

Diabetes in England 2010

Dr Rowan Hillson MBE

National Clinical Director for Diabetes

I strongly believe that...

- Everyone with diabetes deserves the highest standards of personalised diabetes care, no matter where, when or by whom it is delivered.
- People providing diabetes care must be trained in diabetes and must know the boundaries of their knowledge.
- They must have opportunities to extend these boundaries and to update.
- People with diabetes and professionals must have ready access to specialist diabetes expertise.

The size of the problem. APHO prevalence model

Estimate for those >16 yrs in England 2010

- 3.1 million people with diabetes (range 2.2 – 4.5 million)
- 7.4% (uncertainty range 5.3 – 10.8%)
- 822,000 adults with undiagnosed diabetes

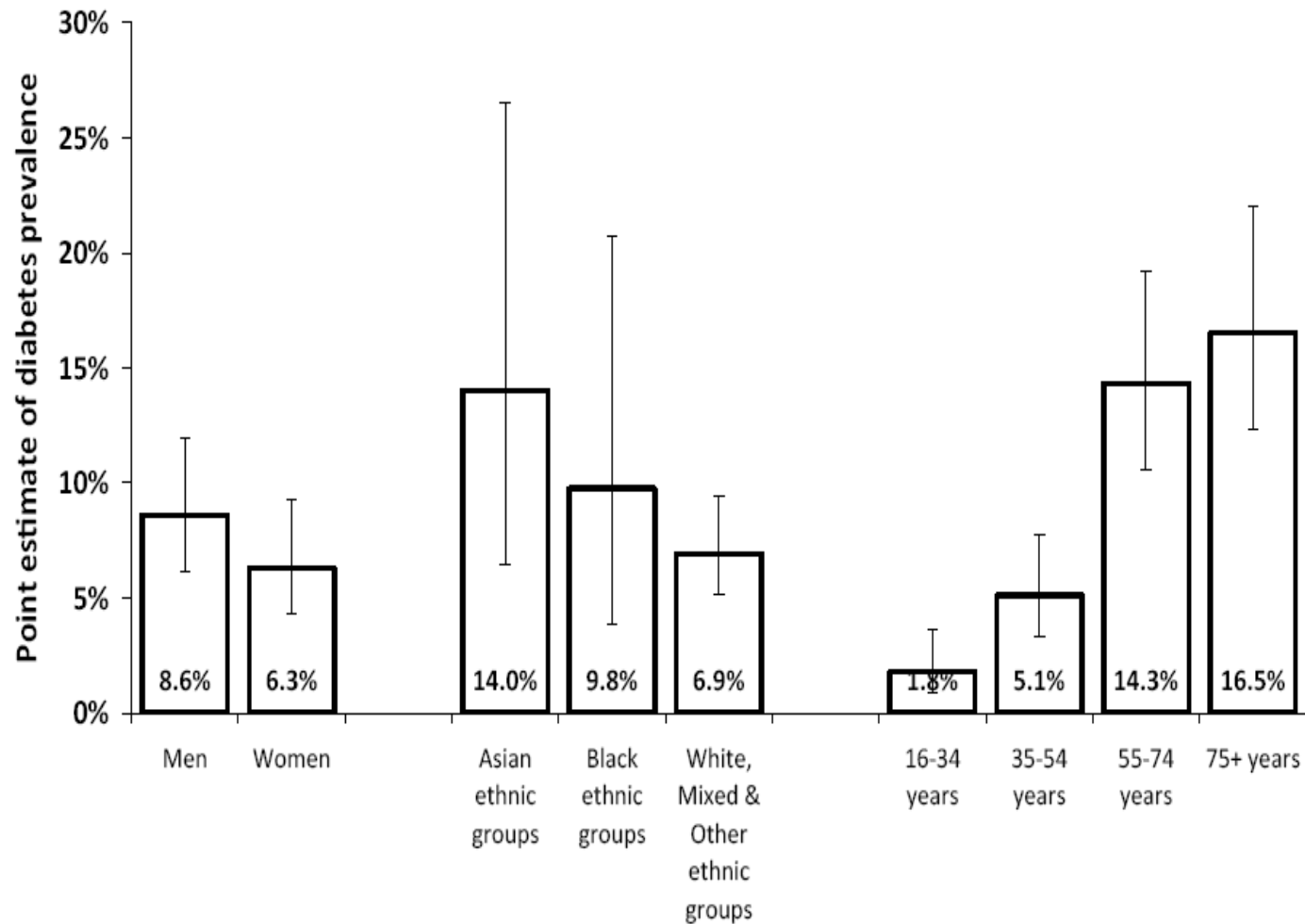
- Estimate for 2030, 9.5% 4.6 million

- www.yhpho.org.uk/resource/view.aspx?RID=81090

Diabetes prevalence 2010

www.yhpho.org.uk/resource/view.aspx?RID=81090

Summary of estimates of diabetes prevalence for England, 2010, by age, ethnicity and sex



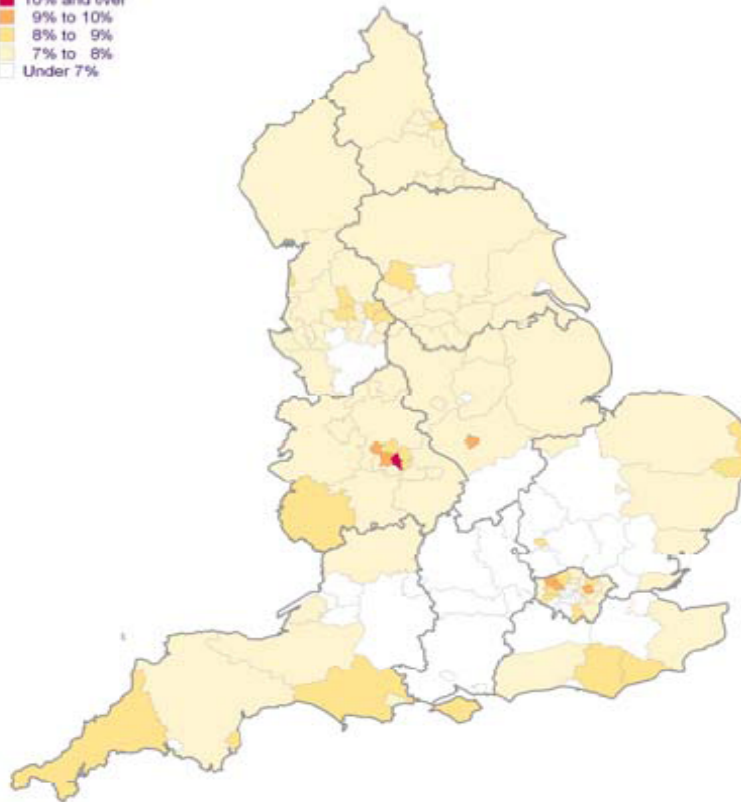
Estimate Prevalence by PCT 2010 and 2030

www.yhpho.org.uk/resource/view.aspx?RID=81090

Diabetes prevalence model by Primary Care Trust

Diabetes Prevalence 2010

- 10% and over
- 9% to 10%
- 8% to 9%
- 7% to 8%
- Under 7%



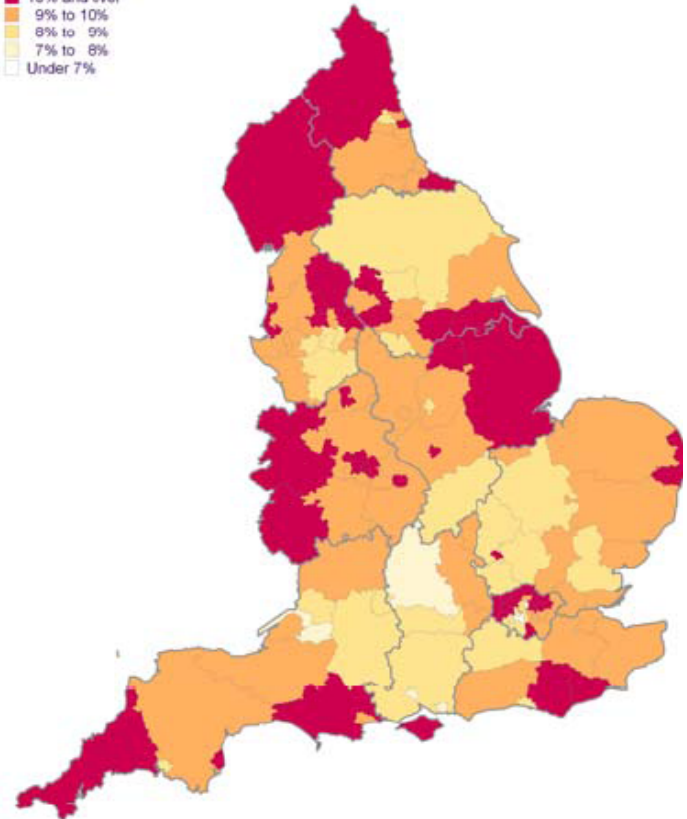
Produced by YHPHO June 2010

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Diabetes prevalence model by Primary Care Trust

Diabetes Prevalence 2030

- 10% and over
- 9% to 10%
- 8% to 9%
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- Under 7%



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Greatest increase in estimated prevalence

www.yhpho.org.uk/resource/view.aspx?RID=81090

Table 4: Increase in estimated prevalence by PCT

	2010	2030	Increase
Greatest increase			
Harrow	9.6%	13.9%	44.8%
Croydon	8.3%	11.9%	43.6%
Milton Keynes	6.4%	9.2%	43.5%
Redbridge	8.9%	12.7%	42.4%
Hounslow	8.5%	12.0%	41.4%
Hillingdon	7.6%	10.7%	40.6%
Enfield	7.9%	11.1%	39.7%
Leicester City	10.0%	13.9%	38.8%
Barnet	8.1%	11.2%	38.0%
Westminster	6.3%	8.7%	37.7%

National Diabetes Information Service

ndis.ic.nhs.uk/pages/index.aspx



0845 300 6016
enquiries@ic.nhs.uk



The Information Centre
for health and social care

Sign-in

You are not logged in.

- Home
- About NDIS
- Tools
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Welcome to the National Diabetes Information Service

Welcome to the National Diabetes Information Service (NDIS), where you can find a comprehensive range of diabetes data, tools and information, easily accessible from this website. Over the next few months, we will be adding more data and more valuable tools to the website. If you have any queries, suggestions, or would like to receive our email update please contact us at ndis@ic.nhs.uk

Latest News and Events

National Diabetes Audit - 5/07/10

The NDA Adult and Paediatric Summary National Reports are available. Detailed information at national, regional, PCT and practice level can be accessed via the on-line analysis tool PIANO (link - works only if connected via the NHS network N3).

Diabetes Patient Experience Project - 29/06/10

Phase two is now underway, to measure the patient experience of children and young people 15 and under.

Health Needs Assessment Tool - 21/06/10

You can now create customised PDF reports from the HNA tool. Selecting indicators create on-screen customised reports using default or user-defined peer groups and then generate a PDF.

The Time Trend and Dashboard display options now contain a drop-down box allowing the user to view any organisation from their current peer group.

[Read the user guide](#)

Diabetes Inpatient Activity

This NDIS analysis examined whether a patient's stay was affected if they had diabetes, and if any effect was further influenced by factors like age or the reason for admission. The study analysed 2007/08 data from both the Hospital Episode Statistics database and the National Diabetes Audit.

DiabetesE Fifth National Report now available

This report from Innove presents findings for 2009 that demonstrate how DiabetesE is encouraging PCTs to make improvements in

Recent Releases

APHO Diabetes Prevalence Model for England - 5/7/10

The APHO Diabetes Prevalence Model for England provides estimates of total diabetes prevalence for people aged 16 years and older in England for 2009 to 2030.

DOVE tool now available

The DOVE (Diabetes Outcomes Versus Expenditure) tool, developed by Diabetes Health Intelligence, is now available, and allows you to see the relative position of your selected PCT in terms of spending on diabetes care and outcomes. Your PCT is shown in comparison with other PCTs in your Diabetes Area Classification Group and all other PCTs.

Diabetes Data Directory

The Diabetes Data Directory, produced by Yorkshire and Humber Public Health Observatory (YHPO), is a comprehensive list of diabetes datasets and tools, that describes the tools and their use, as well as linking out to relevant websites.

Users can also search through a list of common questions that commissioners, clinicians and others may be asking, and the Diabetes Data Directory will highlight where the answers can be found.

National Diabetes Audit (adults)

2008 – 2009 1,630,699

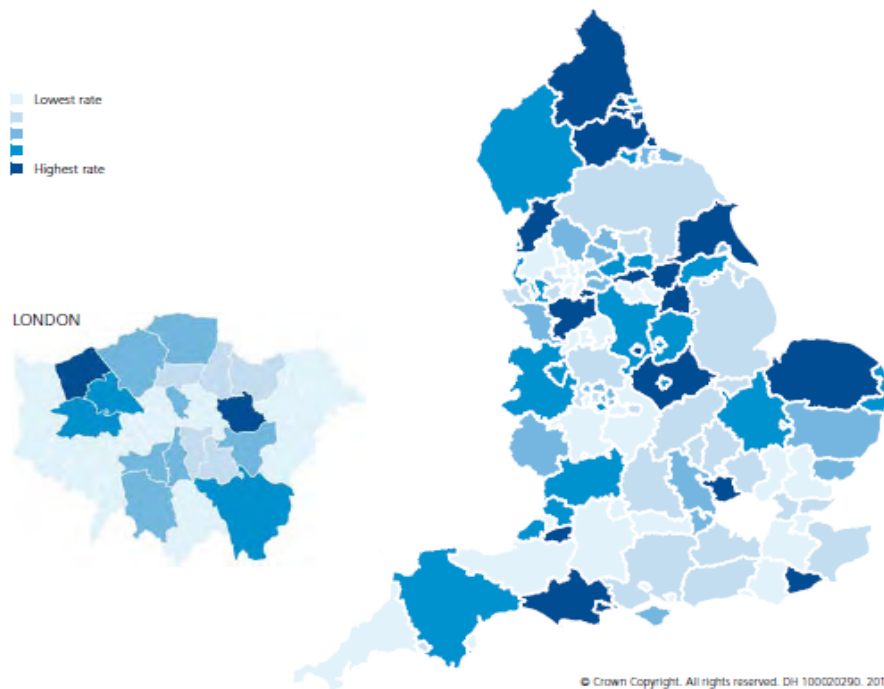
	HbA1c ≤7.5	Chol <4	targeted BP
England	62%	39%	50%
London SHA	61%	38%	49%
Hillingdon	60%	46%	51%
			www.ic.nhs.uk

Atlas of Variation – 9 care processes

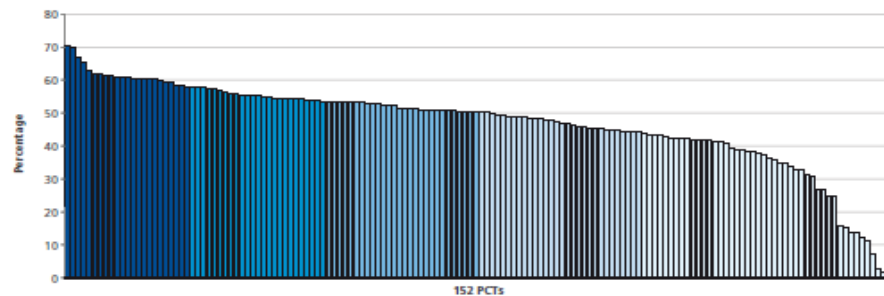
www.rightcare.nhs.uk/atlas/

Map 4: Percentage of people with diabetes receiving nine key care processes by PCT

2008/09



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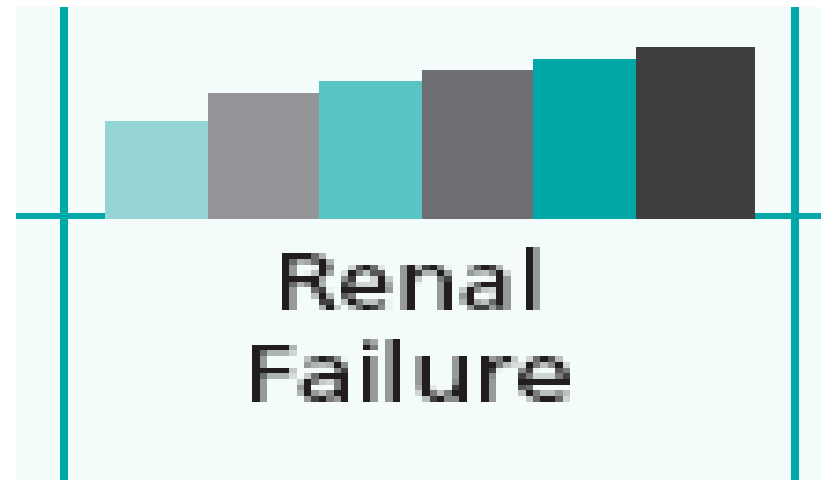


National diabetes audit 2008/9 England

	Type 1 England	Type 2 England	Hillingdon All patients
All care processes	32%	51%	3%
HbA1c	88%	94%	90%
BP	89%	97%	94%
Urinary Microalbumin	51%	68%	4%

NDA End stage renal failure 2003/4 → 2008/9

- Type 1 diabetes
0.78 → 1.27%
- Type 2 diabetes
0.26 → 0.48%



Prescribing for diabetes in England 2004/5-2009/10

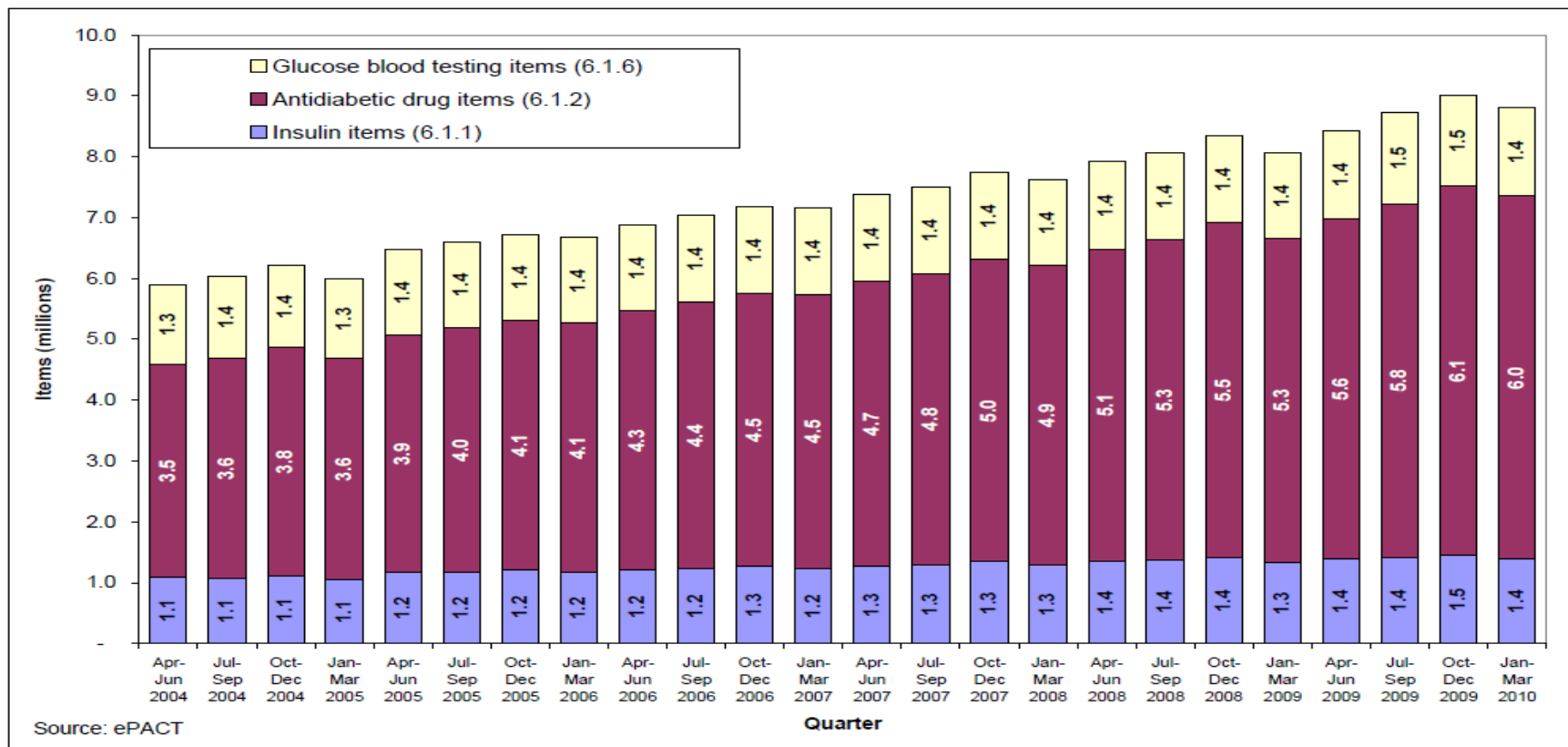
- Drugs used in diabetes (BNF 6.1) £649 million
- Glucose lowering and glucose monitoring
- 7.7% of total drug spend

- Cost per person by PCT April – Sept 2008
- Lowest £105.68 Highest £175.85

- www.ic.nhs.uk/statistics-and-data-collections/primary-care/prescriptions/prescribing-for-diabetes-in-england-2004-05-to-2009-10

Prescribing for diabetes in England

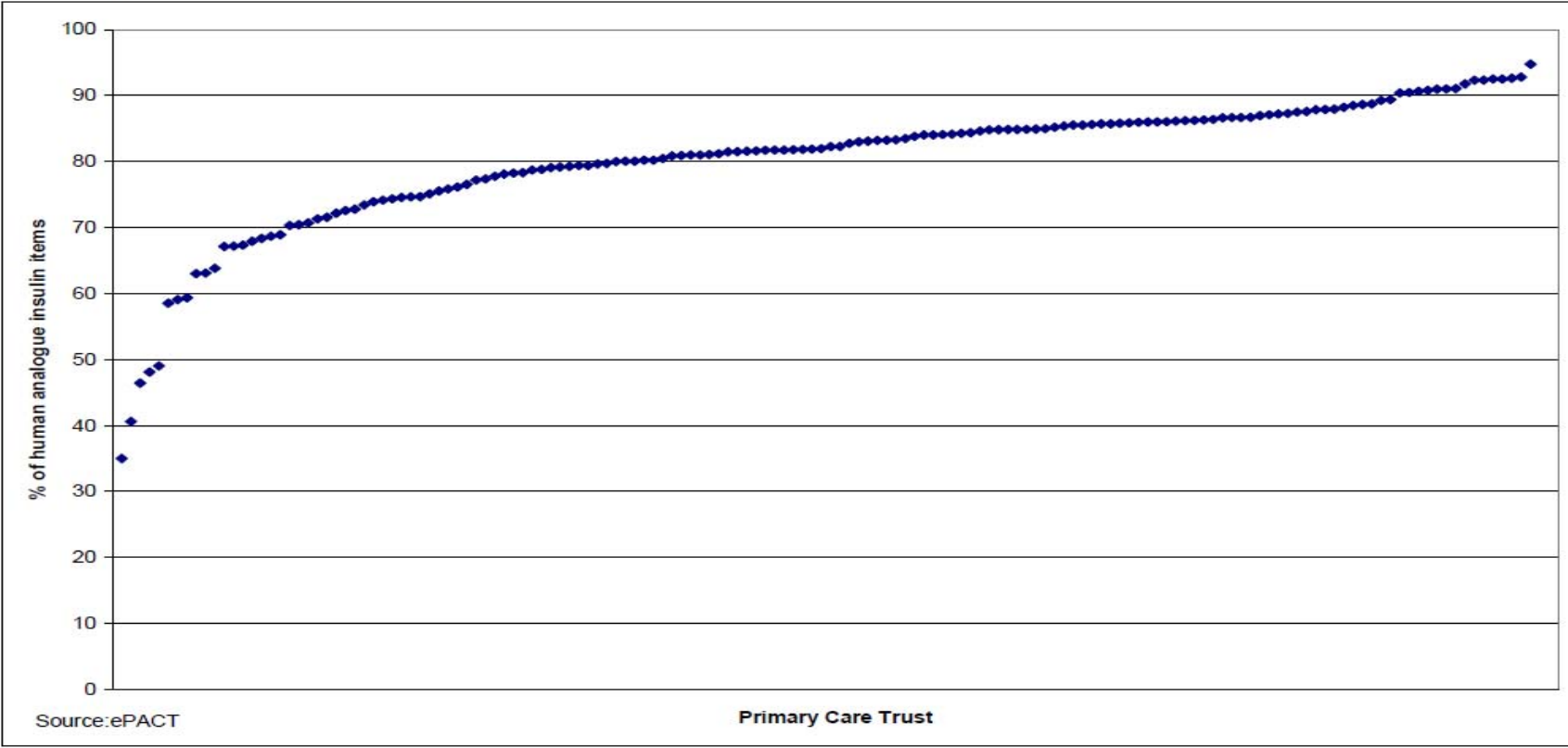
Figure 2: Items for the major sections within Drugs used in diabetes (BNF 6.1), April 2004 – March 2010



Source: ePACT

Variation in type of insulin prescribed

Figure 18: Percentage of human analogue insulin items as a proportion of all insulin items prescribed, by PCT, 2009/10



		Daily insulin dose				
Cost per unit		50	80	200	300	500
Long acting insulin						
Glargine	0.026	1.3	2.08	5.2	7.8	13
Detimir	0.028	1.4	2.24	5.6	8.4	14
Insuman basal (pen)	0.017	0.85	1.36	3.4	5.1	8.5
Insuman basal(vial)	0.011	0.55	0.88	2.2	3.3	5.5
Humulin I (pen)	0.019	0.95	1.52	3.8	5.7	9.5
Humulin I (vial)	0.0156	0.78	1.248	3.12	4.68	7.8
Insulatard (pen)	0.0133	0.665	1.064	2.66	3.99	6.65
Insulatard (vial)	0.0078	0.39	0.624	1.56	2.34	3.9
Cost difference per month when compared to least expensive insulin						
Glargine	0.5096	£25.48	£40.77	£101.92	£152.88	£254.80
Detimir	0.5656	£28.28	£45.25	£113.12	£169.68	£282.80
Cost difference per month when compared with insulin						
Exenatide vs glargine	68.24	£31.84	£10.00	-£77.36	-£150.16	-£295.76
Exenatide vs detimir	68.24	£29.04	£5.52	-£88.56	-£166.96	-£323.76
Exenatide vs NPH	68.24	£57.32	£50.77	£24.56	£2.72	-£40.96

Safe use of insulin

BBC Low graphics Help Search

NEWS **LIVE BBC NEWS CHANNEL**

Page last updated at 15:36 GMT, Friday, 27 March 2009

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CPS to review insulin death case

A file on a nurse who mistakenly gave a diabetic woman, aged 85, a lethal dose of insulin is to be reopened.

Margaret Thomas from Pontnewynydd, Pontypool, died six hours after community nurse Joanne Evans's injection, the Cardiff inquest heard.

Ms Evans injected 10 times too much insulin using the wrong syringe. Coroner Mary Hassell ruled that Mrs Thomas was unlawfully killed.

The Crown Prosecution Service (CPS) said it would look again at the case.



Margaret Thomas collapsed and died six hours after the injection

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NPSA Safer administration of insulin

www.diabetes.nhs.uk/safe_use_of_insulin/

NHS

National Patient Safety Agency

Rapid Response Report

NPSA/2010/RRR013

From reporting to learning

16 June 2010

Safer administration of insulin

Issue

Errors in the administration of insulin by clinical staff are common. In certain cases they may be severe and can cause death. Two common errors have been identified:

- the inappropriate use of non-insulin (IV) syringes, which are marked in ml and not in insulin units;
- the use of abbreviations such as 'U' or 'IU' for units. When abbreviations are added to the intended dose, the dose may be misread, e.g. 10U is read as 100.

Some of these errors have resulted from insufficient training in the use of insulin by healthcare professionals.

Patient safety incidents

Between August 2003 and August 2009 the National Patient Safety Agency (NPSA) received 3,881 wrong dose incident reports involving insulin. These included one death and one severe harm incident due to 10-fold dosing errors from abbreviating the term 'Unit'. Three deaths and 17 other incidents between January 2005 and July 2009 were also reported where an intravenous syringe was used to measure and administer insulin.

For IMMEDIATE ACTION by all organisations in the NHS and independent sector. The deadline for ACTION COMPLETE is 16 December 2010.

Safe use of insulin e-learning course

www.diabetes.nhs.uk/safe_use_of_insulin/elearning_course/



NHS Diabetes

Supporting, Improving, Caring

Introduction

The right insulin

The right dose

The right time

The right way

Insulin products

Insulin devices

e-learning course

True stories

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[Home](#) > [Safe Use of Insulin](#) > e-learning course

e-Learning Course



This resource has been designed for all Health Professionals who need to administer insulin for patients with diabetes.



[start your learning here](#) and access the safe use of insulin e-learning module. You will be directed to a self-registration page where you will need to register your details as a new learner. All mandatory information fields are marked with red *.

Important – please note that you will need to enable pop-ups in your browser in order to view all the content.

When you complete the course you will have the opportunity to print a learner certificate and complete the on-line feedback questionnaire. Note that you will need to access the on-line feedback questionnaire in order to show your course as fully complete.

39

days to go

Deadline for Rapid Response Report action is **16 December**

Quick Links

[NPSA Rapid Response Report - Safer Administration of Insulin \(PDF 60KB\)](#)

[True stories](#)

[Monthly Index of Medical Specialties \(MIMS\) online](#)

[British National Formulary \(BNF\)](#)

CSII or insulin pump therapy is recommended as a treatment option >12 yrs old, Type 1 diabetes if:

attempts to achieve target HbA1c levels with multiple daily injections (MDIs) result in the person experiencing disabling hypoglycaemia.

or

HbA1c levels have remained $\geq 8.5\%$ on MDI therapy despite a high level of care.

CSII therapy is recommended as a treatment option for children <12 years with type 1 diabetes provided that MDI therapy is considered to be impractical or inappropriate

NICE TA151 2008

Insulin pump therapy (all ages)

- NICE TA151



- There should be 21700 pump users in England
- There are about 8000
- NTAC guidance How to why to

www.technologyadoptioncentre.nhs.uk/Continuous-Subcutaneous-Insulin-Infusion/executive-summary.html

Insulin pump therapy – benefits for patients

- Reduce hospital admission
- Improve quality of life
- Improve metabolic control
- Fewer follow-ups needed
- Better general health and treatment satisfaction
- Less anxiety and depression
- Greater freedom eating and sleeping
- Less glucose swings
- Reduced complications
- Greater control and accuracy

Self-monitoring of blood glucose in people with non-insulin-treated Type 2 Diabetes

Teach people how to do it properly

Agree why they are testing, and what to do about the results

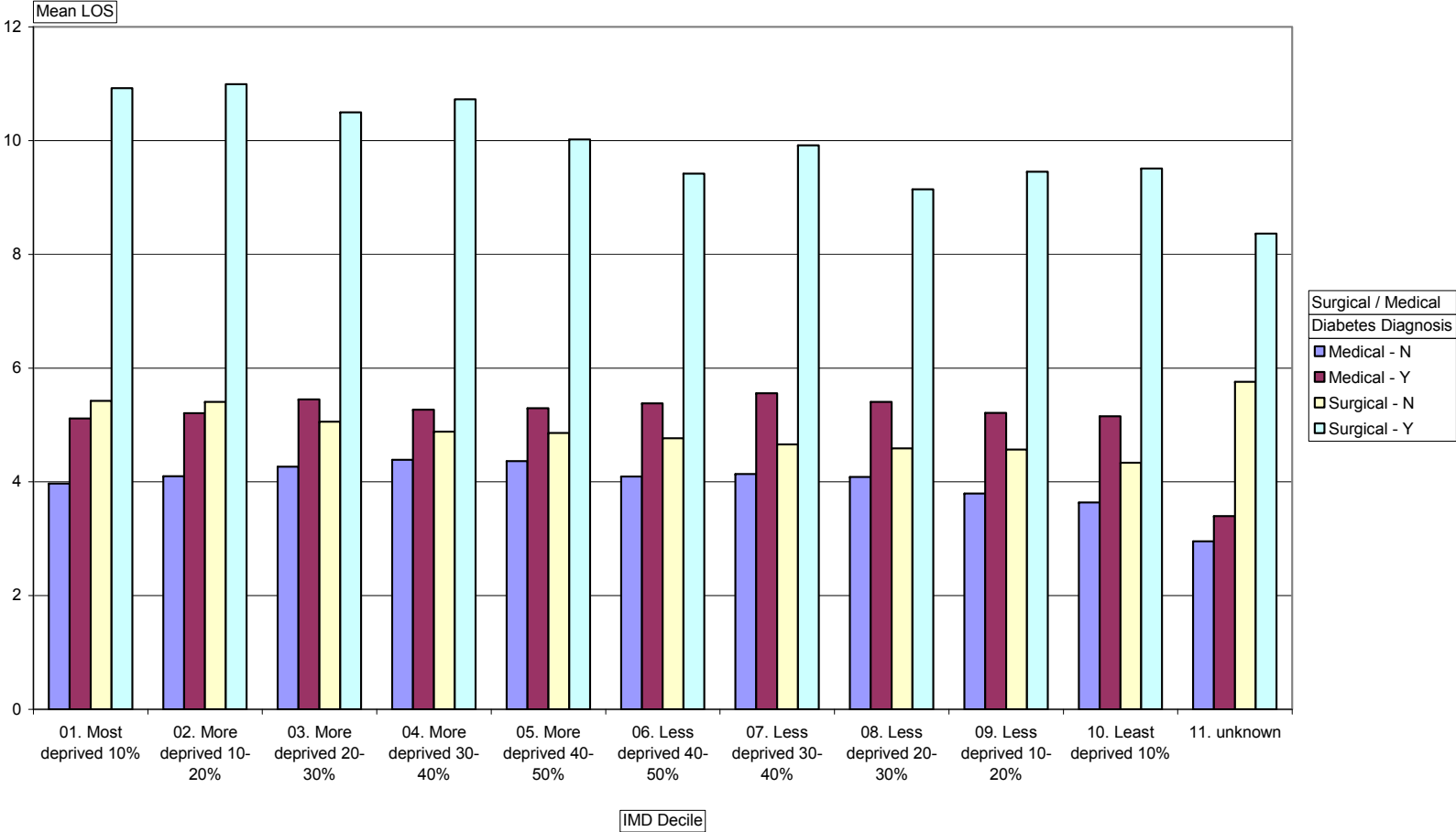
Who should test?

- On sulphonylureas – risk of hypoglycaemia
- Others – define clear goal for use of SMBG
- Reinforce lifestyle changes, monitor treatment, alert healthcare professionals
- People motivated by SMBG who use this to maximise lifestyle and medication should continue

Identify those who do not find it useful and stop it

Staff training needed in use of SMBG with patients

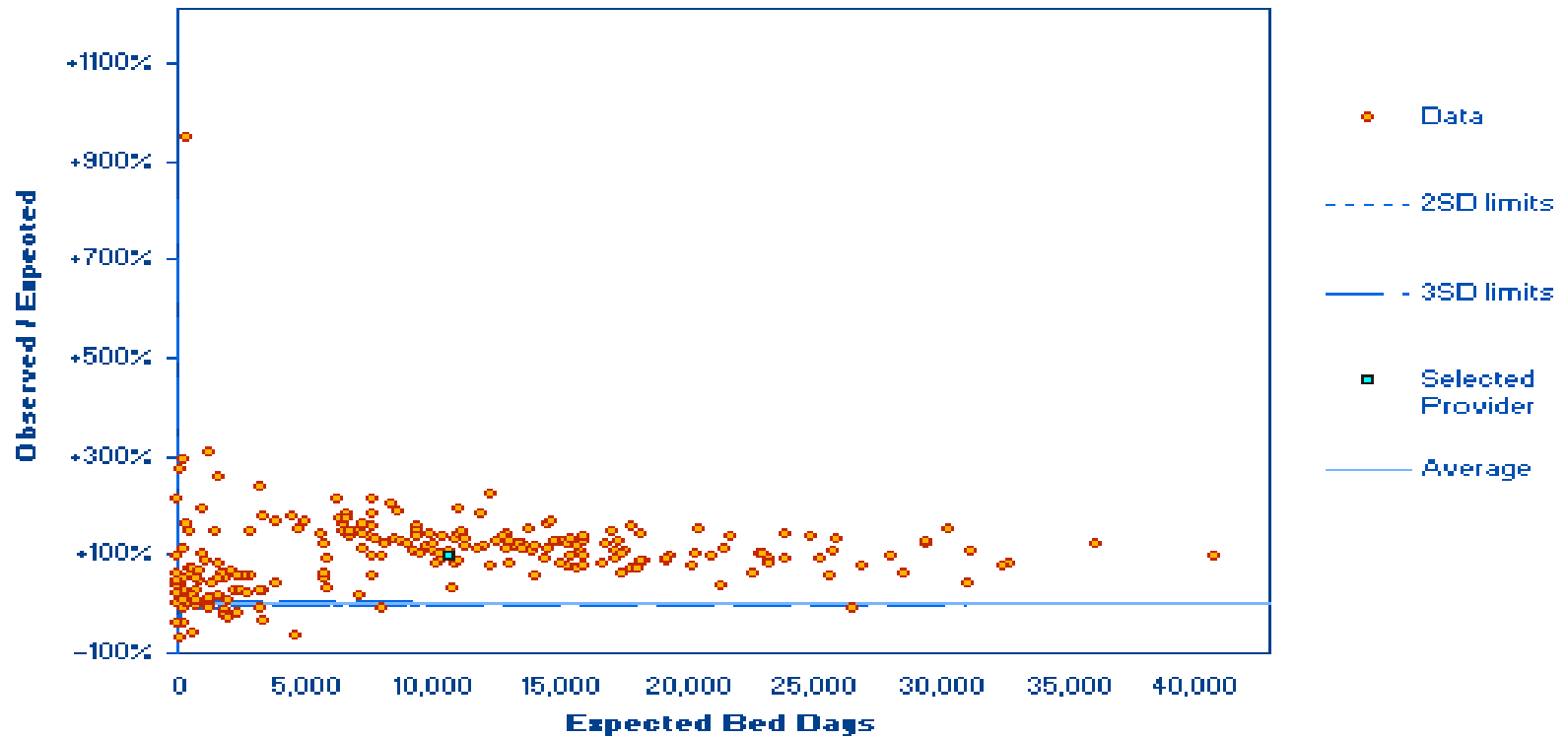
LoS / Social deprivation Medical or Surgical admission



Length of stay - bed days

Hillingdon (observed/expected 120% → 95% past yr)

HRG X - ALL HRG - Bed Days by Provider - 2008/09

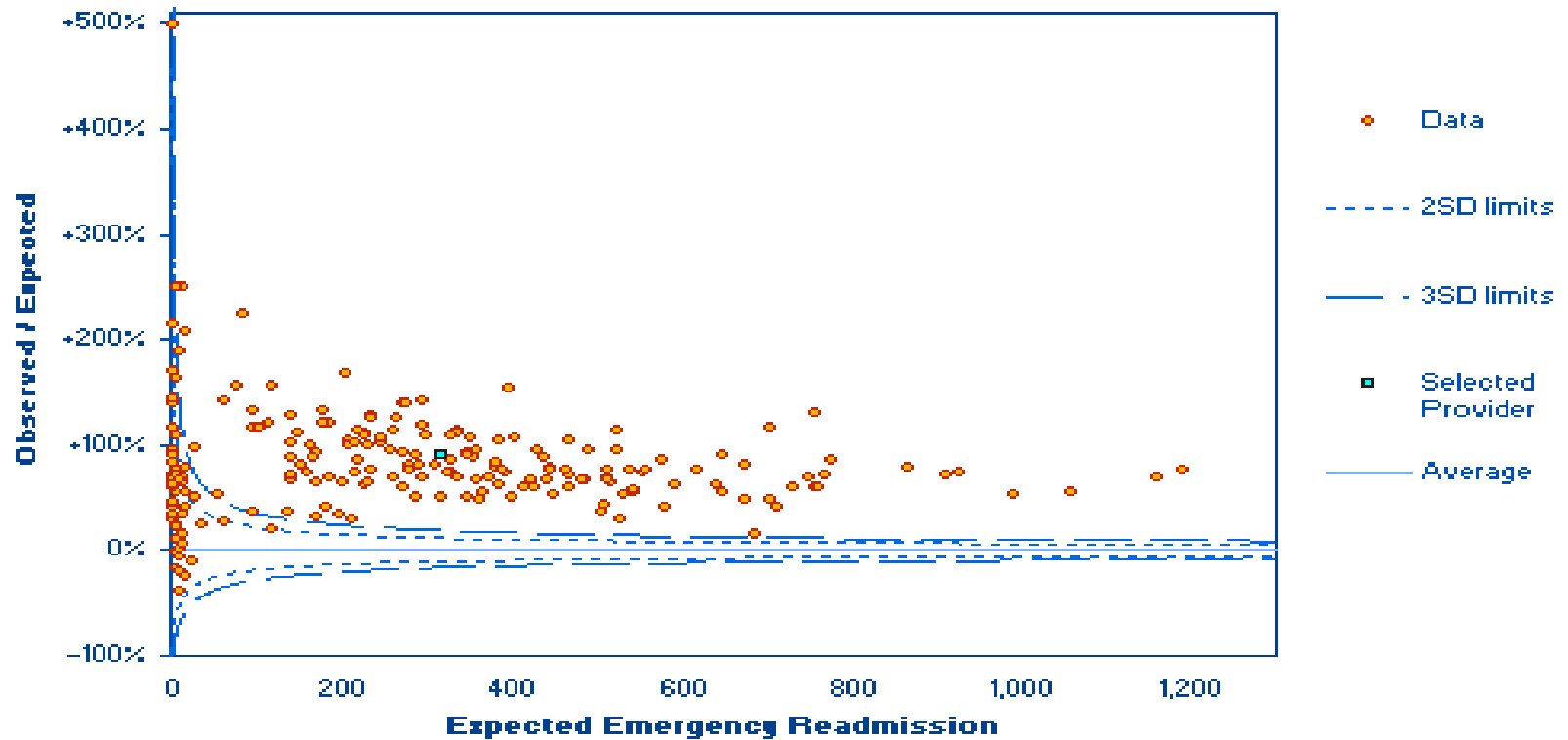


Source: Clinical Indicators Extract (HES)

Emergency readmissions Hillingdon (Observed/expected 107% → 91% past)



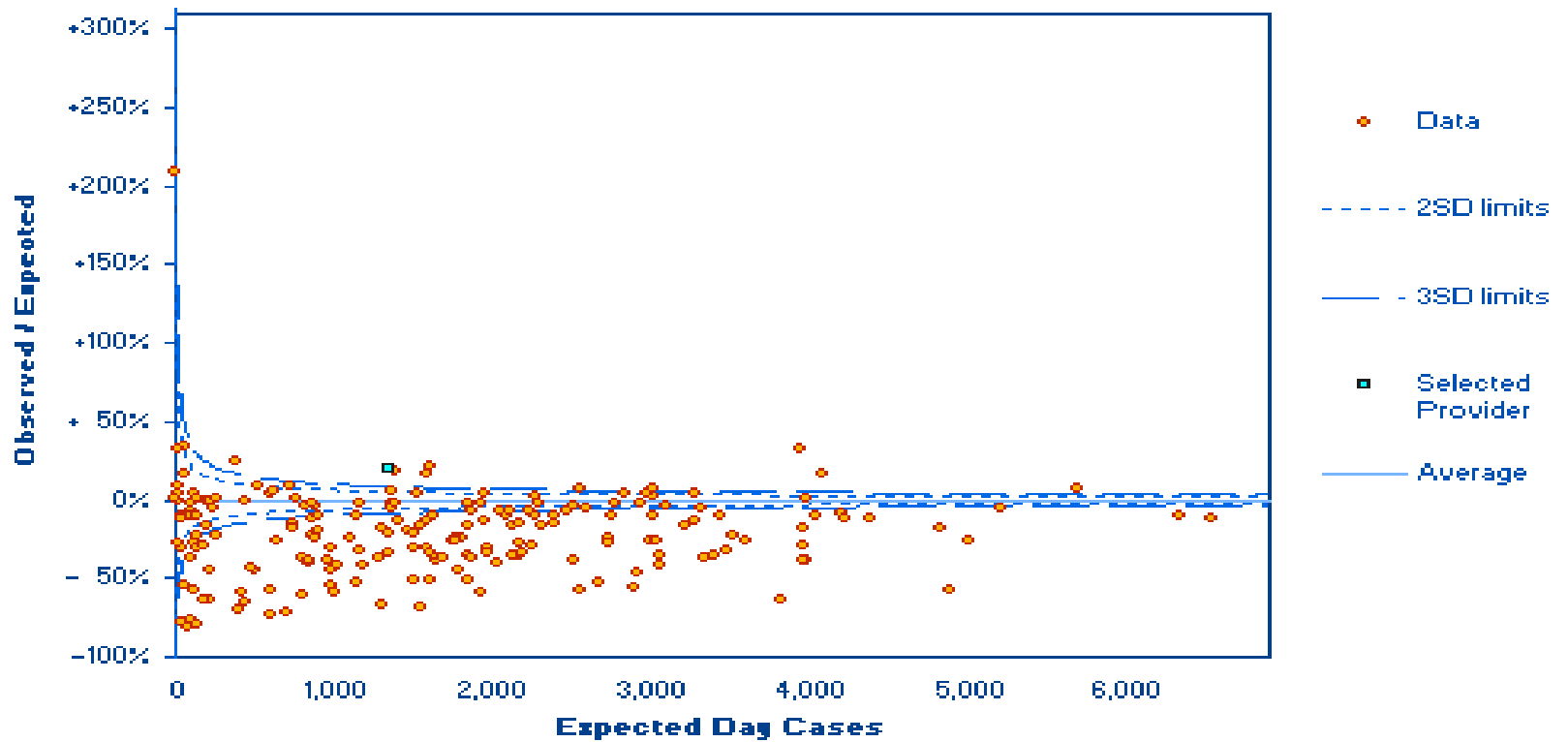
HRG X - ALL HRG - Emergency Readmission by Provider - 2008/09



Source: Clinical Indicators Extract (HES)

Hospital day cases (Hillingdon)

HRG X - ALL HRG - Day Cases by Provider - 2008/09



Source: Clinical Indicators Extract (HES)

ThinkGlucose Toolkit

What went up	What came down
Overall quality of care	Insulin drug errors
Patient safety	Other adverse incidents
Bed efficiency	Cancelled operations/procedures
Diabetes team utilisation	Complaints
Knowledge and awareness among hospital staff	Delays in discharge
Patient satisfaction	Inappropriate referrals to the specialist team
Income (due to more accurate coding)	
Staff satisfaction	
Resource efficiency	

Diabetes inpatient specialist team

- **Every acute hospital should have access to a diabetes inpatient specialist team with sessions dedicated to inpatient care and access to all diabetic inpatients on all units**
- **Diabetic inpatient specialist nurses reduce admissions from A&E, reduce clinical incidents, shorten length of stay and improve patient experience.**



Putting feet first



Putting feet first

Commissioning specialist services for the management and prevention of diabetic foot disease in hospitals

This report is supported by:

Association of British Clinical Diabetologists
Foot in Diabetes UK
Joint British Diabetes Society
National Diabetes Inpatient Specialist Nurse Group
Primary Care Diabetes Society
Scottish Diabetes Foot Action Group
Society of Chiropodists and Podiatrists
The Vascular Society of Great Britain and Ireland
Welsh Endocrine and Diabetes Society



Putting feet first

Diabeticare / Diabetes Reg / Diabetes consultant

Acute diabetic foot disease is defined as:

- **a newly developed ulcer**
- **inflammation**
- **swelling**
- **infection**
- **acute pain in the absence of trauma.**

Diabetes and pregnancy (CEMACH)

Women with established diabetes have:

- **5 x more stillbirths**
- **3 x more neonatal deaths**
- **2 x congenital malformations**

Compared with non-diabetic women

NICE CG63



Improving pregnancy outcomes

- Identify all diabetic women of child-bearing age in surgery/clinic
- Ascertain their wishes & contraception need
- If planning pregnancy refer urgently to specialist preconception diabetic clinic in Diabeticare for perfect glucose control
- Check B12 and start folic acid 5 mg
- Avoid statins and ACE inhibitors unless using contraception

NICE CG63



The Secretary of State's plans

- Make patients the driving force of improvements to the NHS
- Engage people in their care – “no decision made about me, without me”
- Provide meaningful information about healthcare services for patients
- Focus on patient outcomes, not targets

- Focus on quality, innovation, productivity, and safety

- Holistic approach for entire patient pathway from preventive health and well-being measures through to hospital and community care

- To create an independent NHS Health Board to allocate resources and provide commissioning guidelines

- Commissioning by GP consortia



How can the NHS White paper improve Diabetes care?

NHS

Diabetes

- “Equity & excellence: Liberating the NHS”
 - ***Transparency in Outcomes: a framework for the NHS:***
 - Principles, structure, approach
 - Potential Outcomes indicators under 5 Domains
 - ***Commissioning for patients***
 - GP Commissioning
 - NHS Commissioning board
- 🧩 Suite of other supporting papers



How can the NHS White paper improve Diabetes care?

NHS

Diabetes

Transparency in Outcomes: a framework for the NHS:

- ❖ Domain 1: Preventing people dying prematurely.
- ❖ Domain 2: Enhancing quality of life for people with long-term conditions.
- ❖ Domain 3: Helping people to recover from episodes of illness or following injury.
- ❖ Domain 4 & 5: Ensuring people have a positive experience of care. Treating and caring for people in a safe environment and protecting them from harm.
- ❖ General principles of the Outcomes Framework

NICE Draft Quality Standard for diabetes (adults)

[www.nice.org.uk/media/163/66/
DiabetesQualityStandard.pdf](http://www.nice.org.uk/media/163/66/DiabetesQualityStandard.pdf)

Feedback by 16 December

Diabetes without walls

Commissioning guide



The person with diabetes is central to his or her care and must be continuously involved in care planning and management decisions.

Patients want good care, convenient ..., tailored ...

They want a clear, well-organised system where everyone looking after them knows what is going on, and what they are doing.

If they have a problem they want prompt, expert advice.

Diabetes Commissioning Guide October 2009

NHS Diabetes Website

RCP Teams without walls group and NHS Diabetes

www.diabetes.nhs.uk/our_work_areas/commissioning_guide/

Diabetes without walls

www.diabetes.nhs.uk/our_work_areas/commissioning_guide/

NHS Diabetes

Supporting, Improving, Caring

Introduction

Benefits of using the Diabetes Commissioning Guide

The case for change

Using this guide

Models of Care

STEP 1.
Health needs assessment

STEP 2.
Setting priorities

STEP 3.
Service improvement

STEP 4.
Evaluation

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Welcome to the NHS Diabetes Commissioning Guide

"The person with diabetes is central to his or her care and must be continuously involved in care planning and management decisions. Patients want good care, convenient to home or work, tailored to their needs at that time. They want a clear, well-organised system where everyone looking after them knows what it going on, and what they are doing. If they have a problem they want prompt, expert advice."

Dr Rowan Hillson, MBE
National Clinical Director for Diabetes

We are facing a relentless rise in a population that is living longer with the inevitable increase in the individual's complex health needs. We are also seeing an continuing rise in obesity which is accompanied by an equal increase in the prevalence of Type 2 diabetes, even in children and pregnant women.



As we face constraints in spending over the next few years at the same time as seeing a rise in diabetes prevalence, the approach to providing diabetes services comes under greater pressure to deliver better quality and safety outcomes, improved patient experience, and more efficient processes and productivity.

Any person living with diabetes will expect to find services that meet their individual needs, give them the best clinical outcomes, and help them to manage their own condition in the most effective way to keep them healthy and happy in their daily lives. This requires an informed and collaborative approach to commissioning diabetes

Useful Resources

[Commissioning Diabetes Without Walls 2009 \(PDF 2MB\)](#) - Report outlining how to support the commissioning of improved quality of diabetes care and patient experience.

[Commissioning information for people with diabetes](#)

Feedback

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Your message

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The Diabetes Commissioning Guide is in a permanent process of review and update. There are big plans in place to develop the guide further during the next 12 months to provide a rich, interactive resource for people commissioning, delivering or

Delivering integrated diabetes care

Quality improvement with best use of resources

- Commissioning
- Patient and staff education
- Care planning
- Local information with national help (NDIS)
- Regional + local diabetes networks
- Improve risk factor control
- Improve detection early complications and Rx
- Improve diabetes care in hospital + on discharge

- Link with other long term conditions
- Optimal management of people with co-morbidities

**NHS Diabetes
Regional Programme Manager
Leena Sevak**



Thank you

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