of patients had been using the service for more than 12 months, 26/42 (62%) had used the service for than 6–12 months, and 9/42 (21%) for less than 6 months

Patients' satisfaction with the service

In response to specific questions asking about information, convenience, communication and deliveries, all 42 patients thought that they had been adequately informed about the HDS before the HDS had begun. Most patients, (38/42, 90%) thought that receiving their medicines through home delivery was more convenient than receiving it from the clinic HIV Pharmacy and 4/42 (10%) did not. These patients added that they found it easier to collect their medicines while they were attending the hospital for blood tests or doctor appointments. Several patients commented that the home delivery service allowed them the flexibility of not waiting for their medicines at the hospital and of not having to carry bulky packages of medicines away from the hospital.

Most patients, 39/42 (93%) indicated that they received adequate notice with regard to the delivery date, 2/42 (5%) had not received enough information and one (2%) patient did not answer the question. Most patients, 40/42 (95%) thought that their medicines had arrived within the agreed delivery time or on the agreed date and 2/42(5%) did not know. Most patients, 21/22 (95%) rated the service from the van delivery drivers as excellent or very good, and 18/19 (95%) rated the service as excellent from the postal service.

Considering contact with the HDS customer care dept, 10/42 (24%) of patients had never made contact, 6/42(15%) had made contact once, 12/42(28%) had made contact twice and 14/42 (28%) had made contact on three or more occasions. The main reason for contact was to confirm delivery dates. The majority of patients 37/42(88%) rated the service provided by the HDS customer care department as excellent or very good, 2/42(7%) gave a rating of 3 and 2/42 (5%) did not know. One patient thought they had received too many calls at inconvenient times and one patient said that he had not spoken to the same person each time he made contact and felt uncomfortable with this. Patients commented that they found the provider's home delivery co-ordinators very helpful and friendly.

Confidentiality

The majority of patients 35/42 (83%) had no concerns about confidentiality relating to home delivery and 4/42 (10%) did have concerns. Most patients 39/42 (93%) rated the service provided by the hospital pharmacy staff at HIV clinic as excellent,

1/42(2%) gave a rating of 3 and 1/42 (2%) gave a poor rating.

Most patients 38/42 (91%) had no difficulty with attending their blood tests and doctor appointments at the HIV clinic and three (7%) did express difficulties in attending HIV clinic. Most patients indicated overall satisfaction 39/42 (93%) with the HDS.

Findings from the pharmacy homecare database

Of 80 events logged on the hospital pharmacy homecare database, the most common events were supply issues (n=32/80, 40%; Table 1). These events were all partial medicine supplies, with the balance of the prescription stock 'to follow'. The 32 partial supplies were from a total of 567 (5.6%) deliveries by the HDS provider and each delivery may have included more than one medicine (patients are often prescribed several medicines).

The second finding from the homecare log was patient withdrawal because the HDS was inconvenient (n=16, 20%; Table 1). No particular patients experienced recurrent issues with the HDS.

Discussion and conclusion

Few evaluations of medicine HDS exist in the published literature[5,6] and this work expands data available describing UK HDS. A high response rate was found to our survey. The results of the questionnaire evaluation of the HDS indicate that the majority of patients rated the service they received as very good or excellent. A possible limitation of this work is that patients who withdrew from the HDS were not surveyed. Some patients who withdrew cited confidentiality as the reason for withdrawal, thus we felt it would be intrusive to include this group in the survey and they were excluded. If at worst, all 16 patients who found the service inconvenient and withdrew were dissatisfied with the HDS, the proportion of the randomly selected sample who were satisfied overall with HDS would reduce by 2.6%, giving 90% overall satisfaction.

The UK National Patient Safety Agency recommends that pharmacy staff routinely open the bag of dispensed medicines, check the dispensed medicines with patients, and counsel patients about their medicines.[7] Home delivery providers do not currently offer this at the point of receipt of medicines. Home delivery may also limit the opportunities and duration for face-to-face interaction and medication review with specialised HIV clinical pharmacists. The impact of this should be investigated in the long term.

The results of the questionnaire evaluation of the HDS indicate that the majority of patients rated the service they received as very good or excellent.

Although regular attendance at the hospital clinic was a criterion for entry into home delivery of drugs, non-attendance at appointments still occurs in both HDS and hospital-supply patients. Our results indicate that non-attendance is not caused by difficulties in attending clinic appointments. Patients may become complacent after years taking therapy or it may be that separating clinical review from medicine supply may have a negative effect on attendance. Clinic non-attendance can lead to a lack of recent blood results, which precludes release of a prescription to the HDS company and thus increases the workload of hospital HIV pharmacy staff in chasing patients.

The comments made by some patients highlight concerns about the fear of confidentiality being breached when there were shared post-boxes or accommodation or if they spoke to different people at the home delivery company. Although confidentiality issues were always raised with patients at recruitment, we now explore this through direct questioning during recruitment to HDS. As experience has been gained in HD a more critical evaluation of the suitability of patients is being undertaken to limit recruitment of patients inappropriate for HDS. Issues with supply have also improved as the HDS company gains more experience and for

Table 1. Events logged on the hospital pharmacy homecare database Jan07–Jan08*

Number of events identified (% all events)	Details
32 (40%)	Supply of medicines not complete at delivery and patient received a subsequent delivery to complete supply
16 (20%)	Patients decided to withdraw because they felt the service was not convenient. Reasons given included having to factor yet another thing into their lives, worry about confidentiality, fear of running out of medicines, problems at delivery
14 (17.5%)**	Problems with postal delivery
12 (15%)	Queries on invoices
4 (5%)	Four patients were identified as being unsuitable for the scheme and withdrawn by the hospital
2 (2.5%)	Delivery errors
80 (100%)	**Total events identified**

** There were a total of 567 deliveries during this period. **Does not include events during the postal strike*

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example holds greater stocks of medicines.

Introducing HDSs has increased the complexity of work within the HIV Pharmacy and has required reconfiguration of processes and work that should not be underestimated. Clinical practice in HIV changes more rapidly than it does in other fields, and the need to recall patients and change their Haart regimens can cause difficulties in managing a HDS. A Royal Mail strike occurred over a few weeks during the year and resulted in the need to switch patients from postal to van delivery in the short term. The need to ensure continuity of supply during the period of the strike resulted in increased workload for the HIV pharmacy and HDS provider. Contingency plans for similar situations will need to be established for the future. Recently the availability of a combination tablet (Atripla®) and facilitating switching appropriate patients to this combination increased complexity of the homecare workload. The full cost of home delivery needs to be reviewed in the context of such complexities of processing.

Although a log of events was recorded on a homecare database and used to identify risk patterns, identification of risks and plans for improvement needs to be looked at in the context of the measures of quality set for home delivery. A formal approach of cross-referencing events to the HDS providers' log, and standardising and weighting the definition of events will help to improve performance management of home delivery. ✣

Acknowledgment

We acknowledge the contributions made by Chris Boakye, Alison Grant, Steve McCormick, Chris Robinson, Jill Swan, Dolly Sankoh, Claire Eldridge, HIV medical, nursing and finance staff at GSTT in establishing this home delivery service.

Declarations of interest

The authors have no interests to declare.

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PPRT has established a mentoring scheme for new researchers

The Pharmacy Practice Research Trust (PPRT) has established a one-to-one mentoring scheme to support novice or junior pharmacy practice researchers and help them develop research knowledge. The scheme offers the mentee support and advice on key research areas, such as concept development through to grant applications and forging professional links and is accessible via email, telephone or face-to-face.

For mentors, who will be drawn from the pharmacy research establishment, it will provide the opportunity to help and support the future academic workforce. It has the potential to extend collaborations outside academia and can allow access to emerging research talent. Currently mentors have agreed to support the scheme from 10 accredited educational establishments throughout the UK.

It is hoped that the scheme will help pharmacists who are interested in developing their pharmacy practice research experience. For those pharmacists who are somewhat isolated from academia the scheme will also provide opportunities to seek advice and collaborations as well as share any concerns with senior researchers.

For full information about the scheme and application forms to register your interest either as a mentor or mentee please visit: http://www.pprt.org.uk/ResearchSupport/E-MentoringScheme.aspx