

THE TRUE COST OF MEDICATION NON-ADHERENCE



ADHERENCE
LET'S TAKE CARE OF IT

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FOREWORD



One billion a year.
Almost three million a day.
Just under 2,000 every single minute...

However you count them, the number of prescription items dispensed by pharmacists within the community is staggering.

And while the vast majority of those drugs and treatments will be put to good use in tackling the nation's burden of ill health, a significant proportion of what's dispensed will not be.

Of all the areas of waste within the NHS, patients' failure to take the medicines they are prescribed is arguably the most profligate.

According to latest estimates, this problem of non-adherence is draining in the region of £500m a year¹ from an already cash-strapped health service. That's money that could be used to hire extra staff, fund vital surgery or cover some of the costs of life-saving cancer therapies.

What is most disturbing about this haemorrhaging of cash is that it should, in theory, be almost entirely preventable. A patient survey carried out for this report suggests all the key factors that drive large-scale waste in prescription medicines are ones that needs to be urgently addressed.

They range from patients simply forgetting to take their pills or having concerns about side-effects, to lack of proper communication by healthcare staff and a failure to explain how drugs work.

None of these are insurmountable. Better patient education, targeted use of support services by pharmacists and utilising modern technology to aid compliance would go a long way to stemming the flow of resources down the toilet – quite literally in some cases.

But time is not on anyone's side. As the population ages and more people live for longer with long term illness that need good drug management, this problem needs to be solved... and soon.

This report, on behalf of Omnicell, aims to throw the spotlight on the sheer scale of the waste caused by prescription non-adherence, in the hope that it might focus the attention of all those in a position to instigate change.

A handwritten signature in black ink, appearing to read 'Randall Lipps'. The signature is fluid and cursive, written over a white background.

**RANDALL LIPPS, CHAIRMAN, PRESIDENT AND
CHIEF EXECUTIVE OFFICER, OMNICELL LTD**

KEEP TAKING THE TABLETS



Keeptaking the tablets. It's probably the best known mantra of modern medicine. And yet, the fact is, many patients don't. There are a variety of technical terms to describe the problem, including non-adherence or non-compliance. But whatever you call it, the failure of patients to stick to the right dose of medicine at the right time has been a problem in the UK for years.

More to the point, it carries consequences far beyond what most patients probably envisage when they forget the odd pill, or decide to have a day off their treatment. Every year in the European Union an estimated 200,000 people die² as a result of not following their medication regime properly.

In the UK, the issue has started to gain more attention, not least because with an ageing population that will most likely be beset by chronic health problems in later years, the need to improve adherence is becoming more and more important. Longer lifespan

is one thing. But most people would agree it only matters if it equals quality of life too.

"If you look at all the major chronic illnesses, every one of them needs good medication adherence in order to keep them under control," says Paul O'Hanlon, Omnicell's managing director for the UK and Ireland.

"Take diabetes as an example. The eventual result of poor compliance and not controlling their blood sugar levels effectively can lead to poor circulation and potentially amputation of limbs."

More than three million people in the UK have diabetes³ and that number is growing. Yet, shockingly, around 100 amputations a week⁴ are performed on the NHS due to complications from the disease and nearly 1,300 diabetic patients a year go blind⁵ due to diabetic retinopathy.

The harsh truth is, with better medicines management, these figures could probably be slashed. But just how bad is non-adherence in the UK?

A survey of 2,048 people carried out for this report by ComRes shows just how serious the problem is. If the findings were extrapolated across the whole population, it would mean that hundreds of thousands – potentially even millions – of NHS patients are putting their lives at risk.

OUR SURVEY SAYS...

36 per cent of British adults agree printing the cost of the medication to the NHS on the packaging – a current government proposal – would make them more likely to take their drugs properly. However around half (49%) say it would not have an impact.

THE TOP FINDINGS:

One in five do not take all their medicine:

Just over 20 per cent of those who responded to our survey admitted missing a round of medication they are meant to take every day. Drugs like statins, anti-hypertensives (for high blood pressure) or inhaled corticosteroids for the prevention of asthma attacks, have to be maintained at fairly constant levels to maximise protection against illness. If not, symptoms can be poorly controlled and complications can set in – sometimes life-threatening.

Most patients simply forget

Our survey showed almost two-thirds of respondents who regularly took prescription medicines and admitted missing doses simply forgot. It can be hard to remember multiple daily doses of medicines, especially where there is polypharmacy – the concurrent use of multiple medications by one individual. Experts say occasional lapses are unlikely to do much harm. But if they become more frequent, the consequences can be much worse.

A quarter fear side-effects

One in four of those who missed a dose said they didn't forget to take their medications but DELIBERATELY chose not to – because they suffered side-effects and felt ill when they took them. That's worrying because many patients fail to realise that simply trying an alternative drug – even if it's the same type of medicine – could get rid of the adverse effects.

Those with a mental health condition are most likely to quit due to adverse effects, with 35% confessing they would stop for this reason. In contrast, just 16% of heart disease sufferers and 18% of diabetics said they'd stop complying due to side-effects.

OUR SURVEY SAYS...

62% of 18-24 year olds believe getting reminders by text or phone would help them adhere to prescribed medication. But only 28% of those over 65 agreed.

If you don't feel ill, why take them?

High cholesterol rarely makes you feel ill. Neither does high blood pressure. Yet both are major risk factors for heart disease and strokes. This may explain why a worrying 20 per cent of survey respondents said they often stopped taking their daily prescription medicines because they did not feel ill and decided they did not need them. Patients with mental health issues, such as depression or bipolar disorder, were again the most likely to take this view with 20 per cent admitting they had stopped for this reason. In contrast, with heart disease and type 2 diabetes it hovered around 10%.

One in three chuck medicines away

Almost one in three people (31%) have disposed of medication that they have not used, the survey reveals, with some respondents confessing they flush unwanted pills down the toilet. But just over a quarter (27%) also said they hang on to old medicines that they have not taken. Very few – just six per cent – alert their doctor, pharmacist or any other healthcare professional when they fail to finish a course of medicine. This represents a substantial proportion of medication going to waste that, if patients were better informed, could be directed back to the NHS.

Some give them to other people

Worryingly, around six per cent of those who took part admitted they would give unused or old medicines to someone they knew – in case they needed them. There are obvious inherent dangers in 'donating' prescription drugs to people without a doctor's consent.

SICK BRITAIN

- 73 per cent of British adults surveyed have been prescribed medication in the last year and almost half in the last month.
- Older people – those over 65 – take more pills, with 68% of those over 65 having taken medication in the last month.
- Most are on pills for high blood pressure (21%), raised cholesterol (16%), asthma (13%) and mental health issues (12%)
- Over half (53%) said having personalised packaging from their pharmacist, that shows when each dose should be taken, would help them to adhere to prescribed medication.



THE REAL

COST TO THE NHS

FIVE hundred million pounds a year¹. It's a sizeable sum of money. And in today's cash-strapped health service it would pay for almost 30,000 kidney transplants⁶, an extra 21,000 qualified nurses⁷ or cover the annual bill for the Cancer Drugs Fund⁸, the scheme which gives tens of thousands of patients access to life-extending cancer drugs denied them on the NHS, twice over. Instead, it's being completely wasted.

This is because £500m a year is what research shows is being lost due to patients not taking their medicines properly. In July this year, Health Secretary Jeremy Hunt announced plans to stamp prescription medicines with the phrase 'funded by the UK taxpayer'⁹ - in a bid to stem the massive wastage resulting from patients not taking their medication. Drugs that cost more than £20 will also have the cost printed on the packaging to remind people how much their treatments are costing.

It is hoped that the move will remind patients of the expense of their medicine and also encourage them to stick to treatment plans. Because, Hunt says, the NHS is facing the worst financial crisis in its history as it struggles to meet the needs of the rising and ageing population. Vital cash is being frittered away when

patients request repeat prescriptions for medicines they may never use.

Whether such drastic measures will actually work or not remains to be seen.

The result of the survey undertaken for this report suggests about a third of patients think labelling medicines will make them be more conscientious about taking their drugs as instructed. But that leaves two-thirds who are less convinced.

The full scale of the problem was revealed in 2013 by a landmark investigation called the Aston Medication Adherence Study. It was conducted by researchers at Aston University's Pharmacy School and was the first large-scale investigation into medication adherence in the UK. Researchers analysed more than one million anonymised individual prescriptions, conducted more than 7,000 patient questionnaires and ran seven separate focus groups to look into why patients stopped taking their drugs.

The study focused on three clinical areas - raised cholesterol, type 2 diabetes and hypothyroidism, where health is affected by an underactive thyroid. All three require long term medication where compliance with the prescribed dose is essential. The results showed that

around a quarter to a third of the patients were non-adherent to their medication. The reasons why came as little surprise.

Fears about side-effects, lack of information about their medicines and the absence of symptoms all dictated patients' behaviour. But there was another interesting factor. Patients complained that constant switching between generic forms of medicines undermined their trust in pharmacists.

Generic medicines play a crucial part in helping to control NHS drug spending. But the Aston study suggested patients often fear they are being given a less effective formula.

Professor Ric Fordham, professor of applied health and economics at the University of East Anglia, says non-adherence 'is a big problem'. He adds: "When patients don't feel ill, they think there is no need for them to take their drugs any more. Or if they start to feel better they arbitrarily decide they don't need to take as much.

"Many of these people have chronic diseases and will be on drugs for the rest of their life, which in some cases could be a long period of time.

"The danger lies in when they decide to take them sporadically, or try and wean themselves off by only taking medicines every other day instead of daily."

One part of the cost equation that's often forgotten, says Professor Fordham, is what non-adherence does to the value of NHS drugs.

"Patients still get their repeat prescriptions, so that's still costing the government money.

"But if they don't take their medicines they don't get the full benefit of them and that ends up reducing the cost effectiveness of the drugs.

"When the National Institute for Health and Care Excellence (NICE) approves medicines, it does so on the basis that they are used properly.

"In fact, this cost effectiveness can be reduced by 30 to 40 per cent if patients don't do that."

One simple example, he says, is the prescribing of bisphosphonates for osteoporosis. These are relatively cheap and effective drugs when used properly. But failure to do so increases the risk of a hip fracture, which costs the NHS around £20,000 to treat. That skews the actual cost-effectiveness of bisphosphonates because they are not being used to their full potential.

Heidi Wright, from the Royal Pharmaceutical Society, says co-morbidity is a major factor in non-adherence.

This is where patients suffer a variety of chronic conditions and need drugs for all of them. One report by the King's Fund¹⁰ found up to 20 per cent of those aged over 65 were on more than ten different medicines. Some might have to be taken before food, others after, some in the morning, others in the evening.

"Some patients may already be taking ten tablets a day and just don't feel like taking any more," she says.

"Or it may be that they don't understand what the drugs are or don't like the side-effects.

"Then there are those who take their medicines, feel a bit better and subsequently stop taking them, perhaps because of the side-effects."

And she has a stark warning if action is not taken soon to tackle the issue.

"It's going to get worse. People are living for longer but with at least two or more long-term conditions."

The GP view

GPs prescribe billions of pounds worth of medicines every year – but how much do they know about why patients don't always take them? Media medic Dr Keith Hopcroft, a GP in Essex, gives his view.

"I think it's partly our fault as GPs. We're not great at telling patients what drugs are for, or what the effect might be if they do not take them.

OUR SURVEY SAYS...

Only SIX per cent – just less than one in 20 – young adults between 18 and 24 said they would return valuable medication to the GP or pharmacist if they didn't use it. In contrast, 46% of those over pension age would hands drugs back.

OUR SURVEY SAYS...

66 per cent of those aged 55 or over said they always read the label on their medicine. Among young adults aged 18 to 24, it's just 46 per cent. One in ten said they NEVER read the instructions.

“Often patients who are prescribed drugs like statins for high cholesterol, or anti-hypertensives for high blood pressure, will say but I didn't feel any different when I took them.

“But these are not drugs that are going to make you feel different in any way and part of the problem is GPs often don't explain the purpose of the drug and why there is a major benefit in taking it.

“But the other really big factor is patient information leaflets (that accompany prescribed medicines).

“They rarely give any sense of perspective when it comes to side-effects. So patients read them and then often don't take the drugs because they get scared off.

“And it's fair to say patients can sometimes be quite devious. They are very rarely honest with GPs about not taking their medicines and while they may religiously pick up their repeat prescriptions, that doesn't necessarily mean they are actually taking them.”

My partner takes 56 pills a day



Dave Williams, 62, from Manchester has been caring for his partner Martin Bird, 59, since he was diagnosed as HIV positive in 1988. Here, he tells how that task would be impossible without a patient pack system for all Martin's drugs.

"Martin and I have been together for 32 years. And I have been his carer for many of those. With HIV, medicine compliance is absolutely critical because the virus can replicate and become resistant to treatment.

"But that's just part of the problem these days. Martin now also has memory loss, hepatitis B, epilepsy, diabetes, peripheral neuropathy and an underactive thyroid. As a result of which he currently has to take a total of between 56 and 58 tablets every day.

OUR SURVEY SAYS...

Women (67%) are more likely than men (62%) to forget to take their medication.

OUR SURVEY SAYS...

Patients in Yorkshire & Humberside (39%) are most likely to stop taking their medicines due to side-effects that make them feel unwell.

"I used to arrange his daily medication in a plastic box myself. Every fortnight I would sit down for at least two hours at a time to organise his upcoming treatment. But the trouble was if you dropped the box you'd have to start all over again.

"Now I use blister packs from Boots which are picked up once a month, apart from his HIV medicines and epilepsy which are provided separately.

"I've been using blister packs for about six months now and we've had no problems at all.

"It would be a virtually impossible task for many carers without them."

Patient packs help control my epilepsy



Lisa Williams, 29, suffers with epilepsy as a result of a road traffic accident. Taking the right dose of medication at the right time is essential. Lisa, from Manchester, tells how patient adherence packs provided by her pharmacist ensure she keeps her condition under control.

“In 2006, I was involved in a car accident as a back seat passenger. I was in a coma for two weeks and in hospital for a total of 17 weeks.

“I suffered a head injury which rapidly led to epilepsy and left me quite forgetful. Almost immediately, I started suffering fits and seizures. It was really scary. Doctors prescribed me the anti-epileptic drug levetiracetam, which I have to take two of in the morning and two in the evening.

OUR SURVEY SAYS...

Patients in Wales are the most likely to flush their medicines down the loo.

OUR SURVEY SAYS...

Patients in the north-east of England (64%) are most likely to believe printing the cost of drugs on packaging will make little difference to adherence.

“I also take folic acid at the moment because I am trying to get pregnant.

“I get my patient pack from the pharmacist every week. It gets dropped off on a Monday morning.

“I used to find it really difficult managing my medication. I could never remember if I had taken my drugs or not. On one occasion, I took too many and overdosed and had to go to hospital.

“I’ve been using the packs now for about three years and have had no problems in that time.

“My epilepsy is well controlled now and the last seizure I suffered was over a year ago.”

PHARMACISTS ON THE FRONT LINE

In Britain, an estimated 1.6 million¹¹ people a day visit a community pharmacist. So while GPs may be regarded as the gatekeepers to the NHS, it's the pharmacists out in the community that provide the main interface for patients coming into contact with the health service. And that means they are ideally placed to lead the charge against the huge amount of waste and health medical complications resulting from medicines not being taken properly.

With more than 14,000 community pharmacies in England alone¹², some experts believe pharmacists should be given more support to try and tackle the crippling cost of prescription drug waste. Heidi Wright, Practice and Policy Lead for England at the Royal Pharmaceutical Society says: "There's a lot more that all healthcare professionals, including pharmacists, can do about having a proper conversation with patients on the risks and benefits of different drugs. And I don't think those conversations happen as much as they should.

"It may be due to time, or it may be that pharmacists lack the confidence to initiate that kind of conversation with patients."

OUR SURVEY SAYS...

45 per cent of British adults surveyed have been prescribed some sort of medicine on the NHS in the last month. A further one in five (19%) say they have been prescribed medicine on the NHS between one month and six months ago.

But pharmacists do have the facilities and the right framework to spearhead this drive. As part of their contract, they provide a free service to patients, called the Medicines Use Review. Seated in a private consultation room, a patient can discuss at length the details of their drug regime with their local pharmacist during a meeting that usually lasts just ten to 20 minutes. This helps the patient to understand how medicines should be used and why they have been prescribed, as well as solving any problems there may be with side-effects. Patients can request a review if they regularly take more than one medicine for conditions like asthma, arthritis, diabetes or epilepsy. The pharmacist completes a Medicine Review Action Plan and a copy goes to the patient's GP.

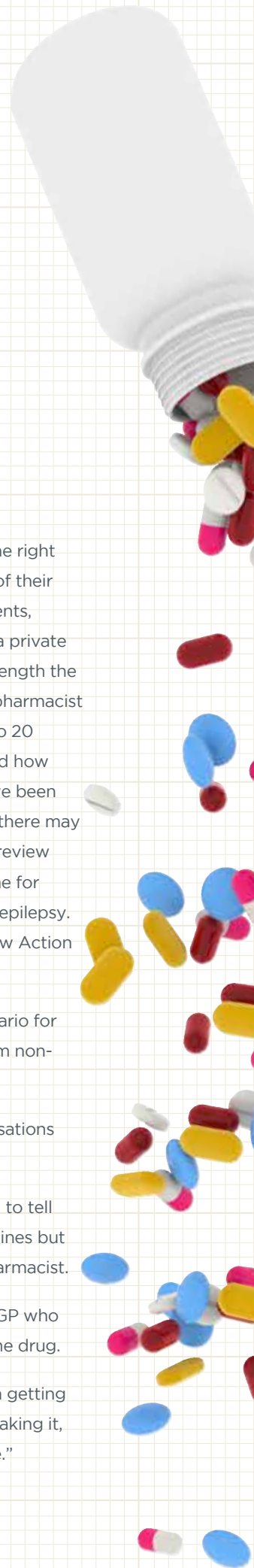
"The Medicines Use Review is the ideal scenario for pharmacists to tackle the issue of waste from non-adherence" says Wright.

"That's exactly where these types of conversations should take place.

"And sometimes patients may not be willing to tell their GP that they are not taking their medicines but will be quite happy to mention it to their pharmacist.

"There is often a reluctance to admit it to a GP who might be in control of actually prescribing the drug.

"Patients worry they might be stopped from getting the drug because, even though they're not taking it, they feel they might still need it in the future."



Similar opportunities arise as part of another pharmacy-based service, the New Medicines Service.

This was introduced in 2011 as an 'advanced service' under the NHS community pharmacy contract and is designed to help patients with long-term conditions who are newly prescribed a medicine.

More than 90% of community pharmacies in England¹³ now provide this service to their patients.

Research suggests adherence has since increased and patients' knowledge on managing their conditions have improved.

"The New Medicines Service gives the patient and the pharmacist the time to sit down and talk about any possible side-effects," says Wright.

"Then they can agree to review the situation after two weeks, or four weeks, so they can change the dose or even change the medicine.

"This is crucial because patients who do not take their medicines are more likely to be admitted to hospital.'

But much still depends on the pharmacist's own enthusiasm for engaging with patients on potentially sensitive issues.

"Some are better than others" says Professor Ric Fordham, Professor of Applied Health and Economics at the University of East Anglia.

"If you live in a small village or town and your pharmacist knows you then your health is probably quite well managed.

"But in the big cities there is not usually the same interpersonal relationship."

Pharmacy Voice, the association which represents community pharmacists, says its members have a pivotal role to play in tackling the issue of non-adherence.

But Chief Executive Robert Darracott says it seems some community pharmacists have still not embraced the full potential value of Medicines Use Reviews.

And he believes the problem may be that many pharmacists are not clear about how to initiate contact with patients who might be in need of a reassessment of their medicines.

"In contrast" he says, "take up of the New Medicines Service is faster and bigger than the Medicines Use Review, probably because the story behind it is more obvious.

"It is creating the opportunity for pharmacists to have a chat with patients who are starting out on their treatment."

Darracott also feels there's a lack of clarity and structure about how information gleaned during these services is used to drive forward improved efficiency.

He is also concerned that some pharmacists may be encouraged to carry out Medicines Use Reviews for as many patients as possible – as part of a box ticking exercise – rather than identifying the ones who really need it.

"Done well, a Medicines Use Review can produce a huge amount of benefit.

"And as for the New Medicines Service, patients seem to quite like someone finding out how they are doing.

"But sometimes this kind of intervention is better done as an informal chat – a casual 'how are you getting on?' – rather than a series of formulaic queries. The informality can be really quite important."

Whatever the model for intervention, there is a growing sense of urgency in the pharmacy community that action must be taken soon to stop much-needed NHS cash haemorrhaging through unused medicines.

"This really needs to be sorted out," says Darracott. "The population is ageing and older people take more medicines, so this is going to get increasingly complicated."

PACK TO THE FUTURE

It's nearly 30 years since adherence packs for prescription medicines were first introduced in the UK. Today, an estimated one million patients benefit from them as a means to delivering their personalised medicine regimes.

In short, they organise multiple medications in an easy-to-follow format which allows patients, or their carers, to check what needs to be taken and when. And there is no question that such aids are much needed.

It is estimated that there are currently around five million patients in the UK taking four or more medications and a significant number of patients who need further help to comply with their prescriptions.

OUR SURVEY SAYS...

Men are significantly more likely than women to say they have been prescribed medication. This is true of high blood pressure (26% of males compared to 16% of females); high cholesterol (22% of males compared to 11% of females); type 2 diabetes (10% of males compared to 5% of females); and heart disease (6% of males compared to 2% of females).

Three decades on, packs do not differ greatly from those that first emerged in early 1980s.

But new, more innovative methods for deploying patient packs are being explored, many of which involve using them as a way of remotely monitoring compliance.

"The market for adherence packs has grown over the last 15 years or so" says Paul O'Hanlon, Omnicell managing director for UK and Ireland.

"But it has almost been by word of mouth. GPs, pharmacists, carers and patients themselves got to hear they were available for the right patient and their use has slowly grown, to the extent that almost every pharmacy in the UK now provides this service for some patients."

There may be one million users already but O'Hanlon says the potential market could be as high as five million in the UK. But for that to materialise, the adherence pack market may need to become a little more sophisticated, embracing new technology to more closely track compliance and drug use.

"Technology is not really being put to good use at the moment" says O'Hanlon.



“There are reminder apps for smart phones, which are great, especially as studies show the main reason for most people not adhering to medicines is that they simply forget.

“But the next level for this market is probably intelligent packs, which will be able to record the doses being taken. If they identify that a dose has been missed, the pack will be able to automatically send a text, or make a phone call, to the patient or their carer.”

The technology to make this work already exists, says O’Hanlon, but needs to be incorporated into the market. The smart packs will also work through wi-fi to transmit data to a website or database accessible by pharmacists or nurses, who can remotely monitor how each patient is doing, or even anxious relatives who worry their loved ones are not getting the best possible treatment.

“We believe this will emerge in the next 12 to 18 months” predicts O’Hanlon.

One of the most likely applications for this technology is in mental health, where the consequences of non-adherence in conditions such as bipolar disorder or schizophrenia can be distressing, even catastrophic.

At the moment, the first evidence of it usually only emerges when the patient suffers a psychotic episode. That often means they have to be admitted to a psychiatric unit for weeks or even months at a time to be stabilised with a regime of powerful drugs with potentially serious side-effects.

Only when they are back on a maintenance dose of medicines that keeps their mental state on an even keel, can they return to a relatively normal life. It’s costly to the NHS and traumatic for the patient.

But remote monitoring via Wi-Fi could give psychiatric teams an early warning sign that problems are brewing.

“The real challenge is whether the NHS sees the value of this and helps to support it” says O’Hanlon.

OUR SURVEY SAYS...

Patients in Scotland are the most likely to always read the instructions on their prescription medicines.

US firm Proteus Digital Health¹⁴ has gone one step further and developed smart pills that can inform patients and their doctors if medication is being taken properly.

Patients take their drugs along with an extra tablet, called a Helius, embedded with a tiny edible sensor which sends back information to a receiver in the form of a patch worn on the shoulder or arm.

This tracks when the drugs were taken and the dose, as well as monitoring heart rate and body temperature. It also alerts a patient to when the next dose is due and records whether they are sleeping well or taking enough exercise.

The idea is that a patient would get a blister pack of, say, five tablets they need to take. But the pack would also include the Helius smart tablet embedded with a sensor the size of a grain of rice that is taken at the same time as the drug.

When the smart pill encounters fluids in the stomach it sends a signal to a receiver inside a stick-on plaster worn on the shoulder detailing what pills have been taken and when.

The information is then downloaded for the patient, carer and doctor to check that the medication is being taken correctly.

Last year, Proteus Digital Health announced plans to produce its smart pills in the UK, employing 200 skilled staff, and negotiated a supply deal¹⁵ with high street chain Lloyds-pharmacy to make them available to patients in Britain at a cost of around £50 a month.



TIME FOR A HEART-TO-HEART

Every three minutes, someone in the UK suffers a heart attack¹⁶. Tragically, nearly one in three victims will die. But even for the survivors, there can be terrible consequences.

Although the chances of living through a heart attack are probably greater than ever before, it can result in heart failure - seriously depleted heart function which takes a huge toll on quality of life as patients age.

Around 65,000 people a year in the UK develop heart failure as a result of a heart attack¹⁷. Heart muscle thickens as the damaged organ, pumping at less than full capacity, struggles to get blood round the body to other vital organs. The scarring stops the heart from pumping properly and this leads to symptoms such as severe tiredness, shortness of breath and chest pain. Hands and feet can also become swollen as heart failure interferes with the body's ability to expel fluids efficiently.

Although there are drugs that can control the symptoms of heart failure, many people gradually deteriorate and it is estimated that up to 40 per cent of heart failure patients die within a year of diagnosis¹⁸.

But heart attacks are not the only cause. Untreated high blood pressure, faulty heart valves, irregular heart rhythms, too much alcohol and even viral infections that can damage cardiac muscle can all have a devastating impact. According to NHS Choices website¹⁹, heart failure affects a staggering 900,000 people in the UK.

“We know that being diagnosed with heart failure can be frightening” says the British Heart Foundation.

“It can raise all sorts of questions about what the future is going to be like.

“The best thing is to learn how to manage symptoms and keep the condition under control.

“While there isn’t a cure for heart failure at the moment, the treatments available to control symptoms are helping many people live full and active lives.

“Doctor will prescribe drugs that will control your blood pressure and help the pumping action of the heart.

“Patients are probably taking a combination of many different medications and it can be hard to keep track.

“But taking the right medication properly will help to control symptoms so make sure you understand what your different medications do.”

But do heart failure patients really follow this advice?

Paul Forsyth, a Heart Failure Specialist Pharmacist, NHS Greater Glasgow and Clyde highlights that there

are barriers to non-adherence within heart failure patients and more can be done to overcome these, he says.

“There are currently no standardised NHS mechanisms to identify patients who are not adhering to their medication and no healthcare professionals with tailored support mechanisms in place to help patients adhere to their medicines.

“But put simply, without adherence support, some heart failure patients are going to remain at an unnecessarily elevated risk of hospitalisation and death.

“Within pharmacy, we need to develop systematic approaches to identify and support such patients. It is no longer acceptable to simply let them slip through the cracks. Pharmacy need to work collaboratively with health and social partners to achieve this, in a patient-centred approach.”

A report published earlier this year by researchers working for Chest Heart and Stroke Scotland²⁰ looked at why many heart failure patients do not comply with their medication instructions.

It warned that, as a result, some got sicker and died sooner from not taking the right doses at the right times. As part of the investigation, researchers interviewed patients in inner-city areas with heart failure to identify the obstacles to compliance – and then set up an innovative scheme where specially trained pharmacy technicians were drafted in to help them improve.

To begin with, the pharmacy technician carried out face-to-face interviews with patients, each one lasting up to 20 minutes. These visits were repeated at weekly and monthly intervals for up to six months. What they revealed was that, for many patients, non-adherence had less to do with worries over the side-effects of drugs and more to do with the logistics of the care they received.

In a report on the project researchers said: “Patients appeared resigned to the prospect of managing their medicines in their own way, despite these practices being at odds with recommendations from specialist

OUR SURVEY SAYS...

That of those that have not taken their medication as prescribed; two thirds (65%) say that it’s because ‘they forgot’, a quarter (25%) claim that the side effects made them feel ill and a further 20% say they did not feel ill and therefore did not think they needed the medication.

nurses, GPs, consultants, pharmacists and family members or carers.

“It appears that for these patients, who were living in socio-economically deprived areas and had multiple morbidities, the advice given by health and social care providers was competing with other priorities that were more pressing.

“Examples included regular income and maintenance of social networks.”

And they added; “In contrast to previous research, patients did not raise concerns about the side effects of their medicines that led to non-adherence.

“Instead, we found the majority of barriers lay with the sphere of medicines and heart failure management. Participants’ concerns were more about their home and social care, friendship and support networks, and the challenges of interactions with health care outlets.

“The burden of dealing with heart failure did not emerge as a prominent theme, suggesting it was less important to patients than has been reported elsewhere.”

So how did visits by a pharmacy technician change patients’ habits?

The report said: “The intervention was intensive, repeated and delivered in a language that patients understand, by two technicians who were empathetic and willing to do some of the work required by the patient, to help manage their illness and associated issues.

“We suspect all of these attributes mattered and resulted in patients changing their medicine taking behaviour.

“The technicians..... listened and responded to patients’ concerns, whatever these were and however they were presented. This led to referrals to social care, addiction services, memory clinics and collaboration with wider networks which were reported by patients, as requiring attention, before adherence with heart failure medicines could be enacted.”

What became clear, researchers found, was that loneliness and lack of human contact was just as much a factor in non-adherence as forgetfulness, or worries over adverse effects.

“There was a high level of acceptability of the intervention, with the friendship that developed between technician and patient cited as a common strength. This suggests the patients tended to be socially isolated and valued regular contact from an empathetic pharmacy technician.

“This is the first study to demonstrate a potential role for pharmacy technicians supporting heart failure medicine non-adherence. Based on these positive findings, we plan to design, seek funding and conduct a pilot study involving a control group, and evaluate impact over a longer term, for example a one year.”

The researchers plan to include a new measure of success – how many patients avoid the need to seek hospital care as a result of regular contact with a pharmacy technician.

Because they believe their initial experiment stopped some patients experiencing a deterioration in their heart failure symptoms.

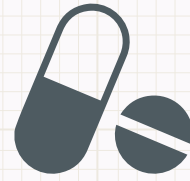
Watch this space.



**MEDICATION WASTAGE
COSTS THE NHS**

£500 million
EVERY YEAR

Health Secretary Jeremy Hunt statement on Medication Adherence 2nd July 2015



45%

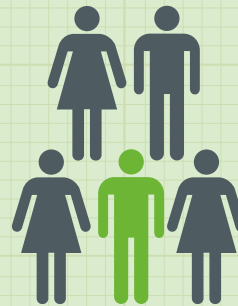
**OF BRITISH ADULTS HAVE BEEN
PRESCRIBED SOME SORT OF
MEDICINE ON THE NHS IN THE
LAST MONTH.**

(OmniceLL Medication Adherence: ComRes interviewed 2,048 British adults online between 31st July and 2nd August 2015)



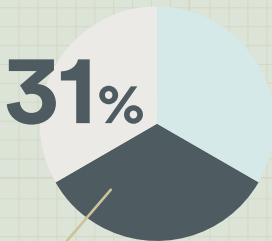
**36% OF BRITISH ADULTS AGREE PRINTING
THE COST OF THE MEDICATION TO THE
NHS ON THE PACKAGING – A CURRENT
GOVERNMENT PROPOSAL – WOULD MAKE
THEM MORE LIKELY TO TAKE THEIR DRUGS
PROPERLY. BUT THE MAJORITY DOUBT IT
WILL HAVE ANY EFFECT.**

(OmniceLL Medication Adherence: ComRes interviewed 2,048 British adults online between 31st July and 2nd August 2015)



**ONE IN FIVE ADULTS (21%) ADMIT
THAT THEY HAVE MISSED A ROUND
OF MEDICATION THAT THEY ARE
MEANT TO TAKE EVERY DAY.**

(OmniceLL Medication Adherence: ComRes interviewed 2,048 British adults online between 31st July and 2nd August 2015)



**AROUND ONE IN THREE PEOPLE (31%)
SAY THEY HAVE DISPOSED OF
MEDICATION THAT THEY HAVE NOT
USED, AND 6% SAY THAT THEY HAVE
GIVEN LEFTOVER MEDICATION TO
'SOMEONE THEY KNEW'.**

(OmniceLL Medication Adherence: ComRes interviewed 2,048 British adults online between 31st July and 2nd August 2015)

**OMNICELL'S RESEARCH EXPLORED THE COMPLEX
REASONS WHY PEOPLE DON'T ADHERE TO THEIR
MEDICATION. OF THOSE THAT HAVE NOT TAKEN
THEIR MEDICATION AS PRESCRIBED:**



65%

**SAY THAT IT'S
BECAUSE 'THEY
FORGOT'**



25%

**CLAIM THAT THE
SIDE EFFECTS MADE
THEM FEEL ILL**



20%

**DID NOT FEEL ILL
AND THEREFORE
DID NOT THINK
THEY NEEDED THE
MEDICATION**

(OmniceLL Medication Adherence: ComRes interviewed 2,048 British adults online between 31st July and 2nd August 2015)

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ADHERENCE

LET'S TAKE CARE OF IT

