



InDependent Diabetes Trust

December 2013 Newsletter



Seasonal Greetings to all our readers

The Trustees and staff of IDDT wish all our members a Happy Christmas and a Healthy New Year. We would also like to thank you for your help and support throughout 2013.

As we look back over 2013, we can reflect on a successful, although sometimes difficult, year for IDDT. Unfortunately, we cannot forget the difficulties - the economic climate is affecting IDDT just as it affects us all as individuals. However, we should look at our successes! Our quarterly



publications are now reaching 30,000 people. Successful because in 2013 we have been able to develop two new booklets “Passport for Diabetes in Care Settings”, which has proved to be very popular and just recently and “Type 1 Diabetes – Know the Facts”. We have launched the first of a series of study days for our health professional members and have great hopes for these in the future. We have forged relationships with other bodies; we have been invited to and attended several Government think-tanks about the future health care for people with diabetes, as well as forming positive working relationships with the English Community Care Association (ECCA) and the Institute for Diabetes in Older People (IDOP).

Our successes are particularly remarkable because in 2014 IDDT celebrates 20 years since its formation! In 1994 just a handful of us got together to form IDDT, with little money but a lot of determination! The determination was to maintain the availability of natural animal insulins for those people who experience adverse effects when using genetically engineered ‘human’ insulin.

Twenty years later, the UK is the only developed country where animal insulin is available, so yes, we have been successful in our original aims. However, when the handful of us started out, we didn’t plan for an organisation with a long-term future or one that would grow to the extent that IDDT has grown. We set out to fight a battle with the expectation of winning or losing.

Our fight for animal insulin taught us a great deal and we realised that the cause is actually greater than just the animal insulin situation and it is still a cause to fight for – the health and wellbeing of children and adults with diabetes and their right to an informed choice of treatment and respect for their experiences and views. Perhaps in the era of the new NHS, the need to advocate for the health and wellbeing of those with diabetes is even greater. Yes, the new NHS is supposed to put patients at the centre of care but this does not always seem reflected in the services people receive, so it is just as vital now as it was nearly 20 years ago that we ensure that people receive their right to an informed choice of treatment and receive respect for their experiences and views.

So as we approach 2014, our aims are clear – to provide information and support for people with diabetes, to listen to them, to maintain our independence from the pharmaceutical industry and in this economic climate, to survive! With our usual determination and your continued support and generosity, we will!

Articles in this issue

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Christmas Time



Christmas is a mixture of many things – presents, excitement for children [and adults] and a busy time for everyone but it can be a worrying and stressful time too, especially if this is your first Christmas with diabetes. Celebrating Christmas is not just a time for presents but also about food! We all eat a lot more than we should and we tend to eat

much more of the sort of food that is not exactly ideal for children or adult diabetes. The problem with diabetes is that you can’t take a day off from it but it is important to remember that it is a time to be enjoyed with family and friends.

Our Consultant Dietitian, Dr Mabel Blades, has prepared some Christmas recipes for us with nutritional values calculated for us. These include:

- Traditional Christmas Dinner,

- Christmas Pudding
- Inspiration buffet ideas – kebabs and nibbles
- Christmas swaps

If you would like a copy of our 'Christmas Tips' give us a call on 01604 622837, email enquiries@iddtinternational.org or visit our website www.iddtinternational.org

IDDT Launches New Booklet

"Type 1 Diabetes – Know the Facts"

IDDT has launched this new booklet to provide information about Type 1 diabetes in non-medical language. It completes our range of booklets about diabetes which now consists of:

- **Understanding Your Diabetes** – which explains the different types of diabetes, the causes and treatments.
- **Type 1 Diabetes – Know the Facts** – which provides information about Type 1 diabetes, insulin treatment, diet, exercise and blood glucose testing.
- **Type 2 Diabetes – Management and Medication** – which provides more in depth information about Type 2 diabetes and the various treatment options.

For copies of 'Type 1 Diabetes – Know the Facts', please complete the flier with this Newsletter or contact IDDT on 01604 622837 or email enquiries@iddtinternational.org

IDDT News

Christmas Cards

We would like to say a big thank you to everyone who has purchased our Christmas cards. We have sold more than ever this year and we are very grateful for the support. We still have cards available so either visit our

website www.iddtinternational.org or give IDDT a call on 01604 622837

Research - don't forget to keep up-to-date

Visit Journal Watch on the homepage of our website:

www.iddtinternational.org

Keepsight masks

For people who need supplies for their Keepsight masks, please call 01202 679797

For healthcare professionals

At the end of another busy year, IDDT wants to say a big thank you to all the healthcare professionals who have looked after people with diabetes throughout the year. We try to help by providing all our booklets FREE of charge and we are really pleased that 2013 saw a large increase in the numbers of our booklets being ordered by healthcare professionals for their patients.

The booklets continue to be FREE, but unfortunately we have had to introduce a delivery charge for orders of over 20 booklets every 6 months. We are aware that it can be difficult to find a system within the NHS for obtaining even this small amount, but we are a charity. We have no government funding and we do not accept pharmaceutical industry funding so that we are, as our name suggests, 'independent'. We rely entirely on voluntary donations, largely from people with diabetes so we ask for your understanding that IDDT has no option but to make a delivery charge to help to secure the future of the charity.

Be Warned!

List cleaning

The GP, 14th October 2013 warned that NHS England has sent letters to more than 700,000 patients in London asking them to return a form by post to confirm their current address. GP leaders are worried that people who fail to respond will be removed from the practice lists without their knowledge.

So if you receive such a letter, don't ignore it!

Extracting information from patient records

Patient data is to be extracted from GP practice systems in a scheme led by NHS England to help medical research. The information to be collected will be on disease diagnosis, prescriptions, vaccination status and more. Some GPs fear that even though the information is supposed to be anonymous, patients could be identified as postcodes and NHS numbers will be extracted.

A letter to GPs throughout England has given them approximately 8 weeks to inform patients of this extraction of information from their records. This is an opt out system – the information will be automatically extracted unless patients actively object - and GPs have called upon NHS England to make all patients aware that they can refuse to have their information used. Merely having posters in GP surgeries does not ensure that all patients are being informed. It is being argued that as medical records are confidential, patients should give their consent and to remove information without this could put GPs in breach of Data Protection laws.

A warning - obtaining pump consumables when moving areas

We live in a country that has a 'National' Health Service but one of our members whose 24 year old daughter has Type 1 diabetes and uses an insulin pump has discovered that it is not truly a national provider.

The 24 year old received approval by her local PCT for pump funding in 2009 when she lived at the family home. Now, having moved to London, the supplier of her pump consumables [infusion sets and cartridges] is refusing to dispatch her order until she gives them the address of her new provider who will be footing the bill. This has proved a long and tortuous process with inevitable delay.

Her mother writes, "My daughter should not be in the position of having to prove herself and her eligibility every time she changes her postal address. A simple database of Named Patients, identified as living with incurable conditions, would provide the resource for this process to be implemented. In the 21st century, there seems to be a complete lack of recognition within the NHS of the mobility of the population that it serves."

If you use a pump and are moving house, it may be good to set the wheels in motion as soon as possible try to ensure that your pump supplies are available when you move. Insulin pumps are funded on a local rather than a national basis but this should not prevent people who move areas obtaining their pump supplies.

Recall of some batches of NovoMix 30

The European Medicines Agency [EMA] has announced the recall of some batches of NovoMix 30 FlexPen and Penfill because of a manufacturing problem during the filling of the cartridges, which resulted in some batches of NovoMix 30 containing too high or too low amounts of insulin units per millilitre.

According to NovoNordisk, only a small percentage of cartridges (0.14%) contain a wrong amount. However, in the affected cartridges the level of insulin may vary between 50% and 150% of the labelled insulin units, which could lead to hypoglycaemia or hyperglycaemia.

The EMA recommends that patients using NovoMix 30 FlexPen/Penfill from the affected batches should be switched to products from unaffected batches or, if such batches are not available, to alternative treatment.

The affected batches of NovoMix 30 FlexPen batches are: CP50912, CP50750, CP50639, CP51706, CP50940, CP50928, CP50903, CP50914, CP50640, CP51095, CP50904, CP50650, CP51098, CP50915, CP50412, CFG0003, CFG0002, CFG0001, CP50902, CP50749, CP50393, CP50950, CP51025, CP50751, CP50375, CP50420, CP51097, CP50641, CP51096 and CP50392.

The affected batches of NovoMix 30 Penfill batches are: CS6D422, CS6C628 and CS6C411.

The batch numbers are printed on the pen for NovoMix 30 FlexPen and on the cartridge for NovoMix 30 Penfill.

Distortion Of HbA1c Results

As we know, the HbA1c test measures the amount of glucose that has stuck to the red blood cells over the last 6 to 8 weeks [called glycosolated haemoglobin]. However, some people have variants of haemoglobin which can lead to false results.

Such variants [haemoglobinopathies] can include inherited haemoglobin variants, elevated foetal haemoglobin, and haemoglobin S and E which are prevalent in people of South East Asia, Mediterranean, and African descent.

One variant of particular concern is the sickle cell trait. People with this trait have inherited biological differences affecting the formation of their haemoglobin and erythrocytes, which in turn affects their HbA1c results. In people who have both the sickle cell trait and diabetes, using HbA1c to measure blood glucose levels can be prone to anomalies:

- falsely low or high levels
- HbA1c readings that are different than expected
- HbA1c levels that are extremely different from previous HbA1c readings
- low correlations between HbA1c and self-monitored glucose levels.

When these HbA1c inaccuracies, the fructosamine test should be used as an assessment of long-term blood glucose levels. It is a simple, low cost test that corresponds well to actual blood glucose levels in the body.

There are other conditions that can result in unreliable HbA1c test results:

- blood transfusions
- anaemia
- heavy bleeding
- kidney failure
- liver disease.

So, HbA1c should be relied upon with great caution in patients who carry haemoglobin variants or these conditions. If this applies to you, it is something you should discuss with your doctor.

Biosimilar Insulins – We Should Be Aware

Most of us have heard of generic drugs which are copies of drugs that are no longer in patent and any company can make them. While a new drug is in patent, the manufacturers can charge a higher price but once the generic version is introduced, the price drops considerably, hence they are frequently used in the NHS. Generic drugs have to be approved by the European Medicines Agency [EMA] but because they are an exact chemical copy of the original drug, they do not have to go through large scale trials and the manufacturer just has to demonstrate that they contain the same active ingredients that work in the same way, called bioequivalence.

In the UK, the insulins used are still the original insulins and copies of them have not yet been used, even though many insulins are now out of patent, or will be in the next few years. However, this could change as the EMA is already considering applications for approval of copies of Humalog. Copies of insulins are called biosimilar products, not generic.

What are biosimilar insulins?

Insulin is not a chemical drug but a biological drug which means that it is difficult to produce an exact copy that will work in exactly the same way as the original insulin. Therefore copies of insulins are called biosimilar because they cannot be said to be identical to the original.

Studies have to be carried out before biosimilars can be approved and these have to demonstrate similarity to the original insulin in terms of quality, safety and efficacy. However, these trials are likely to involve fewer participants than for a new drug so for this reason, biosimilar drugs are not as cheap as generic drugs. It is estimated biosimilar insulins would be between 30% and 70% cheaper than the original.

Are biosimilar insulins available?

Copies of Lantus, Humalog and Novorapid are already used in 27 countries where they have not had to go through the EU and US approval process. However, it is expected that they will be available in Europe, including the UK, before too long.

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What lessons have we learned from the past?

IDDT must be more aware than any patient-based organisation in the world of the problems that can occur when new insulins are introduced. In many ways we have to welcome biosimilar insulins because they will save the NHS considerable amounts of money. They should also put an end to the high prices the four insulin manufacturers have been able to charge by their effective monopoly of supplies of insulin to countries around the world. Let us also not forget that some people may find them better than their present insulins.

However, we also have to hope that lessons have been learned from the introduction of human insulin over 20 years ago. So we want to see:

- The names of biosimilars are sufficiently different from the originals so that there is no room for errors in prescribing and dispensing and so that patients are not confused.
- That EVERY SINGLE PATIENT is informed that their insulin is being changed and no assumptions are made that the insulins will be exactly the same as the originals.
- That EVERY SINGLE PATIENT is made aware that they will need to test blood glucose levels more during the changeover and that they are supplied with sufficient test strips to do this.
- That CCGs, GP practices and/or hospitals do not see the reduced cost as an opportunity to change ALL their insulin dependent patients on block to biosimilars simply as a means of saving money but that they treat EVERY SINGLE PATIENT as an individual.
- That doctors, healthcare professionals and patients are given detailed education about changing insulins, possible adverse reactions and what to do if they occur. Perhaps above all, if adverse reactions do occur, that health professionals listen to people with diabetes and believe them – they do know their own diabetes better than anyone else.

As people with diabetes, we must also learn lessons from the past, even those who were not aware of the problems with the introduction of human insulin. We must be vigilant and always check a new prescription of insulin before leaving the pharmacy and certainly before using a new batch.

Higher Water Intake Linked To Weight Loss



In the August edition of Diabetes Health, a report reminds of the importance of drinking more water. Drinking more water makes the body use more energy and a new study reinforces what we have already been told – that it may lead to greater weight loss.

A review of 11 studies with over 4,000 participants found that overall, those who drank more water lost more weight. Most researchers put this down to feelings of fullness brought on by drinking water but this latest study from Germany suggests that it could be due to more than this. The suggestion is that it could be due to ‘water-induced thermogenesis’ which causes the body to use more energy.

A study in 2003 showed that drinking 500 millilitres of water [about a pint] increased the metabolic rate by 30% which suggests that water gives the metabolism a significant boost. A study 3 years later found that the water must be chilled in order to benefit from this metabolic boost which happens as the water is warmed to body temperature.

According to a study in 2011, water may even reduce the risk of Type 2 diabetes developing. Water is the most important nutrient in our body, so drinking more of it can’t hurt anyway. This study looked at 3,615 people with normal blood glucose levels and found that those who drank 4 glasses or more a day were less likely to develop hyperglycaemia [highs] in the following years than those who drank less water.

As water is the most important nutrient for the body, drinking more of it can’t hurt!



Analogues And Injection Times

Much is written about the benefits of analogue insulins although the evidence from research suggests that for the majority of people, they are not superior to human insulin but they are very significantly more expensive. We have covered this unnecessary cost to the NHS pointing out that the excess money spent on analogue insulins that have no benefits for the majority could be spent on providing better standards of care – education, provision of more trained health professionals, better foot care, the list is endless.

What are the different insulins?

- Human insulin is genetically engineered insulin.
- Analogue insulin is made by genetically engineering, genetically engineered human insulin.
- Animal insulin is natural insulin extracted from the pancreases of pigs or cattle and highly purified.

One of the arguments in favour of analogue insulin is that the short-acting type is actually rapid-acting and can be injected immediately before a meal whereas human [and animal] should be injected 20 to 30 minutes before a meal but take a look...

The timing of rapid-acting insulin

It's nearly 20 years since the first rapid-acting insulin analogue came on the market, now there are three – Humalog, NovoRapid and Apidra. Assuming the rapid-acting insulin really was rapid, then the idea was right, it would help the body to cope with the impact of a meal of carbohydrate and help to reduce the post-meal blood glucose levels. As a result, people were told to inject immediately before eating, or immediately after eating if you don't know ahead how much carbohydrate the meal will contain.

However, in the intervening years there has been research and knowledge gained from people using continuous glucose monitors which have shown that rapid-acting insulins are more rapid than short-acting human or animal insulins but they are not particularly fast.

According to the manufacturers, the action times of rapid-acting insulin analogues are roughly: onset 5 to 15 minutes, peak between 30 to 90 minutes and duration of action about 4 to 6 hours (ref 1). In a book, Pumping Insulin [5th ed, by Walsh and Roberts] the authors noted that the above times are an underestimation of the duration of insulin. In another book, Scheiner (ref 2) claims "I think it's libellous to call these insulins "rapid-acting". Yes, more rapid than Regular insulin, but WAAAY slower than the insulin secreted by a functioning pancreas."

Since the approval of rapid-acting insulins, clinicians, through some research and lots of observations especially with continuous glucose monitoring, have learned that to adequately blunt the post meal rise in glucose levels, it's important to create a "lag time" with these insulins. A lag is defined as the amount of time that needs to elapse between the meal time injection and a meal (ref 1). This can reduce variability of blood glucose levels.

So where do we go from here?

As has been said for many years, treatment, insulin regimes and timing is individual, so a time lag might not be necessary for everyone, or necessary for every meal. Yes, it is very convenient to be able to inject or give a bolus immediately before meals, but it may be worth discussing this time lag with your diabetes team to see if it would work better for you.

If rapid-acting insulin is not really rapid, then going back to the old ways of injecting 15 or 30 minutes before a meal [according to blood glucose levels] is not too inconvenient, many people did it for years, and still do. For instance, it may mean in the morning injecting first thing, getting on with the normal morning habits and then eating breakfast. It never seemed too difficult in our house!

Even faster-acting insulins

Research is going on to develop truly fast-acting insulin that more nearly mimics the body's own insulin production in response to food. There are also devices being investigated to see if insulin can be delivered faster. All this research is quite a long way off coming to fruition, so in the meantime we have to use the type of insulin that suits each individual and in a way that suits each individual.

Ref 1. Evert AB. Nutrition Therapy for Adults with Type 1 and Insulin Requiring Type 2 Diabetes. In: Evert A, Franz M: Diabetes Nutrition Therapy, American Diabetes Association, 2012.

Ref 2. Scheiner, G: Think Like A Pancreas, 2nd ed. DaCapo. 2011.

Latest research shows timing doesn't make any difference in Type 2 diabetes

100 people with Type 2 diabetes treated with human insulin [slower acting compared to analogue insulin] were split into two groups. For 4 weeks one group waited 20 minutes after injecting human insulin before they ate and then switched to injecting and immediately eating. The other group did the same in reverse order and in both groups this was followed by a 4 week period of observation.

The results:

- All the participants had generally higher than ideal blood sugar levels but the difference between when they waited to eat and when they ate immediately after injecting was negligible.
- There were about the same number of high blood sugar episodes was about the same whether they waited 20 minutes or not.
- 87% of the participants said they significantly preferred doing away with the 20 minute wait.

The researchers recommend that people should talk to their doctors before making the change in timing and pointed out that results may enable some people to change from expensive analogues to human insulin and still have the convenience of injecting immediately before eating a meal. They also said that it should not be assumed that these findings would apply to people with Type 1 diabetes – more research is needed for this. [Diabetes Care January 2013]

NICE Updates

Insulin Degludec (Tresiba) - NICE issues Evidence Summaries for Type 1 diabetes and Type 2 diabetes

NICE Evidence Summary

NICE Evidence summaries provide summaries of key evidence for selected new medicines that are considered to be of significance to the NHS and provide useful information for those working in the NHS when a new medicine becomes available.

NICE has now issued evidence summaries for the new insulin degludec [Tresiba] for Type 1 and Type 2 diabetes in adults over 18 years. Tresiba is a long-acting, once a day insulin analogue available in 2 strengths: 100units/ml and 200 units/ml. It must be used with a minimum of 8 hours between injections. It is more expensive than all other long-acting insulins and NICE recommends that the cost should be taken into account when prescribing decisions are made.

Type 1 diabetes: Insulin degludec [Tresiba]

The NICE guidance for Type 1 diabetes [Clinical guideline 15] recommends that basal insulin supply for adults should be NPH (isophane) insulin or a long-acting insulin analogue when nocturnal hypoglycaemia or morning hyperglycaemia are problems on NPH (isophane) insulin or rapid-acting insulin analogues are used for mealtime blood glucose control.

Key points from the Evidence Summary

- Tresiba is non-inferior to Lantus [glargine] in terms of glycaemic control in Type 1 diabetes. [Non-inferior means not worse but not better either]
- There are statistically significantly lower rates of nocturnal hypoglycaemia with Tresiba compared with Lantus but the trials failed to find a difference in the rates of overall, daytime or severe hypoglycaemia.
- Although there is one 104 week study reporting some safety data, there are no published studies comparing Tresiba with NPH (isophane) insulin and none that measure patient-oriented efficacy outcomes.
- Tresiba reduced HbA1cs by between 0.1% points [1 mmol/mol] and 0.4% points [4 mmol/mol] in 2 studies up to 104 weeks lon but these were non-inferior to Lantus.

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The full Evidence Summary can be found by visiting:

<http://publications.nice.org.uk/esnm24-type-1-diabetes-insulin-degludec-esnm24>

Type 2 diabetes: Insulin degludec [Tresiba]

The NICE guidance on the treatment of Type 2 diabetes [Clinical guideline 87] recommends that the long-acting insulin analogues, Lantus and Levemir, can be considered in some limited circumstances, for example in people who need assistance from a carer or healthcare professional to inject their insulin, or in people whose lives are restricted by recurrent symptomatic hypoglycaemia. Tresiba will be included in the updated guidance. NICE also says that the high cost of insulin degludec needs to be taken into account.

Key points from the Evidence Summary

- Tresiba is non-inferior to Lantus in terms of glycaemic control.
- It reduced HbA1cs by about 1.1% [12mmol/mol] over 12 months.
- There are statistically significant lower rates of some, but not all, measures of hypoglycaemia, particularly night hypos.
- There are no published studies with a year's information comparing Tresiba with NPH (isophane) insulin and none that measure patient-oriented efficacy outcomes.

The full Evidence Summary can be found by visiting:

<http://publications.nice.org.uk/esnm25-type-2-diabetes-insulin-degludec-esnm25>

Safety for both Type 1 and Type 2 diabetes

The MHRA has issued advice to minimise the risk of medication errors associated with the higher strength, 200 units/ml formulation. The dose-counter window of the pen device shows the number of units, irrespective of strength, therefore, no dose conversion is needed.

Another new drug for diabetic macular oedema

Following the approval of Lucentis for the treatment of diabetic macular oedema, NICE has given approval to a drug called Iluvien [fluocinolone acetonide] also for the treatment of chronic diabetic macular oedema. Treatment with Iluvien does not require frequent intravitreal injections. A

patient access scheme with a discounted price has now been accepted by the Department of Health to enable NICE to give approval. The guidance can be found online: <http://www.nice.org.uk/TA271>

Dapagliflozin - new drug for Type 2 diabetes

NICE recommends dapagliflozin given with other drugs as a possible treatment for some people with Type 2 diabetes under the following circumstances:

- with metformin, as long as dapagliflozin is used in the way that NICE recommends for drugs called dipeptidyl peptidase-4 inhibitors in its guidance for Type 2 diabetes
- with insulin [with or without other antidiabetic drugs]
- with metformin and a sulfonylurea only if you are taking part in a research.

The full appraisal can be found online: <http://guidance.nice.org.uk/TA288>

NICE issues guidance for physical activity in adults

NICE is advising GPs and practice nurses to do more to identify adults who are not active enough and to encourage them to get moving. Only 39% of men and 29% of women aged 16 and over are meeting the UK Chief Medical Officers' minimum recommendations for physical activity.

The new guidance recommends that primary care practitioners should:

- Identify adults who are not currently meeting the UK activity guidelines as part of a consultation or a planned session on management of long-term conditions.
- Not to rely on visual clues such as body weight to identify adults who are inactive, but use a questionnaire that has been shown to be accurate to assess physical activity levels.
- Encourage adults who have been assessed as being inactive to do more physical activity with advice tailored to the person's health status, the person's motivations and goals, current level of activity and ability, circumstances, preferences and the barriers preventing them from being physically active.
- Provide information about local opportunities to be physically active for people with a range of abilities, preferences and needs.

The updated guidance can be found here <http://www.nice.org.uk/PH44>

What are the current recommendations for activity?

Adults (19-64 years) should be doing at least 150 minutes of moderate intensity activity over a week in bouts of 10 minutes or more. These could include vacuum cleaning, brisk walking or cycling, water aerobics, doubles tennis, pushing a lawn mower, hiking, rollerblading, volleyball or basketball. Older adults [over 65 years] should aim to be active daily.

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Blood Glucose Testing

We are only too aware that many people with Type 1 diabetes and those with Type 2 diabetes using insulin are having the number of test strips they need restricted and people with Type 2 diabetes not using insulin are not being provided with blood glucose testing strips. Let us take a look at the situation...

Blood glucose testing in Type 1 diabetes – how often is enough?

This study aimed to look at home blood glucose monitoring and how often testing should take place in order to obtain ‘good’ control as measured by the HbA1c test.

The study involved 150 people with Type 1 diabetes who were well educated about their diabetes, were using intensified insulin therapy [also called basal bolus therapy] and understood how to adjust their insulin doses.

The researchers compared HbA1cs with home blood glucose test results over a 12 month period. They recommended that participants carried out a minimum of testing 4 times a day. The final analysis concluded that:

- For 4 or less tests per day, each added test resulted in an estimated reduction HbA1cs of 0.19%
- For more than 4 tests a day there was a reduction of 0.02%

The researchers concluded that optimal control can be obtained for people with Type 1 diabetes with ‘routine diabetes care, flexible and intensified insulin therapy coupled with continuing patient education and a minimum of

4 home blood glucose tests a day’. [Division of Endocrinology Diabetes and Metabolism, University Hospital Basel, May 2013]

This research could be interpreted that people with Type 1 diabetes only need to be prescribed enough test strips to carry out 4 tests a day, especially by GPs who want to cut costs. Looking carefully, the study only involved specific categories of people so it cannot be applied to everyone with Type 1 diabetes. It also says that optimal control can be achieved along with ‘continuing education’. Do the majority of people in the UK receive ‘continuing education’ when appointments at the clinic are once a year?

Testing in people with Type 2 diabetes

In a previous Newsletter we reported a change in the evidence from an updated Cochrane Review which showed that newly diagnosed people with Type 2 diabetes who are not treated with insulin achieve significantly better HbA1cs if they have access to blood glucose testing.

Another study has reviewed 18 clinical guidelines which advised on blood glucose self testing in people with Type 2 diabetes not treated with insulin. While the reviewers raised questions about the evidence on which some of these guidelines are based, the majority of the guidelines do come down in favour of self-testing of blood glucose levels in people with Type 2 diabetes not treated with insulin.

What action is being taken?

February 4th 2013 - the UK Department of Health warned of the need for test strips in a letter to GPs, Hospital Doctors, Community Pharmacists, Chief Executives and PCTs entitled “Safe care of people with Type 1 diabetes”. The letter stated that self blood glucose testing for people with Type 1 diabetes “is essential for safety checks when feeling unwell, or in situations when the blood glucose might fall too low or too high”. It also reminded them that there are specific issues for drivers with insulin-treated diabetes.

The letter also points out that while test strips may appear to have a premium cost, the wider costs to the patient’s quality of life, their safety and ability to work and to the NHS of complications of uncontrolled diabetes, far outweigh these costs.

However, the letter could, and should, have included the need for people

with Type 2 diabetes being treated with insulin or tablets to have test strips when appropriate.

August 2013 - Diabetes UK issued a report highlighting that people with both Type 1 and Type 2 diabetes are being denied blood glucose test strips or having the number they require reduced.

- 58% people with Type 1 diabetes and 40% of people with Type 2 diabetes were refused test strips or had the number they were prescribed restricted,
- nearly 25% of those surveyed said their GP had told them this was due to restrictive policies by local health managers. [Surprising as CCGs involving GPs are now in charge of spending!]
- there was a widespread variation across the country on prescribing test strips.

October 18th 2013 - Jane Eillison, the Minister now responsible for diabetes, answered a Parliamentary Question as follows: "NHS England is aware that for a minority of people with diabetes, access to test strips has been limited when in fact access is clinically indicated. The National Clinical Director (NCD) for Diabetes, Professor Jonathan Valabhji, has liaised at NHS England with the Domain Directors for Long Term Conditions and Patient Safety, the Chief Pharmaceutical Officer and the Pharmacy and Medicines Professional Leadership Group. Discussions have reflected the fact that this is more of a problem within some CCGs than others, and therefore the NCD has undertaken, as a first step, to look at the data on prescribing variance of test strips, to those with diabetes across England so that ultimately the specific CCGs where this is a problem can be approached."

If you have difficulty with obtaining test strips or obtaining the number you need, we hope that you can use some of this information to argue your case.

Review Of Continuous Monitoring

Many studies show that continuous glucose monitors [CGMs] can be used safely to tighten blood glucose control and to ease some of the burdens of self-management of diabetes. A review has been carried out to see who would most benefit from the use of CGMs. It showed that:

- The benefits of CGM may vary based on age, type of diabetes, pregnancy, health, sleep, or heart rate.
- Accuracy and reliability are critical in current uses of CGM and especially for new and future systems that automate insulin partially, such as low glucose suspend or entirely such as the fully closed loop artificial pancreas.
- Imperfections remain in certain situations, such as hypoglycaemia, and in certain populations such as young children.
- Ongoing research on sensors and calibration software should result in better systems.

[Endocrinology, Diabetes & Obesity: April 2013 - Volume 20 - Issue 2]

Kidney Disease And Diabetes

One of the long-term complications of diabetes can be kidney disease [nephropathy] and most of us are aware that prevention of its development is one of the reasons that we need to keep good blood glucose control. Aggressive treatment of blood pressure and stopping smoking also help to prevent or treat kidney disease.

We have two kidneys which are about the size of a fist and shaped like beans. They are situated just above the waist in the back and are partly protected by the ribs. It is possible to live a healthy life with only one kidney.

What is kidney disease?

Kidney disease starts with the kidneys leaking protein [albumin] which appears in the urine. At a later stage, kidney function is affected and in severe cases this can lead to kidney failure. The healthy balance of our body's chemistry is largely due to the work of our kidneys and their function

is:

- to remove the body's waste products and excess water as urine. The waste products form from the breakdown of the protein we eat and from normal muscle activity,
- to produce hormones that help in the production of red blood cells, to build strong bones and to help to keep blood pressure under control.
- one of the most important functions of the kidneys is the control of blood pressure. High blood pressure [hypertension] is very common in people with kidney failure and can occur from the early stages of kidney damage. However, it is a 'chicken and egg' situation - high blood pressure can cause kidney failure but kidney failure can cause high blood pressure. As people with kidney disease have an increased risk of heart disease compared to the general population, it is important that high blood pressure is treated.



Diagram shows the position of the kidneys

Inside each kidney there are about one million tiny units called nephrons that filter and remove excess fluid and waste products from the blood. The entire body's blood supply circulates through the kidneys every two minutes. The waste products and the fluid that are filtered out are excreted as urine. The urine travels through tubes into the bladder where it is stored and eventually passes out of the body. If the kidneys fail, then the harmful waste products build up in the blood, called uremia, and you feel ill.

Signs and symptoms of kidney failure

- Extreme tiredness
- Nausea and vomiting
- Shortness of breath
- Difficulty sleeping
- Swelling of hands, feet and face
- High blood pressure
- Itchiness
- Loss of appetite.

How does diabetes affect the kidneys?

If there is a lot of sugar in the urine, because you are running high, for whatever reason, then this can lead to infection that can spread from the bladder to the kidneys.

In both longstanding and/or poorly controlled diabetes, the kidneys have to work hard to get rid of the excess sugar. During this process the small blood vessels in the kidneys can be damaged, in the same way as those supplying the eyes and causing retinopathy. If both diabetes and high blood pressure are present the risk to the kidneys is greater.

Does kidney damage produce symptoms?

In the early stages there are no symptoms and any kidney damage should be picked up in the urine tests carried out at your normal clinic visit when albumin levels are measured, as part of your 9 key tests.

If large amounts of urine are lost then this leads to frothing of the urine and a build up of fluid in the body with swelling of the ankles [oedema] but this should be spotted in the routine clinic urine tests.

What is microalbuminuria?

This is the name for the condition described above where abnormal amounts of protein [albumin] leak from the kidneys into the urine. It is the first sign that kidney disease may be developing. If kidney damage progresses then there are increased amounts of protein excreted in the urine and this is called macroalbuminuria.

The presence of microalbuminuria is detected by testing all the urine

collected during a 24hour period. The test carried out in the laboratory checks the ratio of albumin to creatinine, another substance that if higher than normal is a good predictor of kidney damage. Creatinine is a waste product produced as a result of muscle activity. The albumin/creatinine ratio is measured in micrograms per milligram. Someone without diabetes normally excretes less than 25 mg/mg per day although this 'normal' figure is less in men [18mg/mg] than in women [25mg/mg].

It is important that we understand the results of albumin/creatinine ratios to prevent unnecessary worry. With the permission of Diabetes Interview we are printing their table of ranges of albumin/creatinine ratios:

	MALE	FEMALE
Normal albuminuria	17µg/mg or less	25 µg/mg or less
Low microalbuminuria	18-65µg/mg	26-29µg/mg
High microalbuminuria	66-250µg/mg	93-355µg/mg
Proteinuria	More than 250µg/mg	More than 355µg/mg

Don't panic at one high result!

Results of urine tests for protein can be high for various reasons. For example, it could be due to infections of the kidney, bladder or urethra or if you had been exercising vigorously around the time of the test. If subsequent tests are consistently higher than expected, then your doctor should carry out further tests and, if so you should receive treatment for microalbuminuria.

The use of ACE inhibitors

ACE inhibitors, are drugs normally used for the treatment of high blood pressure. This is a category of drugs called Angio-Converting Enzyme inhibitors –ACE for short. There is now evidence that the use of ACE inhibitors in people who start to show small amounts of protein in the urine, helps to reduce the progression to macroalbuminuria. So their use has a protective effect on the kidneys, even in people whose blood pressure is normal. They can have fairly mild side effects, the common one being an irritating cough. They are not suitable for everyone so this needs to be discussed with your doctor and they are not recommended for pregnant women.

The key to preventing kidney damage is early detection of the excretion

of protein in the urine and early intervention with treatment to slow down the progression of microalbuminuria to prevent further kidney damage.

According to information from the National Diabetes Audit, during 20010/1, 25% of people with diabetes in England and 21.6% in Wales were not recorded as having a urinary albumin, the early warning check for kidney damage. In addition to this urine check, a blood test should also be carried out to screen for how well the kidneys are functioning and the percentage of people receiving this test was much higher.

These are two of the nine essential checks that should be carried out annually and it is important that you ensure that you have both the urine test and the blood test to ensure that any possible kidney damage is detected early.

Recent research involving diabetes and kidneys

Increasing age and duration of diabetes

Recent research [Diabetes Care, April 2013] has confirmed that good control of blood glucose and blood pressure reduces the risk of developing kidney disease in Type 1 diabetes. The researchers found that these factors become increasingly important with increasing age and the duration of diabetes as they increase the risk of microalbuminuria. As these are factors that cannot be altered, screening for early diagnosis and treatment are very important.

The study showed that the frequency of microalbuminuria was associated with:

- longer duration of diabetes
- higher HbA1cs
- age
- female gender
- raised diastolic blood pressure [the lower number]
- lower body mass index [BMI].

The frequency of microalbuminuria was highest, exceeding 15%, among individuals with a diabetes duration of at least 10 years and an HbA1c level of 9.5% or more. By contrast, microalbuminuria was infrequent among people with HbA1cs of less than 7.5%, regardless of their age or how long

they had diabetes.

Women with diabetes more likely to develop kidney disease than men

According to a new study, women are more likely to develop kidney disease than men. The study has linked a genetic variant on chromosome 2 with kidney failure in women with Type 1 diabetes but not in men and this might predispose women with diabetes to kidney failure.

In the study women with diabetes with the risk variant had a nearly two-fold increased risk of developing kidney failure compared with diabetic women who did not have the risk variant. [Journal of the American Society of Nephrology, September 2013]

Fruits, proteins can help delay kidney disease



According to a new Canadian study, eating a diet rich in fruits and complete protein can help to prevent kidney disease in people with Type 2 diabetes. The researchers found that eating a diet packed with fruits, especially berries rich in anti-oxidants, complete protein, moderate alcohol intake [a glass of red wine a day] was linked to a lower risk of kidney disease and death.

The study involved 6,200 people with Type 2 diabetes who were tracked for over 5 years. 32% developed chronic kidney disease but those with the healthiest diets were less likely to develop the disease than those who ate less healthily.

Complete proteins are those that contain all nine essential amino acids rather than just a few and include meat, poultry and fish, eggs and dairy products and soybeans.

Other foods that are good choices to protect kidneys include foods rich in anti-oxidants such red bell peppers, cabbage, garlic, onions, apples, cauliflower, strawberries, blueberries, cherries, raspberries, cranberries and red grapes. [JAMA Internal Medicine, August 2013]

Lipoatrophy – Rare But Not A Thing Of The Past

In the days before insulins were highly purified [1970s], it was common for people with diabetes to develop lumps and dents at injection sites, one of the causes being repeated injections at the same places. This condition is called lipodystrophy which includes lipohypertrophy, the bumps, and lipoatrophy, the dents. Lipohypertrophy was particularly common before the introduction of highly purified insulins.

Lipodystrophy is a defect in the breaking down or building up of fat below the surface of the skin, resulting in lumps or small dents in the skin surface. The subcutaneous tissue is the third layer of the skin into which insulin injections take place, contains fat and connective tissue that houses larger blood vessels and nerves. The body pulls the injected insulin from the fatty tissue and this can result in a shrinking of the fatty tissue [atrophy] causing dents at the injection site.

With the arrival of purified insulins, pork followed by human and analogue insulins, there was a marked reduction in the numbers of people with lipoatrophy and it is now viewed as a rare complication of treatment with insulin analogues. However, it has been reported with most of the analogue insulins in adults and children. Our attention was drawn to it by a small a study in Practical Diabetes [September 2013] which described five cases of lipoatrophy with the long-acting insulin analogue, Levemir.

One of the major problems with lipoatrophy is that if people continue to inject in these sites this can lead to erratic insulin absorption which in turn leads to erratic blood glucose levels. There is no treatment if lipoatrophy does develop, so the best way is to prevent this problem from happening and this means rotating the injection sites and regular inspection of injection sites.



Statins Again....

Statins linked to joint disease

Musculoskeletal disorders are conditions that affect the nerves, tendons, muscles and supporting structures, such as the discs in your back. They result from one or more of these tissues having to work harder than they're designed to.

Research carried out in the US found that musculoskeletal problems were 19% higher in people taking statins compared to those who didn't.

There was a 13% increased risk of dislocations, strains and sprains and a 9% rise in reports of pain. The authors suggest that statins may interfere with metabolic processes in the body, causing myopathies and tendonopathies [damage to muscles and tendons] that may result in soft tissue damage.

The treatments included simvastin, atorvastatin, pravastatin, rosuvastatin and fluvastatin – in other words, just about them all.

The researchers said that this latest research shows that the full spectrum of adverse reactions to statins have not been fully explored. We may like to remember that when the recommendations came into the UK that everyone over 45 should take statins to prevent cardiovascular disease, objectors to the policy said that it was the largest clinical trial ever because the consequences of such widespread prescribing were unknown. Well, they may well have come home to roost but what a shame people have had to suffer unnecessarily. [Reported in GP, 10 June 2013]

Diabetes risk with statins

A Canadian study has looked at the risk of new onset Type 2 diabetes in people treated with different statins. They looked at information over 13 years and found that not all statins carried the same risk of causing diabetes.

The risks were as follows with the greatest risk at the top:

- rosuvastatin
- atorvastatin
- simvastin

- pravastatin
- fluvastatin – none.

End Of England's National Health Service

By Priscilla Alderson, 14 August 2013

Priscilla is a professor at the Institute of Education University of London. She has researched with children aged 3-12 years who have Type I diabetes. Her recent books are on the ethics of research with children, young children's rights, and *Childhoods Real and Imagined*, about the place of children and young people in the 'adult' world.

Since 1948, Britain's National Health Service (NHS) has been based on four principles:

1. to be universal and open to everyone in need;
2. to be free at the point of delivery and funded through taxes;
3. to have the Secretary of State for Health responsible for providing the NHS and democratically accountable to Parliament for its performance;
4. to be an integrated, cooperating and equitable whole service.

The 2012 Health and Social Care Act ended these principles in England in the following ways.ⁱ

1. Instead of healthcare being universal, 'non-Britons' will be charged for treatment. And patients will get hospital care, only if they are registered with a family doctor/general practitioner (GP). Doctors, like the border police, will have to check everyone's nationality. Many vulnerable patients, such as asylum seekers, homeless people and others not on a GP register, no longer have the right to free health care.ⁱⁱ

2. The law no longer requires that healthcare services are free. This can speed up charging for services in three ways. 1) Private companies are providing, commissioning and monitoring more and more services.ⁱⁱⁱ 2) Public services are being downgraded and waiting times increased. This persuades or forces people towards using private services. Double standards

then widen between the lower public care levels and the higher private care ones, increasing pressures to resort to private services. Wealthier people resent paying taxes to fund public services they do not use, whereas the NHS depended on everyone sharing, using and paying for it. 3) Massive PFI (private finance initiative) debts to companies that build and run hospitals absorb funds needed to pay for patients' services. Bankrupt hospitals are due to be taken over by private companies.^{iv}

3. The government is no longer responsible or accountable for NHS standards. Instead, quangos control cost-effectiveness and contracts.^v

4. The NHS is being split into many competing, private services, with secret 'confidential' contracts, whereas patients with complex conditions depend on many different services all working together openly. In theory, when businesses compete they raise standards. In practice, businesses tend to strip out assets, sack staff, cut spending, increase profits for managers and share holders, and raise charges to patients. The companies cherry pick patients, and reject expensive long-term and complicated cases. Mergers reduce competition, and end with a few global companies in control and liable to collude over price-fixing.^{vi} They also tend to use tax avoidance, so further cutting the sources (the taxes) that fund free healthcare.^{vii} English health services are rapidly moving into the USA model.

References

ⁱ Davis, J. and Tallis, R. (2013) NHS:SOS. London; Oneworld; Leys, C. and Player, L. (2011) The Plot Against The NHS. London: Merlin.

ⁱⁱ <http://www.gponline.com/News/article/1181633/GPs-cannot-NHS-border-agency/>

ⁱⁱⁱ Pollock, A., Kondillis, E. And Price, D. (2013) Blaming the victims. London: Centre for Primary Care and Public Health, Queen Mary, University of London.

^{iv} Pollock, A. (2005) NHS: PLC: The Privatisation of Our Health Care. London: Verso.

^v See above sources.

^{vi} For example, <http://www.bbc.co.uk/news/business-20307412>.

^{vii} See note 1.

Feedback On Byetta And Victoza [GLP-1] Drugs For Type 2

In the last Newsletter, we reported on the health concerns surrounding the use of Victoza and Byetta [a class of medicines known as GLP-1] and that the medicines were being investigated by the European Medicines Agency (EMA). The EMA's Committee (CHMP) has now concluded that presently available information on Victoza, Byetta and Bydureon does not confirm recent concerns over an increased risk of adverse pancreatic events – pancreatic cancer and pancreatitis, although a small but significant number of cases of pancreatitis have been reported. They go on to say that all these medicines already carry warnings.

This is not terribly re-assuring, as the link cannot be ruled out and more evidence is required. Several studies are planned or are ongoing, which are aimed at increasing the ability to understand and quantify risks associated with these medicines including the occurrence of pancreatitis and pancreatic cancer.

The medicines included in the studies are: Byetta, Bydureon (exanatide), Victoza (liraglutide), Lyxumia, Efficib, Januvia, Janumet (sitagliptin), Onglyza (saxagliptin), Jentaducto, Trajenta (linagliptin), Eucreas, Galvus (vildagliptin). This list is not exhaustive.

Byetta and Type 1 diabetes?

There has been some confusion about whether Byetta can be prescribed for Type 1 diabetes but it is only licensed for the treatment of Type 2 diabetes. We quote from the Summary of Product Characteristics [accessed Sept 2013]:

- **Use: Treatment of Type 2 diabetes**
- **Warnings and precautions: Not to be used in patients with Type 1 diabetes or for ketoacidosis.**

This means that if it is prescribed for someone with Type 1 [called off-label prescribing] and something goes wrong, then the manufacturers are not responsible because it has not been prescribed according to its approval.

A new study has investigated whether Byetta has a role in the treatment of Type 1 diabetes. Only 17 patients were involved, so the results cannot be classed as very useful. Nevertheless, the researchers found that Byetta reduced high sugars after meals and delayed gastric emptying [where food was absorbed more slowly by the body]. Included in the study were patients who still had some insulin production but Byetta did not increase insulin production, as it does in Type 2 diabetes.



From Our Own Correspondents

Wrong test strips for the Omnipod

Dear Jenny,

I wondered if any of your other readers have experienced a similar problem that happened to me while using my Omnipod. [The Omnipod is tubing-free insulin patch pump with an integrated blood glucose meter.] Originally I was told that the test strips for use with the Omnipod were Freestyle Lite and I have been using these for 2 years. However, I checked with the manufacturer and the correct ones for the Omnipod are Freestyle test strips NOT Freestyle Lite, which are for use with the Pura blood glucose meter. Using the wrong strips can result in variations in inaccurate test results which could be quite dangerous. I hope this helps other uses of the Omnipod.

By email

What should fasting glucose results be?

Dear Jenny,

I have been told I have pre-diabetes and I don't know what fasting glucose tests to diagnose Type 2 should be – can you help? I have also heard that Type 2 diabetes is now being diagnosed by using the HbA1c test and not fasting glucose tests, is this the case?

By email

Fasting glucose tests should be carried out on 2 separate occasions to avoid a false diagnosis because increased blood glucose levels can be caused by conditions other than diabetes, such as eclampsia, kidney disease,

pancreatitis or by some drugs such as steroids. There are variations in approach to diagnosis but the following results of a glucose fasting test are fairly standard:

- Normal: 3.9 to 5.5 mmols/l
- Pre-diabetes or impaired glucose tolerance: 5.6 to 7.0 mmol/l
- Diagnosis of diabetes: more than 7.0 mmol/l

There is an increasing tendency now to diagnose Type 2 diabetes by the HbA1c blood test which measures average blood glucose levels over the previous 8 weeks or so. This has the advantage of not putting people through 2 fasting tests.

Do parents ever stop being parents?

Dear Jenny,

Strictly speaking this is not really part of your IDDT remit but I'm stuck! My husband and I recently moved areas and our daughter with Type 1 diabetes, who is in her mid 20s, lives in London. I visited our new GP this morning and while I was there I asked who I could talk to with any concerns or queries I might have over my daughter's Type 1 diabetes now I have changed Health Authority. My two queries are quite simple – what the procedure is in the new area with the yellow sharps bins and also to talk about the likelihood of our 28 year old son acquiring Type 1 diabetes - a conversation that has never been had. The response of the GP to the yellow bin enquiry was "it's her illness, ask her what she wants to do with it". As you can imagine, I didn't bother to ask him about the possibility of my son developing Type 1 diabetes.

So, yet again a complete lack of understanding and empathy from the professionals who seem to refuse to believe that parents can have any meaningful role in the health of their child after it has reached the magic age of 18 years. I do understand an 18 year-old's entitlement to privacy but my argument is that my relationship with my daughter is being criticised by most of the medical professionals who I meet. They simply make no effort to understand that a young person's attitude towards their health might be influenced positively through the actions of their family and that if that young person's attitude is positive then outcomes may well be better. If I can make my daughter's complex health situation easier by simply organising the disposal of a sharps bucket then why shouldn't I?

The NHS constantly tries to obstruct me in the process of helping my daughter by tackling the routine administrative tasks. Is this a commonplace scenario and if so, how can I avoid these moralising, finger-wagging medics and get the snippets of advice that I need to help my daughter with the admin tied up with maintaining a healthy life while using an insulin pump. I've poked around various websites but parenthood seems to stop when offspring reach the age of 18. I wonder if other parents of young adults with Type 1 diabetes are thinking about this as well?

By email

Jenny: Perhaps readers, both parents and adults with Type 1 diabetes, could give us their views...

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NHS News

Complaints about GPs

The Parliamentary and Health Ombudsman has promised a huge increase in the number of complaints against GP that it investigates compared with last year. The Ombudsman's decision is to now 'usually investigate' if a complaint passes some simple tests - if the issue falls within his/her remit, is made within the usual time limits and whether the complainants could not be reasonably expected to pursue the complaint through other legal means. More than 800 GPs could be investigated this financial year compared with only 82 last year.

Restrictions on surgery – postcode lottery

Many of the press reports about restrictions on elective surgery have been based on anecdotal evidence but this has now been formally studied. According to research [The Lancet, 16 February 2013], access to elective surgery was being restricted by Primary Care Trusts [PCTs] to save money. The study looked at five surgical procedures between April 2005 and March 2011 - inguinal hernia repair, varicose vein surgery, cataract surgery, total knee replacement, and total hip replacement.

They compared Hospital Episode Statistics with PCT policies.

- Responses were received from 119 PCTs (79%) with 17 of those having no policies for the procedures under investigation.
- There has been a significant difference between the numbers of operations being carried out for PCTs with a policy restricting funding compared with those with no policy. For example, when some areas introduced rationing for hernia surgery in 2006/07, 59% fewer patients were operated on in some PCTs compared to those with no policy.

Concluding that there is indeed a 'postcode lottery' and while accepting there may be a need to save money by cutting operations classed as 'of low clinical value', they were concerned that there is no agreed view as to what treatments are classed as 'of low clinical value'.

We would cite the example of cutting cataract operations – if the development of a cataract stops you going to work, reduces the family income and results in claiming benefits from the State, the operation for this may be of low clinical value, but the ramifications for the person, the family and the State are very significant! Now PCTs have been replaced by CCGs, will the same situation continue?

Podiatrists and physiotherapists given prescribing powers

In August 2013 new legislation was introduced which means that podiatrists and physiotherapists can now prescribe medicines to their NHS patients. The purpose is that patients will receive quicker and more effective treatment which will reduce the number of visits to GPs or hospitals and therefore costs to the NHS. There's only one flaw in the thinking and that is that people with diabetes are having a problem obtaining an appointment with an NHS podiatrist in the first place!

Something else we didn't know about the NHS!

Healthcare UK was set up last year to link UK health providers with possible clients overseas. The Health Service Journal [August 2013] published a new suggestion for increasing income – NHS doctors to travel to India to work in return for payment to their employers in the UK. According to an editorial in Practice Nursing [Sept 2013], the British Medical Association are not happy with this idea and have suggested that the next step will be flying patients to India because some operations are cheaper there! The Department of Health has said this would never happen but Patricia Hewitt, chair of the UK India Business Council, has suggested that there are areas of healthcare

where doctors in India would be much cheaper - a hip replacement costing £12,000 in the UK would be £4,500 in India.

UK doctors would also be welcome in primary care in India and Patricia Hewitt has suggested that the income generated from this could help to close the NHS funding gap. But do we want to see British doctors going abroad to fund their employers to run the NHS? IF this happens, then the number of doctors in the NHS will be reduced and surely this can only mean a poorer service in the UK and longer waiting times?

Audit Of Care Homes



The Institute of Diabetes for Older People [IDOP] and the Association of British Clinical Diabetologists [ABCD] carried out a national audit of care homes to investigate the level of care of people with diabetes. 2,043 care homes were surveyed and the research showed:

- One in ten care home residents were reported as having diabetes, despite previous research which showed that nearly a quarter of all residents have the condition.
- Over 60% did not have a designated member of staff responsible for diabetes management.
- One in five care home residents administer their own medication but without any checks or any system in place to check they have taken their medication. Although self-management is usually encouraged, vulnerable people with diabetes should be checked to avoid complications from errors.

Professor Alan Sinclair, audit lead, said: *“This audit has the potential to improve care for older people with diabetes living in care homes in England, and give insight on how to provide staff with the training and support that they need, as well as assisting managers and policymakers to allocate*

resources.

“We know care home staff are working hard to care for their residents but it was sad and concerning to discover some of the results. Especially, the fact 17.3% of homes had no system in place to examine whether those who self-medicate for diabetes have taken their medication. We encourage self-medication but it needs to be checked in a care setting, especially.”

NOTE: Don't forget that IDDT and IDOP have jointly published a '**Passport for Diabetes in Care Settings**' to help care home staff with the day to day needs of their residents with diabetes. Copies are available from IDDT: Tel 01604 622837, email martin@iddtinternational.org or write to IDDT at PO Box 294, Northampton NN1 4XS

Attitudes, Wishes And Needs

The Diabetes Attitudes, Wishes and Needs Study [DAWN] was first carried out in 2001 and it showed the value of a team care approach and the importance of psychosocial issues in diabetes care. The study was repeated in 2011 and called DAWN2 but this one interviewed 15,000 people with both Type 1 and Type 2 diabetes in 17 countries. The interviews were with people with diabetes and with their family members as well as with healthcare professionals. The results showed significant variations between countries but the main findings are set out below.

Results for people with diabetes

- 13.8% were likely to have depression
- 44.6% experienced diabetes-related distress
- 12.2% rated their quality of life as poor or very poor
- 40% said their medication interfered with their ability to live a normal life
- Only 48.8% had taken part in any form of educational programme
- 55.5% were worried by the risk of hypoglycaemia.

Results for family members

- 35.3% found supporting a family member with diabetes as burden
- 61.3% were worried by the risk of hypoglycaemia

- 44.6% felt their emotional wellbeing was negatively affected
- 37.1% did not know how to support the person with diabetes
- Only 23.1% had been offered participation in educational programmes.

Results for healthcare professionals

- 60% felt there was a need for improved diabetes self-management education
- 61.4 to 92.9% felt that people with diabetes needed to improve various self-management activities
- In some countries, up to a third of healthcare professionals had not received any formal diabetes training
- 32.8% reported societal discrimination against people with diabetes.

As there are very significant issues between the different countries involved in the study, a study group has been set up to see if there are any significant issues in the UK. I think that most of us know that there are! Below is the findings of a small study involving family members of people with loss of hypo warnings and this clearly demonstrates one set of problems that need addressing.

“Living in the shadow of the patient”

This is a quote taken from researchers at Edinburgh University who investigated the effect of hypoglycaemia unawareness [loss of hypo warnings] on families of people with Type 1 diabetes. [Diabetes Care, August 2013].

In depth interviews were carried out with 24 adult family members of people with Type 1 diabetes and hypo unawareness. The researchers found the following reports:

- family members described restricting their lives so they could help the person with hypoglycemia unawareness detect and treat their hypoglycaemia,
- during a hypo, some family members reported being very physically afraid of their partner/relative due to their aggressive, argumentative behaviour and personality changes, which can also make treating the hypo difficult,
- when left unsupervised, family members reported feeling anxious and

- worried about the safety of the person with hypo unawareness,
- resentment can build up over time as family members can neglect their own health and wellbeing to care for the person with hypo unawareness,
- some family members highlighted unmet needs for information and emotional support, while some struggled to recognize and accept their own need for help.

These concerns often occurred after traumatic events, such as discovering the person with diabetes in a coma.

The researchers concluded that hypoglycaemia unawareness takes its toll on family members who are in urgent need of information and emotional support, something that the family carers may not recognise themselves. They recommend that healthcare professionals should take this into account.

It is worth commenting...

Many of these feelings experienced by family members don't just occur with people who have lost their hypo warnings, they can occur with hypos and especially night hypos. As family carers, many of us experience fears and anxiety because our loved ones may be aggressive, violent, difficult or say hurtful things while they are hypo. We may have had to deal with a coma and or a seizure and we may be fearful of it happening again.

The role of the family in caring for someone taking insulin should not be underestimated and nor should their feelings, fears and anxieties. If our loved one is late home from school or work, what is our first thought? They may be hypo somewhere. Many of us as carers do not discuss these feelings with the person with diabetes because we don't want to upset them but we are 'living in the shadow of the patient' and we do need information and support.



Cautious Optimism

Blindness due to diabetes down

This research compared the numbers of people with blindness caused by diabetes between 2000 and 2009 and compared this with the previous decade. In the population with diabetes, the average incidence of blindness due to diabetes was 42.7 per 100,000 people for 2000-2009 compared to 64.3 for 1990-1999.

Over the decade 2000–2009, the incidence of blindness due to diabetes fell by a mean of 10.6% per year in the population with diabetes. [Diabetes Medicine DOI: 10.1111/dme.12223]

Amputation rates – the UK fares better than most

We have discussed the importance of foot care for people with diabetes – regular self-checking, foot checks at the annual diabetes visits and receiving treatment within 24 hours for emergency problems. Much as there are still amputations that are taking place that could be prevented by good foot care at the right time, the UK has one of the lowest rates of amputations in the developed world and Australia is the second worst performing.

- Australia amputation rate is 18 per 100,000 population.
- The average amputation rates for the developed world are 12 per 100,000 population.
- The average amputation rates for the UK are 7 to 9 per 100,000 population.

So the amputation rates for Australia are twice those of the UK. It seems the reasons include that foot care is underfunded and the health system limits the number of visits to all healthcare professionals but foot problems alone very often require high numbers of consultations.

Government Has No Plans To Increase Research Into Type 1 Diabetes

On July 23rd 2013, the Parliamentary Under-Secretary of State, Earl Howe said that the Department of Health has made no specific assessment of the adequacy of research into Type 1 diabetes and has no plans to investigate options for increasing the volume of research in this area.

The UK Clinical Research Network Portfolio Database currently has 238 studies in diabetes that are in set-up or recruiting patients. The breakdown is as follows:

Type of diabetes	Number of Studies
1	43
2	99
1 & 2	72
Other diabetes- related	24

In August, Lord Howe announced an increased investment of £124million in research. It is intended to help to make sure patients benefit from innovative new treatments and techniques. Researchers from 13 research teams across the country will be working on projects to reduce the risk of dementia through exercise and strategies to improve the nutrition and health of those who have already been diagnosed. Long-term conditions are another key area with teams exploring ways to improve the diagnosis of chronic obstructive pulmonary disease, looking at better aftercare for stroke patients and preventing at risk groups from developing diabetes. Some of the projects also aim to reduce pressures on A&E including trying to cut down admissions in children under five and people with long-term conditions. So still Type 1 diabetes is not really a priority!

Health Screening

The public are sometimes criticised for not taking responsibility for their own health and one form of this criticism is not taking up the offers of government screening programmes. In defence of the public, we have to be sure that screening programmes are going to be of benefit to us, that they are not going to do more harm than good and that we are not going to be given unnecessary medicines as a result of screening. Evidence is also required by those working in the NHS and by the NHS itself, to ensure that the large amounts of money spent is not wasted. There are positive and negative examples of screening.

A positive example of screening

In people with diabetes the retinopathy screening programme offers everyone with diabetes an annual retinopathy screening. Years of research was carried out to establish that it was effective in reducing the progression of retinopathy, visual loss and blindness. However, this screening is in a specific group of people with known risks, and fears, of retinopathy. It is not whole population screening sometimes with dubious evidence of benefit for individuals and the NHS - but sounds good politically!

Whole population screening could be potentially harmful



Research published in the British Medical Journal [11.09.13] provides evidence that expanding the government's dementia screening programme will result in 60% of people over 80 being diagnosed with dementia and up to 23% of people who do not have dementia, being labelled as having the condition.

The present evidence shows that although 5-15% of people with mild cognitive impairment will progress to dementia, between 40% and 70% will not and their cognitive abilities could improve. The study states: *“Current policy is rolling out untested and uncontrolled experiments in the frailest people in society without a rigorous evaluation of its benefits and harms to individuals, families, service settings, and professionals.”*

The researchers questioned whether the aging population is becoming a “commercial opportunity” for developing screening, early diagnostic tests and medicines to prevent cognitive impairment.

NHS health check review and action plan

The NHS Health Check entitles people between the ages of 40 and 74 to an annual health screening. However, the availability of this screening varies across the country and this is often based on whether or not GP practices have the time and money to carry out the screening. It may also be based on whether or not GPs feel that it is a priority when they are clearly short of resources.

There have been mixed reports on the success of the Health Checks but the NHS Health Check Review and Action Plan, [July 21st 2013, NHS England] found that the screening is clinically effective and value for money so it is perhaps surprising that a Cochrane Review of such health checks contradicted these findings.

The Review looked at 14 trials involving 182,880 people and showed: the health checks they studied did not reduce morbidity [illness] and they had no effect on the risk of death.

Following publication of this Review, the Danish government reversed its plan for routine health checks. In addition, it is clear that many GPs are not supportive of the screening policy and believe that the checks not only do no good but might actually be harmful. There is always a risk of false positives or false negatives which result in more tests, over diagnosis and over treatment of conditions that may not have caused the patient any symptoms in their lifetime, not to mention the worry caused to the patient and their family.

The NHS Health Check is a £300 million programme, unsupported by evidence and many within the medical profession and it would appear, without any real benefits for patients. Yet NHS England, encouraged by a group of charities, HEART UK, Diabetes UK and the British Liver Trust, appears to be ignoring the evidence and going ahead regardless...

Snippets

The smallest insulin syringe in the world

Made by Ypsomed, the Daily Dose disposable syringes are for single doses. It is able to show which doses have been taken. The Daily Dose is the smallest insulin syringe in the world making it very discreet to use and an ideal back up for pump users to carry around in case of pump failure.

More information is available at www.ypsomed.co.uk

Pharma industry payments to healthcare professionals revealed



Payments made to doctors and nurses by pharmaceutical companies have been published for the first time. The payments are anonymous but names will be published from 2016 as part of an EU initiative to promote transparency.

For 2012, the total paid from industry to nurses, doctors and other healthcare

professionals was £40 million.

Launch of new wireless continuous glucose monitor

Advanced Therapeutics has launched the Dexcom G4, a wireless continuous glucose monitor that is designed to simplify blood glucose management. It consists of a sensor, transmitter, receiver and software and can show new glucose readings every 5 minutes for up to 7 days of continuous wearing. The software enables 30 days of information to be downloaded so that short and long-term trends and patterns can be seen. Meal details, insulin doses and activity levels can also be entered into the receiver which can help with understanding the impact of food, insulin and exercise has on blood glucose levels.

1 billion prescription items dispensed in a year

According to a Health and Social Care Information Centre [HSCIC] report, more than 1 billion prescription items were dispensed in England during 2012 or over 1,900 a minute! This is a rise of almost two thirds compared to 10 years ago. While the report shows a year on year rise in items, it

also shows a fall in total net costs of items to the NHS for the second year running. Prescriptions to treat diabetes accounted for the biggest net cost by treatment area for the sixth year running at £767.9 million.

England has fallen “woefully” behind Scotland and Wales in the provision of healthy food and drink in hospital vending machines

A survey by the World Cancer Research Fund has shown that unlike the other British nations, England has no national guidelines to ensure patients, staff and visitors to the country's 146 acute hospital trusts have 24-hour access to healthy food and drink. Three quarters of English hospitals have no policy in place relating to food and drink from their vending machines many of which are stocked with high calorie products such as chocolate bars, crisps and sugary soft drinks.

More about the Mediterranean diet

Over the years we have heard much about the benefits of Mediterranean diet - a diet of high intake of omega-3 fatty acids, which are found in fish, chicken and salad dressing and it also involves limiting saturated fats, meat, and dairy foods.

According to a study, the Reasons for Geographic and Racial Differences in Stroke the Mediterranean diet may be linked to preserving memory and thinking abilities.

It involved 30,239 people ages 45 and older between January 2003 and October 2007 of which 17% had diabetes. Results showed that people following the Mediterranean diet were 19% less likely to develop problems with their thinking and memory skills. [Neurology, 2013; 80 (18)]

Life expectancy improves – including for people with diabetes

The Lancet has published an analysis that shows that life expectancy has improved in the UK over the last 20 years, but levels of ill health have not. [26.03.13] The UK is now below average compared with 18 other countries, 14 EU countries, Australia, Canada, Norway and the USA.

In the 20 years from 1990 to 2010, life expectancy in the UK overall increased by 4.2 years to 79.9 years but improvements have been very

small for some age groups. The good news is that the UK's years of life lost rate is significantly better when compared to the average of all the other countries for road injury, diabetes, liver cancer and chronic kidney disease.

It's worrying – happiness of children in the UK declines

According to a survey of 42,000 children aged 8 to 17, wellbeing has dipped since 2008 after a period of improvement. One in 10 children now has low wellbeing, with the lowest self-satisfaction being in the 14 to 15 age group. The group with the lowest wellbeing is more likely to have experienced family conflict, bullying or other negative experiences.

Worldwide happiness

According to the World Happiness Report 2013, Denmark, Norway and Switzerland are the top three happiest nations in the world. The report strengthens the case for wellbeing being a crucial part of economic and social development.

If you would like to join IDDT, or know of someone who would, please fill in the form (block letters) and return it to:

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From Your Editor – Jenny Hirst

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