ANNUAL REPORT 2012

Diabetes Services at GreatOrmondStreetHospital for Children and UniversityCollegeLondonHospitals
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SUMMARY

2012 saw us bringing together the services at Great Ormond Street Hospital for Children and University College London Hospitals into a single functioning clinical group. The Great Ormond Street service headed by Dr Catherine Peters became well established during the year with the appointment of Samantha Drew as a Clinical Nurse Specialist and Dr Rakesh Amin as a Consultant Endocrinologist. These changes allowed us to present the joint group for Peer Review in July. The review concluded that the joint group functioned extremely well as a cohesive team and the high standard of care delivered was commented on throughout the Reviewers report.

The growth in the Children and Young People's Diabetes Service continues. The clinic population is now 348 with 41 new referrals between April 2011-2012 and 36 referrals between April 2012-December 2012. The majority of referrals wish to extend their diabetes knowledge and skills so that they can commence insulin pump therapy but there is an increasing number referred because they are on pump therapy and need additional support.

We have continued to work to involve and engage patients and families in their care. This year we ran an ‘Expert Parent and Adolescent Day’ which included a Tree of Life session for young people. Parents were invited to attend the award session at the end of the day. Rebecca Thompson and Peter Hindmarsh also contributed to the annual Friends for Life Conference for parents and children with diabetes which was a great experience.

During the year members of the team have been involved in two major projects. D24 which is a National 24 hour on-call system for Paediatric Diabetes. This is a joint venture with NHS24, CapGemini and Infermed which will not only deliver out of hours advice but will evolve we hope into a major education and training resource. We are also involved in creating a North Central London Paediatric Diabetes Health Care System to roll out good practice across North Central London. This is a huge undertaking in conjunction with Camden Clinical Commissioning Group and UCL Partners. As part of this we will be redesigning the integrated Patient Relationship Management System which the team have been developing with Microsoft UK and Tribal Health Care Group.

We have also completed in conjunction with the London Borough of Camden our School Pathway for care in schools. Not only does this outline the care pathways but it also includes training and education provisions for staff and ways of delivering one to one support at critical stages of schooling.

We have continued to focus on improving diabetes care. We recognise that this is always in partnership with children and young people and their families. For the thirteenth twelfth successive year we have seen improvements in clinic glycosylated haemoglobin. In the National Paediatric Diabetes Audit the team had the second best glycosylated haemoglobin of 7.7% with 33% of children now achieving an HbA1c less than 7.5%.

Finally, congratulations to Russell Viner and his award of a Chair in Adolescent Medicine at UCL. Russell and Peter also appeared in The Times Top 100 Children’s Doctors in 2012. Deborah Christie was awarded the Adele Hoffman Visiting Professor for Adolescent Health and Medicine
HOW WE ARE DOING?

Excellent clinic performance
Median HbA1c 7.8%
39.7% of clinic achieving HbA1c less than 7.5% compared to 18% Nationwide.
These are the best results in the UK

1. National Quality Control of Glycosylated Haemoglobin Measurement

Over the year 2012 monthly assessments were made of samples provided by the UK External Quality Assessment Scheme (ERAS). For UCLH HbA1c using the DCA1000 Siemens System in clinic over the range 5-10.9% there was a Bias of 0.12% (EQAS versus UCLH) with 95% limits of agreement of -0.48 to 0.72%.

2. Glycosylated Haemoglobin Measurements Year on Year at UCLH

Table 1. Overall Mean HbA1C (%) Clinic Performance for Years 2005 to 2011

<table>
<thead>
<tr>
<th></th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>All Clinics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Median</td>
<td>8.7</td>
<td>8.9</td>
<td>9.0</td>
<td>Median</td>
<td>8.4</td>
<td>Median</td>
<td>8.2</td>
</tr>
<tr>
<td>Median</td>
<td>8.5</td>
<td></td>
<td>8.1</td>
<td></td>
<td>8.2</td>
<td></td>
<td>7.8</td>
</tr>
<tr>
<td>Median</td>
<td>8.5</td>
<td></td>
<td>8.5</td>
<td></td>
<td>7.8</td>
<td></td>
<td>7.8%</td>
</tr>
<tr>
<td><strong>Paediatric Clinic</strong></td>
<td>8.3</td>
<td>8.2</td>
<td>8.4</td>
<td>Median</td>
<td>8.1</td>
<td>Median</td>
<td>8.0</td>
</tr>
<tr>
<td>Median</td>
<td>7.8</td>
<td></td>
<td>8.3</td>
<td></td>
<td>8.0</td>
<td></td>
<td>7.6</td>
</tr>
<tr>
<td>Median</td>
<td>7.6</td>
<td></td>
<td>7.6</td>
<td></td>
<td>7.6</td>
<td></td>
<td>7.6</td>
</tr>
<tr>
<td><strong>Adolescent Clinic</strong></td>
<td>9.1</td>
<td>9.4</td>
<td>10.0</td>
<td>Median</td>
<td>9.4</td>
<td>Median</td>
<td>8.5</td>
</tr>
<tr>
<td>Median</td>
<td>9.1</td>
<td></td>
<td>9.3</td>
<td></td>
<td>9.4</td>
<td></td>
<td>8.4</td>
</tr>
</tbody>
</table>

The general trend shows a steady all clinic improvement over time which is a continuation of a long term trend in clinic HbA1c over the years 1999-2012 which is shown in Figure 1 (left panel). The right panel shows that the variation in the clinic is also decreasing with time.

Figure 1. UCLH Quality Control Data 1999-2012
This may reflect increasing use of protocols such as intensification of insulin therapy to improve care.

Table 2 shows the effect of Mode of Insulin therapy on HbA1c. Note we stopped recommending Twice Daily therapy for Children and Young People with Diabetes in 2004.

Table 2. Mode of Insulin Therapy and HbA1C

<table>
<thead>
<tr>
<th></th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>BD</td>
<td>9.7 ± 0.3</td>
<td>9.5 ± 0.4</td>
<td>10.9 ± 0.8</td>
<td>Median</td>
<td>Median</td>
<td>Median</td>
<td>Median</td>
</tr>
<tr>
<td>MDI</td>
<td>9.2 ± 0.2</td>
<td>9.7 ± 0.2</td>
<td>9.6 ± 0.2</td>
<td>Median</td>
<td>Median</td>
<td>Median</td>
<td>Median</td>
</tr>
<tr>
<td>CSSI</td>
<td>7.6 ± 0.2</td>
<td>7.7 ± 0.1</td>
<td>7.9 ± 0.1</td>
<td>Median</td>
<td>Median</td>
<td>Median</td>
<td>Median</td>
</tr>
</tbody>
</table>

3. National and International Benchmarking

Figure 2. UCLH Clinic Performance compared to UK National Diabetes Audit 2011

Overall UK Paediatric National Diabetes Audit Average 8.8%

Proportions Hitting Targets

Table 3. Percentage hitting Target HbA1C (< 7.5%) by Mode of Insulin Therapy at UCLH

<table>
<thead>
<tr>
<th></th>
<th>All</th>
<th>Paediatrics</th>
<th>Adolescent</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDI</td>
<td>23.3</td>
<td>30.0</td>
<td>17.5</td>
</tr>
<tr>
<td>CSII</td>
<td>46.1</td>
<td>52.2</td>
<td>28.2</td>
</tr>
</tbody>
</table>
Table 4  UCLH HbA1c MEASURES LESS THAN 7.5% AND LESS THAN 8%
1999 - 2012

<table>
<thead>
<tr>
<th>Year</th>
<th>&lt;7.5%</th>
<th>&lt;8%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999</td>
<td>9.7</td>
<td>10</td>
</tr>
<tr>
<td>2000</td>
<td>7.5</td>
<td>10</td>
</tr>
<tr>
<td>2001</td>
<td>8.3</td>
<td>15.4</td>
</tr>
<tr>
<td>2002</td>
<td>10.4</td>
<td>16.7</td>
</tr>
<tr>
<td>2003</td>
<td>12.2</td>
<td>23.5</td>
</tr>
<tr>
<td>2004</td>
<td>18.8</td>
<td>35.0</td>
</tr>
<tr>
<td>2005</td>
<td>29.4</td>
<td>40.6</td>
</tr>
<tr>
<td>2006</td>
<td>32.5</td>
<td>45.9</td>
</tr>
<tr>
<td>2007</td>
<td>33</td>
<td>47.4</td>
</tr>
<tr>
<td>2008</td>
<td>34.6</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>&lt;7.5%</th>
<th>&lt;8%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>28.9</td>
<td>41</td>
</tr>
<tr>
<td>2010</td>
<td>35.2</td>
<td>52.6</td>
</tr>
<tr>
<td>2011</td>
<td>45</td>
<td>65.4</td>
</tr>
<tr>
<td>2012</td>
<td>39.7</td>
<td>59.7</td>
</tr>
</tbody>
</table>

General trend to more individuals hitting target area for HbA1c (as recommended by UK Department of Health less than 7.5%). For paediatric practice it has been suggested by the American Diabetes Association that 8% target should be used.

Table 5. Translation of HbA1C into Relative Risk of Developing Complications using DCCT Complications Dataset

<table>
<thead>
<tr>
<th>Relative Risk</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>HbA1C % of Clinic</td>
<td>HbA1C % of Clinic</td>
<td></td>
</tr>
<tr>
<td>1-2 &lt;8</td>
<td>44.1</td>
<td>&lt;8</td>
</tr>
<tr>
<td>2-6 8-10</td>
<td>37.4</td>
<td>8-10</td>
</tr>
<tr>
<td>&gt;6 &gt;10</td>
<td>18.5</td>
<td>&gt;10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Relative Risk</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>HbA1C % of Clinic</td>
<td>HbA1C % of Clinic</td>
<td></td>
</tr>
<tr>
<td>1-2 &lt;8</td>
<td>65.4</td>
<td>&lt;8</td>
</tr>
<tr>
<td>2-6 8-10</td>
<td>26.8</td>
<td>8-10</td>
</tr>
<tr>
<td>&gt;6 &gt;10</td>
<td>7.8</td>
<td>&gt;10</td>
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</table>

4. ANNUAL REVIEW PERFORMANCE

a). 2010

<table>
<thead>
<tr>
<th></th>
<th>PAEDIATRIC (0-12)</th>
<th>ADOLESCENTS (13-19)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N 176 %</td>
<td>N 142 %</td>
</tr>
<tr>
<td>Eligible</td>
<td>147 83.5%</td>
<td>142 100%</td>
</tr>
<tr>
<td>Attended</td>
<td>100 68.02%</td>
<td>110 77.4%</td>
</tr>
<tr>
<td>Missed</td>
<td>47 31.9%</td>
<td>32 22.5%</td>
</tr>
<tr>
<td>DNA (invited)</td>
<td>2 1.36%</td>
<td>4 2.8%</td>
</tr>
<tr>
<td>New Referral</td>
<td>31 21.0%</td>
<td>20 14.0%</td>
</tr>
<tr>
<td>Too Young</td>
<td>22 14.9%</td>
<td>-</td>
</tr>
<tr>
<td>Local</td>
<td>2 1.36%</td>
<td>6 4.2%</td>
</tr>
<tr>
<td>Newly diagnosed</td>
<td>8 5.4%</td>
<td>2 1.4%</td>
</tr>
<tr>
<td>New referral with A/R</td>
<td>2 1.36%</td>
<td>5 3.52%</td>
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</tbody>
</table>
### b). 2011

<table>
<thead>
<tr>
<th></th>
<th>PAEDIATRIC (0-2yrs)</th>
<th></th>
<th>ADOLESCENTS (13-19)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N 186</td>
<td>%</td>
<td>N 145</td>
<td>%</td>
</tr>
<tr>
<td>Eligible</td>
<td>149</td>
<td>80.1</td>
<td>142</td>
<td>97.9</td>
</tr>
<tr>
<td>Attended</td>
<td>123</td>
<td>82.5</td>
<td>114</td>
<td>80.2</td>
</tr>
<tr>
<td>Missed</td>
<td>17</td>
<td>11.4</td>
<td>18</td>
<td>12.6</td>
</tr>
<tr>
<td>DNA (invited)</td>
<td>0</td>
<td>0.0</td>
<td>4</td>
<td>2.81</td>
</tr>
<tr>
<td>New Referral</td>
<td>4</td>
<td>2.68</td>
<td>3</td>
<td>2.11</td>
</tr>
<tr>
<td>Too Young</td>
<td>32</td>
<td>21.4</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Local</td>
<td>10</td>
<td>6.71</td>
<td>8</td>
<td>5.63</td>
</tr>
<tr>
<td>Newly diagnosed</td>
<td>5</td>
<td>3.35</td>
<td>3</td>
<td>2.11</td>
</tr>
</tbody>
</table>

### c). 2012

<table>
<thead>
<tr>
<th></th>
<th>PAEDIATRIC (0-12yrs)</th>
<th></th>
<th>ADOLESCENTS (13-19yrs)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N = 204</td>
<td>%</td>
<td>N = 150</td>
<td>%</td>
</tr>
<tr>
<td>Eligible</td>
<td>161</td>
<td>78.9</td>
<td>147</td>
<td>98</td>
</tr>
<tr>
<td>Completed</td>
<td>91</td>
<td>61.5</td>
<td>86</td>
<td>61.2</td>
</tr>
<tr>
<td>Not completed</td>
<td>34</td>
<td>21.1</td>
<td>35</td>
<td>23.8</td>
</tr>
<tr>
<td>DNA (invited)</td>
<td>4</td>
<td>2.5</td>
<td>8</td>
<td>5.4</td>
</tr>
<tr>
<td>Newly diagnosed</td>
<td>5</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>patients</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Too young</td>
<td>38</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Referrals</td>
<td>18</td>
<td>11</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Some patients had annual review at the end of the year 2011 so the system of completing annual review around the birthday is not always successful.

Proposed Plan for 2013
The system of using one form for blood test and urine test DARB and DARI is working well
A new system of ensuring annual reviews are done when patients attend clinic for the first 3 months of the year
Diabetes register will be kept up to date for the NPDA 2013
### Table 6. UCLP and NATIONAL/INTERNATIONAL BENCHMARKING

<table>
<thead>
<tr>
<th></th>
<th>HbA1c</th>
<th>Percentage &lt;7.5%</th>
<th>Diabetes Admissions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>2010-11</td>
</tr>
<tr>
<td><strong>UCLH/GOSH</strong></td>
<td>7.7</td>
<td>33.8</td>
<td>38</td>
</tr>
<tr>
<td><strong>NCL</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>8.5</td>
<td>15.5</td>
<td>33</td>
</tr>
<tr>
<td><strong>NE LONDON</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>8.93</td>
<td>14.3</td>
<td>50</td>
</tr>
<tr>
<td><strong>BEDS and HERTS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>8.7</td>
<td>11.6</td>
<td>58</td>
</tr>
<tr>
<td><strong>ESSEX</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>9.2</td>
<td>9.2</td>
<td>48</td>
</tr>
<tr>
<td><strong>All United Kingdom</strong></td>
<td>8.7</td>
<td>15.8</td>
<td></td>
</tr>
<tr>
<td><strong>Germany</strong></td>
<td>8.1</td>
<td>33.7</td>
<td></td>
</tr>
</tbody>
</table>
GREAT ORMOND STREET HOSPITAL SITE

This year has seen the formation of a complete IDG at the GOSH site with the appointments of Samantha Drew, diabetes nurse specialist, Sharon McElroy, psychologist, Hannah Gordon, diabetes nurse and Rakesh Amin, consultant. These members of the team have joined Catherine Peters, consultant and Rebecca Margetts, diabetes dietitian.

Patient care
The focus on this site is on less common forms of diabetes, including cystic fibrosis (CF) related diabetes, post transplant diabetes and steroid related diabetes. We have established good working relationships with the CF, renal transplant and cardiothoracic transplant teams in particular. We have dedicated joint diabetes/CF clinics and we are increasingly using CGMS in this group of patients.

We have three children on pump therapy and two more pump starts due in the next month. The young people now using the pumps report a significant improvement in quality of life and we have an interview with one child on the hospital website http://www.gosh.nhs.uk/teenagers/about-your-condition/diabetes/controlling-my-blood-glucose-levels-by-jade-13/

Samantha Drew and Rebecca Margetts have spent a considerable amount of time developing education packages for CYP with diabetes and their families which take into account the lifestyle and medical factors relating to transplant therapy and living with more than one chronic disease.

Staff education
Over the past year, much of the diabetes team focus has been on improving the knowledge and skills of staff within the trust. Historically, GOSH has not provided a service for children and young people with diabetes and the appointment of a diabetes nurse specialist was made with a view to improve understanding in this area. Samantha has provided education to clinical site practitioners, practice educators and ward staff and this has been very well received. She worked with Rebecca Margetts and Diabetes UK to hold a hospital event for World Diabetes Day in November 2012. This was attended by staff and families and an article in the hospital newsletter following this has further highlighted the work of the diabetes team.

Audit
An audit against standards set by the National Patient Safety Agency, Never Event: Maladministration of insulin was undertaken in May 2012. The sample group included 61 nurses and 7 doctors across the trust. The results showed that an average of 37% of staff had knowledge that met the standards set by the National Patient Safety Agency. The results were presented to the Quality and Safety Committee in November 2012 where it was agreed that completion of diabetes online e-learning will become mandatory for all clinical staff from March 2013.

The team have been working with the GOLD team (GOSH e-learning department) to develop a suitable e-learning package and a DVD quick guide has been uploaded on “the safe use of an insulin pen device” for staff to access 24 hours a day.

The pharmacy department have also recently completed an audit into use of insulin on the wards and the information is currently being collated. As a result of problems identified around the prescription of insulin, we have worked with the pharmacy on the electronic prescribing software to introduce improved prescribing options. We will soon be able to prescribe based on carbohydrate and correction ratios.
PEER REVIEW

In July 2012 we underwent the Peer Review process with a visit by the assessors from Yorkshire and the National Cancer Board who run Diabetes Quality. The review team were impressed with the team which they felt was met with an efficient, well regarded Paediatric Diabetes Team that is committed to providing a high quality service. They noted our Health Service Journal award as testimony to this.

The reviewers noted our joint service run across the University College London Hospital (UCLH) and Great Ormond Street Hospital (GOSH) sites and were impressed by the mutual respect between both teams and staffing groups.

Strong points liked by the Reviewers

Management of HbA1c - median of 7.8% in 2011.
Development of service at GOSH reducing risks to patient safety.
Pump 'Expert patient' day in place and this has been running for four years.
Multiple examples of positive patient feedback.
'Get Ready for Adult life with Diabetes' information leaflet.
Transitional arrangements - age grouped cohorts of patients.
Inclusion of patient competencies within the carb counting information
Introduction of school liaison sessions at UCLH plus availability of Friday morning appointments for teachers.
Patient education nursing checklist.
Strong nursing team.
Support provided by the Divisional Manager.

Things to do

Enhance the dietetic profile within the team.
Psychological provision at GOSH.
Need to identify a lead for overall strategic development of service and focal point for communication.
GOSH to submit data to National Diabetes Audit.
Policy relating to current arrangements for 'key worker' needs to be formulated.
The paediatric diabetes service at UCLH cares for children and adolescents aged 0-19 years. The service has specialist clinics for children (aged under 13 years) under the care of Professor Peter Hindmarsh and Dr Catherine Peters and clinics for adolescents (13-19 years) under the care of Professor Russell Viner. The latter includes a specific transition programme into the adult diabetes service for 18-19 year olds. Rebecca Thompson provides services as a Nurse Consultant to both age groups.

The diabetes service has an inter-disciplinary team which work together with the aim to support the young person and their family living with the demands of diabetes.

The service offers an additional specialist service for adolescents struggling with their diabetes. Having a designated adolescent unit has enabled us to develop a 4-stage planned admission programme that allows young people who are really stuck with their diabetes, to start again and plan for a better future.

We are also a referral service for children and adolescents who wish to move onto an insulin pump. All team members are certified pump trainers and we continue to deliver our structured pump education pathway for these children and their carers.

We currently have a caseload of 348 children and young people with diabetes. Looking at our referrals into the service and the number of young people transitioning out to adult services each year, the service expands by approximately 25 children/ young people per year.

Accessing care

Children and young people have to live with the demands of diabetes 24-hours a day and the management impacts on every part of their life.

UCLH provides:

- an emergency department
- in-patient care (including a specialist adolescent unit for both emergency and planned admissions)
- out-patient care (includes interdisciplinary outpatient clinics, nurse-led clinics, nurse-led annual reviews, dietetic, podiatry and psychology clinics specifically focussed on CYP)
- education events (parent expert study days and workshops designed for school staff)
- ongoing support via telephone, SMS and email.

Inter-Disciplinary Group Meetings

The CYP IDG meets weekly on Tuesday between 13.00 and 14.00h at UCLH and between 14.30 and 15.30h at GOSH. Core members consist of one medical consultant, one clinical nurse specialist, a dietician and a psychologist. The following are discussed:

1. Current inpatients, including planned admissions, as well as newly presenting CYP with diabetes.
2. Recent inpatients review
3. Outpatients to be reviewed that week in clinical settings, along with any outstanding outpatient problems.
New referrals to the service, where consideration is given to attendance, either as an outpatient, the undertaking of a 4 stage plan, or a network meeting to better clarify the role for the Service in the care of the person with diabetes.

Decisions regarding treatment plans that need alteration are considered at the Clinical Nurse Specialist Team Meeting held each day at 08.00h.

For complex inpatients the Medical and Nursing Teams join the Thursday Paediatric and Adolescent Multi-Disciplinary Team Meeting

The weekly GOSH IDG consists of a medical consultant, clinical nurse specialist and dietician. Patient discussions have the same format as above. Due to the co-morbidities of the patients with diabetes that are managed at GOSH, psychology input is provided by the patient’s primary service ie CF team, transplant team, oncology team. Feedback to the psychology services from the meeting are provided where appropriate. Local liaison takes place in conjunction with the lead GOSH Speciality and involves the Secondary Care Paediatric Team and General Practitioner.

Contacts

Diabetes Central Administrator     Tel: 020 344 79221
Janet.Taylor@uclh.nhs.uk

Diabetes Nurse Specialists     Tel: 020 344 79364
childrensdiabetesnurses@uclh.nhs.uk

STAFFING

Core Group

Medical Consultants
Dr Rakesh Amin
Professor Peter Hindmarsh
Dr Catherine Peters
Professor Russell Viner

Nurse Consultant
Rebecca Thompson

Diabetes Nurse Specialists based at UCLH
Kirsty Agostini
Freya Brown
Jennifer Pichierri nee Luscombe
Louise Potts (Lead for Transition)

Diabetes Nurse Specialists based at GOSH
Samantha Drew (Lead for user issues)
Hannah Gordon
Dieticians based at UCLH
Laura Bull
Cathy Hunt

Dietician based at GOSH
Rebecca Margetts

Psychology Consultant
Dr Deborah Christie

Psychologist to Diabetes
Dr Lucy Casdagili

Diabetes Administrator
Janet Taylor (user issues contact)

Leads for Information Transfer and Technology
Professor Peter Hindmarsh
Dr Catherine Peters

Leads for User Issues and Information
Initial point of contact and directed as necessary
Kirsty Agostini (UCLH)
Samantha Drew (GOSH)
Jennifer Pichierri nee Luscombe (UCLH)
Louise Potts (UCLH)

Extended Groups

Adult Transition and Services
Dr Stephen Hurrell (UCLH)

Professor Stephanie Amiel (Kings College Hospital)
Geraldine Gallen (Clinical Nurse Specialist Kings College Hospital)

Play Specialist
Liz Wilkinson (UCLH)

Clinical Psychology
Glenda Fredman (UCLH)

Clinical Psychiatry
Simon Lewis (UCLH)

Social Worker
Gill Hardman (UCLH)
Ann Hunter (GOSH)

Ophthalmology at UCLH (Accredited Diabetes Retinal Service)
Mr Martin Harris
Nephrology
Dr William van’t Hoff (GOSH)
Professor Robert Unwin (Royal Free Hospital)

Gastroenterology
Dr Sara McCartney (UCLH)
Dr Keith Lindley (GOSH)

Neuropathy (Autonomic)
Professor Chris Mathias (National Hospital)

Exercise and Diabetes Consultant
Francesca Annan (Alder Hey Hospital, Liverpool)

Link Nurses
Laura Taylor (UCLH Ward T11)
Hannah Gordon (GOSH Rainforest)

Currently we have five Consultants in Paediatric Diabetes. Peter Hindmarsh, Catherine Peters and Russell Viner provide Medical Consultant input; Rebecca Thompson provides Nurse Consultancy and Deborah Christie provides Clinical Psychology input.

In addition to the consultants, the inter-disciplinary team include:

- Clinical Nurse Specialists – 2013 will see an increase in nursing time to 4WTE at UCLH and 0.8 WTE at GOSH to provide advice, support and education Monday to Friday 08.00-18.00. All nurses have undertaken post graduate education within paediatric diabetes and are certified insulin pump trainers.
- Paediatric dietician – we will have 1.2 WTE paediatric dietetics covering the paediatric/adolescent diabetes and obesity service from January 2013 at UCLH and 0.7 WTE at GOSH
- Paediatric Psychology – Psychological services are an integrated component of the paediatric and adolescent diabetes service. Regular audit has demonstrated high levels of satisfaction with the service with over 50% of the case load having had an opportunity to meet with members of the psychology team. A range of psychological approaches are offered for individuals and families. The team works within a systemic framework and offers solution focussed, narrative and motivational interviewing as well as cognitive behavioural therapy. For complex cases network meetings are arranged in order to include members of the diabetes team, the family and other members of the network to join together to develop shared management plans.
- Play specialists who assist with pump preparation and intensive insulin schedules and help with annual reviews
- Children and young people are also able to access specialist advice for the ophthalmology and podiatry services, as part of their ongoing diabetes management.
CLINIC PERFORMANCE

General

The Service increased again during 2011 so that the total number in the service is 348. There were 36 new referrals to the service during the period April to December 2012 with the majority coming for Insulin Pump therapy. We are also seeing an increasing number of referrals of children who have started on pump therapy elsewhere and who are not getting the support that they need.

Table 1 Clinic Size 2009-2012

<table>
<thead>
<tr>
<th>Year</th>
<th>Clinic Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>253</td>
</tr>
<tr>
<td>2010</td>
<td>298</td>
</tr>
<tr>
<td>2011</td>
<td>327</td>
</tr>
<tr>
<td>2012</td>
<td>348</td>
</tr>
</tbody>
</table>

68% of the clinic population are on Insulin Pump therapy with the remainder on Multiple Daily Injection regimens and 3 remaining on Twice Daily therapies.

The current wait time for a Pump assessment Clinic is 2-3 weeks and pump starts are dependent upon the competence of the individual, on average 2 months. We offer immediate start on pump therapy to all newly diagnosed under the age of 5 years and to any sibling of a child already on insulin pump therapy.

Clinics Held

The number of clinics (face to face) held during the year increased overall by 5% reflecting the complexity of the case load along with the general increase in families wishing to have their care at UCLH. The addition of Dr Catherine Peters to the team has opened up a large area of flexibility to allow for more timely follow up appointments.

The General Diabetes Clinics have continued with the usual age banding. 2010 saw the introduction of the Teenage Transition Clinic held in parallel with the Adolescent Clinic. As transition is a continuous process this allows the 10-13 year age group to be seen in the same setting as the Adolescent Clinic and introduces them gradually to the concept and process of the Adolescent Clinic. Currently the Teenage Transition Clinic operates weekly.

The Nurse led clinic has continued on Wednesdays and continues to be a useful development for drop in and specific task focussed work. The telephone clinics are now well established and benefit from the clear agendas set for each consult. 2012 has seen a continued increase in e-mail communication which is now the most popular mode on interaction within the service.
Clinics Available for Children and Young People with Diabetes at UCLH 2012

<table>
<thead>
<tr>
<th></th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM</td>
<td>Paediatric Diabetes PCH and CJP (weekly)</td>
<td>Pump School (2 a month)</td>
<td></td>
<td>Additional Adolescent Clinic (monthly)</td>
<td>Annual Review and Education Training Clinic</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Psychology and monthly Network Meetings</td>
<td>Sensor training clinic (monthly)</td>
</tr>
<tr>
<td>PM</td>
<td>Nurse consultant clinic (weekly)</td>
<td>Adolescent Clinic</td>
<td>Nurse Led Clinic (weekly)</td>
<td>Paediatric Diabetes (fortnightly)</td>
<td>Telephone clinic (weekly)</td>
</tr>
<tr>
<td></td>
<td>Adult Transition (3 monthly)</td>
<td>Teenage Transition (weekly)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Psychology</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note psychology also conduct sessions throughout the week for CYP with Diabetes

Timely service delivery is important and Table 1 shows how this has changed over the last few years in Paediatrics and Teenage Transition. Clinic size has increased and overall Did Not Attend (DNA) rates are low (versus 9-10% for Endocrinology at Great Ormond Street Hospital) and unchanged. Consultation times suggest that our 30 minute appointment schedule is correct with efficient use of time as shown by Face to Face times.

Table 2 Timeliness of Service (Paediatrics)

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Clinic Size</td>
<td>6.9</td>
<td>7.6</td>
<td>7.6</td>
<td>7.8</td>
<td>7.1</td>
<td>6.8</td>
</tr>
<tr>
<td>DNA Rate (%)</td>
<td>3.3</td>
<td>4.3</td>
<td>2.4</td>
<td>5.1</td>
<td>4.8</td>
<td>4.7</td>
</tr>
<tr>
<td>Wait time (mins)</td>
<td>13.7</td>
<td>15.4</td>
<td>17.4</td>
<td>15.5</td>
<td>12.8</td>
<td>12.4</td>
</tr>
<tr>
<td>Consultation time (mins)</td>
<td>23.0</td>
<td>22.3</td>
<td>25.9</td>
<td>26.5</td>
<td>25.6</td>
<td>25.5</td>
</tr>
<tr>
<td>% Face to Face Time</td>
<td>NA</td>
<td>73.6</td>
<td>85.7</td>
<td>85.0</td>
<td>82.0</td>
<td>79.7</td>
</tr>
</tbody>
</table>
Timeliness of Service (Teenage Transition Clinic)

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Clinic Size</td>
<td>5.4</td>
<td>5.3</td>
<td>5.9</td>
</tr>
<tr>
<td>DNA Rate (%)</td>
<td>3.4</td>
<td>6.0</td>
<td>6.8</td>
</tr>
<tr>
<td>Wait time (mins)</td>
<td>18.5</td>
<td>19.8</td>
<td>13.8</td>
</tr>
<tr>
<td>Consultation time</td>
<td>27.6</td>
<td>25.4</td>
<td>23.8</td>
</tr>
<tr>
<td>% Face to Face Time</td>
<td>76.9</td>
<td>75.9</td>
<td>77.8</td>
</tr>
</tbody>
</table>

We asked families and young people what they felt about the service using the NetProvider Score System. Families and/or young people were asked to rate the service.

On a zero to 10 scale how likely is it that you would recommend us to a friend or another family with a child who has diabetes?

<table>
<thead>
<tr>
<th>67 completed returns out of 70 issued</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mean Score 9.86 Standard Deviation 0.52</strong></td>
</tr>
<tr>
<td>Compares to standard return in NHS of under 5</td>
</tr>
</tbody>
</table>

**Insulin Pump service**

UCLH now has 262 children and young people using insulin pump therapy. This represents 75% of our current caseload. We are able to resource for 48 new pump starts per year, enabling a supportive staged pathway from referral through to families feeling confident and competent to use this insulin regimen.

UCLH has seen an increase in referrals of children and young people already initiated on insulin pump therapy but who are looking for more support and education from health care professionals to enable them to become experts at using CSII. The needs of this group has been met through education, reviewing current pump settings though the use of continuous glucose monitoring and nurse email/telephone clinics and additional follow up clinic slots in Rebecca Thompson's clinic. Once pump setting are optimised these patients are then seen in the MDT clinic on a three monthly basis.

**PSYCHOLOGY AND DIABETES**
The interaction between the Psychology Team and Diabetes continues to go from strength to strength. Referrals to psychology continue to increase. A steady increase in referrals has taken place over the years. On average families are seen 3 - 12 times following the initial referral depending on the reason for referral. Individual, family and parental support is available.

Network meetings have continued and remain valued by UCLH Diabetes Team, families and local services including schools.

A specialist neuropsychological assessment service is also offered to young people who may have cognitive difficulties as a result of poor metabolic control. This specialist assessment is discussed with children, young people and families as well as liaising with schools and the education authorities.

The Tree of Life sessions have continued during the year. Young people that have participated in the workshops have continued to participate in the most recent session as co-facilitators supported by the psychology team.

Figure 1. Psychology Referral Patterns
AFRICAN GROUP – Jennifer Pichierri

The work involves improving the outcomes for Children and Young People with diabetes treated at UCLH, specifically from African backgrounds. We have identified that children and adolescents from African backgrounds have poorer glycaemic control compared to the white Caucasian population treated at UCLH. (Caucasian mean HbA1c 7.8%; African mean HbA1c 9.4%).

To address this Jen has been running support groups in order to ascertain how we can best meet the needs of this population and support them. After a series of meetings the group worked out their own plan and determined what their needs were. We then organised ways to help meet these needs but at all times ownership of the direction of the group remained with the families. As a result of this in the families that engaged there was a 0.8% decrease in the HbA1c over 2012. We hope to build on this success during 2013 by using the principles that we have learnt to engage other diverse groups.

In addition we have begun a piece of work to see how GOSH/UCLH can engage and help tackle diabetes problems in Africa. This is early days but we are working with a group of Somalian ladies in the UK to consider how best to deliver support for children with diabetes in the Horn of Africa.
SUPPORTING SCHOOLS AND EARLY YEARS CENTRES

Having diabetes impacts on care given within schools and early year’s settings, with appropriate diabetes care necessary for the child’s immediate safety, long term well being, and optimal academic performance. Whilst some older children may be fully independent with their diabetes care, younger children are likely to need support and assistance from school staff during the school day to manage their diabetes on their behalf in the absence of their parents. It is therefore essential that all school staff have an awareness of this medical condition and the child’s needs during the school day.

The team at UCLH have written a Position Statement relating to the care of children with diabetes in schools and early years settings that formalised early verbal communication between UCLH and London Borough of Camden. The draft document has been sent out for comments and is to be discussed with commissioners and complex needs panels. It is hoped that this can then be formally approved by Camden.

Our school study days were well attended this year and schools felt knowledge had increased and there was more confidence in thinking about food in school and exercise. We were also impressed by the schools confidence improving in managing high and low blood glucose situations.

Things that people found helpful were the practical session, examples from work, carb counting and the Equality Act info. Things that people requested for the future were updates on developing an actual care plan.
DIABETES CARE CHARTER

Our Mission Statement, “To develop and deliver a high quality and responsive diabetes service that maximise health and well-being for children, young people and families” captures what we believe we should be striving for.

This year we have translated this broader mission statement into a series of statements that describe what you can expect of us from the time of diagnosis and then through our general care processes. We imagine that these will change with time as we receive feedback.

At Diagnosis we will:

1. Always respect your views on your child and work with you to provide the best care possible
2. Remember that this a stressful time for you and provide extra help when needed to deal with the problems that arise
3. Introduce you to the Diabetes Team and explain the way that we help people manage diabetes.
4. Help you start insulin therapy and understand how insulin works and how to give insulin.
5. Instruct you on how to measure blood glucose using a meter and explain what high and low blood glucose measurements mean.
6. Show you how to deal with high blood glucose values by giving extra insulin
7. Show you how to deal with low blood glucose values by giving carbohydrate or reducing insulin
8. Review your family meals and think about how diabetes will fit in

When you go Home we will:

1. Keep in daily contact for the first 10 days
2. See you on a weekly basis in our clinics until you are confident about diabetes
3. Ensure that there will be Community support for you at home
4. Liaise with nursery/school so that they know how to help you when your child goes back to nursery/school

What Care you should expect in the long term. We will:

1. Encourage and support you to develop into an Expert Diabetes Carer
2. Deliver advice and support in a way that is helpful to you
3. Expect you to work with us in a collaborative way to enhance your skills
4. Use clinic appointments or telephone sessions to develop your skills and help you find solutions to any problems that arise
5. Keep you updated on new developments in diabetes care
6. Make sure that we check for long term problems on a regular basis

RELATIONS WITH FAMILY DOCTORS

We are conscious also that we need to work well with colleagues in primary care. Paediatric Diabetes Care is recognised by all to be best delivered through Paediatric Diabetologists but we recognise the important role that Family Doctors play in providing holistic care.
We hope to improve our interactions with Family Doctors through our web solution. However it is useful to also outline what the UCLH diabetes team is responsible for and what your family doctors/GPs can do

**Hospital Responsibilities**

We will provide:-

- Quarterly review of diabetes care and goal setting to develop the competence of the patient and family
- Annual review checks for complications of diabetes
- Provide various modes of access for information and advice such as telephone clinics, email and the UCLH Diabetes Portal
- Update you by whatever mode of communication you prefer after every consultation
- Liaise with nursery/school to ensure that staff are trained in managing diabetes in nursery/school
- Provide in-house experienced psychologists who are specifically trained in dealing with the problems children and young people with Type 1 Diabetes can often experience.

**General Health**

From the Family Doctor/GP standpoint we would like you to provide:

- General health care as you would in any child without type 1 Diabetes
- The full range of immunisations and developmental checks
- Prescriptions for the requisite supplies: insulin, needles, ketone strips, needle disposal, Glucogel and Glucagon injections, etc. We will provide this list at diagnosis for you and update as needed.
- Sufficient blood glucose testing strips. With the intensive insulin regimens that we recommend, patients need to test many times per day and the average is 8-10. We find that this achieves a high level of control which is consistent with research findings

**Emergency Care**

There are several aspects that we welcome help with:

1. Supporting ourselves and the family in ensuring “Ease of Access” with the local Paediatric Team to avoid unnecessary delays in Accident and Emergency.
2. Ensuring that your practice has easy access to our information on Sick Day rules and the Management of Hypoglycaemia. All these are on our Web Portal (see below).
3. That the patient’s condition is flagged on your system, so locum doctors and practice nurses are alerted that the patient has Type 1 Diabetes.
4. Encourage the young person to wear a medic alert. We realise that we cannot enforce this but a bit of additional reinforcement can be helpful.
FINANCE

For the Financial Year 2012-2013 we have claimed where possible the Best Practice Tariff. This will become mandatory for Clinical Care Groups to pay in 2013-2014 and we aim to recoup this money in over 95% of our cases.

Funding for the Insulin Pump Service is not covered by the Tariff and this will continue to be charged separately on the basis of a new start rate of 48 per year.

The Best Practice Tariff is awarded on the following criteria:

✔ On diagnosis, a young person with the diagnosis of diabetes is to be discussed with a senior member of paediatric diabetes team within 24 hours of presentation.

✔ All new patients must be seen by a member of the specialist paediatric diabetes team on the next working day.

✔ Each provider unit can provide evidence that each patient has received a structured education programme, tailored to the child or young person’s and their family’s needs, both at the time of initial diagnosis and ongoing updates throughout the child or young person’s attendance at the paediatric diabetes clinic.

✔ Each patient is offered a minimum of four clinic appointments per year with a multi-disciplinary team (MDT), i.e. a paediatric diabetes specialist nurse, dietitian and doctor.

✔ Each patient is offered additional contacts by the diabetes specialist team for check-ups, telephone contacts, school visits, e-mails, trouble shooting, advice, support etc. Eight contacts per year are recommended as a minimum.

✔ Each patient is offered at least one additional appointment per year with a paediatric dietician with training in diabetes (or equivalent appropriate experience).

✔ Each patient is offered a minimum of four haemoglobin HbA1C measurements per year. All results should be available and recorded at each MDT clinic appointment.

✔ All eligible patients should be offered annual screening as recommended by current NICE guidance.

✔ Each patient should have an annual assessment by their MDT as to whether input to their care by a clinical psychology input is needed, and access to psychological support as appropriate.

✔ Each provider must participate in the annual Paediatric National Diabetes Audit.

✔ Each provider must actively participate in the local Paediatric Diabetes Network. A minimum of 60% attendance at regional network meetings needs to be demonstrated.

✔ Each provider unit must provide patients and their families with 24 hour access to expert advice on diabetes management.

✔ Each provider unit must have a clear policy for transition to adult services.
Each unit will have an Operational Policy, which should include within it a structured ‘high HbA1C’ policy, a clearly defined DNA/was not brought policy taking into account local safeguarding children board (LSB) policies and evidence of patient feedback on the service.
NORTH CENTRAL LONDON PAEDIATRIC DIABETES HEALTH CARE SYSTEM

The North Central London Paediatric Diabetes Health Care System is a grouping of Commissioners and Paediatric Diabetes practitioners which aims to deliver a value-based diabetes health care system to the current 750 children and young people (CYP) with diabetes in North Central London. The Hospitals involved are Barnet and Chase Farm Hospitals NHS Trust, Great Ormond Street Hospital for Children NHS Foundation Trust, Royal Free Hospital NHS Trust, University College London Hospitals NHS Foundation Trust and Whittington Health NHS Trust.

The delivery of care varies between the participating centres. Only the service at UCLH approaches the benchmark measures of Germany, internationally recognised as providing the best quality of care. Access to intensive insulin regimens such as pump therapy, which provides the best control, is variable across the sector with 64% of patients at UCLH on pump therapy versus 8% at the other sites. All participating trusts cover similar areas of social deprivation and ethnic diversity and attaining a standard of equitable care is a major challenge.

Based on these data the Paediatric Diabetes Clinical Teams we have all got together to deliver a patient centred high value service to all CYP with Diabetes in North Central London.

We plan to do this by:

- Creating high performing diabetes teams to deliver the vision individualising care on the basis of personal needs, beliefs and priorities and delivering care in suitable environments.
- Ensuring that the needs of the family are met and that we reach those at risk of exclusion, such as children in care or from ethnic minorities. Equitable care for all
- Delivering a high value service based on the 6 markers of Quality Care which is cost-effective maximising the quality of healthcare while releasing savings
- Use already designed innovative ways to provide services on a 24/7 basis using specialist assessment and treatment protocols, inter-disciplinary teams, outreach and IT systems
- Providing services that are age-appropriate and emphasise prevention, earlier diagnosis, better treatment and better coordination.

This is part of a larger drive which we are the lead for through the area that is part of UCL Partners. UCL Partners is an Academic Health Centre charged with improving care for all in North Central and North East London. Our service is the prototype for this service development and we will be working on this throughout 2013.
**DIABETES CENTRE**

In order to better deliver what we do at UCLH and to deliver services better for children in North Central London we need to organise everything into a single Diabetes Centre. The general thinking and needs are shown below and Catherine Peters and Peter Hindmarsh are looking at siting options.

**Concept**
- Central umbrella paediatric diabetes centre operating across GOSH and UCLH trusts with option for other trusts to participate by local agreement
- Centre focused on needs of Children and Young People (CYP) and moving away from traditional medical clinic models
- The majority of staff situated in one clinical centre to improve communication and collaboration and for greater working efficiency
- Opportunity for holistic care of CYP with various forms of diabetes eg type 1 and cystic fibrosis related diabetes
- Strong clinical and basic science collaboration

**Structural Needs**
- Open reception and resource area
- 8 appointment rooms Each 4m x 3m
- Treatment room with lab equipment/stores 4m x 3m
- Educational seminar rooms opening into larger lecture area Each 5m x 5m
- Open plan office to accommodate nursing staff, dietitians, medical staff, psychologists, administrative staff involved in care of CYP with diabetes 6m x 6m

**Desirables**
- Separate adolescent and child facilities
- Kitchen/coffee bar area with wall mounted ovens and microwave for dietetic sessions

**Activities**
- Outpatient MDT activity
- Outpatient consultations with nursing staff, dietitians, psychology
- Daily rapid access referral clinic for new and current patients
- Transition clinics
- Pump school
- Diabetes educational programmes for CYP & family
- Seminars for teaching staff
- Seminars for parents & CYP on range of topics
- Staff educational programmes and study days
- Dietetic group work for weight management/celiac disease with potential for cooking/recipe resources
- Opportunities for walk in use of resources
- Reception staff/PA role to be amalgamated so that they are friendly face of clinic, allowing patient-admin staff interaction and full membership of diabetes team
- Use of space for weight management programmes in context of type 2 diabetes
Potential for CYP with co-existing morbidities to mix with other CYP with diabetes who do not pose health risks i.e. CF CYP in pump school with T1DM. Preventing cross infection between CF patients, but allowing shared learning.
D24

D24 is a project that we are working on with CapGemini, InferMed and NHS24 to create a 24-hour out of hours national advice centre. The technology that we are using allows us to place many situations in web and app formats so that families can work through problems on-line using a PC or their mobile phone. We also will be developing a call centre so that telephone advice and support can be accessed instead or as well as. The system will also act as resource for education and training materials which will be tailored to the competence level of the user and also set for ease of reading or listening dependent on the age of the person that is accessing the information.

As an example here are two screen shots of how it might look:
RESEARCH

UCLH Children and Young People’s Diabetes Service have an active research programme ranging from beta cell studies, clinical research studies and large scale motivational behaviour trials.

This year we were very pleased to be involved with the Artificial Pancreas Project in Cambridge with Roman Havorka. Further families went to Cambridge to participate in the studies in 2012 and the results show amazing control overnight with the closed loop algorithm. Several patients have returned this year to complete a short study on how the algorithm copes with missed boluses. Next year we hope to be involved with the at home algorithm.

Measuring Oxidative Stress
In conjunction with Dr Kevin Mills at Institute of Child Health, Professor Hindmarsh has been looking at the development of markers of oxidative stress in urine. Diabetes is associated with high glucose values in the blood and these lead to damage to blood vessels through a process known as oxidative stress. Currently we try to keep blood glucose normal to reduce these problems but we know that problems still occur. As a result we are looking at ways of measuring oxidative stress as this may be another factor, like HbA1c, that we should control. So far we have identified a marker in urine which is a by-product of the body’s metabolism of Vitamin E which is generally higher in those with diabetes. Our research centres on how this might relate to other markers of blood vessel health. This is now moving into field studies with Chloe Bulver setting out on a project to link these changes with other markers of blood vessel health.

We are also looking into the use of two new urine measures of kidney function which initial studies suggest might be of value.

Diabetes Care in Different Communities
Delivering care equitably is a hallmark of a Quality Service. We have started to look at this in our clinic population. What we have found is that the background of the person, particularly their ethnicity, is important in how well they do with their diabetes. We showed that deprivation played a small role in this. From this, we have started to look at how we might better address the needs of different ethnicities. More specifically, Jennifer Pincherri is leading on a project to assess attitudes to health in the African population that comes to our service.

CASCADE
This is a structured intensive psycho-educational programme developed at University College London Hospitals Trust. Youngsters are invited with their families to attend four group sessions, delivered over four months, with three to four families per group. The aim of the sessions is to develop the youngster’s confidence in managing their diabetes, including how to adapt the amount of insulin they take, how to eat normally, and how to manage daily challenges such as exercise, illness, and holidays.

The study is a randomised controlled trial in which clinical nurse specialists in 13 clinics attend training workshops, and then deliver the programme to over 500 children and young people from across 26 specialist centres. We hope to find out how acceptable the programme is, ease of delivery, participation and impact on health related quality of life, self management behaviour, emotional, behavioural and family functioning and service use. The programme will also be assessed for its cost-effectiveness. The study is now complete and we await results in 2013.

To view full details about the project visit www.hta.ac.uk/1669
PUBLICATIONS


Thompson, R. Adolescents and pump therapy – Maintaining success CSII therapy. Diabetes Digest 2011 (Suppl); 10 :6-8

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