PROVISION OF DIABETES CARE FOR ETHNIC MINORITIES IN THE UK

A special case?

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SUMMARY

- SOUTH ASIANS ARE SPECIAL AND DESERVE MORE MONEY!

SCOPE

- Focus on South Asians (but is applicable to most ethnic minorities in the UK)
- Reminder about the impact of diabetes on South Asians
- Description of the “health gap”
- Inequalities in diabetes care between SAs and White Caucasians
- Some strategies to bridge the health gap

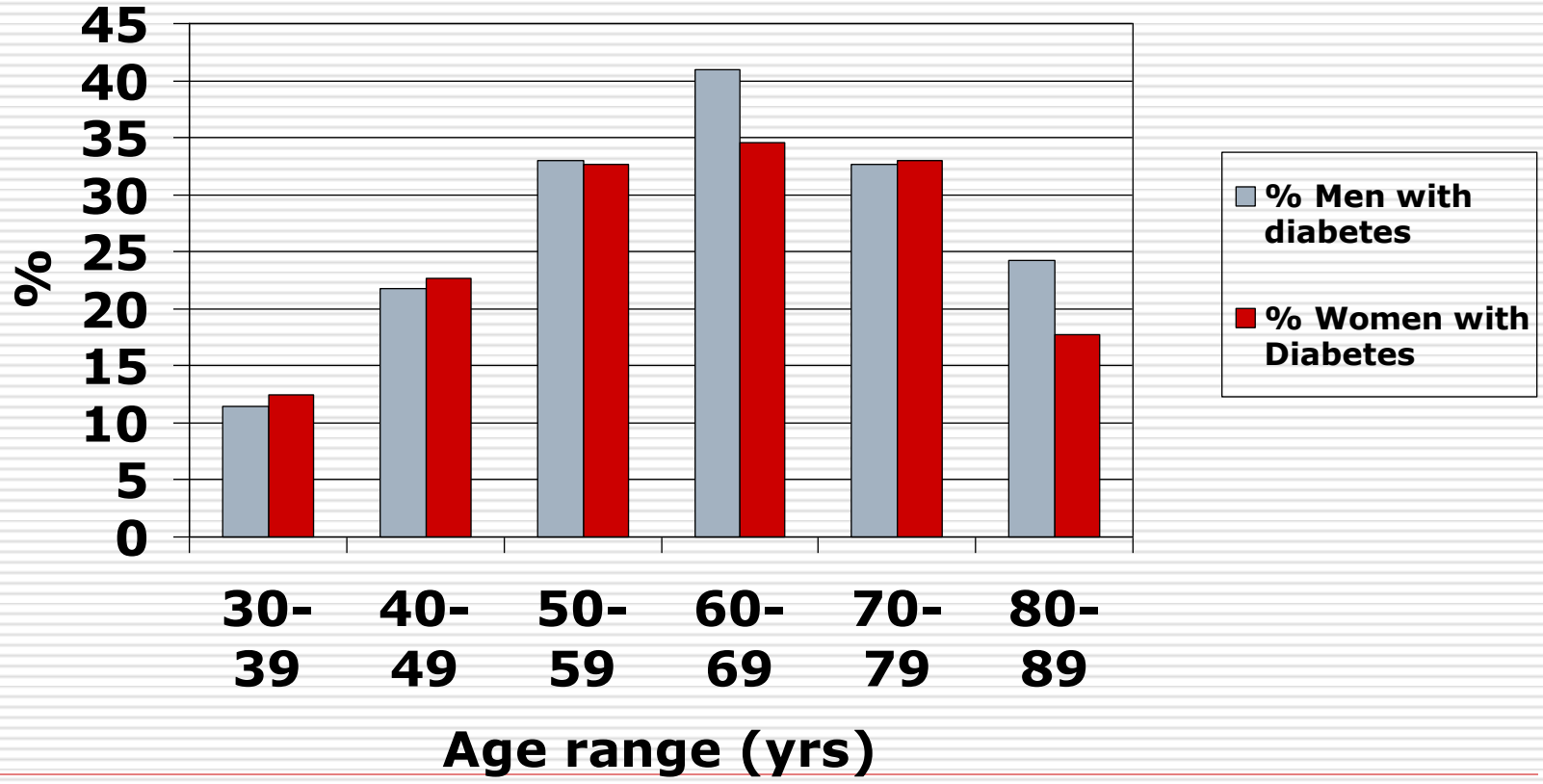
DIABETES IN SOUTH ASIANS

Chennai Diabetes Study

- Prevalence of diabetes in an urban city in India is 11.6%
- Rural India – 4.3%

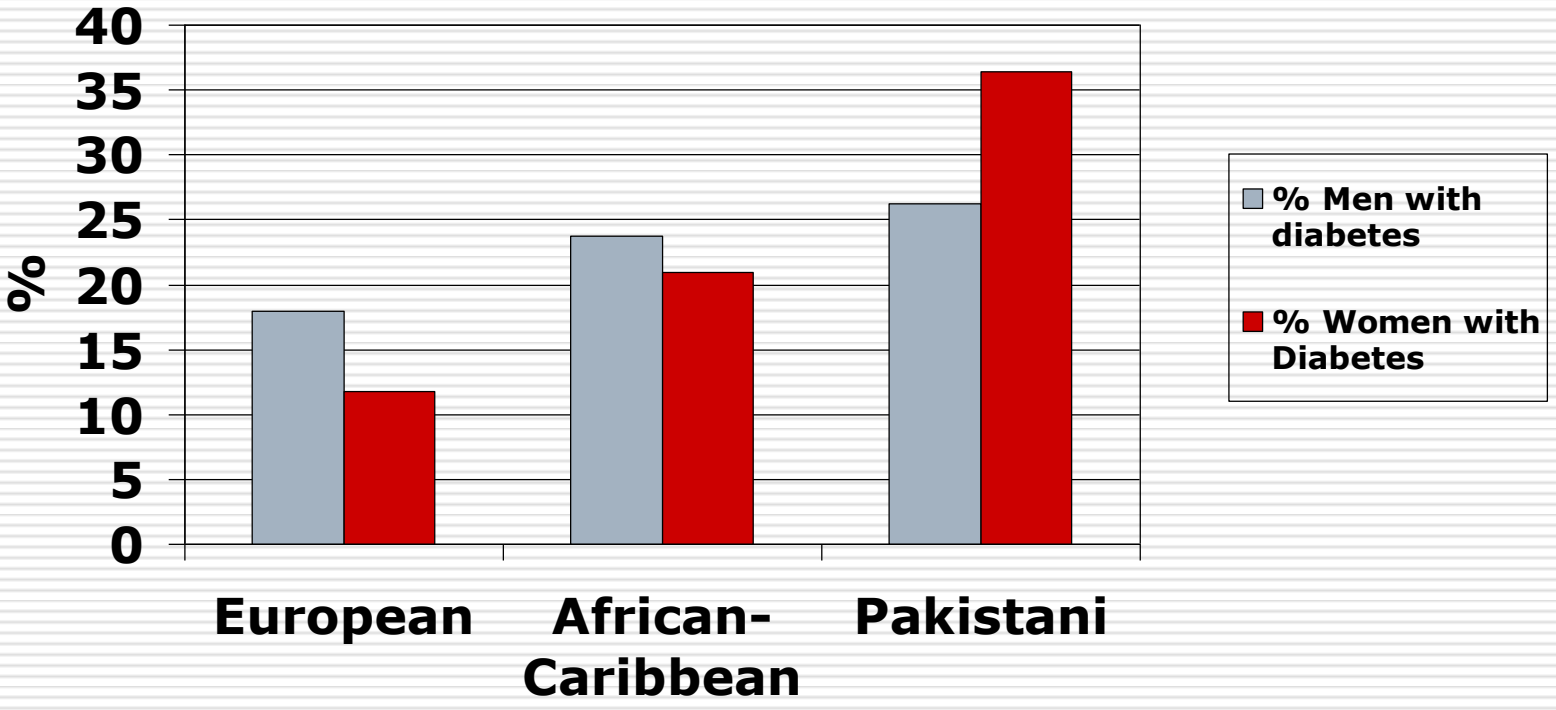
DIABETES IN SOUTH ASIANS

DECODA



DIABETES IN BRITISH SOUTH ASIANS

Inner City Manchester - Adults aged 35-79



DIABETES IN BRITISH SOUTH ASIANS

Southall Diabetes Survey

- Diabetes prevalence around 4-6x that of white population (~10%)
- Around 20% of South-Asians >50yrs - DM
- Lifetime risk for diabetes in South Asians is 1 in 3
- Presents around 10 years earlier

- CHD and renal disease rates significantly greater

WHY IS DIABETES MORE COMMON AMONGST SOUTH ASIANS?

- Nature
- Nurture
- Culture

NATURE

- South Asians are more *Insulin Resistant*
- Genetic Pre-disposition to insulin resistance – *"thrifty genotype"* - predisposition to T2DM due to genetic selection - *"survival advantage"* in low calorie environments
- *Yajnik et al. JCEM 2002* Cord blood of neonates:

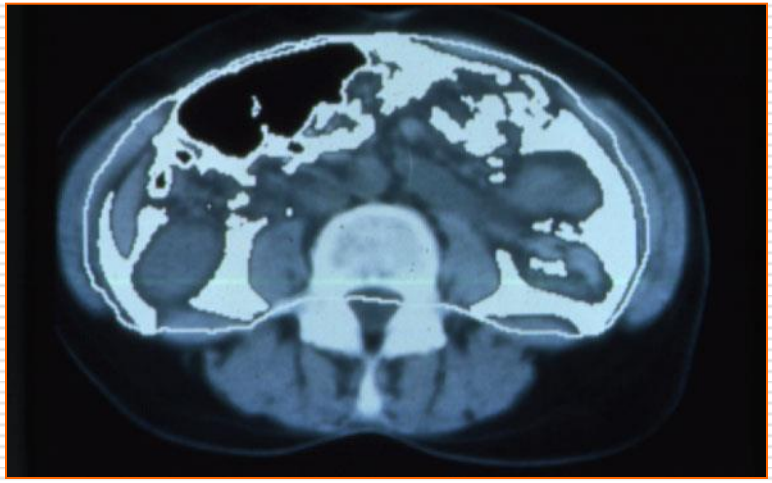
	South Asian	European (UK)	
Glucose	5.3	4.4	$p<0.001$
Insulin	34.7	20.8	$p<0.01$

NATURE

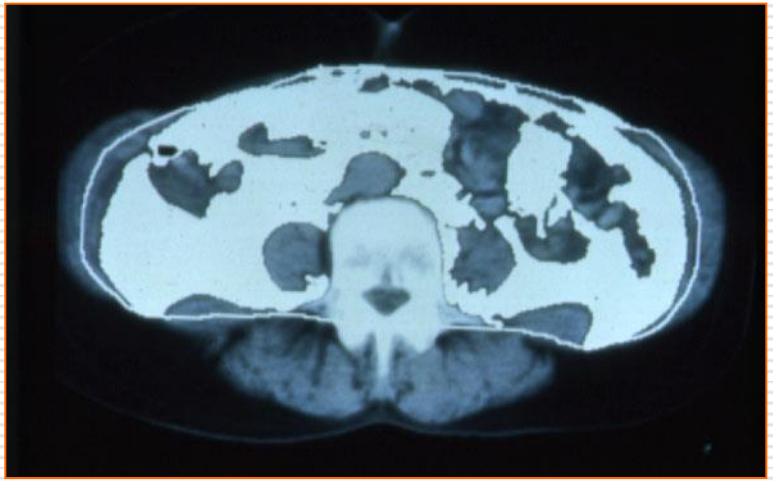
Whincup et al. Diab Med 2005 - Ten Towns Heart Health Study - Survey of school children 13-16:

	South Asian	European	
BMI	20.4	20.7	NS
Body fat (bioimp)	27.9	26.2	0.02
Glucose	5.22	5.04	<0.001
Insulin (mU/l)	10.81	8.96	0.001
HOMA	2.5	1.99	<0.001
IFG	5.6%	1.5%	

CENTRAL ADIPOSITY



European – BMI 25



South Asian – BMI 25

CENTRAL ADIPOSITY

- *Mohan et al.* – studied 300 Indian families – heritability for a trait defined as "abdominal obesity" was >90%

- SA have lower levels of adiponectin, higher levels of resistin, IL-1, TNF-α, CRP, homocysteine, PAI-1, fibrinogen

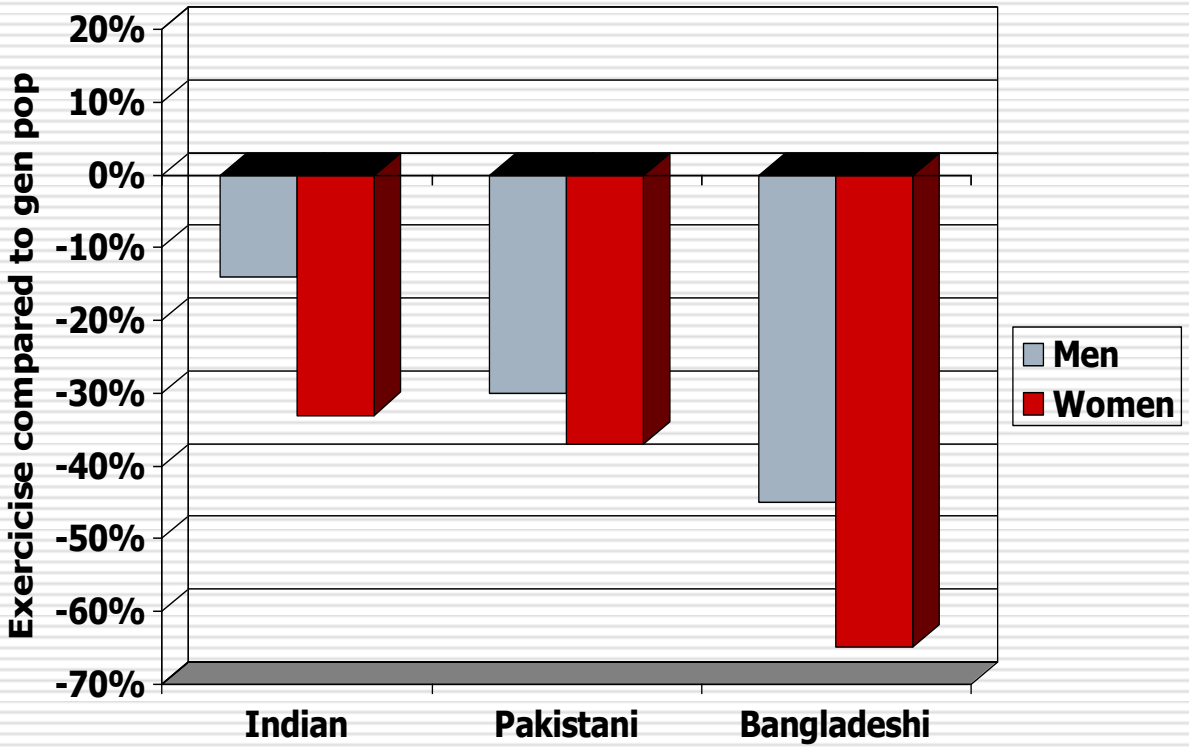
NURTURE

- Obesogenic environment - “Westernisation”, “Coca-colonisation”

	Punjabi in London	Sibling in Punjab
BMI	26.8	22.9
SBP	146	132
T chol	6.5	4.9
HDL chol	1.12	1.21
Insulin sensit	45.4	59.9

CULTURE

Health Survey for England 2001



BARRIERS TO PHYSICAL ACTIVITY IN EAST LONDON BANGLADESHIS

- *BIPOD study*
  - Physical activity and importance of diet widely acknowledged as important
  - Muslim prayer was frequently cited as sufficient to sustain health
  - Desire to exercise versus fear of social disapproval
  - Social expectation of 'special foods'
  - Wife's role as a provider of 'tasty meals' versus the guardian of the families health
- *Knowledge of diabetes*:
  - Poorer knowledge of diabetes related issues amongst SAs

DIET

SA diet:

- Relatively healthy – high proportion of fish / vegetables
- Also higher intake of CHO and saturated fats

OPTIMAL BMI IN SOUTH ASIANS

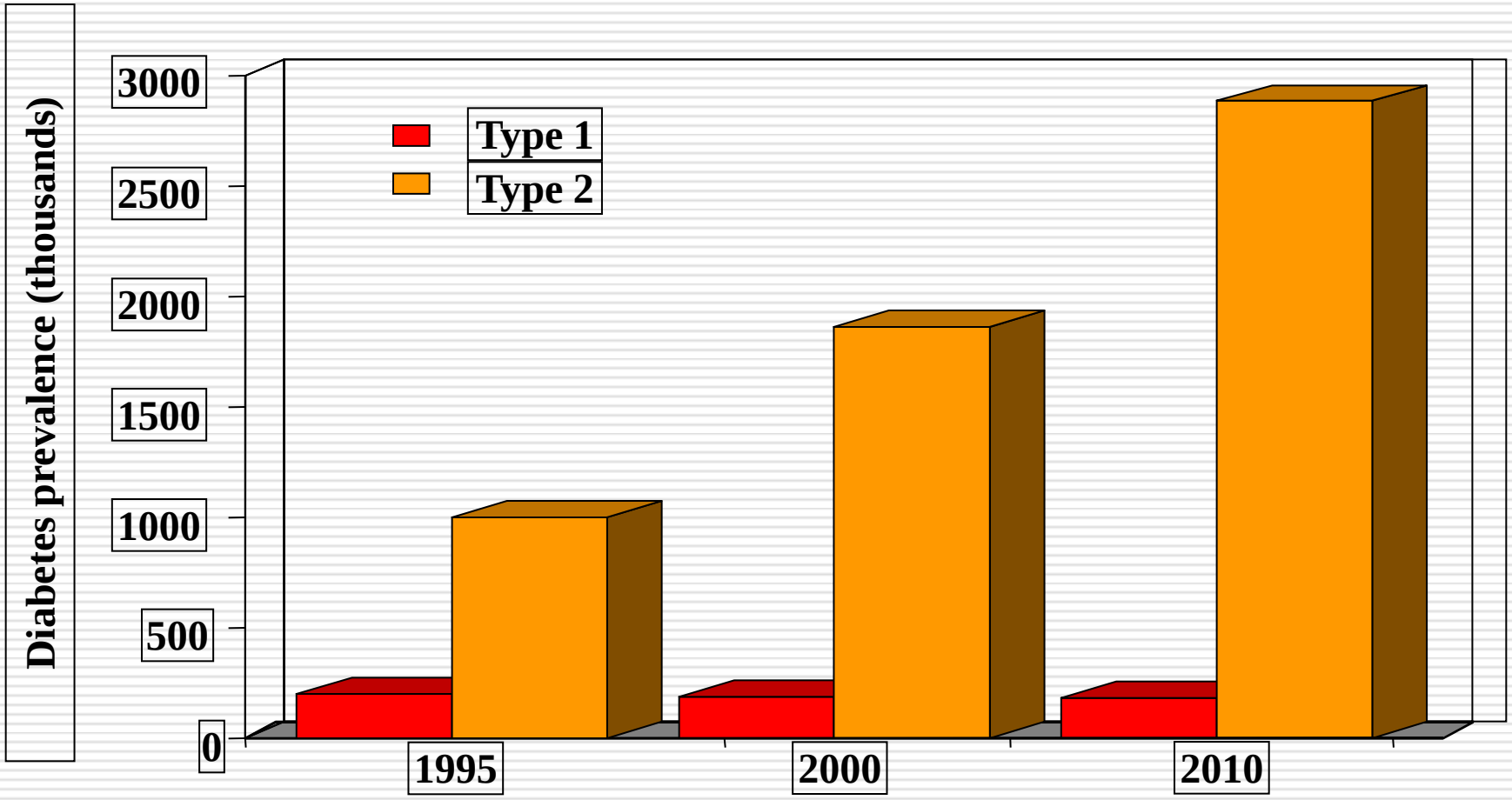
WHO Guidance:

	White	South Asian
Normal	≤25	≤23
Overweight	25-29	23-28
Obese	≥30	≥28

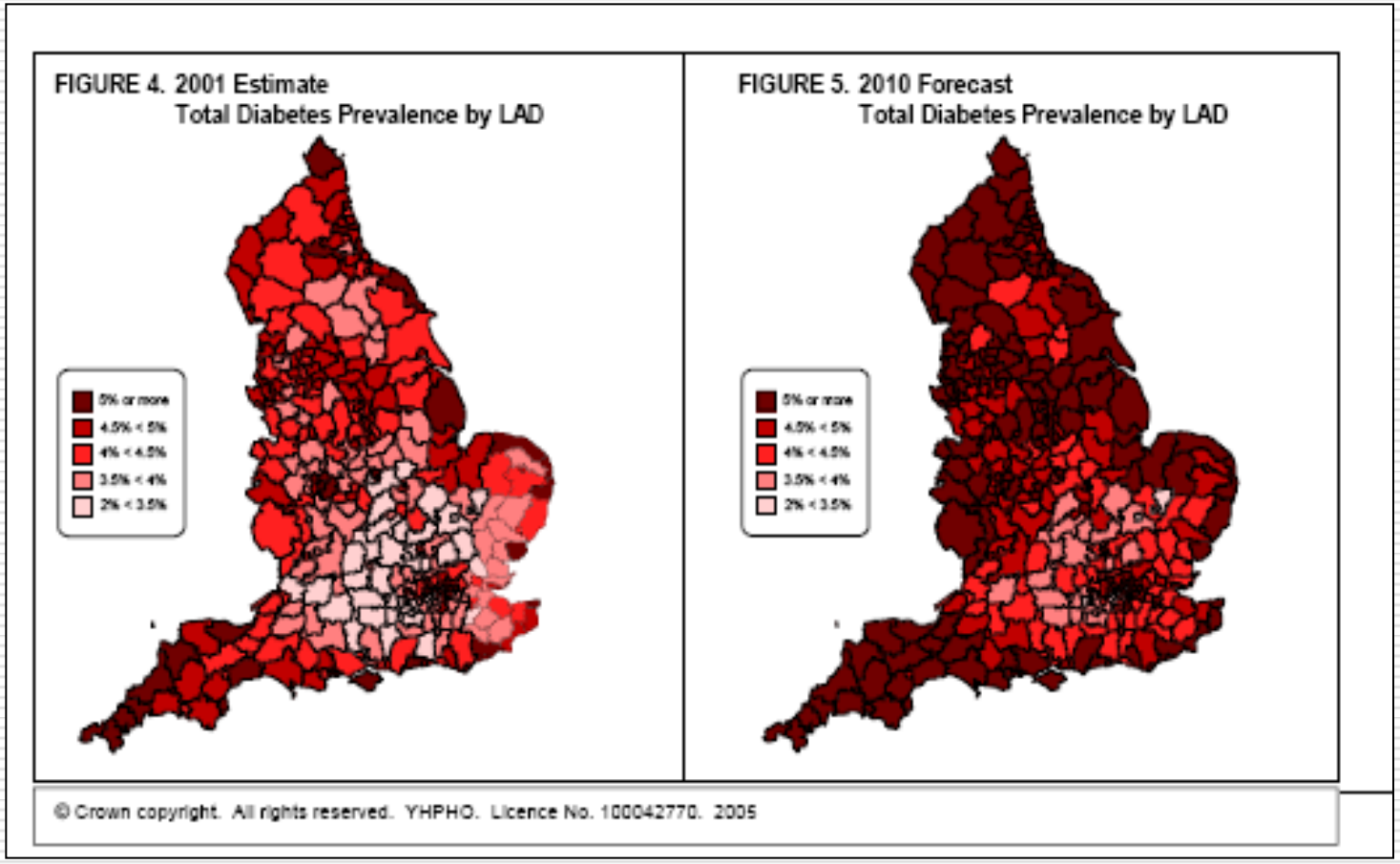
IDF definition of metabolic syndrome

	Female	*Male*
Europids:	*>88cm (34.5”)*	*>102cm (40”)*
South Asians:	*>80cm (31.5”)*	*>90cm (35”)*

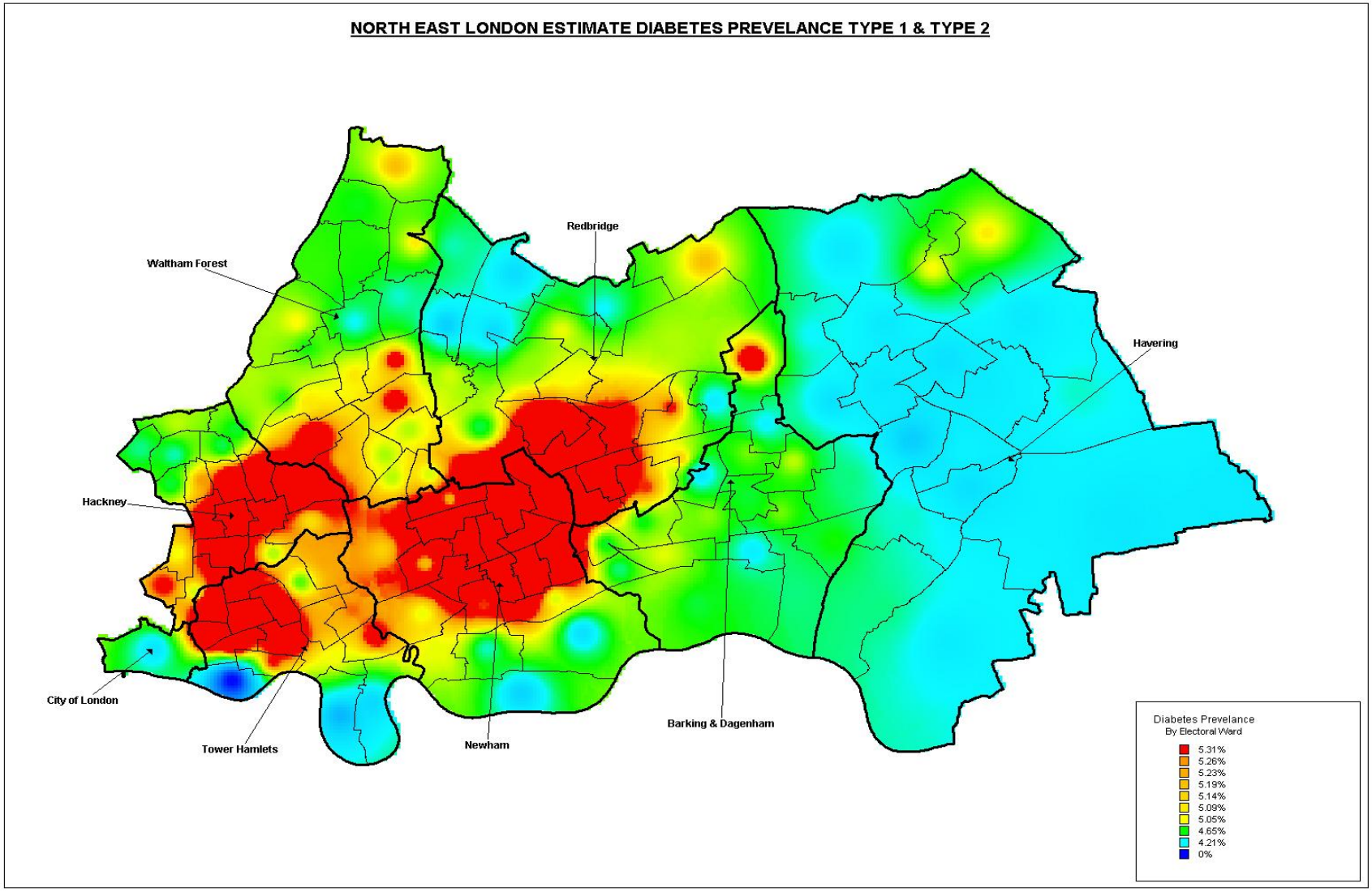
DIABETES IN THE UK: 1995-2010



DIRE FORECASTS



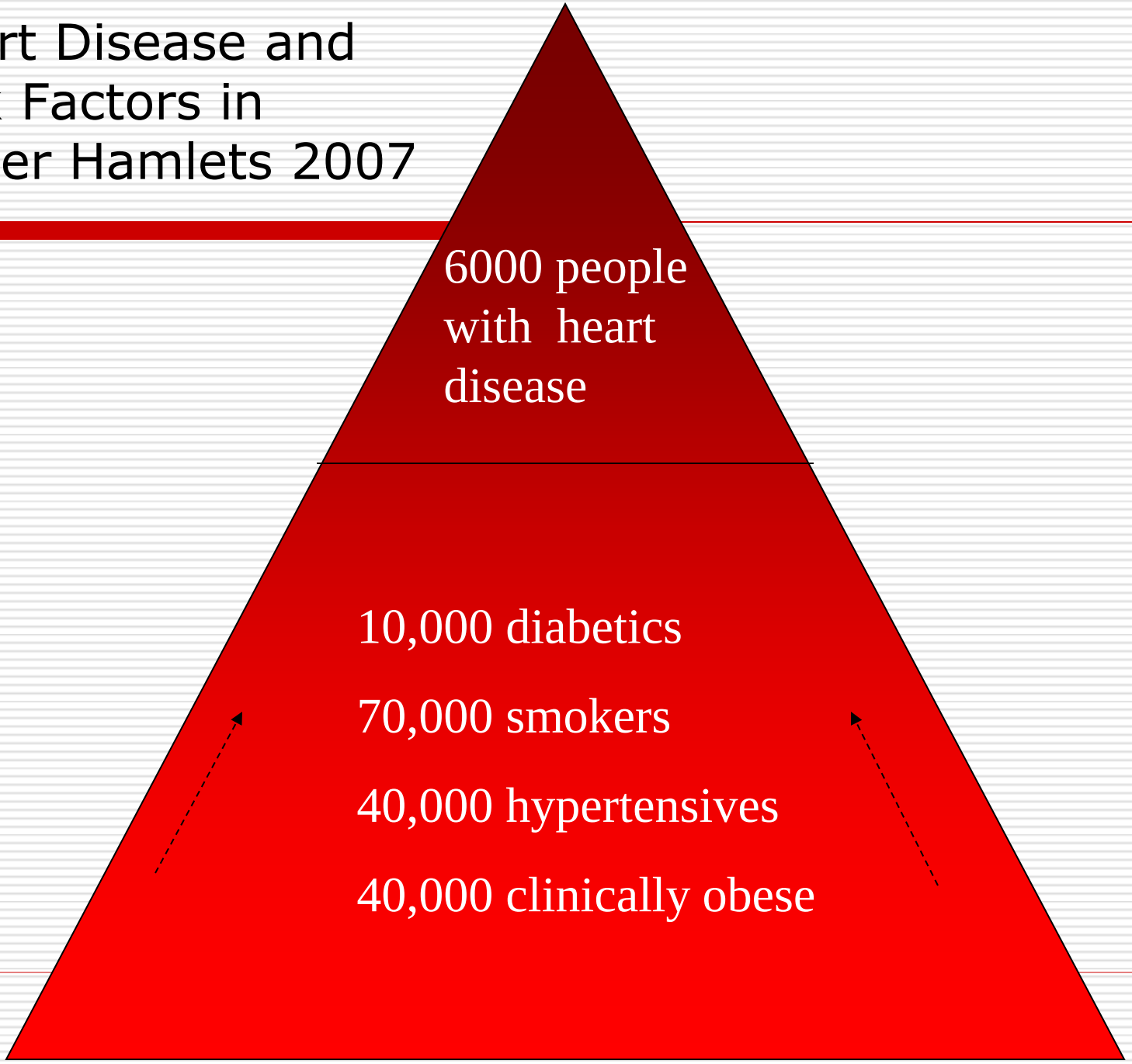
DIABETES IN NE LONDON



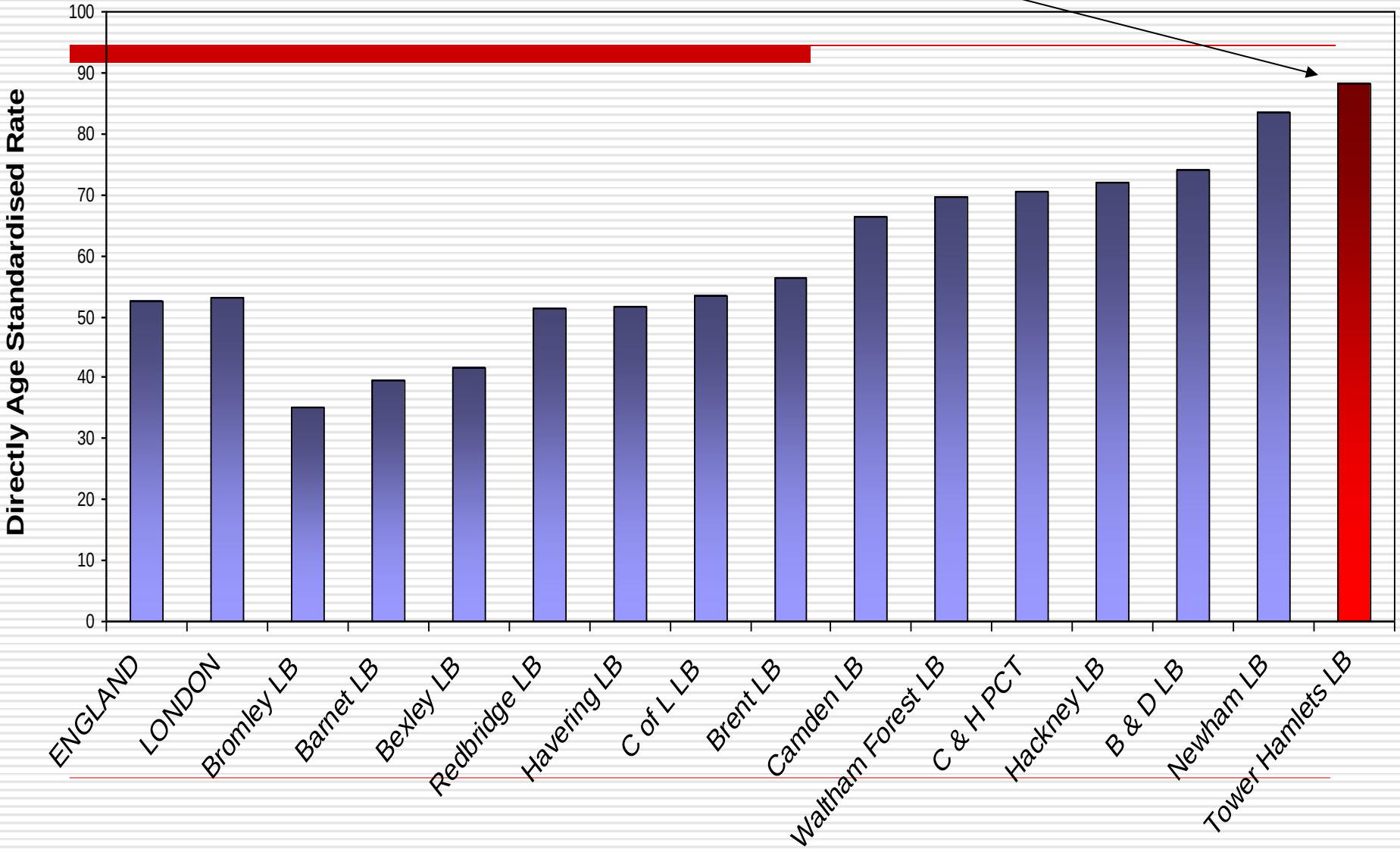
TOWER HAMLETS

- Population ~205,000 (3rd highest increase in E&W)
- 73% <44yrs (compared to 61% nationally)
- Most deprived borough in UK
- 3rd highest number without a car
- Lowest prop of owner-occupier tenures in E&W
- 30% households overcrowded(worst in UK)
- 51% white, 33% Bangladeshi
- 26% turnover in GP lists
- High mortality rates from heart disease

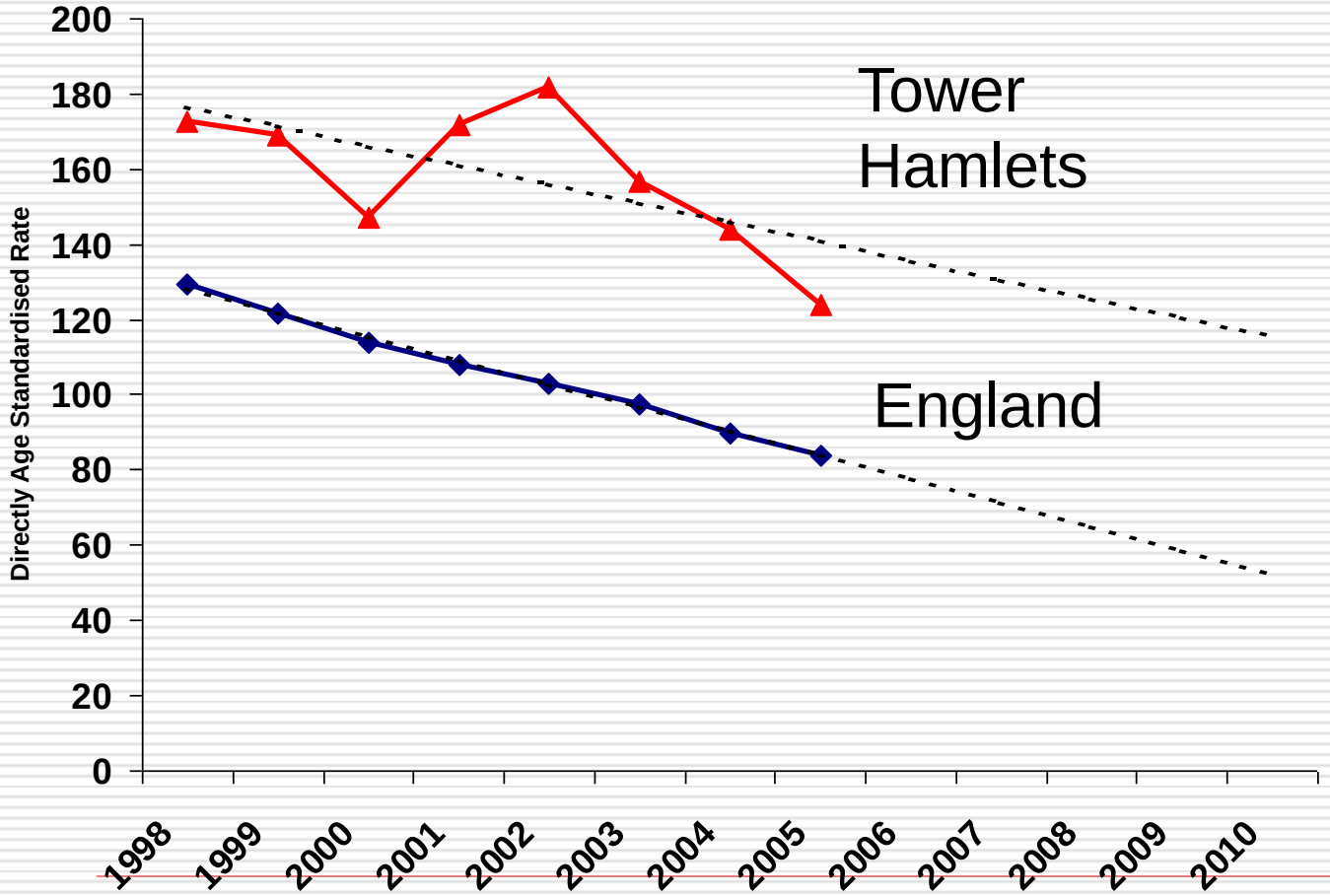
Heart Disease and Risk Factors in Tower Hamlets 2007



Tower Hamlets has the highest death rate from heart disease in London

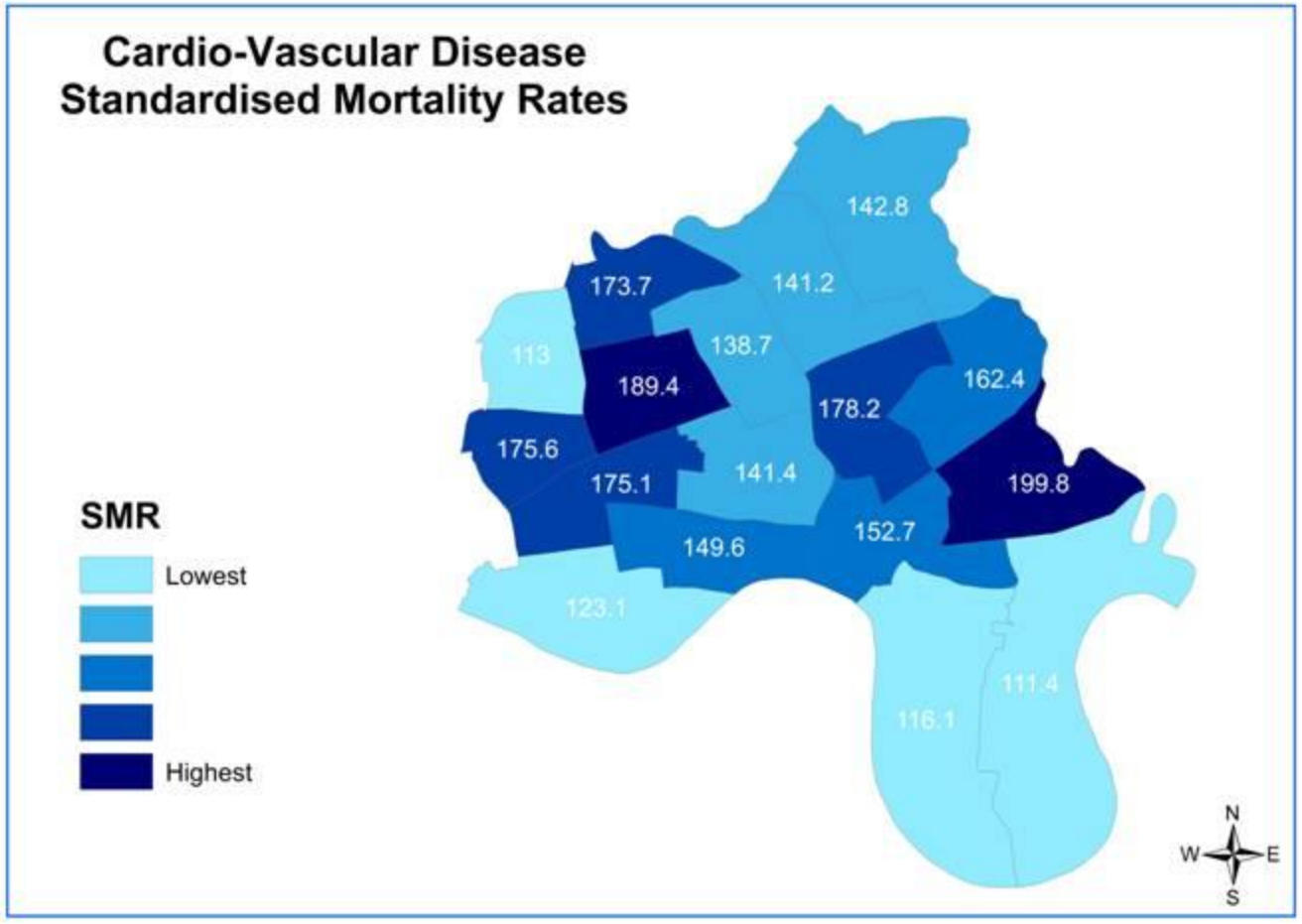


THE HEALTH GAP



- Death rates from heart disease are falling,
- Step change to close the gap between Tower Hamlets and the national average

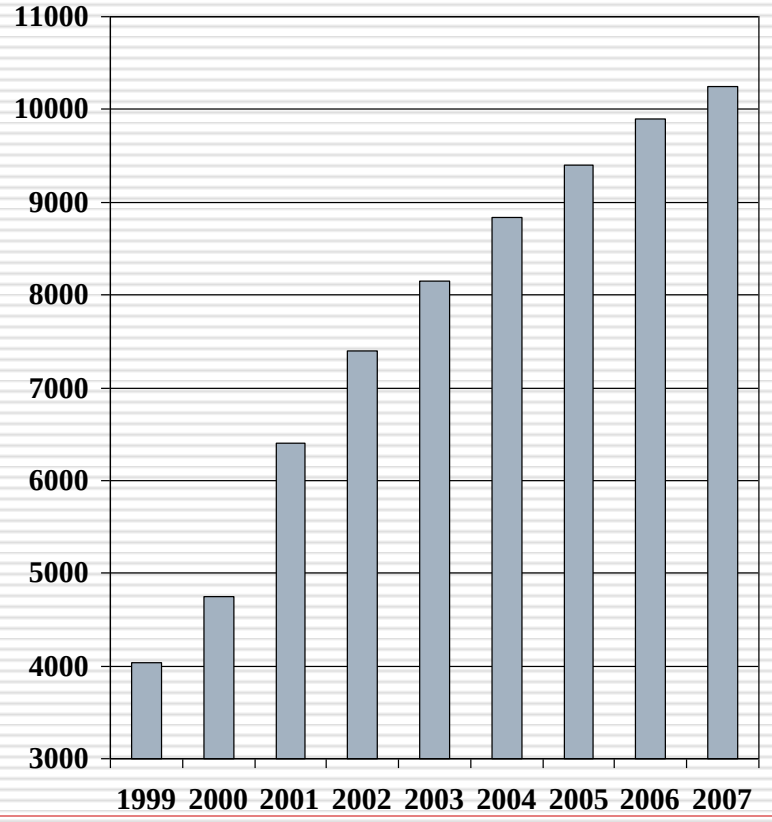
CVD RATES ACROSS THE BOROUGH



Strongly associated with ethnicity

PREVALENCE OF DIABETES IN TOWER HAMLETS

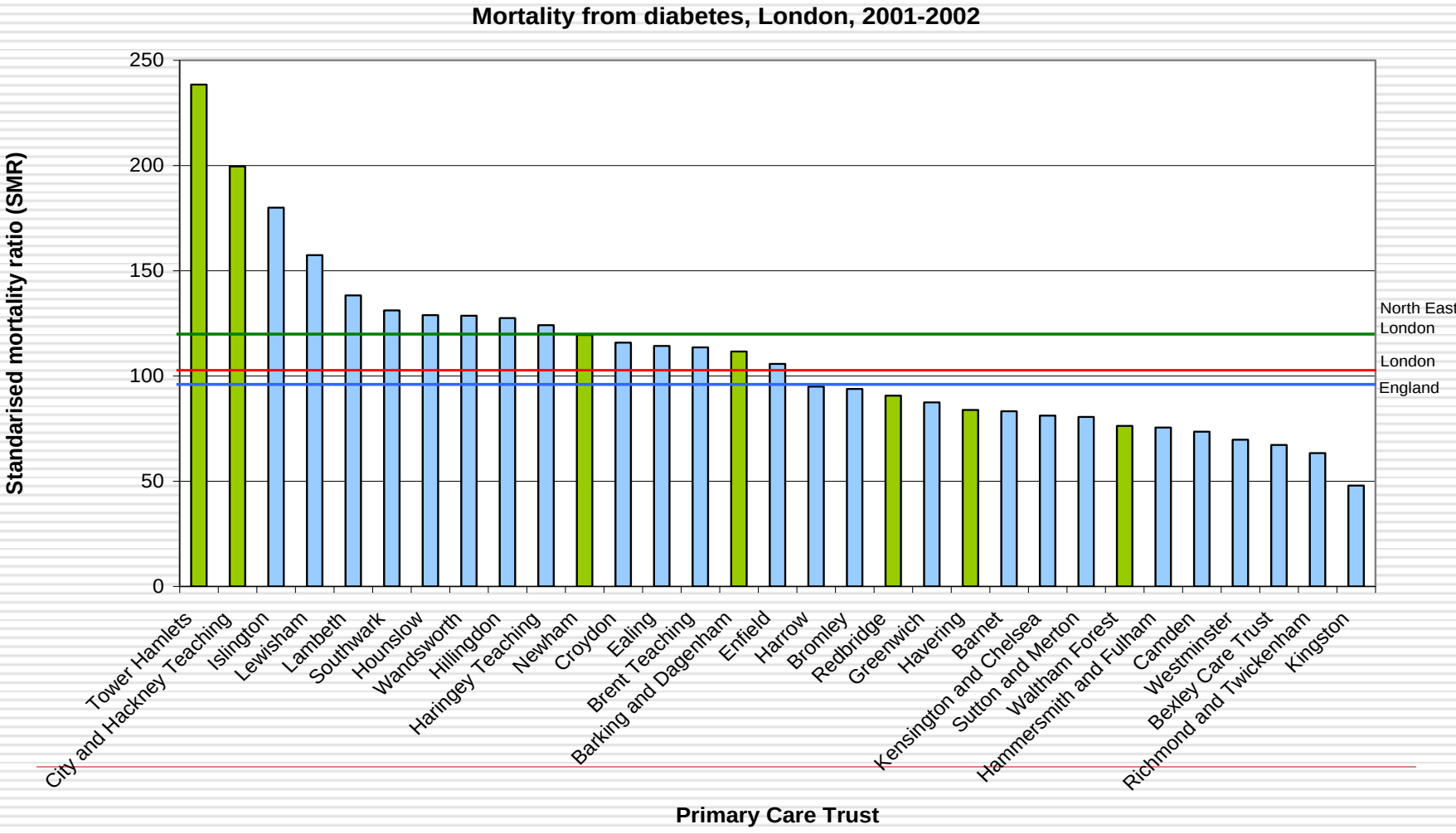
- Burgeoning numbers
- Current prevalence – 6.1%



DIABETES IN TOWER HAMLETS

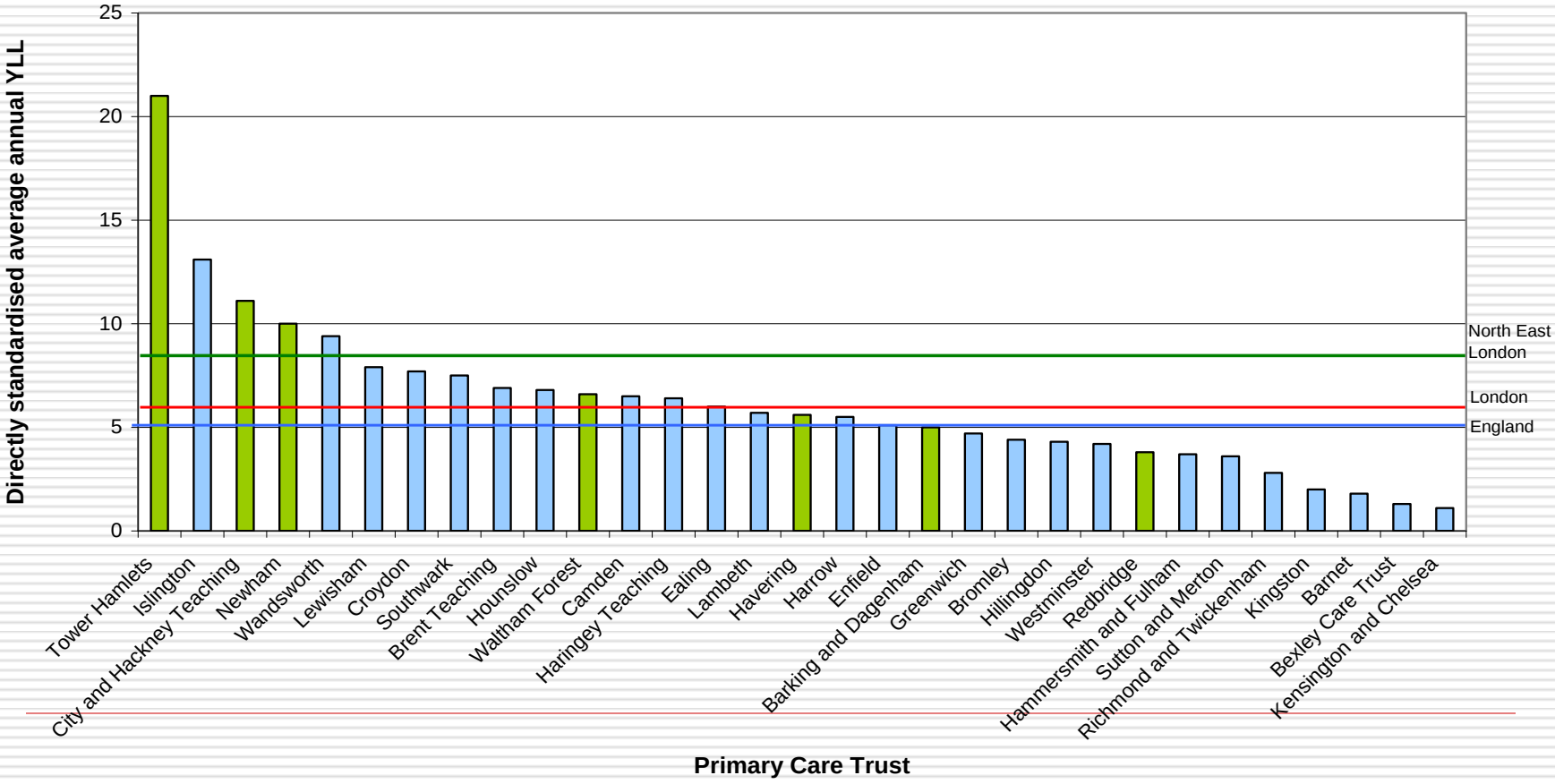
- Twice the national average
- 10,254 known to services, BUT prediction models suggest ~12,000
- Based on current obesity trends, predicted further 3000 people with diabetes by 2010

THE IMPACT OF DIABETES IN TOWER HAMLETS



THE IMPACT OF DIABETES IN TOWER HAMLETS

Average annual years of life lost (YLL) up to age 75 due to mortality from diabetes, London, 2001-2002



DIABETES CARE IN TOWER HAMLETS

Position	*PCT Name*	*No. of Practices*	*Diabetes Total Points Achieved /Available %*
1	Craven Harrogate and Rural	26	99.2%
2	South East Oxfordshire Primary Care Trust	10	99.2%
3	Ashford	16	99.2%
252	**Waltham Forest**	**60**	**90.6%**
253	**Havering**	**52**	**90.5%**
287	**Redbridge**	**51**	**86.5%**
289	**Newham Primary Care Team**	**68**	**85.8%**
294	**City and Hackney Primary Care Team**	**52**	**84.0%**
295	Hyndburn & Ribble Valley	23	83.9%
296	Huddersfield Central	33	83.5%
297	Greenwich	47	82.8%
298	**Barking & Dagenham**	**42**	**82.6%**
299	**Tower Hamlets Primary Care Team**	**42**	**81.7%**
300	Southend	41	81.2%
301	Knowsley	37	81.1%
302	Bradford City	42	80.3%
303	Wednesbury & West Bromwich	31	79.8%

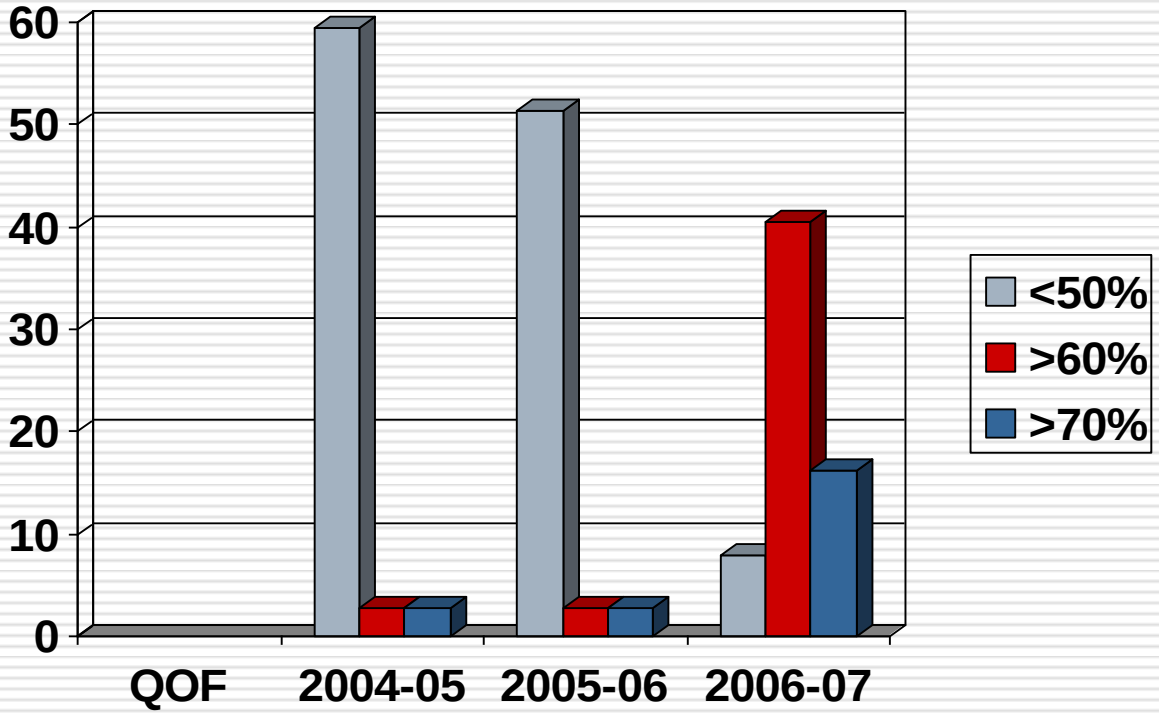
DIABETES CARE IN TOWER HAMLETS

Practice level data

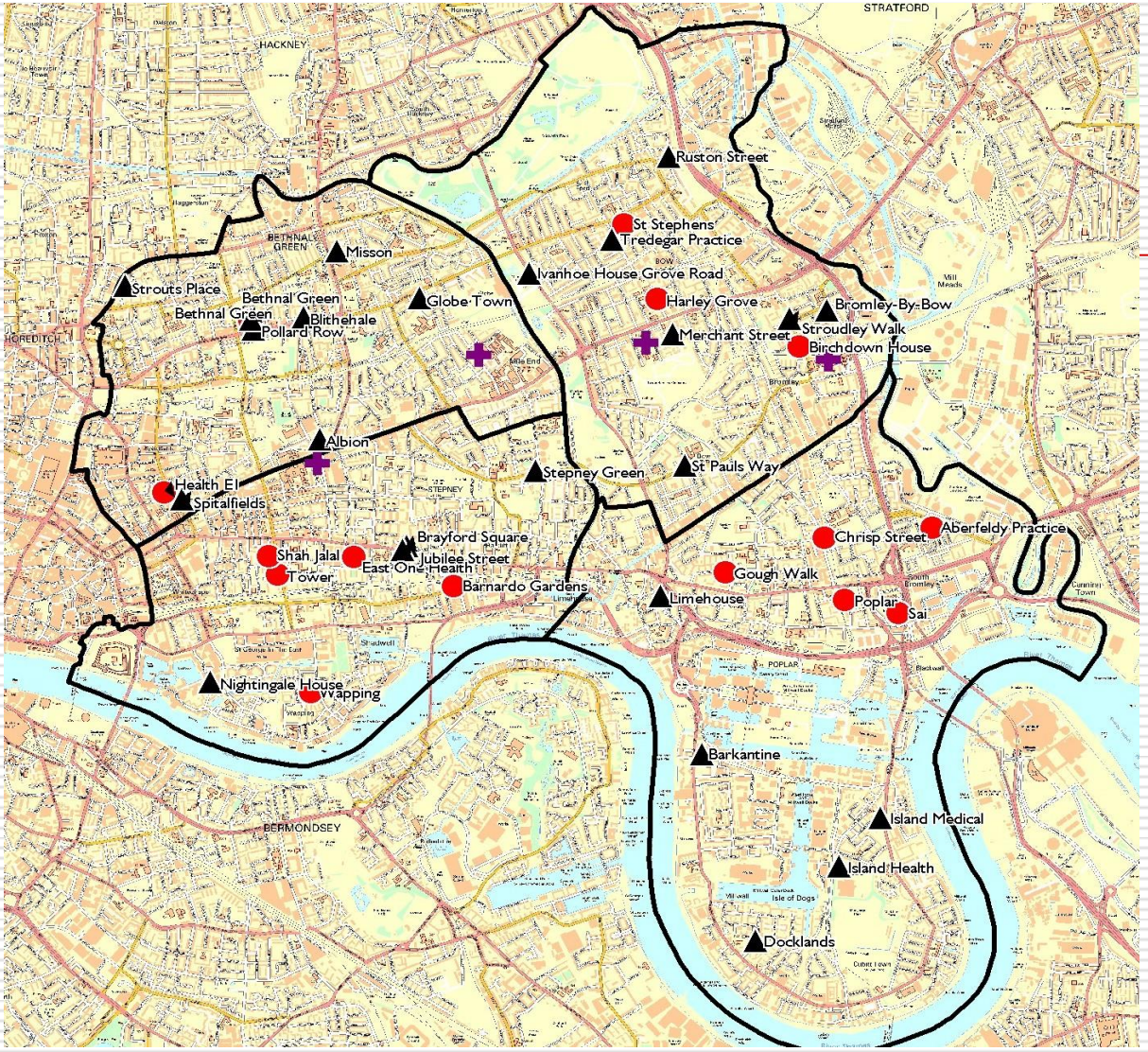
- Mean percentage of points scored by TH practices was 83.7%
- Number of practices below average for E&W (93.2%): 27 (65.8%)
- Number of practices with QOF points <75%: 10 (24.4%)

- The bottom 10 practices look after 1518 patients with diabetes.

PRACTICES ACHIEVING HBA_{1C} <7.5%



LES 7 Insulin Dependent Diabetes 05-06 Map



= Providing Enhanced Service

= Not Providing the Service

= Hospital Site

CHALLENGES TO DIABETES CARE IN SAs

- Language / Culture / Health Beliefs
- Poor Knowledge of diabetes and it's effects

- Eg Insulin therapy:
  - 212 consecutive South Asian patients who required insulin
  - 122 (57.5%) were happy to commence insulin immediately
  - 47 (22.1%) reluctant to start insulin
  - 43 (20.3%) refused insulin – variety of reasons:
    - Needles as prime reason - 22 (10.4%)
    - Other (Myths and misconceptions)

CHALLENGES TO DIABETES CARE IN SAs

- Retrospective survey of all diabetic patients attending an Inner London hospital diabetic clinic over one year was undertaken.

	White Euro	Bangladeshi	
Number	1162	912	
Male smokers	22.1%	28.1%	
HbA1c	8.1%	8.6%	p=0.039
Total chol >5.0	26%	31.6%	p=0.05
BP >140/80	32.1	43.2%	p<0.01

WHAT CAN BE DONE TO "BRIDGE THE HEALTH GAP"

- DOH, DUK, SAHF, BHF suggest four objectives for meeting the challenge of diabetes and CHD in South Asians:
  - Increased awareness of diabetes in SAs through community based activities
  - Providing more culturally specific information for groups at increased risk
  - Greater partnership with relevant community organisations
  - Funding of community and research projects focussed on SAs

APNEE SEHAT

- Community based interventions in places of worship, community centres etc.
- Develop visuals – Posters, DVD

EVALUATION

- Appropriate Role Model/Health Champions and Language of Delivery
- Simple and Visual
- Practical
- Whole family/Community approach
- Community & Religious leaders support

- 5 national awards

UKADS

- Test the hypothesis that structured, culturally sensitive care for type 2 diabetes in SAs can improve CV risk
- Pilot: 361 patients with T2D
- 6 GP practices in Coventry and B'ham

- Enhanced care – Asian linkworker contacted pts to encourage clinic attendance, organise educational sessions, and attended with pts to clinics to facilitate understanding and compliance

UKADS

- Saw practice nurses, with input from DSNs worked to treatment protocols for BP, lipids and glycaemia
- Conventional – same protocols / targets, but no additional support

	Intervention	Control	P
SBP	-6.69	-2.11	0.035
DBP	-3.14	+0.28	0.003
Chol	-0.51	-0.12	0.005
HbA1c	-0.23	-0.20	0.866

UKADS

- Follow on study – randomised 1800 SA pts, and 500 White pts
- 3 years

- Full health economic evaluation will be determined

TOWER HAMLETS DIABETES EXPERIENCE

Five years ago - A failing service

- Two nurses - both posts vacant
- Under-resourced
- Lack of community links
- Clinics over-booked - 50 wk new patient wait
- Low morale
- Patients and GPs had given up on the service

WHAT DID PATIENTS WANT?

Patients wanted:

- To be looked after near to their home (in primary care)
- To see a specialist if they have problems
- A rapidly responsive service
- Rapid access to information and support
- Education in their own language

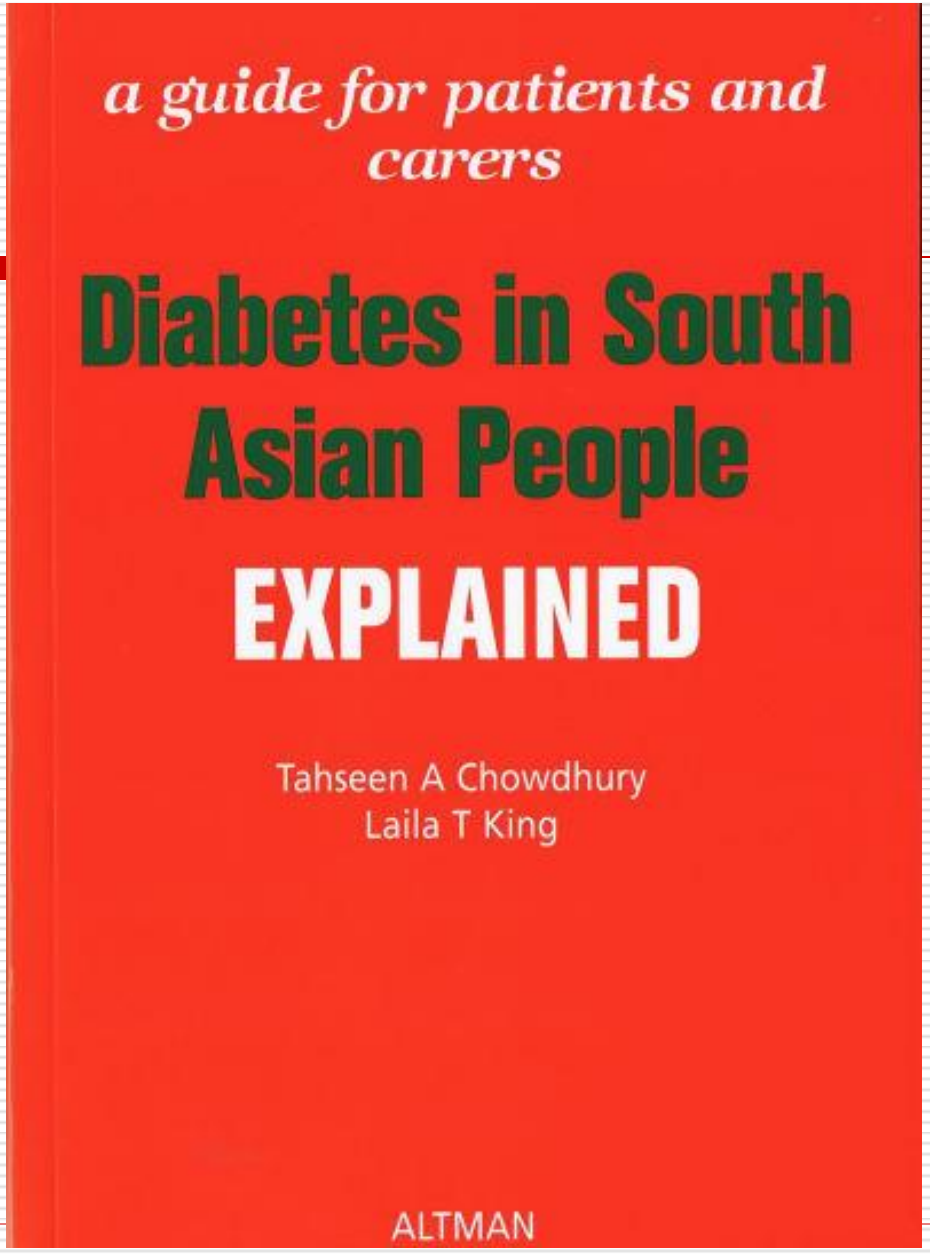

UNDERSTANDING DIABETES

EDUCATION FOR PATIENTS

- HAMLET (Hands on approach to self-management and life long empowerment training)
  - Type 2 diabetes based on X-PERT
  - In Bengali and English
  - Undertaken in primary care venues
  - Very positive feedback
  - Audit on going

EDUCATION FOR PATIENTS

- Support for TH Diabetes Support Group
- "Diabetes in Ramadan" and "Diabetes in Hajj" classes
- Patient education leaflets, videos etc.
- Hand Held diabetes records
- Radio / TV programmes – Channel S, Bangla TV, BBC Asian Network, Spectrum Radio


a guide for patients and carers
Diabetes in South Asian People
EXPLAINED
Tahseen A Chowdhury
Laila T King
ALTMAN

SPECIALIST SUPPORT FOR COMMUNITY BASED DIABETES SERVICES

- Community based DSN
  - Help practice nurses set up and run diabetes clinic and provide advice / support to practice nurses
  - Help start insulin in primary care
  - Run education for patients and HCPs
- Consultant community sessions
  - Difficult cases clinic – sit in with GP and see patients together
  - Educational meetings – update on diabetes
  - "Virtual Clinics" – review of 6-8 computerised case records of patients in primary care, to formulate management plans
  - E-mail advice clinic - rapid access to advice by e-mail

EDUCATION FOR HEALTH PROFESSIONALS

- DEPTH – "Diabetes Education for Professionals in Tower Hamlets" –
  - Warwick – CIDC, Hospital In-patients certificate, Insulin Start course, Study Days
  - Diabetes in South Asians

- Roehampton MSc in Diabetes

IMPROVEMENTS IN CARE

- QOF Mean 95.6%
- Local Enhanced Services:
  - Annual Reviews – 73% of all annual reviews in the area are being done in primary care
  - Insulin commencement – 20 practices, ~180 patients started on insulin in primary care
- Secondary Care
  - ~20 referrals pw – 50 wk waiting
  - ~6 referral pw - <4 week waiting
  - Specialist Clinics: Acute, Renal, Low risk GDM, Pump, Adolescent / YP, CF
- Referral guidelines / management / ICP

YEAR OF CARE

- Tower Hamlets selected as one of the sites
- NDST, DUK, DOH initiative:
  - Yearly care planning at the centre of patients journey
  - Patient led care plan
  - Menu of options from the care plan
  - Commissioning services using the patient centred model

MRC PREVENTION STUDY

- Consortium led by Graham Hitman
  - Pilot –
    - Establish risk score to determine MS
    - Randomise 500 pts

      Usual care – no intervention

      Six months lifestyle –

      Achievers (>5% wght loss) – continue lifestyle

      Non-achievers - metformin
  - Intervention
    - 11 week course delivered by trained Bangladeshi trainers
    - Smoking cessation programme

SUMMARY

- Diabetes is a genuine epidemic in South Asians
- SAs fare much worse compared to White Europeans in diabetes related outcomes
- Culturally tailored interventions can be successful in improving the outlook for these high risk patients