



## Proactive Care Frameworks

### Managing CV risk factors

### A holistic approach

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# 10 year cardiovascular disease ambitions for England

## Atrial fibrillation (AF)



**85%**

of the expected number of **people with AF are detected by 2029**

**90%**

of patients with AF who are already known to be at high risk of a stroke **to be adequately anticoagulated by 2029**

## High blood pressure



**80%**

of the expected number of **people with high blood pressure are diagnosed by 2029**

**80%**

of the total number of people already diagnosed with high blood pressure are **treated to target as per NICE guidelines by 2029**

## High cholesterol



**75%**

of people aged **40 to 74** have received a **formal validated CVD risk assessment** and **cholesterol reading** recorded on a primary care data system in the last five years by 2029

**45%**

of people aged **40 to 74** identified as having a **20% or greater 10-year risk** of developing CVD in primary care are treated with statins by 2029

**25%**

of people with **Familial Hypercholesterolaemia (FH)** are **diagnosed and treated** optimally according to the **NICE FH Guidelines by 2029**

## Covid impact

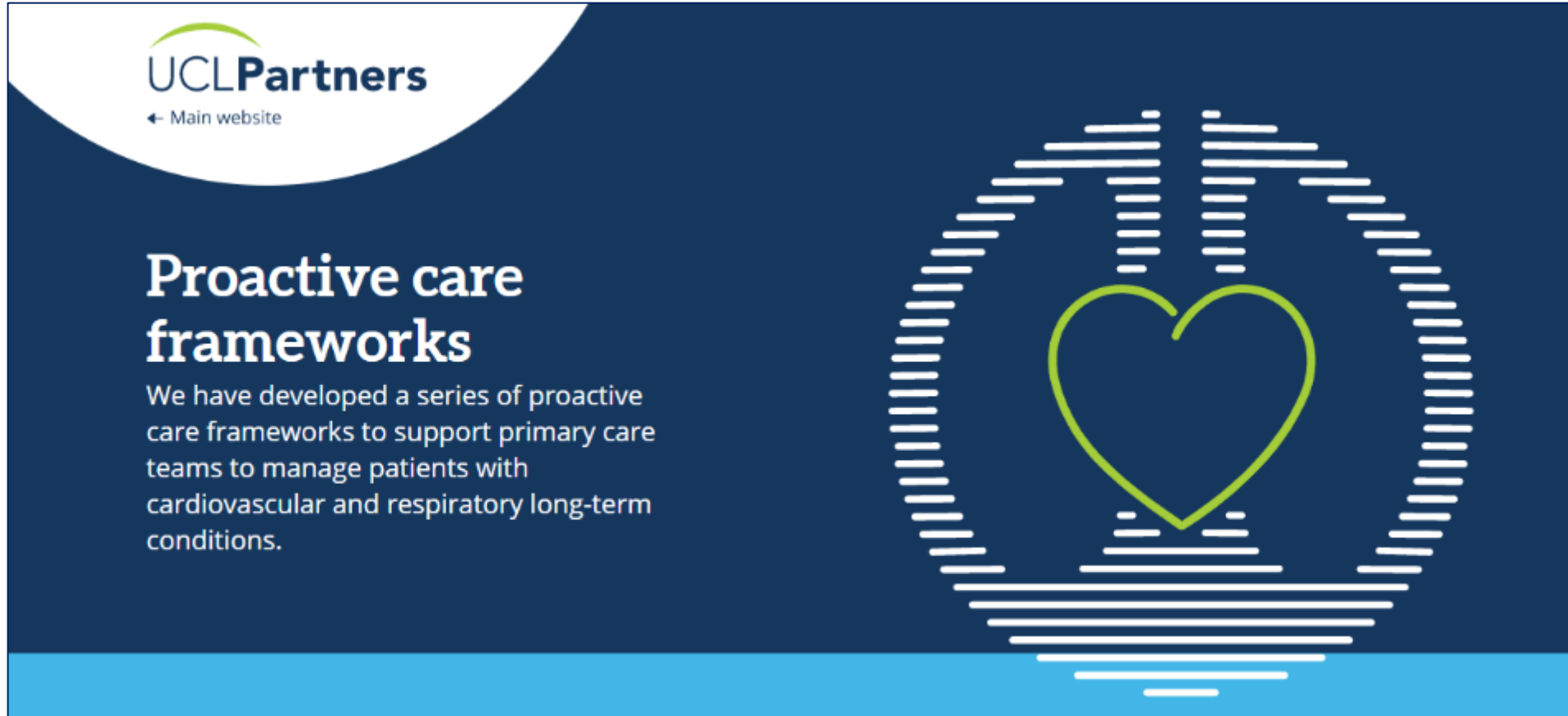
1. Disruption of routine, proactive care in high impact conditions such as CVD, hypertension, diabetes, COPD, asthma
2. Risk of deterioration/exacerbation in high impact conditions driving further waves of demand for urgent care and increasing premature mortality and morbidity

## Historic Diagnosis and Treatment Gap

In the high risk conditions for CVD (AF, Blood Pressure, Cholesterol)

- Under diagnosis
  - Sub-optimal treatment
  - Variation in care
- } is common

**The NHS Long Term Plan 2019:** *“We will prevent 150,000 heart attacks, strokes and cases of dementia by optimising the diagnosis and management of high blood pressure, high cholesterol and atrial fibrillation”*



The banner features a dark blue background with a light blue curved top-left corner. In the top-left corner, the UCLPartners logo is displayed with a green arc above the text, and below it, a left-pointing arrow followed by the text 'Main website'. The main text on the left is in white, with the title 'Proactive care frameworks' in a larger font. Below the title is a paragraph of white text. On the right side, there is a large graphic of a heart outline in green, centered within a circular arrangement of white horizontal lines of varying lengths that create a ripple effect.

UCLPartners  
← Main website

## Proactive care frameworks

We have developed a series of proactive care frameworks to support primary care teams to manage patients with cardiovascular and respiratory long-term conditions.

[www.uclpartners.com/proactive-care](http://www.uclpartners.com/proactive-care)

# UCLPartners Proactive Care Frameworks

## High Impact Conditions

### **CVD prevention**

1. Atrial Fibrillation
2. Blood pressure
3. Cholesterol
4. Type 2 Diabetes

### **Respiratory**

5. Asthma
6. COPD

### **In development**

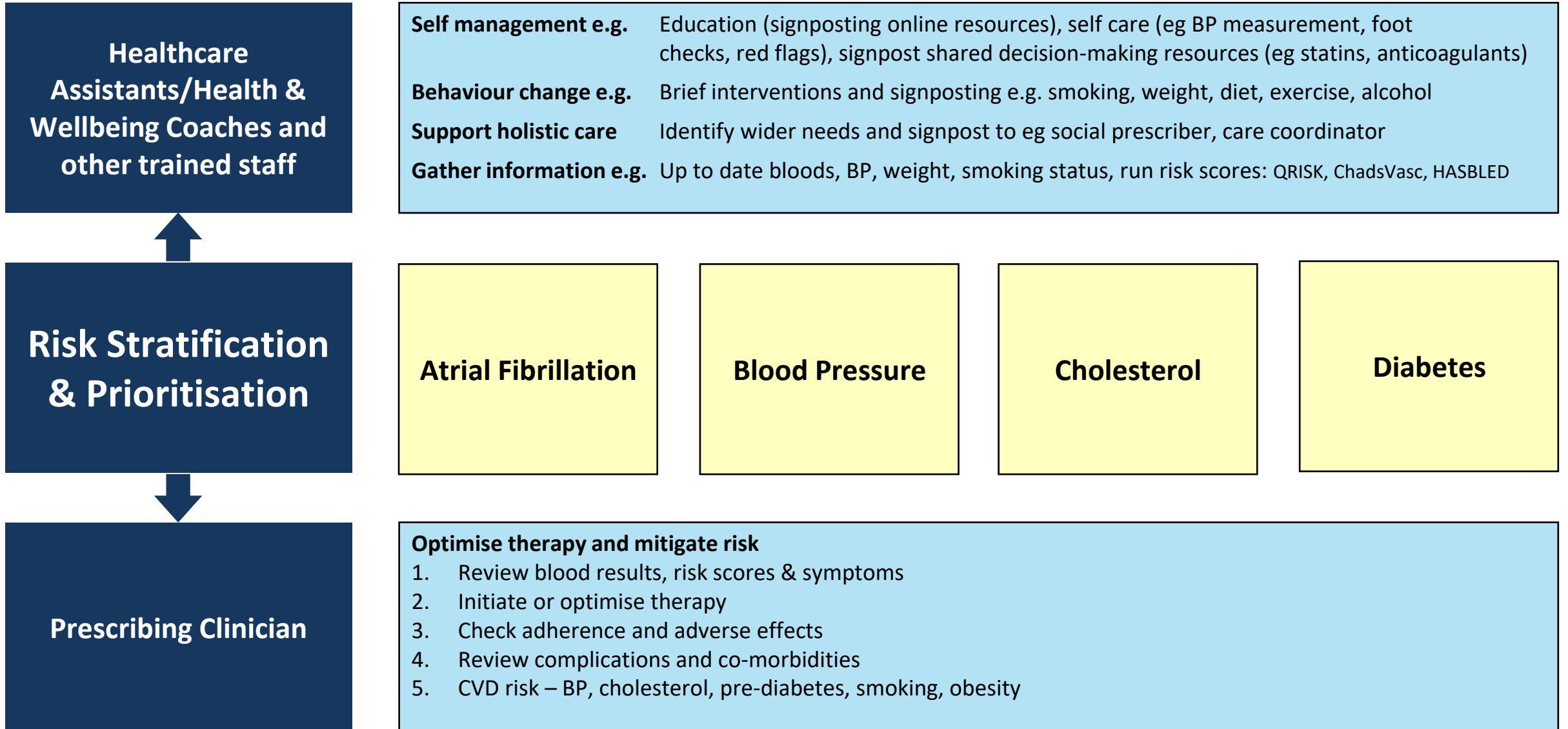
7. Heart Failure
8. SMI

## Framework Principles

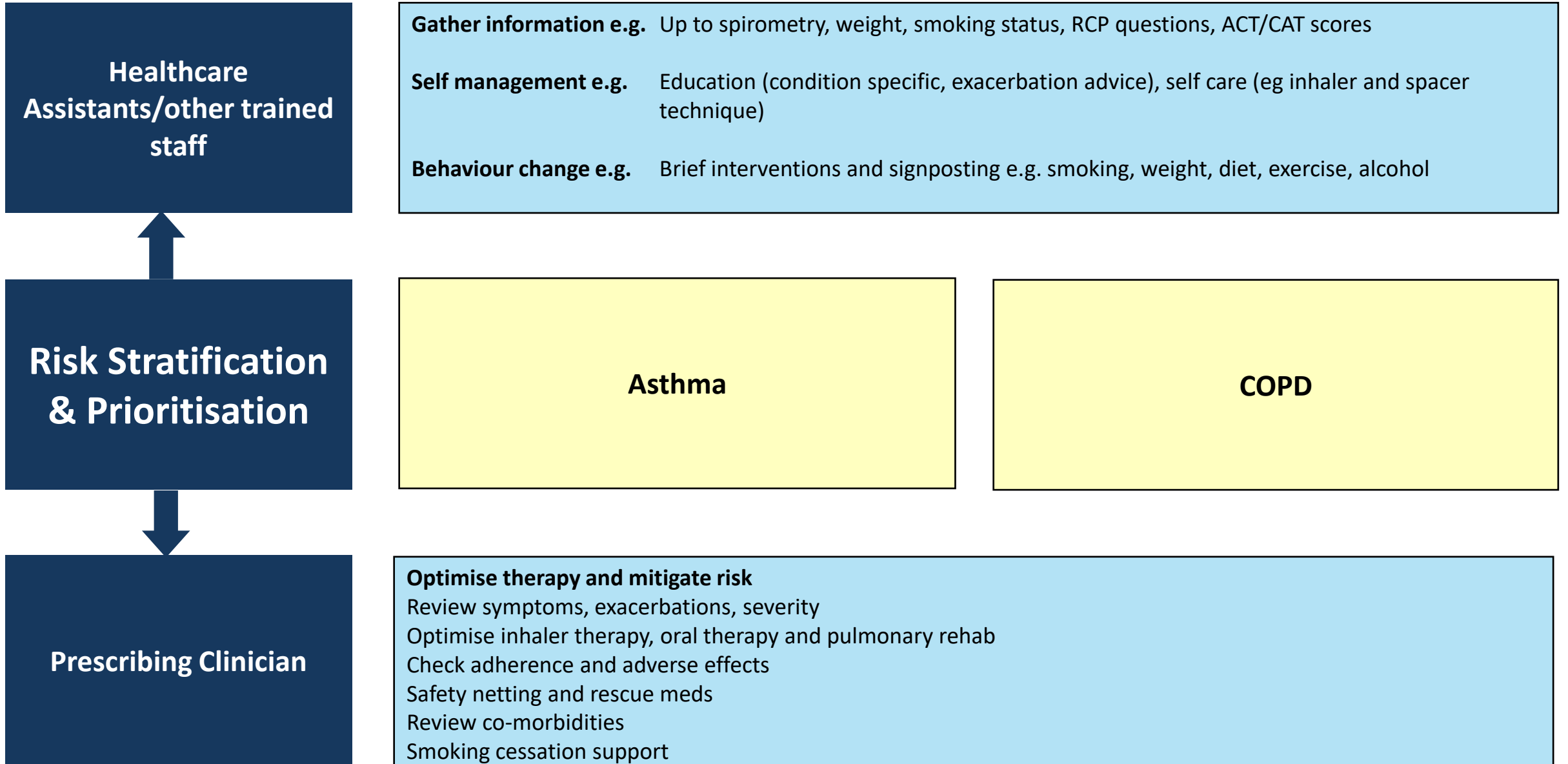
- Primary care led with PPI support
- Improve clinical care and self-care
- Free clinician capacity

## Population Health Management Approach

- Risk stratification based on NICE guidance
- Prioritisation to optimise treatment early in those with greatest need
- Deploy wider workforce to support self-management and personalisation of care



# UCLP Proactive Care Frameworks Overview: Respiratory Conditions



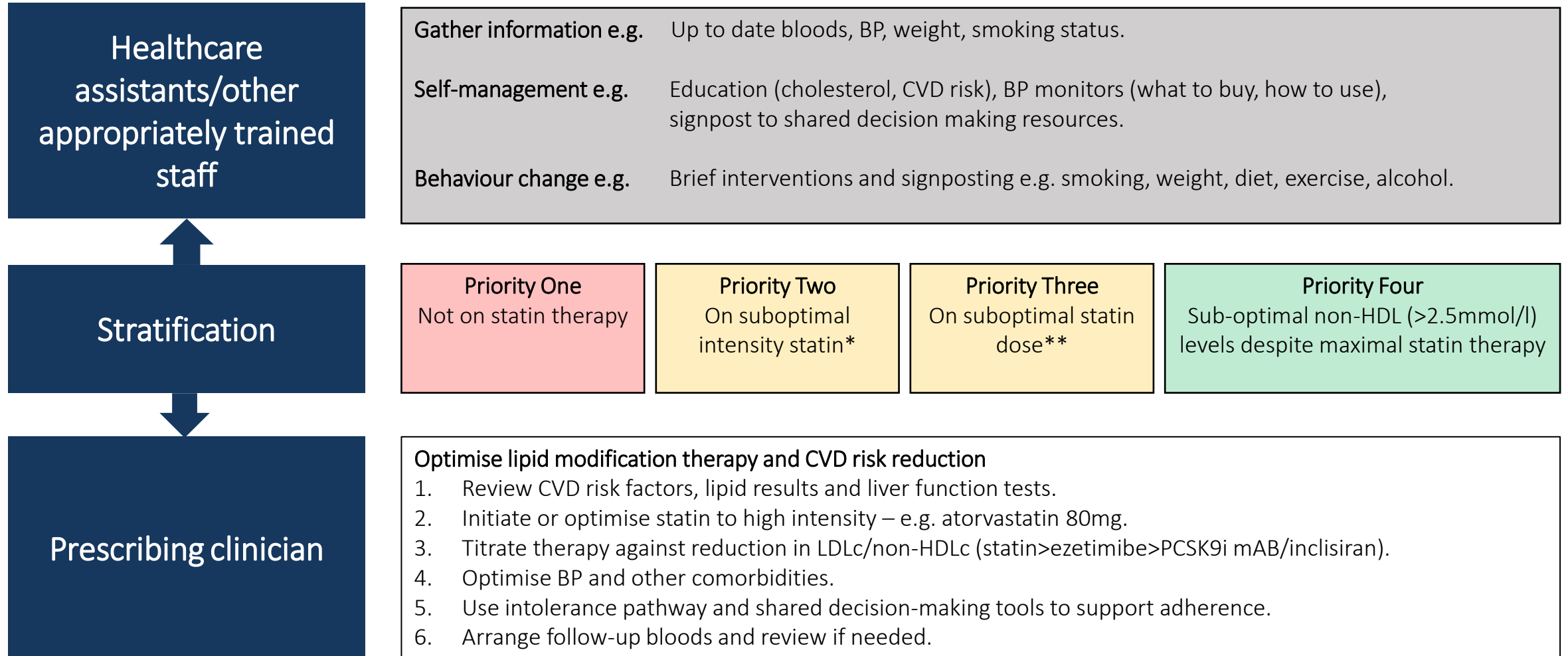


1. Comprehensive **GP stratification tools** built for EMIS and SystemOne
2. **Pathways** that prioritise patients for follow up, support remote delivery of care, and identify what elements of LTC care can be delivered by staff such as Health Care Assistants and link workers.
3. **Scripts and protocols** to guide Health Care Assistants and others in consultations.
4. **Training** for staff to deliver education, self-management support and brief interventions. Training includes health coaching and motivational interviewing.
5. **Digital and other resources** that support remote care and self care.
6. **Project management** and support for local clinical leadership

The UCLPartners Proactive Care Frameworks focus on  
The HOW of doing things differently



# Cholesterol – Secondary Prevention (pre-existing CVD)



Healthcare assistants/other appropriately trained staff

Gather information e.g. Up to date bloods, BP, weight, smoking status.  
Self-management e.g. Education (cholesterol, CVD risk), BP monitors (what to buy, how to use), signpost to shared decision making resources.  
Behaviour change e.g. Brief interventions and signposting e.g. smoking, weight, diet, exercise, alcohol.

Stratification

**Priority One**  
Not on statin therapy

**Priority Two**  
On suboptimal intensity statin\*

**Priority Three**  
On suboptimal statin dose\*\*

**Priority Four**  
Sub-optimal non-HDL (>2.5mmol/l) levels despite maximal statin therapy

Prescribing clinician

**Optimise lipid modification therapy and CVD risk reduction**

1. Review CVD risk factors, lipid results and liver function tests.
2. Initiate or optimise statin to high intensity – e.g. atorvastatin 80mg.
3. Titrate therapy against reduction in LDLc/non-HDLc (statin>ezetimibe>PCSK9i mAB/inclisiran).
4. Optimise BP and other comorbidities.
5. Use intolerance pathway and shared decision-making tools to support adherence.
6. Arrange follow-up bloods and review if needed.

\* E.g simvastatin  
\*\* E.g atorvastatin 40mg

# Cholesterol –Primary Prevention (no pre-existing CVD)

Healthcare assistants/other appropriately trained staff

**Gather information:** E.g. up to date bloods, BP, weight, smoking status, run QRISK score.\*  
**Self-management:** Education (cholesterol, CVD risk), BP monitors (what to buy, how to use), signpost to shared decision making resources.  
**Behaviour change:** Brief interventions and signposting e.g. smoking, weight, diet, exercise, alcohol.

Stratification

**Priority One**  
One of:  
• QRISK  $\geq$ 20%  
• CKD  
• Type 1 Diabetes  
AND  
• Not on statin

**Priority Two**  
• QRISK 15-19%  
AND  
• Not on statin

**Priority Three**  
• QRISK 10-14%  
AND  
• Not on statin

**Priority Four**  
On statin for primary prevention but not high intensity

Prescribing clinician

**Optimise lipid modification therapy and CVD risk reduction**

1. Review QRISK score, lipid results and LFTs.
2. Initiate or optimise statin to high intensity – eg atorvastatin 20mg.
3. Titrate therapy against reduction in LDLc/non-HDLc (statin>ezetimibe).
4. Optimise BP and other comorbidities.
5. Use intolerance pathway and shared decision-making tools to support adherence.
6. Arrange follow-up bloods and review if needed.

\*QRISK 3 score is recommended to assess CV risk for patients with Severe Mental Illness, Rheumatoid Arthritis, Systemic Lupus Erythematosus, those taking antipsychotics or oral steroids

# Implementation Resources

1. [Optimisation Pathway for Secondary Prevention](#)
2. [Optimisation Pathway for Primary Prevention](#)
3. [Statin Intolerance Pathway](#)
4. [Muscle Symptoms Pathway](#)
5. [Abnormal Liver Function Test Pathway](#)
6. [Shared Decision-Making Resources](#)
7. [Statin Intensity Table](#)
8. [Summary of Lipid Lowering Therapies](#)
9. [Inclisiran for Secondary Prevention](#)
10. [Bempedoic Acid for Use in Statin Intolerance](#)
11. [QRISK2/3](#)
12. [Familial Hypercholesterolaemia \(FH\) Detection and Management in Primary Care](#)

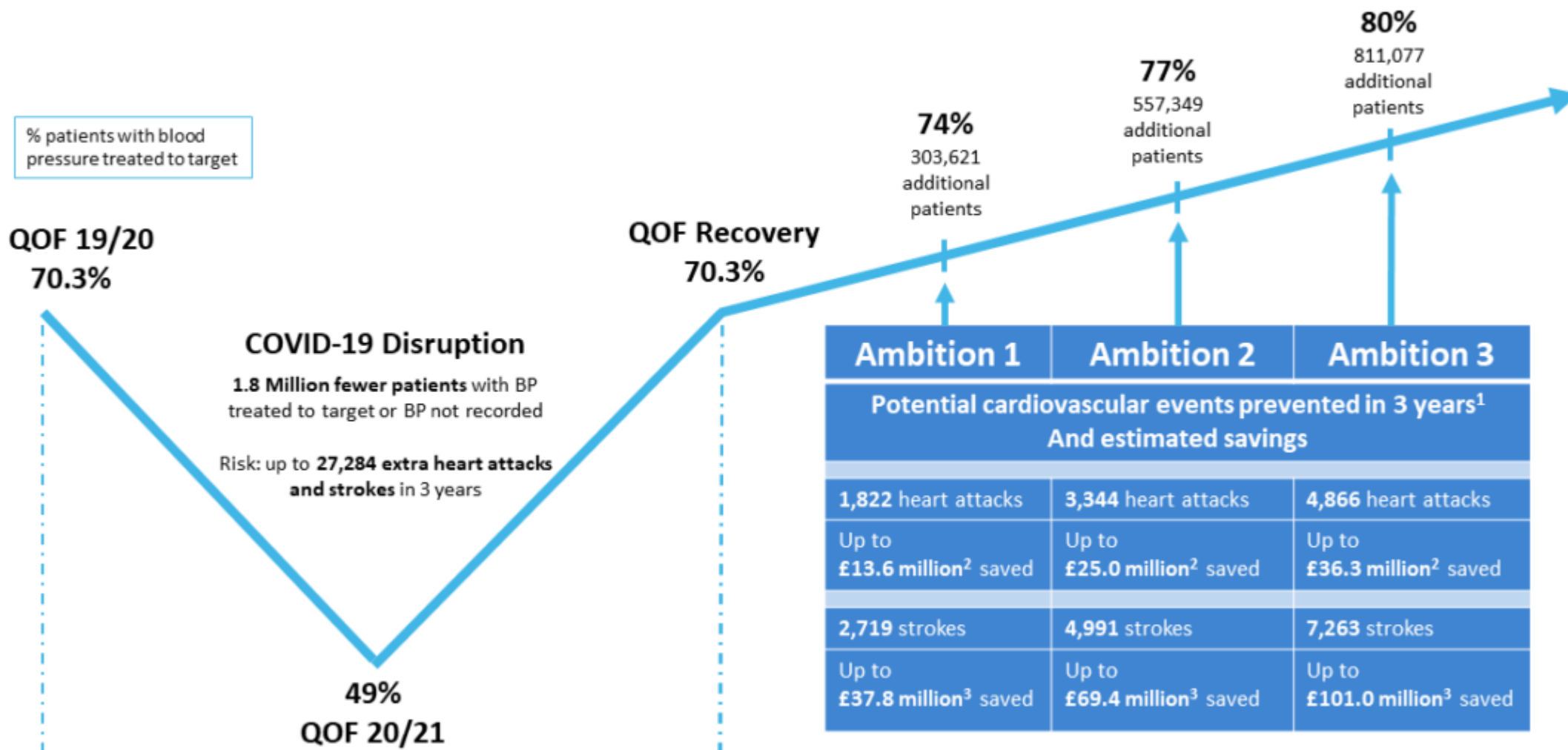
Preventing CVD in people with hypertension requires control of blood pressure and cholesterol

1. Around 50% of people with established CVD also have hypertension.
2. 40-50% of people with established CVD are either on no lipid lowering treatment or suboptimal treatment
3. All men over 55 with hypertension and all women over 60 with hypertension also have a QRisk score above 10%. Large numbers are not on statins.

By targeting optimisation of blood pressure and cholesterol in patients with hypertension, especially for secondary prevention, we will prevent large numbers of heart attacks and strokes in a short time frame.

# Size of the Prize – England

## BP Optimisation to Prevent Heart Attacks and Strokes at Scale



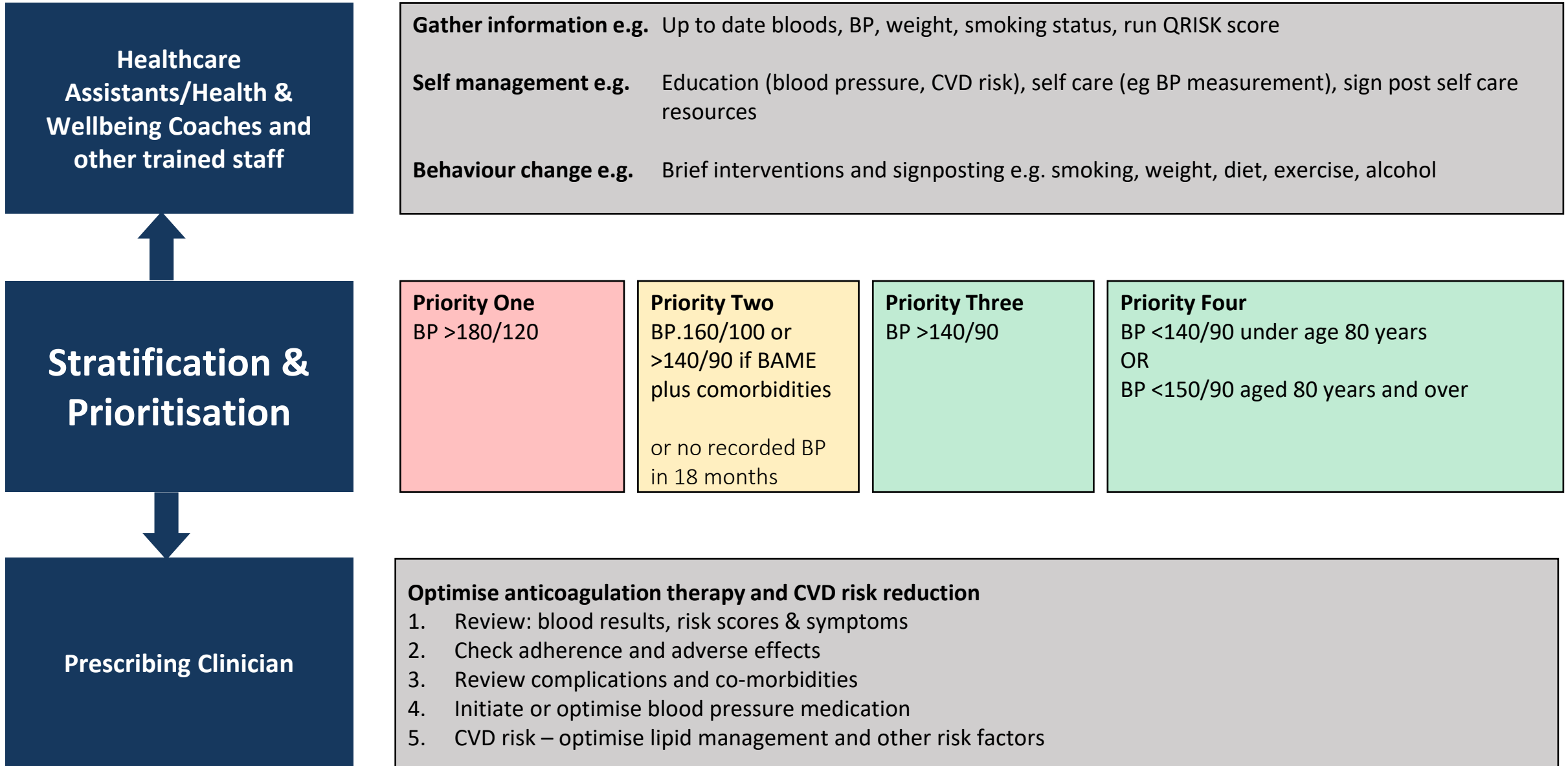
### References

- Public Health England and NHS England 2017 Size of the Prize
- Royal College of Physicians (2016). Sentinel Stroke National Audit Programme. Cost and Cost-effectiveness analysis.
- Kerr, M (2012). Chronic Kidney disease in England: The human and financial cost

### Modelling

Data source: NCVIN 2021. Briefing note: QOF 2020/21 Management of hypertension – HYPALL metric (HYPO03+HYPO07). Potential events calculated with NNT (theNNT.com). For blood pressure, anti-hypertensive medicines for five years to prevent death, heart attacks, and strokes: 1 in 100 for heart attack, 1 in 67 for stroke.

# Hypertension: stratification and management



## Example modelling (One London borough)

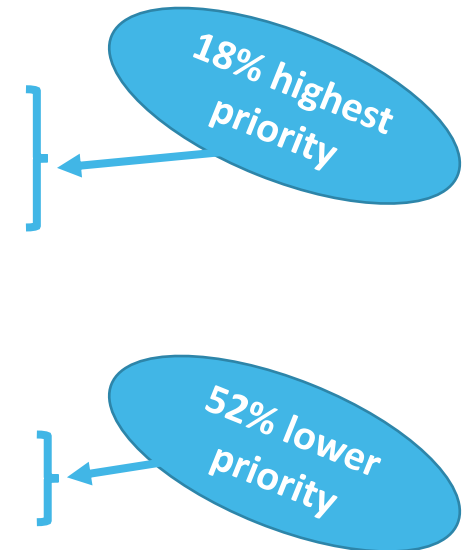
- Informs workflow and workforce planning
- Helps GPs meet QOF and other targets
- Shift between priority groups over time shows clinical impact

### Borough level searches

Total Population: ~446,000

Hypertension: 40,155

Priority Group	Definition	No. of patients	%
<b>PRIORITY 1</b>	Clinic BP $\geq 180/120$ mmHg	541	1%
<b>PRIORITY 2a</b>	Clinic BP $\geq 160/100$ mmHg	2,756	7%
<b>PRIORITY 2b</b>	Clinic BP $\geq 140/90$ mmHg and BAME + additional CV risk factor	3,827	10%
<b>Priority 2c</b>	No BP reading in last 18 months	5,902	15%
<b>Priority 3a</b>	Clinic BP $\geq 140/90$ mmHg BP if BAME or CVD, CKD, diabetes	3,818	10%
<b>Priority 3b</b>	BP $\geq 140/90$ mmHg - all other patients	2,347	6%
<b>Priority 4a</b>	BP $< 140/90$ mmHg (under 80 years)	18,013	45%
<b>Priority 4b</b>	BP $< 150/90$ mmHg (80 years and over)	2,951	7%





# Atrial Fibrillation: stratification and management

**Healthcare Assistants/other appropriately trained staff**

**Gather information e.g.** Up to date bloods, BP, weight, smoking status, run ChadsVasc, HASBLED, QRISK score

**Self management e.g.** Education (AF/stroke risk, bleeding risk, CVD risk reduction), signpost to shared decision making resources.

**Behaviour change e.g.** Brief interventions and signposting e.g. smoking, weight, diet, exercise, alcohol

**Stratification**

<b>Priority One</b> Not on anticoagulant  <a href="#">Offer anticoagulant if indicated</a>	<b>Priority Two</b> On anticoagulant & antiplatelet/s  <a href="#">Review need for antiplatelets</a>	<b>Priority Three</b> On Warfarin  <a href="#">Check TTR for optimal control</a>	<b>Priority Four</b> On DOAC Renal function >12m ago  <a href="#">Check CrCl and review dosage</a>	<b>Priority Five</b> On DOAC Renal function <12m ago  <a href="#">Routine review</a>
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**Prescribing Clinician**

**Optimise anticoagulation therapy and CVD risk reduction**

1. Review: blood results, risk scores & symptoms
2. Initiate or optimise anticoagulant
3. Consider switch to DOAC if poor control on warfarin
4. Check adherence and review any side effects
5. Review and mitigate bleeding risk: BP control, medication, alcohol, PPI
6. CVD risk – optimise BP and lipid management, if required

# John



## HCA – phone and video consultations and texts to share resources

- Asks about his understanding of blood pressure and cholesterol
- Provides information and signposts *British Heart Foundation* websites to support education and self management
- Shares videos showing him how to measure BP and send in results – activates AccuRx Florey for BP monitoring
- Asks about smoking and asks if he is ready to quit - signposts to *OneYou* website for a *personal quit plan*; and *signposts to local stop smoking service*
- Asks how he has been coping with lockdown and signposts to *EveryMindMatters* website for tips on mental wellbeing
- Collates information to support clinician consultation

# John



## HCA collates information to support clinical consultation

- Average home BP readings: 162/ 91mmHg
- BMI – 28kg/m<sup>2</sup>
- Blood results - T chol: 6.1mmol/L, HDL: 0.9mmol/L; non-HDL: 5.2mmol/L
- Smoking status – ~15 cigarettes per day
- QRisk2 score = 17.5% (smoker, sBP 162mmHg and TC / HDL ratio 6.7)
- Patient record shows that amlodipine has been picked up at regular intervals over the past 9 months

# John



## Prescribing Clinician – phone, video or face-to-face

- Reviews readings and blood results
- Highlights lifestyle issues – smoking, weight loss – refer for follow up by social prescriber
- Asks if John has any concerns or side effects with his medication and if he is taking it regularly – explores adherence issues
- Checks on complications and co-morbidities
- Adjusts his BP medication, if necessary
- Recommend statins – John will have a look at the BHF website link and shared decision making resources and think about it before follow-up appointment

<b>Modification</b>	<b>Recommendation</b>	<b>Approximate Systolic Blood Pressure Reduction (mm Hg)<sup>a</sup></b>
<b>Weight loss</b>	Maintain normal body weight	5–20 per 10-kg weight loss
<b>DASH-type diet*</b>	Consume a diet rich in fruits, vegetables, and low-fat dairy products with reduced saturated and total fat	8–14
<b>Reduced salt intake</b>	Reduce daily dietary sodium intake	2–8
<b>Physical activity</b>	Regular aerobic physical activity (at least 30 min/day, most days of the week)	4–9
<b>Moderation of alcohol intake</b>	Limit consumption to 2 drinks/day in men and 1 drink/day in women and lighter-weight persons	2–4

\*DASH, Dietary Approaches to Stop Hypertension. Effects of implementing these modifications are time and dose dependent and could be greater for some patients.

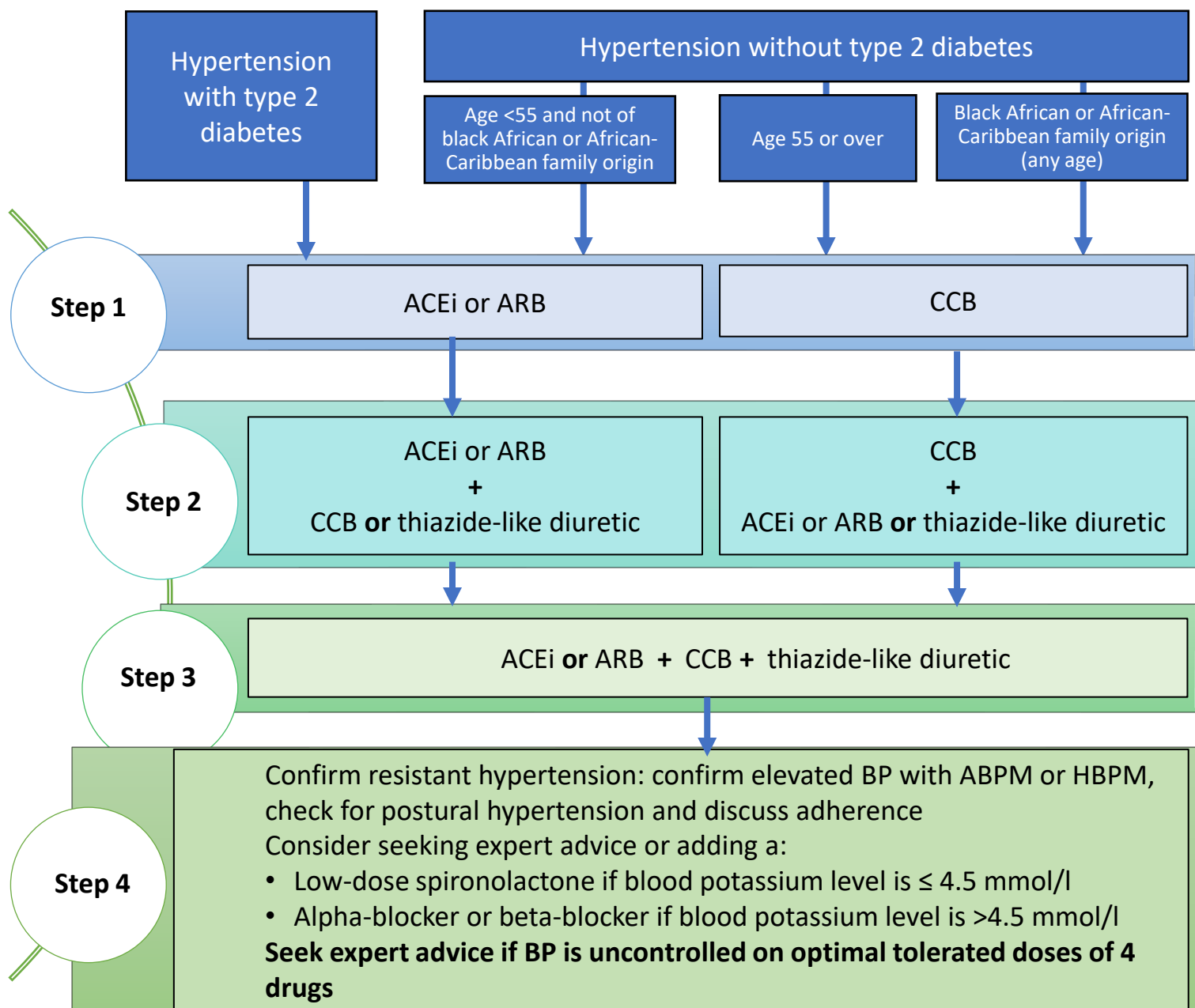
Vooradi S, Mateti UV. A systemic review on lifestyle interventions to reduce blood pressure. J Health Res Rev [serial online] 2016 [cited 2021 Apr 27];3:1-5.

Available from: <https://www.jhrr.org/text.asp?2016/3/1/1/173558>

**In monotherapy, most drugs achieve systolic BP reductions of ~ 10 to 15 mmHg**

[https://journals.lww.com/md-journal/Fulltext/2016/07260/Treatment\\_efficiency\\_of\\_anti\\_hypertensive\\_drugs\\_in.16.aspx](https://journals.lww.com/md-journal/Fulltext/2016/07260/Treatment_efficiency_of_anti_hypertensive_drugs_in.16.aspx)

# NICE Hypertension Treatment Pathway (NG136)



Use clinical judgement for people with frailty or multimorbidity

Offer lifestyle advice and continue to offer it periodically

**Monitoring treatment**

Use clinic BP to monitor treatment  
 Measure standing and sitting BP in people with:

- Type 2 diabetes or
- Symptoms of postural hypotension or
- Aged 80 and over

Advise people who want to self monitor to use HBPM. Provide training and advice

Consider AMPM or HBPM, in addition to clinic BP, for people with white-coat effect or masked hypertension

**BP targets**

Reduce and maintain BP to the following targets:

Age <80 years:

- Clinic BP  $<140/90$  mmHg
- ABPM/HBPM  $<135/85$  mmHg

**Postural hypotension:**

- Base target on standing BP

**Frailty or multimorbidity:**

- Use clinical judgement

Pathway adapted from NICE Guidelines (NG136) Visual Summary  
<https://www.nice.org.uk/guidance/ng136/resources/visual-summary-pdf-6899919517>  
 Abbreviations: ACEi: ACE inhibitor, ARB: Angiotensin II Receptor Blocker, CCB: Calcium Channel Blocker, ABPM: Ambulatory Blood Pressure Monitoring, HBPM: Home Blood Pressure Monitoring

# Time matters!

If systolic BP > 150 mm Hg...

- a delay of > 6 weeks before medication intensification

OR

- a delay of > 12 weeks before BP follow-up after antihypertensive medication intensification

**Increases the risk of an acute cardiovascular event or death.**

These findings support the importance of timely medical management and follow-up in the treatment of patients with hypertension

Xu et al. BMJ 2015;350:h158



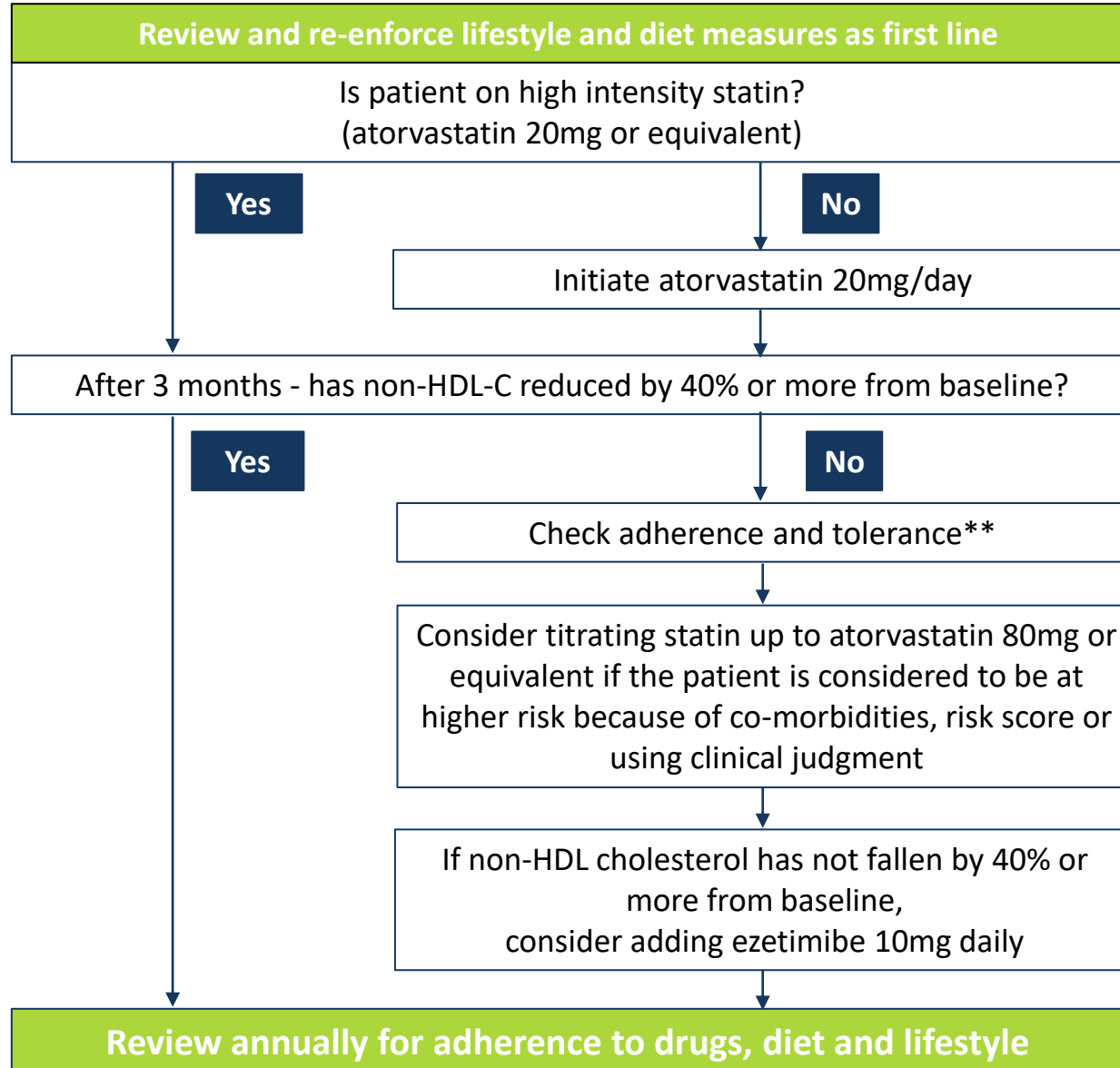
# John



## Follow up – phone, video or face-to-face

- Recheck and review bloods
- Follow up lifestyle issues – smoking, weight loss
- Address any concerns or side effects with the new medication and check if he is taking it regularly
- Titrate BP medication, if necessary
- Revisit statins and initiate atorvastatin 20mg daily after a shared decision

# Optimisation Pathway for Patients with High Cardiovascular Risk\* – Primary Prevention



Optimal High Intensity statin for Primary Prevention  
(High intensity statins are substantially more effective at preventing cardiovascular events than low/medium intensity statins)

Atorvastatin	20mg
Rosuvastatin	10mg

\* High cardiovascular risk:

- QRisk >10% in ten years
- CKD 3-5
- Type 1 Diabetes for >10 years or over age 40

\*\* If statin not tolerated, follow [statin intolerance pathway](#) and consider [ezetimibe](#) 10mg daily +/- [bempedoic acid](#) 180mg daily

# Shared Decision-Making Resources

Benefits per 10,000 people taking statin for 5 years	Events avoided
Avoidance of major CVD events in patients with pre-existing CVD & a 2mmol/l reduction in LDL	1,000
Avoidance of major CVD events in patients with no pre-existing CVD & a 2mmol/l reduction in LDL	500

Adverse events per 10,000 people taking statin for 5 years	Adverse events
Myopathy	5
Haemorrhagic Strokes	5-10
Diabetes Cases	50-100

Shared decision-making resources:

- [BHF information on statins](#)
- [Heart UK: Information on statins](#)
- [NICE shared decision-making guide](#)

# Atrial Fibrillation: stratification and management

Healthcare Assistants/other appropriately trained staff

**Gather information e.g.** Up to date bloods, BP, weight, smoking status, run ChadsVasc, HASBLED, QRISK score

**Self management e.g.** Education (AF/stroke risk, bleeding risk, CVD risk reduction), signpost to shared decision making resources.

**Behaviour change e.g.** Brief interventions and signposting e.g. smoking, weight, diet, exercise, alcohol

Stratification

<b>Priority One</b> Not on anticoagulant  <a href="#">Offer anticoagulant if indicated</a>	<b>Priority Two</b> On anticoagulant & antiplatelet/s  <a href="#">Review need for antiplatelets</a>	<b>Priority Three</b> On Warfarin  <a href="#">Check TTR for optimal control</a>	<b>Priority Four</b> On DOAC Renal function >12m ago  <a href="#">Check CrCl and review dosage</a>	<b>Priority Five</b> On DOAC Renal function <12m ago  <a href="#">Routine review</a>
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Prescribing Clinician

**Optimise anticoagulation therapy and CVD risk reduction**

1. Review: blood results, risk scores & symptoms
2. Initiate or optimise anticoagulant
3. Consider switch to DOAC if poor control on warfarin
4. Check adherence and review any side effects
5. Review and mitigate bleeding risk: BP control, medication, alcohol, PPI
6. CVD risk – optimise BP and lipid management, if required

# Sally



## **71 year old retired teacher with long standing atrial fibrillation, hypertension and prior myocardial infarction (2015)**

- Blood pressure was well controlled at last visit (over 18 months ago due to COVID-19)
- She is currently treated with aspirin 75mg daily, amlodipine 10mg daily, ramipril 5mg daily and atorvastatin 20mg daily
- She is highlighted as a priority one patient on the AF searches, as she is not currently anticoagulated to prevent stroke

# Sally



- What can we monitor and manage remotely?
- What lifestyle advice should we provide?
- Does she need amendments to her drug treatment?
  - For AF
  - For BP
  - For cholesterol control
- Are there any other concerns?

# Sally

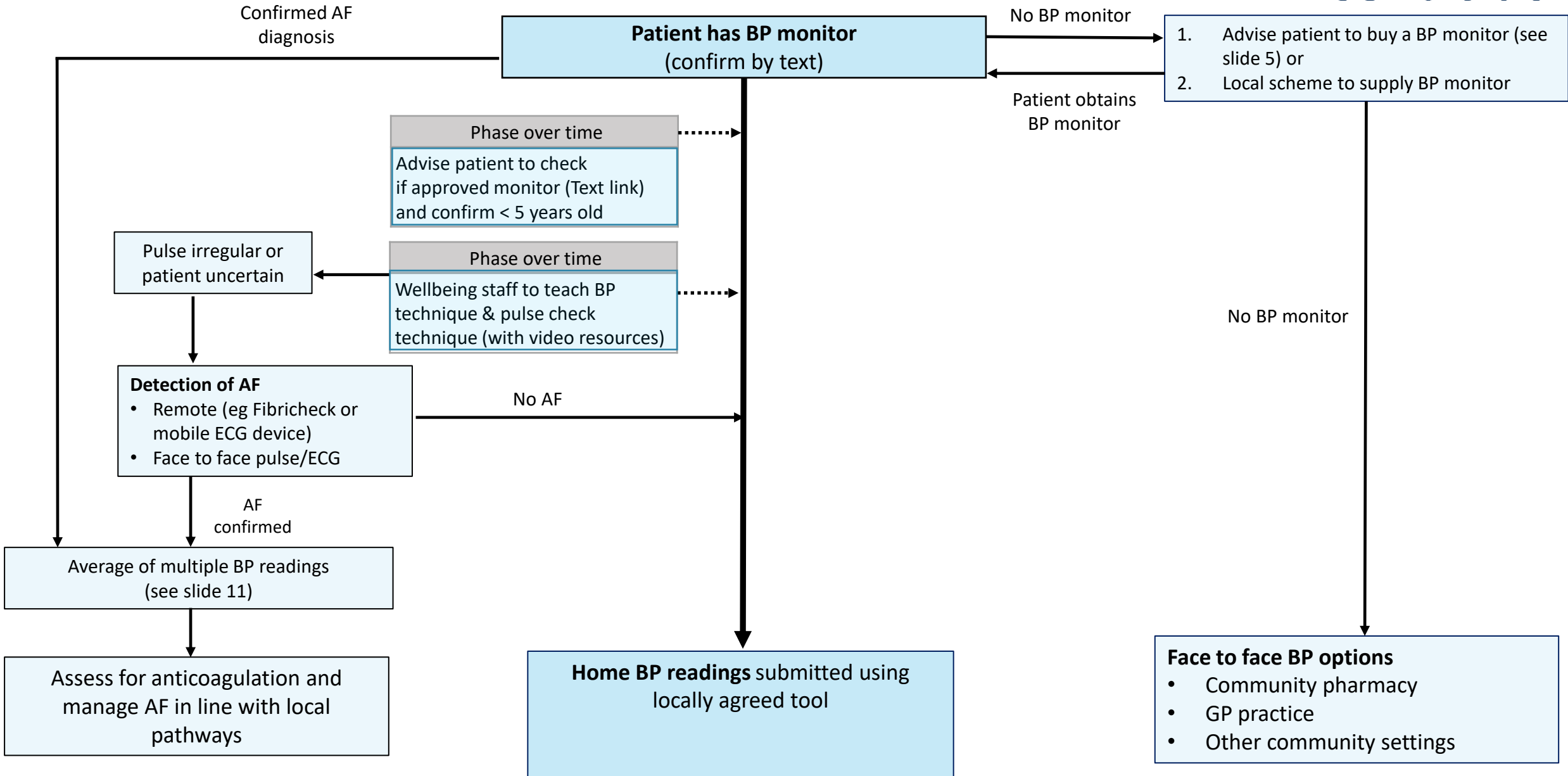


## HCA – phone and video consultations and texts to share resources using the UCLPartners consultation scripts

- Asks about her understanding of AF, blood pressure and cholesterol
- Provides information and signposts *British Heart Foundation* websites to support education and self management
- Shares videos showing her how to measure BP and send in results – activates AccuRx Florey for BP monitoring
- Shares videos on how to monitor heart rate and rhythm
- Asks how she has been coping throughout the pandemic and signposts to *EveryMindMatters* website for tips on mental wellbeing
- Collates information to support clinician consultation



# Home Blood Pressure Monitoring Pathway



# Sally



## HCA collates information to support clinical consultation following agreed protocol

- Average of home BP readings: 146/91mmHg
- Heart rate = 94bpm and irregular
- Calculates CHA<sub>2</sub>DS<sub>2</sub>VASc and HASBLED / ORBIT score
  - CHA<sub>2</sub>DS<sub>2</sub>VASc = 4
  - HASBLED score = 2 (1 if stop aspirin)
- Bodyweight: 76kg / BMI – 27kg/m<sup>2</sup>
- Blood results
  - Serum creatinine = 132micromol/L
  - T chol: 4.6mmol/L, HDL: 0.9mmol/L; non-HDL: 3.7mmol/L
- Patient record shows that medication has been picked up at regular intervals over the past 9 months

Stroke Risk			
CHA <sub>2</sub> DS <sub>2</sub> VASc		CHA <sub>2</sub> DS <sub>2</sub> VASc Score	Number of AF-related strokes avoided per 1,000 AF patients treated with anticoagulant therapy per year*
Congestive Heart failure	1		
Hypertension	1		
Age >75 years	2		
Diabetes	1	1	4
Prior stroke/TIA	2	2	17
Vascular disease	1	3	25
Age 65-74 years	1	4	38
Female	1	5	57

## Interpretation

1. Offer anticoagulation to all patients (male or female) with CHA<sub>2</sub>DS<sub>2</sub>VASc ≥ 2
2. Consider anticoagulation in all men with CHA<sub>2</sub>DS<sub>2</sub>VASc = 1
3. Antiplatelet monotherapy (Aspirin/Clopidogrel) is not recommended for stroke prevention in AF

# Bleeding Risk Assessment

## Bleeding Risk (HASBLED)

HASBLED Score		HASBLED Score	Number of major bleeds caused per 1,000 AF patients treated with anticoagulant therapy per year*
Uncontrolled hypertension (systolic >160mmHg)	1		
Abnormal liver function (Bili >2x ULN or AST/ALT/ALP >3x ULN)	1		
Abnormal renal function (Creat>200µmol/L, dialysis, transplant)	1	1	4
Prior stroke/TIA	1	2	12
History of major bleed or predisposition (anaemia)	1	3	15
Labile INR (on warfarin (TTR<60%))	1	4	21
Age >65 years	1		
Medication usage predisposing to bleeding (Antiplatelets/ NSAIDS)	1		
Alcohol (>8units/week)	1		

### Interpretation

- HASBLED ≥3 indicates a higher bleeding risk
- Address modifiable bleeding risk factors to reduce HASBLED score e.g. lower BP, review concomitant drug therapy, reduce alcohol intake
- Consider a proton pump inhibitor to reduce upper GI bleeding  
<https://www.mdcalc.com/has-bleed-score-major-bleeding-risk>

## Bleeding Risk - ORBIT

ORBIT Score**		ORBIT Score	Risk level	Number of major bleeds caused per 1,000 AF patients treated with anticoagulant therapy per year
Haemoglobin <13 mg/dL for males and <12 mg/dL for females, or haematocrit <40% for males and <36% for females	2			
Age >74 years	1	0-2	Low	24
Bleeding history - Any history of GI bleeding, intracranial bleeding, or haemorrhagic stroke	2	3	Medium	47
GFR <60 mL/min/1.73 m <sup>2</sup>	1	4-7	High	81
Treatment with antiplatelet agents	1			

\*\*NICE 2021 indicated that ORBIT is the best tool for bleeding risk assessment, other tools may need to be used until it is embedded in clinical pathways and electronic systems

### Interpretation

- Address modifiable bleeding risk factors to reduce bleeding risk e.g. lower BP, review concomitant drug therapy, reduce alcohol intake
- Consider a proton pump inhibitor to reduce upper GI bleeding  
<https://www.mdcalc.com/orbit-bleeding-risk-score-atrial-fibrillation>

# Sally



## Prescribing Clinician – phone, video or face-to-face

- Reviews BP readings, blood results and scores
- Highlights lifestyle issues – weight loss, diet and exercise – refers for follow up by social prescriber / health and wellbeing link worker
- Asks if Sally has any concerns about or side effects with her current medication and if she is taking it regularly – explores adherence issues
- Discusses the need for anticoagulation in atrial fibrillation to prevent stroke
  - Offers DOAC, discusses benefits and risks, makes shared decision, ensures appropriate dosing and monitoring, refers for community pharmacy NMS
  - Stops the aspirin to reduce bleeding risk
- Other considerations for further follow up
  - Optimise BP control – consider increasing ramipril dose
  - Optimise statin for secondary prevention – aim for high dose high intensity statin (e.g. Atorvastatin 80mg daily)

# Initiating Direct Oral Anticoagulants (DOACs)\*

## Action

1

Check the patient has Non-Valvular AF and has no other contraindications to therapy

2

Check CHA<sub>2</sub>DS<sub>2</sub>VASc

3

Check:

- Bloods for renal function, LFTs, clotting and FBC
- Bodyweight
- Creatinine Clearance (CrCl)

4

Check bleeding risk with HASBLED score or ORBIT score, in line with local guidance

5

Shared Decision Making (SDM) - agree which DOAC to initiate. Correct choice of dose

6

Counsel patient and agree a plan for follow up including monitoring blood tests

## Resource

DOAC contraindicated if mechanical prosthetic valve or known moderate to severe mitral stenosis  
DOAC contraindicated if pre-existing clotting disorder, such as antiphospholipid syndrome (APS) pregnant, breastfeeding or planning pregnancy, mechanical heart valves – seek specialist advice. For full list of contraindications see SmPCs at [www.medicines.org.uk](http://www.medicines.org.uk)

Offer anticoagulation if [CHA<sub>2</sub>DS<sub>2</sub>VASc](#) ≥ 2 (consider if = 1 in men)

### [Creatinine clearance calculation](#)

Dabigatran contraindicated if CrCl < 30ml/min

Apixaban, Edoxaban, Rivaroxaban, are not recommended if CrCl < 15ml/min

Address modifiable risks identified by [HASBLED or ORBIT score](#) to reduce bleeding risk. Review other medication – [including antiplatelets](#) and NSAIDs; consider PPIs

### [DOAC dosing](#)

### [DOAC monitoring](#)

Provide written information, an anticoagulant alert card and point of contact should issues arise

**\*NICE guidance 2021 recommends DOACs first line. If DOAC is unsuitable, consider warfarin following local pathways for initiation & monitoring**

# DOACs: Calculating Creatinine Clearance

**eGFR should not be used to guide dosing decisions for DOACs<sup>1</sup>**

**Use actual bodyweight (within 1 year) to calculate Creatinine Clearance (CrCl)**

- If weight < 50kg or > 120kg or if BMI >40 : seek specialist advice

**Use renal function checked within last 3 months**

**Calculate CrCl using Cockcroft Gault equation**

- Be cautious with calculators integrated into GP IT systems as they may default to ideal bodyweight resulting in underdosing of DOAC
- Use [MDCalc](#)

CrCl	Monitoring interval
>60ml/min	Annually
30-60ml/min	6-monthly
<30ml/min	3-monthly

**Adjust DOAC dose if necessary**

See slide on [DOAC dosing in NVAf](#)

# Anticoagulation in People Taking Antiplatelet Therapy

- Antiplatelet therapy is not recommended for stroke prevention in AF; oral anticoagulants should be used.
- Some patients with AF are on antiplatelet therapy as treatment for vascular disease. See guidance below

Indication for antiplatelets	Antiplatelet	Action when initiating anticoagulation for AF
Primary prevention of CVD	Antiplatelet monotherapy	Stop antiplatelet therapy (antiplatelet therapy not recommended for primary prevention of CVD)
Secondary prevention of CVD <ul style="list-style-type: none"> <li>• Stroke / Transient Ischaemic Attack (TIA)</li> <li>• Stable coronary heart disease (CHD)</li> <li>• Peripheral arterial disease (PAD)</li> </ul>	Antiplatelet monotherapy or Low dose rivaroxaban with aspirin	Stop antiplatelet therapy  Increase DOAC dose (to AF stroke prevention dose) and stop aspirin
Patients within 12 months of an ACS or stent placement (cardiac or vascular)	Aspirin plus clopidogrel, ticagrelor or prasugrel	Seek specialist advice to agree the preferred drug regimen. Triple therapy (dual antiplatelet plus anticoagulant) duration must be clearly defined.
Patients more than 12 months after an ACS or stent placement (cardiac or other vascular)	Antiplatelet monotherapy / dual antiplatelet therapy  If dual antiplatelet required long-term	Stop antiplatelet therapy, unless otherwise advised by specialist (check discharge summary)  Seek specialist advice – do not initiate triple therapy without advice

**When using an anticoagulant plus an antiplatelet – add a proton pump inhibitor (PPI)**



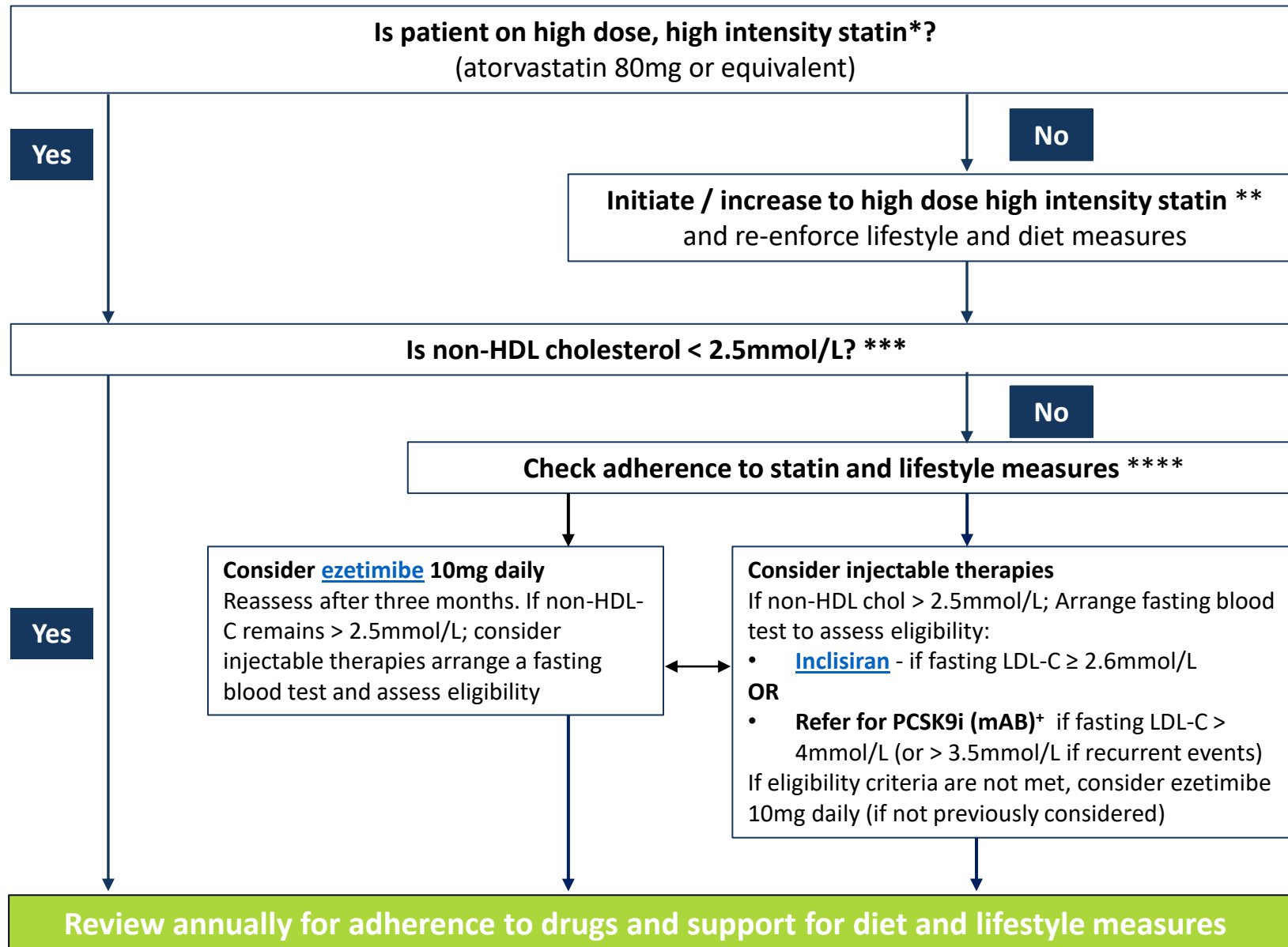
# Detection and Management of Hypertension in Patients with Atrial Fibrillation

Blood pressure should be checked in patients with AF to identify undiagnosed hypertension. If hypertension is suspected due to a high BP reading, the diagnosis should be confirmed using ABPM or home BP checks over 7 days.

Checking BP in patients with established hypertension:

- Patients **with** AF:
  - Submit 2 BP readings each morning and evening over 4 days. Calculate the average systolic and diastolic values.
- Please refer to UCLP hypertension pathway for detailed guidance:  
[https://s31836.pcdn.co/wp-content/uploads/Hypertension-Framework\\_UCLPartners-LTCs-April-2021-v2.0.pdf](https://s31836.pcdn.co/wp-content/uploads/Hypertension-Framework_UCLPartners-LTCs-April-2021-v2.0.pdf)

# Optimisation Pathway for Secondary Prevention



**Optimal High Intensity Statin for secondary prevention**  
(High intensity statins are substantially more effective at preventing cardiovascular events than low/medium intensity statins)

Atorvastatin	80mg
Rosuvastatin	20mg

\* Dose may be limited if:

- eGFR<30ml/min
- Drug interactions
- Intolerance
- Older age / frailty

\*\* See [statin intensity table](#)

\*\*\* Current NICE Guidance recommends at least a 40% reduction in non- HDL cholesterol

\*\*\*\* **If statin not tolerated**, follow statin intolerance pathway and consider [ezetimibe](#) 10mg daily +/- [bempedoic acid](#) 180mg daily. If non HDL-C remains > 2.5mmol/L despite other lipid lowering therapies consider injectable therapies.

+ NICE Guidance: [Evolocumab](#), [Alirocumab](#)

# Resources to support proactive care

## UCLP Resources

1. Comprehensive search & stratification tools for EMIS and SystemOne
2. Protocols for HCA and similar roles to provide structured support for patient education, self management and behaviour change
3. Slide sets for clinicians – focus on the *how to* of optimising clinical management in real world primary care
4. Workforce training framework
5. Implementation guidance
6. Case studies
7. Digital resources for staff and patients
  - Understanding your condition
  - How to ..... check your BP, check your feet, identify red flags etc
  - New technologies eg Healthy.io, fibricheck
  - Brief interventions eg smoking, diet, activity
  - Videos – eg running the search tools

[www.uclpartners.com/proactive-care/](http://www.uclpartners.com/proactive-care/)

# Resources for clinicians – supporting co-morbidity management

Atrial Fibrillation

UCLPartners

UCLPartners Proactive Care Framework:

Atrial Fibrillation – managing AF and cardiovascular risk

April 2021

Blood Pressure

UCLPartners

UCLPartners Proactive Care Framework:

Hypertension – managing high blood pressure and cardiovascular risk

April 2021

BP & Lipid management included in pathways for AF, BP, cholesterol and T2 Diabetes

Cholesterol

UCLPartners

UCLPartners Proactive Care Framework:

Lipid management

April 2021

T2 Diabetes

UCLPartners

UCLPartners Proactive Care Framework:

Type 2 Diabetes – managing diabetes and cardiovascular risk

April 2021



### What is high blood pressure (hypertension)?

Understanding Blood Pressure (Subtitles)

Watch later Share

### How to check your blood pressure using a blood pressure machine

How to measure your blood pressure at home

Your machine needs to be validated/safe and easy to use. You may wish to check your machine at the surgery or with your pharmacist to ensure readings are fairly similar in the first instance.

Watch later Share

### Find out about cholesterol

What is cholesterol?	Having high cholesterol	Cholesterol tests and results
Cholesterol is a blood fat which plays a vital role in how all of our cells work, it's also needed for digestion, to make Vitamin D, and to make hormones which keep your bones strong. <a href="#">Learn more.</a>	Too much cholesterol in the blood can lead to diseases of the heart and blood vessels. High cholesterol can be caused by lifestyle but can also be inherited, and most people don't know they have it. <a href="#">Learn more.</a>	Anyone can have high cholesterol, even if you're young, slim and otherwise healthy. You can't feel it, so the only way to find out your cholesterol level is to get a cholesterol test. <a href="#">Learn more.</a>

### What is Atrial Fibrillation?

Watch later Share

Watch on YouTube

### How to check your pulse

You may be able to tell if you have a regular or irregular heart beat by checking your pulse. This is important because an irregular heart beat may be a sign you have a heart condition.

Our Senior Cardiac Nurse, Emily McGrath, shows you how to check your pulse:

Emily McGrath  
Senior Cardiac Nurse

Watch later Share

### Reduce your cholesterol

Our experts answer the 5 most common questions to help you reduce your cholesterol.

# Resources to support behaviour change

Home > For Your Body

**ONE YOU**

How Are You? quiz | Check your health | **Quit smoking** | Drink less | Eat better | Move more

## QUIT SMOKING

Stopping smoking is one of the best things you'll ever do for your health. Get started with free expert support, stop smoking aids, tools and practical tips.

Home > For Your Body

**ONE YOU**

How Are You? quiz | Check your health | Quit smoking | Drink less | **Eat better** | Move more | Lose weight

## EAT BETTER

What you eat, and how much, is so important for your health and your waistline. Try these easy ways to eat better every day.

### EASY MEALS APP

Our free Easy Meals app is a great way to eat foods that are healthier for you. Search recipes by meal time and create shopping lists.

Get the Easy Meals app

Home > For Your Body

**ONE YOU**

How Are You? quiz | Check your health | Quit smoking | Drink less | Eat better | **Move more**

## MOVE MORE

Moving is good for your body and mind. Try these easy ways to move more every day.

Home

Better health every mind matters

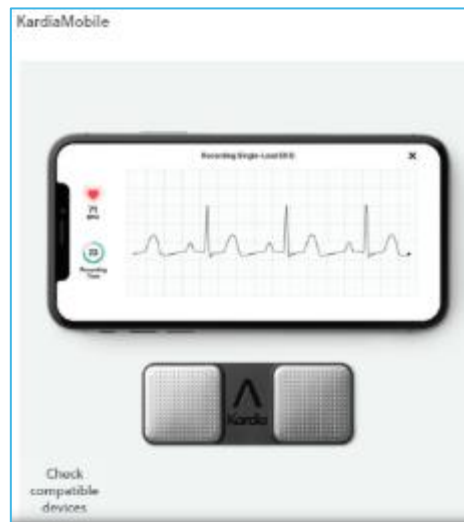
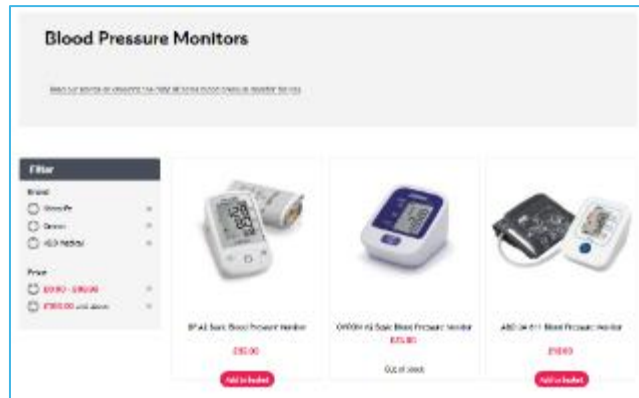
Your Mind Plan quiz | Parents | Youth | Anxiety | Low mood | Stress | Sleep | Urgent

## Every Mind Matters

### Looking after your mental health

Having good mental health helps us relax more, achieve more and enjoy life. Get advice and practical tips to help you look after your mental health and

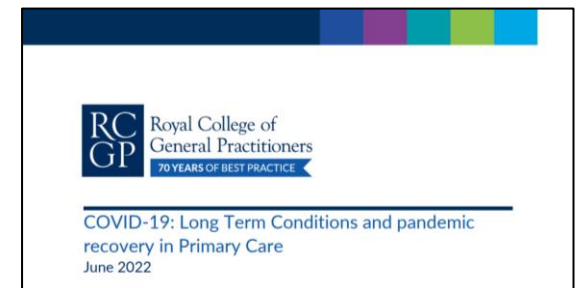
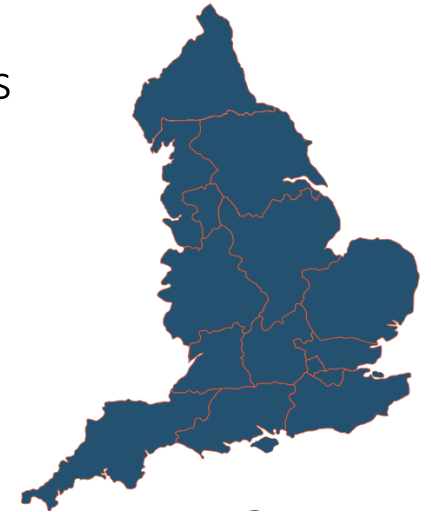
# Resources to support remote management





# National uptake of the UCLP Proactive Care Frameworks

1. Widely welcomed by GPs and primary care teams:
  - Over 8,000 downloads of the search tools and over 40,000 unique website visits
2. Adopted into NHS England's [NHS@Home](#) & implementation underway in 14 Integrated Care Systems
3. [National Blood Pressure Optimisation Programme](#) prioritises implementation of the UCLP Proactive Care Framework for Hypertension by all 15 AHSNs
4. [RCGP's Long Term Condition Recovery Guidance June 2022](#) recommends UCLPartners Proactive Care Frameworks to support prioritisation





The banner features a dark blue background with a light blue curved top-left corner. In the top-left corner, the UCLPartners logo is displayed with a green arc above the text 'UCLPartners' and a small arrow pointing left followed by 'Main website'. The main text on the left reads 'Proactive care frameworks' in large white font, followed by a paragraph: 'We have developed a series of proactive care frameworks to support primary care teams to manage patients with cardiovascular and respiratory long-term conditions.' On the right side, there is a large graphic of a heart outline in green, centered within a circular arrangement of white horizontal lines of varying lengths that create a ripple effect.

UCLPartners  
← Main website

## Proactive care frameworks

We have developed a series of proactive care frameworks to support primary care teams to manage patients with cardiovascular and respiratory long-term conditions.

[www.uclpartners.com/proactive-care](http://www.uclpartners.com/proactive-care)

# Thank you

For more information please contact:

[Primarycare@uclpartners.com](mailto:Primarycare@uclpartners.com)

[www.uclpartners.com](http://www.uclpartners.com)  
[@uclpartners](#)