Alcohol use is as common in patients with diabetes as it is in the general population although its effects may have greater clinical significance. Chronic alcoholism and binge drinking are associated with many adverse health consequences, however, it has been observed that moderate alcohol intake may in fact have some protective value against the development of type 2 diabetes and may have beneficial effects on glycaemic control with reductions in HbA1c and fasting plasma glucose, and may be associated with lower cardiovascular risk.

**ALCOHOL AND HYPOGLYCAEMIA RISK**

The immediate effect of alcohol on blood glucose is, to a certain extent, dependent on when alcohol is consumed in relation to meals and the sugar content in alcoholic beverages. Drinking alcohol in the fasting state increases the risk of hypoglycaemia. High sugar content drinks such as regular soft drink mixers and beers increase blood glucose transiently, but ultimately alcohol reduces blood glucose and predispose to hypoglycaemia which may be prolonged until the following day. Patients on insulin and sulphonylureas are more at risk of developing hypoglycaemia. Alcohol is implicated in up to 20% of severe hypoglycaemia requiring hospital attendance in patients on insulin therapy.

Studies on the relationship between alcohol and hypoglycaemia in patients with diabetes are limited, and these are predominantly done in patients with type 1 diabetes.

Alcohol-induced hypoglycaemia may be attributable to a combination of factors such as inhibition of gluconeogenesis, suppression of growth hormone secretion and reduction of hypoglycaemia awareness due to cerebral effects of alcohol. Alcohol intoxication may reduce one’s ability to recognise hypoglycaemic symptoms therefore he/she is less likely to treat the event promptly and appropriately. In addition, alcohol impairs counter-regulatory response to insulin-induced hypoglycaemia.

Education on the effects of alcohol on glucose levels, particularly prolonged risk of hypoglycaemia, is important. Preventative strategies include the following:

- Eat a starchy meal/snack before and after alcohol intake
- Avoid ‘light’ beers as these have higher alcohol content
- Alternate between alcoholic and non-alcoholic beverages if drinking over a long period of time
- Carry identification e.g. medic alert bracelet, and sugary snacks
- Ensure a friend, accompanying the person, recognises hypoglycaemia and when to seek help
- Check blood glucose before going to bed to exclude hypoglycaemia but do NOT try to treat hyperglycaemia if present
- Be vigilant of hypoglycaemia the next day
- Ensure restriction of total alcohol intake at a session to ≤ 5 units.

**GLUCOSE MANAGEMENT IN CHRONIC ALCOHOLISM**

Heavy drinkers may have a degree of cognitive impairment and their ability to manage more complex therapy regimens, to recognise early symptoms of hypoglycaemia and treat it effectively is often compromised. Some patients with chronic alcoholism have little or no glycogen store as a result of malnourishment and underlying deleterious effects of alcohol on the liver. Consequently, this group of patients are more at risk of, not just hypoglycaemia, but severe hypoglycaemia.
The presence of alcoholic liver disease increases insulin resistance which adversely affect glycaemic control. In addition, liver disease limits the use of existing therapies. Many oral glycaemic lowering agents (sulphonylureas, thiazolidinediones, metiglinides, acarbose and certain DPP-IV inhibitors) are avoided particularly in severe liver disease. Insulin treatment is thus more common in this group and with that the risk of hypoglycaemia. Insulin dose adjustment is problematic partly due to considerable day-to-day variability in glucose levels. There is a rather fine balance between maintaining glycaemic control and risk of hypoglycaemia. A pragmatic approach is to offer a fixed dose insulin regime and avoid tight glycaemic control.

**ALCOHOL AND HYPERGLYCAEMIA RISK**

Some alcoholic drinks such as beers have high calorie content. Over time, this may cause weight gain especially in patients with type 2 diabetes who are typically overweight or obese. Weight gain adversely affects glycaemic control as it leads to greater insulin resistance. Long term hyperglycaemia increases the risk of developing microvascular and macrovascular complications. Vascular damage may persist and even progress over time despite improvement in glycaemic control (legacy effect). Thus, it is important to explore our patients’ drinking patterns, and counsel them about the harmful effects of excess alcohol consumption including binge drinking.

In addition, a small number of patients with excess alcohol intake on a regular basis may be at risk of Alcohol-related Ketoacidosis, independent of blood glucose levels as a result of metabolic fuel selection in patients with liver disease.

**SUMMARY**

Alcohol use is common in patients with diabetes with variable effect on blood glucose. Risk of hypoglycaemia may be prolonged and patient education is essential as many hospital attendances due to alcohol-induced hypoglycaemia are avoidable. Alcohol may be associated with weight gain and long term hyperglycaemia. Managing glucose control in patients with diabetes and chronic alcoholism is challenging and requires individualisation of therapy.

**KEY MESSAGES**

- Alcohol consumption is common in patients with diabetes
- Alcohol increases the risk of hypoglycaemia and the effect may lasts to the next day
- Patient education with hypoglycaemia prevention strategies should be given at every opportunity
- There is no “safe” insulin self-management strategy in type 1 diabetes for an acutely intoxicated individual – this therefore needs to be avoided
- Majority of oral glycaemic lowering agents should be avoided in severe liver impairment
- In chronic alcoholism, avoid tight glycaemic control and consider the use of fixed dose insulin regime
- Beware of alcohol and weight gain with potential worsening of glycaemic control

**REFERENCES**


DR L CHONG & DR I CRANSTON
Most physicians managing patients with diabetes adopt a holistic approach given the multi-system involvement of the disease. Oral health has a significant impact upon quality of life. Therefore asking patients about their oral health and access to oral health care should form part of the routine assessment of patients with diabetes.

However, the oral cavity in diabetes is often neglected. This may be due to the fact that conditions observed in the oral cavity of someone with diabetes are no different from those seen in the non-diabetic patient. However, the effects of hyperglycaemia often lead to increased susceptibility to oral pathology such as periodontal diseases, xerostomia, dental caries, dental abscesses and candidiasis. This increased susceptibility has potential consequences which need to be recognised by the patient, dental practitioner and diabetes care team alike. Perhaps the most significant yet least recognised sequela of hyperglycaemia on the oral tissues is its effect upon the periodontium. Periodontal disease is one of the most widespread diseases of mankind - almost all of the adult population has experienced gingivitis, periodontitis or both. It can have a profound negative impact upon daily life affecting confidence, social interactions and food choices (of particular importance in diabetes management).

The increased risk for periodontal disease in patients with diabetes is approximately threefold; the level of glycaemic control is a major factor in determining the increased risk. The diabetic population have a more severe gingivitis than those without diabetes even if they have similar plaque levels. Adults, especially those with microvascular complications, are prone to greater periodontal destruction. This may be due to vascular changes and altered cell-mediated immune response to the plaque antigens, associated with hyperglycaemia. Therefore, it is important that the particular susceptibility to periodontal destruction is explained to patients, regular dental examinations encouraged and oral hygiene advice given. Likewise, dental practitioners should be aware of the greater potential for destruction in these patients, institute effective prevention regimes and treatments for periodontal disease.

They should also re-emphasise the importance of good glycaemic control. A meta-analysis by the Cochrane collaboration in 2010 identified that 3-4 months after periodontal treatment in patients with diabetes, a mean reduction in HbA1C approaching 0.5% (5.5mmol/mol) could be demonstrated - more pronounced in patients with severe periodontitis. Patients with diabetes also exhibit an increased susceptibility to oral candidosis and can develop clinical signs of infection at lower candidal loads than non-diabetic patients. The prevalence seems to be related to glycaemic control - salivary glucose levels mirror blood glucose levels, and raised salivary carbohydrate levels increase adherence of the candidal organism to oral epithelium. Poor glycaemic control can lead to difficulties in eradicating the infection. Predisposition to candidal infection is also increased by a reduction in salivary flow - xerostomia, a frequent finding in patients with diabetes. Xerostomia can be a result of dehydration due to polyuria, or in long standing diabetes related to microvascular damage and neuropathy affecting the major salivary glands.

The problems of dry mouth, which can also be exacerbated by medications, include increased plaque accumulation, fungal infections, dental caries, atrophic, ulcerated or desquamative mucosa, impaired masticatory function (for example difficulty in swallowing) and impaired taste sensation. Treatments include ensuring good hydration, artificial salivas and systemic treatments. For all dentate patients with a dry mouth, fluoride is essential to reduce the risk of dental caries.

Dental caries, another common problem, develops only in the presence of three interacting variables - bacterial plaque, bacterial substrate (especially sugar) and a susceptible tooth surface. Various studies have reported conflicting views on the prevalence of caries in diabetic patients but surprisingly, despite the restriction of refined carbohydrate, the observed rate appears to be no less than the general population. Patients with diabetes are more susceptible to infections including those in the oral cavity.

Pain and infection can increase insulin resistance and impair glycaemic control. Therefore, infections need to be treated promptly and vigorously. Patients with diabetes exhibit delayed wound healing which has obvious consequences following minor and major oral surgical procedures. The delay in healing is proportional to glycaemic control and poor control is often quoted as a contraindication to more complex dental procedures such as provision of implants.

Therefore, it can be seen that hyperglycaemia presents an adverse environment to tissues in the oral cavity as it does elsewhere. However, there is no reason why well controlled patients with diabetes cannot be managed in a general dental practice. Local anaesthesia is safe to use and confers no additional hazards for the patient with diabetes. Dental procedures requiring sedation or the administration of a general anaesthetic should be carried out in a hospital environment where good perioperative glycaemic control can be achieved following liaison with the diabetes team. Regular oral health examinations should be encouraged with particular emphasis upon the diagnosis and effective management of periodontal problems. Dental care should also concentrate upon prevention of oral disease. Communication between the patient and the various healthcare professionals is important and should be encouraged at every available opportunity with the aim of more integrated management by the medical and dental healthcare teams.

Further reading:
Carbohydrate (CHO) counting can be used alongside basal bolus insulin to enable people with diabetes to increase their choice and flexibility in both the type of food taken and in meal timing. The DAFNE study (1) included education on CHO counting in its five-day structured training course designed to maintain glucose control while enabling dietary freedom. As well as a significant improvement in glycaemic control the study found significantly improved quality of life at one year follow up.

Education on CHO counting is provided in the QAH diabetes service, it is offered on an individual basis or as part of group education programmes such as Basal Bolus Conversion (Type I/II) and JIGSAW (Type I intensive insulin education) or as a stand alone carbohydrate awareness/counting education session. Education is patient centred and interactive, tools such as food models & packets, photographs of meals showing CHO sources and portions are all used to assist learning.

Education aims initially to enable people to identify which components of their meals/snacks contain CHO. This is facilitated by discussion of food groups (fat, protein, dairy, fruit and vegetables and CHO) and CHO–containing foods (Box 1). The need to count total CHO intake rather than sugar content can be a new concept that requires discussion.

**Box 1 - Summary of Carbohydrate Sources**

- Cereal derived starch products – breakfast cereals, grains, bread, rice, pasta, couscous, flour-based products (pastry, biscuits, cakes, batter)
- Vegetable starch – potato, legume (lentils, beans, peas), sweet corn
- Fructose – fruit, fruit juice
- Lactose foods – milk, yogurt, ice cream, custard

Methods to assist the person in calculating how much CHO their snack/meal contains are then explored. Box 2 summarizes the methods commonly used. One size does not fit all, some like to weigh their food and use the CHO information in food tables or on the food packet to calculate the CHO content whilst a lot of people are finding the relatively new ‘Carbs and Cals’ photographic booklet or phone App a more practical tool. ‘

**Box 2 - Methods used to estimate CHO content of foods**

1. Weighing the food and using the amount of CHO per 100g (CHO reference booklet or packaging).
2. ‘Handy measures’ eg 1 tablespoon cooked rice contains 10g CHO, 1 medium slice of bread contains 15g CHO (CHO reference booklet or packaging).
4. Familiarisation with personal portions and creation of own CHO lists.

Once the person is able to do this they are taught how to calculate the amount of insulin they need to take for different quantities of CHO. This is done by using units of bolus insulin for every 10g CHO. This insulin to CHO ratio can vary from 0.5 to over 3 units for every 10g CHO eaten, the higher amounts being required for those who are more insulin resistant.

Home glucose monitoring is an important tool and is often used intensively until the person has gained confidence. A 2-3mmol/l rise in blood glucose level from pre to post-prandial (2 hour) suggests that the insulin dose was suitably matched to the CHO content of the meal/snack eaten. In view of other potential variable factors we advise checking a meal more than once. Reflection and learning from previous experience is encouraged.

**THE FOLLOWING ISSUES ARE COMMONLY DISCUSSED:**

**Eating Out**

The challenge of calculating the amount of CHO in foods and meals eaten away from home can become easier as the person becomes more experienced in working out the CHO content of different foods and is able to visualise portions in relation to those taken at home. The photographic portion size atlases can also make this easier. A list of the CHO content of take away foods and reflection on past experiences are also found to be useful.
Snacks
Basal bolus often means people can choose whether to have snacks. The person may find they need to take extra insulin with snacks or they may find it isn’t required particularly if they are active, the snack is small or they are taking short rather than rapid-acting insulin as their bolus, blood glucose testing can inform such decisions.

Missing Meals
It may be possible for people to miss meals using this approach but this depends on the individual and can be informed by blood glucose testing. Eating regular meals does, however remain healthy eating advice.

Healthy Eating
The beauty of basal bolus and CHO counting is the dietary freedom. This should not detract from the value of choosing a healthy diet and is an important consideration as improved glycaemic control can be accompanied by weight gain. Healthy food choices are discussed as part of education as appropriate.

Alcohol
Alcoholic drinks often contain CHO and can affect a rise in BGL, however the alcohol component itself can lower glucose levels for several hours later. For this reason routine bolusing for CHO in alcoholic drinks is not recommended unless the real effect on blood sugars levels is known.

Whilst CHO counting is a very useful tool for many it may not be possible for all on basal bolus insulin, if this is the case use of pre and post-prandial blood glucose testing can help promote increased awareness of the impact of different foods and portion sizes on blood glucose levels. Likewise whilst basal bolus insulin suits many it is not for all and some will prefer a twice daily mixed insulin with routine meal patterns and fewer injections.

If you would like further education on the above please access our Professional Education Programme via our website. For guidance on specific patients please contact myself or Jeannette Head at the Diabetes Centre.

Reference
Insulin passports are a Nationally-driven initiative to reduce confusion and insulin prescription errors for patients with diabetes, particularly (but not exclusively) at times when they are ill and may be admitted to hospital.

**Who should carry one?** Everyone who uses insulin.

**Who should complete it?** Any HCP who conducts a consultation with an insulin-using patient at the end of that consultation should ensure that they have a current passport.

**How should I complete it?** Most of the elements are straightforward transpositions of a prescription, but it is important to include usual doses. Some of the elements may be completed by the patient themselves (e.g., the hypo treatment preferences) with support and advice as required.

**When should I complete it?** At the end of any consultation, ensuring the information in it reflects the latest management strategy for that patient.

**What if I change a dose?** Ideally a new passport should be provided at each change of dose, so that the document remains clear and concise – old passports should be discarded.

---

**NHS I have Diabetes**

**Type 1:** □ **Type 2:** □

And I am treated using insulin injections as documented below:

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<th>Dose 3</th>
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If I am ill or fainting please give me:

unless I am unable to co-operate or unconscious, and please repeat after 10 mins if I am no better

If I am unconscious do **NOT** give anything by mouth

**CALL 999 FOR AN AMBULANCE IMMEDIATELY**

If you update your insulin please get a new card from your local GP.

---

**INSULIN PASSPORT**

Completion date: ____________________________

Name: ____________________________

Address: ____________________________

Tel: ____________________________

Allergies/other notes: ____________________________

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**How can I get more copies?**

Medical photography QAH

Illustration ref: 11/4441
WHAT CARE SHOULD YOU EXPECT FOR YOUR DIABETES IN HOSPITAL?

In Portsmouth Hospitals we are trying to ensure that our environment and care is as “diabetes friendly” as possible, independent of the reason you may come into hospital. In order to achieve this there needs to be a high degree of cooperation and understanding between the hospital staff and yourself, regarding both your usual diabetes care and how this may need to change during an admission to hospital. This document aims to explain some of the practices you should expect of the staff in PHT and what they will expect of you when you come to hospital.

Before You Come to Hospital
• If you are coming in for a planned operation you MUST be sure that the team involved are aware that you have diabetes during the “pre-admission assessment”. They will then ask you a series of questions about your treatment and give you a leaflet explaining any changes that may be required in the run up to the admission. Pay particular attention to the advice about food intake and medication changes!
• Ensure that you have both a written record of your usual diabetes treatment (including doses) and a small supply (adequate for 3-4 days) of it packed for when you first come to hospital. If your treatment involves insulin please bring your pen(s) in with a full cartridge (and one spare) but do not bring in your entire stock from the fridge – we do not have enough refrigerated storage for it!

When you arrive in Hospital
• If you come to hospital as an emergency, the same questions about your treatment will be asked of you as above. Understanding your usual treatment is important in deciding appropriate initial care in hospital, so please keep a record on your person of your treatment if you are unsure.
• Within 24 hours of every admission you should expect to have been asked a series of questions about your diabetes and had an examination of your feet (some people with diabetes are more at risk of foot and heel sores whilst in hospital). If this has not happened you should raise it with your ward nurse.

During your stay in hospital
• It is not unusual for your diabetes treatment to need to change temporarily whilst you are in hospital (some tablets may need to be stopped, insulin may need to be altered or commenced short-term) so do not assume that you just “carry on as usual” unless you are told that this is appropriate. Whenever you take a treatment for your diabetes (tablet or injection) this needs to be noted within your care record, so make sure your nurse knows about it!
• If you use insulin for your diabetes, we will try and make sure that whenever possible you will be able to undertake treatment yourself (either self-injecting a dose advised by ward staff or – when deemed appropriate – deciding your own dose) but this always needs to be recorded and agreed in discussion with your nurse, as in some circumstances its more appropriate for your insulin to be administered by the ward staff (eg. around surgery or if very unwell).
• We aim to measure sugar levels quite regularly whilst you are in hospital (generally 4 times each day, using the hospital meters for accuracy rather than your own) before each meal and before sleep. For most patients in hospital we aim to keep sugar levels in a range between 6 and 11mmol/L and may well adjust your usual treatments to achieve this.
• If there are any difficulties around your diabetes whilst you are in hospital, the ward team can liaise with the Diabetes Specialist Team (Consultant, Specialist Registrar, Diabetes Specialist Nurses, Dietitian and Podiatrist) who visit the wards routinely, in order to get individualised treatment advice for you if necessary.
• All the food on the hospital menus labelled with a “D” on the menu has been designated as suitable for people who have diabetes and the meal plans try (where possible) to offer an even split of calories and carbohydrates across the day. Meals labelled with an “R” are suitable if you are trying to lose weight. There are however limited “snacks” available on the wards (food is prepared off site, generally with just some pre-packed biscuits available otherwise) so we recommend that you bring in with you some simple snack foods and/or your usual treatment for a hypo (if you have one).
• Whilst you are in hospital, your diabetes treatment (tablets or injection) will be stored in a security locker at your bedside. This locker is NOT refrigerated so do not bring in more than a week or two’s insulin as it will be wasted.

When its time to go home
• If your treatment has been changed during your stay in hospital then you should expect that the staff will explain to you if this is expected to revert to your usual treatment and when.
• The letter to your GP will include details of any changes to your treatment, and this will be discussed with you by the nurse providing your discharge information / treatments.
• If your treatment involves insulin you should expect to receive an “insulin passport” as you leave hospital, which is a small credit-card sized document of your usual treatment that you can carry with you.
• If you have concerns regarding your diabetes management after you leave hospital you can contact the Diabetes Specialist Team on 02392 286260

Medical Illustration Reference: 12/2984
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## REGISTRATION FORM

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### PLEASE PROVIDE DETAILS OF THE EDUCATION MODULE (S) THAT YOU WISH TO APPLY FOR:

#### Preference 1
- **Course Name:**
- **Course Dates:**

#### Preference 2
- **Course Name:**
- **Course Dates:**

#### Preference 3
- **Course Name:**
- **Course Dates:**

Depending on demand, it may not be possible to attend your chosen course (or courses) on the date specified. If this is the case, you will be added to a waiting list.

To finalise your acceptance on the course, we would be grateful if you could send a deposit in the form of a cheque made payable to “Portsmouth NHS Trust” for £50, dated a month before your module is due to take place. This cheque will not be cashed, but held on record and returned to you on the day of attendance at the course. The deposit will only be cashed if you do not attend the course and do not provide at least one week’s notice – the time we require to give an opportunity for candidates on the reserve list to attend.

**Please forward your completed form and deposit to:**

**CAROLINE PARNELL**  
**DIABETES PROFESSIONAL EDUCATION CO-ORDINATOR**  
**DIABETES & ENDOCRINOLOGY DEPARTMENT**  
**QUEEN ALEXANDRA HOSPITAL**  
**PORTSMOUTH PO6 3LY**
NEW MODEL OF DIABETES CARE
in the City of PORTSMOUTH

The new model of diabetes care in Portsmouth City has been set up with the provision of a specialist nurse and Consultants working in the community. The basic principle is that beyond six specialised areas (known as the “Super Six” - low renal clearance, foot disease, pregnancy, type 1 diabetes, JIGSAW/insulin pump service clinics and in-patient diabetes management), the remainder of diabetes care will be provided in the community with the help of the Community Diabetes team (CDT).

To reassure practices, NO existing patients with diabetes will be discharged unless approved by GP and practice nurse concerned. We are mindful of keeping our primary care colleagues on board and if you feel that this isn’t the case, please let us know either by phone or email. We are aiming to discharge appropriate patients, depending on each individual surgeries capacity and thus, patients will be discharged ONLY after approval from surgery concerned.

The first phase of this model will involve us sending you a list of patients who do not necessarily fall under the “Super Six” clinics. We are dependent upon you/your practice nurse to tell us whether these lists contain patients who would be more suitable staying under specialist care- or whether they can be managed in the community with support from the CDT. Once you have agreed, these patients will be discharged with a letter- assuring them that their care will continue under specialist supervision- but in a different way- closer to home.

As part of the model, The Specialist Diabetes Consultant team are pleased to be given the opportunity to visit your practice in the near future. Our aim is to visit you twice a year and our administrative staff will contact you soon regarding suitable dates. We wish to maximise the value of each visit and with this in mind the first visit would aim to:

a) Discuss diabetes patients on the list sent to your practice of patients with sub-optimal glycaemic control as their main problem that may be suitable for discharge and management in your practice with our guidance.
b) Discussion of any patient within your diabetes care that cause concern
c) Set next date for visit

As part of this new service, there are two other facilities available for you.

We would like to encourage all primary care (GP and practice nurses) to use the designated email address communitydiabetes.portsmouth@nhs.net if you would like to access Consultant or specialist nurse advice with a 24-48 hour response time.

There will also be a mobile phone contact 07581 910025 (available Monday-Friday between 5:30pm and 7pm) for any diabetes cases you may like to discuss with a Consultant.

The CDT are currently in the process of appointing a whole time community diabetes specialist nurse to support you managing diabetes patients within your practice which will begin in January 2013.

This model of care has been in place in South East Hampshire, Fareham and Gosport for some time - and if needed, please feel free to talk to your primary care colleagues in those areas for any feedback.

Finally, we expect the model to evolve whereby insulin starts etc will be delivered in primary care with support from the CDT but this will be a gradual process and thus would look for patience and support from primary care to deliver this.

Dr Iain Cranston
Prof Mike Cummings
Dr Darryl Meeking
Dr Partha Kar
DEPARTMENT OF ERROR

We recognise that there were some errors in the following table published in the last edition of the Solent Diabetes Voice which we are pleased to correct:

This table compares the properties of the different GLP1 agonists available:

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<th>EXENATIDE</th>
<th>LIRAGLUTIDE</th>
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<td>2MG/WEEKLY INJECTION</td>
<td>5MCG BD (first month)</td>
<td>0.6MGS (first week)</td>
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<td>1.2MGS DAILY</td>
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<td><strong>SIDE EFFECTS</strong></td>
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<td><strong>OTHER EFFECTS</strong></td>
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</table>
Direct GP access to the following services is available. Emergency referrals we will aim to see within 24 hours and routine referrals will be seen within 4-6 weeks. These services are provided in addition to the traditional diabetes clinics operating at QAH, GWM and Petersfield Hospital. Referrals may be made through a conventional letter/fax or Choose and Book unless otherwise stated.

<table>
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<tr>
<th>SERVICE</th>
<th>COMMENT</th>
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<tbody>
<tr>
<td>Rapid Access (URGENT)</td>
<td>Urgent cases eg new onset type 1 diabetes, mild DKA may be discussed with any member of the diabetes team to decide the best course of action. 92 286260</td>
<td>Rotational basis via specialty DSN team.</td>
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<tr>
<td>Pregnancy</td>
<td>Usually seen within one week of referral. Please refer ASAP 9228 6000 x4553 or 4584 since early review is essential. The service also provides pre-pregnancy counselling for all diabetic women of child bearing age.</td>
<td>Prof. Mike Cummings Sara Moutter Anita Thynne Jeanette Head</td>
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<tr>
<td>Cardiovascular Clinics</td>
<td>For diabetic patients with established CVS disease or who are at high CVS risk who require specialist advice (including patients with microalbuminuria)</td>
<td>Prof. Mike Cummings</td>
</tr>
<tr>
<td>Foot Clinic</td>
<td>Patients can be referred by any member of the community diabetes team, usually via podiatry. Urgent slots will be kept for urgent cases.</td>
<td>Dr. Darryl Meeking Sharon Tuck</td>
</tr>
<tr>
<td>Erectile Dysfunction Clinic</td>
<td>For any diabetic patient that has not responded to oral therapy.</td>
<td>Prof. Mike Cummings Sara Moutter</td>
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<tr>
<td>Type 1 Diabetes Intensified Insulin Education Service (JIGSAW)</td>
<td>Goals-based 22-hour intensive insulin education package open for patients with type 1 diabetes using multiple daily dose insulin therapy, but who are unhappy with their achieved control. Access either by DSN referral or patient self referral (both by proforma to Caroline Parnell).</td>
<td>Dr. Iain Cranston Lisa Skinner Jo Buchanan Sue Beaden Jeanette Head</td>
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<tr>
<td>Insulin Pump Service</td>
<td>Assessment / initiation and follow up service (as per NICE guidelines) for patients wishing to consider pump therapy (after education through the JIGSAW service).</td>
<td>Dr. Iain Cranston Lisa Skinner Sue Beaden</td>
</tr>
<tr>
<td>Low Renal Clearance Clinic</td>
<td>Assessment and follow-up for optimised metabolic management of patients with diabetes and renal impairment (eGFR 20-40) with liaison to renal services in-clinic.</td>
<td>Dr. Iain Cranston Joanne Buchanan</td>
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<tr>
<td>Painful Peripheral Neuropathy Groups</td>
<td>One off group sessions examining the causes of and available treatments for painful peripheral neuropathy. Focus also on foot care and risks associated with sensory loss.</td>
<td>Jane Rowney</td>
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<tr>
<td>Desmond (Type 2) Education Sessions</td>
<td>Whole day group education sessions for people newly diagnosed with type 2 diabetes. Booked through the Diabetes Centre: 02392 286260 Portsmouth City, Tuesday – Friday. 01329 229422 Fareham &amp; Gosport , &amp; East Hampshire. Sarah Stiles</td>
<td>DSN Team</td>
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<tr>
<td>GLP1</td>
<td>Medical assessment and then education in the use of Exenatide b.d. or once weekly Liraglutide.</td>
<td>Dr. Iain Cranston Mandy Morcombe</td>
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<tr>
<td>Young Persons</td>
<td>STYLE (Safe Transition to Young Adult Life) is a multidisciplinary transition clinic held monthly at QAH and tri-annually at Gosport War Memorial Hospital. Weekly nurse-led clinics are also held at QAH and six-weekly at Portsmouth University Surgery. SARB (Safe Approach to Risky Behaviour) educational sessions may be accessed at QAH and Portsmouth University to educate on safety measures that can be taken while indulging in behaviours such as drinking alcohol, attending festivals, body tattoos and piercings etc.</td>
<td>Dr Partha Kar Dr Lorraine Albon Anita Thynne Jeanette Head</td>
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</tbody>
</table>

The following services are also available following initial assessment / review by the Specialist Nursing Team:

| Starting Insulin Groups                      | Insulin starts for patients with type 2 diabetes.                      | Jane Rowney Sharon Allard Mandy Morcombe                |
| Basal Bolus Insulin Conversion Groups        | For people with type 1 and type 2 diabetes who wish to change their insulin to a basal bolus regimen. Goals based programme with dietetic and nursing input focussing on carbohydrate counting. Accessed by proforma. | Anita Thynne Sarah Moutter Jeanette Head                |