

Lancashire County Council
Health Overview and Scrutiny Meeting

Work Programme: Stroke Programme

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PERIOD OF REPORT

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FOR INFORMATION

1. Introduction

This report provides a high-level overview of the whole Stroke Programme in Lancashire and South Cumbria (LSC), focussing on the different phases of the end to end stroke pathway including stroke prevention, hospital-based treatment, integrated community stroke rehabilitation and life after stroke.

It gives an update on the current position within Lancashire and South Cumbria and outlines, at a high level, the work which is being progressed and the key decisions which will need to be made during the coming months of the programme.

In Appendix 1 there is a statement about the alignment of the NHS Long Term Plan with the work we are prioritising within the LSC Stroke Programme. In Appendix 2 there is a summary of the evidence and recommendations for visual assessment and treatment as part of the Stroke pathway.

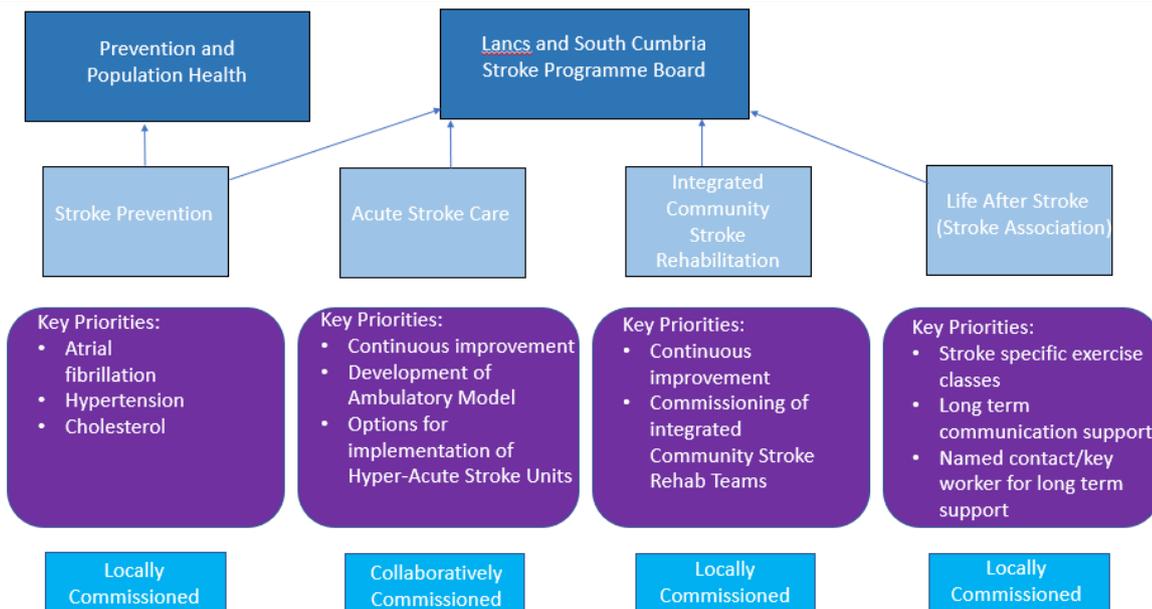
The Health Overview and Scrutiny Committee is requested to:

- **Note the content of this report.**
- **Note the decisions to be made about the Stroke programme by commissioners and providers in the next few months.**
- **Endorse the programme and work going forward.**

2. Programme Overview – End to End Pathway

The end to end stroke pathway service specification for Lancashire & South Cumbria was agreed by the Lancashire and South Cumbria CCGs in 2015. It describes what patients within our region should expect in terms of care to prevent a stroke as well as treatment, rehabilitation and longer-term support after a stroke.

Because of the current unjustified variation in access, and because the quality of Acute Stroke and rehabilitation services across LSC do not consistently meet national standards, we have developed a comprehensive Stroke programme across the Lancashire and South Cumbria ICS. The diagram below provides a high-level overview of the programme and sub-groups, key priorities, reporting and commissioning arrangements for each. There are key interdependencies with other ICP work programmes where these are also in place.



3. Stroke Prevention

The ICS-wide Stroke Prevention Alliance (partnership of ICS Stroke Prevention workstream with key stakeholders including the Advancing Quality Alliance, RightCare, Innovation Agency) is currently finalising its revised strategy and has identified the effective management of Atrial Fibrillation (AF), Hypertension and elevated Cholesterol as the three key risk factors to focus on over the next 3-5 years.

Current Position:

PHE has recently published data¹ indicating that for Lancashire & South Cumbria:

- Atrial Fibrillation:** There are 46,700 residents estimated to have AF with approximately 33,200 recorded on GP registers leaving 13,500 undiagnosed (observed to expected ratio approx. 71.1%). Of those with diagnosed AF there are 7,200 high risk AF patients not being appropriately anticoagulated
- Hypertension:** there are 433,900 residents estimated to have hypertension with approx. 258,000 recorded on GP registers leaving 175,900 undiagnosed (observed to expected ratio approx. 59.4%). Of those with diagnosed hypertension there are 50,800 patients not being appropriately treated to the Quality and Outcomes Framework (QOF) target though the number not being treated to NICE's clinical target is likely to be considerably higher
- Cholesterol:** For patients newly diagnosed with hypertension (age 30-74) with a cardiovascular disease (CVD) risk assessment $\geq 20\%$ only 64.2% are treated with statins. it is important to emphasise that for the wider cohort of all patients with a CVD risk assessment $> 20\%$ effectively treated with statins, it is estimated nationally that this figure is likely to be in the range of only 35-40%

More recent information from our established national data sets (GRASP-AF Quality Improvement tool and QOF) quote figures of approximately 5,900 high risk AF patients not being appropriately anticoagulated and 50,500 patients with hypertension not being appropriately treated in Lancashire and South Cumbria. This demonstrates there is still significant progress to be made in both these areas. Recent audit data has also highlighted significant concerns regarding the management of AF within hospital settings.

There has been a significant amount of work progressed within this area, however frustrations exist relating to the challenge of implementing a consistent prevention agenda across Lancashire and South Cumbria, linked to population health. This may gain some traction now that it is prioritised in the NHS Long Term Plan.

Improvement actions being taken now

- Working with the National CVD Prevention Board and local Clinical Leads to devise 1, 3 and 5-year ambitions in respect of these risk factors
- Integrated approach with ICS Primary Care Workstream to ensure these levels of ambition are reflected in ICS-wide standards for primary care currently being developed
- Engaged Stroke Prevention Clinical Leads to undertake a series of ICP based clinical engagement visits which will support both the launch of the Stroke Prevention Strategy as well as the development of associated ICP Plans
- Coordinating the delivery of support to individual ICPs in conjunction with RightCare, AQuA, Innovation Agency and other partners

Future Decisions

Commissioners in the ICS will need to decide whether to:

- Mandate targets recommended by our Stroke Prevention clinical leads across the ICS to be delivered through a range of prevention and primary care actions.
- Target the use of financial resources in local GP quality contracts which support improved case management of patients with risk of cardiovascular disease.

4. Hospital-based Treatment

a. Continuous Improvement

All Trusts have been making huge efforts to continuously improve their Acute Stroke Services within the context of significant challenges in most clinical pathways and areas, the biggest of which is the workforce. When the Lancashire & South Cumbria Stroke Programme started in January 2014 SSNAP performance was a “sea of red”. The standard of Acute Stroke Services across LSC remain inconsistent, with unjustified variation in access, timely treatment and access to rehabilitation services, and consequently variation in outcomes depending on where you live.

Current position

The importance of the role that effective, accessible and high-quality Integrated Community Stroke Rehabilitation (ICSR) plays in ensuring that all patients achieve the best health outcomes, and in ensuring that the entire stroke pathway from onset of symptoms works effectively, cannot be overstated. Without high quality community rehabilitation being in place first, the acute phase will not be able to achieve the pathway of improvements that have been set out, and the pathways in their entirety will not be able to leverage the greatest return on investment. Both are necessary precursors to Hyper-Acute Stroke Unit implementation

The table below shows performance at an overall level (aggregated score of detailed domains) against the National Stroke Sentinel National Audit Programme (SSNAP) measures. Progress has been greater in some areas than others however the challenges faced in all areas have been significant.

Overall Levels												
Lancashire & South Cumbria												
Site	Jul 15-Sep	Apr 15-Jun	Oct 15-Dec	Jan 16-Mar	Apr 16-Jul	Aug 16-Nov	Dec 16-Mar	Apr 17-Jul	Aug 17-Nov	Dec 17-Mar	Apr 18-Jun	Jul 18-Sep
National	No Data											
Blackpool Victoria Hospital	E	E	E	E	E	D	E	E	C	D	D	C
Royal Blackburn Hospital	E	E	E	D	D	D	C	C	B	A	A	A
Royal Preston Hospital	D	D	C	C	D	D	D	C	B	B	B	C
Furness General Hospital	D	C	D	D	D	D	C	C	C	C	D	D
Chorley and South Ribble Hospital	D	B	C	B	C	C	D	D	B	B	No Data	B
Pendle Community Hospital - Marsden Stroke Unit	No Data	No Data	No Data	No Data	D	D	C	D	B	B	No Data	C
Royal Lancaster Infirmary	D	D	D	D	D	D	D	D	D	D	C	C

Improvement actions being taken now

- A single continuous improvement plan for Lancashire and South Cumbria is being developed based on the current improvement plan template/process in place at the Royal Blackburn Hospital. This will also link to a therapy dashboard which has been developed.
- East Lancashire Hospital NHS Trust is currently piloting the Ambulatory Care pathway at Royal Blackburn Hospital, feedback from which will be available in early February. Managing the interdependencies with Integrated Rehabilitation is vital, and this may slow the introduction of a complete ambulatory pathway where it is not in place. The other acute Trusts are preparing to undertake short pilots of different ways of working including alternative ambulatory clinics, ring-fencing stroke beds and relocating Transient Ischaemic Attack (TIA) clinics to the stroke ward to assess the impact of these initiatives and support future improvement work.

Future Decisions

Commissioners in the ICS will need to agree:

- Investment plans for the whole stroke pathway including specialist rehabilitation at all sites, nurse consultants, psychology, pharmacy, orthoptics etc.
- The realistic ambition for delivering improved quality and safety and reducing unjustified variation in acute stroke care between sites
- The value of a collaborative approach to recruiting key clinical professionals into an ICS-wide stroke service (network) rather than individual hospital and community organisations (which may mitigate risks to recruitment challenges at certain sites)

b. Development of a sustainable Acute Model of Care

This revised programme of work commenced with mapping the acute phases of the stroke pathway, focussing in particular on the options for implementing Hyper-Acute Stroke Units (HASUs) to deliver the first 72 hours of specialist care across Lancashire & South Cumbria. The work is intended to focus each Acute Stroke Unit on improvement against the SSNAP scores, and other improvement actions which are shared across the four Acute Trusts in the Strategic Stroke Improvement Sub-group of the Stroke Programme.

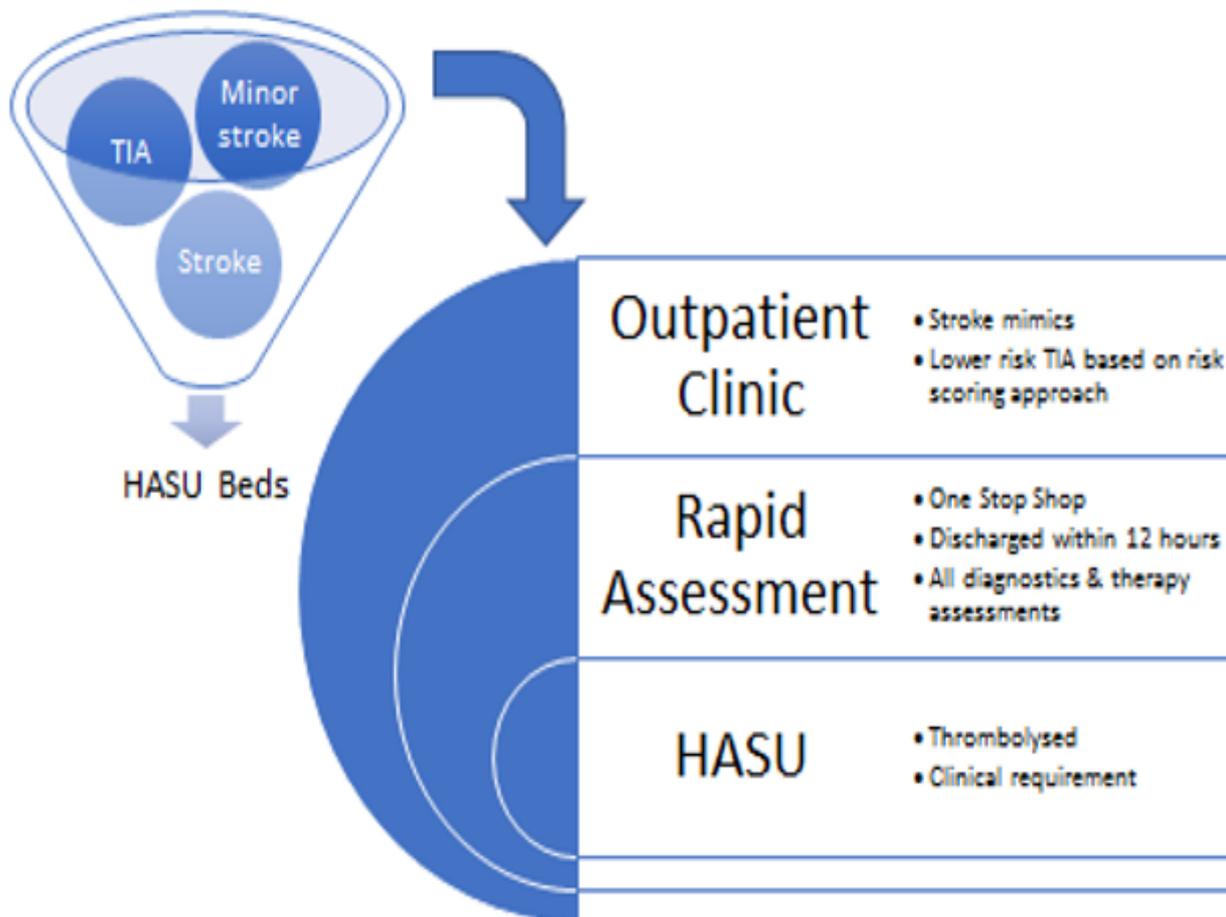
Given our current population, high incidence of stroke mimics, and challenges around workforce availability, the detailed hyper-acute options appraisal and modelling work (available on request) identified that predominantly focussing on implementation of hyper-acute stroke units was not practicable at this stage, and not appropriate for patients who live in geographically remote areas. Additionally, the significant unjustified variation in access to acute stroke services across Lancashire & South Cumbria needed to be addressed first, therefore an alternative ambulatory care model is

being developed and modelled. The interdependency of Integrated Stroke Rehabilitation with Hyper Acute care is demonstrated clearly in the NSH Long Term Plan, where rehabilitation is prioritised over HASU in terms of timeline to implementation.

A group of stroke clinicians and clinical commissioners have researched and developed an **ambulatory care model** as a more sustainable model of hospital care which is appropriate for the population and geography of Lancashire and South Cumbria. **Ambulatory care** or outpatient care is medical care provided on an outpatient basis, including diagnosis, observation, consultation, treatment, intervention, and rehabilitation services. This care can include advanced medical technology and procedures even when provided outside of hospital, and means that patients receiving this do not need a hospital bed (see diagram below). The Ambulatory Care Model is considered by leading Stroke clinicians to be the most effective way of managing the Acute Stroke pathway, and is seen as a more appropriate model because it:

- Prevents patients from being admitted unnecessarily
- Providing an environment that supports same day emergency care
- Provides access to quicker assessment, diagnosis, appropriate treatment and rapid rehabilitation
- Refers patients on to more appropriate pathways, if needed e.g. TIA clinics, migraine etc.

■ ■ The Alternative Option



Improvement actions being taken now

- To undertake more detailed impact analysis of the model, including on ambulance services, hospital estates, diagnostics, workforce and the requirements for a triage, treat and transfer pathway
- Finance modelling and exploring options around alternative funding mechanisms as the traditional “payment by results” tariff is not the preferred option

Future Decisions

Commissioners in the ICS will need to agree:

- The ambulatory care model as a more sustainable model of hospital care now being recommended by our clinical leaders
- Amendments to the service specification which document the alternative ambulatory model
- Realistic implementation plans with providers, asking hospitals to work more closely together to mitigate the risk of limited numbers of staff.

c. Options for Implementation of Hyper-Acute Stroke Units (HASU)

The main focus of a HASU is to closely monitor and stabilise the medical condition of a person newly diagnosed with a stroke for the first 72 hours after onset, and includes patients presenting within 6 hours of stroke onset who constitute a category of stroke patient known as the “**hyperacute stroke**” patient. Rapid assessment, early treatment eg. Thrombolysis or Mechanical Thrombectomy (when eligible) and access to a multi-disciplinary team 24/7 including neurologists, interventional radiologists, specialist nurses and therapists.

Subject to a collective agreement to endorse the ambulatory model as the most appropriate clinical model for hospital-based stroke care in Lancashire and South Cumbria, the ICS will then need to ensure that all patients have access to hyper acute stroke care, including mechanical thrombectomy where appropriate, in the early stages of a moderate to severe stroke. A timeline for this process still needs to be agreed to ensure any unintended consequences are mitigated, including unexpected financial impacts or changes in patient flows. These may need to be re-modelled if the ambulatory model is agreed to be taken forward to implementation.

The National Stroke Peer Review team has visited all the acute stroke sites across LSC in the past 18 months. The ICS can expect to receive further recommendations from the National Team in terms of optimum locations for HASUs based on SSNAP performance, population sizes and co-dependent clinical services eg. Mechanical thrombectomy. The National GIRFT team are visiting LSC for a formal ICS-wide Stroke review on 1 March 2019.

Future Decisions

Commissioners in the ICS will need to:

- Decide on optimum locations for HASUs based on modelling and national team guidance

5. Integrated Community Stroke Rehabilitation

The National Stroke Plan will be published to support the NHS Long Term Plan recommendations for Stroke, and will support the mandate that every acute stroke unit should have access to an integrated community specialist rehabilitation team that provides early intensive rehabilitation and ongoing therapy for up to 6 months, which is based on need and not criteria or discharge destination. Nationally and locally it is realised that this service needs to be put into place as part of continuous improvement and is an essential part of an effective stroke pathway.

Current position

The table below demonstrates the current Lancashire & South Cumbria services benchmarked against the seventeen key elements of the integrated stroke service specification. This highlights significant variation between localities and compared to the specification. Patients are not being given the opportunities they should to maximise their functional recovery and reduce disability, resulting in increased costs across the system in Health and Social Care.

SECTION A: Team information		Blackpool	Fylde and Wyre	Morecambe Bay CCG			Blackburn With Darwen CCG	East Lancs CCG	Southport and Formby CCG	West Lancs CCG	Greater Preston CCG	Chorley and South Ribble CCG
	Team name	ESD Team		LNESDT	MBESDT	SLL&M	BWD CST	EL CST	N Sefton CNRT	West lancs CNRT	CNRT	
SECTION B: Compliance												
1	All core professionals in team	N	N	N	N	N	N	N	N	N	N	N
2	Staffing levels met	N	N	N	N	N	N	N	N	N	N	N
3	Service provided for 6 days a week	N	N	N	N	N	N	N	N	N	N	N
4	Service provided for up to 6 months	N	N	N	N	N	Y	N	Y	Y	Y	Y
5	Pathway 1. Therapy at home with ICST support	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y
6	Pathway 2. Therapy at home with joint ICST & re-ablement	Y	Y	N	N	N	N	Y	Y	Y	N	N
7	Pathway 3. Intermediate care	N	N	N	N	N	Y	Y	Y	N	N	N
8	Pathway 4. Residential/nursing home patients	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y
9	Service accepts 40% ESD cohort	Y	Y	Y	N	N	Y	Y	Y	Y	Y	Y
10	Service accepts 60% non ESD cohort	N	Y	N	N	N	Y	Y	Y	Y	Y	Y
11	Assessment within 72 hours	N	Y	Y	N	N	N	N	Y	N	N	N
12	Wait of 7 days or less from assessment to treatment	Y	Y	Y	N	N	N	N	N	N	N	N
13	In reach into acute setting	N	Y	Y	N	N	N	Y	N	N	N	N
14	Self referral permitted	N	N	N	N	N	Y	Y	Y	Y	Y	Y
15	Life after stroke services available	Y	Y	Y	N	N	Y	Y	Y	Y	Y	Y
16	6 month review for all residents	Y	N	N	N	N	Y	Y	N	N	N	N
17	Inputting into SSNAP in timely way	Y	N	Y	N	N	Y	Y	Y	N	Y	Y
	Total (out of 17 elements)	8	9	7	0	0	10	11	11	8	8	8
	% compliance with model	53	60	47	0	0	67	73	73	53	53	53

ESD – Early Supported Discharge CST – Community Stroke Team CNRT – Community Neuro-Rehab Team

Improvement actions being taken now

- CCGs and Providers have worked together to review/scope/map current services and identify requirements
- All CCGs have actively engaged in the production of plans for the commissioning and

implementation of Integrated Community Stroke Rehabilitation Teams, including Early Supported Discharge, within the next 12-18 months

- Continuous improvement work is being progressed both locally and via collaborative Task & Finish Groups where a pan-Lancashire & South Cumbria approach is beneficial

Future Decisions

Commissioners in the ICS will need to:

- Make investment decisions in relation to the commissioning of integrated community stroke rehabilitation services. Without this, the ambulatory model described above will not work effectively
- Consideration needs to be made to the provision of psychological services for patients, access to orthoptic assessment for any visual impairment (see Appendix 2), and support to families and carers

6. Life After Stroke

The stroke pathway service specification describes three key elements of support that stroke patients should have access to:

- Stroke specific exercise classes
- Long term communication support
- Named contact/key worker for long term support

In addition, engagement with patients and carers highlighted that access to patient information could be improved and would have a positive impact in supporting patients and carers post-stroke.

Current position

The current position is highly variable. CCGs have different arrangements in place to commission a range of services from the Stroke Association, resulting in inequity of access to support for patients and carers post-stroke. In addition, pressures on local authority budgets, where they contribute to some of these services, increases the inequity.

There are opportunities to review life after stroke support and consider, in conjunction with the Stroke Association, how this can be commissioned, at either an ICP or ICS level, to enable more equitable access for patients and their carers.

In relation to improved access to patient information:

- A Directory of (all support) Services was developed by the Stroke Association which is refreshed on a 6-monthly basis and covers Lancashire & South Cumbria
- Patients, carers and staff working within stroke services were engaged and involved in the development of the Lancashire & South Cumbria Stroke Patient Information Guide, developed by the Commissioning Support Unit

Improvement actions being taken now

- Stroke Association has started to provide 6-month reviews in Blackpool
- Stroke Association has secured Sports England money in Central Lancashire to support people in to exercise programmes after stroke
- Work within Morecambe Bay Stroke Pathway Group focussing on how to make access to Stroke Association services more equitable
- Number of Stroke Association Peer Support groups increasing, based more on a voluntary staffing model

Future Decisions

Commissioners in the ICS will need to:

- Decide whether life after stroke support services should be commissioned at an ICP or ICS level

7. Engagement

a. Clinical

Throughout the programme there has been significant clinical engagement in support of developing the end to end stroke pathway service specification and shaping, developing and modelling options for the ambulatory care model and options for hyper-acute stroke units. All trusts are represented at the Clinical Reference Group as are Clinical Commissioners from each of the CCGs.

Wider staff engagement sessions took place in November and December 2018 across all acute trust sites, with the exception of Blackpool sessions which are being rescheduled due to current pressures, to share the update on progress to date and to seek wider staff feedback and input to the development of the ambulatory care model. The feedback is currently being collated. Further work is now planned, including video access to updates, and a Stroke System Event is also being arranged for 5th March. This is to ensure that all partners are clear on the journey to date and next steps, in particular the upcoming critical decisions for the Stroke Programme.

b. Patients/Carers

Throughout the programme there has been significant patient/carer engagement.

During 2016, patients supported the development of the end to end stroke pathway service specification as part of workstream groups as well as programme team members engaging with a large number of patients/carers at Stroke Association support groups across Lancashire & South Cumbria, to share the specification and seek feedback. In addition, all Stroke Association groups have been re-visited during summer 2018 to provide an update on the work and seek further feedback and input.

Patients, carers and staff were key to the development of the Patient Information Guide which was shaped through a series of workshop sessions and resulted in an interactive tool which is available in a range of formats to suit the needs of stroke patients, carers and clinicians.

The Stroke Programme Board, and (sub-group) Clinical Reference Group membership includes a patient representative who actively contributes to discussion and influences the direction of travel. In addition, further patient engagement is taking place during January-March 2019 and, subject to clarification on consultation requirements, more formal pre-consultation engagement and public consultation will be undertaken if required in future.

Informal and formal discussion with the Health Overview and Scrutiny Committee (LCC) to develop a four-way (LCC, Blackpool, Blackburn with Darwen and South Cumbria) scrutiny approach to service change and transformation is underway, and updates on the Stroke programme (and other clinical pathways) are taking place.

ⁱ Size of the Prize: reducing heart attacks and strokes (STP Level), Accessed via http://www.healthcheck.nhs.uk/commissioners_and_providers/data/size_of_the_prize_reducing_heart_attacks_and_strokes Public Health England, 2017

Appendix 1.

Lancashire and South Cumbria Stroke Programme: NHS Long Term Plan alignment statement

Following the publication of The NHS Long Term Plan on the 7th January 2019 we thought it may be useful to quickly clarify where the stroke system proposals sit within the framework for future development signalled in The Plan.

As you will be aware we have worked closely with Dr Deb Lowe as the Chair of the Stroke Programme Board to ensure that wherever possible we were closely aligned to the national direction of travel.

The Plan recognises the importance of developing Integrated Stroke Delivery Networks which join up the stroke pathway from the start of stroke symptoms to eventual discharge from services. As part of this networked approach it highlights the benefits of ensuring patients have access to hyper acute interventions as part of a networked 24/7 service. This approach is strongly aligned to the joint stroke improvement plan which has been developed across all providers and our ongoing work to ensure effective access to hyper acute interventions, including thrombolysis and thrombectomy, for all patients in Lancashire and South Cumbria.

We are already working closely with colleagues across the health economy, supported by HEE and UCLan, to start to develop an innovative and flexible approach to meeting the workforce challenge in stroke care. This work will build up over the next few months building on a successful and well attended workshop in November 2018. We will continue both this work, and further develop our focus on digital opportunities and solutions in the coming months.

We are particularly pleased that the focus on developing high intensity models for stroke rehabilitation received significant focus in The Plan. This is clearly in line with the work which is currently ongoing across all CCGs and ICPs to ensure that we have services which meet patient needs, and support effective pathways, in all localities. There is a commitment in The Plan to begin roll out of this in 2020, in line with the current work in Lancashire and South Cumbria we will be well placed to be in the front runners for this milestone.

Finally, there is a clear link between the work which is taking place in developing an ambulatory model for patients with stroke like symptoms, TIAs, and mild strokes and the focus on developing a wide range of Same Day Emergency Care pathways heralded in Chapter 2.

Overall we feel that the work that has been ongoing around the improvement of stroke care in Lancashire and South Cumbria has put us in a strong position to be able to respond swiftly and effectively to The Plan. We would like to thank you for all your support in getting to this stage, and look forward to continuing that collaboration during 2019.

Stroke-related visual impairment – for information

Report compiled by Professor Fiona Rowe, VISION research unit, University of Liverpool
(January 2019)

What is the extent of this problem?

The prevalence of overall visual impairment has been estimated at 65% with varying prevalence reported for specific types of visual impairment¹⁻⁴. For example, visual field loss is reported in up to 52% of stroke survivors, central visual impairment in up to 70%, eye movement disorders in up to 68% and visual perceptual disorders (inclusive of visual inattention) in up to 80% of stroke survivors^{1, 3, 5, 6}. Figures for incident new onset visual impairment following stroke are placed at about 60%⁷. Given the estimated 100,000 new onset strokes per annum in the UK⁸ there are sizeable numbers of stroke survivors living with stroke-related visual impairment.

What is the impact?

Visual impairment constitutes a considerable comorbidity of stroke. Visual impairment, on its own or in addition to other stroke-related disabilities, can cause significant impact to quality of life⁹. For many, it results in inability or altered ability to undertake many aspects of daily activities with impact on return to work, participation in hobbies and family life, and can lead to social isolation, altered mood and depression¹⁰⁻¹². Interventions for stroke-related visual impairment are well established but require referral to appropriate eye care services, which is facilitated through orthoptic service routes¹³. Where visual impairment is identified, this facilitates optimisation of other therapy and early access to vision rehabilitation.

How can it be detected?

Visual impairment may be the sole presenting sign of stroke – approximately 90% of occipital lobe stroke lesions have no other neurological signs¹⁴. More commonly, however, visual impairment is one of a number of presenting signs and symptoms of stroke¹⁵. Visual impairment may cause symptoms that are noted immediately on occurrence of the stroke or, indeed, visual symptoms may only become apparent some weeks or months after stroke onset. Thus, presentation of visual symptoms by stroke survivors can be expected at any stage from stroke onset through to chronic post stroke stages. Furthermore, transient visual impairment is also recognised as a precursor symptom of stroke with such symptoms being hallmarks of transient ischaemic attack (TIA)¹⁶. Recognition of visual impairment as a common sequelae of stroke is slowly increasing. However, it remains under reported and poorly identified in stroke survivors because many visual conditions cannot be detected by merely observing the eyes¹⁷. Careful questioning alongside specific testing of visual function is required for the accurate and reliable detection of visual impairment.

Vision screening options

There are issues with how best to identify the presence of visual impairment through stroke team vision screening and specialist vision assessment¹⁸. Even with screening measures in place there are also issues reported with provision of care and access to vision services for stroke survivors who have been identified as having vision problems¹⁹.

Access to orthoptic services on acute stroke units enables faster provision of vision screening. The earlier assessment time-point reported for the IVIS study⁷ is important as it shows the feasibility and acceptability of early visual assessment within 3 days of stroke onset for at least half of stroke survivors and within 1 week of stroke onset for the majority. This in turn allows early detection of visual impairment and sharing of the functional significance of this with the patients, carers and stroke teams. Furthermore, early assessment leads to early intervention which has potential impact on general rehabilitation where visual function can be improved.

An ideal stroke vision service follows recommendations from the National Clinical Guidelines for Stroke⁸ which specify orthoptists as core members of the acute stroke team and screen all stroke survivors prior to discharge. Stepped down models of care include vision screening by others members of the stroke team with orthoptic referral for those identified with potential

visual impairment²⁰. However there must be acknowledgement in this instance of the reduced sensitivity and specificity of such screening¹⁷. Vision screening methods thus warrant improvement and the recent release of specific vision screening tools help to tackle this issue (e.g. VISA (Visual Impairment Screening Assessment)²¹ and Scottish stroke app²². Future work is required to embed VFAST (Vision-Face-Arm-Speech-Time) as part of stroke screening and as part of the 6-month review to better aid detection of visual impairment from start to finish and ensure best access to appropriate vision services and care²³.

North West Coast status

The current position in the North West Coast for stroke and vision is 13 Trusts with acute stroke units, 13 Trusts with eye departments with an overlap of these two services in all Trusts. Only five Trusts have orthoptists routinely assessing stroke survivors on the acute stroke units. Thus, a postcode lottery exists resulting in a health inequality for stroke survivors.

Health inequalities relate to poor detection of visual impairment whilst an in-patient on acute stroke units, poor or no referral to eye care services and long-term unmet needs with cost implications for the NHS and social care²⁴. Conversely, the cost of providing orthoptic services on acute stroke units is minimal in the context of the overall stroke and/or ophthalmology budgets but significant in terms of benefit to patients²⁰.

Recommendations

1. Orthoptist on acute stroke unit with vision assessments for all stroke survivors prior to discharge and minimum Monday/Wednesday/Friday service,
2. BIOS consensus statement²⁵ followed for one session per 10-bed unit,
3. Back-up screening by stroke multi-disciplinary team, particularly for early discharge cases within 24-48 hours where orthoptic assessment has been missed,
4. Embed VFAST at all stages of stroke pathway.

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