INDEPENDENT DIABETES TRUST
Newsletter
March 2016 Newsletter, Issue 88
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Three former Health Secretaries call for review of the NHS!

In this issue...

On January 6th 2016, Norman Lamb, Liberal Democrat MP and former Health Secretary, called for a cross-party commission to review the future of the NHS and social care systems in England. He was supported by several charities and most importantly, by two other former health secretaries, Labour MP Alan Milburn and former Conservative MP Stephen Dorrell, now chairman of the NHS Confederation which represents NHS Trusts.

Mr Lamb warned that immediate action is required to prevent the NHS from crashing:

> *"The NHS and social care face an existential crisis. Demand for services continues to rise year on year but funding is failing to keep up. The position in social care is perhaps even more serious. Growing pressures on services are so severe that all parties must come together to fundamentally re-think how we can guarantee the future of the NHS and social care services. The Government cannot avoid this issue any longer"*

Stephen Dorrell added that without appropriate intervention, he predicts the NHS problems will "only get worse" within the next 10 years.

With three former Health Secretaries holding this view, the government and those running the NHS will be brave, arrogant or foolish to ignore their calls.


Alan Milburn


Stephen Dorrell


Norman Lamb

A charity supporting and listening to people who live with diabetes

Charity Number 1058284 Registered Number 3148360

What about the state of diabetes care?

As readers are aware, at the end of last year we published our report, Diabetes – Care in Crisis, which highlighted so many of the problems being faced by people living with diabetes:

- Education – only 4% of people with Type 1 being offered education courses and only 17% of those with Type 2 diabetes.
- Feet – 100 amputations per week, 80% of which are preventable.
- Children - 84% of children 12 and under are not receiving the 7 recommended NICE and over 50% are not receiving structured education.
- Only 22% of people with Type 2 diabetes meet recommended blood glucose, blood pressure and cholesterol levels
- Annual health checks – overall 40% of people are not receiving these checks, and this has actually gone down for people with Type 1 diabetes from 43% to 41%.

We are not the only ones to recognise that the care and treatment of people with Type 1 and Type 2 diabetes is simply not good enough. I hasten to add that this is not the fault of the health professionals looking after us but the fault of the NHS systems in place, or more importantly not in place, for the necessary care to be given.

The All Party Parliamentary Group for Diabetes and the Diabetes Think Tank are aware of the problems but no one is really listening, or if they are listening they are ignoring all these voices. More recently, the Public Accounts Committee has issued its review of diabetes care and treatment. Yet another voice but hopefully one that will be heard, read on…



Public Accounts *review of*

Soon after our Report was published, there was a review of diabetes care and treatment by the Public Accounts Committee (PAC). This called upon NHS leaders to defend their record of the care and treatment of people with Type 1 and Type 2 diabetes. The health leaders were Una O'Brien permanent health secretary at the Department of Health, Simon Stevens chief executive of NHS England, Jonathan Marron strategic director of Public Health England and Jonathan Valabhji national clinical director of obesity and diabetes.

As Co-Chair of IDDT, I watched the video of the 2 hour meeting which showed some interesting body language! The PAC asked very direct questions but the answers did not provide any hope for great changes to improve the care of people with diabetes, so the final report which came out in mid-January makes an interesting read.

Meg Hillier MP, Chair of the PAC, said:
"The NHS and Department for Health have been too slow in tackling diabetes, both in prevention and treatment. The number of people with diabetes is increasing, as is the number of patients who develop complications. It is a very serious condition that can have a huge impact on people's lives. Yet support available to patients and those at risk varies hugely across the country. There's clear evidence of what works and as a priority action must be taken to ensure best practice in treatment and education is adopted across the board.

Taxpayers must have confidence that support is available when and where they need it, rather than by virtue of where they live."

PAC main findings

The summary says, "*We are concerned that the witnesses from the Department and NHS England painted an unduly healthy picture of the state of diabetes services in England. Although an individual diabetes patient's prospects are getting better, the number of people with diabetes is rising by 4.8% a year, and performance in delivering the nine care processes and achieving the three treatment standards, which help to minimise the risk of diabetes patients developing complications in the future, has stalled.*"

- There are weaknesses in the approach of the Department for Health and NHS England so ***"the costs of diabetes to the NHS will continue to rise".***
- While progress has been made since the Committee last examined diabetes services, there remain ***"unacceptable variations in the take up of education programmes, delivery of recommended care processes, achievement of treatment***

Committee *diabetes care*

standards and in outcomes for diabetes patients". These include geographic variations across clinical commissioning groups (CCGs), as well as variations between different groups of diabetes patients.

- While the number of diabetes patients experiencing complications continues to increase, diabetes specialist staffing levels in hospitals are not keeping pace with the increasing percentage of beds occupied by diabetes patients.

PAC key recommendations

- The Department and NHS England to take rapid action to improve the spread of best practice in preventing and treating the condition.
- By April 2016, diabetes data should be used to identify CCGs performing poorly compared to the national average, and "establish interventions to help them improve".
- By April 2016, NHS England and Public Health England should set out a timetable "to ramp up participation in the national diabetes prevention programme" to 100,000 people a year.
- By July 2016, the Committee urges the Department and NHS England to put in place a separate timetable "to reduce geographical variations and variations between different patient groups".
- Other recommendations include making it mandatory for GP practices to submit data for the National Diabetes Audit, and for NHS England to develop a "better and more flexible range of education support" for diabetes patients.

Note: IDDT support for the PAC Report is on our website and has been tweeted.

The full report can be accessed at the following web address: http://www.parliament.uk/business/committees/committees-a-z/commons-select/public-accounts-committee/news-parliament-2015/management-adult-diabetes-report-published-15-16/

The **winners** of IDDT's lottery draws!

We are delighted to announce the winners of the lottery draws for the last 3 months. They are as follows:

Winners of the November 2015 draw are:
1st prize of **£247.68** goes to Christine from Oakham
2nd prize of **£185.76** goes to Jill from Solihull
3rd prize of **£123.84** goes to Anon from Bradford
4th prize of **£61.92** goes to Anon from Ashford

Winners of the December 2015 draw are:
1st prize of **£258.24** goes to Ann from Birmingham
2nd prize of **£193.68** goes to Anon from Crewe
3rd prize of **£129.12** goes to Graham from London
4th prize of **£64.56** goes to Hilda from Stoke on Trent

Winners of the January 2016 draw are:
1st prize of **£274.56** goes to Brian from Gloucester
2nd prize of **£205.92** goes to Paul from Northampton
3rd prize of **£137.28** goes to Anon from Southampton
4th prize of **£68.64** goes to Chris from Bugbrooke

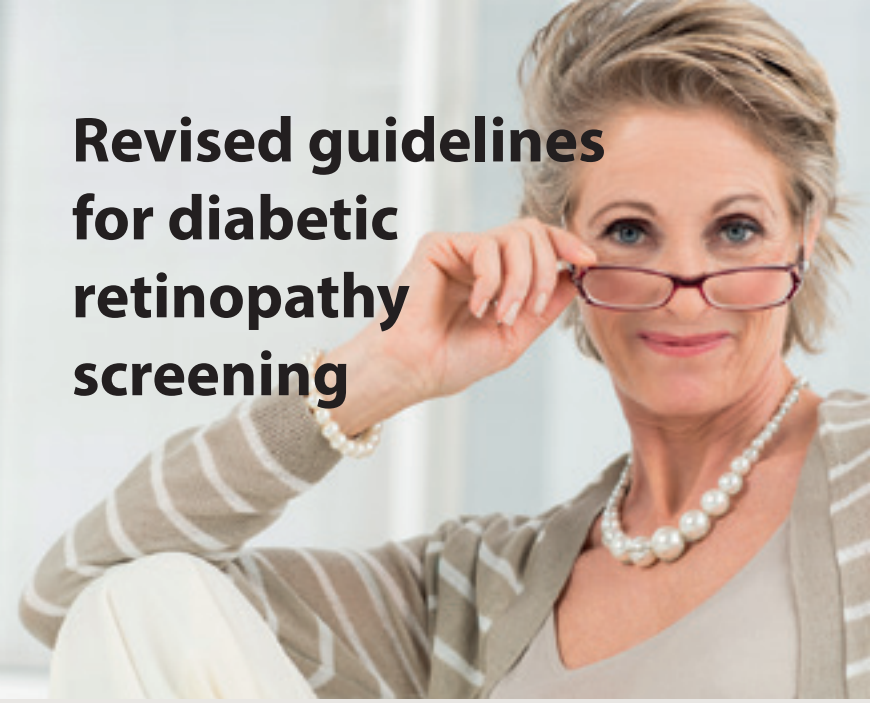
Note: the winners of the draws for February, March and April 2016 will be announced in our June Newsletter or will be available on our website.

Thank you to everyone who joined in IDDT's lottery.

Special Prizes for June Lottery draw!

In recognition of Diabetes Week in June and for that month only, we are doubling the prize money for all 4 prizes, so the First Prize will be over £500!

If you would like a chance to win for just £2.00 per month, then complete the form with this Newsletter, give us a call on 01604 622837 or email tim@iddtinternational.org



Revised guidelines for diabetic retinopathy screening

The UK National Screening Committee (NSC), which advises the NHS and Ministers, has revised its recommendations for screening for diabetic retinopathy. It is now suggesting that people with diabetes at low risk of sight loss are only screened for retinopathy every two years, not annually. The guidelines for people at high risk of sight loss remain unchanged with annual screening.

This change to the screening guidelines is as a result of a large observational study that found that in people with diabetes at low risk of sight loss, one screening every two years is adequate.

What does the NSC class as low risk?

People who have had two successive clear diabetic eye screening appointments will be classed as being at low risk of developing sight-threatening retinopathy.

For various reasons, the NSC does not recommend screening for glaucoma, which can also be a complication of diabetes.

If you are worried by only being screened once every two years, remember that you can have a full eye test free of charge with an optometrist who will check for retinopathy and glaucoma.

Diabetic retinopathy is rare in children with diabetes

A study published in Ophthalmology (Sept 2015) recommends that examinations for diabetic retinopathy could begin at 15 years old or later. The study reviewed eye examination results of 370 children younger than 18 years. This showed:

- Children had an average duration of diabetes of 5.2 years and none had retinopathy.
- The shortest disease duration was 5 years and the youngest age of diagnosis with severe diabetic retinopathy was 15 years old.

The researchers commented that diabetic retinopathy is extremely rare in children, regardless of the duration or control of diabetes and current screening guidelines seem to create unnecessary burdens for families and the healthcare system.

Diabetes claims against doctors on the increase

According to the Medical Defence Union (MDU), negligence claims alleging that doctors failed to diagnose diabetes or to manage it properly increased significantly over a ten year period. 75% of the claims involved GPs.

- The number of patients suing doctors increased by 28%, from 162 claims between 2003-7 to 207 cases between 2008 to12. The vast majority of cases did not lead to compensation being paid.
- Over the 10 year period, 92 negligence claims have been settled for just over £8.2 million plus legal costs of around £1.2 million over the decade.
- There were also 489 complaints, 123 coroner's inquiries and 44 GMC investigations.
- The MDU helped its members with over 1,215 incidents involving diabetes over the ten year period to 2012.

With the large increase in the number of people with diabetes over the last 10 years, it is not surprising that the number of complaints has gone up and the MDU point out that it does not necessarily imply a fall in medical standards. It could also reflect a greater willingness of people to take action if they believe that there have been failings in their care.

Common allegations included the following.

- Failing to make an initial diagnosis
- Failing to diagnose typical complications like foot or leg ulcers.
- Alleged medication errors and poor ongoing monitoring.

The MDU has issued advice to doctors to help them avoid delays in diagnosis and managing diabetes.

IDDT comments: people are now told of the NICE 9 key checks that they are supposed to receive annually, so they are more likely to be aware if they do not receive them… and complain. Most of IDDT key booklets list the 9 key checks at the back so people can tick and date when they receive them.

WARNINGS!

Insuman shortages

Insuman Basal, Comb 25 cartridges and prefilled pens are likely to be in short supply for the next eight months, according to the manufacturers Sanofi. These insulins are used by nearly 50,000 people in the UK.

Although there will be some stock in the supply chain, NHS health professionals have been told that by Sanofi there would be a 'possible supply shortage in the United Kingdom of some Insuman presentations (recombinant human insulin) from 1 December 2015. This is due to limited capacity at the manufacturing site and supply is expected to return to normal in July 2016'. They warn that replacement with alternative insulin formulations is needed to avoid hyperglycaemia and serious complications.

The four specific products affected are:

- Insuman Basal 100 IU/mL
- Insuman Comb 25 100 IU/mL cartridges
- Insuman Basal Solostar 100 IU/mL
- Insuman Comb 25 Solostar pre-filled pens.

The nearest alternative insulins are as follows:

- For patients on Insuman Basal preparations the alternative human insulins are Humulin I and Insulatard,
- Those on Comb 25 products can be switched to Humulin M3.

Sanofi has said that it is difficult to estimate how many people will be affected but GP leaders have said that people cannot run out of insulin, so GP practices need to get on and switch patients to an alternative insulin. If you are using these insulins, you need to discuss alternatives with your GP practice.

GlucoMen LX Sensor test strips

The Medicines and Health products Regulatory Agency (MHRA) has issued a medical safety alert about GlucoMen LX test strips from Menarini Diagnostics UK.

The company has detected a few cases of inaccurate results obtained by some users of the GlucoMen LX Sensor test strips used with the GlucoMen LX PLUS. Incorrect storage of the vial after first opening could be the cause of possible overestimated results – higher results than the actual blood glucose levels..

The MHRA recommends that:

- The vial should be closed immediately after each use. If it is left open to high environmental humidity for a prolonged period of time, the test strips may overestimate the blood glucose value.
- The test strips must be stored in their original vial and the discard date should be written clearly on the label, counting nine months after opening.
- Users who obtain unexpected values must repeat the test with a new test strip and if the results continue to be abnormal or not consistent with what they feel, they must contact their doctor before taking any other action.

Yet more warnings about SGLT2 inhibitors!

In the last two Newsletters we have reported on adverse effects of the Type 2 diabetes class of drugs known as SGLT2 inhibitors - canagliflozin (Invokana, Invokamet), dapaglifloxin (Farxiga, Xigduo) and empaglifloxin (Jardiance, Glyxambi, Synjardy). The adverse effects causing the warnings to be added are diabetic ketoacidosis (DKA) at normal blood glucose levels and an increased risk of bone fractures.

A more recent review by the FDA in the US has resulted in further warnings, this time for life-threatening blood infections (urosepsis) and kidney infections (pyelonephritis). Urinary tract infections (UTI) can lead kidney infections (pyelonephritis) as a result of the UTI bacteria travelling up the ureters to the kidneys. From the kidneys, the infection can spread further to the blood causing urosepsis.

The FDA adverse events reports from March 2013 to October 2014 identified 19 cases of these conditions, all of which resulted in admission to intensive care or dialysis to treat kidney failure. So the FDA has added new warnings to the labels of all SGLT2 inhibitors and informed the manufacturers that they must carry out post-marketing studies for 5 years. They also recommend that before SGLT2 inhibitors are prescribed patients should be assessed for ketoacidosis history and urinary tract infections.

Beware of buying diet pills online

The pressure is on for the general public to lose weight and many people with diabetes, especially Type 2 diabetes, are no exception to this. The MHRA has issued a warning about the dangers of buying diet pills online.

During 2015, the MHRA seized more than 240,000 doses of pills claiming to be for weight loss or slimming. Some of them were marketed as 'all herbal' or natural when they actually contained synthetic sibutramine which was withdrawn in Europe and the US in 2010 due to an increased risk of heart attacks and strokes.

If you are looking to buy products online described as herbal or natural, the only safe products should display the Traditional Herbal Registration (THR) logo and a THR/PL number. This means that they have been assessed by the MHRA for quality and safety but the MHRA advises people not to buy slimming pills online without consulting a doctor or pharmacist.

NICE Updates

New NICE guidelines for adults with Type 2 diabetes

The key points about the new guidelines for adults with Type 2 diabetes are as follows.

- Healthcare professionals should involve people in decisions about their care.
- The guidelines stress the need for individualising care and include new recommendations on managing blood glucose, effective drug treatment and lifestyle.
- People with Type 2 diabetes and their families or carers should be offered a diabetes education course around the time of diagnosis.
- The sequence of drug treatments that can be offered.

Adopting an individualised approach

Healthcare professionals should take into account a person's:

- personal preferences
- comorbidities (other conditions in addition to diabetes)
- risk of polypharmacy (taking many drugs)
- the ability to benefit from long-term interventions because of reduced life expectancy.
- The needs and circumstances of each person should be reassessed at each review, along with both the healthcare professional and the patient considering stopping any medicines that are not effective.

Managing HbA1cs

The HbA1c is a measurement of average blood glucose levels over the previous 2 to 3 months. Again, NICE says that people with Type 2 diabetes should be involved in decisions about their individual HbA1c target. They should be encouraged to achieve and maintain this target unless there are any adverse effects, such as hypos or an impaired quality of life.

So NICE recommends that the aim should be to achieve an HbA1c 48mml/mol (6.5%). If the drug being used can cause hypoglycaemia, then a target of 53mmol/mol (7%) should be used

If HbA1cs are not adequately controlled by a single drug and rise to 58mmol/mol (7.5%) or higher then healthcare professionals should:

- reinforce advice about diet, lifestyle and advice and the need to take drugs as prescribed,
- support the person to aim for an HbA1c of 53mmol/mol (7%) and intensify drug treatment.

How often should HbA1cs be measured?

- 3 to 6 monthly intervals until the HbA1c is stable without changing treatment,
- 6 monthly intervals once the HbA1c is stable and the blood glucose lowering treatment are stable.

New advice on drug treatment

Standard release metformin should be offered as the initial drug treatment and the dose should be gradually increased over several weeks to minimise the risk of gastrointestinal side effects. However, if these side effects occur, then a

The day after the November 2015 spending review, the following plans were published in Primary Care Today.

Cuts are worrying

West Norfolk CCG could cut gluten free prescriptions to save money

This CCG faces a potential shortfall of £4.9 million for 2015/2016 and are considering stopping the prescription of gluten free products to save £73,000 a year. They state that while this will be unpopular with the 404 patients currently receiving gluten free products on prescription, these types of savings allow the CCG to maintain investment in priority areas such as ambulance services, mental health and A&E.

Mid Essex CCG plans to save £15.7m through drastic cuts to services

Commissioners here are planning to axe vasectomies, hearing aids and GP physiotherapy. This CCG looks after 389,000 NHS patients and is consulting on ways to save cash by patients being seen privately or buying items on the high street.

These are just a few examples of cuts that are going to cost people money but there is no explanation of what happens to people who can't afford to 'be seen privately or buy items on the high street'?

trial with modified release metformin should be offered. The guidelines also include a pathway for other blood glucose lowering drugs. The full guidelines can be found online at www.nice.org.uk/guidance/NG287

The full guidance can be found at www.nice.org.uk/guidance/ng20 or IDDT's booklet on coeliac disease can be obtained by calling 01604 622837 or emailing enquiries@iddtinternational.org

NICE updates guidance on coeliac disease

Coeliac disease is an autoimmune condition associated with chronic inflammation of the small intestine which can lead to malabsorption of nutrients. Proteins, known as glutens, which are present in wheat, barley and rye activate an abnormal immune response. Improvements usually follow when gluten is excluded from the diet.

Coeliac disease is a common condition with studies suggesting that it affects 1 in 100 people. People with other autoimmune conditions, such as Type 1 diabetes and thyroid disease, are at a higher risk of coeliac disease. The new NICE guidelines recommend that people with Type 1 diabetes and thyroid disease should be tested for coeliac disease at diagnosis. First degree relatives of those with coeliac disease are also at higher risk of the condition.

Undergoing investigations for coeliac disease

- Any test is only accurate if a gluten containing diet is eaten during the testing process.
- People who are following a normal diet (containing gluten) should eat some gluten in more than 1 meal every day for at least 6 weeks before testing.
- People should not start a gluten free diet until diagnosis is confirmed.

should we be prepared?

Restrictions for people with diabetes

The most common restrictions IDDT hears from people with diabetes are lack of podiatry services and restrictions on the number of blood glucose test strips for people with Type 1 and Type 2 diabetes. Such apparent savings are short-sighted – it's not just people's health that could suffer but the increased risks of diabetic complications in those who are denied what they need, will cost the NHS far more in the long run.

Remember - VAT exemption on diabetes products

If you have to pay for diabetes products such as test strips, ALL diabetes products are exempt from VAT. Despite arguing her case, one of our Type 1 members is being denied the number of test strips she needs by her GP, so she is buying them from her pharmacist. To add insult to injury, the pharmacist is refusing to supply them exempt of VAT. If you need to 'prove' this to your pharmacy, it can be checked by visiting the following website: www.gov.uk/financial-help-disabled/vat-relief

For The Ladies

An interesting article by Dr Rowan Hillson, MBE (Practical Diabetes Vol 32 No 9) covers many of the issues that cause concerns and difficulties for women with diabetes. We hope that the information she provides will be of help.

The effect of menstruation on diabetes

There is research that shows the following.

- In women with Type 1 diabetes between the ages of 18 and 40, 61% had changes in their blood glucose control prior to their menstruation and this was mainly hyperglycaemia. Half of them adjusted their insulin dose accordingly.
- Changes in glucose control occurred in 67% of women using fixed-dose oestrogen/progesterone oral contraceptives.
- Women with Type 1 diabetes experienced less hypoglycaemia and more hyperglycaemia in the phase after ovulation (luteal phase) than in the follicular phase (the phase where follicles in the ovary mature ending with ovulation).

The relative lack of insulin may be sufficiently severe to cause diabetic ketoacidosis (DKA), so unexplained hyperglycaemia or repeated DKA may be caused by their menstrual cycle. It is worth remembering that many women with Type 1 diabetes do not have regular periods, so you or your diabetes team could think that the hyperglycaemia is 'unexplained'.

Irregular periods

Research shows that girls with Type 1 diabetes tend to start their periods later than girls without diabetes. Those with poorer control (higher HbA1cs) also tend to start later. For each 1% increase in average HbA1c levels in the 3 years before menstruation starts, menstruation is delayed by 1.3 months compared to girls without diabetes. Menstruation also started later in girls who were diagnosed before the age of 10 years compared to those diagnosed after that age.

Research has also shown that oligomenorrhoea, when the time between periods is greater 36 days, is present in 37% of adolescent girls with Type 1 diabetes and is more likely in those with poor control.

Dr Hillson's advice to health professionals is that they should assist women to manage their own particular cycle.

Menopause

An American study suggests that women with Type 1 diabetes have earlier menopause than those without but this is contradicted by a later study in Finland. As many of our members know, the time before menopause glucose control can be unstable. A review suggests that postmenopausal hormone replacement therapy has neutral or beneficial effects on glycaemia control in women already diagnosed with diabetes but future studies are needed to find out how these observations should influence the care of postmenopausal women with Type 1 diabetes.

HbA1c Converter

In the UK the HbA1c measurements changed some time ago but many of us are still used to the old ones and need a reminder! In addition, some articles or research publications are still using the old measurements, so it is important that we are aware of both.

Here is a table showing HbA1cs in percentages and IFCC measurements in mmol/mol

HbA1c (DCCT measurement (%)	HbA1c new measurement (mmol/mol)
6	**42**
7	**53**
8	**64**
9	**75**
10	**86**
11	**97**
12	**108**
13	**119**

Jeremy Hunt Watch

Care.data pilots on hold again

We have reported in the past the progress of the NHS's care.data programme which aims to collect patient information from GP surgery records. The scheme has been in the planning for some time but concerns about confidentiality have been expressed by patients, privacy campaigners and GPs. The programme, which aims to extract data from GP surgeries to a central database, had begun with four "pathfinder" trials at Blackburn with Darwen clinical commissioning group (CCG), Somerset CCG, West Hampshire CCG and CCGs in Leeds.

At the NHS Innovation Expo in September 2015, Jeremy Hunt admitted that the NHS had not yet won the public's trust, especially in terms keeping medical information secure. He explained that further measures need to be put in place on the wording for consents and opt-outs. So it is not clear when this programme will eventually happen!

Hunt announces scheme to cut practice red-tape

At the end of October 2015, Jeremy Hunt announced that he aims to "immediately stop" pointless referrals from hospitals back to GPs to reduce bureaucracy and free up appointments. Apparently this will be done through "more co-ordinated working between GPs and hospitals, wider use of primary care staff and better use of technology". He believes that these referrals account for around 2.5% of appointments, and could give "two hours a week back to each GP".

He also announced that the government will ensure that each patient has a named, responsible GP which will be included in the 2015/16 GP contract. This is an extension of the 2014-15 agreement which required all patients over the age 75 to be given a named accountable GP. By 31 March 2016 all practices will need to include on their website a reference to the fact that all patients have been allocated a named accountable GP. So we are going back to the good old days when we always did have a named GP!

Nurses added to shortage occupation list

During 2015 more than 63% of Trusts actively recruited nurses from outside the UK – Italy, Spain and Portugal were the most targeted countries. Despite this, 7 out of 10 recruitment campaigns aimed at EU countries were not successful and 1 in 10 nursing jobs remain vacant, ranging regionally from 7 to 18%.

A report, ***Health at a Glance 2015,*** from the Organisation for Economic Co-operation and Development has shown that a minimum of 47,700 more NHS nurses are needed to meet the average in other countries including Italy, France, Germany, the USA and Canada. This would mean an increase in NHS costs of £1.66 billion a year.

The report also showed a need for 26,500 more doctors to meet the same average, an additional £2.4 to £2.6 billion annually.

Late in 2015, it was announced that nursing will be added to the government's list of shortage occupations on an 'interim basis'. So nurses from outside the EU applying for jobs in the UK will have their applications prioritised in an attempt to improve staffing levels. However, Jeremy Hunt said that the changes are only temporary to "prevent the NHS having to pay rip-off staffing agencies that cost the taxpayer billions of pounds a year." The RCN welcomed this common sense approach as a real victory for nurses and hope that this common sense approach is extended.

Hunt attacked over nurse bursaries

In the last spending review it was announced that student nurses will have their tuition fee grants (bursaries) removed and replaced with loans, in order to offer more training places. However, in a parliamentary debate, Jeremy Hunt was accused of "idiocy" and making student nurses his next target (06.01.16).

Heidi Alexander, Labour's health minister asked,

> *Why should a trainee nurse who spends half of their degree caring for patients not receive a bursary? If they are on a ward at 3 o'clock in the morning, why should they be expected to pay for the privilege?*

New insulins
are there any benefits?

We have discussed the various new insulins in our previous Newsletters and now the research comparing them to older insulins is starting to appear. Are there any benefits?

Tresiba vs Lantus. This clinical trial showed that, in patients with Type 1 diabetes treated with a basal-bolus regimen, the risk of hypoglycaemia induced by moderate-intensity exercise was low with Tresiba and similar to that with Lantus. (Diabetes, Obesity and Metabolism)

High-strength insulin glargine 300 units/ml (Toujeo) in adults with Type 2 diabetes. In 3 randomised controlled trials in 2496 adults with Type 2 diabetes Toujeo had similar efficacy to Lantus 100 units/ml in terms of HbA1c reduction. There was a statistically significant reduction in confirmed or severe nocturnal hypoglycaemia with Toujeo in 2 of the RCTs, but not in the third trial. Severe hypoglycaemic events were rare and not statistically significantly different between Toujeo and Lantus (NICE)

Insulin glargine biosimilar (Abasaglar)in Type 1 and Type 2 diabetes. In 2 randomised controlled trials insulin glargine biosimilar (Abasaglar) was as effective as insulin glargine (Lantus) at reducing HbA1c levels in people with Type 1 and Type 2 diabetes. The safety profile of Abasaglar is comparable to that of Lantus (NICE)

No great benefits then from these new insulins!

And another new insulin on the way…

Novo Nordisk has applied for approval in Europe of a new faster-acting insulin aspart. It is a meal-time insulin intended to improve glucose control after meals (postprandial) in people with both types of diabetes. It is a new formulation of NovoRapid in which two new excipients have been added to ensure early and fast absorption.

Novo Nordisk intends to make faster-acting insulin aspart available in the prefilled delivery device FlexTouch® for Type 1 and Type 2 diabetes as well as for pump therapy. (*09-12-2015 /GlobeNewswire /Source: Novo Nordisk A/S / : NOVO B /ISIN: DK0060534915*)

Do we need another faster-acting insulin?

In order to achieve approval no doubt the new insulin will be safe. The trials are only short-term and the outcomes that are being measured are blood glucose levels after meals and the effects on HbA1cs and hypoglycaemia. Will lowering post-meal blood glucose levels reduce the complications of diabetes compared to other insulins? We don't know because the trials are short-term and assume that if HbA1cs are lower, the risk of complications will be lower but surely this is something we need to know?

For many… paying for GPs is simply not an option

A YouGov survey of 1995 adults in the UK showed that nearly 1 in 4 adults would pay part of the cost of a visit to their GP.

- Certain social groups are more willing to pay than others – 26% of those in managerial jobs and 20% of those in manual jobs were willing to part pay.
- 56% believed that the NHS can't do everything due to financial pressures.
- 50% were prepared to pay for chiropody, 45% for rehabilitation and 36% would contribute to counselling fees.

So the survey showed that for many people paying for GPs is simply not an option. We must remember that many of these people may well have long-term conditions such as diabetes, so their payments would not be a one-off cost but a regular cost.

Asylum seekers and diabetes

Quite a few of our members have expressed concerns about asylum seekers with diabetes and whether they have been able to access insulin and other medicines. On December 16th 2015, Lord Roberts of Llandudno asked in the House of Lords, what medical support is available to asylum seekers with diabetes in refugee camps across Europe. This was answered by Lord Bates:

> *"Each EU Member State is responsible for the welfare of asylum applicants on their territory. The UK government bears no responsibility for asylum seekers who are on the territory of another Member State and has made no assessment of the support available for diabetic asylum seekers in other parts of Europe."*

We can only assume from this that the government is ensuring that asylum seekers in this country receive the insulin and medicines they need but play no part in what happens in other countries such as Greece where many of them land.

DIABETES in older people

Diabetes Older People's Network makes pledge

At the third National Conference of the Older People's Diabetes Network (OPDN) a commitment was made to improve the care of older people with diabetes. The OPDN is hosted by Diabetes Frail, a not-for-profit organisation dedicated to excellence in diabetes care – www.diabetesfrail.org

The conference took place at Aston University in November 2015. The network's Clinical Lead, Professor Alan Sinclair said: "The objective of the network is to bring together health and social care professionals who share the aim of ensuring older people with diabetes get the best possible care. There is a real commitment from all of the speakers and delegates to go away and work towards improving the care of older people with diabetes."

Professor Sinclair gave a presentation about the emergence of frailty as a complication of diabetes. The other topics covered were withdrawing oral glucose-lowering medications in frail older people with diabetes, the cardiovascular safety of glucose-lowering agents and an update on modern treatments with DPP4-inhibitors, GLP-1 agonists and SLGT2 inhibitors. Professor Roger Gadsby talked about care homes, diabetes and polypharmacy (the prescribing of many drugs) and Jenny Hirst from IDDT spoke about the benefits of the charity's Diabetes Passport for Care Settings.

There were also workshops exploring the National Care Home Diabetes Audit and identifying key research questions from a patient's perspective.

Note: if you would like IDDT's Diabetes Passport for Care Settings, call IDDT on 01604 622837 or email enquiries@iddtinternational.org

Less aggressive treatment for people with heart failure and Type 2 diabetes

A study at Dundee University has shown that there are dangerous effects from both under and over-treating diabetes in those with diabetes and chronic heart disease. It found that people with the two conditions should have their diabetes treated less aggressively.

The American Diabetes Association already recommends that elderly people with Type 2 diabetes should be treated less aggressively and this study suggests that this should also be extended to people with Type 2 diabetes and heart disease.

In this study 1,447 people with both conditions were monitored between 1993 and 2010 and:

- There was an increased risk of premature death in people whose blood glucose levels were outside the HbA1c range of 7.1 – 8.0% (54.1 – 63.9 mmol/mol). This means more people died if their blood sugars were above or below this range.
- This occurred in people treated with drugs but not in those treated with diet only.
- There were fewer premature deaths in those on low risk medication, such as metformin compared to those treated with medication with high risk of hypoglycaemia, such as insulin.

According to the lead researcher, clinicians have struggled with how aggressively to treat diabetes in those with heart failure, so hopefully this research will help to guide future treatment.

Pomegreat drinks now have added sugar!

IDDT's logo has been on Pomegreat drinks in some of the major supermarkets and we were happy to endorse this drink because Pomegreat was sweetened with a natural fruit extract. This was shown to mitigate the effects of sugar whereas many other fruit juices contain fructose or added sugar. These are fast-acting sugars and lead to raised blood glucose spikes.

However, the company making the Pomegreat has been taken over by an American company and from the end of January 2016, Pomegreat will contain added sugar. Therefore from the end of January 2016, IDDT will not be supporting its use and our logo will no longer appear on the products.

IDDT News

IDDT says 'Thank You'

Congratulations go to Stuart Hood for his 70th birthday! We have to also say a big thank you to him and his family and friends for making donations instead of presents and giving £150 to IDDT. Many thanks for thinking of IDDT.

And thanks to you!

We would like to say a big thank you to all of you who bought our Christmas cards last year. We sold over 750 packs and every pack sold raises funds that help us continue our work. We will be selling cards again later this year and hope you will buy your cards from us again.

Thank you for helping developing countries

As you may be aware IDDT acts as the UK arm of an organisation called Insulin for Life, collecting unwanted insulin and diabetes supplies to send to developing countries. In 2015 we sent out over 3,800 pens, vials and cartridges of insulin worth over £32,000, along with nearly 40,000 items of various diabetes supplies – so a big thank you to all of you who donated items.

We would also like to say thank you to all of you who continue to sponsor a child looked after by the Dream Trust in India – last year you raised over £7,800!

It's important to know…

In view of the publicity about unethical practices by some charities, it is important that we let members know that IDDT does not fundraise by cold calling or mass mailings, which we consider to be intrusive and unethical. We would also like to reassure members that their details are not passed on, or sold, to any other organisation under any circumstances.

A date for your diary

This year we are holding our bi-annual, one day Conference, entitled 'Best Foot Forward'. It will be on Saturday, October 15th 2016 at the Kettering Park Hotel, just off the A14, so easily accessible by road and there is a good train service from London. As the last conference in 2014 was so well received, the programme will be similar. There will be speakers, 'Question Time' and group discussions led by the team of nurses from Kings Lynn. Further details and a Conference Programme will be sent to you with the June Newsletter.

We hope to see many of you there, so put the date in your diary

Pharmaceutical NEWS

Trials of glucose monitoring device to help professional drivers manage their Type 2 diabetes

A new glucose monitoring device aims to help lorry drivers and other professional drivers to manage their diabetes. It combines real-time glucose monitoring and messaging technology with medical health coaching support.

The device, created by Connect Health Solutions, is expected to increase patient adherence, prevent future health complications, lower costs and reduce the risk to road safety. It is currently being tested by bus drivers at First Bus in Halifax.

As Type 2 diabetes is increasing so is the number of professional drivers with the condition and the manufacturers say that the device is ideally suited to the management of Type 2 diabetes for professional drivers as it will provide support and confidence to both drivers and employers.

Glucagon Patch

Glucagon currently available is injected for the treatment of severe hypoglycaemia. It stimulates the liver to convert glycogen to glucose which is then released into circulation. Zosano Pharma has announced positive results from clinical trials of its glucagon patch, ZP-Glucagon - a rapid onset, transdermal micro-needle glucagon patch. The trials compared the patch with injectable glucagon in 16 people in two doses, 0.5 mg and 1 mg. The results

showed that 100% of the people achieved normalised blood sugar with both strengths of the patch and both strengths had sufficiently rapid onset of action and similar response times.
In emergency, pressing down a patch of glucagon may be easier to use than an intramuscular injection which has to be mixed, drawn up and injected.

Intranasal glucagon to treat hypoglycaemia in Type 1 diabetes

Researchers have been investigating needle-free intranasal glucagon. They compared the usual intramuscular glucagon with intranasal glucagon and found that intranasal glucagon was highly effective at treating hypoglycaemia in Type 1 diabetes. On average, the intramuscular version took 16 minutes for people to come round and the intramuscular took 13 minutes. Head/facial discomfort was reported in 25% of intranasal and 9% of intramuscular cases, nausea occurred with 35% and 38% cases respectively.

New testing device being tested

A new device developed in Mexico, Glucosalarm, measures glucose levels in urine and could end the need for finger prick tests. The device is attached to the toilet and transmits blood glucose readings to a smartphone.

The sensor is activated via bluetooth from a smartphone then, when urinating, a few drops are deposited on the collector where it is mixed with enzymes that react with the glucose present and produce a coloured compound. The sensor measures the intensity of the colour, calculates the concentration of glucose and sends the results to the phone in 15 to 40 seconds. If the result is too high an alert can be sent to the family, the doctor or even to an emergency number requesting an ambulance. The Glucosalarm is currently being tested in people with diabetes.

Intestinal insulin patch

A study presented at the 2015 American Association of Pharmaceutical Scientists Annual Meeting, has shown that an intestinal patch which can be swallowed as a capsule, can effectively control blood glucose levels.

Insulin cannot be taken through the mouth because enzymes in the gastrointestinal tract break down the insulin and make it inactive. However, this patch is made from a protective shell of muco-adhesive polymers with insulin inside them which can be carried through the body. The patch is also treated with an enhancer to improve the insulin delivery. Once the pill has been swallowed, it is designed to dissolve and release the patches of insulin which then stick to the intestinal wall for a more effective delivery of insulin.

When tested on diabetic rats, the patches released 100% of the insulin and enhancer within 5 hours and the blood glucose levels dropped significantly. The researchers' next plan is to find out how intestinal patches can achieve faster or extended release of insulin.

The latest on the NHS Diabetes Prevention Programme

In November NHS England issued a Pre-Qualifying Questionnaire (PQQ) to secure services for the first wave of the NHS Diabetes Prevention Programme's (NHS DPP) national roll out. The questionnaire is the first stage of the process to determine which service providers have the capacity and experience to deliver the behaviour change programmes.

Following the launch of the programme in March 2015, 7 'demonstrator' sites have been trialling different ways to help those at high risk of developing Type 2 diabetes to lower that risk. By November 2015, 4 sites were establishing their programmes and 3 were already launched.

NHS Diabetes Programme Director, Dr Jim O'Brien, reports that over three quarters of CCGs and local authorities have shown an interest in the national drive to prevent Type 2 diabetes and 66 joint expressions of interest have been submitted to become part of first wave sites.

Dr O'Brien also reports that from July to November 2015, 19 people have taken part in User Involvement (UI) Group meetings organised by Diabetes UK, to ensure the needs and experiences of people at risk of developing Type 2 diabetes are at the heart of the NHS DPP. The discussions have covered a range of issues including how to motivate people to join one of the demonstrator site programmes, how to address any barriers to participation and the importance of tailoring activity to an individual's needs. Their views have been fed into the programme development via the Programme Management Group. Are 19 people really enough to give views that are representative?

NHS News

Trials to keep people healthy at home

NHS England Chief Executive, Simon Stevens, has announced the launch the first wave of NHS Innovation 'Test Beds' - 7 new technology trials where the NHS will partner with technology companies, such as IBM and Philips. The aim is to keep people with long-term conditions healthy at home.

One of the Test Beds will involve people with diabetes and will bring together mobile health self-management tools (sensors and supporting software) with the latest connecting monitoring devices. This will enable people with both types of diabetes 'do the right thing at the right time' to self-manage their condition.

Other Test Beds will include older people being remotely monitored so that doctors can help as soon as they are needed and mental health patients will use apps and technology which will be monitored so that specialist staff can step in before a crisis.

According to NHS England, the results of the trials will be "rigorously evaluated" with the aim to roll out successful schemes and provide evidence to give more areas the confidence to adopt the innovations over the coming years.

GP Sunday opening not wanted by the majority

A survey of more than 800,000 patients by East Anglia University suggests that only 2% of people would attend a GP appointment on a Sunday. It also found:

- 4 out of 5 people are happy with the traditional GP opening times and it was mainly younger, working people who wanted weekend appointments.
- 81% of people did not find traditional GP opening times inconvenient.
- 15% said that weekend opening would make it easier for them to see a doctor but 74% of these preferred Saturday opening.

The lead researcher reported that some weekend opening pilots have already begun to show a lack of demand for Sunday appointments in addition to Saturdays but it may benefit certain patients groups, such as those with some long-term conditions. People with angina, diabetes, hypertension, long-term neurological problems, arthritis, back problems, asthma, kidney or liver disease and cancer are most likely to use a weekend service.

The government's flagship policy is that people should have access to GPs seven days a week by 2020, which may well be helpful to people with long-term conditions but not to the vast majority of people.

Health leaders trying to improve GP access without understanding

A National Audit Office (NAO) report said that both NHS England and the Department of Health are trying to improve access to general practice, but are making decisions without fully understanding the current system. (27.11.15)

The report showed that nationally:

- 92% of people live within 2 kilometres of a GP surgery.
- There are large differences between urban and rural areas with only 1% of people in urban areas not having a GP surgery within 2 kilometres, compared with 37% in rural areas.
- People's experience of accessing general practice remains positive, with almost 9 in 10 patients reporting in 2014-15 that they could get an appointment but patient satisfaction with access is gradually and consistently declining.
- A fifth of patients report that opening hours are not convenient.

Amyas Morse, head of the NAO, said that the challenge for the NHS is how to maintain people's positive experience of accessing general practice and reduce the variation but although the Department of Health and NHS England are working to improve access, they are making decisions without fully understanding either the demand for services or the capacity of the current system. One of the NAO's recommendations is that NHS England should improve the information it collects on demand and supply in general practice.

The Major Project Authority Report 2014/15

Maybe you've never heard of it either but the Major Project Authority (MPA) was created under a Prime Minister mandate in 2011 to improve the delivery of major government projects. Their work covers 188 projects with a combined cost of £489 billion over the next 40 years, yes 40 years! The latest report from the MPA shows there are 21 projects flagged up as problematic. Four of these are rated as 'red', the worst rating, which indicates that the projects are either unachievable or close to failure. Unfortunately 3 of these are in the NHS:

- The Care.data project run by the Health and Social Care Information Centre (HSCIC). This is the controversial project to collect information from patients and the roll out has been delayed because of objections about confidentiality and how the information will be used.
- The NHS Health and Social Care Network which aims to provide a safe and efficient way for health and care organisations to exchange information electronically.
- The NHS Choices website.

From our own correspondents

Broken cartridges

Dear Jenny,

Please could you put a small reminder in your Newsletter as I have recently had 2 NovoRapid cartridges from a box of 5 that were cracked. The first one I didn't spot until I used some of it, so no idea if I got the full dose, the second I found because I checked my stock in the fridge. I have had damaged cartridges before and know I should always check them before loading the pen, but probably like most people, I've just got careless or complacent and don't check. The damage could happen anywhere along the supply chain, so you can't put the blame on anyone. People just need to remember every so often to always check the cartridges before use and most probably do but…
By email

Diagnosed in 1959!

Dear Jenny,

Quite by chance I came across one of your leaflets in Stowmarket Library. I was diagnosed at the age of 10 months in 1959, and have had many complications. In 2015 I had a successful kidney and pancreas transplant at Addenbrooke's Hospital. My problems stem from poor control in childhood and adolescence caused by denial, the treatment of the day and not understanding signals. I therefore self-published a book entitled Fifty Years of Malfunction, which concentrates on what effects diabetes has had throughout my life, and how I came to understand signals later in life.

The following excerpt took place while I was a student in 1978:

"It was at this time that King's College Hospital noticed the first signs of retinopathy, a word I had not yet encountered although I was well aware that many elderly diabetics were blind. With this in mind it is remarkable that I am writing these words some thirty years later (now thirty-six). One evening, in my first year at King's, I was sitting at my desk, amazingly doing some work, when I was suddenly unable to see out of my right eye. It was as if a bottle of drawing ink had been poured into the eyeball. Blind panic took control. I ran down Champion Hill and across Denmark Hill, straight into the Hospital.

Arriving at A & E, I was greeted by the ubiquitous unsympathetic gaze of a receptionist. A doctor duly appeared and informed me that I had had a haemorrhage and that nothing could be done until it had cleared enough to see what damage had occurred. I was put under the care of Mr E.W.G. Davies and during one of his consultations, he asked me about my life. I told him that I cycled into King's College in the Strand every day; that I played squash; and that I drank moderately (I'm sure he didn't fall for this). His response was that I should stop burn-ups on the Edgeware Road, that I should avoid squash, moderate my alcohol intake, and that I should shun aerobic exercise or anything that would make me red in the face. If I did not heed his words, I would be blind by the time I reached twenty-three."

The book generally uses interesting or amusing anecdotes as I have tried to avoid making it a dry scientific document.

Grant's book costs £10.00 payment via PayPal or cheque payable to R G Vicat with all proceeds going to the Transplant Department of Addenbrooke's Hospital. If you would like a copy contact: Grant Vicat, 20 High Street, Ixworth, Bury St Edmunds IP31 2HH, email rgvicat@gmail.com or tel 01359 231992

RESEA

Artificial pancreas entering clinical trials for long-term use

The artificial pancreas is a closed-loop computer system which could help people with Type 1 diabetes. The Universities of Virginia and Harvard are to carry out two 6 month clinical trials to test the efficacy of an artificial pancreas system which monitors blood glucose levels, alters insulin doses automatically and predicts the body's needs through the course of the day.

- The first study will involve 240 people with Type 1 diabetes who will use the device in their normal daily routines for 6 months to test how it fits into their lives and how it compares with a standard insulin pump. The researchers will focus on blood glucose control and the risk of hypoglycaemia to measure the safety and efficacy of the device.
- The second study will involve 180 people for 6 months to test an advanced control algorithm that predicts a person's needed insulin levels and attempts to keep blood glucose levels within a range.

The hope is that this device can lead to an improved quality of life for people with Type 1 diabetes. However, the researchers say that the biggest challenge is the inherent uncertainty in the human body as the various stresses that impact on the body change the way it responds to insulin-controlling glucose. Physical stresses, hormonal swings and anxiety will change the balance so to control for these factors, information is needed over a longer time to be able to fine tune the algorithms to improve overall control.

Infant weight gain linked to possible Type 1 diabetes risk

Norwegian researchers have linked weight gain during the first year of life to a possible higher risk of Type 1 diabetes. The study showed that average weight gain during the first year of life is more than 6 kilograms (14 pounds) and for each additional kilogram (2.2 Pounds) of weight gained during the first year of life, babies had a 20% greater odds of developing Type 1 diabetes by the age of 9 years. However, the researchers said that early weight gain is only one of a number of factors that influence the risk of Type 1 diabetes and they do not advise that parents or doctors make any attempts to reduce babies' growth to reduce the risk of Type 1 diabetes. (Dec. 7, 2015, JAMA Pediatrics, online)

Processed foods increase the risk of autoimmune conditions

Researchers from Israel and Germany have studied processed foods and maintain that industrialised food additives may increase the risk of developing autoimmune diseases. They investigated the effects of processed food on the intestines and the development of autoimmune diseases, including Type 1 diabetes, coeliac disease, lupus, multiple sclerosis and others.

They focussed on the significant increase in the use of food additives aimed at improving taste, smell, texture and shelf life and found a "significant circumstantial connection between the increased use of processed foods and the increase in the incidence of autoimmune diseases."
The scientists argue that processed foods weaken the intestines resistance to bacteria, toxins and other non-nutritional elements and this increases the chances of developing autoimmune disease where the body's immune system attacks cells, tissues and organs as if they are foreign bodies.

The researchers recommend that families with a background of autoimmune conditions should consider avoiding processed foods.

In recent years there has been a decrease in infectious diseases but autoimmune conditions, cancer and allergic diseases have increased, so this is one of the possible environmental causes. (Autoimmune Reviews, December 2015)

Bariatric surgery in the UK is associated with dramatic weight loss 4 years later

Bariatric surgery as delivered in the UK healthcare system is associated with dramatic weight loss, sustained at least 4 years after surgery. This weight loss is accompanied by substantial improvements in pre-existing Type 2 diabetes and hypertension, as well as a reduced risk of Type 2 diabetes, hypertension, angina, myocardial infarctions and sleep apnoea.

These results suggest that widening the availability of bariatric surgery in the UK could provide substantial health benefits for many people who are morbidly obese. The researchers suggest that bariatric surgery could prevent and/or resolve many tens of thousands of cases of hypertension and Type 2 diabetes and prevent similar numbers of cases of other obesity-related illnesses among the 1.4 million morbidly obese people living in the UK. (PLoS Medicine, Dec 2015)

Psoriasis drug could protect insulin-producing cells in Type 1 diabetes

US researchers have found that alefacept, a drug used to treat psoriasis, may help to protect the insulin producing beta cells in people with newly diagnosed Type 1 diabetes. Alefacept targets the immune system which kills off the beta cells to cause Type 1 diabetes.

In the study alefacept was given to people newly diagnosed with Type 1 diabetes who were still producing their own insulin. Compared to people given a placebo (dummy drug), 15 months after the last dose of alefacept people needed to take less daily insulin and had higher levels of C-peptide, a protein produced as a by product of insulin production. Those taking alefacept also had higher levels of cells that regulate the immune system. These factors suggest that those taking the drug were making more of their own insulin. (Journal of Clinical Investigation, July 2015)

TB vaccine for Type 1 diabetes taken to the next level

The vaccine called bacillus Calmette-Guérin (BCG) has the potential to reverse Type I diabetes as it has succeeded in reversing Type 1 diabetes in mice. A new trial will last for 5 years and will test its effect on people with Type 1 diabetes between the ages of 18 to 60. It is estimated that about one million people with Type 1 diabetes still produce some insulin and the vaccine may be able to improve insulin production.

BCG is already approved as a vaccine for TB and researchers have shown that it can eliminate white blood cells that lead to Type 1 diabetes by destroying the insulin-producing beta cells.

In previous research by the authors the abnormal white blood cells were temporarily eliminated and a small amount of insulin was produced. The new trial will provide more frequent doses of the vaccine over a five year period in 150 adults with Type 1 diabetes. It is hoped that the vaccine will produce better blood sugar control and could be used to treat people who have had the condition for many years.

In the UK, research is taking place into a vaccine for Type 1 diabetes to help to delay or even prevent Type 1 diabetes in those at high risk of developing it.

Hypoglycaemia in adults treated with insulin-treated diabetes in the UK: self-reported frequency and effects

In a survey, adults with Type 1 diabetes over 15 years old with Type 1 or insulin-treated Type 2 diabetes completed 4 weekly questionnaires. A total of 1,038 respondents (466 with Type 1 diabetes, 572 with Type 2 diabetes) completed 3,528 questionnaires. The findings were as follows:

- Average numbers of non-severe hypos per week were 2.4 for Type 1 and 0.8 for Type 2 diabetes,
- 23% and 26% of non-severe hypos occurred at night, respectively.
- In the week following a hypo, the number of blood glucose tests per week increased by 4.3 for Type 1 diabetes (12% increase) and 4.2 for Type 2 diabetes (21% increase).
- Most respondents rarely or never informed healthcare professionals about their hypos.

The authors conclude that non-severe hypoglycaemia is common in adults with insulin-treated diabetes in the UK, with consequent health-related and economic effects. They also noted that as communication about non-severe hypoglycaemia is limited, the burden of hypoglycaemia may be underestimated. (Diabetes Medicine, August 2015)

Stem cells for people at risk of diabetes-related kidney disease

A study being funded by a 6 million euro grant from the European Union Horizon programme involves the production of stem cells at the Stem Cell Immunotherapy at NHS Blood and Transplant's site in Liverpool for people at risk of diabetes related kidney disease. The stem cell treatment is given by injections and is being trialled on 48 people at hospitals in Birmingham, Belfast and Italy.

The stem cells are known as stromal cells and are grown from donated human bone marrow. The researchers are investigating the ability of the stromal cells to release proteins to reduce tissue damage caused by inflammation in the kidneys. This has already been successful in animal trials leading to significantly improved kidney function.

The participants will be divided into two groups – the first group will receive the stromal cell injections in different doses and the second group will be given a placebo. The researchers will be able to assess whether the stromal cells have a significant effect on kidney function. End stage kidney disease is responsible for 40,000 deaths per year in the UK with diabetes being the most common cause of end stage kidney disease. Three quarters of people with diabetes will develop some level of kidney disease (nephropathy).

If this research is successful, it could remove the need for kidney transplants, however, the risk of kidney damage can be reduced by tight blood glucose control.

Latest UK recommendations for fibre intake

The Scientific Advisory Committee on Nutrition (SACN) published its final report on Carbohydrates and Health in July 2015 with new recommendations for intakes of sugar and fibre in the diet for the general public. The SACN recommendations for sugar have received a lot of coverage in the press – a reduction of added sugars or sugars in honey, syrups and unsweetened fruit juices to 5% of dietary energy. However, the recommendations include a significant increase in the intake of fibres across all age groups, advising an increase of around 12g of fibre per day for adults. The reason behind this recommendation is that studies show that fibre can play a role in reducing the incidence of cardiovascular disease and Type 2 diabetes.

SACN specifically highlights the importance of foods containing whole grains to increase fibre intake but the UK has no legal definition of the term whole grain and no recommended intake as is the case in other countries such as the US, Denmark and Singapore.

The British Nutrition Foundation has studied the practicality of eating 30g of fibre a day and has concluded that it means eating 8 portions of fruit and vegetables a day with all meals based on starchy foods, regular consumption of whole grain foods and high fibre snacks with very few higher fat or sugary snacks. It is debatable whether these changes are achievable for most people because they mean very significant changes in eating habits so we have to question the point of recommendations that are probably unachievable. Will they simply be ignored?

Some simple ways to increase fibre intake:

Swap this	To this	Increase in fibre intake
Slice of white bread (35g)	Slice of wholemeal bread (35g)	1.1g fibre per slice
30g Cornflakes	45g Shredded Wheat	4.0g per bowl
30g puffed rice cereal	30g Cheerios	1.8g per bowl
230g cooked white pasta	230g cooked wholemeal pasta	3.9g per portion
Bag of crisps (25g)	30g handful of nuts	0.7g per portion

(Source: Nursing in Practice, no.87)

Below are the recommendations for various age groups:

Age Groups	Daily fibre recommendation
2 – 5 years	15g
5 – 11 years	20g
11 -16 years	25g
Above 16 years	30g

Skin disorders and Type 1 diabetes

Diabetes is known to be associated with skin disorders and one study [Diabetes Care, August 2007] has shown that about two thirds of young people with Type 1 diabetes have skin disorders. These usually develop after the diagnosis and early in the course of the condition but they can develop before diagnosis and they can be the first sign of Type 1 diabetes.

This study compared the frequency of skin conditions in 212 young people with Type 1 diabetes between the ages of 2 and 22 and 196 healthy volunteers of the same age. The results showed that:

- 67% of people with diabetes had at least one skin disorder compared with only 26% of healthy volunteers.
- Active skin conditions considered to be associated with diabetes were seen in 38% of the young people with diabetes.
- Ichthyosis, dry patches of scaly skin, was seen in 22% of those with diabetes compared with 3% of the healthy volunteers.
- Rubeosis, abnormal growth of blood vessels causing red discolouration, occurred in 7.1% of those with diabetes with none in those without diabetes.
- Fungal infections were seen in 4.7% of those with diabetes and only 1.5% of those without diabetes.
- The frequency of skin reactions to insulin was 2.7% which the authors considered to be 'fairly low'.

Based on their findings of the frequency and variety of skin disorders associated with Type 1 diabetes, the authors of the study recommend that a dermatologist is included in the group of doctors who treat people with diabetes. Having this as an automatic facility in our NHS system may not be possible but if you have skin problems this study does support you in asking for a referral to see a dermatologist.

Young people with Type 1 increasingly likely to be obese, experts urge dietary changes

New research looking at young people from a variety of countries, has shown that young people with Type 1 diabetes are increasingly likely to be obese. They found that nearly 40% were overweight and higher BMI was closely linked to higher HbA1c levels.

The study does not suggest that this is a cause of Type 1 diabetes but that weight gain or obesity can develop after Type 1 diabetes has been diagnosed. As diabetes management has improved over the years, more calories and glucose are retained by the body and this combined with excessive consumption of processed foods, as in the rest of society, is the cause. Overweight and obesity can lead to serious complications in Type 1 diabetes later in life, increasing the risk of insulin resistance, severe hypoglycaemia and cardiovascular disease. The researchers urge that young people with Type 1 diabetes get into healthy eating habits at a young age and maintain this with plenty of exercise. Historically, children and adolescents with Type 1 diabetes tended to be thinner than their non-diabetic peers and while processed foods and better management may be contributory factors, there are other differences which may add to this increase in weight. Remembering that insulin increases weight, those no longer having a carbohydrate restricted diet but matching insulin to amount eaten at each meal could increase weight means that there could be increases in the daily doses of insulin. Just a thought…(Journal of Pediatrics, July 2015)

New guidance to keep young people with diabetes engaged

There are currently 27,000 young people with diabetes, 96% of whom have Type 1 diabetes. In January 2016, NHS England issued new guidance aimed at keeping young people with diabetes engaged in their treatment by using social media, texts and Skype. This focuses on improving the service for young people moving from child to adult services. This is a difficult time and one when they often lose interest in their diabetes and attending clinic appointments.

Evidence shows that the longer time between appointments, the higher the chance of a young person developing psychological problems such as anxiety and depression and they also tend to have higher HbA1cs. Diabetes is also linked to higher rates of eating disorders.

This system is called the Diabetes Transition Service Specification and is designed to help commissioners to develop local plans to help young people with diabetes. The guidance says that each service specification should include three key stages of transition:

- Paediatric preparation.
- Planned transfers.
- Supported integration into adult and new care settings.

The NHS outcomes framework measures should also form part of the local plans and this includes:

- Provision of a joint agreed care plan before transfer to next service.
- Agreed goals for the individual.
- Preventing complications.
- Measurement of HbA1c levels every 3-6 months.
- Reduced unplanned hospital admissions between ages 13 and 25 monitored.
- Monitor nine key care processes including weight over time to monitor indications of an eating disorder.
- Provide a range of educational modules to help with understanding.

Breath test can detect Type 1 diabetes in children

UK researchers have developed a simple breath test to diagnose Type 1 diabetes before children and young people become seriously ill and before the onset of diabetic ketoacidosis (DKA).

Blood samples were taken from 113 seven to 18 year olds with Type 1 diabetes to measure their blood glucose levels and ketone levels. They were then asked to exhale into a special tube designed to measure the presence certain gases in their breath, including acetone which is produced during the development of DKA. The researchers found that raised acetone levels coincided with raised ketone levels although there was no apparent relationship between breath acetone and blood glucose. Therefore they concluded that acetone levels accurately predict the levels of ketones in the patient's blood.

The researchers are working on the development of a non-invasive breath test that could be used to help to identify children with new diabetes before DKA. It could also be used on sick days to prevent hospital admissions by providing a warning before DKA sets in.

InDependent Diabetes Trust SNIPPETS

Doctors don't always follow the advice they give patients

According to a British Medical Association survey involving 104 doctors from Hampshire, only 21% of doctors would always complete a course of prescribed tablets and 15% would not take a statin if their GPs recommended them. Professional advice is regularly sought informally and at least 35% of doctors tend to self-prescribe antibiotics for an infection rather than see their GPs. When seeing a doctor as a patient, the assessing doctor tends to behave differently from the way they would with other patients – 26% of doctors would do more investigations, 22% would be more likely to treat and 46% would be more likely to refer onwards.

Scottish Government funds competition to help Type 1 diabetes

Nicola Sturgeon's Scottish Government has set aside a £500.000 for a competition to fund innovative technology to help people with Type 1 diabetes. The competition, the 'Small Business Research Initiative' is open to companies of all sizes to develop an innovative process, material, device, product or service that will change the lives of people with Type 1 diabetes. The Scottish Enterprise is providing 50% and the remaining 50% by the Scottish Government. Scotland has one of the highest incidences of Type 1 diabetes in the world.

Rise in over-the-counter pharmaceutical sales

According to information published by Key Note, there has been a rise in sales of over-the-counter (OTC) pharmaceutical items. This has been caused by a rise in prescription charges in England, the NHS budget reduction, the Government's promotion of self-care and self-medication and the switching of some prescription medicines to OTC products.

Analgesics are the largest sales within the OTC market, accounting for 21.5% of the total with around two thirds of the UK adult population purchasing them every year. This is followed by skincare products (19.4%) with foot care skin treatments making up the largest proportion of these OTC sales.

Foot care products sales have grown year-on-year over the past 5 years as a result of the UK's ageing population and rising obesity rates, as well as increased awareness of products regarding foot-related problems, such as dry cracked feet. This can only be a good thing for people with diabetes or at risk of diabetes.

Coffee found to have health benefits!

Research published in the Times (17.11.15) shows that moderate coffee consumption is linked to reduced incidence of diabetes (Type 2) and a range of cardiovascular and neurological diseases. The health benefits are the same whether decaffeinated or not. The article also reports that there is evidence that dark chocolate may reduce blood pressure, the risk of stroke and some cancers and red wine may lessen the risk of depression and cancers of the colon, prostrate and lung. The article ends by saying there are two keys ways to interpreting conflicting health advice – moderation and health scepticism!

Recommendations for smaller portions in the US

A report in The British Medical Journal (04.12.15) suggested that in the US reducing food portion sizes may cut average daily calorie consumption by 22% to 29%. They also suggested for a large-scale impact, portions may need to be similar to what they were in the 1950s, when a hamburger was 4 ounces, compared with 12 ounces today, and a serving of french fries was 2.4 ounces, compared with 6.7 ounces today.

Dance lessons effective at burning calories

A study in the UK at the University of Brighton found dance classes were better at burning calories than cycling, running or swimming for the same amount of time. The researchers found that dance not only appears to increase positive and reduce negative emotions, which are typical effects of exercise, but dancing also actually reduced feelings of fatigue too. Dance styles in the study included ballroom, ballet, salsa, contemporary, street and swing. (Dec 2015)

From your editor – Jenny Hirst

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