

Improving the Quality of Inpatient Care

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ABCD Autumn Meeting 2008

Inpatient Care – Coming of Age

- Before 2000
- 2000- 2004
- 2004-2008
- Beyond 2008

The size of the problem

- Amidst a world-wide pandemic of diabetes
- Which is not sparing hospital practice
- Those with diabetes are admitted twice as often and stay twice as long
- Nodefined standards of care for hospital inpatients with diabetes
- Only limited published evidence to support care
- 'Good practice' level of care (at best) and 'negligible care' (at worst)
- With only limited opportunities to share practice.

Before 2000

- Most diabetes centres were trying to provide 'outreach' services to inpatients
- Patchy delivery of services to inpatients
- First reports showing that a dedicated inpatient specialist nurse service reduced LOS
 - Bournemouth
 - Cardiff
- First dedicated consultant post in diabetes inpatient care
 - Oxford

2004-2008

- Formation of the DISN forum 2004
 - Norfolk and Norwich
- CREST report on safe use of insulin in N Ireland (2005)
- ABCD/Sanofi Aventis Survey of Diabetes Inpatient Specialist Nurse Services (2005-7)
 - Norfolk and Norwich
- Diabetes UK Patients In-hospital Experience (2007)
 - A collation of the inpatient experiences of people with diabetes can be found at:
 - http://www.diabetes.org.uk/Professionals/Information_resources/Reports/Collation-of-inpatient-Experiences-2007/
- Diabetes Inpatient National Network (2007)
 - Oxford and Bournemouth

First National Initiative



- 2004
- Formation of the
- Diabetes Inpatient Specialist Nurse Forum
- Chair Esther Walden, DISN, Norfolk & Norwich

Recommendations to improve the safe use of insulin in secondary care in Northern Ireland

December 2005

Northern Ireland Medicines Governance Team



National Survey of Inpatient Nurse Services

- ABCD/Sanofi Aventis audit surveyed UK inpatient diabetes services in 92% of 262 identified hospitals in the UK.
- Half all UK Hospitals now have a DISN; the remainder would like a DISN, but 1/4
 have had business case rejected.
- Number of acute inpatient beds main population discriminant for having a DISN
- Diabetes teams with a DISN and those without have different perceptions of usefulness of a DISN
- Diabetes teams without a DISN ¾ use DSN to provide inpatient services (mean 15 hours per week per DSN team), but ¼ have no inpatient cover.
- Estimated inpatient coverage perhaps 30% of inpatient diabetes population.

COMPERE

Ist National Conference of The Diabetes Inpatient National Network (DINN):

Towards improving acute care and outcomes for people with diabetes in hospital

7 December 2007, London



The Diabetes Inpatient National Network (DINN) has been established to rectify the neglect associated with the Cinderella area of acute diabetes care. The diabetes epidemic is not sparing hospital practice – all wards are brimming with people with known and unknown diabetes, as well as stress hyperglycaemia. Inhospital hyperglycaemia has very poor outcomes and current management is frequently sub-optimal in all clinical arenas.



This unique and exciting conference will highlight the crisis, review the evidence, debate current perceived wisdom and plan for the future. The view of DINN is that the inhospital care of people with diabetes and hyperglycaemia must be the thrust of specialist diabetes services from this moment onwards. We hope you will join us to add your views to this vital and often neglected area of diabetes care.

Maggie Hammersley, Consultant Physician / Inpatient Diabetologist, Oxford
David Kerr, Consultant Physician, Bournemouth

Aims of DINN 2007

- Raising awareness of the need to improve care for hospital inpatients with diabetes and hyperglycaemia
- Development of nationally recognised standards of care
- Working together with other national organisations to develop and disseminate standards of care
- Consulting and involving patient groups

Aims of DINN 2007

- Coordinating a package of web-based good practice guidelines for the care of hospital inpatients
- Designing and embedding robust value indicators and a national audit tool (cf MINAP dataset)
- Building a research network to improve the evidence base for good practice in this arena

Activity during 2008

- National Diabetes Support Team
 - Improving emergency and inpatient care for people with diabetes
- NHS Institute for Innovation and Improvement
 - Focus On: Inpatient care for people with diabetes
- JBDS Inpatient Care Group
 - Cross disciplinary clinical group
- Government Health Care Select Committee on Patient Safety
- National Patient Safety Association (NPSA)
 - Campaign for Safer Insulin Prescribing
- Diabetes UK:
 - Task and Finish Group for the Management of the Acute Foot in hospital
 - What Care to Expect in Hospital



Improving emergency and inpatient care for people with diabetes

March 2008

This document is not intended to present clinical guidelines, but to inform discussions between clinical teams, acute trusts and commissioners on these key aspects of inpatient diabetes care.

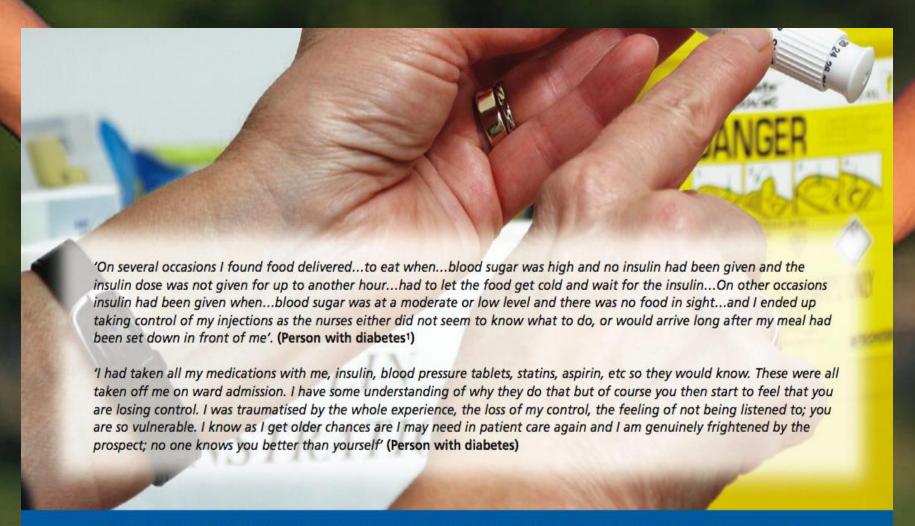




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Sue Roberts, National Clinical Director for Diabetes

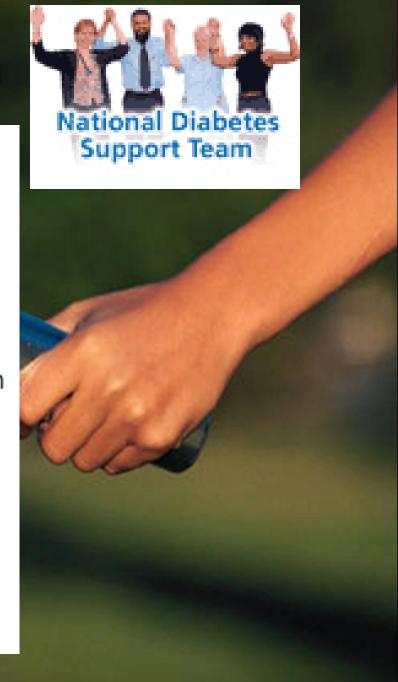
Mike Sampson, Chair of the Working Party



The Report of a Working Party of representatives of the inpatient and emergency care community in partnership with the National Institute for Innovation and Improvement

The working group decided to concentrate on three principal areas in which improvements are needed and where progress can be made relatively easily and measured:

- Preventing diabetes emergencies out of hospital, and emergency admissions, with an emphasis on ambulance services.
- Improving quality and value for money for people in hospital with diabetes.
- Preventing and treating acute foot problems in hospital: strategies for improvement



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Delivering Quality and Value

Inpatient care for people with diabetes



Background

- Evidence of poor patient experience
- Common problem (10-15% of inpatients have diabetes)
- Longer length of stay (up to 2.6 days)
- Highly variable performance between trusts
- Evidence of poor clinical outcomes
- Effective, evidence based interventions are available
- Diabetes NSF (Standard 8) but less national work to date

NHSIII Project Objective

Improve the care, outcomes and experience of people with diabetes admitted to hospital with non-diabetes related problems



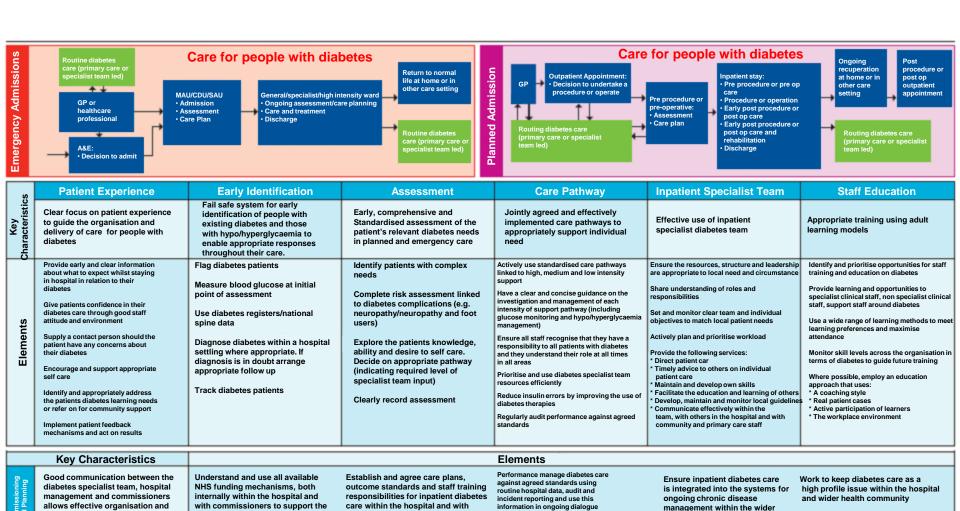
Pathway and Key Findings

delivery of high quality, patient

focussed services

delivery of high quality diabetes care

commissioners



with hospital management and

commissioners

health community

characteristics Patient experience Key Clear focus on patient experience to guide the organisation and delivery of care for people with diabetes Provide early and clear information about what to expect whilst staying in hospital in relation to their diabetes Give patients confidence in their diabetes care through good staff attitude and environment Elements Supply a contact person should the patient have any concerns about their diabetes Encourage and support appropriate self care Identify and appropriately address the patients diabetes learning needs or refer on for community support Implement patient feedback mechanisms and act on results

Early Identification characteristics Key Fail safe system for early identification of people with existing diabetes and those with hypo/hyperglycaemia to enable appropriate responses throughout their care Flag diabetes patients Measure blood glucose at initial point of assessment Use diabetes registers/national spine data **Elements** Diagnose diabetes within a hospital settling where appropriate. If diagnosis is in doubt arrange appropriate follow up Track diabetes patients

Assessment characteristics Key Early, comprehensive and standardised assessment of the patient's relevant diabetes needs in planned and emergency care Identify patients with complex needs Complete risk assessment linked to diabetes complications (e.g. neuropathy/neuropathy and foot users) Elements Explore the patients knowledge, ability and desire to self care. Decide on appropriate pathway (indicating required level of specialist team input) Clearly record assessment

Care pathways

Jointly agreed and effectively implemented care pathways to appropriately support individual need

Actively use standardised care pathways linked to high, medium and low intensity support

Have a clear and concise guidance on the investigation and management of each intensity of support pathway (including glucose monitoring and hypo/hyperglycaemia management)

Ensure all staff recognise that they have a responsibility to all patients with diabetes and they understand their role at all times in all areas

Prioritise and use diabetes specialist team resources efficiently

Reduce insulin errors by improving the use of diabetes therapies

Regularly audit performance against agreed standards

Elements

characteristics

Inpatient specialist team

Effective use of inpatient specialist diabetes team

Ensure the resources, structure and leadership are appropriate to local need and circumstance

Share understanding of roles and responsibilities

Set and monitor clear team and individual objectives to match local patient needs

Actively plan and prioritise workload

Provide the following services:

- * Direct patient care
- * Timely advice to others on individual patient care
- * Maintain and develop own skills
- * Facilitate the education and learning of others
- * Develop, maintain and monitor local guidelines
- * Communicate effectively within the team, with others in the hospital and with community and primary care staff

Elements

Key characteristics

Staff education

Appropriate training using adult learning models

Identify and prioritise opportunities for staff training and education on diabetes

Provide learning and opportunities to specialist clinical staff, non specialist clinical staff, support staff around diabetes

Use a wide range of learning methods to meet learning preferences and maximise attendance

Monitor skill levels across the organisation in terms of diabetes to guide future training

Where possible, employ an education approach that uses:

- * A coaching style
- * Real patient cases
- * Active participation of learners
- * The workplace environment

Elements

Key characteristics

Commissioning and planning

Good communication between the diabetes specialist team, hospital management and commissioners allows effective organisation and delivery of high quality, patient focussed services

Elements

Understand and use all available NHS funding mechanisms, both internally within the hospital and with commissioners to support the delivery of high quality diabetes care

Establish and agree care plans, outcome standards and staff training responsibilities for inpatient diabetes care within the hospital and with commissioners

Performance manage diabetes care against agreed standards using routine hospital data, audit and incident reporting and use this information in ongoing dialogue with hospital management and commissioners

Work to keep diabetes care as a high profile issue within the hospital and wider health community

Ensure inpatient diabetes care is integrated into the systems for ongoing chronic disease management within the wider health community

Institute for Innovation and Improvement

Primary Project Conclusion

It should be no more acceptable for acute trusts to lack an effective glycaemia management strategy than one for infection control or patient consent



Joint British Diabetes Societies Inpatient Care Group (JBDS IP Care Group)

- Formed 2008
- 3 nations representated
- Major stakeholder representation
- Terms of reference defined as improving inhospitalcare for patients with diabetes
- Work streams
 - Standards
 - Guidelines

JBDS IPCG Standards 1

The Top12	
Education	List of MDT staff attending proposed educational updates (% participation)
Mandatory testing	% inpatients with diabetes having capillary blood glucose test or random blood glucose test within 12 hours of admission
Governance	Publication of annual report on: quality of inpatient diabetes care provided by Trust; areas of potential improvement and steps to be implemented to facilitate this
Satisfaction	% of people with diabetes who have been in hospital reporting satisfaction with their clinical care – to compliment the information provided by the Trust
Care plan on admission	% of patients with diabetes as a secondary diagnosis who have a care plan agreed including self medication, need for specialist input, risk factors such as high risk of foot ulceration, etc. For added detail split at pre-op for planned patients and within 1, 4 and 24 hours of admission for emergency patients
Hypoglycaemia Incidence	Benchmark incidence of severe hypoglycaemia against equivalent national and regional data for admissions using widely available local and national datasets
DKA Morbidity &mortality	Complication rate of DKA treatment (cerebral oedema) In hospital death rates In hospital complications cerebral oedema, pulmonary oedema, ARF, septicaemia Readmission rate for DKA over 12-month period

Lead
Dr Rif Malik

JBDS IPCG Standards 2

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IV insulin use	% of patients and % of days of insulin infusion which are considered appropriate (based on
	agreed local guidelines eg not patients who are eating & drinking)
Risk management	Number of adverse incident reports concerning insulin prescription errors
	Review of the match between timing of insulin and
	food and number of prescribing errors
Training	Diabetes knowledge questionnaire (multiple choice) response rate & scores from 50 staff
	picked randomly from HR's Electronic Staff database
Length of stay	Age adjusted excess length of stay (LOS) and LOS ratio in diabetes patients for key indicators
	condition (see below) compared to non-diabetic
	patients. Key indicators (Emergency); Myocardial Infarction, Fractured Neck of Femur
	•
	Key indicators (Elective);
	Hysterectomy, Cholecystectomy,
	HipReplacement, By-pass grafting (Elective)
Self care	% of patients who wish to self care supported to self manage during their admission
	doing their own glucose testing/ self medicating
	with tablets/insulin including insulin dose adjust

Lead
Dr Rif Malik

JBDS IPCG Guidelines

1st Guideline Bundle

- DKA
- Peri-operative Care
- Hypoglycaemia in Hospital
- Management of the Acute Diabetic Foot

2nd Guideline Bundle

- Insulin prescribing
- ACS
- Stroke
- Nutrition in Hospital



UNITED KINGDOM PARLIAMENT



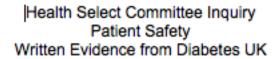
Consultation: Health Select Committee Inquiry into Patient Safety

Call for comments - Consultation: Health Select Committee Inquiry into Patient Safety

The UK Parliamentary <u>Health Select Committee</u> is to start an investigation into patient safety later this year. Among the issues it will examine are the role of human error and poor clinical judgement, the impact of public perceptions of risk on NHS policy, and the effectiveness of boards in establishing a safety culture.

The full terms of reference for the investigation can be downloaded here.

You are invited to assist BSAC in developing its response. Please submit comments to tguise@bsac.org.uk by no later than Thursday 11 September.





To: Committee Clerk

Health Select Committee

7 Millbank London SW1P 3JA

By email: healthcommem@parliament.uk

1. Introduction

- 1.1 Diabetes UK welcomes this inquiry by the Health Select Committee. Diabetes UK's response is focussed on aspects of safety relating to inpatient care for people with diabetes.
- 1.2 We have concentrated our remarks to the issues where we feel we can most effectively contribute to the debate. We would be delighted to supply additional information, or clarification on any of the points raised in our evidence.
- 1.3 Diabetes UK is the largest charity in the UK working for people with diabetes, funding research, campaigning and helping people live with the condition. We have over 170,000 members and represent the interests of people with diabetes, their carers, family and friends, by lobbying the government for better standards of care and the best quality of life.
- 1.4 2.3 million people in the UK have been diagnosed with diabetes and it is estimated that more than 500,000 people have the condition but are not aware of it. Evidence suggests that 4 million people will be living with diabetes in the UK by 2025.

The following interventions can assist in bringing about improvements in inpatient care

- Mandatory training of all staff
- Establishment and use of guidelines
- Establishment and implementation of clinical governance procedures, audit and benchmarking
- Investment to support the availability of diabetes specialist teams including DISNs to provide support
- Development of indicators for use by Care Quality Commission
- Patient satisfaction surveys to inform service improvement
- The sharing and implementation of proven good models of practice



National Patient Safety Agency

The National Patient Safety Agency leads and contributes to improved, safe patient care by informing, supporting and influencing the health sector.

The Patient Safety First Campaign for England

This Campaign has been created to change the culture within the NHS; to one that puts the safety of patients as the highest priority.

Cause: 'To make patient safety everyone's highest priority'
Aim: 'No avoidable death and no avoidable harm'.

Through both web-based and face-to-face support, the Campaign will provide initial resources for both individuals and teams working within the NHS from September 2008. Launched at the NHS Confederation Annual Conference on 19 June 2008, so far over 200 Trusts and PCTs have signed up to the Campaign.

The Campaign is unique and its approach is different in a number of ways. It:

- Seeks to improve the safety of patients by changing practice in specific areas based on existing medical evidence - interventions
- Seeks to create a movement. Sign up to the Campaign is voluntary and asks for participation from individuals, Trust Boards and other health organisations
- Is not a Government-led campaign. It is supported by the NHS Institute for Innovation & Improvement, the National Patient Safety Agency and the Health Foundation, but is delivered 'by the service for the service'
- Is led by a team of dedicated clinicians and managers from across England, all experienced in and passionate about improving patient safety in their own field.

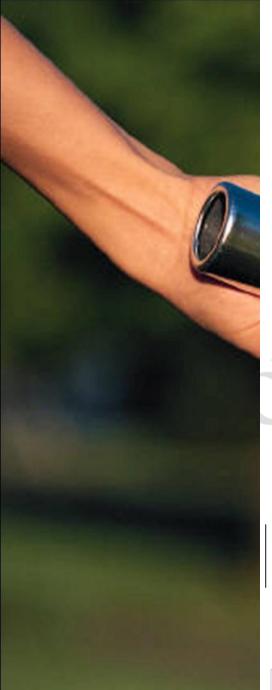
For more information on the interventions, and to find out how to sign up to the Campaign, visit the website.

Evidence to support this project

NRLS Data November 2003 - 31st March 2007 Total 5489

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Outcome (Validated)	
Death	1
Severe	3
Moderate	338
Low	854
No harm	4293
Stage	
Prescribing	867
Preparation/dispensing	551
Administration	3631
Monitoring	286
Other	154
Type of incident	
Wrong dose	1187
Omitted medicine	1239
Wrong drug	852
Wrong frequency	455
Wrong quantity	357
Wrong dispensing label	217
Wrong formulation	211
Mismatching patients/therapy	143
Wrong method of preparation / supply	132





10 Parkway London NW1 7AA Tel 020 7424 1000 Fax 020 7424 1001

Position Statement

Email info@diabetes.org.uk Website www.diabetes.org.uk

Improving Inpatient Diabetes Care - what care people with diabetes should expect when in hospital

February 2008 Page 1 of 7

Summary

Background

The problems surrounding inpatient care for people with diabetes have been long established and work is ongoing to address this issue. Diabetes UK invited people with diabetes to share their inpatient experiences and these highlighted concerns including; disempowerment, distress, a lack of staff knowledge including in the management of acute diabetes complications, issues with food and food and medication timing, medicines mismanagement, and a lack of information provision. It is vital that these issues are addressed to ensure people with diabetes receive high quality care.

Principles:

Standards of care in hospital should be of a level that ensures

- Every person with diabetes has an assessment and care plan for their hospital stay which is regularly updated as appropriate
- Co-ordination and administration of medications and food in a timely manner.
- Access to food and snacks appropriate for maintaining good diabetes management.
- Protocols are in place for the timely prevention and management of hypoglycaemia and hyperglycaemia

including self management of these complications where appropriate.

- People are supported to optimise blood glucose control during their hospital stay.
- Information about the inpatient stay is provided to people with diabetes
- People with diabetes have access to the diabetes team and education
- Effective multi disciplinary communication between staff
- A discharge and follow up plan is developed for each individual

Supported self management of diabetes

People with diabetes wishing to self manage:

- should be supported to do so where appropriate.
- should have access to their self monitoring equipment.
- should have access to education, including information about how to access a structured education programme.

In order to support the delivery of the above, Diabetes UK is calling for:

- The implementation of diabetes training for ward staff to ensure health care professionals are equipped with the necessary competencies.
- The development and implementation of protocols to cover; communication, ongoing referral, surgery, prevention and the timely and effective management of acute complications.
- The implementation of audit and the commissioning of models of care shown to be effective.

The charity for people with diabetes

Diabetes UK is the operating name of the British Diabetic Association Company limited by guarantee Registered office: 10 Parkway, London NW1 7AA Registered in England no. 339181 Registered charity no. 215199



Inpatient Care beyond 2008

- NDST National Project for Inpatient Care
- NDST to work closely with the JBDS IPCG to deliver this plan
- National Diabetes Audit Inpatient fields
- Prof M Sampson in conjunction with JBDS IPCG
 - Inpatient Management Guidelines Project
- DR J Thow NHSIII
 - Think Glucose Campaign

Norfolk and Norwich University Hospitals WHS

NHS Foundation Trust

Department of Diabetes and Endocrinology

Prof M J Sampson Dr R C Temple Dr N Dozio Dr K Dhatariya Dr T Wallace Dr F Swords

We would be very grateful for your help in this survey of key inpatient diabetes management guidelines. We know that most survey questionnaires reach the bin very quickly, but a full response would take only a few minutes and does not involve any extra work. The survey is supported by Diabetes UK, ABCD, the UK Diabetes Inpatient Specialist Nurse (DISN) group and the newly formed Joint British Diabetes Societies (JBDS) working group on inpatient diabetes care.

The JBDS and others are working on developing evidence based, clinically sensible and practical guidelines for key aspects of inpatient diabetes care for national use. One part of this process is to describe variability in current UK guidelines use and practice; a recent UK survey supported by ABCD has shown substantial gaps in guidelines use for inpatient care in the UK.

We are writing to ask if you would please consider sending us hard copies or electronic copies of your current Acute Trust diabetes management guidelines for:

- a) Diabetic ketoacidosis
- b) Severe acute hypoglycaemia in hospital
- c) Subcutaneous sliding scale insulin algorithms
- d) Intravenous sliding scale algorithms
- e) Immediate management(s) of the inpatient with an infected neuropathic foot ulcer
- f) Pre- and peri-operative management for patients a) on insulin
 - b) on oral hypoglycaemics







Professor Mike Sampson Bridget Turner, Diabetes UK Dr Peter Winocour, Chair ABCD Dr Maggie Hammersley, Chair JBDS Esther Walden, Chair UK DISN

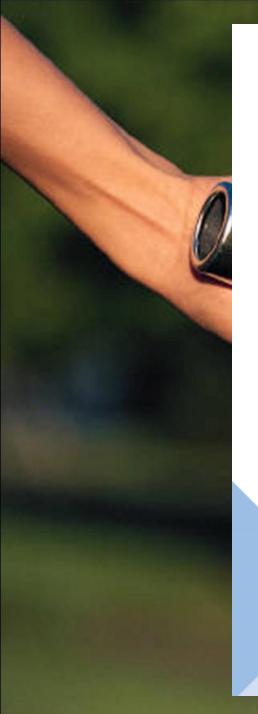
NHSIII Think Glucose Campaign



Institute for Innovation and Improvement









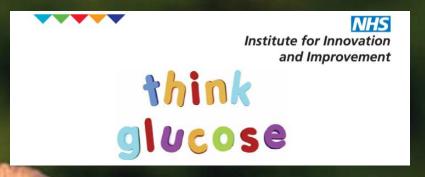


Inpatient care for people with diabetes

October 2008

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- Welcome
- What's been happening?
- Toolkit Test Site Day
- · What's in the toolkit?
- Market Research
- What happens next?
- ThinkGlucose events 2009
- Meet the team
- Contact details



ThinkGlucose Events 2009

From April next year we aim to launch a series of ThinkGlucose events across England. Every trust will be invited to send a small team who will be responsible for implementing the ThinkGlucose toolkit back in their own trust. You can register your early interest in attending one of these events by going to www.institute.nhs.uk/diabetes and clicking on the blue registration tab.

Each NHS Trust will be sent one toolkit along with information on how to apply for the implementation programme. The implementation programme will consist of two levels.

Level one will be attendance of the facilitator's course which will provide a comprehensive view and skill set to be able to implement the toolkit.

Level two will consist of a bespoke level of consultation from the NHS Institute for Innovation and Improvement to assist trusts in the ThinkGlucose toolkit implementation.

* Please note there will be a cost associated with both level one and two.

National Clinical Director for Diabetes Stated Priorities

- Teams/without walls
 - Integrated diabetes care district-wide
- Improving the outcomes of pregnancy in women with established and gestational diabetes
- Reducing admissions for diabetic emergencies
- Improving inpatient care for people with diabetes
- Reducing inequalities
- Improving glucose control in people with diabetes

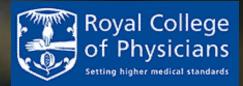


rimary Care Diabetes Society





















Royal College of General Practitioners

