RD SPECIAL REPORT

DRUG MIX-UPS. NURSES WHO DON'T KNOW WHAT THEY'RE DOING. DEATHS. HOW COME HOSPITALS DON'T HAVE A CLUE HOW TO TREAT THE UK'S THREE MILLION DIABETICS?

"If my blood sugar goes up, I panic. I don't want to go back on the ward"

BY SUSANNAH HICKLING

EARLY LAST YEAR, SUSIE FLITTON NEARLY DIED. The 49-year-old from Hemel Hempstead has Type 1 diabetes, and a hiatus hernia operation sent sugar and acid levels in her blood soaring, causing liver and kidney failure. She was given just a 20 per cent chance of surviving, yet pulled through thanks to intensive- care staff at Watford General Hospital. "They were brilliant," she says.

But she tells a very different story about going back onto the ward. Nurses gave Susie insulin—which she normally injects four times a day—at breakfast, but not at lunchtime, apparently believing it was better to keep her blood-sugar levels high, rather than stable.

They seemed aware that diabetics can develop hypoglycaemia (known as a "hypo"), which causes anxiety, shaking, weakness and even coma if sugar levels drop too low, but ignorant of the dangers of them going the other way. *Hyper*glycaemia can cause raging thirst, blurred vision and crushing fatigue—as well as coma and death.

Susie's glucose levels were regularly around 14 millimoles per litre when they should have been well below ten. Her eyesight was blurred and she was racked by anxiety—not helped by the knowledge that the high acid levels could return.

She tried to tell the nurses that what they were doing was wrong, but she was too weak to be assertive and they ignored her. She spent three weeks in hospital—longer than she might have needed to—as doctors couldn't release her until her sugar levels reduced (once levels have gone awry, they can take weeks to stabilise) and her recovery from surgery was slower.

Towards the end of her stay, she was allowed to take charge of her own insulin again, but a nurse brought her not only the wrong

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type but also the wrong pen with which to inject it. "It had someone else's needle," Susie claims.

Eventually, she made a full recovery, but her experience has left her badly shaken. "It was really scary," she says. "If my blood sugar goes up now, I get in a panic because I don't want to go back into hospital."

Is Susie's story a one-off? Definitely not, judging by other hair-raising stories of hospitalisation that pepper online diabetes forums and patient feedback sites.

The dread of being an inpatient again is common—and statistics vindicate these fears. The first National Diabetes Inpatient Audit of 219 NHS hospitals in September 2009 found that, in some, one in four people on the wards had diabetes. But, of the third who took insulin, the same proportion had a treatment error on their chart. Insulin was used incorrectly in a fifth of cases, and more than a quarter of these patients had had a hypo. Less than a third of diabetics could recall a foot examination—crucial, as their circulation is often poor and a simple blister can lead to the loss of a leg—and one in 30 actually developed a foot ulcer.

The full results of the survey have never been published and participating hospitals that *Reader's Digest* contacted were not willing to divulge their results. West Hertfordshire NHS Trust, which runs Watford General Hospital, refused outright, even when we made a request under the Freedom of Information Act. Executives cited an exemption in the legislation.

But what these headline findings do reveal is the extent to which the NHS is letting down many of the UK's estimated three million diabetics.

"Doctors and nurses are taught about diabetes as part of their training, but it's not something they specialise in on the general ward," explains Simon O'Neill, director of care, information and advocacy at charity Diabetes UK. "Treatment *for* diabetes is very good, but as soon as people go into hospital, the generalist staff seem to have no concept of how to manage it. Rather than calling on the diabetes team (present in around half of hospitals) or a diabetes specialist nurse (DSN) they struggle on. They tend to ignore the diabetes or think they're more expert than the patient—who may have spent years successfully managing their condition—and overrule them."

THE TRAINEE NURSE WHO SET UP JOANNE COOPER'S INSULIN DRIP ADMITTED THAT SHE DIDN'T KNOW WHAT TO DO

A diabetic stays an average 2.6 days longer in hospital than other patients. Partly this is because they are more likely to develop complications or have other conditions, such as heart disease. But it's also, says consultant diabetologist Dr David Kerr of the Bournemouth Diabetes and Endocrine Centre, because "the overall standard of care in hospital is sub-optimal".

In Birmingham's Heartlands Hospital, diabetics spent an average of 19 days on the ward, according to the 2009 national audit—ten days longer than the average patient. This comes as no surprise to Joanne Cooper, who was admitted to the hospital in March 2009 with soaring blood-sugar and acid levels.

It took three and a half hours in A&E before the 38-year-old was put on an insulin and saline drip. The trainee nurse who came to set it up admitted, "I don't know what to do."

Joanne never caught even a distant glimpse of a diabetes specialist nurse or diabetic consultant and, in the end, topped up her own insulin to bring her blood sugar down and got out of there.

Fortunately, Joanne Cooper was in hospital for less than 24 hours, but Simon O'Neill cites the caller to Diabetes UK whose father had recovered well from surgery in an unnamed hospital,

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WHAT IS DIABETES?

TYPE 1: The pancreas cannot make insulin, the hormone that helps body cells absorb glucose—a key, energy-providing carbohydrate. Type 1 diabetes cannot be prevented and it's not known why it develops, but accounts for around ten per cent of cases. It's most common in those under 40.

TYPE 2: The body isn't making enough insulin or the insulin it produces isn't working properly. Type 2 accounts for between 85 and 95 per cent of cases and is linked with being overweight. It can be treated with diet and exercise, although medication can be required, too.

Symptoms of diabetes can include:

- Extreme tiredness.
- Excessive urination. The body makes an extra effort to flush the glucose out. This can also lead to extreme thirst.
- Weight loss. The body breaks down fat for energy.
- Blurred vision due to glucose build-up affecting the lens.
- Slow healing of cuts and wounds.

Long-term complications can include:

Heart disease, kidney failure and nerve damage, which can lead to amputations, strokes and blindness.

but was still there two months later, with dangerously high blood sugar. In all that time, the ward staff hadn't contacted the hospital's diabetes team. "Even if we ignore the human suffering, on a purely economic scale, this man was blocking an acute hospital bed at huge cost," O'Neill points out.

Insulin is highly toxic in large quantities and the medical murderer's drug of choice. Nurse Colin Norris—dubbed the "Angel of Death"—killed four Leeds pensioners in 2002 with overdoses.

Yet, according to the National Patient Safety Agency (NPSA), between August 2003 and August 2009 there were 3,881 cases of people being given the wrong amount. Some, including four deaths, occurred because the abbreviation "U" (short for "units") was misread as a zero

"IF PIZZA HUT CAN GIVE ME CARBOHYDRATE DETAILS, WHY CAN'T THE NHS?" SAYS SEAN PRICE

so patients may have received ten times the prescribed amount, or because medical staff used intravenous syringes with graduations in ml, instead of diabetes syringes with graduations in smaller "insulin units". Other errors were blamed on doctors' poor writing on prescriptions. Delayed or omitted doses of insulin—as Susie Flitton knows only too well—were also frequent. According to the NPSA, this was the cause of two deaths between September 2006 and June 2009.

At Mayday Hospital, Croydon, civil servant Tracey Hynan's three-year-old daughter Molly was the victim of another common mistake: she was apparently given the wrong type of insulin. Tracey, and her husband Gary, who happens to be a well-informed Type 1 diabetic, were so frightened for their child's safety they discharged her before any harm could be done. "It was horrific," says Tracey.

In a statement to *Reader's Digest*, Mayday Hospital (now renamed Croydon University Hospital) said that it had taken action to reduce the risk of similar errors recurring, including ongoing training for paediatric nurses.

But even when patients are allowed to take charge of their diabetes management, problems can occur. Forty-six-year-old council worker Sean Price was admitted to Rotherham Hospital last August with hyperglycaemia. Unfortunately, a shortage of monitoring equipment made it impossible for him to keep tabs on his blood-sugar levels.

Neither was he able to count his carbohydrates—crucial for working out his correct insulin doses—as the hospital menus had no nutritional information. "I had to guess everything. If Pizza Hut can give me carbohydrate details, why can't the NHS?" he says.

"Carbohydrate counting is nearly impossible in hospital," confirms Dr David Kerr.

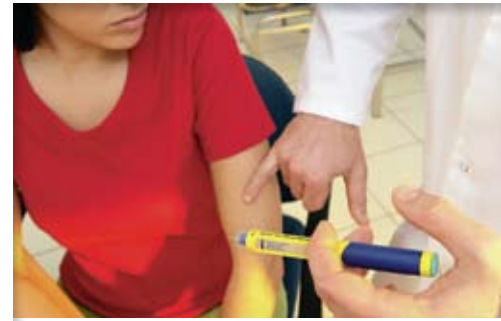
It seems clear that hospital staff need better training. In 1993, a reorganisation of medical-school curricula undermined the teaching of therapeutics and prescribing just as it became increasingly complex.

"Specific final exams on therapeutics were widely abandoned," says Dr David Webb, professor of therapeutics and clinical pharmacology at the University of Edinburgh, "making students think this is a less important area for their efforts."

A national examination that doctors have to pass before they are allowed to prescribe independently is now under development, but will take several years to work through the system, and, until then, other measures are necessary.

Script—an online toolkit developed to help junior doctors with prescribing—could help to plug the gap. Education of doctors and nurses at ward level is also highly effective.

The Royal Bournemouth Hospital gave doctors and other staff a "credit card" listing the 11 commandments of diabetes management that they could slip into their pockets. A DSN also ran education programmes for ward staff.



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AND IF YOU DO HAVE TO GO TO HOSPITAL?

- Be prepared. Try to gain agreement in advance that you can manage your own diabetes.
- Do not hand over your diabetes kit. Instead, keep it in your locker.
- Take your own hypo treatments—a small can of fizzy drink, snacks, glucose tablets.
- Ask to see a member of the diabetes healthcare team if you have concerns.
- Be assertive. Remember, you know your diabetes better than anyone.
- Partners, close friends and family need to know about your condition and the medication you take so they can speak up on your behalf if you're too poorly.
- Download the leaflet *Diabetes Care in Hospital: What Care to Expect During Your Hospital Stay* from Diabetes UK (order a copy by phoning 0800 585088 or visit the website*).
- If you wish to make a complaint, contact the hospital's Patient Advice and Liaison Service.

*See readersdigest.co.uk/links for weblink

As a result, insulin errors at the hospital halved over a 12-month period.

A consistent policy of letting patients manage their own diabetes care, if at all possible, can pay dividends. It helped Worcestershire Acute Hospital Trust reduce diabetics' average hospital stay from ten days to seven.

That initiative was, again, led by a diabetes specialist nurse, but there's a chronic shortage of these, with only around half of all hospitals having one. "Studies show that a DSN saves her salary in a year in reduced bed stays," says Diabetes UK's Simon O'Neill. "But it still doesn't happen."

The 2009 National Diabetes Inpatient Audit is at least proving a useful tool in persuading some hospital managers to allocate resources more effectively. Ipswich Hospital employed a part-time DSN after officials saw its audit results and there's a commitment to increase this provision. The hospital has also introduced a daily foot check in a bid to prevent diabetic ulcers developing.

But until institutions everywhere offer proper care to the swelling numbers of diabetics coming through their doors, they will continue to fail some of Britain's most vulnerable patients.

People like Jo Morgan, 32, a former charity worker from Walsall. Jo suffered a hyperglycaemic attack last May when medical staff failed to put her on an insulin and glucose drip as planned when she had day surgery on her shoulder at Walsall Manor Hospital. Desperately thirsty, struggling to breathe and barely able to see, she was only able to bring down her blood sugar when she injected herself with the insulin she had luckily refused to relinquish on admission.

"You worry that you're going to die because you're in hospital," she says, "and that shouldn't happen." ●

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GENIUNE PHRASES FOR RATHER OBSCURE SITUATIONS...

Vice admiral of the narrow seas (circa 1811): a drunken man who urinates under the table into his companions' shoes.

Tyrekicker (New Zealand, 1986): a politician who debates but takes no action (from car sales, where a person examines a car at length but does not buy it).

Nottingham goodnight (1950s): the loud slamming of doors and saying of "Goodnight" by a courting couple. This supposedly reassures the listening parents. The couple, neither of whom have left, then retire to the sofa.

Grille-peerer: one of a group of clergymen in the 1940s who used to haunt the floors of the London Library to look up the skirts of women browsing above.

Newspaper (prison jargon): a 30-day jail sentence, supposedly the time it would take an illiterate to read one.

By Adam Jacot de Boinod, author of *The Meaning of Tingo* (Penguin, £6.99)