Medicines wastage: how big is the problem?

Overview

The scale of medicines wastage in the UK is currently unknown. Estimates range from less than one per cent, to "up to ten per cent" of total spending on medicines. As a proportion of 2008 medicines spending, this would be a range from **£82 million** up to **£827 million**[1].

The available evidence from academic studies and local audits by Primary Care Trusts suggest that these upper wastage estimates, used by both the Department of Health and National Audit Office, may be overstated, because they pre-date several major measures to control wastage by patients and over-prescribing. To address this deficit, the Department of Health has commissioned a study that is due to report later in 2009.

The available evidence suggests that the single most effective measure to control wastage by patients and inappropriate prescribing by GPs has been medicines reviews, involving the pharmacist and patient. Medicines reviews have achieved significant reductions in repeat prescription items ordered by patients, while maintaining extended prescription lengths.

Awareness campaigns aimed at patients and GPs have achieved significant reductions in the volume of unused medicines returned to community pharmacies and also appear to be an effective means of reducing medicines wastage.

The main mechanism that Primary Care trusts have employed to reduce wastage, 28-day prescribing, has not been studied or monitored independently of the measures above. It is unclear to what extent shorter prescription lengths *per se* have reduced medicines wastage. However, average prescription lengths across the UK have gradually reduced and now stand at just under 40 days.

Early pharmacy studies identified the potential for shortened prescription lengths to reduce the capital value of medicines held by patients at home, but did not evaluate the cost implications of doubling or trebling pharmacy handling costs in perpetuity as a result. As prescription lengths reduce, the pharmacy costs to dispense a greater volume of repeat prescription items are inevitably rising, so that total pharmacy costs in 2008 came to around **£1.6 billion**. This is equivalent to almost 20% of the net cost of the medicines dispensed, which was around **£8.27 billion**.

If all repeat prescriptions in 2008 had been issued at just 28 days, then total pharmacy costs would have been even higher – around **£2.3 billion**, or 28% of the net cost of medicines dispensed. Thus, we can calculate that in 2008, the additional pharmacy costs to reduce prescription lengths from 84 days to the current 40 days amounted to more than **£800 million** and that additional pharmacy spending is likely to increase further in 2009.

In other words, excess spending on pharmacy charges now outweighs even the upper estimates of medicines wastage, while the direct impact of 28-day prescribing on wastage remains unproven. With the benefit of hindsight, it appears that 28-day prescribing may have been a costly diversion from those measures that have been proven to reduce wastage: medicines reviews and enhanced communication with patients and GPs.

[1] Taken from General Pharmaceutical Services England and Wales 2007-2008, http://www.ic.nhs.uk/webfiles/publications/pharmserv9808/General%20Pharmaceutical%20Services%20England%20and%20Wales%202007-08.pdf

How much medicine gets wasted each year?

Nobody really knows. In 2008, the Department of Health commissioned a study on this, which is due to report later in 2009. This study will, of course, be an estimate.

Medicines wastage is defined by the Department of Health as medicines issued to the patient but not consumed. Inevitably, this is somewhat imprecise.

Where the GP prescribes an anti-ulcer drug and the patient finishes the prescription, even though they get indigestion, this is not wastage. But where they stop taking it before they run out, because of side-effects, the unused capsules count as wastage. If the GP prescribes a course of antibiotic and the patient forgets to finish it, the unused tablets count as medicine wastage – even though they should have completed the course as a community health measure, to prevent the build-up of antibiotic resistant bacteria.

To date, the main measure of medicines wastage has simply been packets returned to the chemist for disposal. But pharmacists and waste disposal contractors are not normally asked to itemise what gets handed in. Instead, waste contractors record the weight or volume of the returned packages that they transport and incinerate. All the blister packages and bottles are included the weight they get paid for, as well as any returned appliances such as catheters or stoma bags.

Nobody knows how many of the people who are given drugs they don't take actually return them to the chemist, or how many put them out in the rubbish, or how many recycle them by giving the packet to someone else they know who could use that particular medicine.

So how do we know how much it costs?

We don't – it's mostly a matter of guess-work.

The largest survey of returned medicines in the UK was conducted more than ten years ago and pre-dates several important measures designed to curb wastage. This was a survey completed in January 1998 where, for three months, a waste contractor was asked to record items returned to community pharmacies in 59 local health areas. From these local returns, the Department of Health estimated that the value of returns for the whole of the UK would have been £98 million, or about 2.2% of the £4.36 billion spent on drugs in 1997[2]. In 2007, 2.2% of the £8.37 billion spent on drugs would have been £187 million – but the measures introduced in the intervening years to control both wastage and total prescription spending suggest that the value of returned medicines today is probably much lower than that.

More recently, several academic researchers or Primary Care Trusts have conducted local surveys of wastage, listing of the quantity and type of returned drugs during a shorter period. The shortest of these "audits" was just two weeks, the longest was two months. The information from these surveys has been used to estimate the value of returned medicines over the entire year for those local areas. Unsurprisingly, these surveys have found very different levels of returned medicine, for reasons which will be discussed later.

[2] For total drug spending, see http://www.ic.nhs.uk/webfiles/publications/PCA%20publication/Final%20version%20210708.pdf. For an explanation of the 1998 audit, see http://www.npc.co.uk/npc_publications/resources/gp_prescribing_support.pdf

In their public statements about medicines wastage, many PCTs quote a large figure than just these estimates of the value of returned medicines. They often include the amount they pay waste disposal contractors for transport and incineration[3].

At times, PCTs publish media statements that are designed to catch public attention by talking up the costs of medicines wastage. One of the ways they do this is to apply a speculative statement from the Department of Health that "up to 10%" of drug spending may be wasted to their own pharmacy budget[4].

Or else they may apply a speculative statement from the World Health Organisation that includes the value of drugs which are not taken according the instructions, to the effect that up to 50% of drugs prescribed for long term conditions are either taken incorrectly or not taken at all[5]. The WHO estimate, of course, is based on an international survey that includes many countries where prescription medicines are bought over-the-counter.

Why are returned medicines classified as wasted? Can't they be re-used?

This is because the UK has strict policies that all returned medicines must be destroyed and cannot be re-used, in case they have been tampered with or incorrectly stored.

However, in recent years there have been several academic studies to suggest that it would be possible to re-use at least some of these drugs, because the technology is now available to scan them electronically and verify that they are still in good condition.

One such study, carried out in 2003, examined all drugs returned to community pharmacies and GPs' surgeries within the East Birmingham PCT over a two-month period. The researchers concluded that around one-quarter of all returns would be suitable for possible re-use, with a median of 17 months remaining before expiry[6]. This survey found that the average value of a returned medicine was £8.92. This was nearly 25% less than the £11.56 average cost of all medicines dispensed to patients in the same year. The most commonly returned items were relatively low-cost pain-relief drugs: aspirin, co-codamol, paracetamol[7]. The most valuable returned drugs were inhaled steroids for asthma relief, but these were rarer, making up only 7% of returns.

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[3] Leicester PCT announced in 2009 that the total bill for its drug wastage – **including the costs of transportation and incineration –** amounted to £2.6 million. The media release explained that this was an almost three-fold reduction from its £6.5 million spending on disposal of returned medicines just three years earlier, in 2005. See http://www.leicestercitypct.nhs.uk/MedicineWasteCampaign2120209-pdf.cmsdoc

[4] In September 2007, Oxfordshire PCT ran an audit of returned medicines which indicated a projected annual value of £1.1 million. Following a public awareness-raising campaign in November 2007, the projected rate of medicines returns they reported in March 2008 was down by 50%, to just £0.54 million. See http://www.oxfordshirepct.nhs.uk/about-us/how-the-pct-works/documents/clinicalexecutivebriefingissuejuly08.pdf
But in April 2009, the PCT released a statement claiming medicines wastage amounted to 10% of their total pharmacy spending, at £7.2 million. See file:///C:/Documents%20and%20Settings/Katherine/My%20Documents/ADSHG%20group/prescriptions/Oxford2009.htm

[5] The 2007 National Audit Office report, *Prescribing costs in primary care*, listed all four of these definitions of wastage. See http://www.nao.org.uk/publications/0607/prescribing_costs_in_primary_c.aspx

[6] Mackridge AJ et al, Returned medicines: waste or a wasted opportunity? *Journal of Public Health* **2007** 29(3):258-262.
http://www.ncbi.nlm.nih.gov/pubmed/17579236?ordinalpos=2&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum

[7] The average drug costs per prescription are: aspirin £1.41; co-codamol £6.92, paracetamol £3.49. *Prescription Cost Analysis 2007*, NHS Information centre for health and social care, see http://www.ic.nhs.uk/statistics-and-data-collections/primary-care/prescriptions/prescription-cost-analysis-2007.

What are the problems with wastage audits?

Audits are widely used to predict the annual costs of wasted medicines for a PCT by multiplying up from the returns reported by a sample of pharmacies during a short period across the total number of pharmacies and for the entire year. Of course, it is not possible to say that the audit sample is truly representative of the pattern across the whole PCT or the whole year.

This is best illustrated by the surveys that have asked the person returning the drugs to give a reason for the return. Often the biggest single reason given is the death of the patient. Death rates are seasonal and unpredictable, and these surveys have not asked how long after the death the drugs were being cleared out. One recent survey found that death accounted for only 10% of overall returns[8], while another older survey found death was the reason for 40% of returns[9].

The East Birmingham study, above, is probably reasonably reliable because it covered the whole PCT for a reasonable length of time. But it ran during May and June, so the winter months may have given a different picture of medicines consumption and death rates.

The East Birmingham study found death was more likely to be the reason for return for particular types of drugs. Death was responsible for 100% of returns in drugs used for anaesthesia, 60% of drugs used in immunosuppression or malignant disease, 26% of drugs used for cardiovascular conditions and just 19% of returns for drugs used in infections[10].

At times, the audit period has coincided with a media publicity campaign about drugs wastage, which might have generated a higher rate of returns by encouraging people to clear out their own medicines cabinets or those of their departed relatives[11].

To be confident that an audit of returned medicines was not being distorted by an unusual surge or lull in local deaths or by one-off publicity campaigns, it would have to be done over an entire year, preferably involving a large sample of pharmacies. To date, this has not been done in the UK. However, it has been done in Sweden, where a 12-month survey involving a large sample of 100 pharmacies found that most returned drugs were small-cost items[12].

How much medicine is wasted when someone dies?

Obviously, this will vary a lot depending on what drug treatments the individual was on at the time of their death. A theoretical average value can be estimated, using data compiled by the NHS information centre for health and social care.

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[8] Braund R et al, Disposal practices for unused medications in New Zealand, *Environ Int*. **2009** May 6, http://www.ncbi.nlm.nih.gov/pubmed/19423167?ordinalpos=1&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_DefaultReportPanel.Pubmed_RVDocSum

[9] Hawksworth, G.M., Wright, D.J. and Chrystyn, H: A detailed analysis of the day to day unwanted medicinal products returned to community pharmacies for disposal. *Journal of Social and Administrative Pharmacy* 1996 (13) 215–22.

[10] Mackridge AJ 2007, see footnote 5.

[11] Prescribing waste, 23 January 2007, Coventry Teaching Primary Care Trust. "Coventry audit 2007_prescribing_wa

[12] Taken from Jesson J, Pocock R and Willson K, Reducing medicines wastage in the community, *Primary Health Care Research and Development* **2005**, 6:2:117-124 Cambridge University Press.
Original citation: Ekedahl, A.,Wergman, L. and Rydberg, T: Unused drugs in Sweden measured by returns to pharmacies. *Journal of Social and Administrative Pharmacy* **2003** 20, 26–31. See

JessonPHCRD2005.pdf

Most people who die are over 60. The over 60s are typically prescribed more medicines than younger people, so that on the 2007 average, they collect 42.4 different prescription items from the pharmacy a year.

The average prescription length in the UK now seems to be just under 40 days. This is based on the number of tablets issued to patients with long-term conditions such as high blood pressure and hypothyroidism, where the typical dose is one tablet per day[13]. So the typical over 60-year old is having to renew their medication supply roughly nine times a year, and at any one time, is likely to have around 20 days worth of medicines in their home, made up of just under five different kinds of drugs.

We also know that the average cost of the drugs dispensed to the over-60s is cheaper than the drugs dispensed to younger people, amounting to £9.55 per item in 2007[14]. So the average value of the drug supply they have at home will probably be a bit more than £22.

This is likely to be how much current medicine is left behind when someone dies. There will probably be other, small-value items, such as small quantities of unused paracetamol; these would have no monetary value to speak of.

That £22 drug supply of current medications will be made up of almost five different prescriptions, so that there was a further cost of £7.95 in pharmacy charges attached to those medicines (at 2007 prices). In other words, over one-third of the typical cost of the drugs left behind when someone dies is tied up in the pharmacy charges to dispense them.

What has been done to curb medicines wastage?

With the encouragement of the National Prescribing Centre and the Department of Health, most Primary Care Trusts have utilised four tactics to curb medicines wastage.

1. Restricting prescription lengths
2. Conducting individual medicines reviews
3. Repeat dispensing schemes
4. Awareness campaigns with GPs and the public.

These tactics have usually been implemented in tandem, so that it is hard to say which have had the most, or least, impact. To discuss them in turn:

1. Restricting prescription lengths

An early survey of medicines wastage, conducted in West Yorkshire in1996, identified the opportunity to reduce the capital value of the drug stocks tied up in people's bathroom cabinets by shortening prescription lengths, then averaging three months[15]. However, this study did not consider the long-term cost implications of doubling or trebling pharmacy charges in perpetuity as a result.

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[13] See **PCA 2008**. Bendroflumethiazide 2.5mg tablets: average quantity per prescription 39 tablets, cost per tablet £0.02, number of patients 1.986 million; Levothyroxine 100mcg tablets: average quantity 44 tablets, cost per tablet £0.03, number of patients 0.921 million.
http://www.ic.nhs.uk/webfiles/publications/PCA%202008/PCA%202008v2.pdf

[14] Many of the generic medicines prescribed for the kinds of long-term conditions affecting the elderly, such as bendroflumethiziade for high blood pressure, are relatively cheap.

[15] Hawksworth, G.M., Wright, D.J. and Chrystyn, H: A detailed analysis of the day to day unwanted medicinal products returned to community pharmacies for disposal. *Journal of Social and Administrative Pharmacy* 1996 (13) 215–22.

With the encouragement of the National Prescribing Centre and the Department of Health, most Primary Care Trusts have since implemented restrictions on prescription length. Some PCTs have done this more stringently than others; however, across the UK there is now a clear trend for all prescription lengths to be shorter.

Where a new drug is being tried, it is often prescribed at first for just 14 or 28-days, to ensure that the patient responds to the treatment and there are no side effects[16].

As illustrated in the table below, even cheap, generic drugs which are an acute dependency, essential for life, and where there is no potential for switching to alternative brands, are now being given to patients in smaller amounts. Hydrocortisone, which is only given as steroid replacement therapy, clearly illustrates this prescribing trend.

Hydrocortisone 10mg tablets[17]	**2005**	**2006**	**2007**	**2008**
Quantity	86	85	82	80
Cost	£2.01	£1.97	£1.92	£1.88

Some PCTs now insist that all repeat prescriptions are restricted to just 28 days supply at a time[18]. Research conducted for the British Thyroid Foundation suggests that just over one-third of PCTs apply a universal 28-day limit on all repeats, where others allow a two, three or six month prescription length for some long-term repeats, depending on the nature of the drug[19]. Hence the average prescription length of around 40 days quoted above.

This means that for many of the cheaper drugs used in long-term therapies, PCTs are now paying out more on pharmacy charges than they are on the medicines themselves.

The average cost of the bendroflumethiazide blood-pressure tablets dispensed as a 39-day prescription in the UK in 2008 was 70 pence. The pharmacy dispensing fee and associated charges to process that prescription averaged £1.71[20], or two and a half times as much as the tablets themselves. For levothyroxine, a once-daily endocrine replacement tablet that must be taken for life, the average UK prescription cost £1.24 for the tablets and £1.71 for the pharmacy charges every 44 days. And as illustrated in the table above, the average hydrocortisone prescription now costs £1.81, almost matched by pharmacy costs of £1.71.

Other drugs with a long-term dependency are, of course, more expensive. Once-a-day insulin drugs such as glargine cost £18.49 per prescription in 2008, so that at £1.92, pharmacy charges were around 10% of the net cost of the medicine. But insulin is an acute dependency, and as such does not feature in the lists of returned medicines; in general, patients with diabetes don't waste insulin. So there is no rationale for restricting these drugs to just 28-days supply at a time.

28-day prescribing is often promoted because it reduces the amount of drugs wasted when a patient on long-term therapy is switched to an alternative brand. In 2004, a US team of

[16] See for example, http://news.bbc.co.uk/1/hi/england/devon/3056006.stm

[17] A standard daily dose for hydrocortisone is 20mg per day, taken in three divided doses as 10 – 5 – 5mg, so that 80 tablets would equal 40 days supply of medication.

[18] Coventry PCT has spearheaded the drive to restrict repeat prescriptions to 28-days supply and received a special mention in the 2007 National Audit office report in this regard, see Prescribing waste, 23 January 2007, Coventry Teaching Primary Care Trust.

[19] Mitchell at al, UK trends in prescribing thyroid hormone and patient satisfaction survey, Endocrine abstracts **2009**, http://www.endocrine-abstracts.org/ea/0019/ea0019p345.htm

[20] At 2007 costs. See *Prescriptions dispensed in the community 1997 – 2007*, http://www.ic.nhs.uk/webfiles/publications/PCA%20publication/Final%20version%20210708.pdf

pharmacy researchers looked at MedicAid prescriptions and counted the rate of switching across the main prescription categories. They found that the highest rate of switching was for anti-ulcer drugs (9.4%) and the lowest for diabetic tablets (sulphonylureas) at 0.5%. The researchers concluded that restricting prescriptions to less than three months (100 days) would not be cost-effective, as the savings on wastage prevention would be outweighed by the increased pharmacy costs[21].

2. Conducting individual medicines reviews

A second Birmingham, study, conducted during 2003 and 2004, by a team of researchers from Aston University, looked at the impacts of medicines reviews by pharmacists. They found that this could reduce the number of repeat medicines ordered by more than 20%, while keeping the patient on a three-month repeat[22].

This Aston study also identified that the potential for savings was in the 38% of repeat medicines which were for symptomatic relief of chronic (long-term) conditions, rather than the 62% of repeat prescription drugs that were essential medications. In other words, just over one-third of repeat prescription items were drugs the patient might not need to take all the time, so might end up over-supplied, the most obvious example being pain-relief. While almost two-thirds were items that the patient should be taking continuously at the correct therapeutic dose, with little potential for wastage.

Many of the interventions by the community pharmacist were as simple as prompting "Do you need this medicine this time, or have you still got enough?" The value of medicines not dispensed during the six-month pilot amounted to £13,000 for two general practices.

When NHS Tayside introduced medicines reviews and patient awareness/education measures in 2005, it reported a significant wastage reduction, independent of prescription length. Confirming the findings from early studies on wastage and inappropriate prescribing, the biggest impacts were in care homes.[23]

There are currently around 10,500 practices across the UK, so if the Aston study could be replicated across the UK, this suggests there is the potential for more than £135 million savings in reduced medicines wastage **while keeping all patients on a three-month repeat prescription**.

However, in 2007, the National Audit Office concluded that take-up of medicines reviews around the UK had been lower than expected, and that there were information problems both in ensuring pharmacists had accurate records of the patient's repeat prescriptions and that they were able to convey their reports back to the GP.

3. Repeat dispensing schemes

Under these schemes, the GP signs up to 12 months of advance repeat prescription forms and sends them to a designated pharmacist, to be dispensed to the patient 28-days at a time.

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[21] Domino ME et al, Restricting patients' medication supply to one month: Saving or wasting money? *Am J Health Syst Pharm.* **2004** Jul 1;61(13):1375-9.

"Wastage final AJHSP 2004.pdf"

[22] See Jesson J et al **2005**, as above

[23] See *Clinical Governance: Audit Matters*, vol 10 issue 3, September 2006

TaysideAuditSept06.pdf

Usually, the pharmacist asks the patient to confirm which of the medicines on their prescription they need to order at each 28-day repeat.

As identified in the Aston study, this scheme has the benefit that patients are questioned as to whether they need every item available on their repeat prescription, thereby reducing the number of unnecessary items ordered for intermittent, symptomatic relief.

The disadvantage for the NHS is that the 28-day prescription length multiplies the pharmacy charges incurred on the two-thirds of essential long-term medications that need to be taken continuously at the correct therapeutic dosage.

For the patient, repeat dispensing has the disadvantage that they are committed to go back to the same pharmacist every 28 days, and cannot take their prescription elsewhere if there is a supply problem with the wholesaler and distributor used by that particular pharmacist.

The National Audit Office concluded in 2007 that uptake of repeat dispensing had been too low for them to evaluate whether it would offer value for money.

4. Awareness campaigns with GPs and the public

Many PCTs have run media and poster campaigns about the costs of medicines wastage. Some of these have employed possibly inflated statistics, implying that the monetary value they quote represents pure drug costs, when it includes either the costs of waste disposal or is based on an arbitrary "ten per cent" of total spending[24]. The evidence is that these campaigns work.

Oxfordshire PCT concluded that the campaign it ran in November 2007, which asked people not to tick unnecessary items on their repeat prescription form, halved the amount of returned medicines collected, reducing it to £0.54 million per annum across the PCT[25].

If all 152 PCTs had a similar level of medicines returns, this would mean a total bill for the UK of around £82 million, out of total drugs spending of £8.37 billion. That's less than 1%.

In comparison, the NHS spent **£1.36 billion** on pharmacy charges in 2007. That's nearly one-sixth of the amount spent on the drugs themselves. If all 796 million prescriptions issued in 2007 had been restricted to 28 days' supply, then pharmacy costs would have been higher – around **£1.94 billion**.

If prescription lengths continue to shorten, pharmacy charges will rise further. Based on the newly-released PCA 2008[26], it seems that pharmacy costs for 2008 are likely to be in the order of **£1.61 billion.** So that savings of more than £800 million would have been possible, if the 75% of total prescriptions represented by long-term repeat medications had been dispensed at three-months supply instead of 40 days. But if all 842.5 million prescriptions issued in 2008 had been restricted to 28 days' supply, then pharmacy costs would have been around **£2.3 billion[27].**

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[24] For example, West Essex claimed to be wasting £2 million of its drugs budget a year, amounting to 400 hip replacement. See http://www.westessexpct.nhs.uk/ournews/news2008item.php?id=68
Lewisham also announced wastage of £2 million a year, amounting to 400 hip replacements. http://www.lewishampct.nhs.uk/index.php?assetId=933&assetGroupId=10

[25] See http://www.oxfordshirepct.nhs.uk/about-us/how-the-pct-works/documents/clinicalexecutivebriefingissuejuly08.pdf

[26] See http://www.ic.nhs.uk/webfiles/publications/PCA%202008/PCA%202008v2.pdf

[27] See attached fees report. Pharmacy fees per prescription averaged £1.92 in 2008/9 and £1.71 in 2007/8, for England.

nhs_stats_december_08.pdf

As the Aston study showed, it might be possible to make additional savings on unnecessary repeats – possibly to a value of around £135 million across the UK – while keeping patients on a three-month supply, by setting up effective processes for pharmacists to conduct medicines reviews.

So who benefits from 28-day repeats?

Not the busy GP and their practice staff, who are now printing out, signing off, filing and handing over three times as many prescription forms, leaving them less time to engage with their patients and explore how they are doing on their current medication regime.

Not the medication-dependent patient, who is running back and forth to the chemist shop three times as often, juggling calculations of long weekends, possible delivery delays or lost paperwork in the timing of their repeat prescription orders.

Superficially, the Treasury benefits, because shorter repeats means more prescription charge income from the working age population who are not exempt from the £7.20 prescription charge[28]. The prescription charge brings in something under **£450 million** a year. That's less than could be saved by returning to three-month repeats for long-term medications.

Does the pharmacist benefit from 28-day prescribing? Well, they do get paid per prescription, averaging more than £1.71 for each item they dispense. And the fee structure is currently arranged so that the more prescriptions they dispense, the higher the per-item return they receive. Shorter repeats equals more revenue to the pharmacist. Dispensing doctors have similarly seen their fees grow. Since 1998, dispensing fees have grown at an average of 5% year on year and the number of pharmacies in operation is expanding[29]. This income stream could, perhaps, be clouding their judgement at times as to what is in the patient's best interest.

In conclusion, the available evidence suggests that a 28-day limit on long-term medicines does little to reduce wastage and a lot to increase pharmacy costs. With the benefit of hindsight, it appears that 28-day prescribing has been a costly diversion from the real task in hand, which is to engage the patient in effective medicines reviews, for those drugs used intermittently for symptomatic relief.

Katherine White
30 May 2009

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[28] Best estimates are that around 80% of people aged 18 – 60 incur the £7.20 prescription charge, or roughly half the general population. However, in practice some 88% of all prescription items are exempt. See Written evidence to Professor Ian Gilmore's Prescription Charges Review: Response from Mind, www.mind.org.uk/NR/rdonlyres/379105A4-80D4-4A7F-81A8.../7503/MindsResponsetothePrescriptionChargesReviewFebruar.doc

[29] See General Pharmaceutical Services England and Wales 2007-2008, http://www.ic.nhs.uk/webfiles/publications/pharmserv9808/General%20Pharmaceutical%20Services%20England%20and%20Wales%202007-08.pdf