



AGENDA ITEM

(3.7)

POPULATION HEALTH & PARTNERSHIPS COMMITTEE

STROKE UPDATE

Date of meeting	07/04/2021
FOI Status	Open/Public
If closed please indicate reason	Not Applicable - Public Report
Prepared by	Kevin Duff, Head of Strategic Planning and Commissioning
Presented by	Fiona Jenkins, Executive Director of Therapies and Health Science Claire Nelson, Deputy Director of Planning
Approving Executive Sponsor	Executive Director of Therapies & Health Sciences
Report purpose	FOR NOTING

Engagement (internal/external) undertaken to date (including receipt/consideration at Committee/group)

Committee/Group/Individuals	Date	Outcome
(Insert Name)	(DD/MM/YYYY)	Choose an item.

ACRONYMS

SIG	Stroke Implementation Group
ILG	Integrated Locality Group
SDG	Stroke Delivery Group

1. SITUATION/BACKGROUND

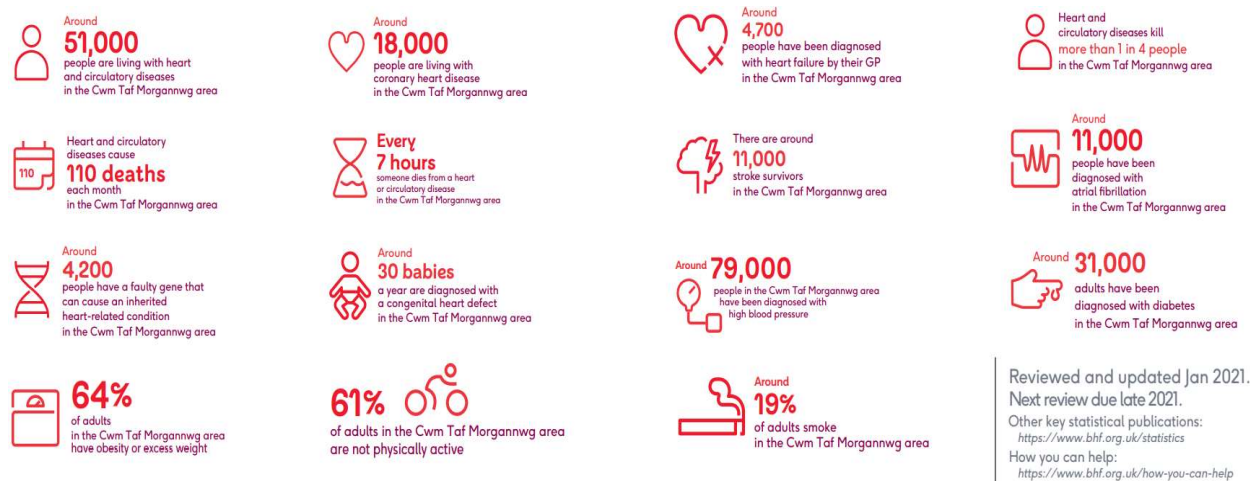
- 1.1 Stroke is a devastating disease for the patient and family and is estimated to cost the UK NHS around £3bn per year with additional cost to the economy of a further £4bn in lost productivity, disability and informal care (National Audit Office 2005).
- 1.2 Strokes are caused by either a bleed within the brain (intracerebral haemorrhage) or around the outside of the brain or an interruption to the flow of blood (cerebral infarction). The most common type of stroke is when an artery (blood vessel) is blocked by a blood clot, cutting-off blood flow to part of the brain. This is known as an Ischaemic Stroke. Without a blood supply, brain cells can be damaged or destroyed because they may not receive enough oxygen. Symptoms may include numbness or weakness on one side of the body and problems with balance, speech and swallowing. Symptoms may range from mild and resolve, through to severe strokes that can lead to a coma and death. The NHS Wales Stroke Delivery Plan 2017-20 states that "each year around 7,400 people will have a stroke in Wales and the Stroke Association estimates that there are almost 66,000 stroke survivors living in Wales".
- 1.3 In CTMUHB we face specific challenges with a population adversely affected by deprivation, with 57.1% of the population of the Health Board estimated to be living in the most deprived 40% of areas in Wales and high levels of chronic disease.
- 1.4 The achievement of national performance targets in the provision of acute stroke services, known as Quality Improvement Measures (QIMs), has been challenging in some areas of CTMUHB. Whilst the Health Board managed to provide 7-day consultant cover during the Covid-19 pandemic, this is not sustainable and the staffing challenges in our two acute stroke units (Princess of Wales & Prince Charles Hospitals) in providing a 7-day service are exemplified in other areas, such as therapies. There are also the physical restrictions exacerbated by recent COVID requirements to manage. In addition to this the Health Board is challenged in providing equitable service provision across a newly revised boundary (with the introduction of Bridgend County Borough in April 2019) in post stroke services, such as community neuro-rehabilitation and early supported discharge.

Population Health

Population Health is an approach aimed at improving the health and

wellbeing of an entire population, while reducing health inequalities. Population health outcomes are not performance measures of service delivery but the health outcomes of population as a whole. They include factors such as mortality, healthy life expectancy and prevalence of chronic disease, certain lifestyle behaviours and levels of clinical risk.

- 1.5 Heart and circulatory diseases is an umbrella term that describes all diseases of the heart and circulation. It includes everything from conditions that are inherited or that a person is born with, to those that are developed later, such as coronary heart disease, atrial fibrillation, heart failure, stroke and vascular dementia. Around 340,000 people are living with heart and circulatory diseases in Wales. The highest premature heart and circulatory death rates in Wales by local authority (2015-17) were for Blaenau Gwent and Merthyr Tydfil.
- 1.6 The infographic below is taken from the British Heart Foundation website and was updated for January 2021. It shows the extent of the challenge in CTM UHB to address the population health issues which can lead to a stroke.



- 1.7 The infographic shows that there are around 51,000 people in CTM UHB living with heart and circulatory diseases and around 11,000 stroke survivors. Also, according to the infographic 64% of adults in CTM UHB have obesity or excess weight, around 19% of adults smoke, 11,000 have been diagnosed with atrial fibrillation and 79,000 with high blood pressure. Appendix 1 contains the infographics which provide a breakdown of the above figures for each Local Authority area in CTMUHB.

- 1.8 With regard to physical activity, Public Health Wales analysis of data from the National Survey for Wales for 2018/19 and 2019/20 reports 42% of adults in CTMUHB area as being active at least 150 minutes in the previous week to the survey, compared to 53% across Wales. The analysis also goes on to show that in Wales, 24% of adults reported that they ate at least five portions of fruit or vegetables the previous day, compared with CTMUHB (22%), with only 15% in Merthyr Tydfil. The analysis also shows that 10 % of adults in Wales reported following less than 2 of the 5 healthy lifestyle behaviours, in comparison to 12% of adults in CTM UHB.

Acute Hospital, Rehabilitation and Community Based Services

Cwm Taf Health Board redesigned its stroke services back in 2015 which incorporated the creation of a new community based rehabilitation service enabling Early Supported Discharge for Stroke patients, centralisation of longer term inpatient stroke rehabilitation services at Ysbyty Cwm Rhondda and centralisation of acute stroke and early stroke rehabilitation services at Prince Charles Hospital. Since 2015 the reconfiguration of the Health Board boundaries has seen the creation of Cwm Taf Morgannwg Health Board which includes the county borough of Bridgend and acute stroke services and rehabilitation at Princess of Wales Hospital. The resultant configuration means CTM UHB has acute stroke services based at Prince Charles and Princess of Wales Hospitals. The intervening years has also seen the introduction of a Community Neuro-Rehabilitation Service funded through the national Neurological Conditions Implementation Group.

1.9 SPECIFIC MATTERS FOR CONSIDERATION BY THIS MEETING (ASSESSMENT)

Population Health: Prevention and Promotion

Improving outcomes requires a multi-agency, system wide approach and a combination of population wide and targeted intervention taking into account the wider determinants of health. The Health Board has a key role, however, in prioritising prevention and early detection in all its pathways and striving to improve the equity of care it delivers.

- 1.10 A key priority in 2021/22 will be to continue the journey in relation to implementing the Healthy Wales, Healthy Weight strategy, building on developments made during 2020/21. There are numerous examples of good practice relevant to the area of stroke that will be further developed as we move forward such as:

i) Continued development of a system wide approach to smoking? cessation delivery which include the 'Help me Quit' service, community pharmacy, antenatal cessation (MAMSS) and the development of a mental health service cessation model, working to embed referral routes into all care pathways;

Embedding the "Making Every Contact Count" (MECC) approach into clinical practice to encourage uptake of the five key positive lifestyle behaviours as part of normal care;

iii) Continued roll out of the >50 Health Check programme, to detect and reduce cardiovascular risk;

iv) Condition specific education programmes which promote self-care e.g. X-PERT, Pulmonary Rehabilitation and the Expert Programme for Patients (EPP);

v) Using the National Exercise Referral Scheme in prevention and management of chronic conditions;

vi) Use of Pharmacist and Stroke Clinician to support management of Atrial Fibrillation at primary care level;

vii) Promotion of Social prescribing;

viii) Reducing clinical risk e.g. detection and optimum management of pre-diabetes and hypertension.

- 1.11 Some of the cluster plans for 2021/22 have identified stroke and its associated population health clinical and behavioural risk factors as priorities to be addressed in their cluster plans for 2021/22. This includes working with the Third Sector to develop a wellbeing hub in a primary care centre, involving a stroke group and working with a GP practice to plan the roll out of MECC.

Stroke Delivery Plan 2017 - 2020

The "Stroke Delivery Plan, 2017-2020: A Delivery Plan for Wales and its Partners" has been extended to end of March 2022, taking into account the recent concentration on tackling Coronavirus and the forthcoming Senedd elections in May 2021. The plan has been written to reflect the latest strategic drivers, including new legislation, prudent healthcare, and the primary care plan. The Plan identifies outcomes for improvement in the following key areas:

- Living Well
- Preventing stroke
- Early recognition and detecting stroke quickly
- Fast, effective care
- Rehabilitation and recovery
- Supporting life after stroke
- End of life care.

1.12 The national Stroke Implementation Group (SIG) was established to provide effective and coordinated leadership at an all Wales level. The SIG includes membership from CTM UHB and acts as a forum to drive forward, support and oversee health boards in delivering the shared vision for improving stroke services in Wales by taking forward the actions set out in the "Stroke Delivery Plan, 2017-2020", and delivering measurable progress towards delivering stroke outcome indicators.

1.13 The SIG has developed a set of quality standards for implementation across Wales with the aim for people of all ages to have the lowest possible risk of having a stroke, and, when it does occur, to have an excellent chance of surviving, and returning to independence as quickly as possible.

1.14 In February 2021 the SIG jointly responded, with Welsh Government, to the Cross Party Group (CPG) on Stroke inquiry report into implementation of the Welsh Government's Stroke Delivery Plan. The inquiry report contained 15 recommendations, the majority of which were either accepted or accepted in part by SIG and Welsh Government. Included in the recommendations accepted was "Reconfiguring stroke service in Wales and the introduction of Hyper Acute Stroke Units (HASUs) should be the number one priority for national and local approaches to the treatment of stroke in Wales".

Strategic Development of Stroke Services in CTMUHB

1.15 CTM UHB has recently established an operating model encompassing ILGs and Systems Groups to ensure integrated services operate effectively across traditional primary-secondary care boundaries and that the highest value interventions are maximised from prevention through to end-of-life care.

- 1.16 The work programme of the Systems Groups is characterised by developing system-wide plans for promoting and improving population health; evidence based and integrated pathway design that crosses organisational boundaries; designing health promotion and preventative interventions; co designing and co creating services that enable people to take more responsibility for their own health and wellbeing; and a focus on long term health and wellness systems.
- 1.17 It has been agreed that the major health condition delivery groups across the Health Board will report to the respective System Group. The Systems Planning Team has recently re-established the CTMUHB Stroke Delivery Group (SDG), which has been identified as reporting to the Older Years System Group.
- 1.18 The role of the renewed SDG will be to review the current service provision across CTM UHB and implement the recommendations of the "Stroke Delivery Plan, 2017-2020: A Delivery Plan for Wales and its Partners" and its subsequent versions which will follow on from 2020.
- 1.19 The renewed SDG had its first meeting on 2nd March 2021 and will liaise and feed into the SIG, as well as the Older Years System Group. Some of the key priorities in 2021/22 will including development of HASU plans as part of a networked approach, addressing workforce challenges and working with primary care to ensure primary and secondary prevention measures are progressed.

2. KEY RISKS/MATTERS FOR ESCALATION TO BOARD/COMMITTEE

Population Health: Risk Factors

The population health information outlined in Section 1 above raises some areas of concern for CTM UHB. High incidence of smoking and obesity, together with high levels of inactivity and 12% of the population following less than 2 of the healthy lifestyle behaviours. In addition, as a result of the levels of deprivation across the Health Board, there is an inequality gap for our population compared to the rest of Wales in terms of life expectancy and healthy life expectancy (the number of years a person can expect to live in good health). The following diagram outlines the increasing behavioral and clinical risks which lead to chronic disease and the wider determinants which underpin them.

- 2.1 As can be seen from section 2 above the Health Board is working with a range of partners to address the population health promotion and prevention agenda. This work will also form part of the wider stroke work being addressed in the CTM UHB Stroke Delivery Group looking at a pathway from population wide health promotion and prevention approaches, management of clinical risk factors in primary care, through to acute hospital care, rehabilitation and life after stroke in the community.



Performance against Quality Improvement Measures (QIMs)

- 2.2 The Sentinel Stroke National Audit Programme (SSNAP), which is a single source of data in Wales, England and Northern Ireland, publishes a range 28 of statistics, collecting data from hospital sites with stroke services, including Prince Charles and Princess of Wales Hospitals. The CTM UHB Integrated Performance Dashboard which is published on a monthly basis provides an overview to the Health Board against 4 national Quality Improvement Measures (QIMs) which are part of the suite of improvement measures in the SSNAP which measure % compliance:
- i) direct admission to an acute stroke unit within 4 hours
 - ii) thrombolysed stroke patients with a door to needle time within 45 minutes



- iii) patients diagnosed with stroke received a CT scan within 1 hour
- iv) assessed by a stroke consultant within 24 hours.

2.3 The Table below is taken from the February 2021 Integrated Performance Dashboard Report to the Health Board and shows the performance against the above 4 QIMs.

Period	Prince Charles Hospital				Princess of Wales Hospital				Cwm Taf Morgannwg			
	4 HRS	45 MINS	1 HR	24 HRS	4 HRS	45 MINS	1 HR	24 HRS	4 HRS	45 MINS	1 HR	24 HRS
Dec-19	37.8%	20.0%	63.2%	57.9%	7.4%	0.0%	44.4%	22.2%	25.0%	12.5%	55.4%	43.1%
Jan-20	30.4%	62.5%	60.7%	66.1%	18.5%	0.0%	44.4%	51.9%	26.5%	50.0%	55.4%	61.4%
Feb-20	44.0%	85.7%	70.6%	68.6%	34.6%	33.3%	51.9%	81.5%	40.8%	70.0%	64.1%	73.1%
Mar-20	45.9%	50.0%	78.4%	70.3%	42.1%	0.0%	52.6%	63.2%	44.6%	25.0%	69.6%	67.9%
Apr-20	69.2%	33.3%	71.2%	75.0%	30.0%	Nil	65.0%	85.0%	58.3%	33.3%	69.4%	77.8%
May-20	50.9%	60.0%	58.6%	69.0%	14.3%	Nil	57.1%	92.9%	43.7%	60.0%	58.3%	73.6%
Jun-20	53.2%	37.5%	56.3%	68.8%	20.0%	0.0%	40.0%	72.0%	41.7%	33.3%	50.7%	69.9%
Jul-20	28.0%	42.9%	68.6%	74.5%	9.1%	0.0%	45.5%	90.9%	22.2%	37.5%	61.6%	79.5%
Aug-20	25.5%	0.0%	61.5%	71.2%	11.1%	0.0%	50.0%	77.8%	21.7%	0.0%	58.6%	72.9%
Sep-20	30.2%	57.1%	63.6%	63.6%	21.7%	0.0%	62.5%	66.7%	27.6%	40.0%	63.3%	64.6%
Oct-20	31.4%	81.8%	80.6%	69.4%	0.0%	0.0%	53.6%	46.4%	17.5%	69.2%	68.8%	59.4%
Nov-20	26.1%	57.1%	66.7%	75.0%	0.0%	50.0%	63.3%	66.7%	16.0%	55.6%	65.4%	71.8%
Dec-20	9.3%	60.0%	60.0%	68.9%	0.0%	0.0%	42.9%	28.6%	6.3%	50.0%	54.5%	56.1%

- 2.4 Drug Treatment known as Thrombolysis is used as soon as possible following the stroke to dissolve the blood clot. It needs to be given quickly (within 4.5 hours at most) and the sooner it is given the better the outcome. 85% of strokes are ischaemic and up to 20% of people with ischaemic strokes are suitable for and respond to intravenous thrombolysis. As can be seen from the above performance table there are particular challenges achieving the door-to-needle time, particularly in Princess of Wales Hospital, and the 4 hour direct admission to a stroke unit.
- 2.5 The ongoing need to segregate Covid activity and social distancing of bed space has impacted both the acute inpatient and rehabilitation provision in stroke services. Both sites have lost their Acute Stroke Unit (ASU) for periods of time during the pandemic, due to the need to accommodate COVID "Red" beds. In addition the turnaround for a COVID swab in ED impacts on the ability to transfer the patient to the ASU within the 4 hour time frame.

- 2.6 Staffing challenges continue to present difficulties achieving a sustainable 24/7 service and, therefore, meeting QIMs. The SSNAP Acute Organisational Audit 2019 Summaries for Prince Charles and Princess of Wales Hospitals both identified instances where clinical psychology input and 7 day working did not meet the recommendations set out by the SSNAP which are drawn from evidence such as Royal College of Physicians National Clinical Guideline 2016 and NICE Quality Standards.
- 2.7 As part of its priorities for 2021/22 the SDG will work with the CTMUHB ILG to address workforce challenges and performance against QIMs.

Life after Stroke Models of Care

- 2.8 Both the Early Supported Discharge and the Community Neuro-rehabilitation Service currently only cover Merthyr Cynon and Rhondda Taf Ely ILG areas, not Bridgend ILG. This presents an inequity of service which the CTM SDG will be keen to address. In addition the Community Neuro-Rehabilitation Service is currently funded by National Stroke / Neurological Implementation Groups until March 2022. Addressing any ongoing funding requirement will also form a priority for the SDG in 2021/22.

3. IMPACT ASSESSMENT

Quality/Safety/Patient Experience implications	Yes (Please see detail below)
	Our plans for the delivery of high quality health and care services will address immediate and longer term challenges facing people who have experienced a stroke.
Related Health and Care standard(s)	Choose an item.
	<p>If more than one Healthcare Standard applies please list below:</p> <ul style="list-style-type: none"> • Effective Care • Dignified Care • Timely Care • Safe Care



	<ul style="list-style-type: none"> • Staying Healthy • Staff and resources
Equality impact assessment completed	No (Include further detail below)
	EIA to be undertaken as part of further work if required.
Legal implications / impact	There are no specific legal implications related to the activity outlined in this report.
Resource (Capital/Revenue £/Workforce) implications / Impact	Yes (Include further detail below)
	The resource implications are to be determined and will be considered in the planning of the IMTP.
Link to Main Strategic Objective	To Improve Quality, Safety & Patient Experience
Link to Main WBFG Act Objective	Service delivery will be innovative, reflect the principles of prudent health care and promote better value for users

4. RECOMMENDATION

4.1 The Population Health and Partnerships Committee are asked to:

- **NOTE** the challenges faced in providing the range of population health interventions and services in the stroke pathway.
- In addition to **NOTE** the strategic planning being undertaken across Wales and within CTM UHB to develop high quality promotion, prevention, treatment and care services.


Appendix 1

Bridgend

 Around
19,000
people are living with heart
and circulatory diseases
in Bridgend

 Around
6,500
people are living with
coronary heart disease
in Bridgend


 Around
1,900
people have been diagnosed
with heart failure by their GP
in Bridgend

 Heart and
circulatory diseases kill
nearly 3 in 10 people
in Bridgend

 Heart and circulatory
diseases cause
40 deaths
each month
in Bridgend

 Every
19 hours
someone dies from a heart
or circulatory disease
in Bridgend

 There are around
4,300
stroke survivors
in Bridgend


 Around
4,100
people have been
diagnosed with
atrial fibrillation
in Bridgend

 Around
1,400
people have a faulty gene that
can cause an inherited
heart-related condition
in Bridgend

 Around
9 babies
a year are diagnosed with
a congenital heart defect
in Bridgend

 Around
27,000
people in Bridgend
have been diagnosed with
high blood pressure

 Around
10,000
adults have been
diagnosed with diabetes
in Bridgend

 **65%**
of adults
in Bridgend
have obesity or excess weight

64% 
of adults in Bridgend
are not physically active

 Around
18%
of adults smoke
in Bridgend


Reviewed and updated Jan 2021.
Next review due late 2021.
Other key statistical publications:
<https://www.bhf.org.uk/statistics>
How you can help:

Merthyr Tydfil

 Around
6,200
people are living with heart
and circulatory diseases
in Merthyr Tydfil

 Around
2,200
people are living with
coronary heart disease
in Merthyr Tydfil


 Around
570
people have been diagnosed
with heart failure by their GP
in Merthyr Tydfil

 Heart and
circulatory diseases kill
nearly 3 in 10 people
in Merthyr Tydfil

 Heart and circulatory
diseases cause
15 deaths
each month
in Merthyr Tydfil

 Every
49 hours
someone dies from a heart
or circulatory disease
in Merthyr Tydfil

 There are around
1,300
stroke survivors
in Merthyr Tydfil


 Around
1,400
people have been
diagnosed with
atrial fibrillation
in Merthyr Tydfil

 Around
570
people have a faulty gene that
can cause an inherited
heart-related condition
in Merthyr Tydfil

 Around
4 babies
a year are diagnosed with
a congenital heart defect
in Merthyr Tydfil

 Around
10,000
people in Merthyr Tydfil
have been diagnosed with
high blood pressure

 Around
3,900
adults have been
diagnosed with diabetes
in Merthyr Tydfil

 **62%**
of adults
in Merthyr Tydfil
have obesity or excess weight

 **65%**
of adults in Merthyr Tydfil
are not physically active

 Around
23%
of adults smoke
in Merthyr Tydfil


Reviewed and updated Jan
Next review due late 2021.
Other key statistical publications:
<https://www.bhf.org.uk/statistics>
How you can help:

Rhondda Cynon Taf

 Around
26,000
people are living with heart
and circulatory diseases
in Rhondda Cynon Taf

 Around
9,300
people are living with
coronary heart disease
in Rhondda Cynon Taf


 Around
2,200
people have been diagnosed
with heart failure by their GP
in Rhondda Cynon Taf


 Heart and
circulatory diseases kill
more than 1 in 4 people
in Rhondda Cynon Taf

 Heart and circulatory
diseases cause
55 deaths
each month
in Rhondda Cynon Taf


 Every
13 hours
someone dies from a heart
or circulatory disease
in Rhondda Cynon Taf


 There are around
5,200
stroke survivors
in Rhondda Cynon Taf


 Around
5,700
people have been
diagnosed with
atrial fibrillation
in Rhondda Cynon Taf

 Around
2,300
people have a faulty gene that
can cause an inherited
heart-related condition
in Rhondda Cynon Taf

 Around
17 babies
a year are diagnosed with
a congenital heart defect
in Rhondda Cynon Taf

 Around
42,000
people in Rhondda Cynon Taf
have been diagnosed with
high blood pressure

 Around
16,000
adults have been
diagnosed with diabetes
in Rhondda Cynon Taf

 **63%**
of adults
in Rhondda Cynon Taf
have obesity or excess weight

 **60%**
of adults in Rhondda Cynon Taf
are not physically active

 Around
18%
of adults smoke
in Rhondda Cynon Taf

Reviewed and updated Jan
Next review due late 2021.
Other key statistical publications:
<https://www.bhf.org.uk/statistics>
How you can help: