KING'S HEALTH PARTNERS

Pioneering better health for all

diabetes modernisation initiative
living well with diabetes

DIABETES
INVESTIGATE
INNOVATE
INTEGRATE

THE ANNA KARENINA PRINCIPLE IN DIABETES CARE

Dr. Dulmini Kariyawasam

Consultant Physician in Diabetes and Endocrinology

FOR – Community Diabetologists have little role in the management of patients with diabetes

Dr Niru Goenka
Consultant Physician in Diabetes & Endocrinology
Countess of Chester NHS Foundation Trust

What defines a community location?

- A place that is not hospital? But where does "community" begin?.....

“Happy families are all alike; every unhappy family is unhappy in its own way.”

Leo Tolstoy

Anna Karenina-*1877*

The Anna Karenina Principle

- *"Successful projects all have common reasons for success; failed projects each fail in their own unique, spectacular way…"*

- *"All well adapted systems are alike, all non-adapted systems experience maladaptation in their own way…"*

Diamond, J. (March 1997): *The Fates of Human Societies*.

Integrated Care for 3 different members of diabetes family……

1. Extended Family – Wider population with Diabetes
2. Anna's Sister-in Law "Dolly"- Complex diabetes patient
3. Anna's Children - Children and young adults with Diabetes

Integrated Care in Diabetes

- Understanding the population you are serving.
- Developing partnerships.
- Clearly defined roles, common aims and goals.
- Activated and informed patients.
- Capable health care professionals.
- Data sharing.
- A system that supports delivery of care that is suited to population, time and complexity.

Combined population – 600,000

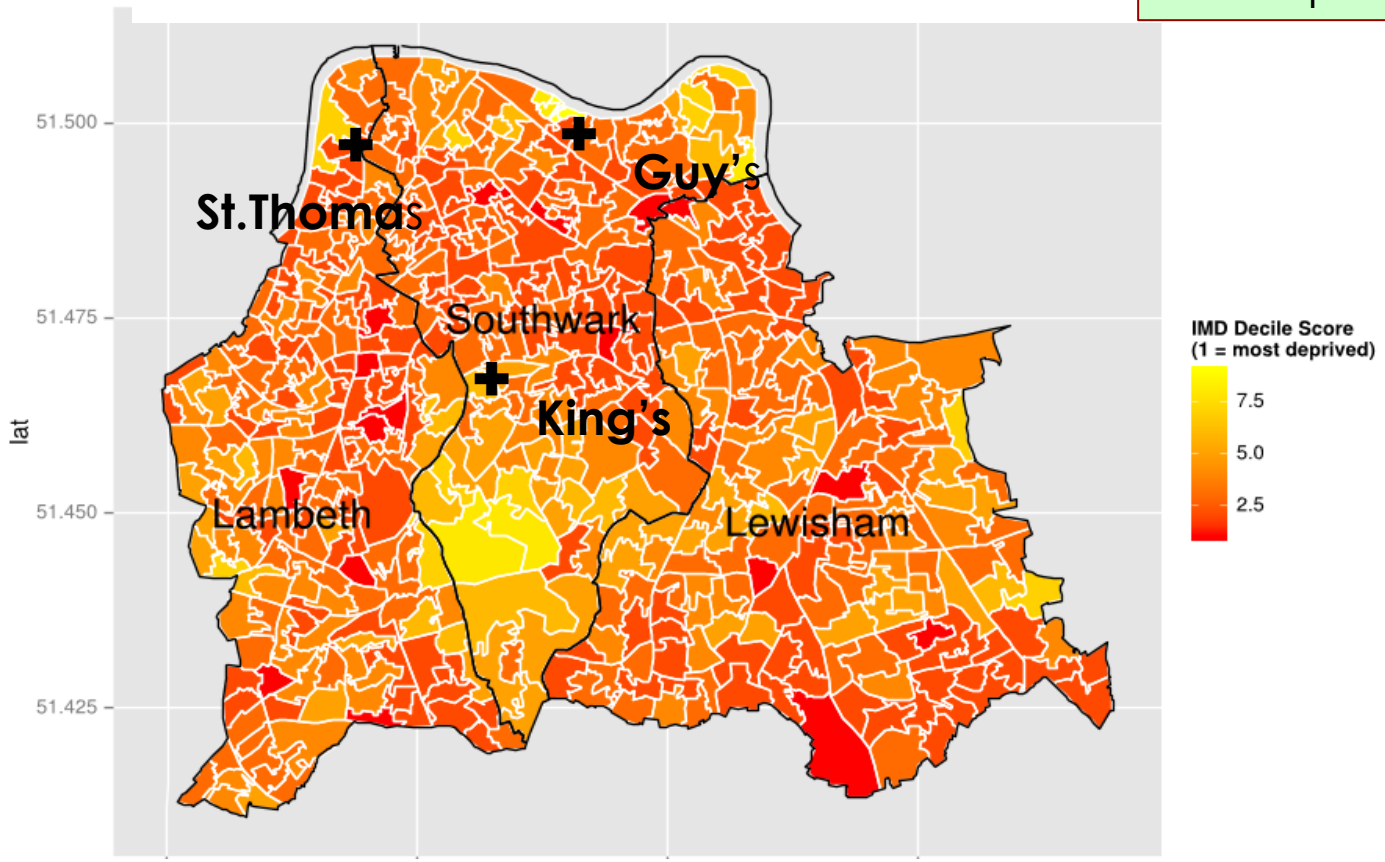
High turnover– 27% (approx 70,000 people per annum) – patients and staff

Over 150 spoken languages

Known diabetes population – 28,000

93 GP practices

KHP
KCH
GSTT
KCL
SLAM



Lambeth and Southwark QOF outcome:

Lambeth	**2010/11**
HbA1c 64mmol	**26**
BP 140/80	
Cholesterol	**29**
Southwark	**2010/11**
HbA1c 64mmol	**15**
BP 140/80	
Cholesterol	**20**
Total	31

Failing System…

- Lack of understanding of the population: no comprehensive registers.
- High turnover of staff.
- Care dependent on one individual.
- Variable expertise.
- Single handed practices.
- Duplication of work between secondary and primary care.
- Lack of data or no use of data.

living well with diabetes

www.dmi-diabetes.org.uk

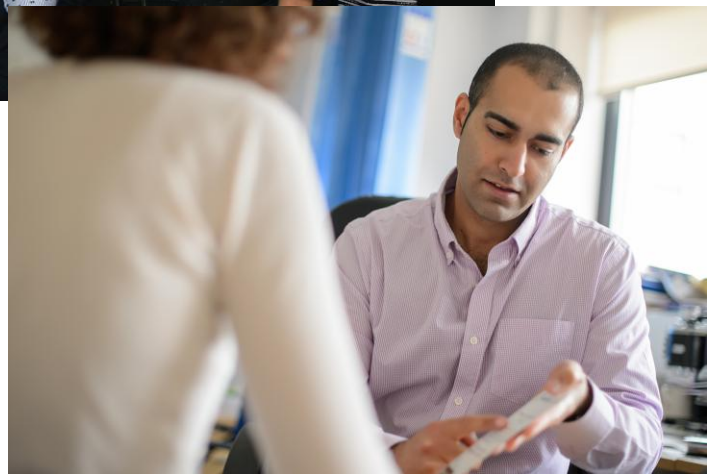
diabetes
modernisation
initiative
living well with diabetes

Main Work streams;

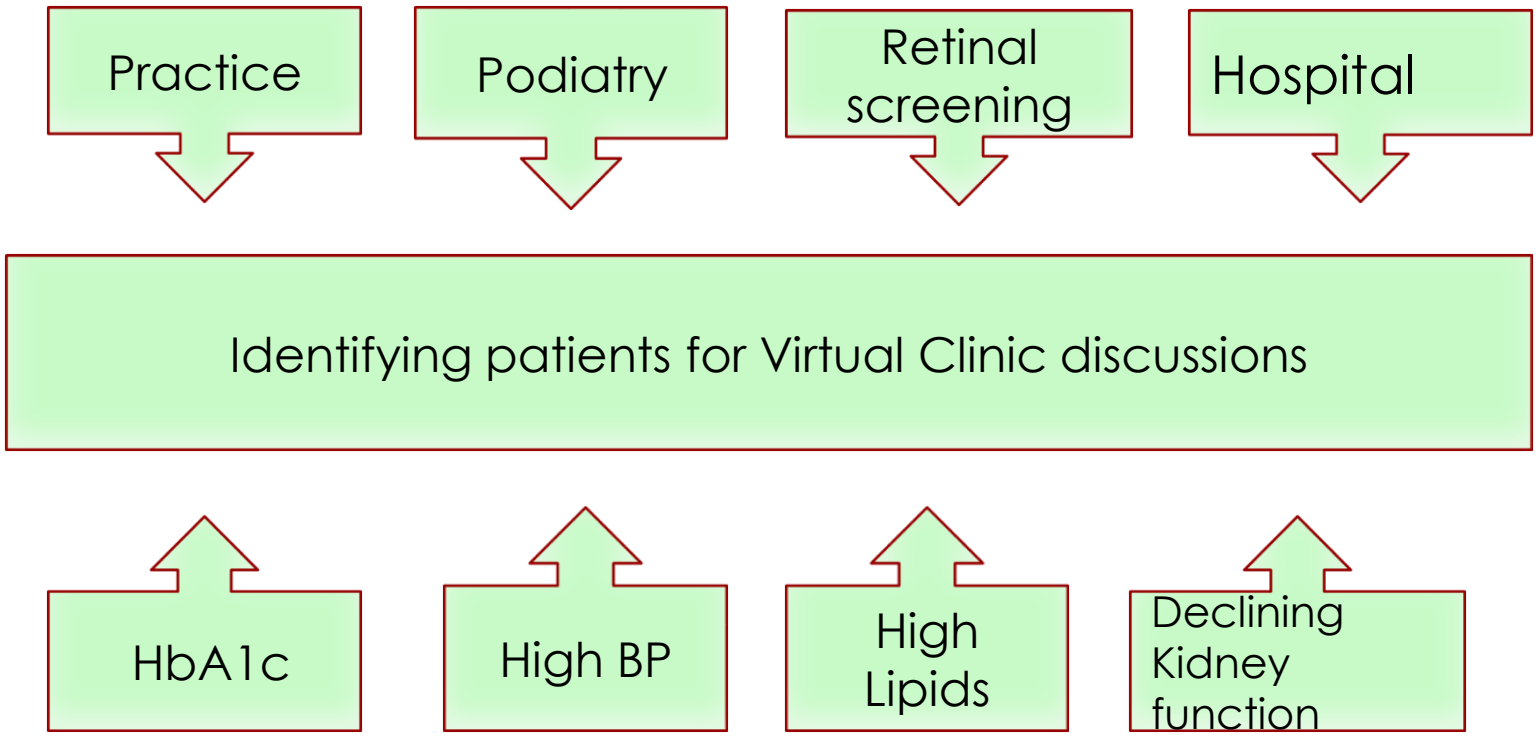
- Developing a systematic approach to manage care of people with type 2 diabetes in primary care

  Sharing data.
  Effective incentives.
  Systematic IT searches (EMIS).
  Education: formal and informal.
  Guidelines for diagnosis and treatment.
  Improving access to specialist care.
  Clinical Leadership.

Intermediate Care Teams



Virtual Clinics



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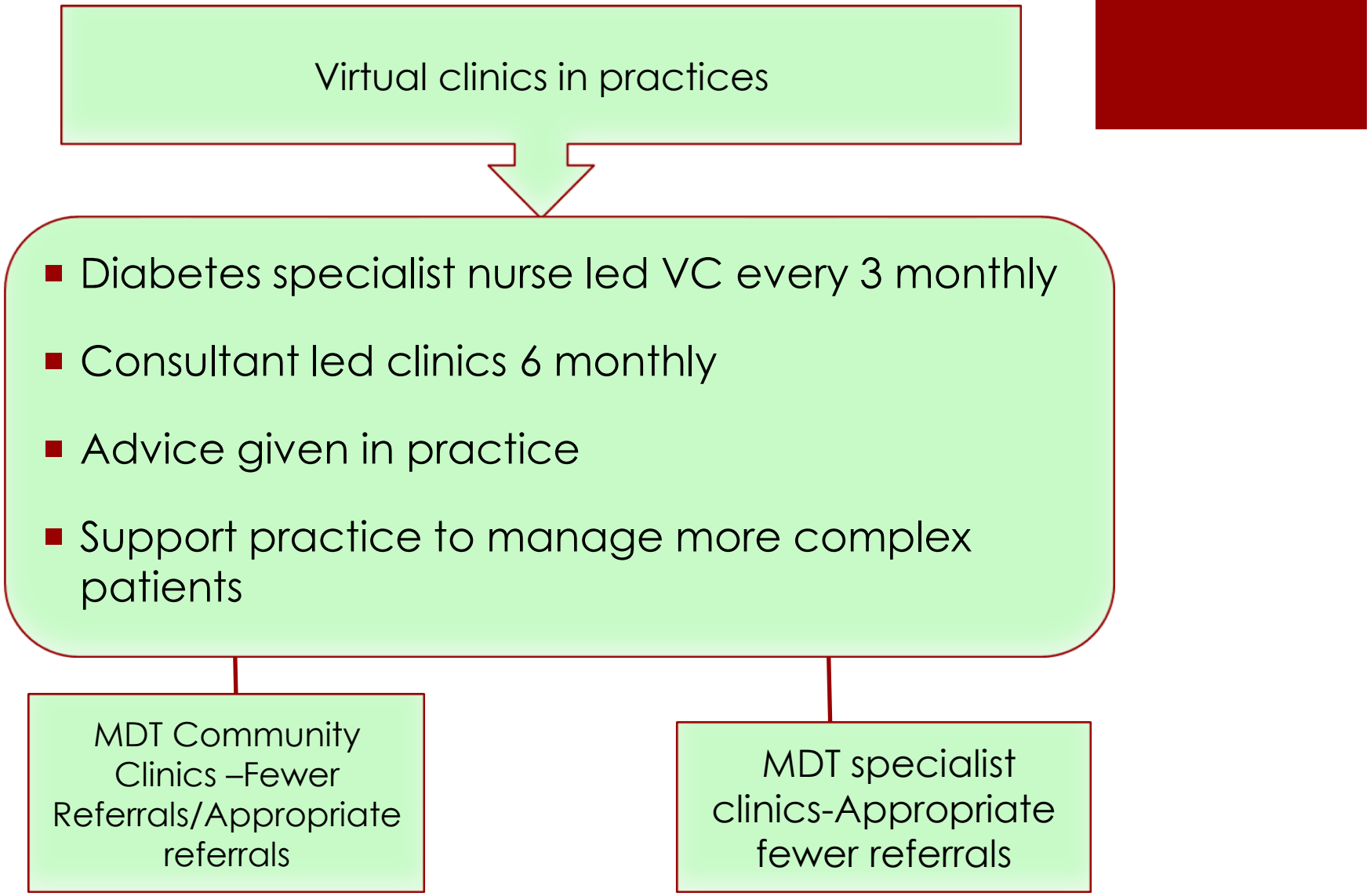


Community Clinics

- 6 community Clinics /week.
- Multi-Professional clinics

Community Clinics

- Better access to specialist care.
- For “hard to reach” population – better engagement.
- Enable use of real estate in secondary care for complex multi-morbidity patients.

Tackling variablilty

New Guidelines

- New diagnosis guidance: shift to HbA1c from glucose based guidance two years ago.
- New guidelines - target and time driven.

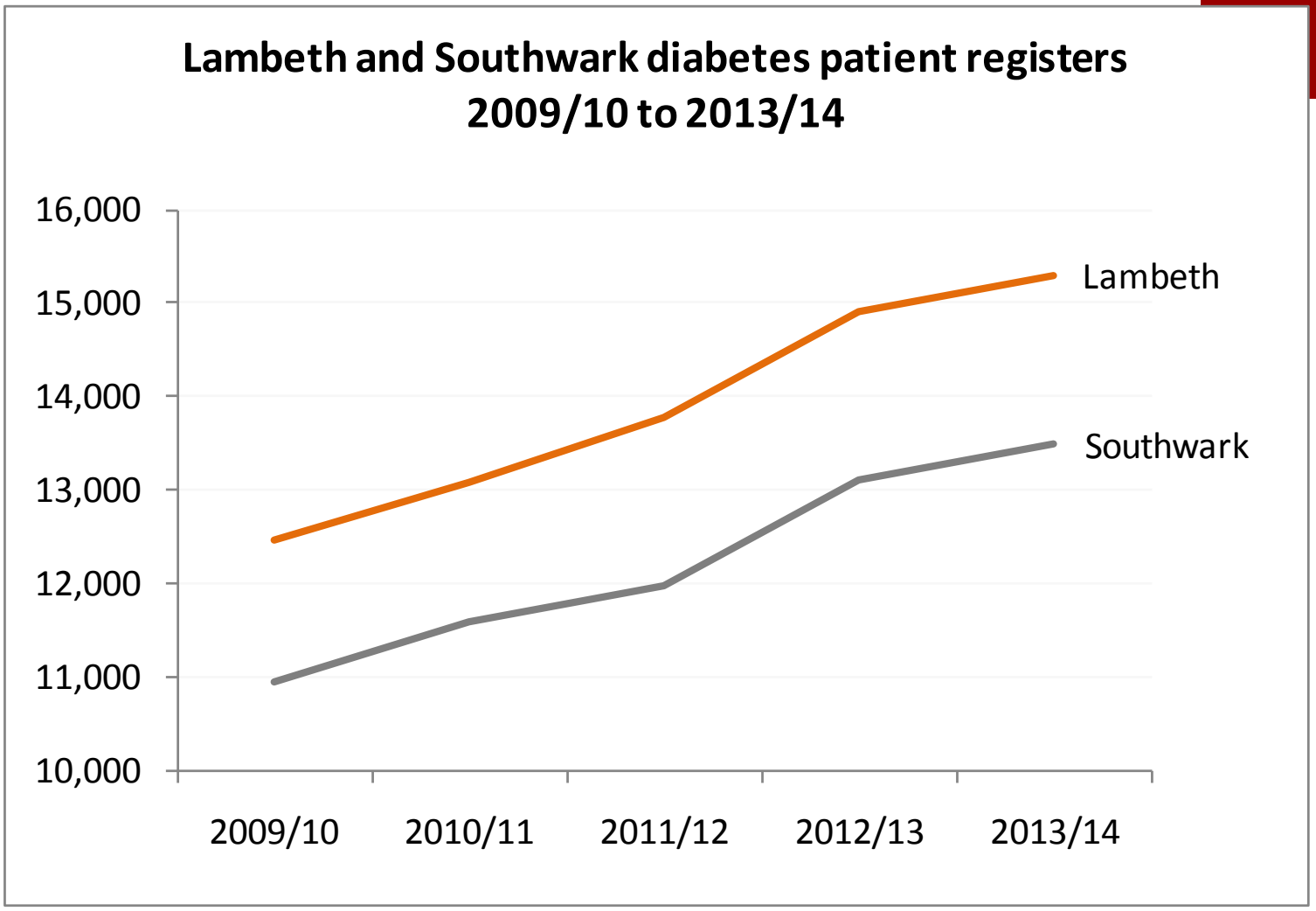
Education and training events

- Education events >100 primary care staff, regular diabetes events in GP protected learning time covering local priorities.
- "INFORM – insulin initiation and ongoing management" training for GPs and practice nurses: train about 60 a year (over 200 staff).

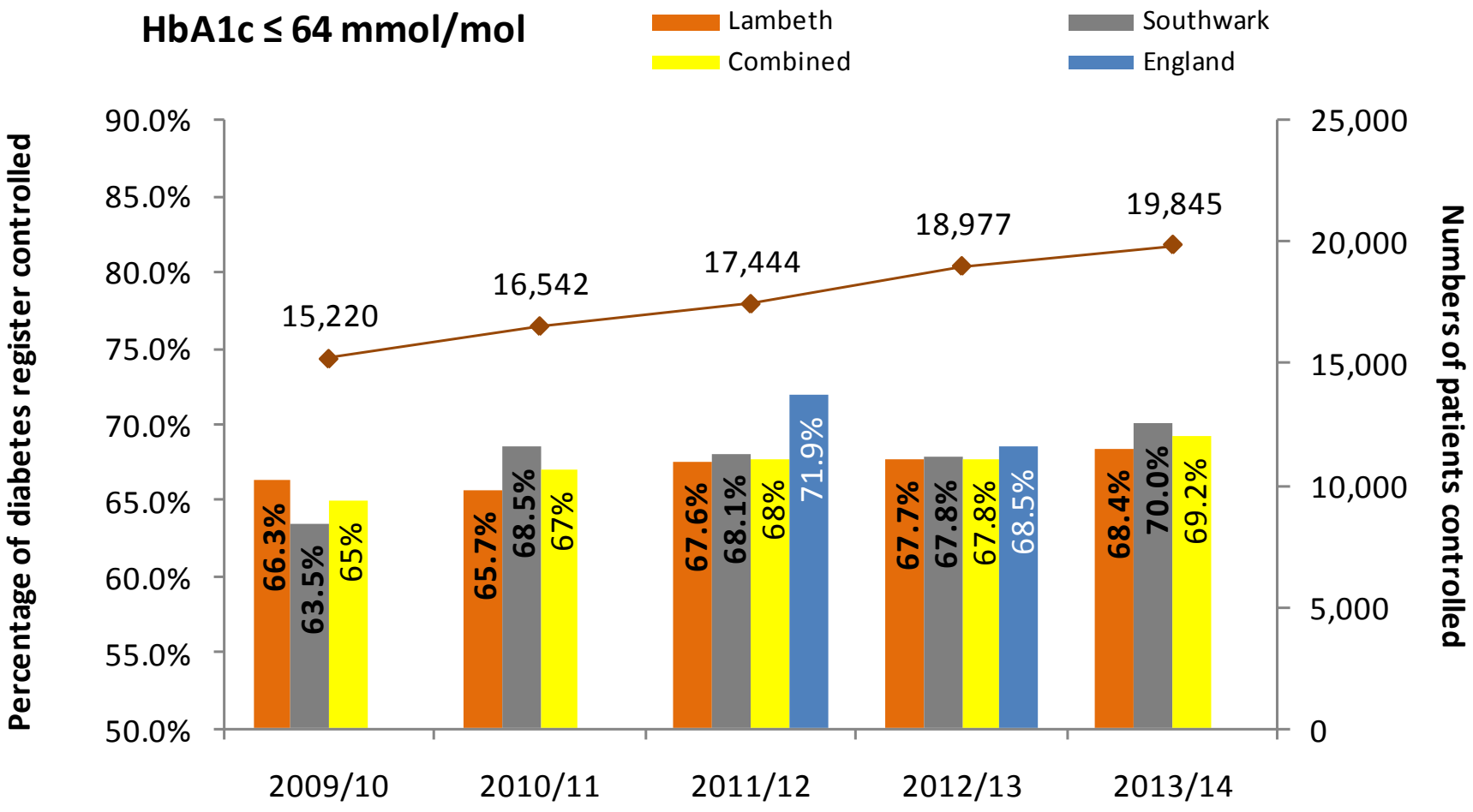
Enhanced support

- Enhanced support to specified practices- nurse working in practice; time limited with an exit plan.
- Telephone and email support.

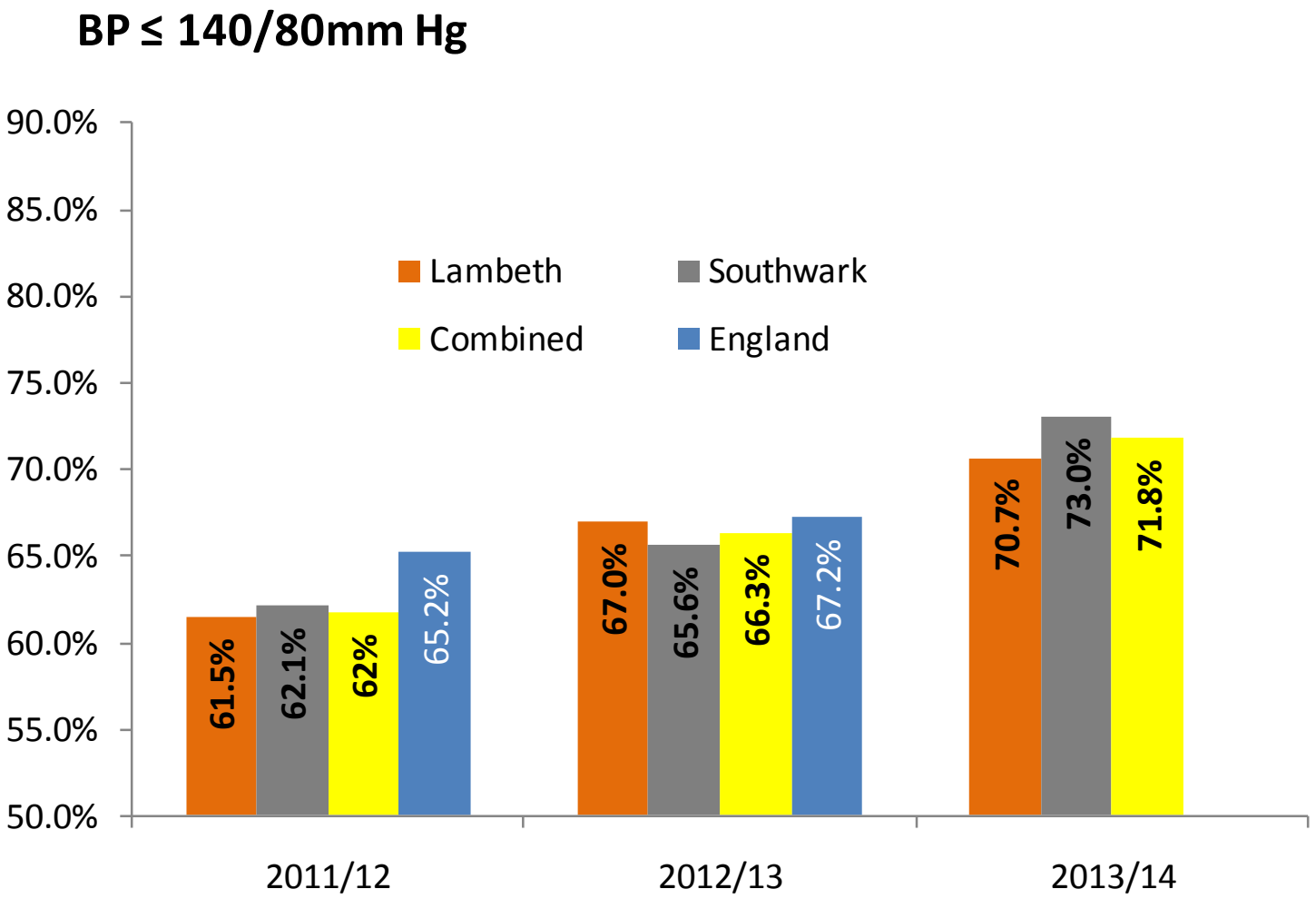
Increasing numbers of people detected



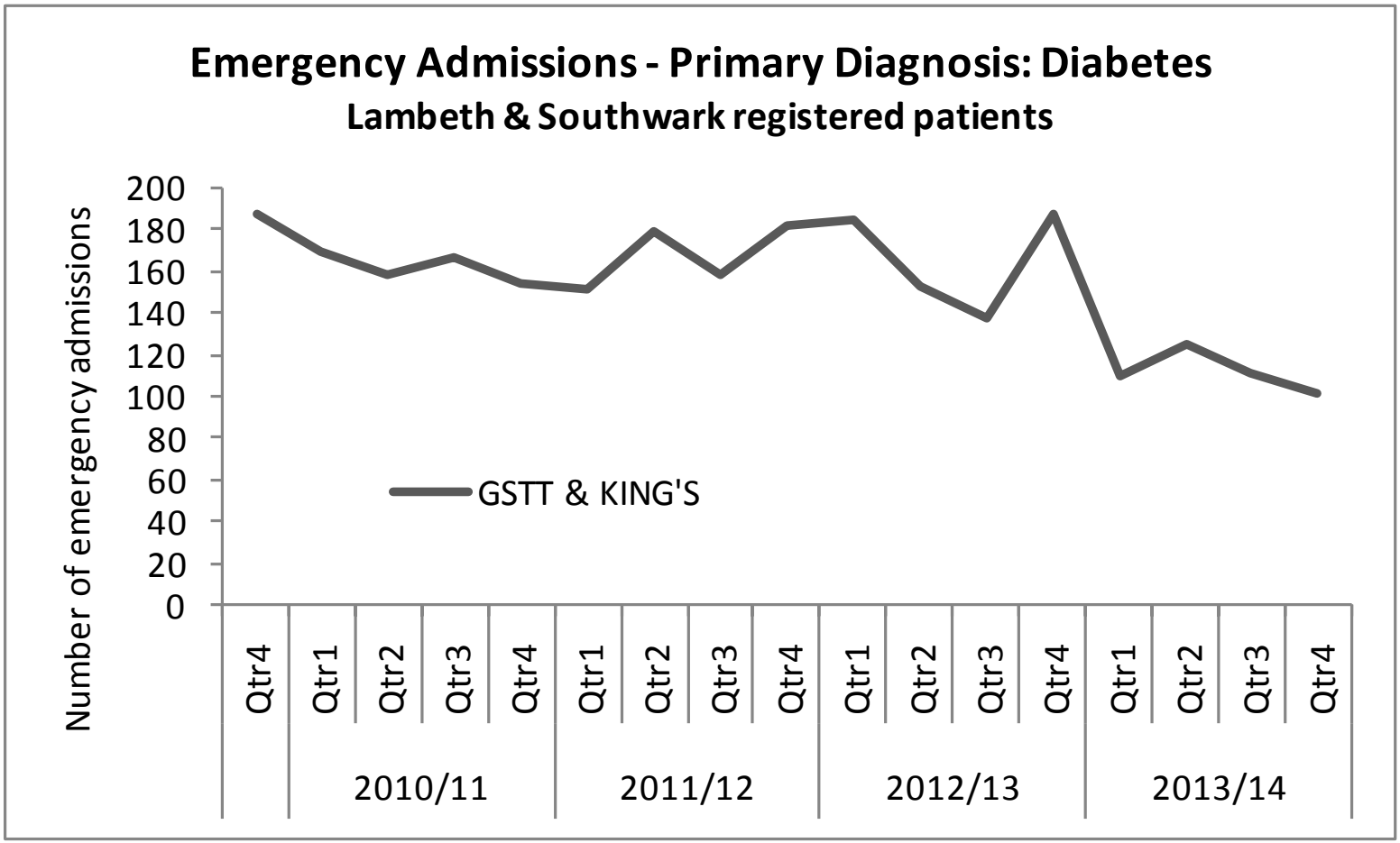
HbA1c ≤ 64 mmol/mol



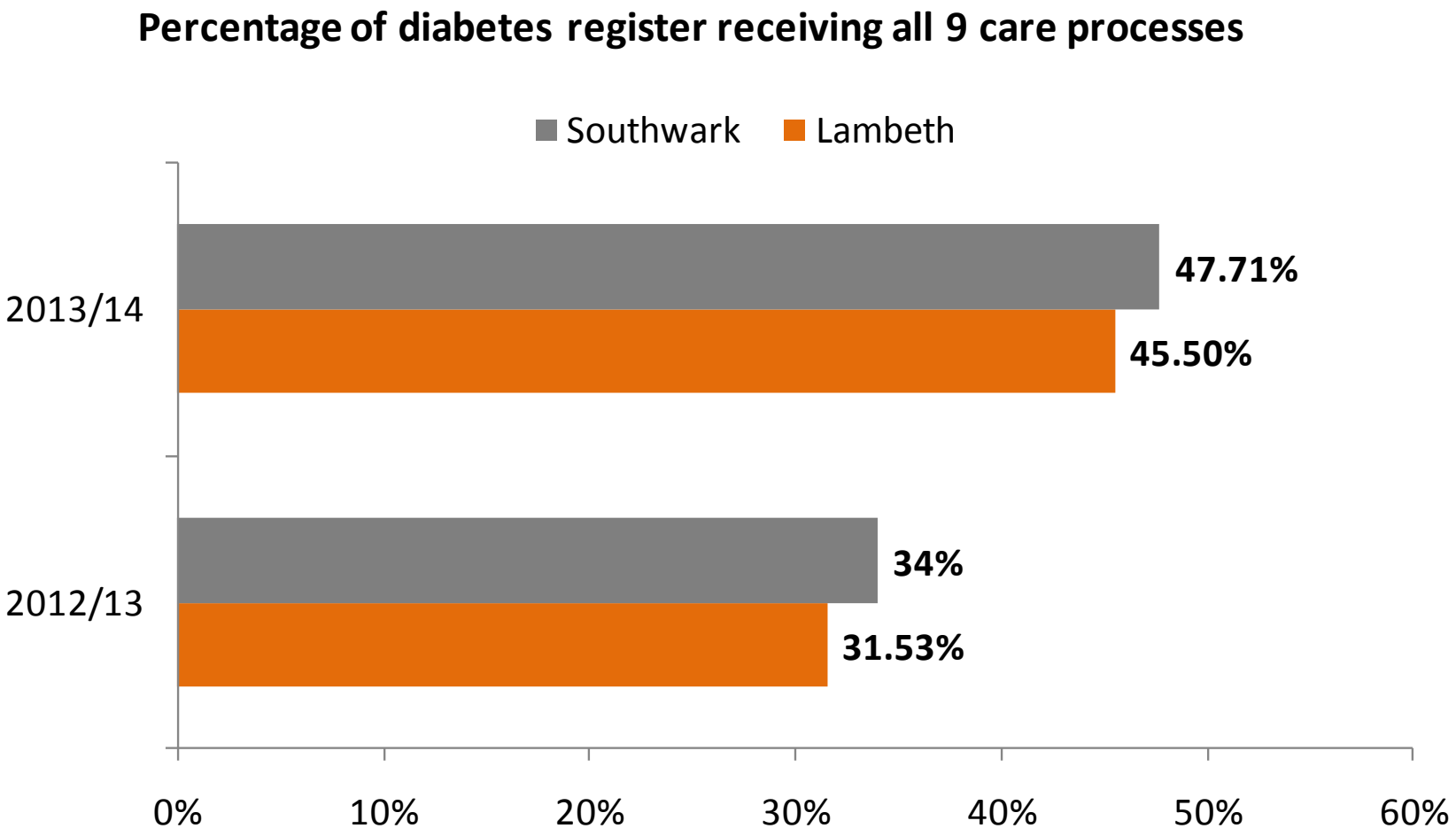
BP≤140/80


BP ≤ 140/80mm Hg
90.0%
85.0%
80.0%
75.0%
70.0%
65.0%
60.0%
55.0%
50.0%
Lambeth
Southwark
Combined
England
61.5%
62.1%
62%
65.2%
67.0%
65.6%
66.3%
67.2%
70.7%
73.0%
71.8%
2011/12
2012/13
2013/14

Emergency admissions



More people receiving Care Processes



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An Academic Health Sciences Centre for London

DIABETES

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INTEGRATE

Improving Specialist Care

King's College Hospital NHS
NHS Foundation Trust

South London and Maudsley NHS
NHS Foundation Trust

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i3-Diabetes is…

A collaboration

- King's Health Partners, Novo Nordisk
- Specialist care, primary care

An information resource

- Database across KHP, primary care
- Academic, clinical, service improvement

Improving services

- Using data to identify & respond to risk
- Improving coordination of care & patient activation

www.i3diabetes.org.uk

i3-diabetes is a collaboration between King's Health Partners and Novo Nordisk funded by both organisations.

47 year old male – Type 2 diabetes

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INTEGRATE

- ESRF – on dialysis
- Proliferative retinopathy
- Peripheral vascular disease
- Hypertension
- BKA of right leg
- Toe amputation on left
- MI and heart failure

Appointments in 2013:6 Months

- 22 Jan – Nephrology clinic
- 14 Feb – A&E
- 19 Feb – Diabetes specialist nurse
- 20 Feb – Diabetes clinic
- 26 Feb – A&E
- 5 March – A&E
- 7 March – Cardiology clinic
- 19 March – Diabetes clinic
- 28 March – Gastroenterology clinic
- 15 April – A&E (Admitted to Victoria ward)
- 23 April – Nephrology clinic
- 25 April – Gastroenterology clinic
- 30 April – Dietician, Diabetes
- 8 May – A&E, Diabetes clinic
- 13 May – Endoscopy suite
- 24 May – Ophthalmology clinic
- 6 June – cardiology clinic

DIABETES
INVESTIGATE
INNOVATE
INTEGRATE

- Foot health clinic appointments every few weeks
- 2 X prolonged hospital admissions for vascular surgery and foot ulcers
- Dialysis unit 3 times a week.

32 year old female- Type 1 diabetes

DIABETES
INVESTIGATE
INNOVATE
INTEGRATE

- Diagnosed at age of 11
- Guy's and St Thomas' from 2005

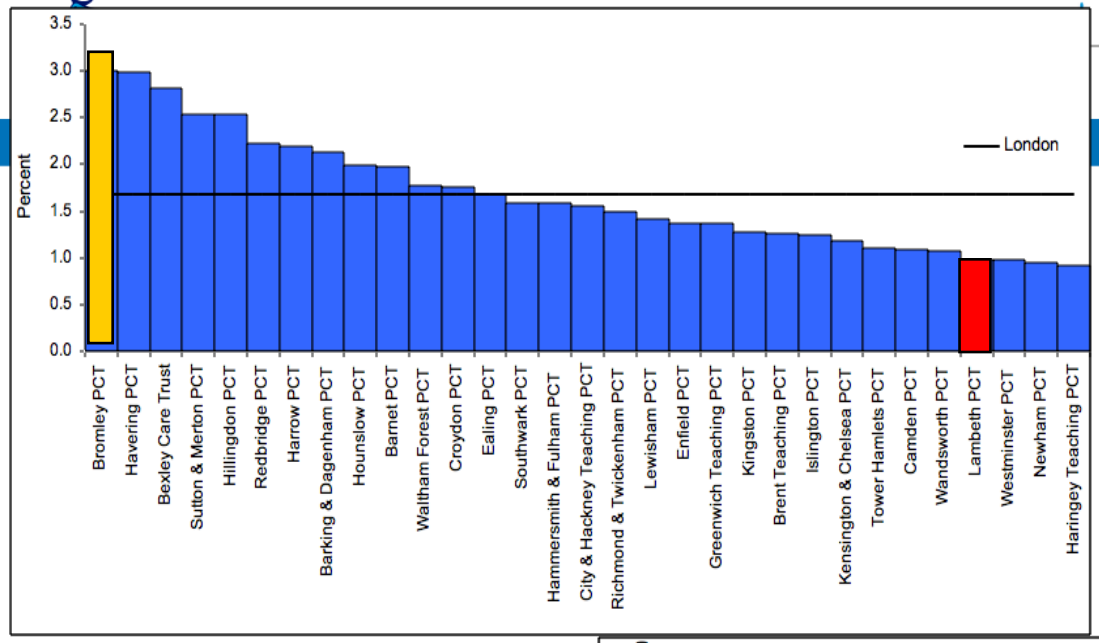
- 2005 -2006 - Poor diabetes control/Review by DSN 3 times/ High BP/High cholesterol/ laser treatment
- 2007 Feb - Nurse and Doctor follow up – poor glycaemic control- 6 month review
- 2007 Oct - Rearranged by hospital
- 2007 Nov - Rearranged by hospital
- 2008 Oct - High BP, 2 plus protein
- 2009 Aug – DAFNE Nephrotic range protein/renal referral
  - » ACE-1/ ARB/ Statin/BP control and review every 2 months

Jan 2010 – Kidney biopsy- Diabetic Nephropathy

- 10th Nov 2010 - Re-arranged
- 17th Nov 2010 - Cancelled by hospital
- 20th Nov-2010 - Cancelled by hospital
- 24th Nov 2010 - Rearranged by hospital

Feb 2011- Reviewed Consultant- PCR- 774g/mol/Cr -102 and eGFR- 56

- May 2011 – DNA
- Aug 2011 - DNA
- Sept 2011 – Admitted to local hospital with
- creatinine of 250,eGFR 20ml/min
- Currently waiting Kidney-Pancreas transplant/on PD



Prevalence of chronic kidney disease in persons (18 +) 2006-2007

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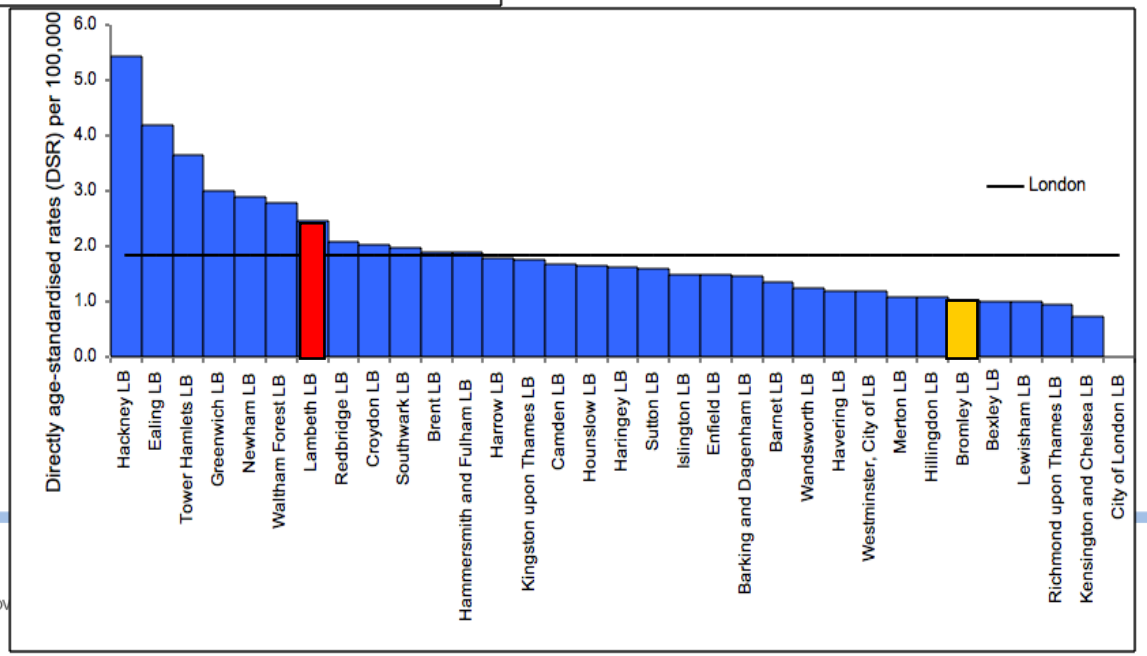
Mortality from chronic renal failure in persons (all ages) 2004-2006



www.i3diabetes.org.uk

i3-diabetes is a collaboration between King's Health Partners and Nov

Source:Compendium of Clinical and Health Indicators/Clinical and Health Outcomes Knowledge Base, www.nchod.nhs.uk

Trajectory of a PwD down the co-morbidity curve

(combination of KCH/GSTT average pathway costs)

Maintaining
OP Stable: £399

OP Core Complex: £2,212

OP Foot Complex: £9,175

OP Renal Complex: £4,925

IP Complex: £8,050

IP Foot Complex: £33,340

IP Renal Complex £26,351

Rolling down the expensive slope of complications could cost up to £84,052

The equivalent to maintaining at **211 PwD** at OP Stable for £399 each

Total £84,052

Why stratify risk?

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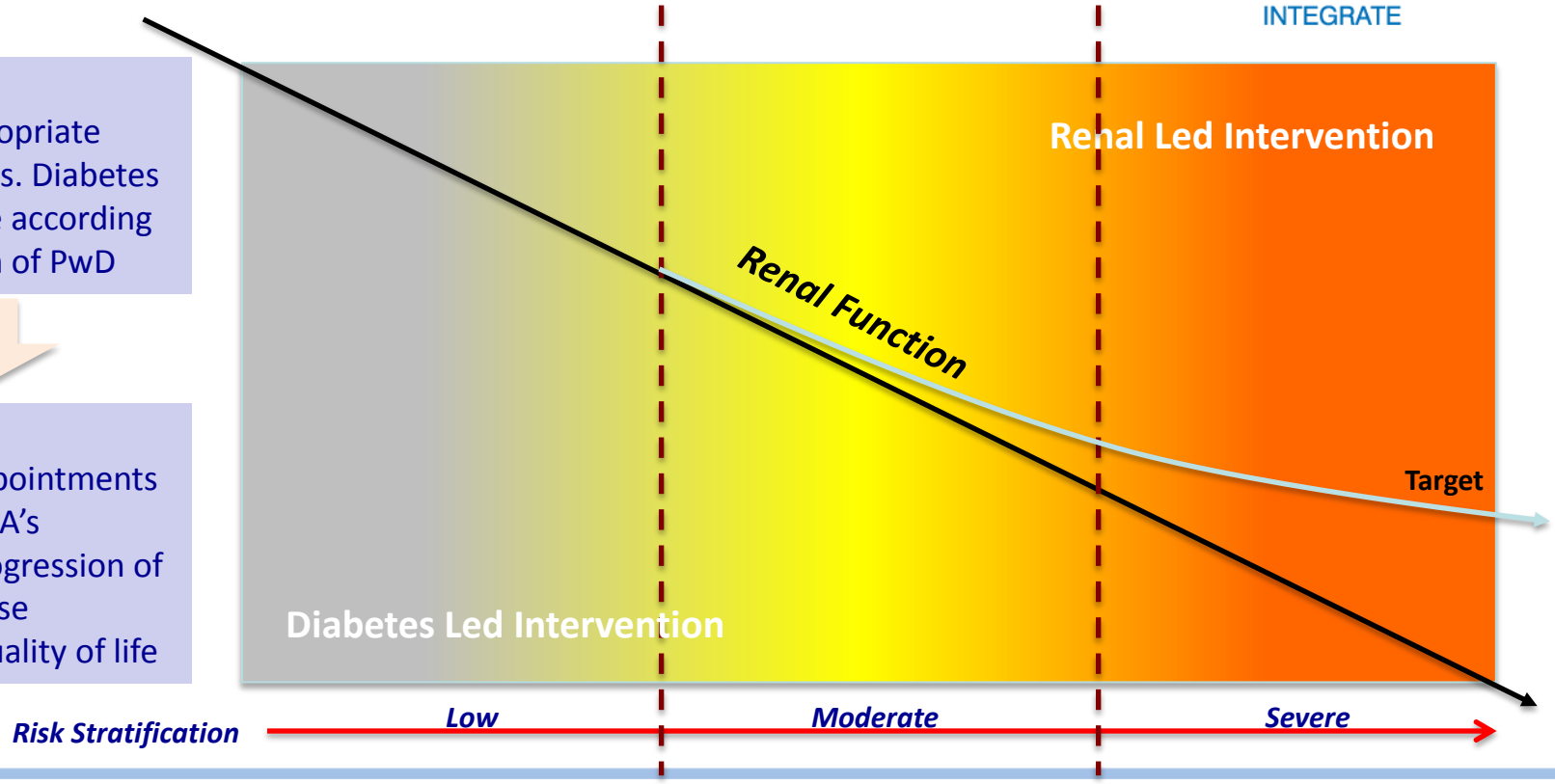
Rationale
Apply the appropriate level of Renal vs. Diabetes led clinical care according to stratification of PwD

Outputs
- Reduce appointments
- Reduce DNA's
- Reduce progression of renal disease
- Improve quality of life



Young adult with Diabetes –Stepping Stone for Diabetes Self Care

Well centre
healthy, safe, happy

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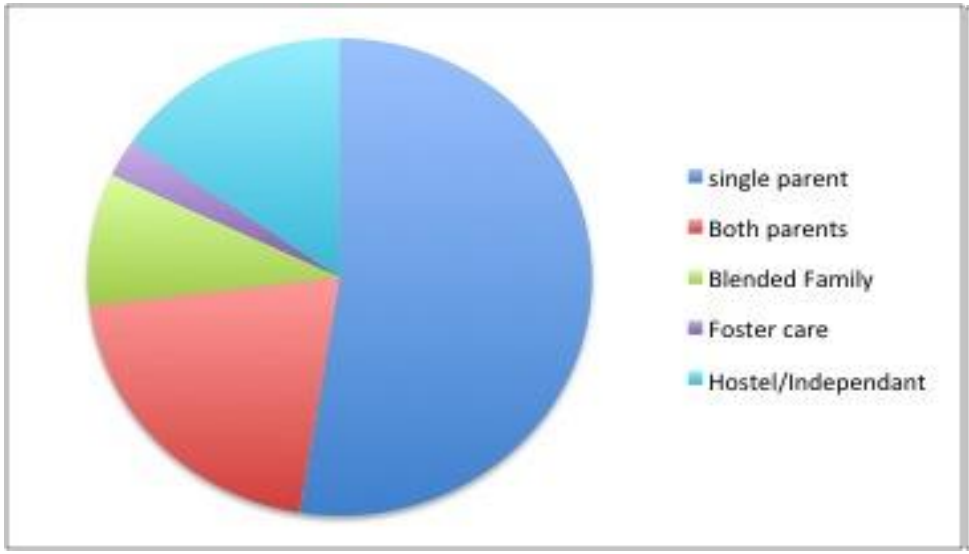
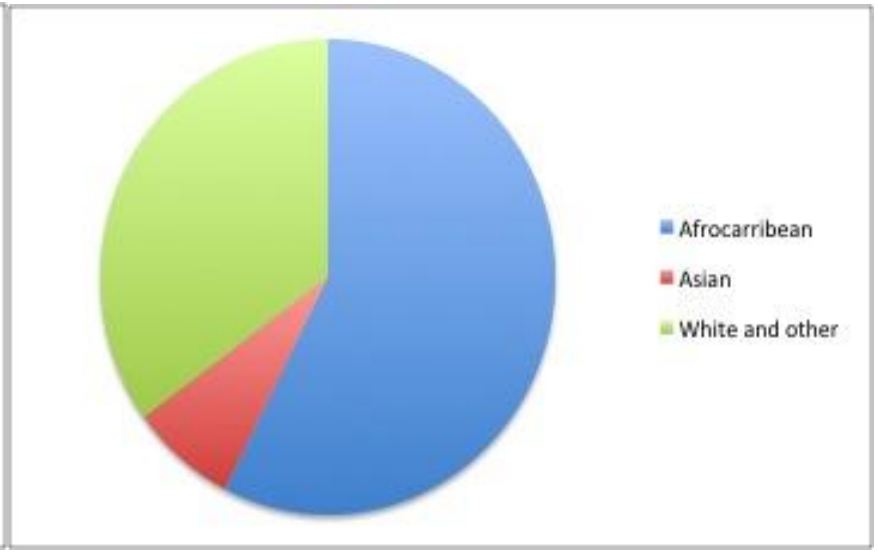
Population

- Number of patients between 14-21
  - Lambeth -94 patients
  - Southwark - 105 patients
- GSTT Young adult clinic- n=79

Social Situation



Ethnicity



Baseline Characteristics

Total number of patients	79
Male/Female	49.2/50.8%
Type 1/Type 2	82.6/17.3%
Mean age (yrs)	20
HbA1c (mean %)	9.9 (6.2-15.8)
Weight (mean kg)	76.9 (49-149)

Psychological issues

- Psychological screening offered routinely to 73%(n=30)
- 51%(n=21) needed ongoing intervention.

Engagement

- attended 5/9 appointments in 12 months
- 61% (n=25) attended > 50% of appointments.
- 26% (n=11) DNA > 50% of appointments.
- 70/79 attended at least for one year

Well centre
healthy, safe, happy

Use the skills of a youth worker to engage and support the most vulnerable cohort of young people and thus retain them in treatment.

2010 NHS Innovation Award – to develop a "One-stop Shop" for adolescents to improve access to healthcare and youth work support.

Improved Engagement

- Youth worker –Engagement of hard to reach patients and working as a conduit between health care providers and young persons/families.
- Innovative approaches to engaging young people(using Skype other social media).
- Community outreach clinics.

CO-Design Services

Stepping Stone for Diabetes Self Management

- What the week offers
  - Type 1 diabetes basic knowledge.
  - Introduction to CHO counting.
  - General health and diabetes: Sex education/dental/podiatry/psychological issues/social worker
  - Friends and family and peer support day with patients who have diabetes.
  - Crises management.
- Simulation Centre day
  - Aims: Experiential learning and practice what they learnt throughout the week in a safe and simulated environment.

Simulation day components:

Basic Life support Skills.

Age Simulation.

Management of hypoglycaemia

Sick day rules.

DKA management in a hospital.

Consultation station: exploring compliance.

HANDS UP FOR HEALTH

I found it very useful and interesting, I really loved it, I would do it all again.

I really really enjoyed the aching part of this program, it was sooo much fun, I've learnt so much more about diabetes, and ~~have~~ I've it made me realise how ~~not~~ the nurses, doctors and how my mum would feel if they had to deal with a diabetes patient - something which I've always took for granted & never really have put into consideration.

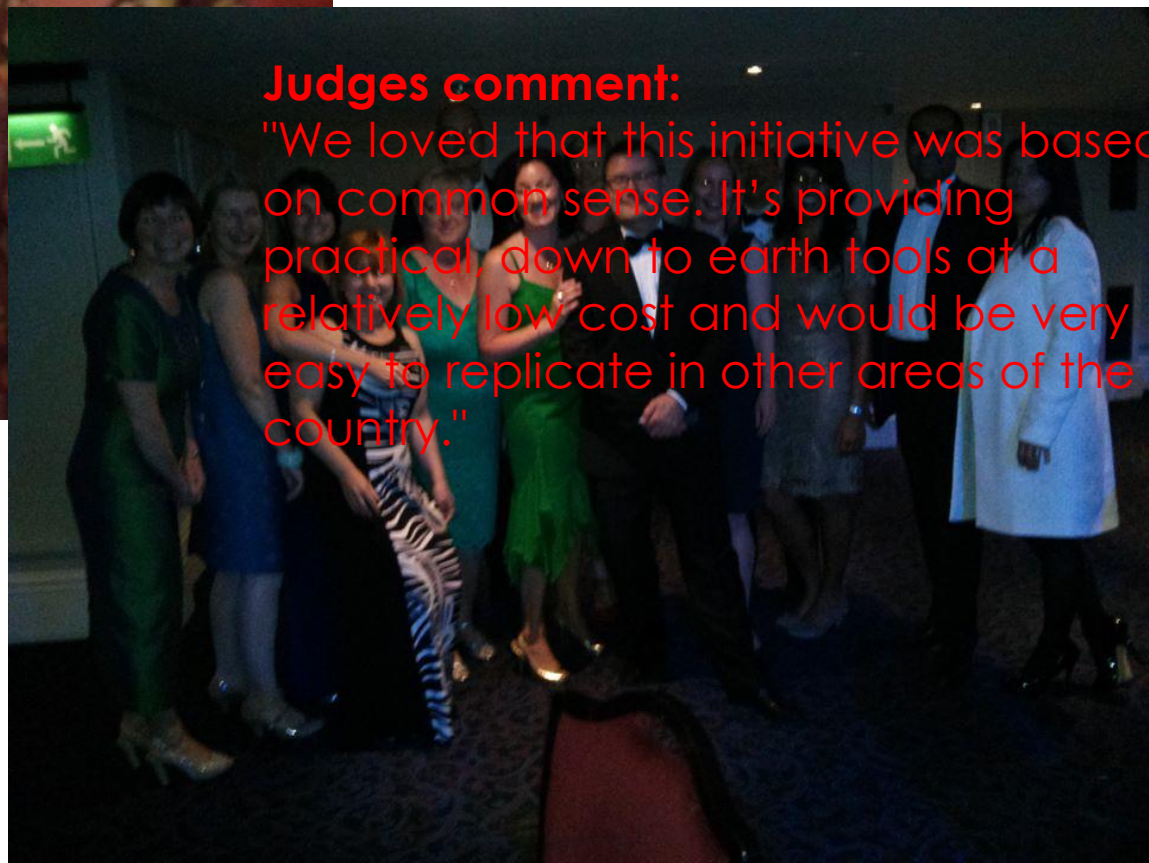
It was really helpful practicing on the mannequins like it was a real life simanon. The ageing gave us insight into how ~~old~~ you would feel being old. The hypo simanon & hyper DKA, clinic related to me a lot and made me realise how it feels like being an outsider

3. What part of the day did you find LEAST INTERESTING and relevant to you? (you can choose more than one answer)

National positive practice in Mental health award -finalist

CARE integration awards 2013

FINALIST



Judges comment:

"We loved that this initiative was based on common sense. It's providing practical, down to earth tools at a relatively low cost and would be very easy to replicate in other areas of the country."

QiC Diabetes 2014 Results

WINNER

A systematic approach to management of diabetes in primary care

Integrated Care in Diabetes

"*Happy families are all alike; every unhappy family is unhappy in its own way.*"

Leo Tolstoy

Anna Karenina-1877

Biological outcomes: From then to now……

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BP 140/80	
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BP 140/80	
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Total	31

- 2013/14 rankings against 2012/13 QOF

Thank you

- **Acknowledgments:**

Prof. Stephanie Amiel, RD Lawrence Professor of Medicine

Dr. David Hopkins, Clinical Director, King's College Hospital

Dr. Stephen Thomas, Clinical Director, Guy's and St.Thomas' NHS Foundation Trust

Jane Stopher, Director DMI

Siobhan Pender, DSN in Children and Young people

Stephanie Singham, Diabetes psychotherapist

Dr.Anna Brackenridge Consultant, Guy's and St.Thomas' NHS Foundation Trust

Dr. Mark Chamley; GP Lead, Lambeth Diabetes Intermediate Care Team

GSTT Charity

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