National Stroke Programme
NHS England

Dr Deb Lowe
National Clinical Director for Stroke

NHS Long Term Plan August 2019

National stroke service model
May 2021

National service model for an
integrated community stroke
service Feb 2022
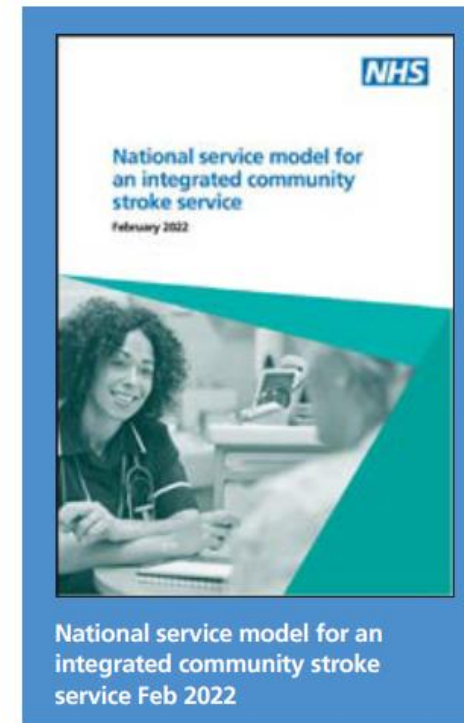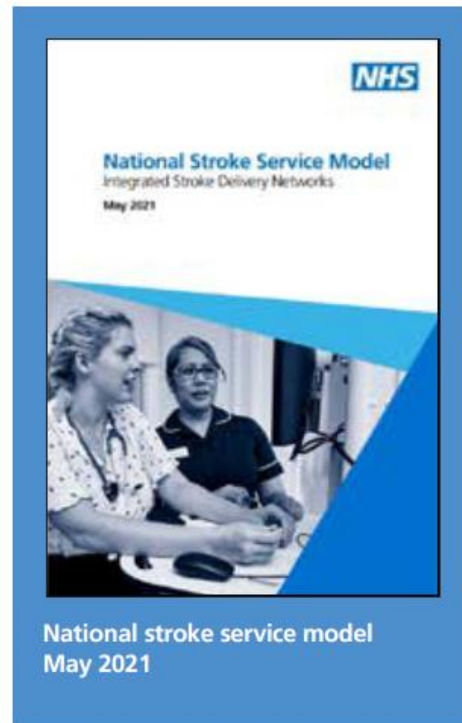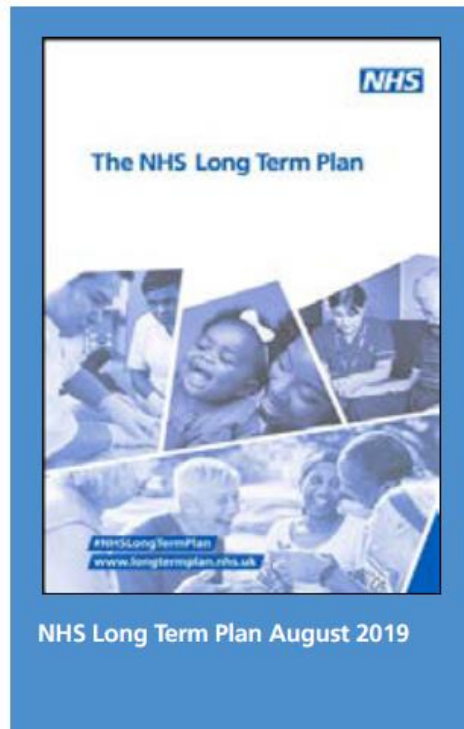
Stroke as a priority

NHS

- Stroke is the leading cause of disability and the fourth largest cause of death in the UK[1]

- Every year **100,000** people in the UK are admitted to hospital having had a stroke, **50%** stroke survivors will be left with disability (physical, communication, cognitive, psychological, visual, fatigue)[1]

- Stroke costs the UK economy **£26 billion** per year, including **£3.4bn** cost to NHS**, £5.2bn** to social care and **£15.8bn** in informal care[2]

- This is forecast to rise to up to **£91bn** by 2035. The average cost of somebody having a stroke is **>£45,000** over the following 12 months[2]

- By **2035**, the number of people having a stroke will **increase by almost half** and the number of stroke survivors by a third[3]

- Half of stroke survivors are living with two or more co-morbidities[4]

- Higher mortality & incidence in those with highest deprivation and ethnic minority groups

1. https://www.england.nhs.uk/ourwork/clinical-policy/stroke/. Accessed September 2019;
2. Stroke Association 2017. Current, future and avoidable costs of stroke in the UK;
3. NHS Long Term Plan, January 2019
4. Gallacher KI et al J Cormorbid 2018; 8: 1-8

National Stroke Programme:

Recognises benefits of:

- Improved primary and secondary prevention

- Optimisation of hyper-acute stroke pathway with Comprehensive / Acute Stroke Unit Care

- Expanding access to mechanical thrombectomy services

- Higher intensity models for stroke rehabilitation and life after stroke support (including psychological care and vocational rehabilitation, structured post discharge support)

Supports the delivery of:

- Integrated Stroke Delivery Networks to enable delivery of 7-day services as listed above and support STPs/ICSs to optimise pathways as required

- Modernisation of workforce (via Health Education England) – focus on cross-specialty/cross-profession accreditation, sustainability

- Scaling of technologies e.g. CT perfusion, use of automated scan reporting for CT Angiography (A.I. – artificial intelligence), telemedicine.

We know what a good stroke service should provide

- Effective primary prevention
- Public education about stroke symptoms and how to respond
- Hyperacute stroke care for about first 72 hours
- Acute stroke unit care for whole admission including in-patient rehabilitation
- Early supported discharge
- Longer term rehabilitation as needed
- Vocational rehabilitation and psychological support
- Secondary prevention
- Patient and carer support and education
- Participation in research
- Continuous quality improvement

NATIONAL CLINICAL GUIDELINE FOR STROKE
for the United Kingdom and Ireland

2023 edition

www.strokeguideline.org

Data and Audit

www.strokeaudit.org

GIRFT
Stroke Programme

National Clinical Lead – Dr David Hargroves
Senior Clinical Advisor – Dr Deb Lowe

NHS

GIRFT
GETTING IT RIGHT FIRST TIME

NHS

GIRFT
GETTING IT RIGHT FIRST TIME

Stroke
GIRFT Programme National Specialty Report

By Dr David Hargroves and Dr Deb Lowe
GIRFT Clinical Lead for Stroke and Senior Clinical Advisor for Stroke

April 2022

GIRFT is part of an aligned set of programmes within NHS England and NHS Improvement

29 recommendations:

[Example] Insight from GIRFT's data
Less than 12% of patients with a suspected stroke are taken directly to CT for on arrival in hospital.

[Example] View from our visits:
Physiotherapy: 83% of services were 7 day, but 53% of these were funded for 5 and stretched over 7 days.

IN PRACTICE
Video assisted triage
University College London Hospitals NHS Foundation Trust and the London Ambulance Service

https://www.gettingitrightfirsttime.co.uk/reports/stroke-girft-report/

Department
of Health &
Social Care

Strategy Unit

NHS

Policy paper

Major conditions strategy: case for change and our strategic framework
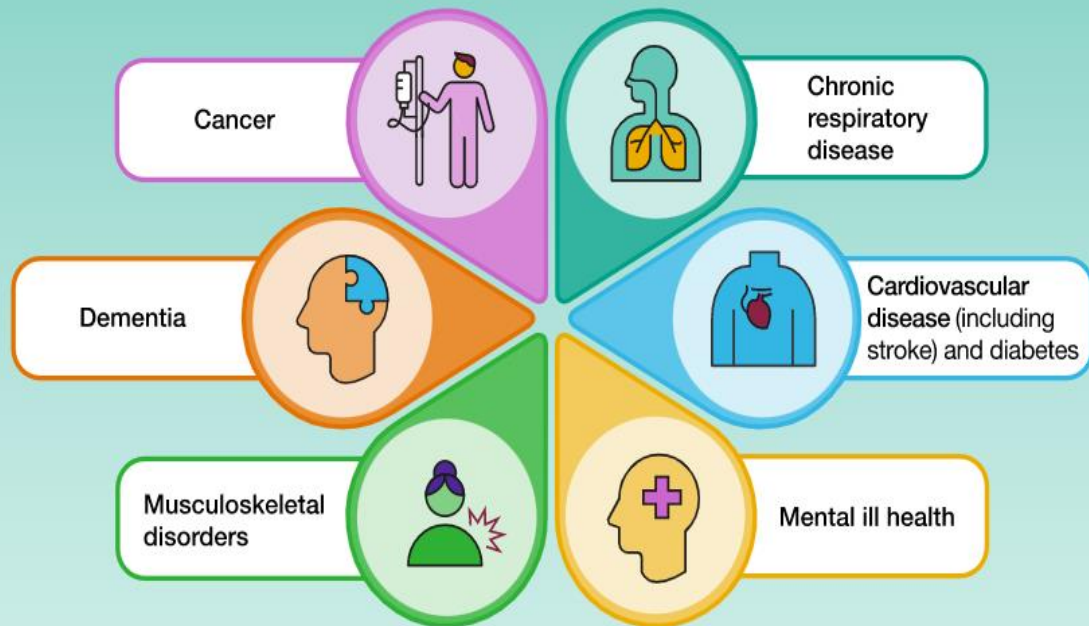
Updated 21 August 2023

https://www.gov.uk/government/publications/major-conditions-strategy-case-for-change-and-our-strategic-framework/major-conditions-strategy-case-for-change-and-our-strategic-framework--2

Major conditions strategy: case for change and our strategic framework

Updated 21 August 2023

Together six groups of major health conditions drive over 60% of mortality and morbidity in England, and it is increasingly common for patients to experience two or more of these conditions at the same time.

Cancer

Chronic respiratory disease

Dementia

Cardiovascular disease (including stroke) and diabetes

Musculoskeletal disorders

Mental ill health

Clinical Policy Unit Team Away Day September 2022

Our strategic framework focuses on:

Primary prevention: acting across the population to reduce risk of disease

Secondary prevention: halting progression of conditions or risk factors for an individual

Early diagnosis: so we can identify health conditions early, to make treatment quicker and easier

Prompt and urgent care: treating conditions before they become crises

Long-term care and treatment: in both NHS and social care settings

To have the greatest impact, we will prioritise change in five areas:

1 Rebalancing the health and care system towards proactive prevention by **managing personalised risk factors**

2 Embedding early diagnosis and treatment **in the community**

3 Managing multiple conditions effectively – including through **aligning generalism and specialism**

4 Better connection and **integration between physical and mental health services**

5 Shaping services and support around people, giving them **more choice and control over their care**

Cardiovascular Disease Prevention – A National and Local Priority

UCLPartners

One death every 3 minutes

100,000 hospital admissions - heart attack

38,000 stroke deaths each year

£19 billion

Driver of inequalities

27% all UK deaths due to CVD

1 admission every 5 minutes

Stroke: leading cause of disability

Overall annual CVD costs the UK economy

CVD drives health inequalities: accounting for 1/4 life expectancy gap
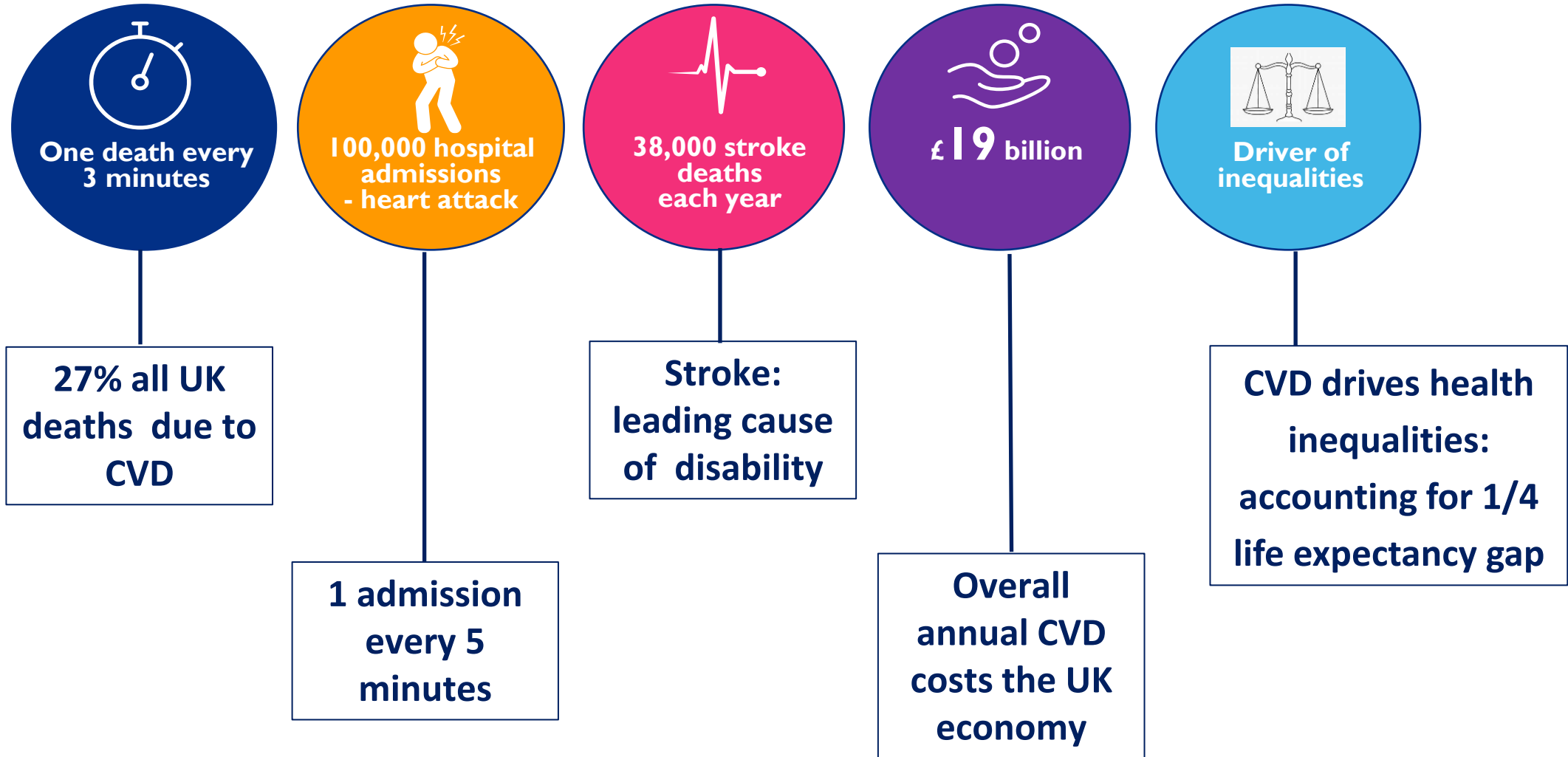
But CVD is highly preventable…

The CVDPREVENT Third Annual Audit Report

The CVDPREVENT [Third Annual Audit Report](#) has been published by NHS Benchmarking Network, presenting analysis of GP recorded data for relevant patient cohorts up to **March 2022**.

Have you been keeping up with your local data? The CVDPREVENT [Data & Improvement Tool](#) is even more up to date, with data up to **December 2022** published on 18th April 2023. Find out where the key improvement opportunities are for the prevention CVD in your patch.

This national primary care audit has been a large, collaborative piece of work that we're proud to support, commissioned as a response to the national aims of the NHS Long Term Plan.

Delivered by NHS Benchmarking Network, the Office for Health Improvement & Disparities (OHID) – National Cardiovascular Intelligence Network (NCVIN) team, and NHS Digital, the audit is a recommended resource for identifying variation, trends, and opportunities in the prevention and management of CVD conditions. To find out more, access the site:
www.nhsbenchmarking.nhs.uk/cvdprevent.

#CVDPREVENT
New data now live on the Data & Improvement Tool!

CVDPREVENT Update - data up to March 2023

CVDPREVENT is a national primary care audit that automatically extracts routinely held GP data about the prevention of cardiovascular disease.

Hypertension

Hypertension: blood pressure monitoring

78.48% 78.38% 79.74% 81.92% 86.89%

Mar-22 Jun-22 Sep-22 Dec-22 Mar-23

March 2023 data showed that **86.89%** of patients, with GP recorded hypertension had a BP reading in the last 12 months. This was an increase of 8.41 percentage points from March 2022.

Hypertension: treatment to recommended age specific thresholds

59.96% 68.15%

March 2022 March 2023

- Not treated to threshold
- Treated to threshold
- National target

The percentage of patients with hypertension treaded to the age-appropriate threshold in March 2023 was 68.15%, an improvement of 8.19 percentage points from March 2022. The 2023/24 National Priorities and Operational Planning Guidance sets out a target of 77% by March 2024.
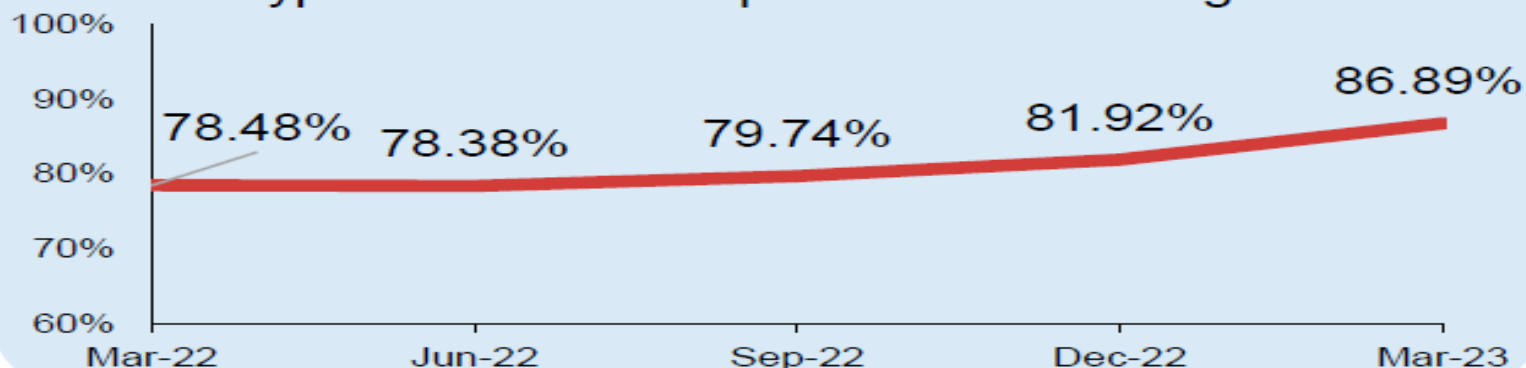
CVDPREVENT Update - data up to March 2023

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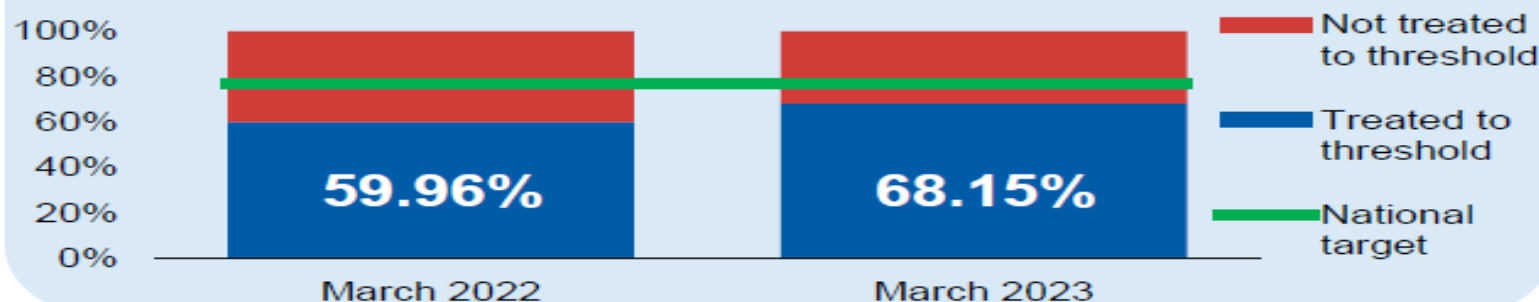
Atrial fibrillation

AF: treatment with anticoagulants

■ Treated with anticoagulation drug therapy

■ Not treated with anticoagulation drug therapy
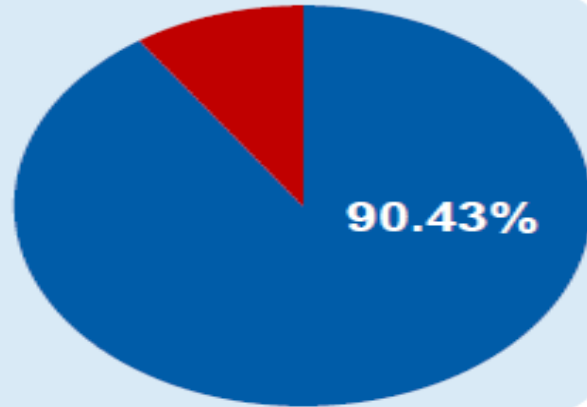
90.43%

March 2023 data showed **90.43%** of people with AF (atrial fibrillation) at high-risk of stroke had a current prescription of anticoagulation drug therapy. This means that the 90% target as set out alongside the NHS Long Term Plan has been met.

Cholesterol

Cholesterol: QRISK of 20% or more treated with LLT

■ Treated with LLT

■ Not treated with LLT
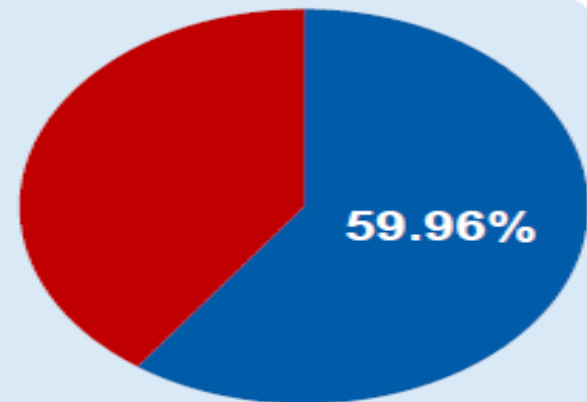
59.96%

The March 2023 data showed that **59.96%** of people with no CVD diagnosis and a recorded QRISK score of 20% or more were receiving LLT (lipid lowering therapy), which rounds up to the 60% target as set out in the 2023/24 National Priorities and Operational Planning Guidance.

Size of the Prize - England
Cholesterol Optimisation to Prevent Heart Attacks and Strokes at Scale

UCLPartners

UCLPartners

% patients >18 years with GP recorded CVD who are currently treated with lipid lowering therapy

95%
331,391
additional patients

90%
202,262
additional patients

98,959

Progress Mar-23
82.2%

Baseline Mar-22
81.4%

Ambition 1

Ambition 2

Ambition 3

Potential cardiovascular events and deaths prevented in 3 years..

One hundred **strokes** =£1,391,000 cost to the NHS

One hundred **strokes** =£951,100 cost to social care*
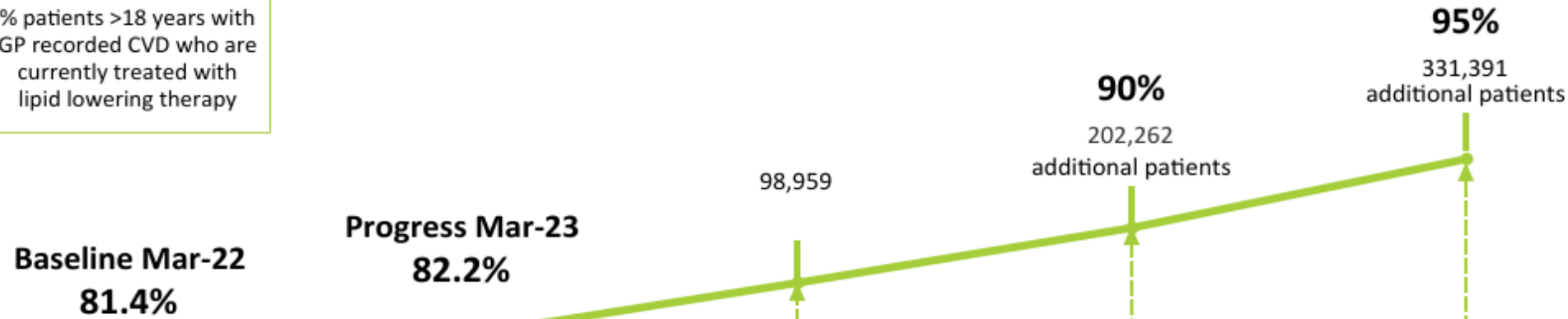
One hundred **heart attacks** =£746,600 cost to the NHS

5,938	CV events	12,136	CV events	19,883	CV events
715	deaths	1,462	deaths	2,396	deaths

References

1. Collin et al. (2016), Interpretation of the evidence for the efficacy and safety of statin therapy, *The Lancet*, 388, 2532-2561. DOI: https://doi.org/10.1016/S0140-6736(16)31357-5

2. Royal College of Physicians (2016). Sentinel Stroke National Audit Programme. Cost and Cost-effectiveness analysis.

3. Kerr, M (2012). Chronic Kidney disease in England: The human and financial cost

Size of the Prize - England
BP Optimisation to Prevent Heart Attacks and Strokes at Scale

UCLPartners

UCLPartners

% patients >18 years with hypertension, blood pressure treated to target

Baseline Mar-20
70.5%

Recovery progress, Mar-23
68.2%

70.5%
182,089 additional patients

74%
460,298 additional patients

77%
696,352 additional patients

80%
932,406 additional patients

48.5%
COVID impact 20/21

Ambition 1	Ambition 2	Ambition 3	Ambition 4
Potential cardiovascular events and deaths prevented in 3 years[1] and estimated savings[2,3]			
1,093 — heart attacks	2,762 — heart attacks	4,178 — heart attacks	5,594 — heart attacks
Up to £8.2M saved	Up to £20.6M saved	Up to £31.2M saved	Up to £41.8M saved
1,631 — strokes	4,122 — strokes	6,236 — strokes	8,350 — strokes
Up to £22.7M saved	Up to £57.3M saved	Up to £86.7M saved	Up to £116.1M saved
874 — deaths	2,209 — deaths	3,342 — deaths	4,476 — deaths

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

Size of the Prize - Cheshire and Merseyside ICB
Cholesterol Optimisation to Prevent Heart Attacks and Strokes at Scale

UCLPartners

% patients >18 years with GP recorded CVD who are currently treated with lipid lowering therapy

Baseline Mar-22
81.0%

Progress Mar-23
81.8%

86%
5,944 additional patients

90%
11,617 additional patients

95%
18,709 additional patients

One hundred **strokes** = £1,391,000 cost to the NHS

One hundred **strokes** = £951,100 cost to social care*

One hundred **heart attacks** = £746,600 cost to the NHS

	Ambition 1		Ambition 2		Ambition 3	
	Potential cardiovascular events and deaths prevented in 3 years..					
	357	CV events	697	CV events	1,123	CV events
	43	deaths	84	deaths	135	deaths

References
1. Collin et al. (2016), Interpretation of the evidence for the efficacy and safety of statin therapy, *The Lancet*, 388, 2532-2561. DOI: https://doi.org/10.1016/S0140-6736(16)31357-5
2. Royal College of Physicians (2016). Sentinel Stroke National Audit Programme. Cost and Cost-effectiveness analysis.
3. Kerr, M (2012). Chronic Kidney disease in England: The human and financial cost
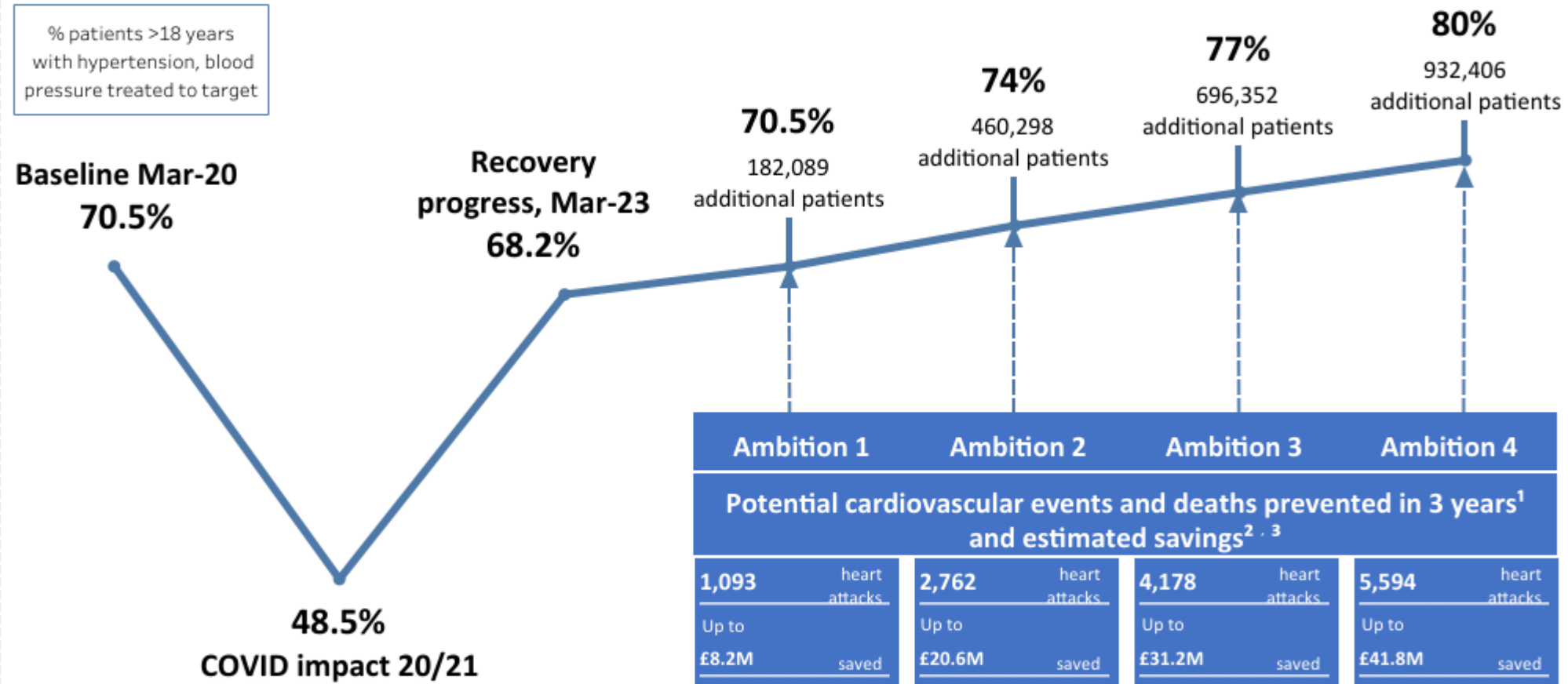
Modelling

Data source: CVDPrevent. Briefing note: CVDPrevent online methodology annex v1 December 2022

Potential events calculated with NNT (Collins, 2016). For patients with known CVD, lipid lowering medicines for five years to prevent cardiovascular events and death: 1 in 10 for cardiovascular events, 1 in 83 for mortality. * Stroke costs to social care are given for the 1st year following stroke only.

Size of the Prize - Cheshire and Merseyside
BP Optimisation to Prevent Heart Attacks and Strokes at Scale

UCLPartners

UCLPartners

% patients >18 years with hypertension, blood pressure treated to target

Baseline Mar-20
70.5%

Recovery progress, Mar-23
66.7%

45.1%
COVID impact 20/21

70.5%
15,256 additional patients

74%
29,180 additional patients

77%
41,176 additional patients

80%
53,172 additional patients

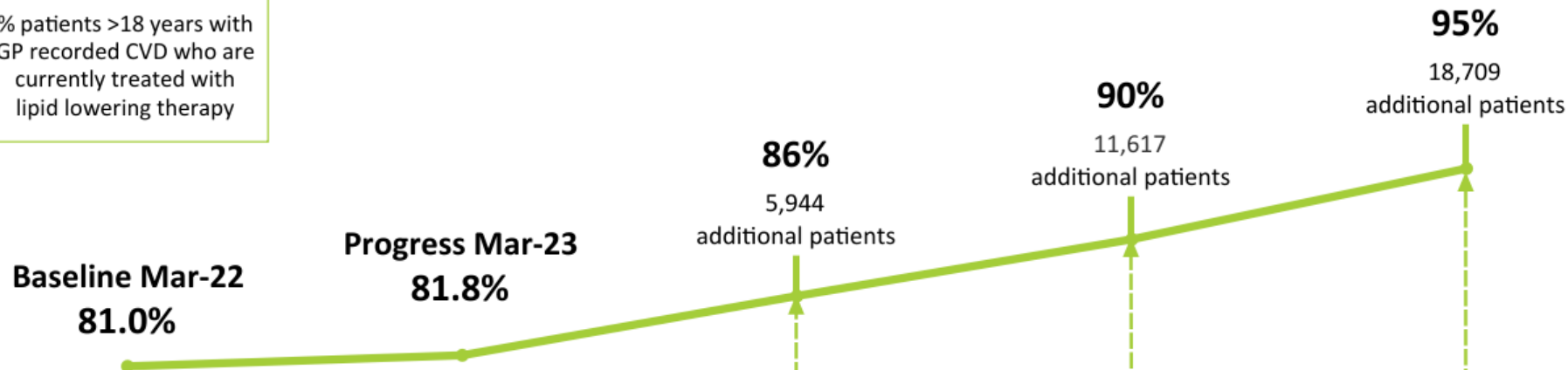| Ambition 1	Ambition 2	Ambition 3	Ambition 4
Potential cardiovascular events and deaths prevented in 3 years[1] and estimated savings[2,3]			
92 heart attacks	175 heart attacks	247 heart attacks	319 heart attacks
Up to £0.7M saved	Up to £1.3M saved	Up to £1.8M saved	Up to £2.4M saved
137 strokes	261 strokes	369 strokes	476 strokes
Up to £1.9M saved	Up to £3.6M saved	Up to £5.1M saved	Up to £6.6M saved
73	140	198	255

References
1. Public Health England and NHS England 2017 Size of the Prize
2. Royal College of Physicians (2016). Sentinel Stroke National Audit Programme. Cost and Cost-effectiveness analysis.
3. Kerr, M (2012). Chronic Kidney disease in England: The human and financial cost
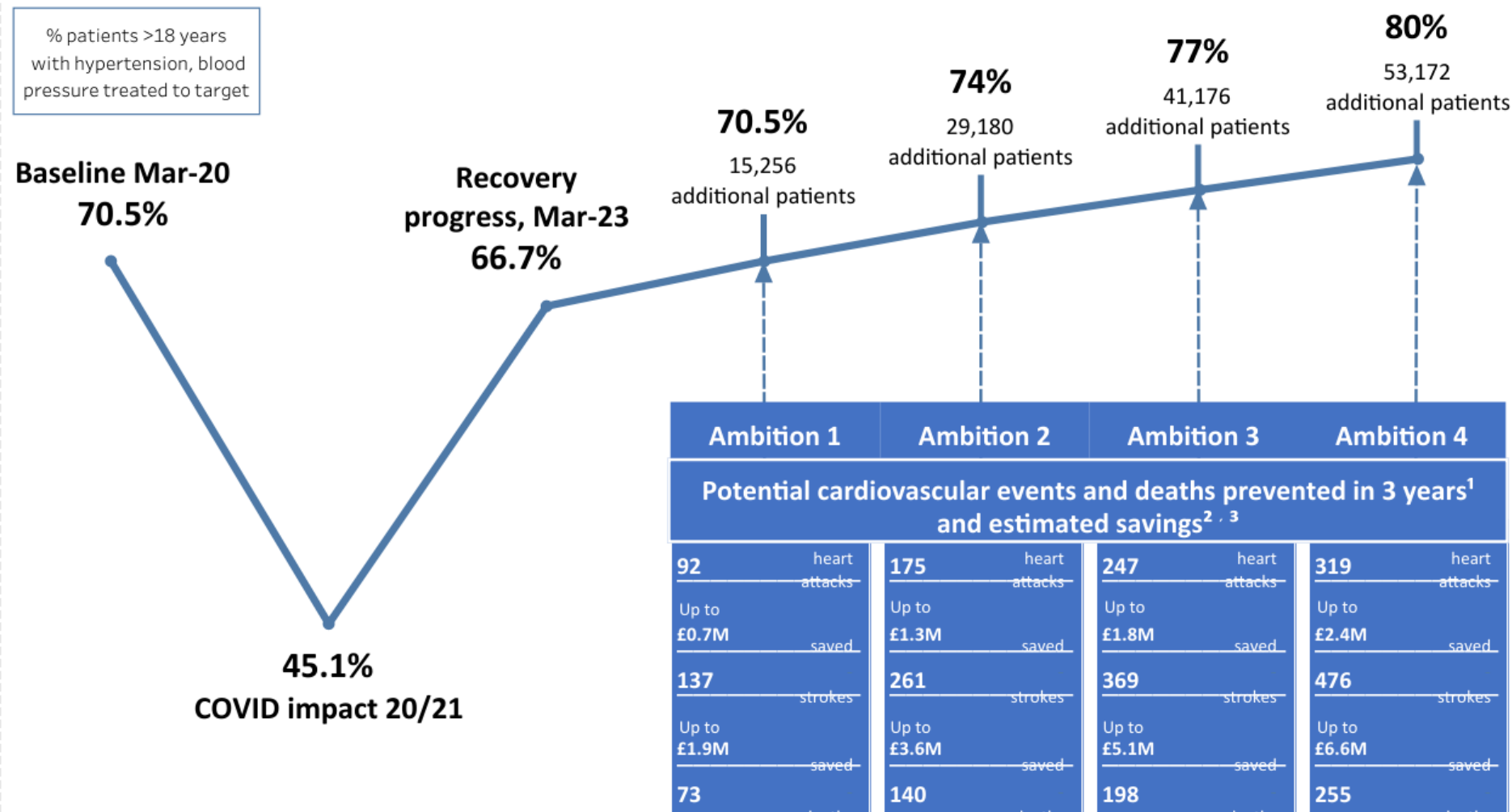
Modelling
Data source: CVDPrevent. Briefing note: CVDPrevent online methodology annex v1 December 2022
Potential events calculated with NNT (theNNT.com). For blood pressure, anti-hypertensive medicines for five years to prevent death, heart attacks, and strokes: 1 in 100 for heart attack, 1 in 67 for stroke.

The CVD prevention challenge in primary care

UCLPartners

1. Late diagnosis, suboptimal treatment and unwarranted variation in the management of high-risk conditions for CVD is widespread and entrenched

   - 1 in 3 people with hypertension are undiagnosed. (ONS)

   - 30% of people with diagnosed hypertension are not treated to target. (CVDprevent)

   - 20% of people with existing CVD are not on essential cholesterol lowering treatment. (CVDprevent)

   - There is limited support for patient education and self-management

2. Treatment optimisation has shown limited progress in decades.

3. It is critical to acknowledge that these usually silent high risk conditions are hard to manage in real world general practice

   - Complexity, multimorbidity, multiple priorities and time pressure are the norm.

   - Demand in primary care is overwhelming - there is never spare capacity

   - Contracts and incentives are not aligned to need and outcomes

4. Shifting the dial in CVD prevention will only happen by supporting primary care to do things differently … and at scale

Optimisation Pathway for Secondary Prevention[3,4]

UCLPartners

Is patient on high dose, high intensity statin[1]?
(atorvastatin 80mg or equivalent)

Yes → → **No** →

Initiate / increase to high dose high intensity statin[2]
and re-enforce lifestyle and diet measures

Review within 3 months: has non-HDL-C reduced by 40% or more from baseline[3]
OR is non-HDL-C less than 2.5mmol/L (or LDL < 1.8mmol/L)[4]

Yes → → **No** →

Check adherence to statin and lifestyle measures[5]

Consider ezetimibe 10mg daily.
Reassess within three months. If non-HDL-C remains > 2.5mmol/L; consider injectable therapies arrange a fasting blood test and assess eligibility

Consider injectable therapies :
Arrange fasting blood test to assess eligibility:
- **Inclisiran** - if fasting LDL-C ≥ 2.6mmol/L
OR
- **Refer for PCSK9i (mAB)[6]** if fasting LDL-C > 4mmol/L (or > 3.5mmol/L if recurrent events)

At any point consider iscosapent ethyl in addition to statins +/- other lipid lowering therapies if fasting triglycerides ≥1.7 mmol/litre **AND** LDL > 1.04 mmol/litre and ≤2.6 mmol/litre

Review annually, assessing treatment to target, adherence to drugs and offering support for diet and lifestyle measures

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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

1. Dose may be limited, for example if:
   - CKD: eGFR<60ml/min – recommended starting dose - atorvastatin 20mg
   - Drug interactions
   - Drug intolerance
   - Older age / frailty
2. See statin intensity table. Use shared-decision making and incorporate patient preference in treatment and care decisions.
3. NICE CG181 CVD Risk Assessment and Reduction
4. NICE approved Summary of National Guidance for Lipid Management
5. 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.
6. NICE Guidance: Evolocumab, Alirocumab

Stroke PREMs
(Patient Reported Experience Measures)
2022/23

Working in partnership

Stroke Association | NHS

National report available on Future NHS:
https://future.nhs.uk/strokecommunity

Integrated Stroke Delivery Networks

- 20 delivery networks, working under the governance structure of the 7 NHSE Regions

- Local 'footprint' mapping to hub (Neuroscience Centre) and spoke stroke services

- Delivery of 'end to end' stroke pathway from pre-hospital to Early Supported Discharge, including CVD prevention

Integrated Stroke Delivery Networks
Providing improved stroke outcomes in every ICS

Patient information and engagement is consistent throughout the single system via a patient passport

Data and information are digital, interactive and accessible to all, across the whole system

Systems are aligned across the full pathway with strong clinical and network leadership

Modernised and upskilled workforce are recruited in line with system need
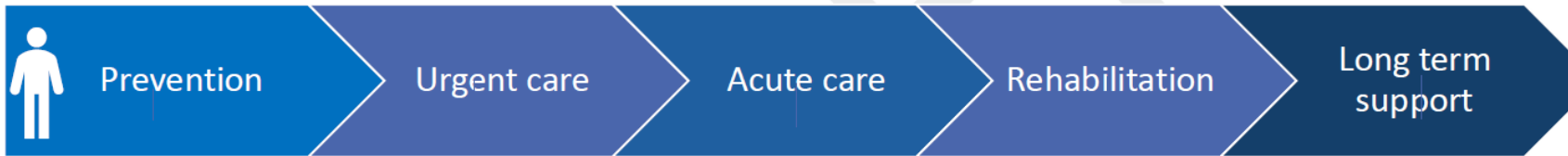
Prevention	Urgent care	Acute care	Rehabilitation	Long term support
Primary Care with Primary Care Networks (PCNs) Community pharmacy	999 / 111 Ambulance Service Comprehensive Stroke Centres / Acute Stroke Centres	Acute Stroke Centres	Stroke Recovery Centres ESD and community services Social care	Primary care Community services Voluntary sector Social care
Improved detection, primary and secondary prevention	Improved training and technology Increased availability of thrombectomy and stroke thrombolysis	Clear transfer pathways Seven-day nursing and therapy services	Comprehensive ESD for all appropriate patients for a minimum of six weeks Seven-day services	Comprehensive rehabilitation, and personalised care and support for as long as the person needs it

Over 10 years thousands of premature deaths will be avoided, tens of thousands of disabilities will be prevented or lessened, and hundreds of thousands will benefit from **better integrated person-centred care**

Stroke Specific Leadership Academy

- Supporting and creating leaders within stroke

- Multi-professional

- Delivered by the Royal College of Physicians

- Modules developed and delivered by the King's Fund

- Recruitment for 24/25 intake soon

National Stroke Programme
NHS England

Dr Rebecca Fisher
Senior Programme Manager, NHSE Stroke Programme

NHS Long Term Plan August 2019

National stroke service model
May 2021

National service model for an integrated community stroke service Feb 2022
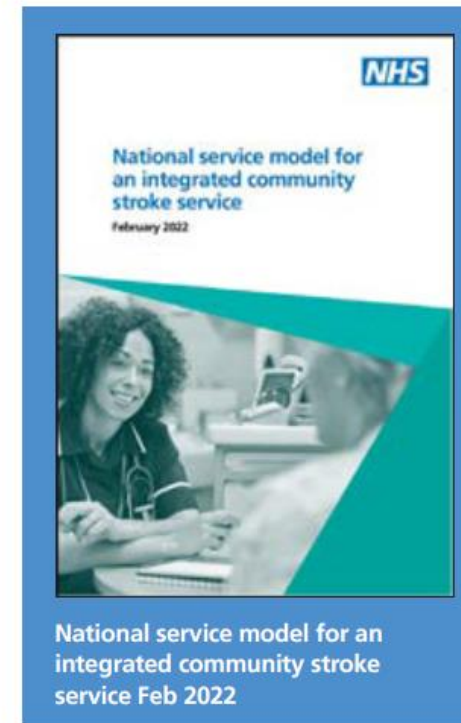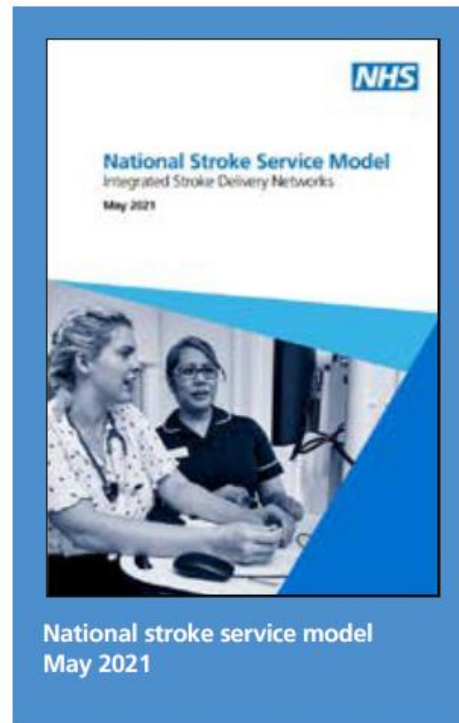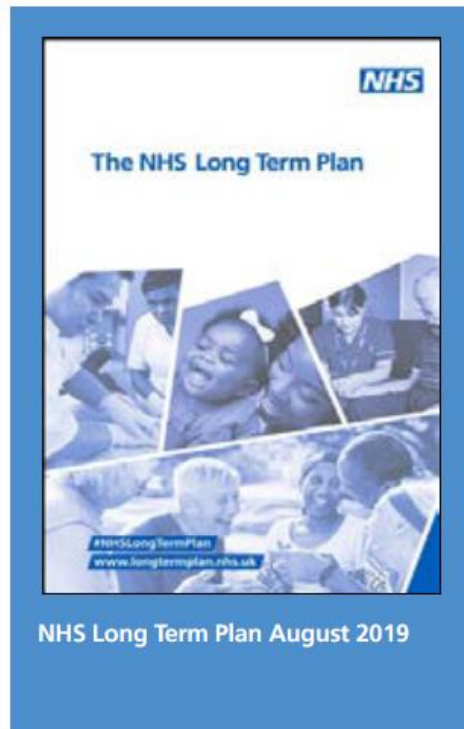
Rehabilitation and Life after Stroke Workstream

NHS

Addressing NHS Long Term plan priorities:

- Implementation and further development of higher intensity care models of rehabilitation
- Out of hospital
- Delivered in partnership with voluntary organisations including the Stroke Association
- Support improved outcomes to six months and beyond
- Provide a comprehensive dataset that meets the needs of all stakeholders

Medium term strategy

- Manage ill-health well; Focus on home and community-based care

Set direction, drive transformation of services: to implement high intensity and needs based model of stroke rehabilitation

Enable expert networks: through Integrated Stroke Delivery networks and the Stroke quality improvement for Rehabilitation (Squire) programme

Support and Develop People and drive transformation: Staff training and development using the ACP credentialing system

Drive improvement: through national networks and use of audit and feedback in the community - Sentinel Stroke National Audit programme (SSNAP) expansion

Stroke Rehabilitation matters

- Reflects a substantial evidence base for stroke rehabilitation
- Complex interventions and organisation of service delivery
- Intensity of stroke rehabilitation; interdisciplinary working
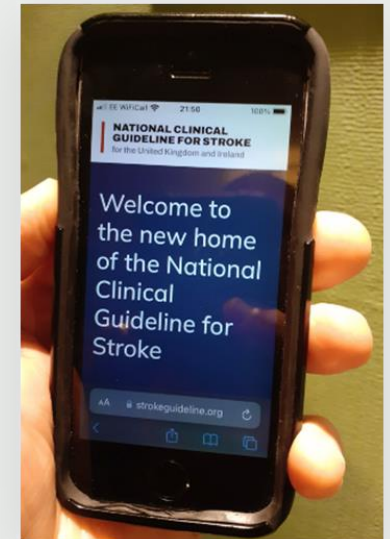
National Stroke Rehabilitation Pilots

Demonstrating impact and providing transferable learning for **how the Integrated Community Stroke Service (ICSS) model can be implemented more widely and in different geographical contexts**.

- Use of rehabilitation assistants and interdisciplinary team working to increase **intensity and dose** of rehabilitation provided and ensure delivery of rehab is **needs-based**.

- Increased access to **psychological and vocational rehabilitation** by introducing specialist training to the multidisciplinary team (MDT), creating specialist regional roles that work across multiple teams and introducing well-being training

- Peer and family support through collaborative working with the voluntary sector, development of peer support hubs and **buddy roles to increase social participation**

- Successful cross-organisational working between community and hospital based stroke care and **health and social care** to avoid transfer delays and to tailor the rehabilitation and care offer to the patient (e.g. social care workers as part of the multidisciplinary team)

Testing of a core dataset to inform SSNAP expansion so that delivery of care and patient outcomes are routinely measured

NHS

ICSS Core Components

Virtual multidisciplinary expert panel
Stroke consultant
Rehabilitation Lead therapist
Stroke specialist nurse
Neuro/clinical psychologist
Vocational Occupational therapist
Social worker
Community specialist: stroke buddy team

Stroke buddy role
Taking charge: empowering patients to navigate their recovery journey, supplemented by a "Safety Net" when they face obstacles

Early Supported
Discharge Team

High
Intensity

TRANSITION
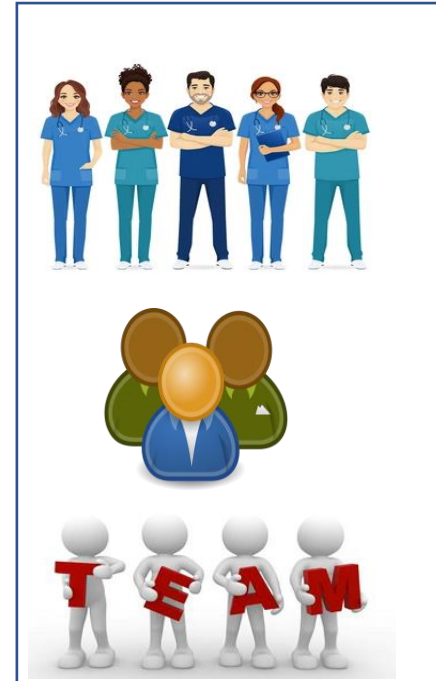
Intensity of rehab needs

Low
Intensity

Community
Rehab Team

Also delivered
to carers and
families

National Stroke Rehabilitation Pilots

Northumbria
A key feature: needs-based stroke rehabilitation delivery beyond 6 weeks

Northampton
A key feature: well-being training for all MDT members

North Central London
A key feature: MDT panel & buddy system supporting activities of daily living and social participation

Therapy delivery: frequency & dose

Days of therapy received vs. days applicable for therapy - Northumbria

Face to face therapy

■ Days applicable for therapy   ■ Days of therapy received

Northumbria ESD Team

Discipline	Days of therapy received	Days applicable for therapy
Physiotherapy	4	63
Occupational therapy	3	53
Speech and language therapy	3	74
Psychology	4	138
Rehab assistant	39.5	70
Nurse	2	62
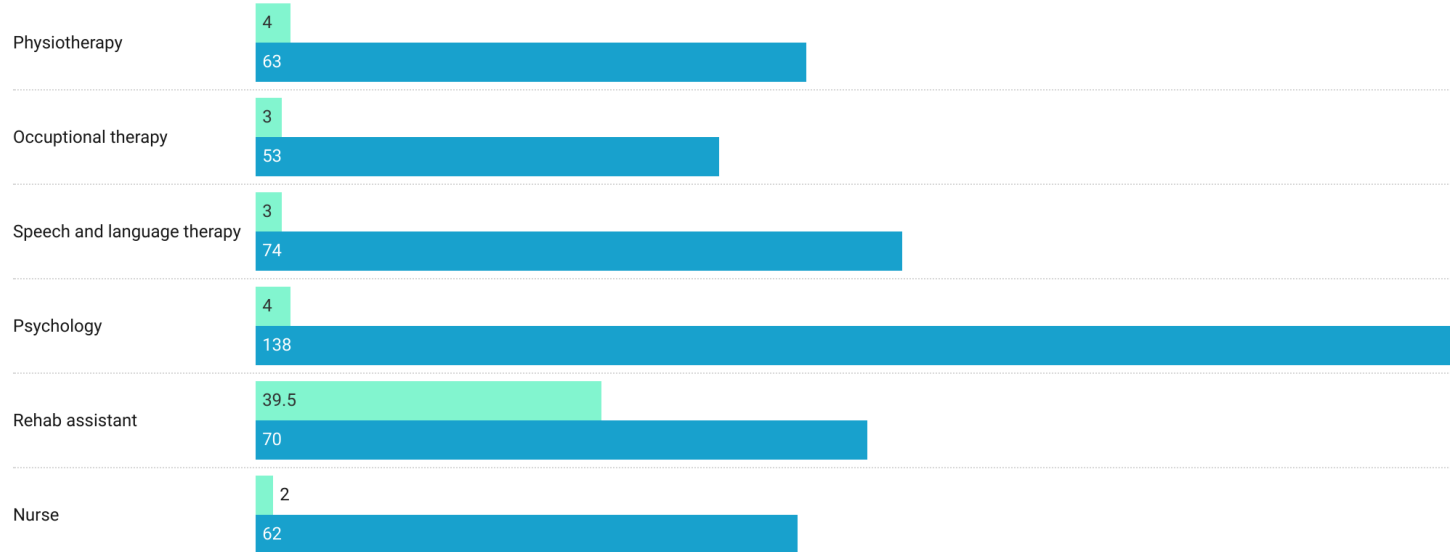
476 patients median length of stay: 64 days
Different cohorts and applicability time periods
Caution with summing across disciplines (55.5 days)

% of days on which therapy is received

	April-Jun 22	Oct-Dec 22	Northumbria
PT	16.8%	16.6%	7.6%
OT	13.5%	13.4%	7.1%
SLT	10.8%	10.7%	5.7%
Psych	3.7%	3.5%	8.1%
RA	-	-	38.7%

In person therapy minutes - Northumbria

Northumbria ESD Team

Created with Datawrapper
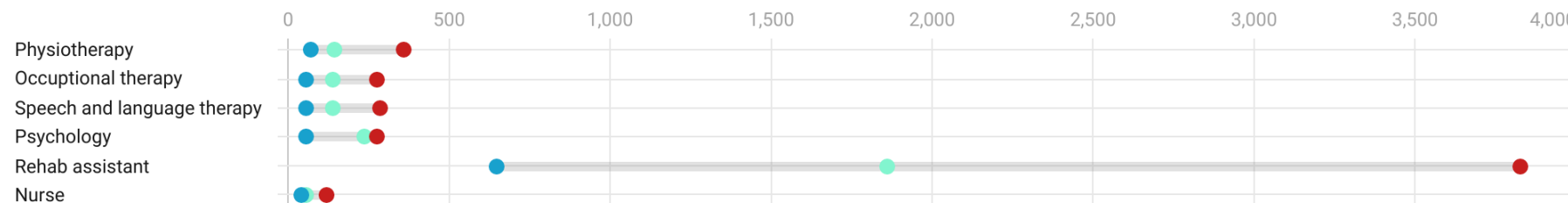
Summary – therapy delivery

- Collection of weekly data was a challenge and led to issues with data quality

- Adhering to SSNAP rules, difficulty getting data out of local systems and into SSNAP, manual data entry – need refresh of rules and provide upload function

- Data interpretation – minutes/ day only when therapy is received; % days over eligible period

- Consider minutes and days *per month*

- Consider the focus being what the patient receives rather than who is providing it

- Useful to have breakdown of face to face & remote delivery

- **Testing a refreshed SSNAP dataset**

DATE	NAME OF TEAM MEMBER	OT Min	OT total	Physio Min	Physio Total
14.10.21	Rebecca	40	40		
14.10.21	Debbie	10	50		
15.10.21	Debbie	45	95		
15/10/21	Andy	50	145		
16.10.21	Debbie	45	190		
16.10.21	Debbie	15	205		
16.10.21	Jenny	30	235		
17.10.21	Joanne	45	280		
17.10.21	Joanne	30	310		
17.10.21	Joanne	30	340		
18.10.21	Linda	40	380		
18.10.21	Jenny	30	410		
19.10.21	Jenny	20	430	15	15
19.10.21 8.15am	Adam	40	470		
19.10.21	M. Scailes	30	500		
20.10.21	Debbie	35	535		
20.10.21	Hannah	30	565	15	30
21.10.21	Hannah	30	595	30	60
22.10.21	Jenny	30	625		
22.10.21	Jenny	30	655		
23.10.21	Jenny	30	685		
24.10.21	Linda	40	725		
24.10.21	Linda			25	85

Patient outcomes: Barthel score

Changes in Barthel score

Excluding not entered

■ Independent ■ Minimal dependency ■ Moderate dependency ■ Severe dependency ■ Total dependency

Northumbria ESD Team

Hospital discharge	66%	21%	9%
First assessment at this team	63%	22%	9%
Discharge from this team	87%	8%
Six month assessment	92%	6%

Northampton ESD/Community Stroke Team

Hospital discharge	61%	17%	10%	7%	4.9%
First assessment at this team	62%	15%	10%	7%	6%
Discharge from this team	76%	10%	6%	4.8%
Six month assessment	77%	8%	8%	4.6%

North Central London

Hospital discharge	64%	13%	8%	6%	10%
First assessment at this team	63%	14%	8%	6%	9%
Discharge from this team	70%	9%	7%	5%	9%
Six month assessment	72%	9%	7%	4.6%	7%

Source: SSNAP • Created with Datawrapper

Outcome measures routinely recorded across stroke care pathway

Measure of the service as a whole

Improvements in levels of dependency observed on discharge from the service which were sustained at 6 months

Barthel
<20: Total dependency
20-39: Severe dependency
40-59: Moderate dependency
60-79: Minimal dependency
80-100: Independent

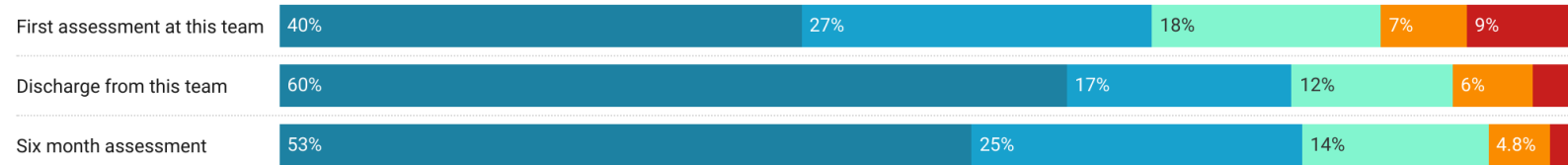**Informing SSNAP dataset changes: inclusion of patient outcome measures**

Improving provision of psychological care

Changes in PHQ score

Excluding not entered

■ Minimal depression ■ Mild depression ■ Moderate depression ■ Moderately severe depression ■ Severe depression

Northumbria ESD Team

First assessment at this team	40%	27%	18%	7% 9%
Discharge from this team	60%	17%	12%	6%
Six month assessment	53%	25%	14%	4.8%

Northampton ESD/Community Stroke Team

First assessment at this team	58%	25%	10%	5%
Discharge from this team	74%	17%	6%	
Six month assessment	70%	13%	8%	6%

North Central London

|				
First assessment at this team	55%	22%	12%	7%
Discharge from this team	62%	21%	11%	4.9%
Six month assessment	65%	22%	9%	4%

Source: SSNAP • Created with Datawrapper

Improvements in depression levels observed on discharge from the service which were sustained at 6 months

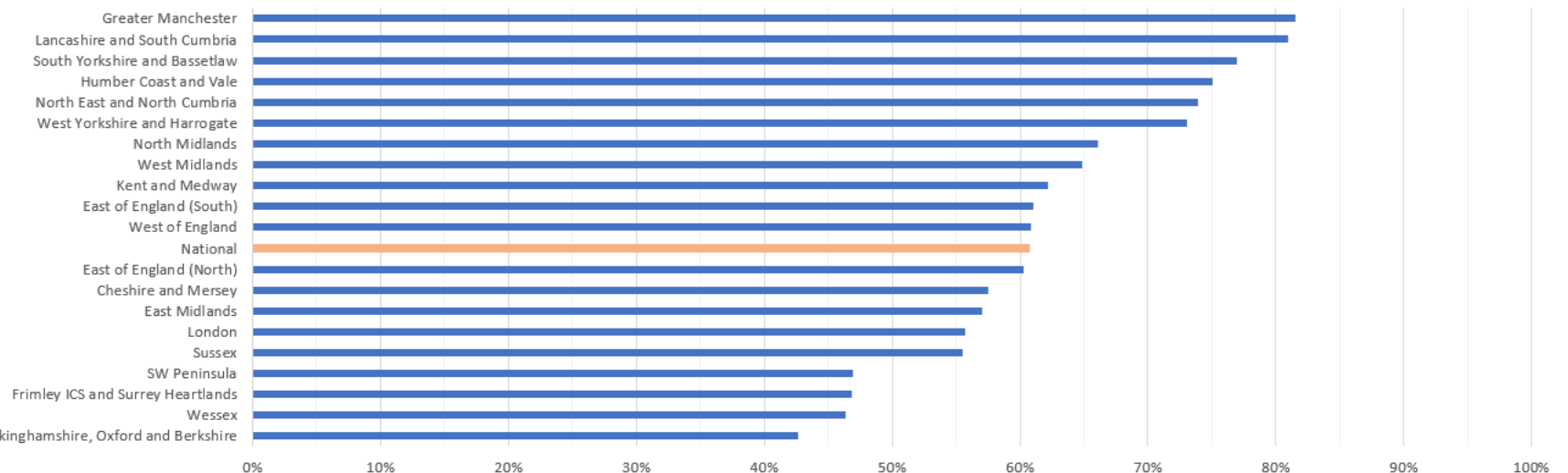| PHQ |
|---|
| **0-4: Minimal depression** |
| **5-9: Mild depression** |
| **10-14: Moderate depression** |
| **15-19: Moderately severe depression** |
| **20-27: Severe depression** |

Improvements in SSNAP reporting

Percentage of patients accessing ESD and /or CRT
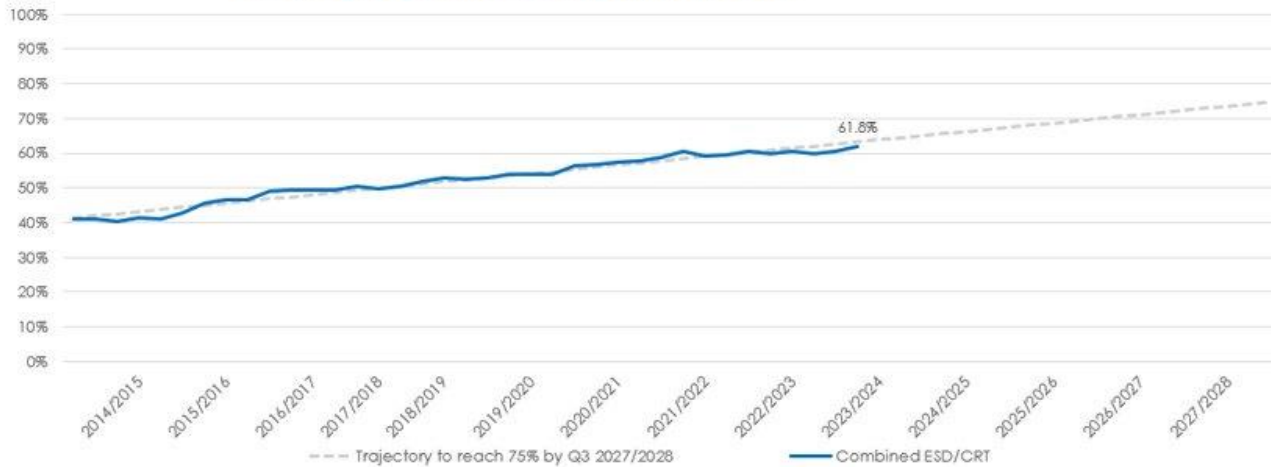
- Apr23-Mar24 Access to ESD, CRT and combined ESD-CRT services
  - Improved webtool for hospital discharge
- Apr23-Mar25 Improving measures of intensity and adoption of outcome measures
  - Testing collection of minutes based on therapy type and Barthel and EQ5D-5L

Regional and ISDN highlight reporting from November 2023

Percentage of patients discharged alive accessing a stroke/neuro specific ESD and/or CRT service (April 2022- March 2023)

Stroke Quality Improvement in Rehabilitation SQuIRE

SQuIRe Leads

Charlie Dorer, East of England SQuIRe

NHSE/I Executive Board | CVD-Respiratory Programme board

Stroke Delivery Board

7 Regional Medical Directors & Programme Boards | Clinical Networks

Quality improvement

Testing and learning

Integrated care boards

NHS Service Providers

Social care and VCSE

National Stroke programme

SQuIRE leads

Integrated Stroke Delivery Networks

Workstream 2023
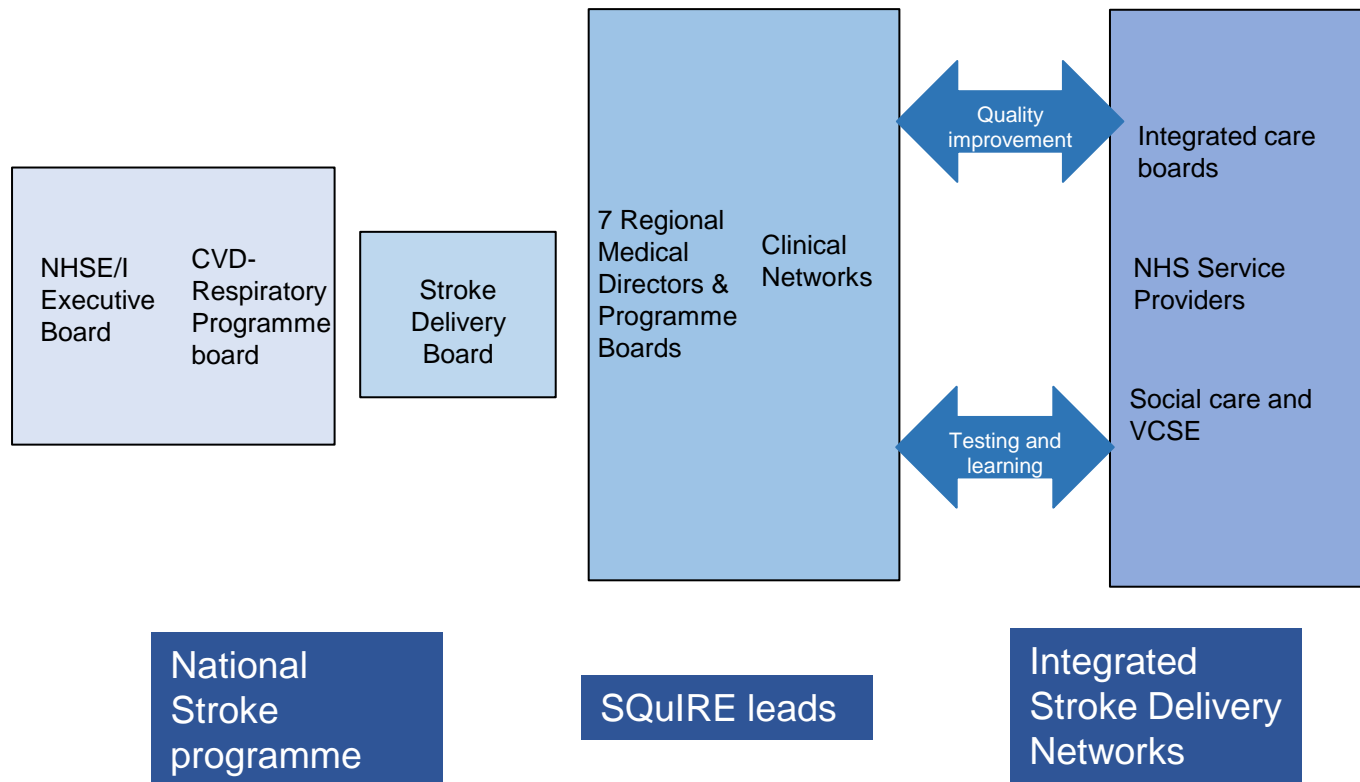
National SQuIRE Quality Improvement Collaborative

The Integrated Life after Stroke Support (ILASS) model

- **The Integrated Life after Stroke Support (ILASS) model is now live on Futures!** The ILASS provides best practice guidance on provision of support services required to provide practical, emotional and social input to people affected by stroke. This support is required to rebuild a life after stroke and optimize a person's independence and reduce their risk of further stroke.

- As the largest provider of life after stroke services, NHS England has worked in partnership with the Stroke Association, to develop this document. It has been informed by the views and perspectives of a wide range of stakeholders including those with lived experience of stroke, charities providing services to stroke survivors, clinicians and healthcare professionals, managers and policy makers.

- This guidance should be used with the National Stroke Service model and National model for an Integrated Community Stroke Service to inform commissioning and provision of care for people affected by stroke.

Vocational Rehabilitation Toolkit

Supporting people back to work after a stroke

Health and work cycle

A healthy and happy workforce has synergistic benefits for:

- Workplaces
- Productivity
- The economy

Summary

NHS Long Term plan & Medium term strategy priorities

Testing of a core dataset that has informed SSNAP expansion

- Harnessing data use in the community to drive service transformation

- Therapy delivery: capturing dose and frequency

- Outcome measures: improvements in disability and dependency and quality of life

Further commitment to improving access to Stroke Rehabilitation

- National Rehabilitation pilots: *how* to implement the ICSS model across England in different geographical contexts

- Tangible examples, case studies, business cases for key transferable learning to drive improvement

- Squire: an embedded national network with a common mission to improve clinical outcomes and patient experience by transforming community stroke care across England

Thank you for listening

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