

# North West London Cardiovascular- Renal-Metabolic (CRM) Enhanced Service Specification 26/27

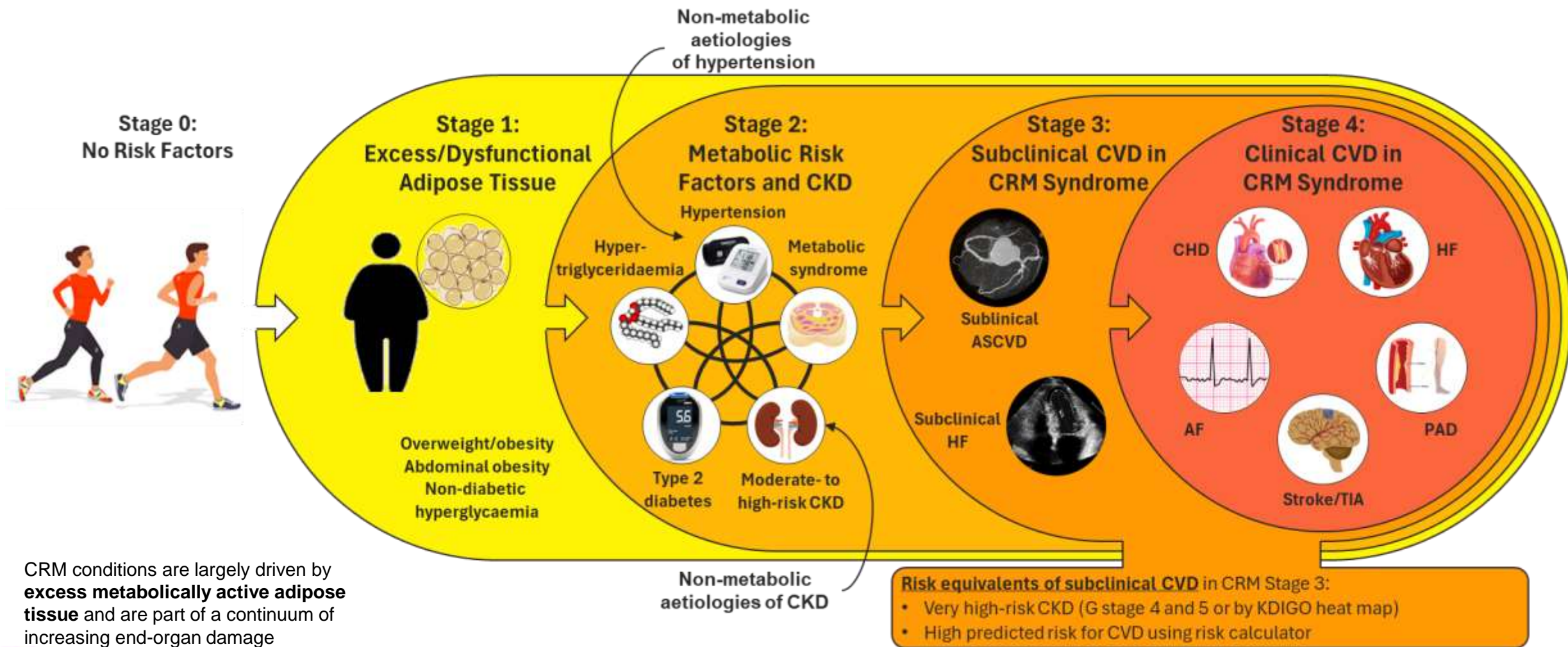
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Personalised Care and Adult ADHD, NWL ICB

# What's Changing

# Summary

- Separate services for **AF**, **CKD**, **DM**, **Hypertension** and **NDH** are being replaced by a single service specification for Cardio-Renal-Metabolic (**CRM**) conditions.
- CRM service specification includes patients with **AF**, **CVD**, **CKD**, **DM**, heart failure (**HF**), hypertension (**HTN**), metabolic dysfunction-associated steatotic liver disease (**MASLD**) and non-diabetic hyperglycaemia (**NDH**).
- Patients risk-stratified based on a **lifetime risk approach** (factoring in **age**, **gender**, **ethnicity**, **deprivation**, **clinical risk factors**).
- **Common care model** and a common set of **outcome measures**.
- Outcomes include **best-practice prescribing**, **personalised care and support planning** as well as modulation of lifestyle-associated risk factors (**physical activity**, **BMI** and **smoking**).
- Accompanied by an investment of **~£6.5m in new primary care funding**, with greater funding towards areas of **higher deprivation**.
- Workforce training to embed the CRM services will focus on **CRM management and personalised care skills** such as health coaching and **motivational interviewing**.
- This is part of a **phased move** toward proactive, personalised, and neighbourhood-based model of care which has been identified as priority focus for West and North London ICB Board.
- Focus on **collaborative care planning**, **lifestyle medicine**, and **behavioural support** - the **Harrow CRM hub** is showing encouraging results.

# Stages of CRM Disease



CRM conditions are largely driven by **excess metabolically active adipose tissue** and are part of a continuum of increasing end-organ damage

# Service Specification

# Comparison of current service specifications and proposed CRM specification

	Current Enhanced Services	New CRM Enhanced Service
<b>Number of Specifications</b>	5	1
<b>Number of Payment KPIs</b>	21	9
<b>Number of Quality KPIs</b>	24	TBD
<b>Treatment Targets</b>	Disparate and conflicting across the various contracts	Unified approach across all CRM conditions
<b>Number of Patients</b>	~588,000	588,000
<b>Number of Patients Receiving 30 min Care Planning Appointment</b>	~185,000 (people with diabetes)	~148,000 (top 25% high risk and moderate risk patients)
<b>Health Equity</b>	Generic approach to health equity in targeting people with LTCs and specific focus on black ethnicity for hypertension	Risk segmentation model (and resourcing) targets younger, non-white people with higher levels of deprivation
<b>Personalised Care</b>	Care planning included in diabetes contract	Significant focus on social and lifestyle factors to address “what matters to me”
<b>Risk Segmentation</b>	No coherent approach to risk prioritisation	Prioritises patients with highest lifetime risk

# Key Clinical Interventions

- **Detection** (reducing the numbers of undiagnosed patients)
- **Completion of key care processes** (completion of which alone is associated with a 15% reduction in all cause risk of hospital admission<sup>1</sup>).
- **Treatment optimisation:**
  - BP  $\leq$  130/80 (estimated to reduce the risk of major adverse cardiovascular events by 20%<sup>2</sup>, more in younger patients, compared with BP  $\leq$  140/90)
  - Statins
  - ACEI/ARBs
  - SGLT-2 inhibitors (reduce risk of kidney disease progression by 37%, CVD-related death or hospitalisation for heart failure by 23%<sup>3</sup>, and in line with new NICE T2DM guidelines)
- **Holistic care:**
  - Completion of a health and wellbeing care plan
  - Improvements in physical activity, weight / waist circumference / smoking status
  - Measurement of the Health Confidence Score

<sup>1</sup> <https://pmc.ncbi.nlm.nih.gov/articles/PMC8212548/>

<sup>2</sup> <https://www.nature.com/articles/s41371-025-01055-z>

<sup>3</sup> [https://doi.org/10.1016/S0140-6736\(22\)02074-8](https://doi.org/10.1016/S0140-6736(22)02074-8)

# Outcomes Metrics - Current

Domain	Disease Register	KPI	50% Payment Threshold	100% Payment Threshold	% payment
Detection	AF, DM, HTN	CRM01: Identifying patients with who likely have <b>AF, CKD, DM, HTN or NDH</b> - diagnose and code appropriately.	Individual	Individual	5%
Care Processes	AF, CKD, CVD (including CVA/TIA, CHD, PAD), HF, HTN, MASLD*, NDH	CRM02: % Patients on PCN registers for <b>AF, CKD, CVD</b> (including CVA/TIA, CHD, PAD), <b>HF, HTN, MASLD, NDH</b> with completion of key care processes (BMI, BP, HbA1c, Lipids, eGFR, uACR, smoking, waist circumference, mental health screening) in last 15m, FIB-4 in MASLD in last 39m OR % Patients on PCN register for <b>diabetes</b> with completion of key care processes as above plus foot check and mental health screening in last 15m, retinal screening in last 27m, FIB-42 in T2DM in last 39m	40%	50%	20%
	DM				
Treatment	ALL	CRM03: % people on PCN <b>CKD, DM or HTN</b> registers with <b>BP ≤ 130/80</b> (≤ 150/90 in moderate / severe frailty and those aged ≥ 80)	Individual	Individual	15%
	ALL	CRM04: % on PCN register with A) <b>CKD, CVD (including CVA/TIA, CHD, PAD), DM, HF</b> OR B) <b>AF, HTN, MASLD, NDH and QRISK &gt; 10%</b> on moderate/high intensity statins	Individual	Individual	10%
	CKD	CRM05: % people on PCN <b>CKD</b> register with A) uACR ≥ 30 or B) diabetes and uACR ≥ 3 or eGFR < 60 on <b>ACEI/ARB</b>	Individual	Individual	5%
	CKD, DM	CRM06: % patients on PCN register with A) CKD and eGFR 20 to <45 OR B) CKD and uACR ≥ 22.6 and eGFR 45-90 OR C) T2DM on <b>SGLT-2</b> (excluding those with moderate/severe frailty or those aged >80)	Individual	Individual	15%
Holistic Care	ALL	CRM07: % of <b>Group 1 / Group 2</b> patients on PCN <b>CRM</b> register with codes for completion of <b>health and wellbeing care plan</b> (including six pillars of lifestyle medicine)	50%	60%	20%
	ALL	CRM08: % of <b>Group 1 / Group 2</b> patients on PCN <b>CRM</b> register with <b>improvement in at least one of:</b> <ul style="list-style-type: none"> <li><b>exercise status</b> from inactive/moderately inactive to a more active group</li> <li><b>reduction in BMI</b></li> <li><b>smoking status</b> from any smoker status to non-smoker/ex-smoker status</li> </ul>	2%	2.5%	5%
	ALL	CRM09: % of <b>Group 1 / Group 2</b> patients on PCN CRM register with <b>pre- and post- care planning Health Confidence Score</b>	40%	50%	5%

# Outcomes Metrics - Adjusted

Domain	Disease Register	KPI	50% Payment Threshold	100% Payment Threshold	% payment
Detection	AF, DM, HTN	CRM01: Identifying patients with who likely have <b>AF, CKD, DM, HTN or NDH</b> - diagnose and code appropriately.	Individual	Individual	20%
Care Processes	AF, CKD, CVD (including CVA/TIA, CHD, PAD), HF, HTN, MASLD*, NDH	CRM02: % Patients on PCN registers for <b>AF, CKD, CVD</b> (including CVA/TIA, CHD, PAD), <b>HF, HTN, MASLD, NDH</b> with completion of key care processes (BMI, BP, HbA1c, Lipids, eGFR, uACR, smoking, waist circumference) in last 15m, FIB-4 in MASLD in last 39m OR % Patients on PCN register for <b>diabetes</b> with completion of key care processes as above plus foot check and mental health screening in last 15m, retinal screening in last 27m, FIB-4 in T2DM in last 39m	30%	50%	20%
	DM				
Treatment	ALL	CRM03: % people on PCN <b>CKD, DM or HTN</b> registers with <b>BP ≤ 130/80</b> (≤ 150/90 in moderate / severe frailty and those aged ≥ 80)	Individual	Individual	5%
	ALL	CRM04: % on PCN register with A) <b>CKD, CVD (including CVA/TIA, CHD, PAD), DM, HF</b> OR B) <b>AF, HTN, MASLD, NDH and QRISK &gt; 10%</b> on moderate/high intensity statins	Individual	Individual	5%
	CKD	CRM05: % people on PCN <b>CKD</b> register with A) uACR ≥ 30 or B) diabetes and uACR ≥ 3 or eGFR < 60 on ACEI/ARB	Individual	Individual	5%
	CKD, DM, HF	CRM06: % patients on PCN register with A) <b>CKD</b> and eGFR 20 to <45 OR B) <b>CKD</b> and uACR ≥ 22.6 and eGFR 45-90 OR C) <b>T2DM</b> OR D) <b>HF</b> on <b>SGLT-2</b> (excluding those with moderate/severe frailty or those aged >80)	Individual	Individual	5%
Holistic Care	ALL	CRM07: % of <b>Group 1 / Group 2</b> patients on PCN <b>CRM</b> register with codes for completion of <b>health and wellbeing care plan</b> (including six pillars of lifestyle medicine)	30%	50%	30%
	ALL	CRM08: % of <b>Group 1 / Group 2</b> patients on PCN <b>CRM</b> register with <b>improvement in at least one of:</b> <ul style="list-style-type: none"> <li><b>exercise status</b> from inactive/moderately inactive to a more active group</li> <li><b>reduction in BMI</b></li> <li><b>smoking status</b> from any smoker status to non-smoker/ex-smoker status</li> </ul>	2%	2.5%	5%
	ALL	CRM09: % of <b>Group 1 / Group 2</b> patients on PCN <b>CRM</b> register with <b>pre- and post- care planning Health Confidence Score</b>	30%	50%	5%

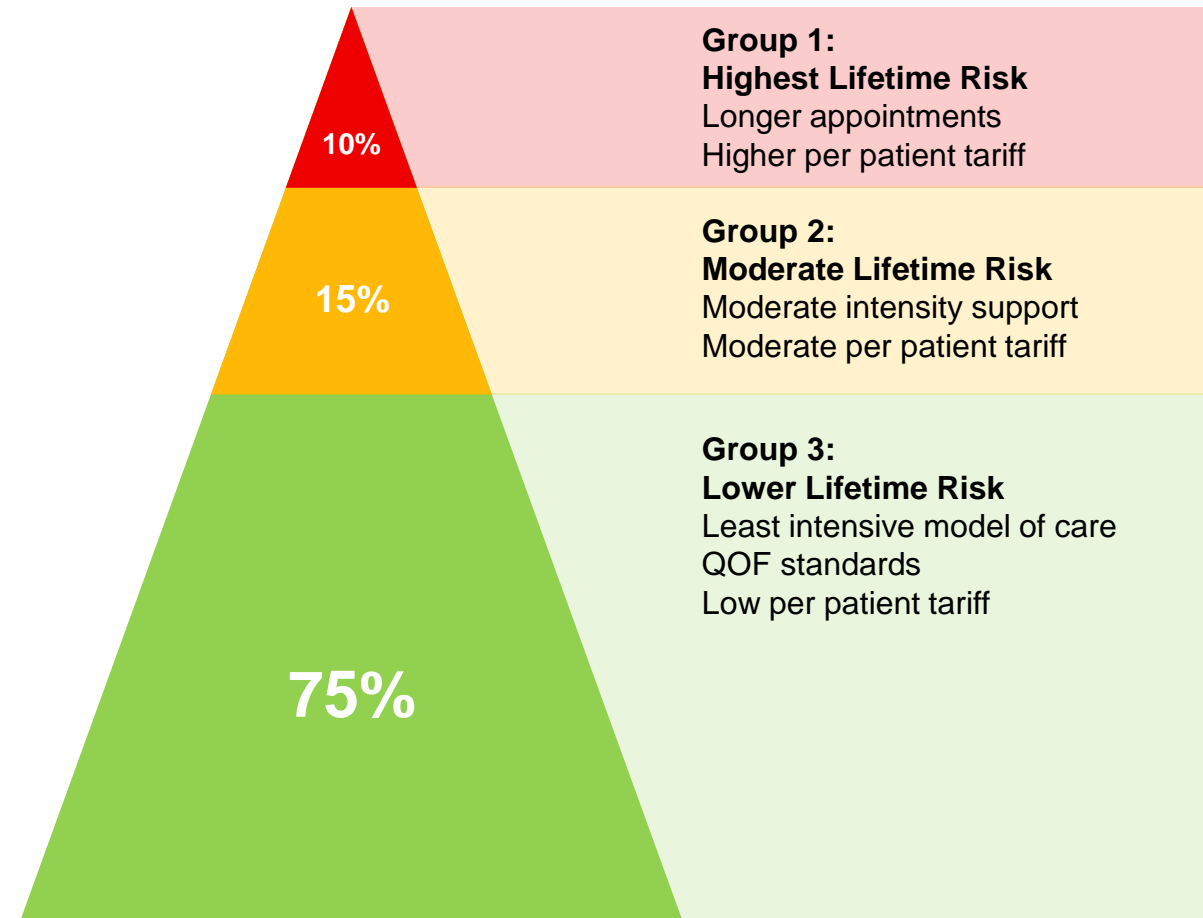
# Small Improvements

Outcome Measure	Mean Improvement Across NWL
BP $\leq$ 130/80	1.3%
Statin prescribing	2.3%
ACEI/ARB prescribing	2.0%
SGLT-2 prescribing	7.6%

Due to change in NICE T2DM guidelines, with SGLT-2s as first line medication alongside metformin

# Risk Segmentation of CRM Patients Based on Lifetime Risk

- **QRISK3-Lifetime** <https://qrisk.org/lifetime/> calculates lifetime risk of a cardiovascular event calculated from a number of factors including **age, gender, ethnicity**, presence/absence of various long term conditions, **SMI**, smoking status, cholesterol, blood pressure and BMI.
- Set to calculate risk to age 70, it prioritises younger, more deprived, non-white patients with the highest risk of not reaching 70 (see slide 21).
- Using clinical system searches **within the native GP systems** we have approximated QRISK3-Lifetime, allowing segmentation and prioritisation of patients for recall along with intensification of treatment and support.
- The service specification includes **3 tiers of risk** (Group 1, Group 2 and Group 3) and depending on the group, patients will receive **more or less intensive input** (type of clinician, length of appointment, number of follow-ups).



Outcomes exclusions: Palliative and end-stage renal disease patients

# Typical Patient Profiles for Risk Segments

- Patients on the CRM register will be classified as Group 1, Group 2 or Group 3, based on an approximation to QRISK3-Lifetime set at age 70.
- Risk segmentation will use clinical system searches rather than external functionality.
- Prioritisation will be on younger, non-white people living in more deprived areas.
- Typical patient profiles for each of the risk groups is shown below

GROUP 1 (~10% highest risk)	£107.08	GROUP 2 (~15%)	£53.13	GROUP 3 (~75%)	£24.09
<p><b>Age:</b> Mostly 40 – 60</p> <p><b>Gender:</b> More likely to be male</p> <p><b>Ethnicity:</b> More likely to be South Asian</p> <p><b>Family History:</b> More likely to have FH of CHD &lt; 60</p> <p><b>Long Term Conditions:</b> Likely to have diabetes, hypertension, possibly CKD, may have SMI</p> <p><b>Smoking Status:</b> More likely to be smoker</p> <p><b>Cholesterol / HDL Ratio:</b> Generally 3.5 – 6 or more</p> <p><b>Systolic BP:</b> May or may not be raised</p> <p><b>BMI:</b> Likely to be 27 – 40 or more</p>		<p><b>Age:</b> Some younger or older people with risk factors</p> <p><b>Gender:</b> Probably a balance of male and female</p> <p><b>Ethnicity:</b> More likely to be South Asian</p> <p><b>Family History:</b> Less likely to have FH of CHD &lt; 60</p> <p><b>Long Term Conditions:</b> May have diabetes, hypertension, possibly CKD</p> <p><b>Smoking Status:</b> Less likely to be smoker</p> <p><b>Cholesterol / HDL Ratio:</b> Mostly 2.5 - 5</p> <p><b>Systolic BP:</b> May or may not be raised</p> <p><b>BMI:</b> Likely to be 25 - 30</p>		<p><b>Age:</b> More likely to be older (&gt;65)</p> <p><b>Gender:</b> More female</p> <p><b>Ethnicity:</b> May or may not be South Asian</p> <p><b>Family History:</b> Less likely to have FH of CHD &lt; 60</p> <p><b>Long Term Conditions:</b> Less likely to have diabetes or CKD</p> <p><b>Smoking Status:</b> Less likely to be smoker</p> <p><b>Cholesterol / HDL Ratio:</b> Mostly 2.5 - 5</p> <p><b>Systolic BP:</b> Less likely to be raised</p> <p><b>BMI:</b> More likely to be 22 - 27</p>	

# Examples of Group 1 Patients

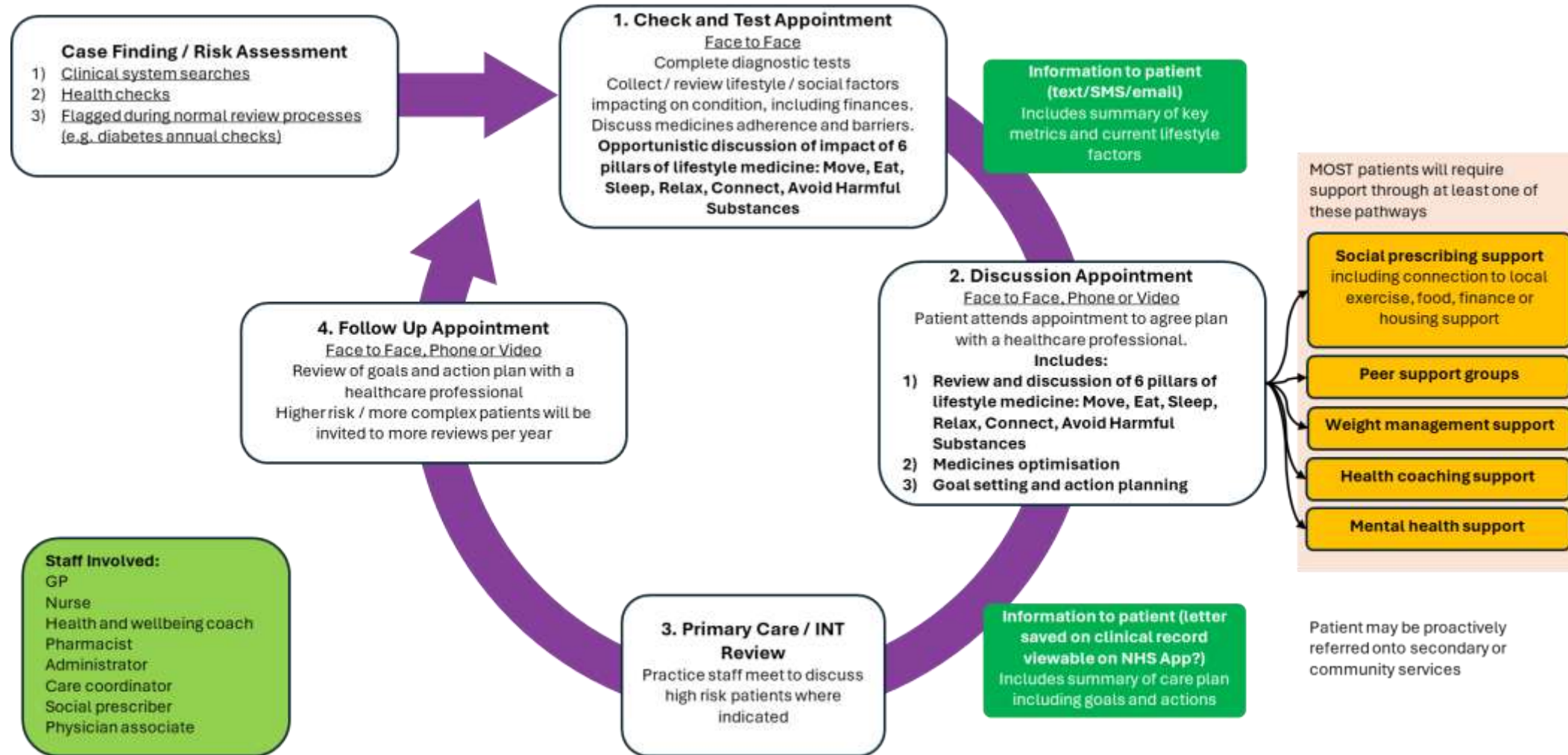
Examples of real patients appearing in the Group 1 segment are shown below, in descending order of QRISK3-Lifetime:

Age	40	50	48	28	52	46	34	34
Gender	Male	Male	Female	Male	Male	Male	Male	Male
Ethnicity	White and Asian	Not stated	Indian	Indian	Other Asian	African	Polish	Indian
IMD Decile	5	3	5	3	5	4	2	4
FH IHD	Yes	No	Yes	Yes	No	Yes	No	No
LTCs	T2DM, HTN	T2DM, HTN	SMI	T2DM	T2DM		HTN	T2DM, HTN
Smoking status	Non-smoker	Non-smoker	Smoker	Non-smoker	Ex-smoker	Non-smoker	Ex-smoker	Non-smoker
Chol:HDL ratio	7.2	6.1	6.6	4.7	8.7	8.5	6.1	2.9
SBP	123	172	122	122	122	110	125	127
BMI	38.1	30.5	29.6	45.6	28.6	30.5	27.2	31.9
QRISK3-Lifetime	77.2%	45.9%	43.2%	36.7%	36.7%	30.3%	27.7%	22.2%
QRISK3	23.9%	26.4%	13%	4.7%	22.5%	5.9%	3%	1.8%
QRISK3 Heart Age	76	78	69	50	75	61	48	46
Excess Heart Age	36	28	21	22	23	15	14	12

QRISK3 Heart Age is the age at which a healthy person of the same sex and ethnicity has the same 10-year QRISK3 score.

Excess Heart Age is the difference between the QRISK3 Heart Age and the person's actual age

# NWL Model of Care



# Motivational Interviewing

- Motivational interviewing (MI) is a collaborative approach designed to help people find their own motivation and commitment to behavioural change.
- MI outperforms traditional advice<sup>1,2,3</sup> especially:
  - ✓ physical activity
  - ✓ diet
  - ✓ smoking cessation
  - ✓ medication adherence
  - ✓ systolic blood pressure
  - ✓ HbA1c
  - ✓ lipid levels

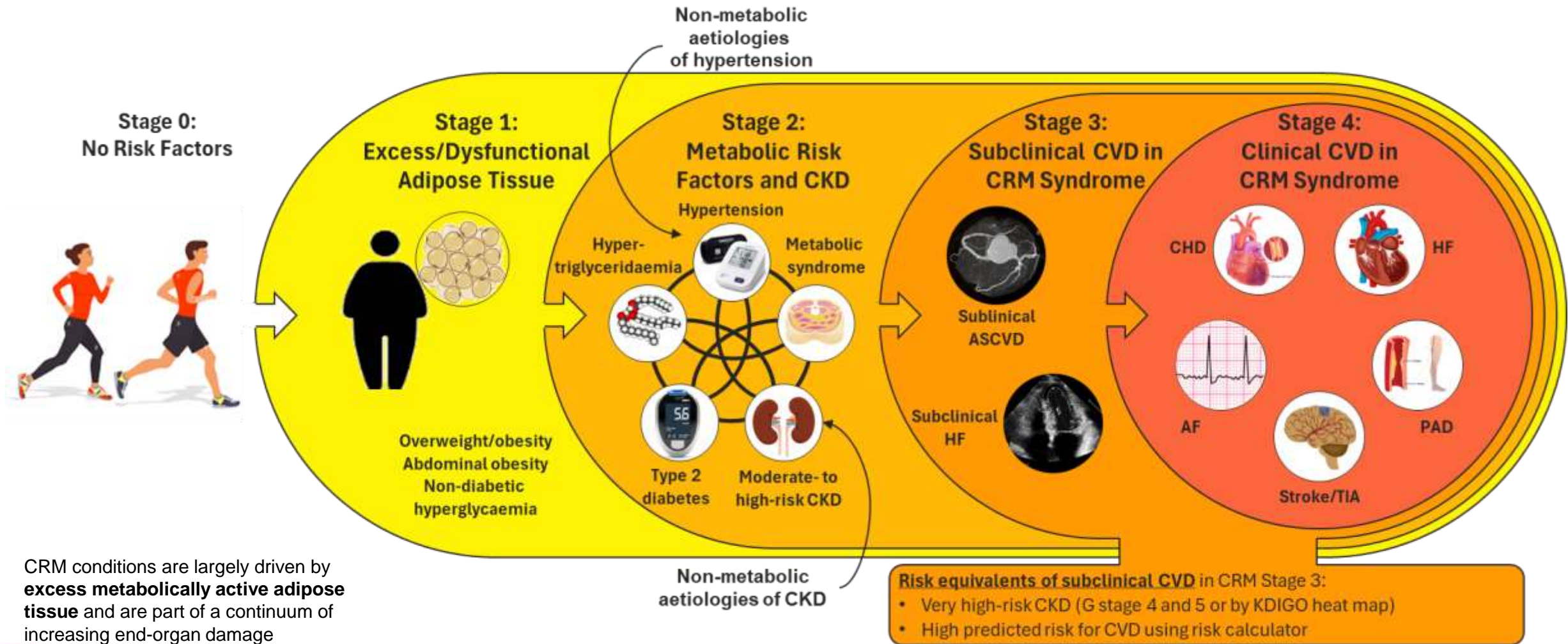
<sup>1</sup> <https://doi.org/10.1007/s11606-016-3685-3>

<sup>2</sup> <https://bjgp.org/content/bjgp/55/513/305.full.pdf>

<sup>3</sup> <https://doi.org/10.1016/j.pec.2013.07.012>

# Appendix A: Holistic Outcome Measures

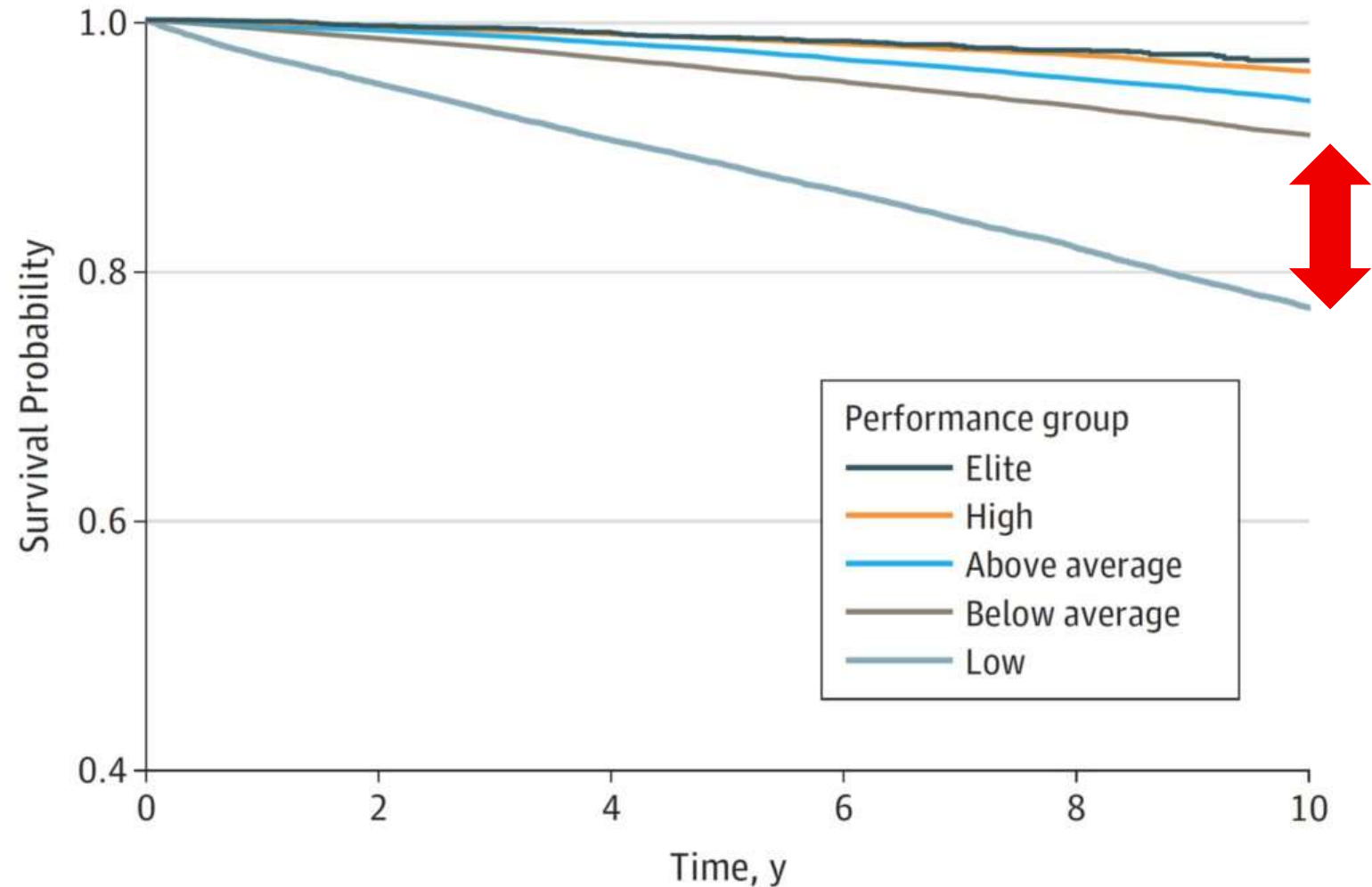
# Stages of CRM Disease



CRM conditions are largely driven by **excess metabolically active adipose tissue** and are part of a continuum of increasing end-organ damage

# Addressing Key Risk Factors: Physical Activity

- Moving out of bottom 25% of fitness level **reduces 10-year mortality relative risk by 80%** and **actual risk by about 20%**
- Moving from low to above average fitness (50<sup>th</sup>-75<sup>th</sup> centile) is **equivalent risk reduction to moving from End Stage Renal Disease to normal health**
- **1 in 4 patients** would become **more active** if advised to by a healthcare professional

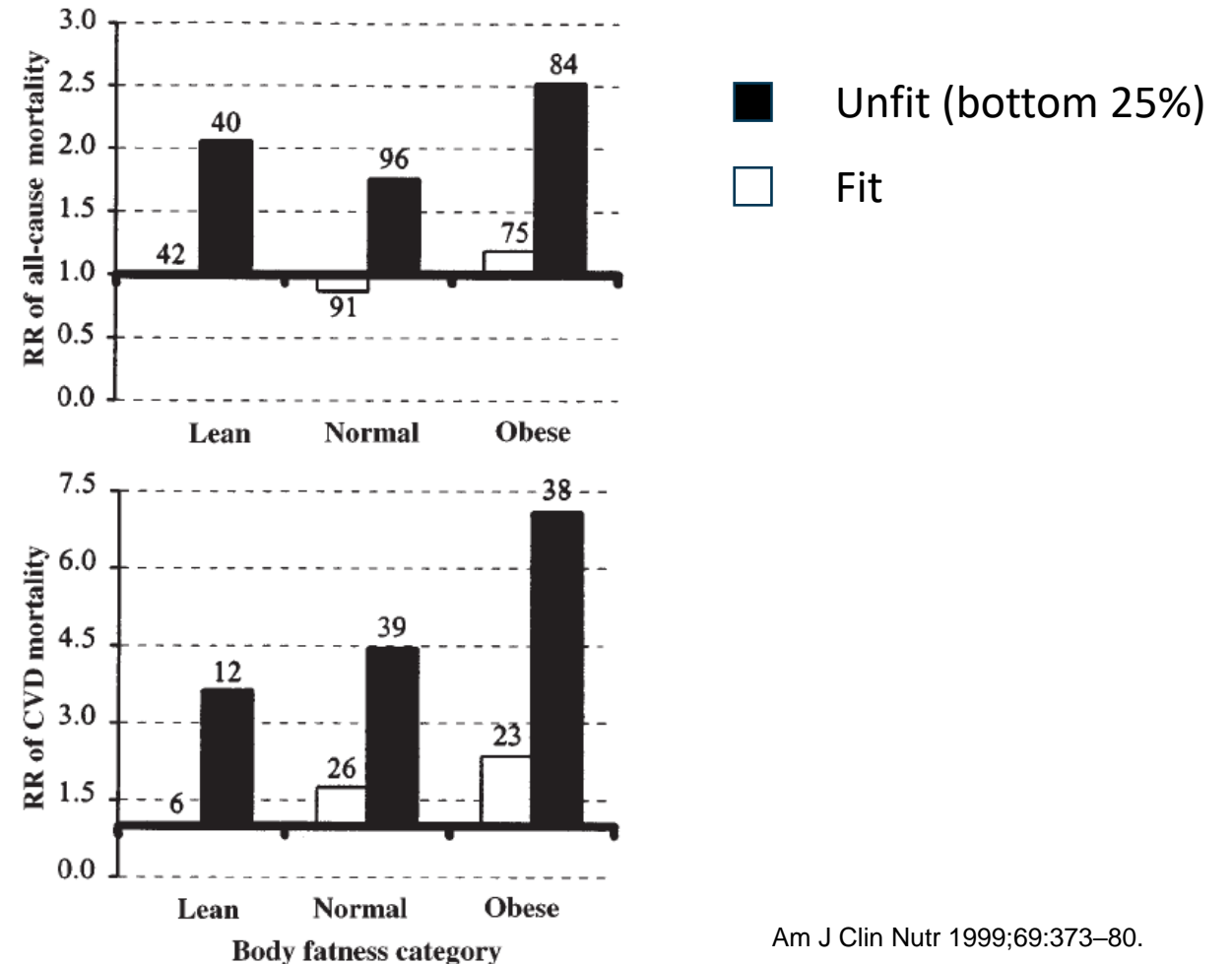


# Physical Fitness a Bigger Predictor of Mortality than Obesity

Study of 21,925 men.

Relative risk of all-cause mortality (top) and CVD mortality (bottom) for fit vs unfit men

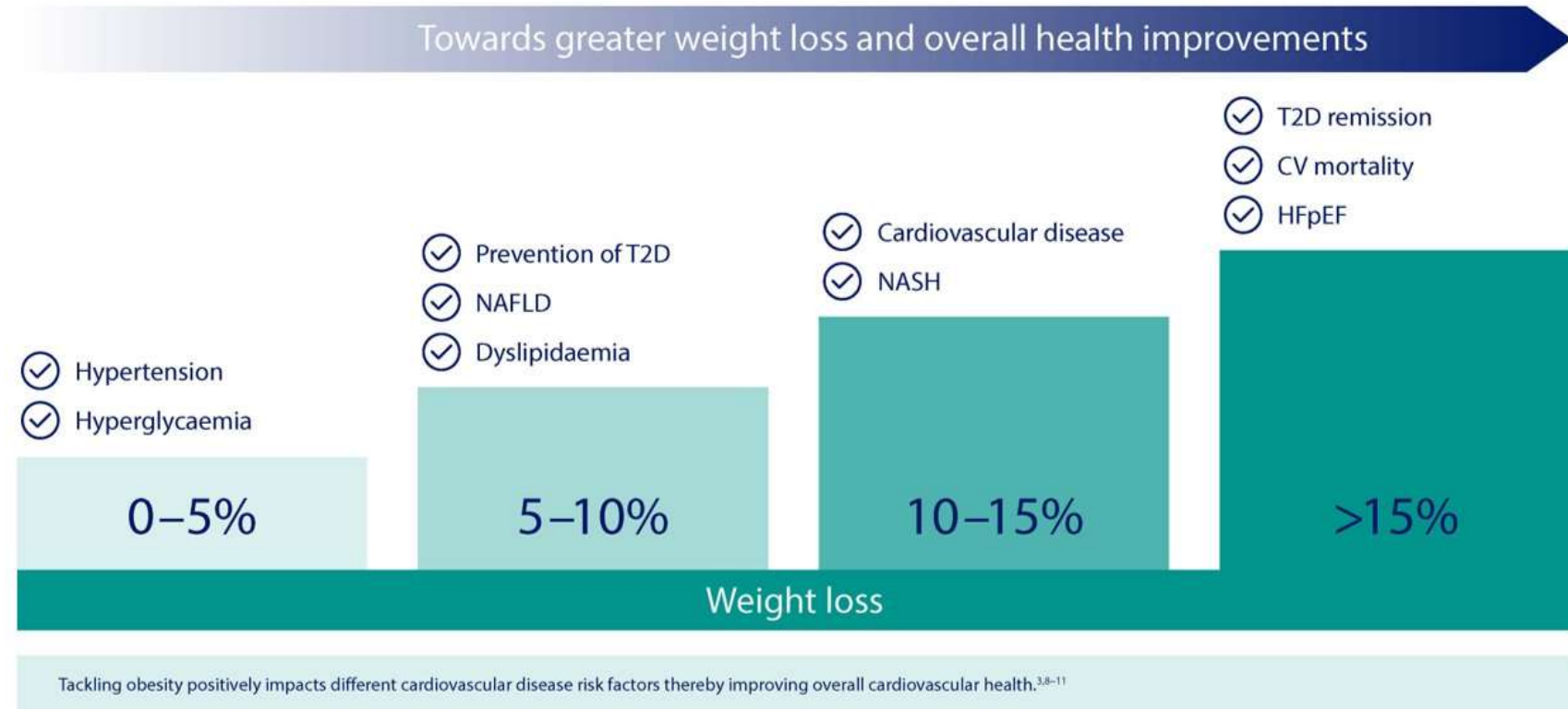
**Take home message: physical fitness plays a bigger role than obesity in driving mortality / longevity**



Am J Clin Nutr 1999;69:373–80.

# Addressing Key Risk Factors: Weight

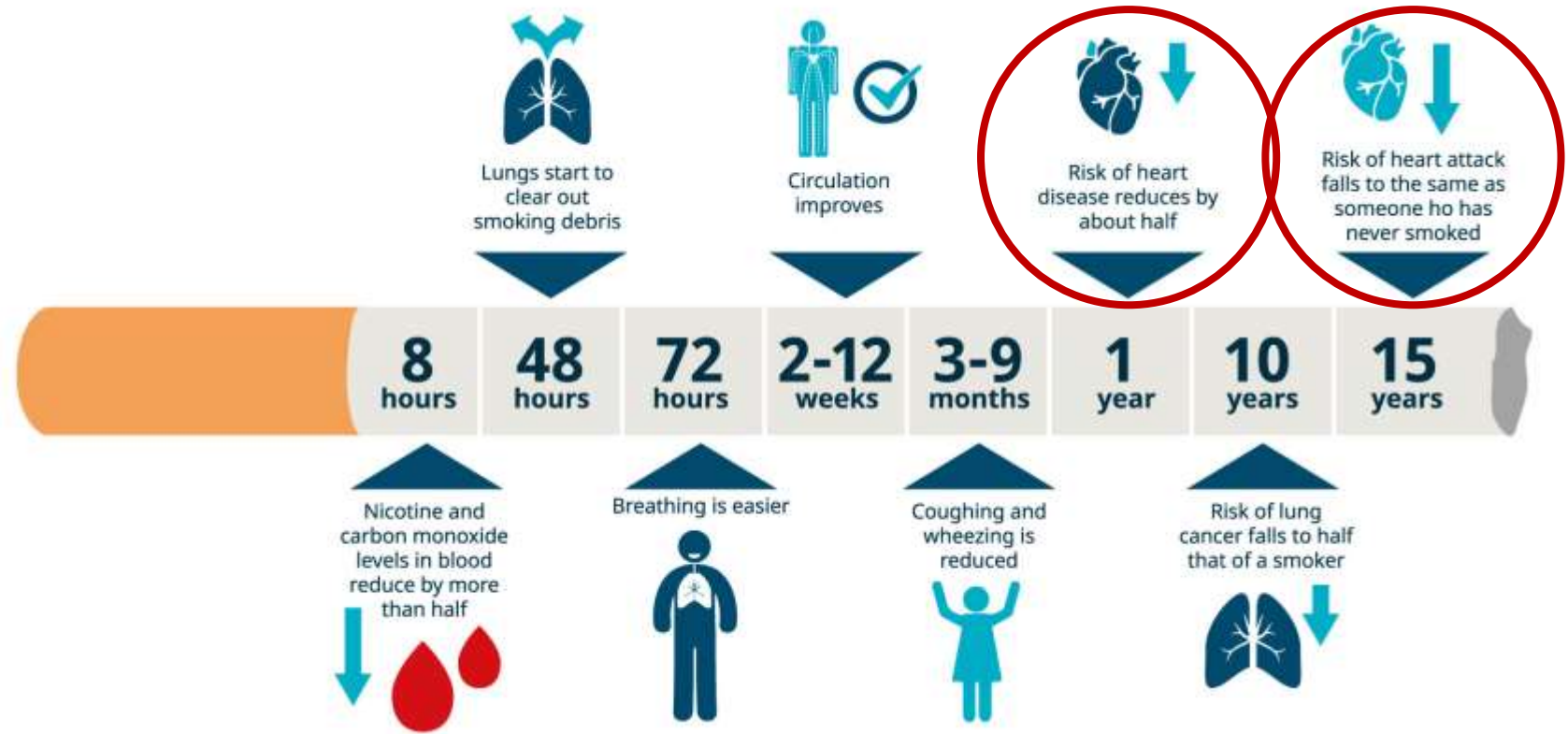
- Metabolically active adipose tissue is the **main driver** of CRM conditions.
- There are significant benefits to losing weight in improving CRM outcomes, reducing progression and achieving remission of conditions including T2DM.
- Supporting patients **reduce excess weight** has to be a key outcome metric if we are to see real health improvements.



CV, cardiovascular; HFpEF, heart failure with preserved ejection fraction; NAFLD, non-alcoholic fatty liver disease; NASH, non-alcoholic steatohepatitis; T2D, type 2 diabetes.

# Addressing Key Risk Factors: Smoking

- The risks of smoking are well known.
- Benefits of smoking cessation are relatively rapid – **1 year to reduce heart disease risk by 50%**
- **72%** of smokers say that they would like to stop.
- Clinicians play an important role in facilitating that process by **making every contact count**.



















# Health Confidence Score

- The Health Confidence Score is a simple, 4-question survey which measures 4 domains of patient confidence: health knowledge, capability to self-manage, access to help and shared decision-making.
- It is free, research-based and has associated SNOMED codes for use in clinical systems.
- <https://bmjopenquality.bmj.com/content/8/2/e000411>

**Health Confidence**

How do you feel about caring for your health?  
How much do you agree?

	Strongly agree	Agree	Neutral	Disagree
I know enough about my health				
I can look after my health				
I can get the right help if I need it				
I am involved in decisions about me				

# Health Confidence Score

Also translated into Punjabi, Polish, Hindi, Urdu and various other languages.

## ਸਿਹਤ ਵਿਸ਼ਵਾਸ

ਤੁਸੀਂ ਆਪਣੀ ਸਿਹਤ ਦੀ ਦੇਖਭਾਲ ਬਾਰੇ ਕਿਵੇਂ ਮਹਿਸੂਸ ਕਰਦੇ ਹੋ?

ਤੁਸੀਂ ਕਿੰਨਾ ਸਹਿਮਤ ਹੋ?

	ਬਹੁਤ ਜ਼ਿਆਦਾ ਸਹਿਮਤ	ਸਹਿਮਤ	ਤਟਸਥ	ਅਸਹਿਮਤ
ਮੈਨੂੰ ਆਪਣੀ ਸਿਹਤ ਬਾਰੇ ਕਾਫੀ ਜਾਣਕਾਰੀ ਹੈ				
ਮੈਂ ਆਪਣੀ ਸਿਹਤ ਦੀ ਦੇਖਭਾਲ ਕਰ ਸਕਦਾ/ਸਕਦੀ ਹਾਂ				
ਜੇ ਮੈਨੂੰ ਲੋੜ ਪਏ ਤਾਂ ਮੈਂ ਸਹੀ ਮਦਦ ਪ੍ਰਾਪਤ ਕਰ ਸਕਦਾ/ਸਕਦੀ ਹਾਂ				
ਮੇਰੇ ਬਾਰੇ ਫੈਸਲੇ ਕਰਨ ਵਿਚ ਮੈਂ ਸ਼ਾਮਲ ਹਾਂ				

# End

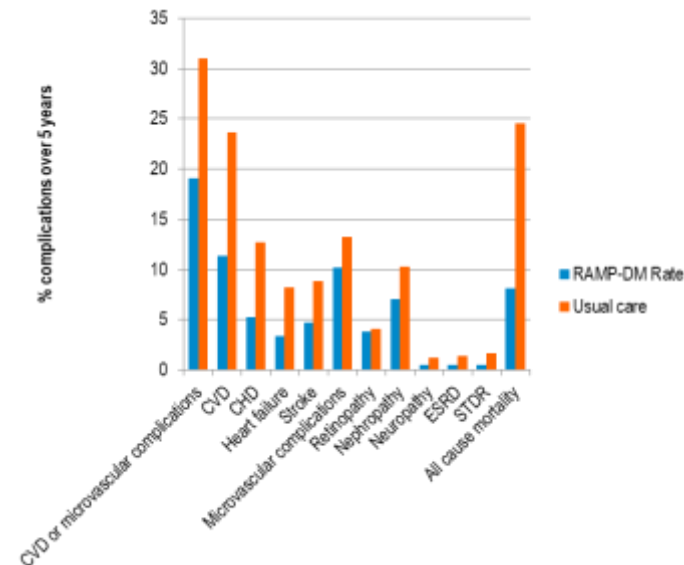
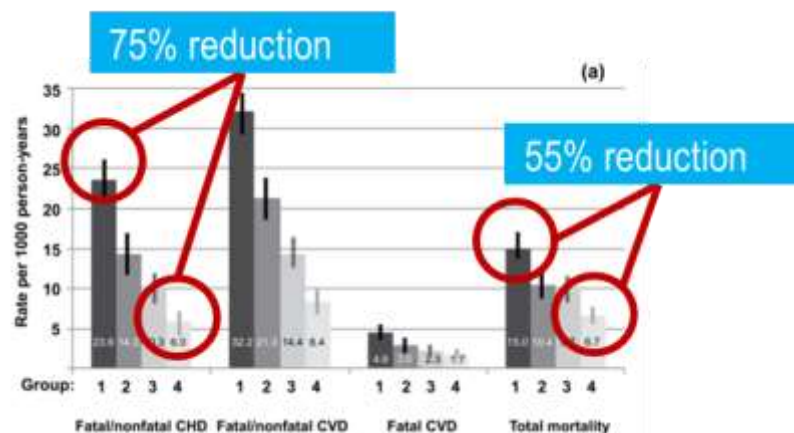
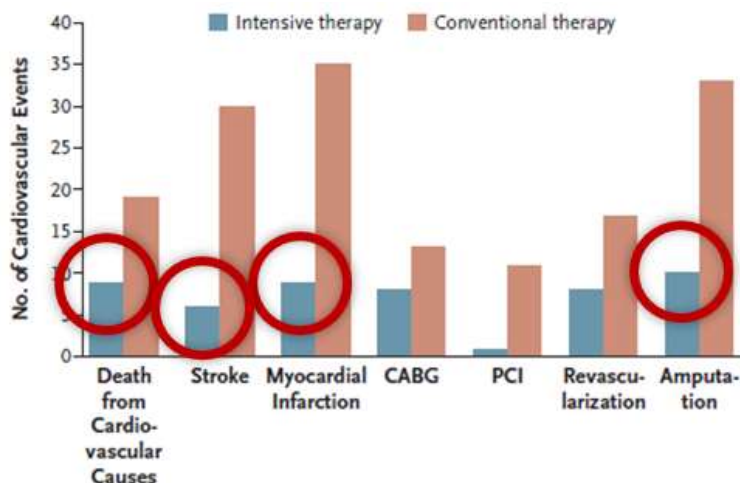
# Why This Matters

# Summary

- People with cardio-renal-metabolic (CRM) conditions make up **20% of the NW London population** but account for around 70% of hospital admissions, driving premature mortality, illness, and disability.
- Best practice care makes a huge difference – reducing **mortality** and **morbidity**.
- North West London is leading the country for achievement of key CRM-associated targets (e.g. **diabetes 3 treatment targets**, achievement of **target BP** in hypertension, **reduction in NDH to T2DM progression**).
- Evidence from NW London shows better HbA1c and blood pressure control reduces admissions; **optimisation of medication** is a crucial part of the new model. However, medical care explains only around **20% of health outcomes**.

# Many Studies Have Demonstrated the Impact of Intensive Risk Factor Intervention

Multiple and international studies have demonstrated the impact of risk factor improvements on CVD events, admissions and mortality, not just for diabetes but for other CRM conditions.



## STENO-2 study:

Multifactorial risk reduction in high risk patients with T2DM

Small improvements in key metrics lead to:

- **>50%** reduction in cardiovascular disease and mortality
- **7.9 years** increase in median survival time at 21 yrs

## Swedish population cohort study

Improvements in key clinical metrics in people with diabetes

(HbA1c, BP and lipids) lead to:

- **75%** reduction in CHD
- **55%** reduction in mortality

## RAMP-DM

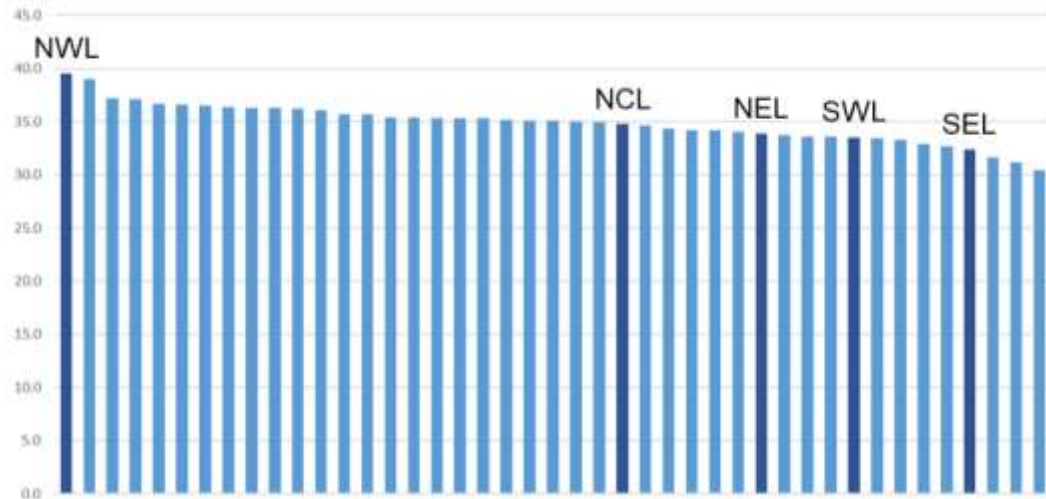
- <https://care.diabetesjournals.org/content/41/1/49>
- Small improvements in key parameters compared with usual care.
- Significant changes in RAMP-DM cohort:
  - **56.6%** reduction in CVD disease
  - **66.1%** reduction in all cause mortality
  - **58.5%** reduction in hospital admission

# Diabetes

## Leading National Diabetes Audit

Over the last 10 years, since the introduction of the diabetes enhanced services in 5 of the boroughs (across all 8 since 2022), NWL has moved from the bottom quartile for achievement of treatment targets (blood pressure, blood glucose and cholesterol) to 1<sup>st</sup> position nationally.

These metrics are key for reducing the risk of complications (e.g. heart attacks, strokes, kidney failure, vascular dementia), hospital admissions, disability and early death.

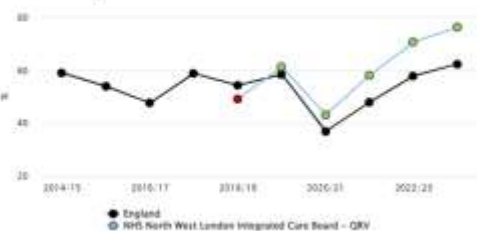


% achievement of 3 treatment targets for diabetes (BP, HbA1c and lipids) by ICB (National Diabetes Audit 24/25)

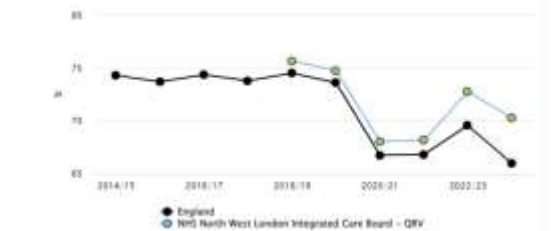
## Reducing CVD Mortality

Data from <https://fingertips.phe.org.uk/profiles> demonstrate significant improvements in NWL compared with the national average for various metrics (including CVD mortality) since the introduction of the original outcomes-based diabetes enhanced service in 5 of the boroughs in 2015, and subsequent expansion across all 8 boroughs (noting the dip in achievement during COVID).

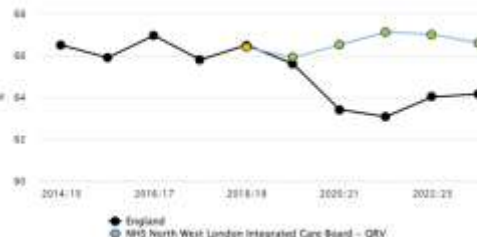
All 8 Key Care Processes



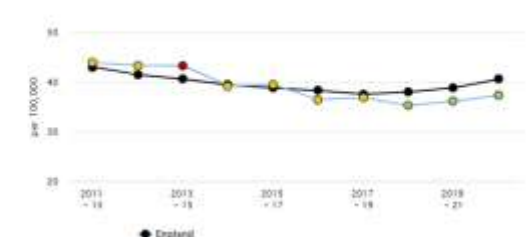
% of T2DM Patients with BP  $\leq$  140/80



% of T2DM Patients with HbA1c  $\leq$  58



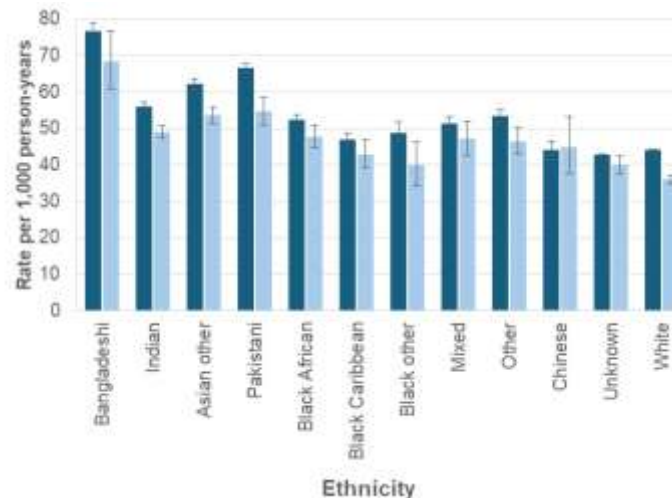
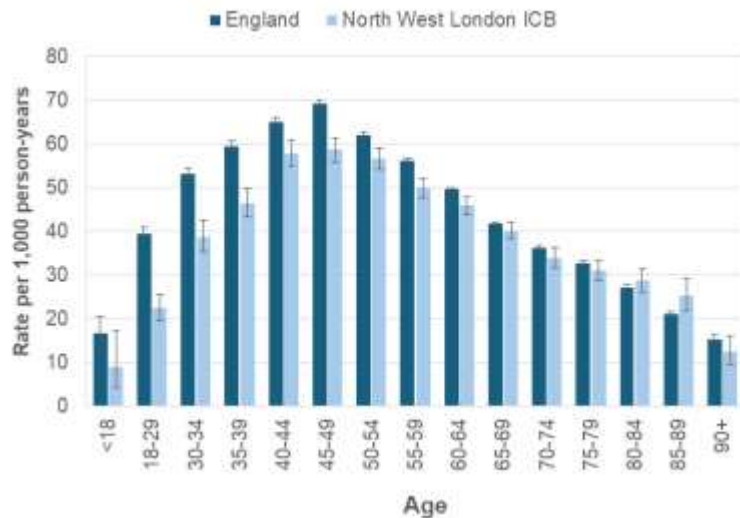
Standardised Mortality Rate from CVD



# Non-Diabetic Hyperglycaemia (NDH/Prediabetes)

## Reducing new Type 2 Diabetes Diagnoses

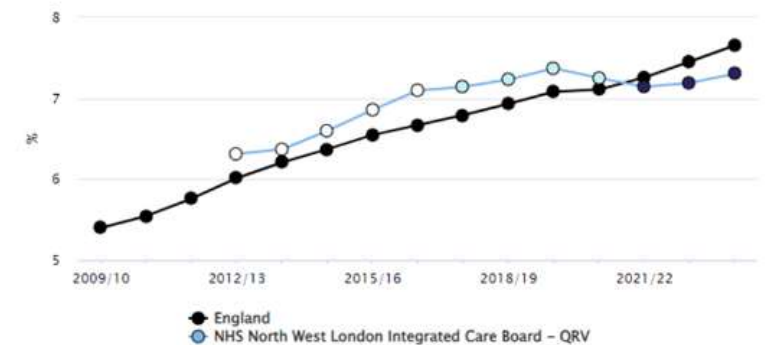
Between 2015 and 2018, following the introduction of the NDH primary care enhanced service (including annual review and referral into the National Diabetes Prevention Programme) in 5 NWL boroughs, 2400 fewer patients in NWL with NDH progressed to a T2DM diagnosis, particularly those in younger age groups with most life years to gain. Impact was seen across all ethnicities.



## PHE Fingertips Data

The impact on new T2DM diagnoses is also demonstrated in Public Health Fingertips data demonstrating a flattening off of diabetes prevalence compared to national data following the introduction of this service. NWL primary care data confirm this, with a reduction of 880 in annual new diabetes diagnoses from 2014/15 to 2024/25.

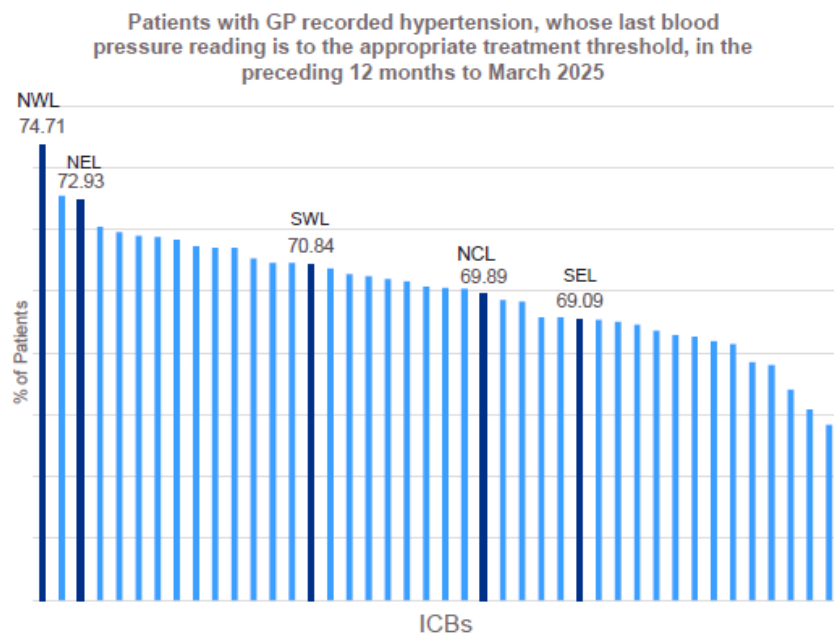
## Diabetes Prevalence



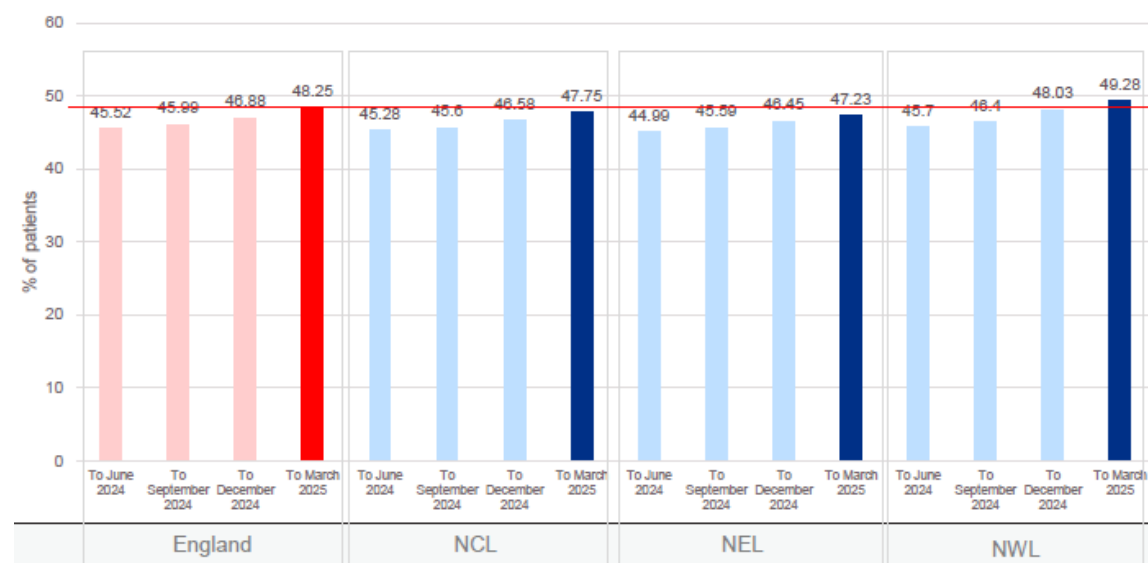
# Context: NW London Performance against National Benchmarks

Preventing and managing cardiovascular disease (CVD) remains a key priority for improving population health. Primary care continues to play a key role in delivering this ambition, aligned with the 2025/26 Commissioning Priorities and the 10 Year Plan.

## Hypertension Indicator, by ICB



## Cholesterol Indicator, by time



- As of 2025, NWL ranked top nationally for the hypertension indicator. NWL has also shown a consistent increase since 2023, compared to London.
- For the cholesterol indicator, NWL exceeded the England average, with an increasing trend since 2024.
- A key driver of this success is the NWL Primary Care Enhanced Services Single Offer. In addition, NWL has implemented a range of innovative initiatives to reduce CVD inequalities, incl. case finding, analytics, and workforce redesign, while scaling up successful local projects across the system.
- NWL's best practice and learning could be shared to support wider improvement.

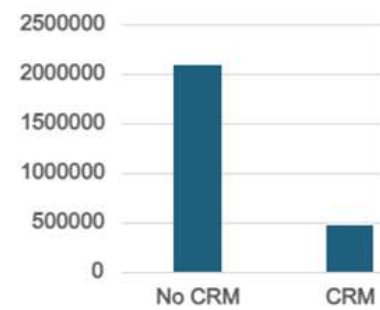
# NWL Data Confirm the Impact of Risk Factor Optimisation on Bed Occupancy

Data for NWL patients with CRM conditions from WSIC demonstrate that:

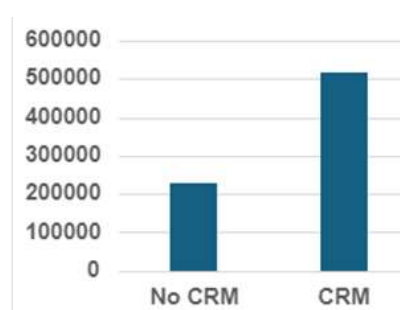
- 1) **~20% of the population** (those with CRM conditions) constitute **70% of bed days**
- 2) Lower BMI, **blood pressure**, blood glucose and lipid levels have a **very significant impact on bed days** (and admissions) **independent of other factors** (e.g. frailty, deprivation, age).

## CRM Patients and Bed Days

Patients with CRM conditions are ~20% of the population but constitute ~70% of bed days



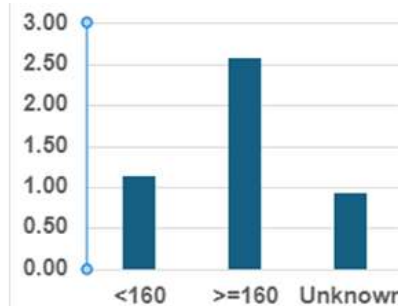
Number of patients with no CRM vs those with CRM



Number of bed days for patients with no CRM vs those with CRM

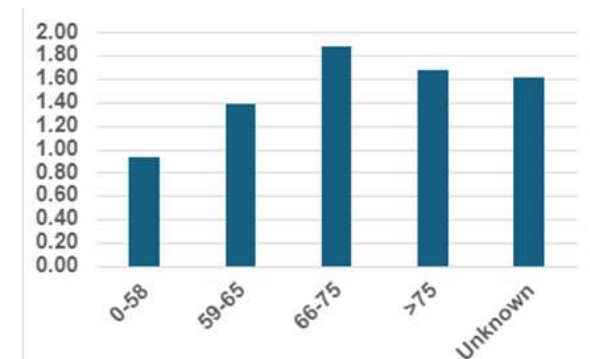
## Bed Days per Patient and CRM Targets

Patients with Systolic BP < 160 mmHg occupy **66% fewer** bed days per patient compared with those with SBP ≥ 160 mmHg



Bed days per patient by BP range

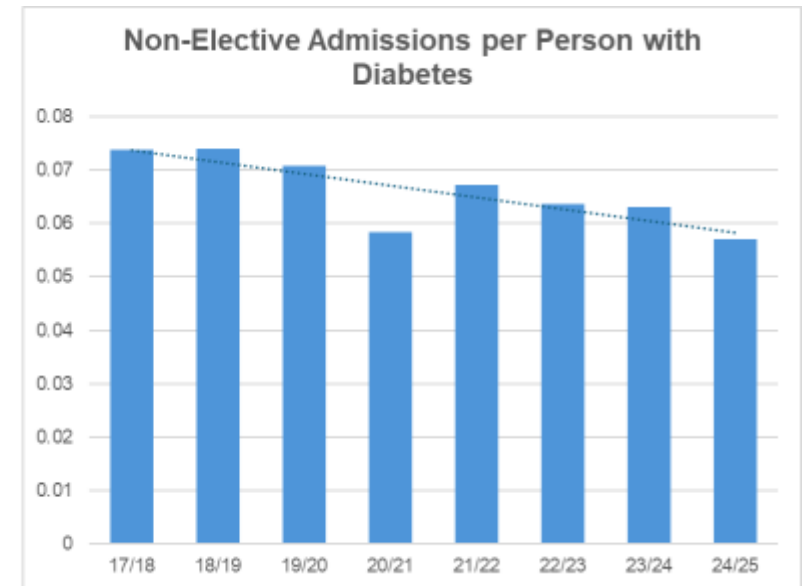
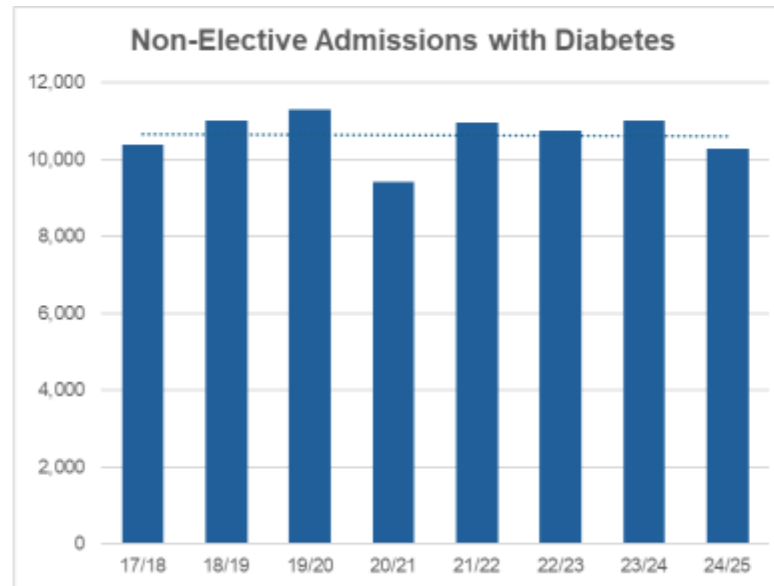
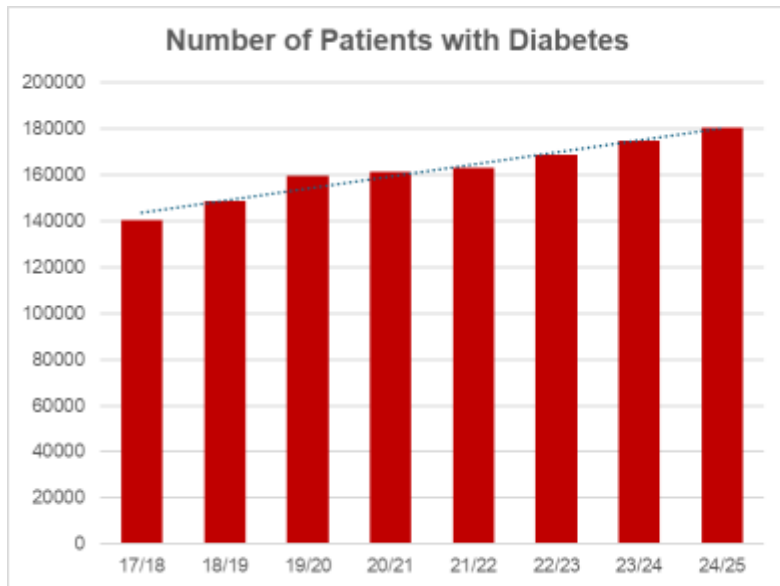
Patients with HbA1c ≤ 58 occupy **43% fewer** bed days per patient compared with those with HbA1c > 58



Bed days per patient by HbA1c range

# Reduction in Non-Elective Diabetes Admissions

Data from WSIC also demonstrate a small reduction in non-elective admissions for people with diabetes complications (heart disease, strokes, renal failure, etc) since 2017/18. However, if we factor in the 28% growth in numbers of people diagnosed with diabetes since then (from 140,665 in 17/18 to 180,674 in 24/25), the data demonstrate a 23% reduction in numbers of non-elective admissions per patient.



# Appendix E: Population Modelling

# Population Breakdown by IMD

The tables below show the breakdown of the ~588,000 people with CRM conditions in North West London. 62% are in IMD 1-5.

HealthBorough	IMD 1	IMD 2	IMD 3	IMD 4	IMD 5	IMD 6	IMD 7	IMD 8	IMD 9	IMD 10	N/A	TOTAL
Brent	16,085	15,075	25,882	21,607	11,559	7,751	2,521	2,071	227	146	40	102,964
Central London	4,590	4,835	5,222	5,285	3,722	2,607	4,135	4,185	2,467	86	16	37,150
Ealing	3,201	25,287	30,559	17,302	14,282	7,255	6,701	3,241	1,124	606	17	109,575
Hammersmith & Fulham	988	7,003	7,926	6,712	5,797	7,925	3,547	2,860	1,842	289	14	44,903
Harrow	39	667	9,608	11,356	13,689	12,173	10,934	8,038	4,218	5,911	7	76,640
Hillingdon	31	9,105	16,573	15,107	9,660	6,208	4,199	7,047	5,707	9,391	20	83,048
Hounslow	1,529	10,471	26,015	21,340	7,095	7,456	5,616	2,225	2,075	795	13	84,630
West London	3,359	10,655	8,042	5,889	4,155	4,714	4,497	4,563	2,955	94	19	48,942
<b>Grand Total</b>	<b>29,822</b>	<b>83,098</b>	<b>129,827</b>	<b>104,598</b>	<b>69,959</b>	<b>56,089</b>	<b>42,150</b>	<b>34,230</b>	<b>20,615</b>	<b>17,318</b>	<b>146</b>	<b>587,852</b>

Table 1: CRM population breakdown by IMD per borough

HealthBorough	1	2	3	4	5	6	7	8	9	10 N/A	
Brent	6.07%	13.55%	17.73%	22.04%	18.97%	11.82%	5.42%	3.81%	0.40%	0.16%	0.03%
Central London	4.26%	14.02%	14.86%	12.73%	11.87%	10.61%	4.99%	15.72%	8.75%	2.15%	0.05%
Ealing	1.71%	15.56%	19.34%	19.99%	11.66%	14.08%	9.27%	4.38%	3.72%	0.26%	0.01%
Hammersmith & Fulham	1.31%	19.15%	16.54%	17.95%	13.98%	11.30%	9.00%	7.00%	3.10%	0.64%	0.03%
Harrow	0.02%	1.59%	7.30%	5.27%	18.27%	16.69%	18.81%	15.14%	9.93%	6.95%	0.01%
Hillingdon	0.01%	4.28%	17.26%	16.17%	14.74%	8.75%	6.77%	9.68%	14.51%	7.82%	0.02%
Hounslow	0.55%	6.88%	13.79%	25.59%	19.67%	18.74%	7.71%	3.90%	1.98%	1.16%	0.02%
West London	8.37%	20.35%	14.33%	12.53%	10.49%	9.36%	8.75%	11.72%	3.54%	0.51%	0.04%
<b>Grand Total</b>	<b>2.53%</b>	<b>11.12%</b>	<b>15.48%</b>	<b>17.46%</b>	<b>15.48%</b>	<b>13.12%</b>	<b>8.93%</b>	<b>7.89%</b>	<b>5.48%</b>	<b>2.48%</b>	<b>0.02%</b>

Table 2: CRM population % in each IMD per borough

# Local Enhanced Services: Harrow Cardiovascular-Renal-Metabolic (CRM) Project

## Overview

- Borough-wide project delivered across 32 practices and 5 PCNs, involving a cohort of ~2,300 at-risk patients with CRM conditions/risk factors.
- Aims to shift care from reactive to preventative, improve early detection, and slow disease progression through holistic management.
- Aligns with the NWL Single Offer and the 10-Year Plan, focusing on lifestyle medicine, health coaching, and patient activation.

## Clinical Impact

- Demonstrated significant improvements (2,054 patient data analysed):
  - **Blood Pressure:** 37% achieved  $\geq 5\%$  reduction; 21% achieved  $\geq 10\%$  reduction.
  - **HbA1c:** 29% achieved  $\geq 5\%$  reduction; 20% achieved  $\geq 10\%$  reduction.
  - **Weight/BMI:** 10% achieved  $\geq 5\%$  weight loss; 3% achieved  $\geq 10\%$  loss.
  - **Waist Circumference:** 53% achieved reduction, with an average decrease of 5 cm.
- These outcomes indicate measurable benefits in **reducing cardiovascular risk, delaying CKD progression**, and improving overall health.

## Patient Experience

- Patients described the CRM clinics as “*completely different from usual GP appointments*”, valuing the longer consultations (30 mins) and holistic discussions covering wellbeing, mental health, and lifestyle.
- Reported feeling **proactively cared for**, gained a clearer understanding of their conditions, and **improved self-management**.
- Patients highlighted **personalised care plans**, and **follow-up continuity** as key enablers of change.

## Staff & System Impact

- 71% of staff reported improved knowledge of **co-morbidity prevention and management**.
- 57% of staff reported greater job satisfaction.
- **Improved integration** and closer links with renal consultants and pharmacists.
- The CRM model also helped practices meet QOF targets, improve coordination of care, and reduce duplication across long-term condition reviews.

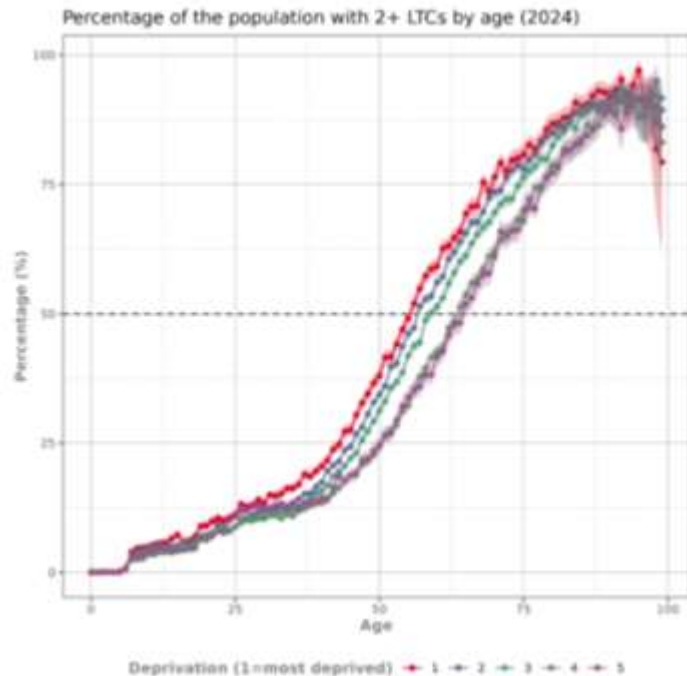
# Appendix B: Health Equity

# Deprivation has a major impact on the risk of developing and the complexity of LTCs

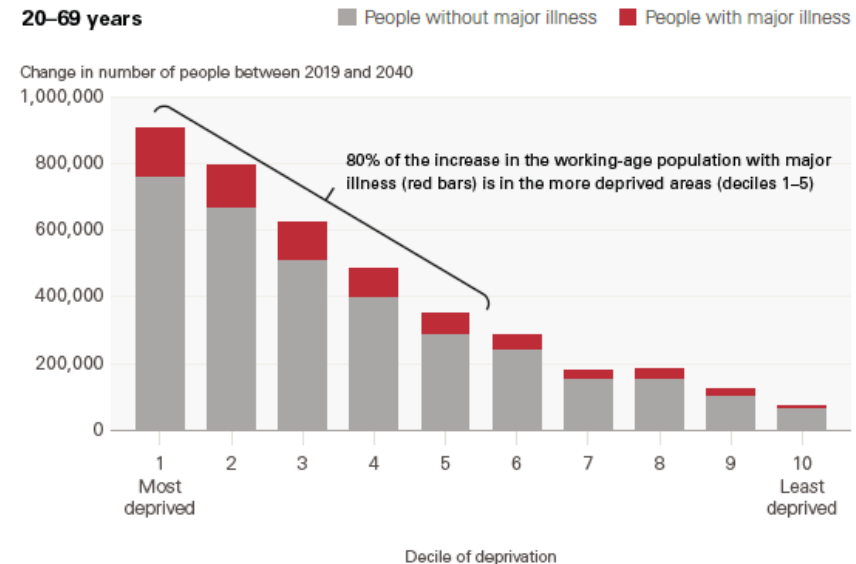
## Socio-economic factors impact:

- **Risk of developing a CRM condition** - those from non-white ethnicities are much more likely to be diagnosed with a significant CRM condition.
- **Clinical workload** for supporting patients with these conditions
- **Risk of life-changing complications, hospitalisation and mortality** - people in the top IMD decile are 33% less likely to have a stroke than those in the most deprived decile. Age of onset of major illness and multi-morbidity is ~10-15 years younger (**below left**) in the most deprived communities compared to the least deprived.

This difference is currently only likely to increase (**below right**). 80% of the increase in working-age population with LTCs is predicted to be in the more deprived areas (1-5)  
 Note that the biggest

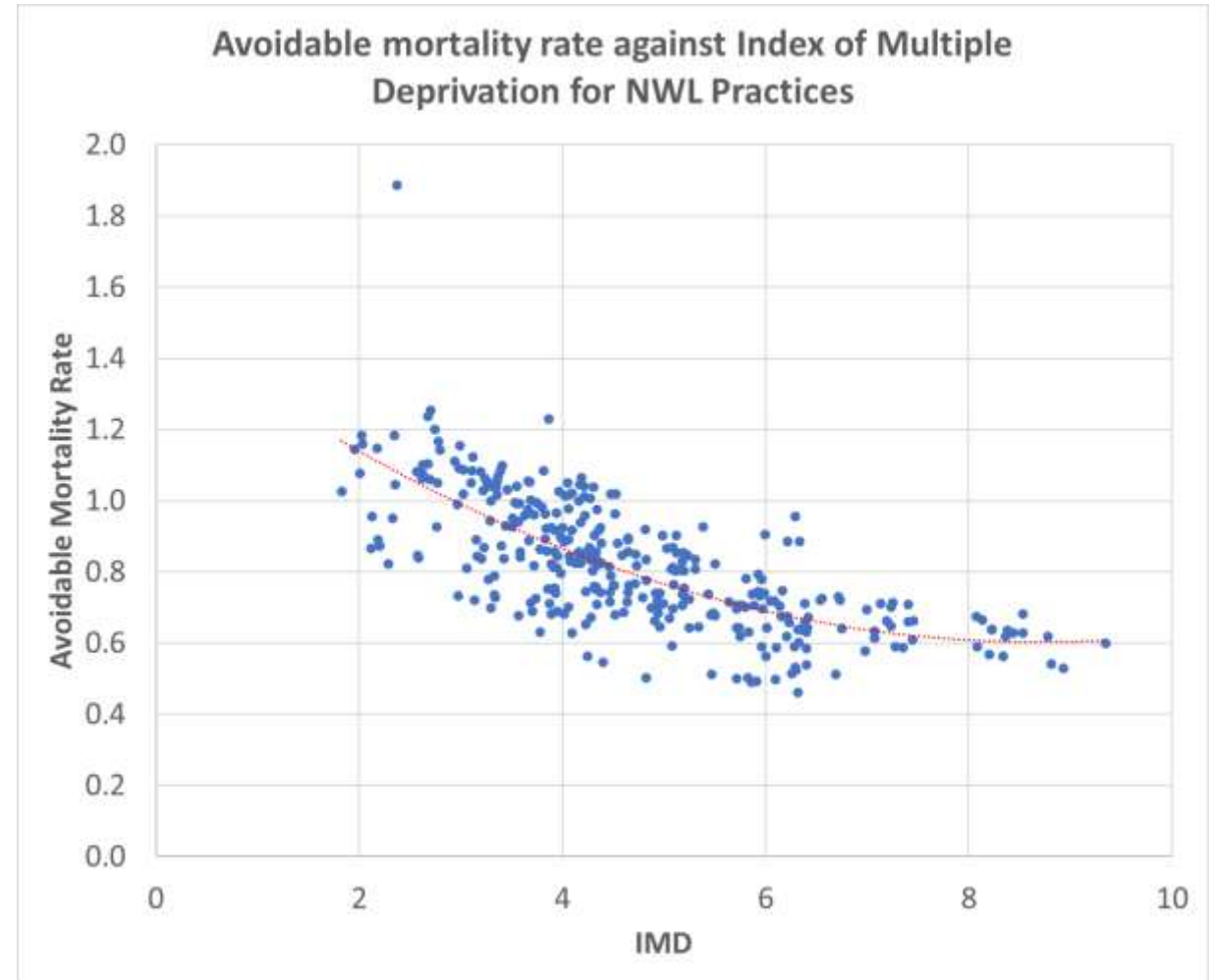


**Figure E2: Projected change in the number of people aged 20–69 years and aged 70 years and older with and without major illness between 2019 and 2040, by decile of deprivation, England**



# Funding doesn't currently meet the additional workload of supporting patients with higher levels of deprivation

- Average GP funding per patient ranges from approximately **£130 per patient** in **the least deprived** practice in NWL to **£165 per patient** in the **most deprived**.
- In contrast, the GP Need Index, the formula NHS England uses to estimate population healthcare need, rises more steeply (graph on right). In the most deprived practices, the need is approximately double that in the practices serving the least deprived communities. **A fair funding model would allocate ~£260 per patient to the practices serving the most deprived populations.**
- This means that in our most deprived communities, **need significantly outstrips funding**, creating a widening gap.
- If we don't explicitly invest based on deprivation and need, inequalities will persist or worsen, despite best efforts by frontline teams.
- **Note that the Index of Multiple Deprivation data for 2025 has been released. The percentage of the NWL population living in a Core 20 area has increased from 12.7% to 17.4%. This creates an even greater imperative to tackle health inequalities.**



# Appendix A: Further Background

# What An Integrated Cardiovascular-Renal-Metabolic Service Means for Patients

## Case Study: *Holistic care, empowering the patient.*

- The health and care system is **proactive** in their response, reducing unnecessary hospital admissions;
- **Holistic care planning** is central to the service, along with support from the wider neighbourhood health team;
- Services are recognising the individual and **supporting** them take ownership for their health and increase their self-efficacy;
- Informal **carers are recognised** and supported in their role; both practically through reducing the burden of attending appointments and emotionally through a focus on **wellbeing**.



Viraj is 45 years old. He has type 2 diabetes, stage 3 CKD and hypertension. He's in full-time employment and has always been quite fatalistic about his conditions and has frequently not attended appointments and missed medication doses. He's never understood that what he does makes a difference to his outcomes.

Viraj's had a care planning appointment with the PCN Clinical Pharmacist who has explained the impact of diet, activity, sleep and other lifestyle factors on Viraj's health, as well as the purpose of the medications he's taking. Viraj has understood for the first time that he could potentially not just delay any deterioration in his health, but reverse his diabetes, CKD and hypertension through achieving a healthy weight. He feels empowered to make the necessary changes and is supported to do this by the PCN Health Coach.



Viraj has begun to take some active steps to improve his diet and has agreed to be referred to the Type 2 diabetes remission programme. He is now an advocate for healthier living in his household and wider family.

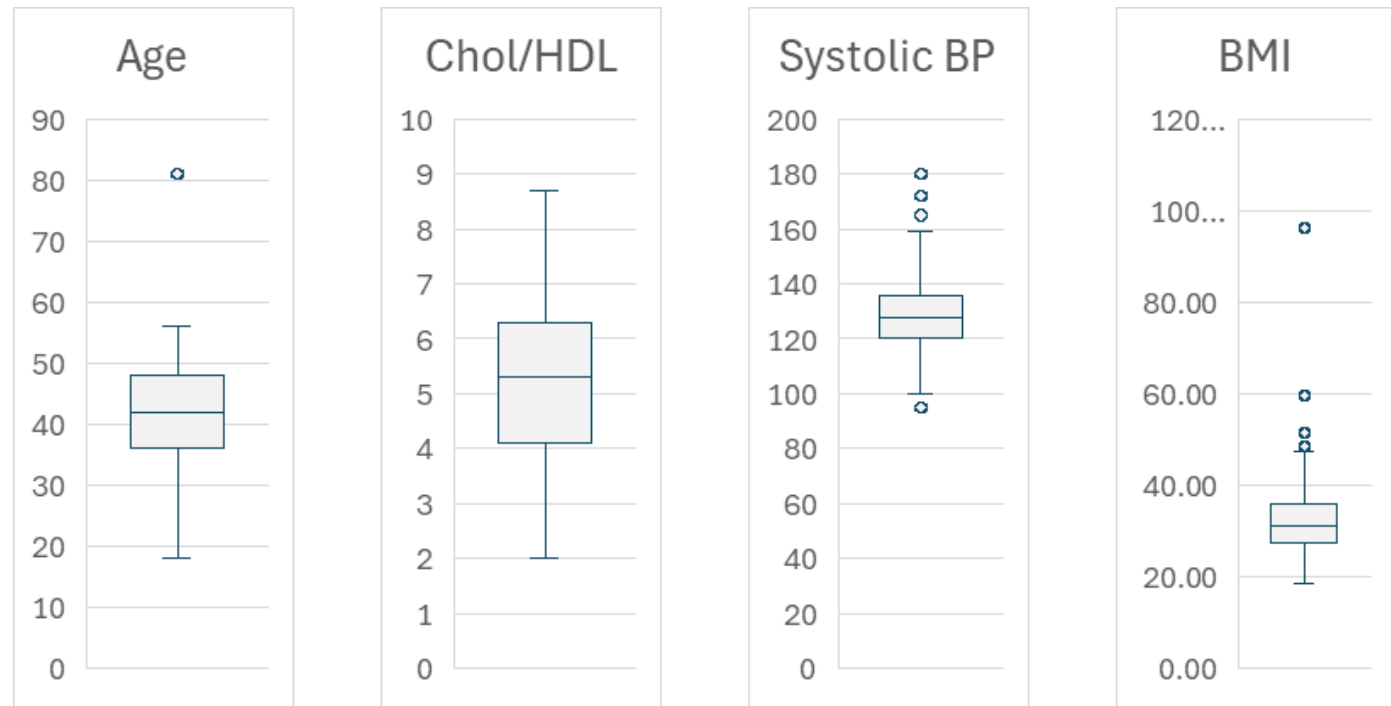
# Appendix C: Risk Segmentation and Case Finding

# Example Data for One GP Practice

As part of the clinical validation process we have audited the patients in the high risk segment in one GP practice. Results are as follows:

- 170 patients in high risk segment
- Mean age 41
- 26% with FH of IHD before 60
- 43% with T2DM
- 1% with recorded CKD
- 47% on antihypertensive medication
- 5% with SMI
- Mean Chol:HDL 5.2
- Mean SBP 128.4
- Mean BMI 32.6

Box Plot\* graphs for age, chol:HDL ratio, systolic BP and BMI for the high risk segment



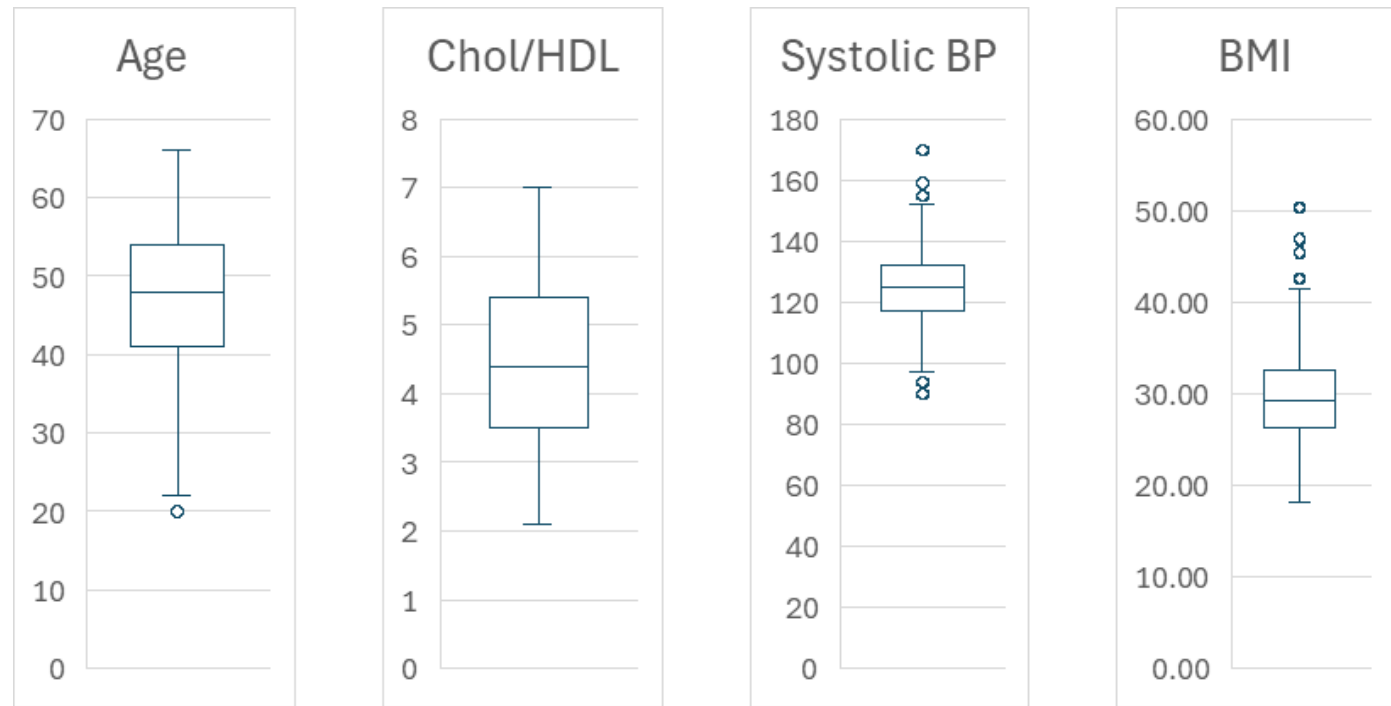
\*Box encompasses 25<sup>th</sup>-75<sup>th</sup> centile with line for median and whiskers for 10<sup>th</sup> and 90<sup>th</sup> centiles.

# Example Data for One GP Practice

As part of the clinical validation process we have audited the patients in the moderate risk segment in one GP practice. Results are as follows:

- 230 patients in moderate risk segment
- Mean age 47
- 12% with FH of IHD before 60
- 46% with T2DM
- 4% with recorded CKD
- 40% on antihypertensive medication
- 2% with SMI
- Mean Chol:HDL 4.4
- Mean SBP 125.1
- Mean BMI 29.7

Box Plot\* graphs for age, chol:HDL ratio, systolic BP and BMI for the high risk segment



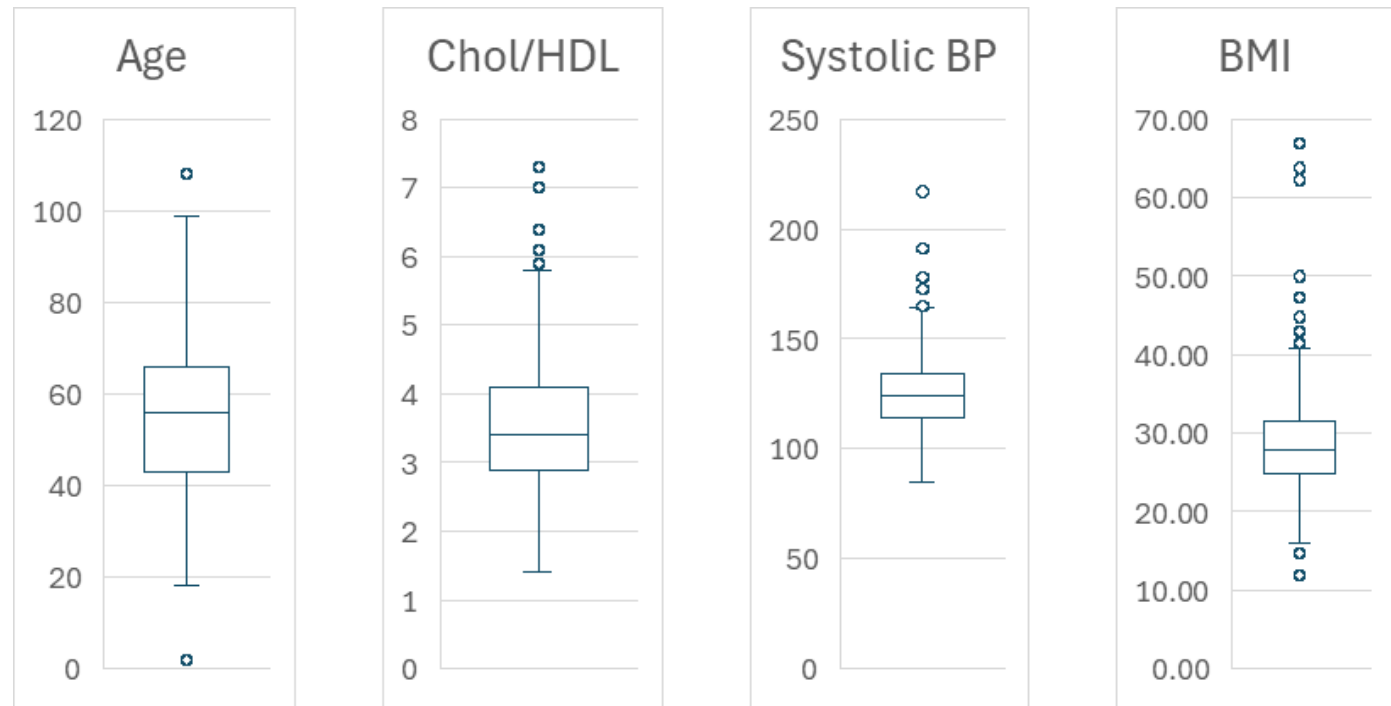
\*Box encompasses 25<sup>th</sup>-75<sup>th</sup> centile with line for median and whiskers for 10<sup>th</sup> and 90<sup>th</sup> centiles.

# Example Data for One GP Practice

As part of the clinical validation process we have audited the patients in the low risk segment in one GP practice. Results are as follows:

- 1355 patients in low risk segment
- Mean age 54
- 14% with FH of IHD before 60
- 24% with T2DM
- 5% with recorded CKD
- 27% on antihypertensive medication
- 1% with SMI
- Mean Chol:HDL 4.4
- Mean SBP 125.1
- Mean BMI 29.7

Box Plot\* graphs for age, chol:HDL ratio, systolic BP and BMI for the high risk segment



\*Box encompasses 25<sup>th</sup>-75<sup>th</sup> centile with line for median and whiskers for 10<sup>th</sup> and 90<sup>th</sup> centiles.