

# Vascular Disease Screening Now and the Future

**Stella Vig**

**Consultant Vascular and General Surgeon**

**Croydon University Hospital**

**Co Chair London Foot Network. London SCLN. NHS London**



# CVS: Preventing Harm

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# Global

- 17.9 million deaths worldwide CVD
- 31% of all deaths

## Scale of the problem

Cardiovascular disease (CVD)  
is the leading cause of death worldwide

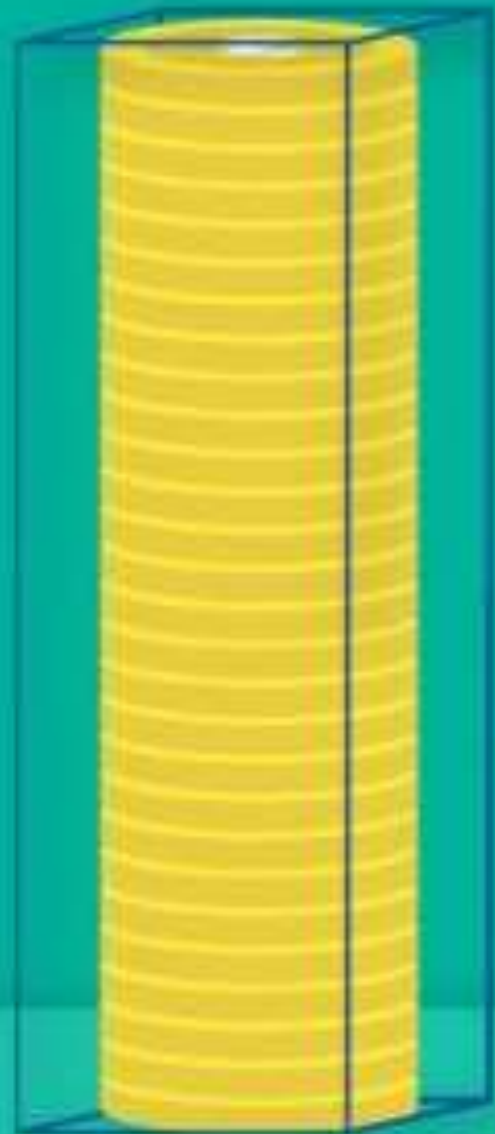


In England, CVD causes

**1** in **4** deaths

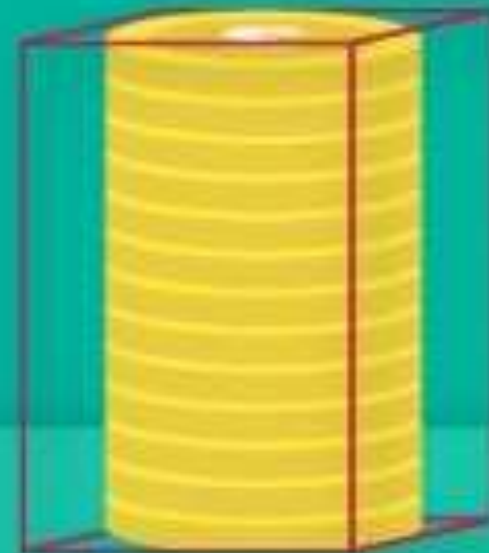
which equates to  
**1 death every 4 minutes**

# Costs of cardiovascular disease to the NHS and wider society



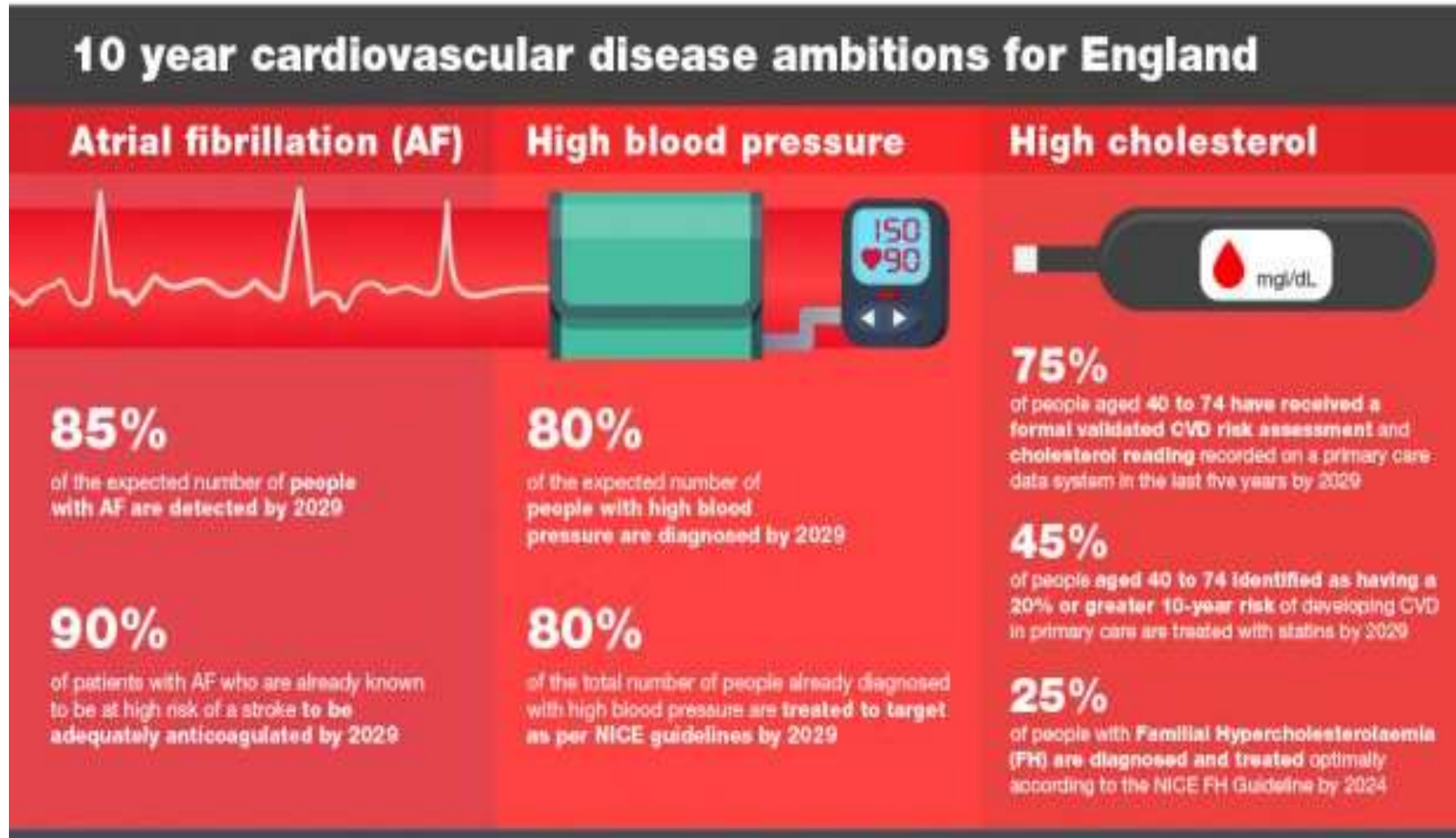
Estimated  
**£15.8  
billion**  
per year  
Non-healthcare  
costs

6.8 million  
people with  
CVD



Healthcare costs  
alone in England  
stand at an  
estimated  
**£7.4  
billion**  
per year

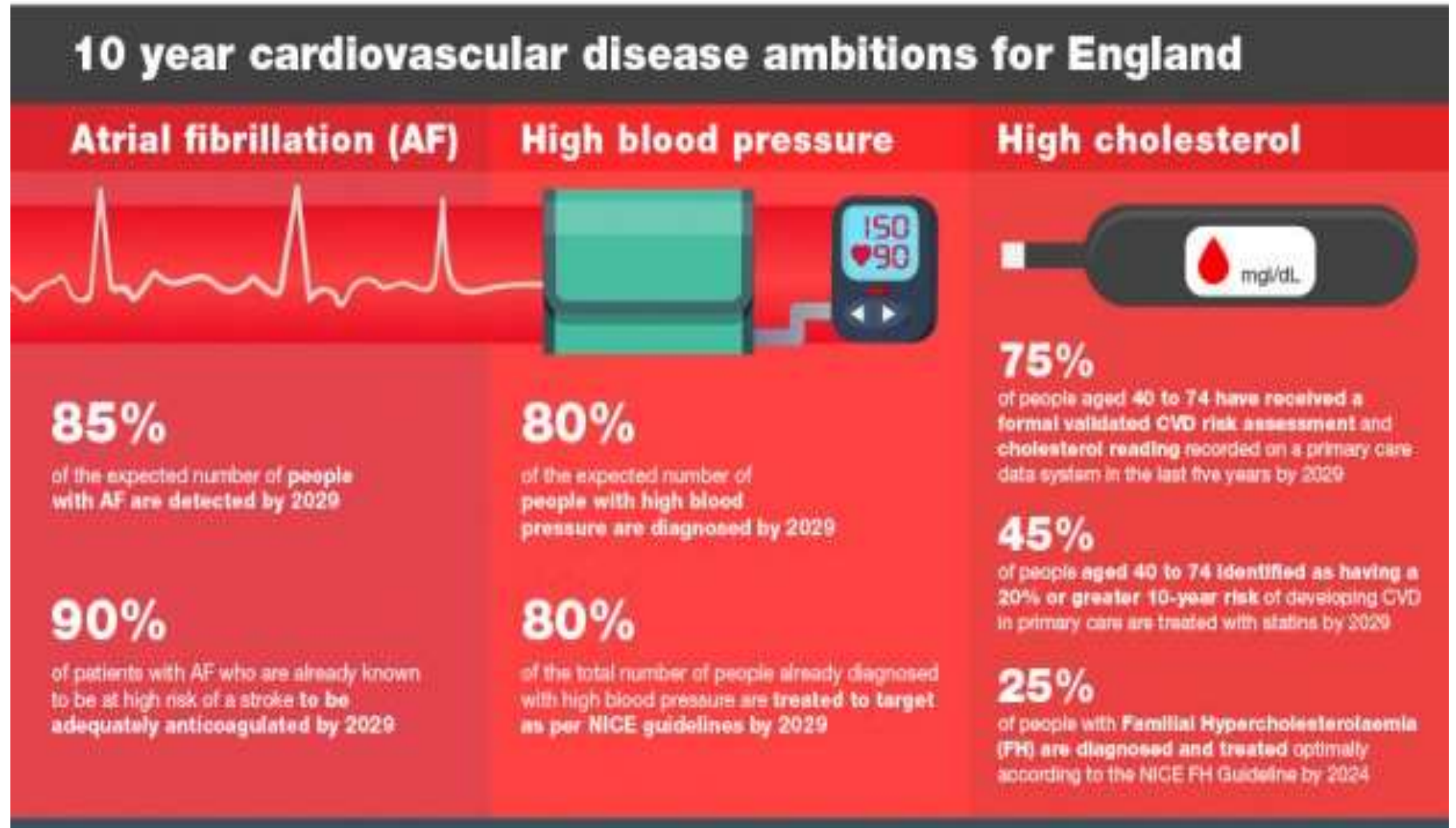
# NHS Long Term Plan

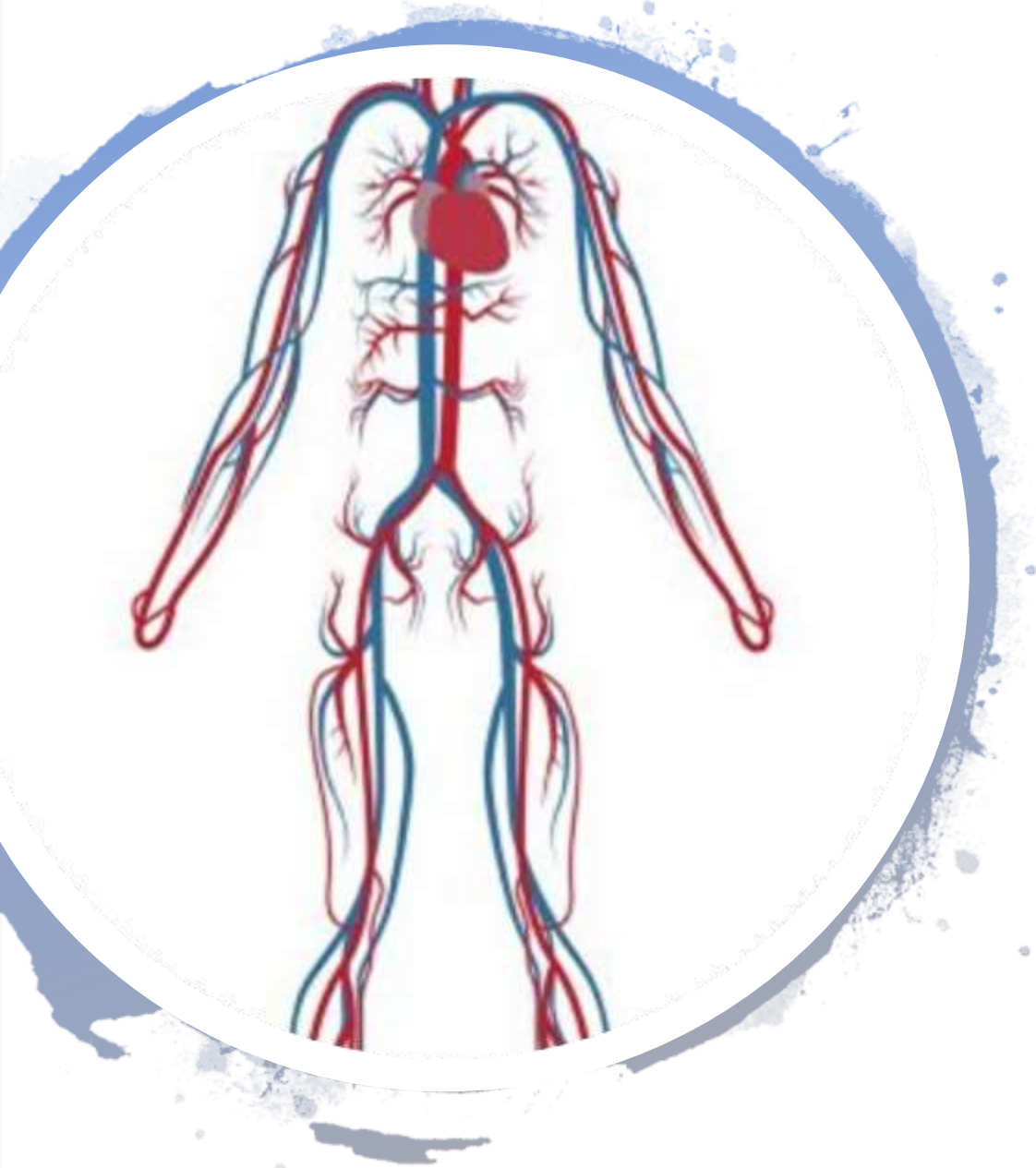


# NHS Long Term Plan

49k  
Strokes

31k MIs





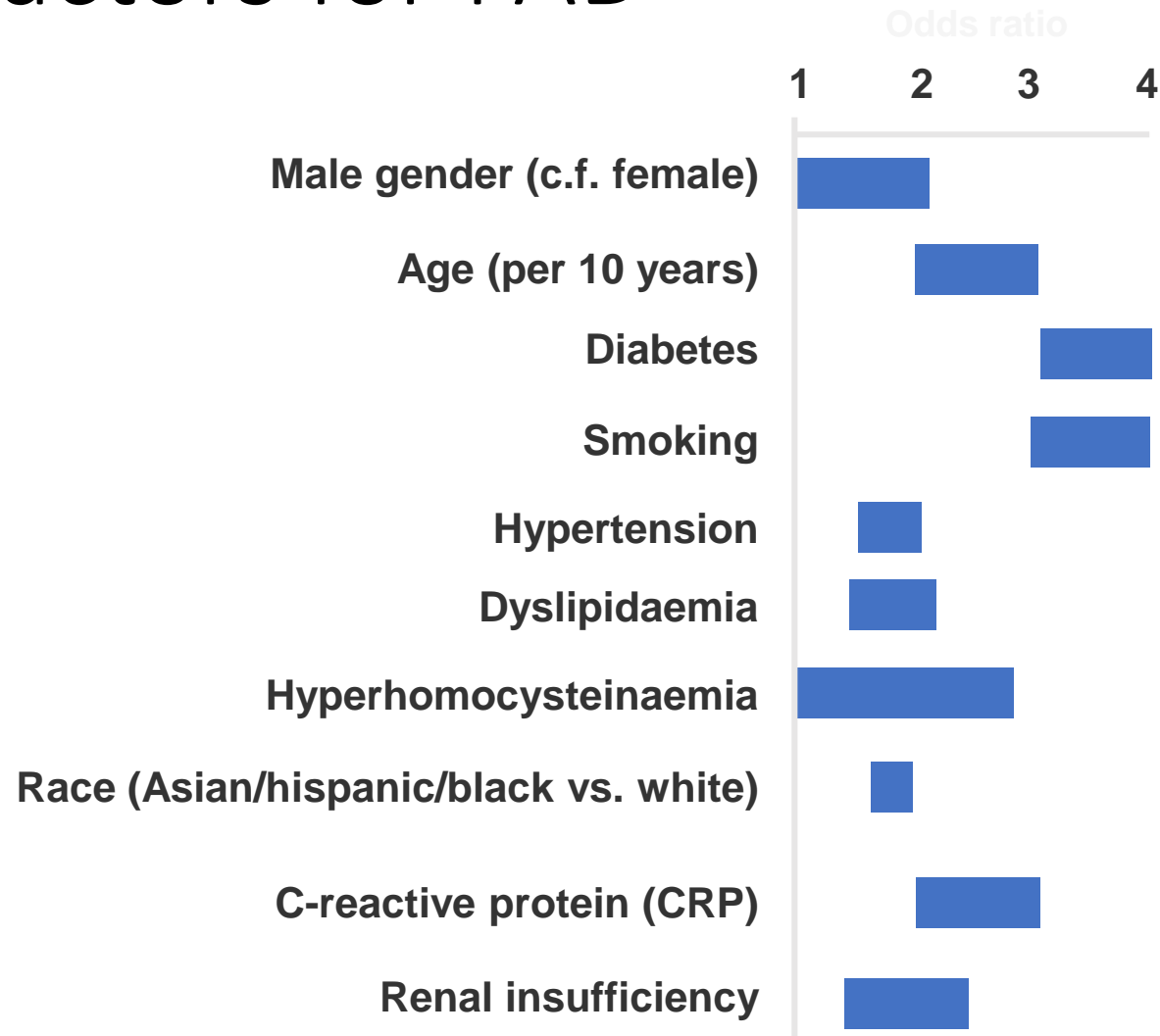
# Vascular Disease

Peripheral Arterial  
Disease

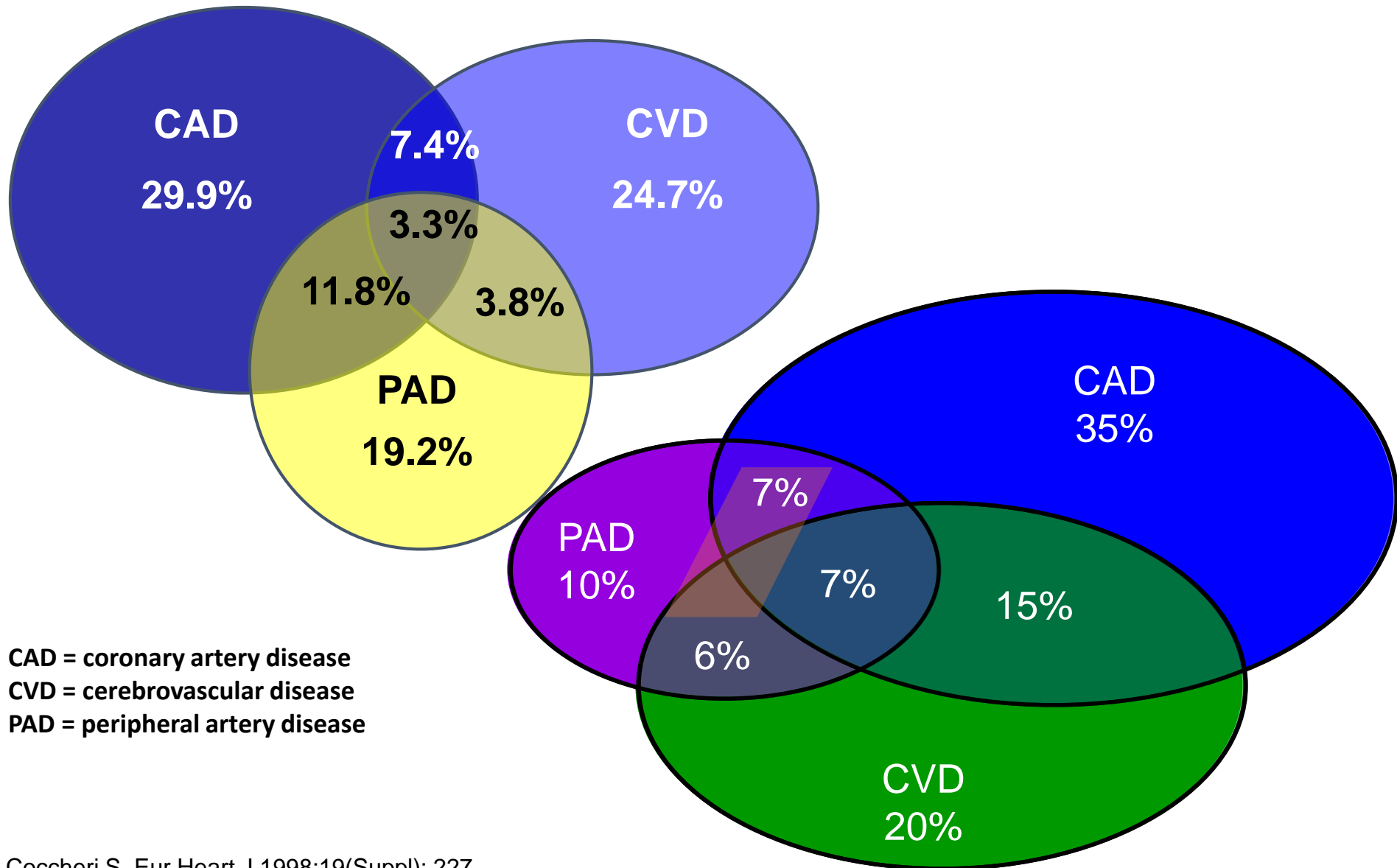
Aortic Aneurysms



# Risk factors for PAD



# CAPRIE/AGATHA: overlap between CAD, CVD and PAD



# Prevalence of polyvascular disease in registries

Study	Patients (n)	Stroke	Stroke and PAD	Stroke and CHD	Stroke PAD CHD	Polyvascular
REACH <sup>1</sup>	67,888	18,843 (16.6%)	815 (2.8%)	5703 (10%)	1086 (1.6%)	15.9%
CAPRIE <sup>2,3</sup>	19,000	7391 (39.2%)	722 (7.1%)	1387 (10.7%)	627 (3.3%)	26.3%
DETECT <sup>4</sup>	753	753	94 (12.5%)	119 (15.8%)	45 (6.0%)	34.3%
SCALA <sup>5</sup>	852	852 (acute)	433 (50.8%)	349 (41%)	?	>50%
GetABI <sup>6</sup>	6880	1218 (17.7%)	165 (13.5%)	468 (38.4%)	186 (15.3%)	67.2%

<sup>1</sup>Bhatt DL et al. *JAMA* 2006;295:180–189; <sup>2</sup>Morrell J *Br.J.Cardiol* 2007;14:supplement 3; <sup>3</sup>Coccheri S. *Eur Heart J* 1998;19(Suppl):227

<sup>4</sup>Leys D et al. *Cerebrovasc Dis* 2006;21:60–66; <sup>5</sup>Weimar C et al. *J Neurol* (in press); <sup>6</sup>Diehm C et al. *Eur Heart J* 2006;27:1743–1749

# QOF PAD 001.1

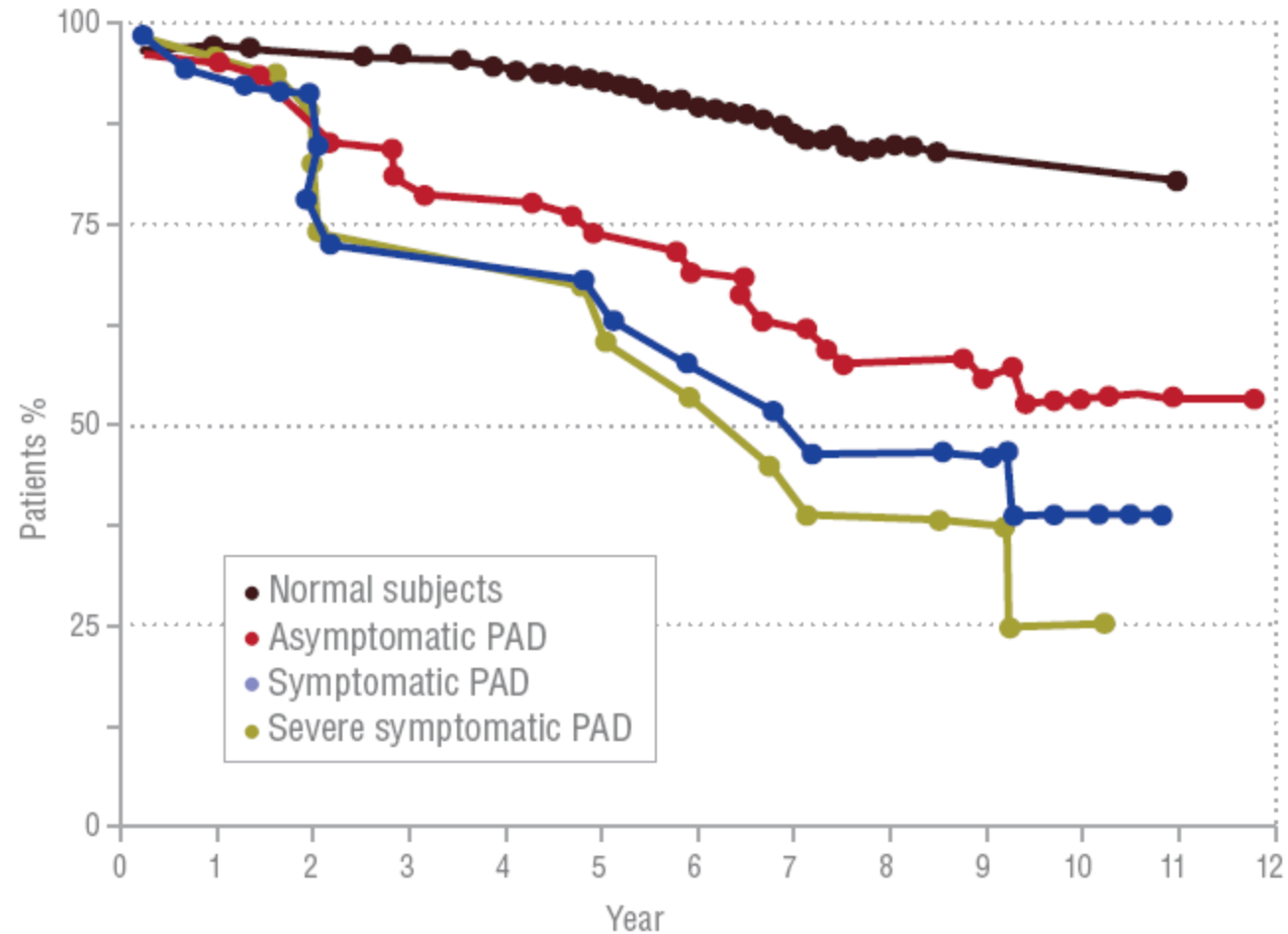
## **PAD Register**

- Symptomatic (>60. only 20%)
- Asymptomatic

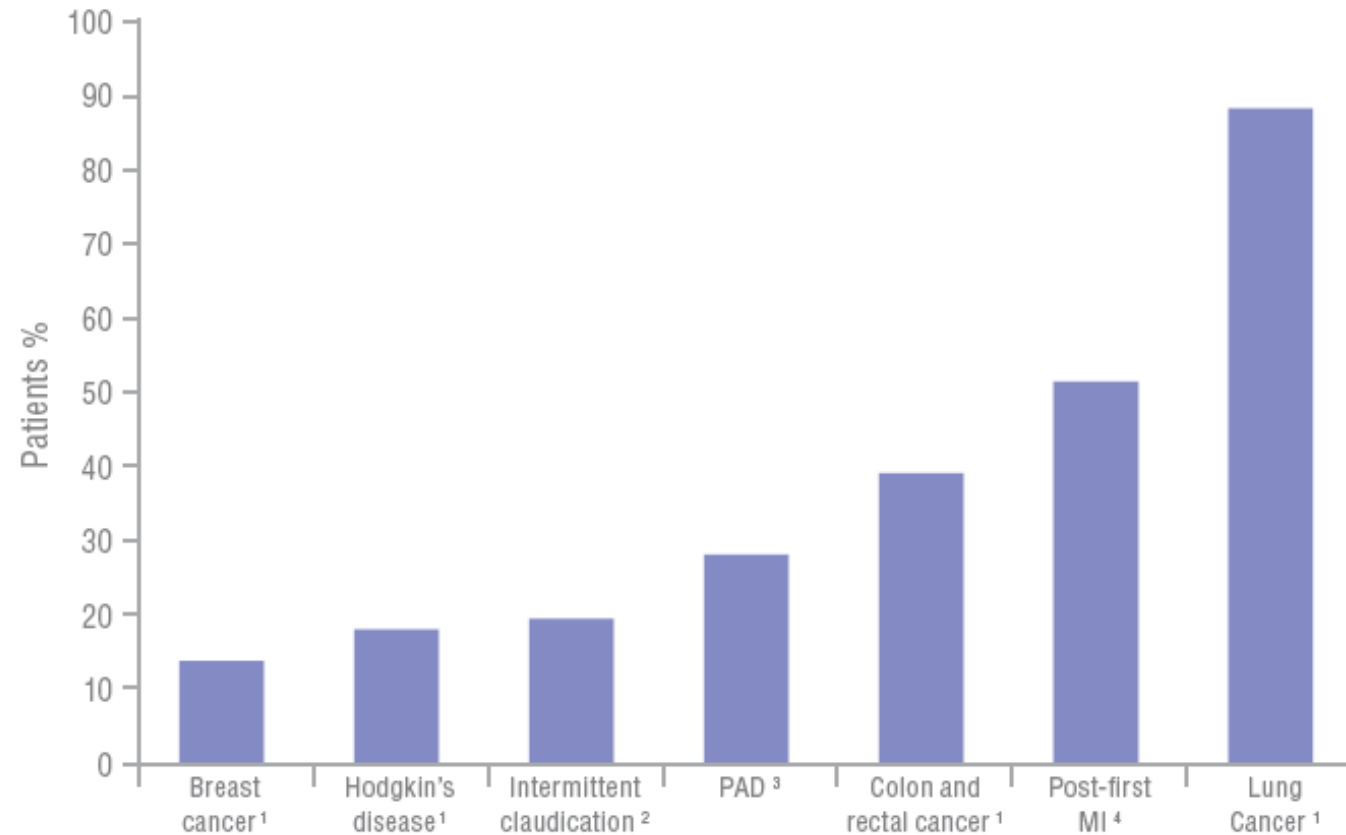
Reduced ankle brachial pressure index is an independent predictor of cardiac and cerebrovascular morbidity and mortality and may help to identify patients who would benefit from secondary prevention

# Long-term survival in patients with PAD

565 patients >66 years old



# 5-year mortality rate in PAD compared with other conditions



Graph adapted from Criqui MH. Vasc Med. 2001;6(3 Suppl):3-7.

<sup>1</sup> American Cancer Society. Cancer facts and figures 1997.

<sup>2</sup> Leng GC et al. Int J Epidemiol 1996. 25 (6): 1172-1181.

<sup>3</sup> Kampozinski RP, Bernard VM. In: Rutherford RB (ed). Vascular surgery. Philadelphia: WB Saunders, 1989: chapter 53.

<sup>4</sup> Capewell S et al. Eur Heart J 2000. 21 (22): 1833-1840.

# Aneurysmal Disease

# Aneurysm screening in the UK – a 4 nations approach

An abdominal aortic aneurysm (AAA) is a dangerous swelling of the aorta, the largest blood vessel in the body.

England, Wales, Scotland and Northern Ireland all have similar screening programmes that prevent hundreds of premature deaths in older men.

Together, the 4 nations each year invite about 400,000 men aged 65 for screening, sharing learning and best practice to improve health outcomes.



## Latest UK-wide annual AAA screening data

	England	Wales	Scotland	Northern Ireland
Men screened	233,426	15,800	61,942	7,601
Uptake	79.5%	80.1%	85.8%	83.0%
AAAs detected	2,773	208	936	111
Prevalence	1.2%	1.3%	1.5%	1.5%

#Screeningisyourchoice

[www.gov.uk/phe/screening](http://www.gov.uk/phe/screening)

@PHE\_Screening

# Who should be screened?

- **men aged 65 or over** – AAAs are up to 6 times more common in men than women, and the risk of getting one goes up as you get older
- **people who smoke** – if you smoke or used to smoke, you're up to 15 times more likely to get an AAA
- **people with high blood pressure** – high blood pressure can double your risk of getting an AAA
- **people with a parent, sibling or child with an AAA** – you're about 4 times more likely to get an AAA if a close relative has had one

# Foot Screening in Patients with Diabetes

# Who is at Risk?

- **Neuropathic prevalence 58%<sup>1</sup> (85%)<sup>2</sup>**
- **Ischaemic 4 X non diabetic**
- **Neuroischaemic**
- **Structural abnormality**



<sup>1</sup>Harati Y. Diabetic peripheral neuropathy. In: Kominsky SJ, ed. Medical and surgical management of the diabetic foot. St. Louis: Mosby, 1994:73-85.

<sup>2</sup>Pecoraro RE, Reiber GE, Burgess EM. Pathways to diabetic limb amputation. Basis for prevention. Diabetes Care 1990;13:513-21.

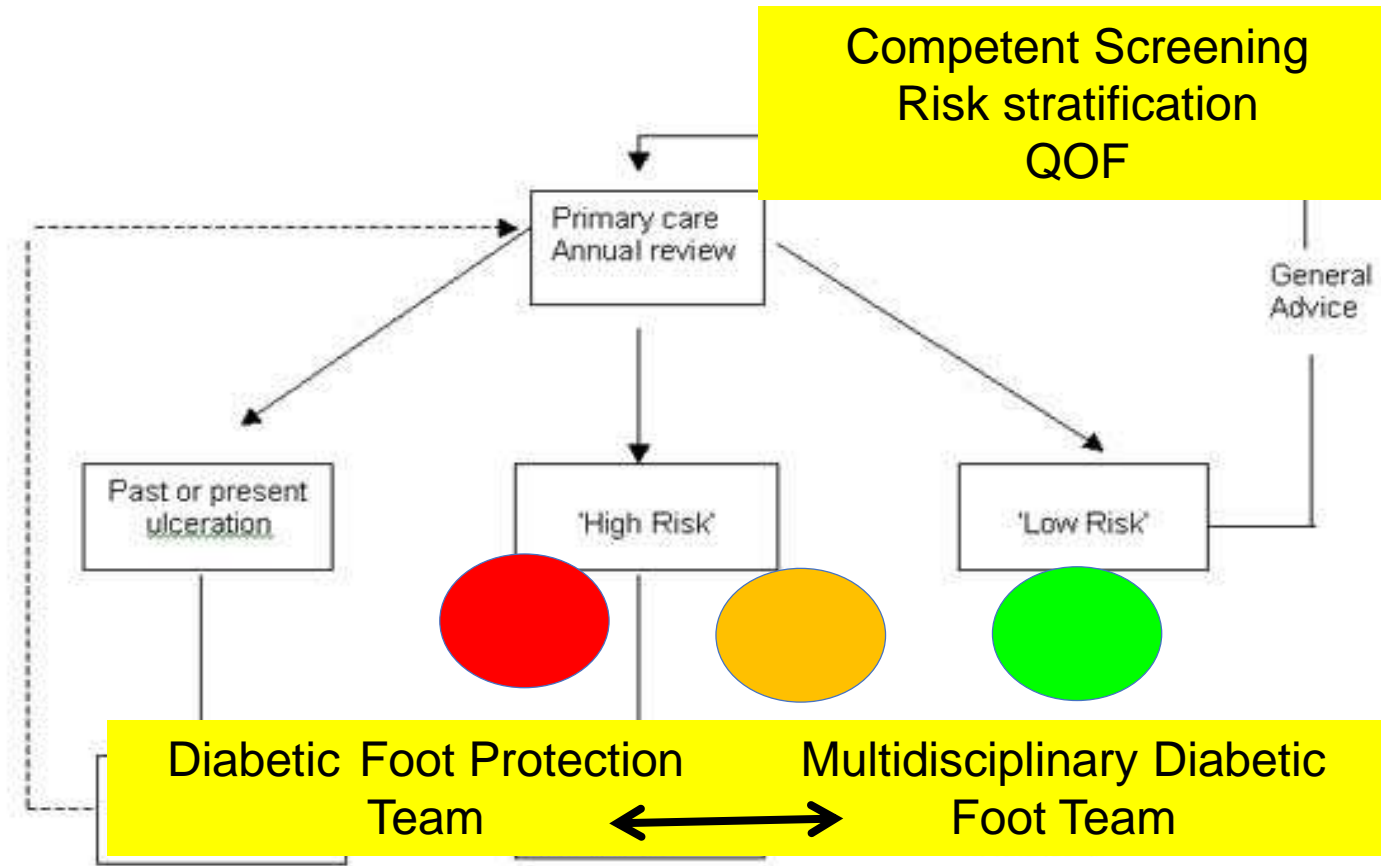
# Diabetic Foot Complications

- **Deformity**
- **Corn and callous**
- **Ulceration**
- **Gangrene**
- **Osteomyelitis**
- **Amputation (15 -46%)**

Ischaemia



# Integrated Care Pathways



**National Diabetes Foot Ulcer Audit**

# NICE Guidance

- Any inpatient with diabetes should have a diabetic foot check
- Patients with diabetic foot disease should be referred to **a Multidisciplinary Foot Team**
- Waterlow scores, Pressure reporting.....**Stop the red** .....
- Nationally failing abysmally!

- Pic



Mr/Mrs X

Blood Tests

Blood Pressure Measurement

ECG

ECHO

ABPI

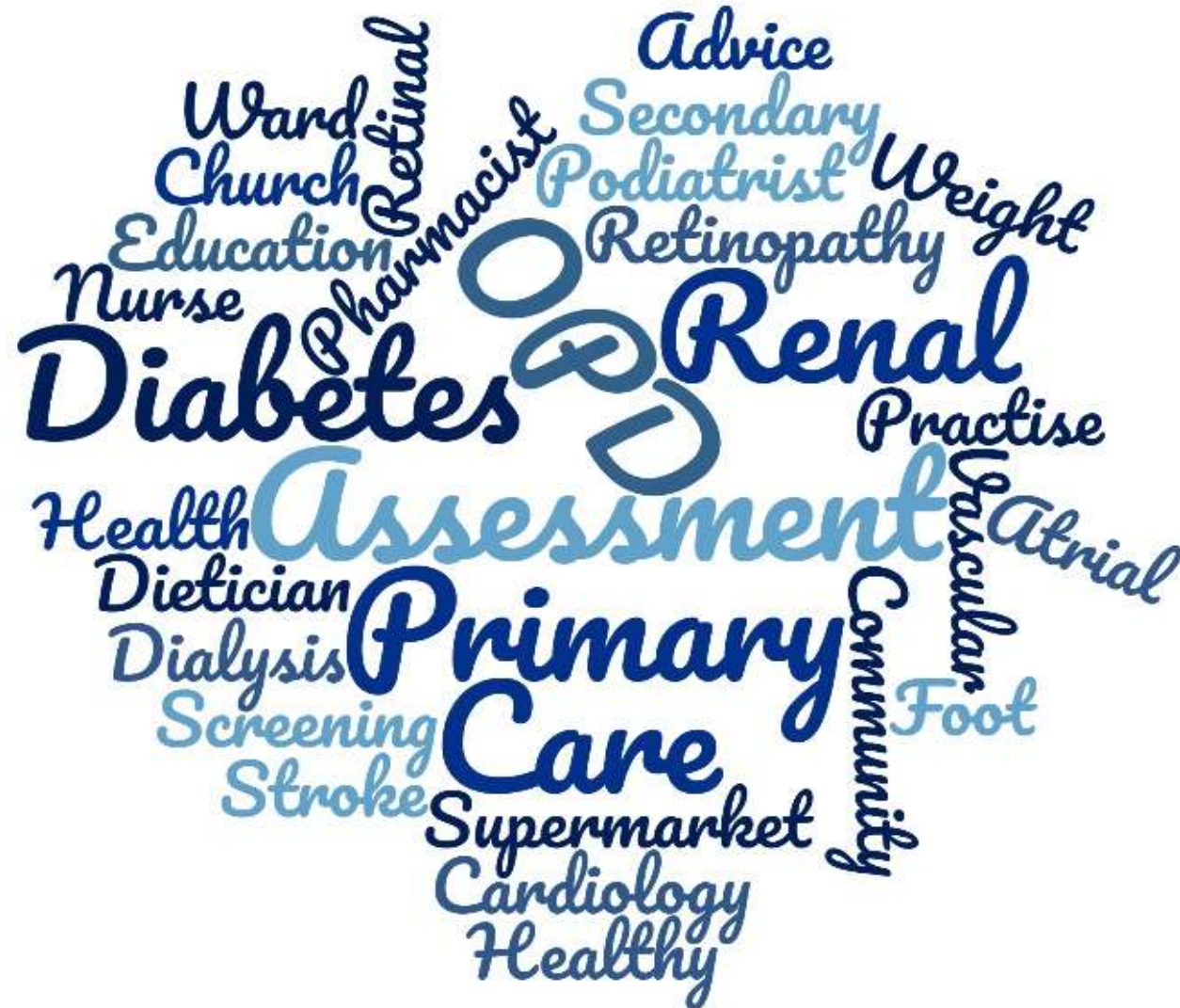
USS Aorta

Foot Check

Neuropathy assessment



# Networked Care: Every Opportunity Counts



# Changing Roles

- Extending Roles
- Increased Training
- Consider Skill Mix and Ambitions
- Opportunities for Local Investment
- Manchester Model for PAD Pods
- St Thomas' Haematology/Primary Care AF
- Foot HCA Champions at St Heliers
- Dialysis Foot Checks
- Community Checks with Open Access
- Increased use of Pharmacist Screeners/Advice
- Chair side Atrial Fibrillation testing in Pod clinics





Networked Care: Every Opportunity Counts