Several pharmacy departments in NHS hospitals have initiated medicines management schemes such as “dispensing for discharge” systems, using patients’ own drugs (PODs) and self-administration of medicines. One of these hospitals is the Evelina Children’s Hospital, London.

Several studies have been published showing that these schemes are cost effective and enhance the pharmaceutical care of patients. For example, one study discovered that dispensing for discharge and using PODs on two wards at the Birmingham Children’s Hospital led to annual savings of £24,000 on one ward and £14,000 on the other, compared with the traditional model of supply.1 Another study at Kent and Canterbury Hospital assessed the financial impact of a dispensing for discharge scheme (without the use of PODs) on all wards over a two-week period. The research found that 8.6% of all medicines dispensed by the pharmacy were returned and 3.4% of returned medicines were destroyed (an approximate value of £2,100.2 From these two studies, it seems that the cost benefits of dispensing for discharge schemes depend on whether PODs are used during an inpatient stay and on the method with which medicines returned to the pharmacy are dealt.

An audit performed at Southampton General Hospital reported that using PODs on eleven medical and surgical wards resulted in a saving to the hospital drugs bill of £45,209 per year.3 However, after considering the additional staffing required to run the scheme, the net savings to the hospital were £24,213 per year. This study highlighted the need to consider staffing costs when determining the financial benefits of running these schemes.

It could be concluded that for such schemes to save money, it is essential that the majority of patients use their own drugs in hospital, since the trust needs to offset the cost of additional staff.

**Aim**
The aim of our audit was to evaluate locally the cost benefits of using PODs and running a dispensing for discharge scheme.

**Method**
A data collection proforma was designed to capture patient data regarding demographics, reason for admission, medication before, during and after hospital stay, the storage of medicines during the admission and by whom the medicines were administered on admission. The data collection proforma was piloted over a one-week period to ascertain its suitability.

From 5 to 18 July 2007, data were collected for all patients taking long-term medication (ie, receiving medicines before admission that would be continued after discharge) admitted to the Beach, Savannah and Mountain wards at Evelina Children’s Hospital, London.
Hospital for at least 48 hours. Parents were asked for consent to allow their child’s medicines from home to be used in hospital. When consent was granted, a member of the pharmacy team assessed the PODs for appropriateness. A supply was only issued from the pharmacy if the medicines were not deemed appropriate, if treatment was started in hospital or if less than 14 days’ supply of a medicine had been brought into hospital. Cost savings were calculated from the reduction in the volume of medicines required from pharmacy.

**Results and discussion**

During the audit period, 213 patients were admitted to the Beach, Savannah and Mountain wards at Evelina Children’s Hospital. Of these, 34 (16%) presented with chronic diseases (e.g., asthma, chronic renal failure, hypertension), 65 (30%) presented with acute conditions (mainly infections) and 114 (54%) were admitted for elective surgery. Eight patients were lost to follow-up — five were transferred to the intensive care unit and three to other hospitals — hence the total number of patients assessed was 205.

**Patients’ own drugs** Only 64 of those in the study cohort were on long-term medication. About half of these (n=33) brought their own medicines (PODs) into hospital with them. This is encouraging because it indicates that many parents/carers are aware of the PODs scheme, but we do need to encourage all people to bring their own medicines to the hospital.

Patients spent an average of three days in hospital so it would save money if we could avoid issuing patients with 14 days’ supply wherever possible. Moreover, it could prevent confusion for parents/carers by preventing multiple supplies of medicines, potentially in different packaging or brands, being issued. In addition, if PODs are brought into hospital, pharmacy staff have the opportunity to assess their quality and appropriateness for use.

Of the patients who brought PODs with them to hospital, 80% used their own medicines during their hospital stay — with no change in dosage. Since these PODs did not need relabelling, pharmacy staff time and resources were saved. Of these patients, 84% were discharged with one or more PODs and 50% were discharged on the same PODs — thus requiring no supply from pharmacy.

**Cost savings** The total cost savings to the hospital generated during the audit period by the use of PODs is estimated to be £2,549. This figure may be skewed because the cost of PODs for two particular patients was estimated at £1,100 in total. (One of these patients was taking antiretrovirals Kivexa [abacavir and lamivudine] and efavirenz while the other was taking the iron chelator deferasirox.) However, in a specialist hospital such as Evelina it is not unusual for such patients to be admitted.

Based on our experience that at least four such patients are likely to be admitted during any given month, our results can be extrapolated to estimate a monthly saving (for Beach, Savannah and Mountain wards) of around £5,100 and an annual saving of £66,000 (≈ 26 × £2,549).

However, considering this figure was calculated based on PODs brought in by only half of patients who were on long-term medication, it is possible that this saving could be higher if all such patients brought their own medicines into hospital with them.

The results of this audit are similar to other studies that showed the use of PODs to be an invest-to-save initiative for the hospital.

**Conclusion**

The use of PODs and dispensing for discharge is a cost-saving initiative for Evelina Children’s Hospital. Currently, only around half of patients on long-term medicines bring PODs into hospital. To increase the extent of savings generated, the parents and carers of all patients on long-term medicines should be encouraged to bring their medicines into hospital for use during their stay.

**References**