STROKE REHABILITATION PROGRAMME

IMPACT REPORT

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1. Introduction

The East Midlands Academic Health Science (EMAHSN) Stroke Rehabilitation Programme had the overall aim of facilitating provision of evidence based community stroke services in all regions of the East Midlands. The vision being that all stroke survivors that need it, would be able to receive appropriate delivery of specialist stroke rehabilitation in their own home. Stroke is the leading cause of adult disability, with devastating impact particularly when stroke survivors leave hospital and return home. Without community stroke rehabilitation services many stroke survivors face the prospect of a life of unnecessary dependency with additional burden placed upon formal and informal carers. The Stroke Rehabilitation programme's aim was to reduce inequality of care provision to ensure that stroke survivors and their families have greater opportunity to be supported in their recovery journey. Key outputs from the Stroke Rehabilitation Programme have facilitated widespread sharing of evidence based best practice models. This is key to ensuring stroke care remains on the local and national agenda.

The Stroke Rehabilitation Programme aimed to make a difference to the quality of community stroke care across the East Midlands by addressing four key areas. Firstly, we have influenced and changed commissioning through continued engagement with stakeholders and the provision of events and resources to ensure that gaps in services are highlighted and addressed. Our second key area has involved facilitating alignment and increased quality in data reporting to enable services to benchmark themselves meaningfully, inform pathway configuration and embed a culture of service improvement across the East Midlands. The third priority for the Stroke Rehabilitation Programme has been to work with provider teams to enhance multidisciplinary team-working and explore how multidisciplinary stroke teams are effective in differing local contexts. Our last key area has been to empower stroke survivors by developing timely, accurate, area-tailored information on stroke services across the East Midlands in the form of service directories.

As part of the programme, we have worked closely with the East Midlands Clinical Network (EMCN) and collaborated with Clinical Commissioning Groups (CCGs), service providers and stroke survivors. This enabled us to address variation, quality and accessibility of stroke services for patients living in the community.

2. Background

Stroke is the third largest cause of death in the United Kingdom, and is a leading cause of disability worldwide (National Audit Office, 2005), representing the most important causes of morbidity and long term disability in Europe (The European Stroke Organisation (ESO) Executive Committee and the ESO Writing Committee, 2008). There are approximately 152,000 strokes in the UK every year and about 1.1 million stroke survivors live in the UK (Stroke Association, 2013). Stroke consumes approximately 5% of all health service resources within the UK National Health Service (NHS), with a large amount of this being due to inpatient care of disabled stroke patients (Saka, McGuire, & Wolfe, 2009). Recovery can continue for many years after a stroke and consequently a seamless transfer of care and access to services over the long term is important for positive patient outcomes and experience.

The stroke care pathway begins with initial treatment in a hyper-acute or acute stroke specialist unit in an NHS hospital. For optimal recovery this needs to be followed on discharge from hospital by the provision of specialist rehabilitation in the community setting, for patients who need it (Walker, Sunnerhagen, & Fisher, 2013). During the last decade there has been an increasing focus on Early Supported Discharge (ESD) teams. ESD services comprise of multidisciplinary teams of nurses, therapists, doctors, and social care staff, with specialist stroke knowledge. ESD teams facilitate the transfer of patients from hospital to home and provide rehabilitation and support in the early stages of adjusting to the home environment (Fearon et al 2012; Fisher et al 2011).

The EMAHSN Stroke Rehabilitation Programme has used Normalisation Process Theory (NPT; May & Finch, 2009) to underpin the process by which knowledge and changes can become embedded in the stroke care pathway. NPT is constructed of four principles: coherence, which evaluates whether an intervention is meaningful; cognitive participation, which asks whether there is commitment and engagement; collective action, which helps to scope the required teamwork involved in an intervention; and lastly reflexive monitoring, which involves an appraisal of the intervention.

Firstly, our programme of work meets the principle of coherence because it is meaningful to our stakeholders and has a clear purpose. For example, we have worked closely with community providers to encourage participation in the Sentinel Stroke National Audit Programme, and this is meaningful to community stroke teams as they are mandated to enter data into the audit and are benchmarked by commissioners on the basis of the results. Our support has a clear purpose for

teams in that they can ensure that the effectiveness of services across the region is being measured consistently and robustly.

We have met the NPT principle of cognitive participation through consistent engagement with stakeholders at all levels to ensure that they are committed to being involved in our programme of work. This has occurred through attendance at regional advisory boards and networks, meetings to encourage the development of networks amongst our stakeholders, and visits to commissioners.

Our programme of work has relied on endorsing the third principle of NPT, collective action, which involves exploring what action and team work is required by ourselves and our stakeholders to embed knowledge and ideas. One way that we have achieved this is through exploring how Community Stroke Teams and ESD teams across the East Midlands work as part of a programme of workshops to enhance effective multidisciplinary working.

Lastly, we have endorsed the fourth principle of NPT, reflexive monitoring, through constantly appraising our approach and outcomes, and collecting feedback from stakeholders to guide our work. For example, we received feedback from Northamptonshire Community Stroke Team after providing the Multidisciplinary Team Effectiveness Programme with them, and used this information to improve the programme before providing it to other teams in the East Midlands.

Damschroder et al. (2009) developed the consolidated framework for implementation Research which is an organising framework detailing several constructs that may be associated with effective implementation, developed through a thorough review of published sources. Many of the constructs included in this framework are useful in explaining the success of the Stroke Rehabilitation Programme and are highlighted below.

The programme has benefitted from the expertise of Professor Marion Walker and Dr Rebecca Fisher, highlighting the legitimacy and credibility of our work, and linking the programme to a background of strong, high quality evidence.

Through engaging with stakeholders we were able to discuss the advantages of becoming involved in the programme, whilst taking care to consider the local context and tailor our work to local needs and priorities. We have been careful to reduce the complexity and cost faced by our stakeholders by managing and financing workshops, events and meetings for our stakeholders to attend.

We have appreciated how different organisations (providers, commissioners, public health, and NHS networks) are linked to each other and have made considerable efforts to ensure that all relevant parties were involved where possible. Additionally, we have facilitated links within organisations.

During the course of our programme, we have been careful to consider how ready stakeholders are to implement new ideas or changes, and what the learning climate of the organisation is. We have supported stakeholders with resources and knowledge to enhance the learning climate and provide the resources required. Additionally, we have identified champions who were able to support and drive the implementation of new ideas and changes that form part of our programme of work.

3. Inputs

The Stroke Programme was funded with £292,518 from 01/04/2014 to 31/10/16 of which £261,542 was allocated for staff pay. The remaining £30,976 was used to fund non-pay costs, as outlined below.

The costs of arranging and attending meetings and events for and with commissioners and providers, and the production of resources to inform and influence commissioning, totalled £12,000.

The Multidisciplinary Team Effectiveness Programme consisted of a series of workshops run with the community stroke team in four areas of the East Midlands in turn. The tables below outline the non-pay costs associated with running each programme:

Northamptonshire	
Item	Cost
Venue	£1775.00
Travel	£350.00
Transcription	£350.00
Total	£2475.00
Lincolnshire	
Item	Cost
Venue	£1800.00
Travel	£200.00
Transcription	£700.00
Total	£2700.00
Derbyshire	
Item	Cost
Venue	£1630.00
Travel	£100.00
Transcription	£550.00
Total	£2280.00
Leicestershire	
Item	Cost

Venue	£2370.00
Travel	£140.00
Transcription	£340.00
Total	**£2850.00**

Work to facilitate the alignment and improvement of data used by provider teams and commissioners included arranging and attending meetings and workshops. The costs associated with this work totalled £6,600.

Empowering stroke survivors through the production of area-tailored service directories involved engagement with service providers and the costs of this totalled £2,071.

4. Impacts and deliverables

The Stroke Rehabilitation Programme aimed to reduce inequalities and unnecessary variation in service provision for stroke survivors by facilitating evidence based practice. This involved engagement with commissioners, service providers and other stakeholders in varied health care environments and local contexts across the East Midlands. The programme resulted in delivery of the following outputs and made significant impacts in four key areas, as discussed below.

a. Commissioning

We have influenced commissioning through continued engagement with stakeholders and the provision of events and resources. Our achievements in this area include the production of an East Midlands wide report entitled 'The Provision of Care Pathways for Stroke Survivors' *(appendix 1a)* which has been disseminated to all regional CCGs, 36 Clinical Network contacts, 4 AHSN contacts, and has been downloaded 471 times from the EMAHSN website. Additionally, we have produced a heat map *(appendix 1b*) which demonstrates the gaps in service provision, in relation to evidence based standards, in a visual format. This was disseminated to all Chief Executive Officers of the CCGS in the region. It has also been downloaded from the website 73 times.

We have held two events; in February 2014, which was attended by 40 people from across the East Midlands including 9 commissioners, service providers, public health representatives and service users; and in June 2015, which was attended by 25 people from across the East Midlands including 9 commissioners, service providers, public health representatives and service users.

We have supported commissioners in plans for a new community stroke service in the Clinical Commissioning Group areas of Mansfield & Ashfield and Newark & Sherwood. Our programme provided a report detailing information of patient flow through existing services and recommendations to facilitate the provider/commissioner dialogue. A community stroke service proposal was submitted through the Clinical Commissioning Group's governance structures and initial support gained. The group requested further development, which is presently ongoing.

Southern Derbyshire Clinical Commissioning Group commissioned a one year pilot Life after Stroke Service, consisting of three Stroke Association Information, Advice and Support Officers. Stroke survivors can also access The Stroke Association online resource 'My Stroke Guide'.

East Leicestershire and Rutland and Leicester City Clinical Commissioning Groups sought our assistance with the development of a service specification for a new joint Community Stroke and Neuro Rehabilitation service. The specification includes the provision of six month reviews.

An updated heat map has been produced to demonstrate changes to community stroke services throughout the lifecycle of our Programme *(appendix 1c)*

The Stroke Rehabilitation Programme has assisted research translation into practice regarding the need for six month reviews for all stroke survivors and conducted a national survey to map provision of six month follow up reviews and identify adopted processes and data collection tools across England *(appendix 1d).* A six month toolkit was also developed in collaboration with the EMCN and shared with Commissioners at an event highlighting the importance of follow up reviews *(appendix 1e)*. The toolkit has been downloaded from the EMAHSN website 68 times and the six month review webpage has been accessed 572 times.

We have been successful in engaging with commissioners partly due to existing networks previously developed by Dr Rebecca Fisher and Professor Marion Walker. These were established through research conducted within the Collaboration of Leadership in Applied Health Research and Care, Nottinghamshire, Derbyshire and Lincolnshire (CLAHRC NDL) and developed in partnership with the EMCN. Members of the Stroke Rehabilitation programme have become integrated within the stroke care network through collaborative work developing specialist stroke community rehabilitation and six month review service specifications along with representation on local advisory groups and boards. Dr Rebecca Fisher was a member of an NHS England National Rehabilitation Programme and EMAHSN outputs are featured in a national Commissioning

guidance for Rehabilitation *(appendix 1f).* Such activities have enabled us to contribute, in a responsive and timely manner, to discussions about the provision of stroke services as and when they occur. Our work has influenced commissioners to provide additional services in two areas of the East Midlands; this will have a positive impact on stroke patients.

b. Data

The Stroke Rehabilitation Programme has worked with commissioners and providers to increase the efficiency of community stroke service delivery through the use of data. The aim has been to empower service providers with the means by which to increase the quality of the data they collect, and to use the data to measure the effectiveness of their services. We have achieved this through providing a series of workshops for both community and acute providers that have been attended by representatives of all areas of the East Midlands.

At the beginning of the Stroke Rehabilitation Programme four of the fifteen East Midlands community stroke teams (including ESD teams) were registered with the Stroke Sentinel National Audit Programme (SSNAP). The audit programme offers the opportunity for national benchmarking of teams in relation to evidence based standards. Through the course of the EMAHSN Stroke Rehabilitation programme the number of East Midlands' community stroke team teams participating in the audit has increased to all fifteen teams across the region. Additionally, ten teams have appeared on the SSNAP regional clinical audit reports for the quarter September - December 2015 (indicating the teams are inputting sufficient data to meet the threshold for reporting), compared to just one team at the start of the programme in July 2014. This highlights the impact that our programme has had in terms of assisting and advising teams with registering to take part in the audit and entering the data.

Our approach has been to facilitate a community of good practice through bringing teams from across the East Midlands together to share knowledge and work through local issues. As a programme, we have worked hard to empower community and acute providers in taking ownership of their data collection, reporting and evaluation, and this has resulted in greater participation in the national audit. We have provided support and guidance through the creation of resources and liaising with the Royal College of Physicians on behalf of the stroke care teams. Our Supplementary Early Supported Discharge and Community Rehabilitation Team SSNAP Helpnotes *(appendix 1g)* have been adopted by the Royal College of Physicians and the resource has been downloaded from the EMAHSN website 132 times.

Our Programme investigated the potential of developing an East Midlands Stroke Care Pathway Data Repository where patient level data from acute and community stroke care services could be linked to provide an overview of patient flow through services and the stroke care pathway as a whole. With the support of the EMAHSN Informatics Theme, four meetings were held involving 22 stakeholders including service providers, commissioners and data controllers across Nottinghamshire. A report 'Barriers to data sharing across the Stroke Care Pathway' was produced concluding the scoping exercise and has been downloaded 59 times *(appendix 1h).*

We were also invited to run a workshop for 11 acute stroke providers and data controllers from across the East Midlands. Following this successful event, a data specific forum has now been added to the quarterly East Midlands Stroke Clinical Advisory Group meetings.

Our work has helped service providers to gain consistency and alignment with their use of data to measure their effectiveness, share good practice, and highlight areas for improvement.

c. MDT Effectiveness Programme

The EMAHSN Stroke Rehabilitation Programme has assisted the adoption of research translation into practice through providing an educational programme to promote effective multidisciplinary working in community stroke teams.

We have achieved this through developing and providing a bespoke programme of workshops to explore and enhance effective team working in multidisciplinary community stroke teams across the East Midlands. The educational programme was delivered to community stroke teams (including ESD teams) across the East Midlands, involving delivery of sixteen half-day workshops in total.

This evidence based educational programme was based on earlier research led by Dr Rebecca Fisher within the CLAHRC NDL and through pilot work with teams in Nottinghamshire (funded by the Higher Education Innovation Cluster). As part of the effectiveness programme, each team was given a bespoke feedback report detailing information about their multidisciplinary team working and recommendations for service development. The final workshop involved each community stroke team developing a series of SMART goals designed to encourage service development over a period of six months. Follow-up visits by the Stroke Rehabilitation Programme to each team ensured that they were working towards their goals and included the provision of further support and guidance to help teams fully realise their service improvements. Teams were then issued a final report *(appendix 1i).*

We received feedback from 66 community stroke team staff who had taken part in the workshops. Of these, 94% felt that they could significantly apply the learnings to their work, 86% felt that their knowledge of the evidence base had increased, and 98% rated the workshops as good or very good. Across Lincolnshire, Derbyshire, Northamptonshire, and Leicestershire 34 SMART goals for service development were identified. The majority of goals have been achieved during the programme and all teams are actively working towards achieving the remainder in the next six months.

This aspect of our work has been successful because it has been based on established evidence and tailored to reflect local needs to make it meaningful to the community stroke teams. The provision of resources to the teams made sure that we were able to provide them with tangible support, and our credibility as staff from the University of Nottingham enabled us to create a knowledgeable and supportive environment for the community stroke teams to feel comfortable in opening up and including us in their world.

A final event held on the 29 June 2016 focused on provision of community based stroke care for stroke survivors in the East Midlands. The overall theme of the event was a celebration of multidisciplinary team working and provision of stroke rehabilitation in the community. The aim was to empower and support staff and highlight service improvement initiatives from team across the East Midlands. A further aim was to highlight outputs from the Stroke Programme, providing learning and signposting opportunities. Seventy people attendees the event including 4 Commissioners, 51 service providers, 4 researchers and 2 service users from across the East Midlands. There were also guests from the Yorkshire and Humber region. The guest speaker was Jocelyn Cornwell, Directory of the Point of Care Foundation.

We received feedback from 34 attendees. 91% of respondents stated the event had addressed it aims to highlight learning, share knowledge, network and discuss ‘what next?’ with100% stating that attending the event had been a good use of their time. 79% of respondents suggested things they intended to do differently as a result of the event. We asked attendees for feedback on involvement in and experiences of working with our Programme (see figure 1).

Figure 1

Our work has helped four community stroke services (10 teams in total) to work more effectively as multidisciplinary teams through identifying areas for evidence based service improvement and sharing best practice across the East Midlands.

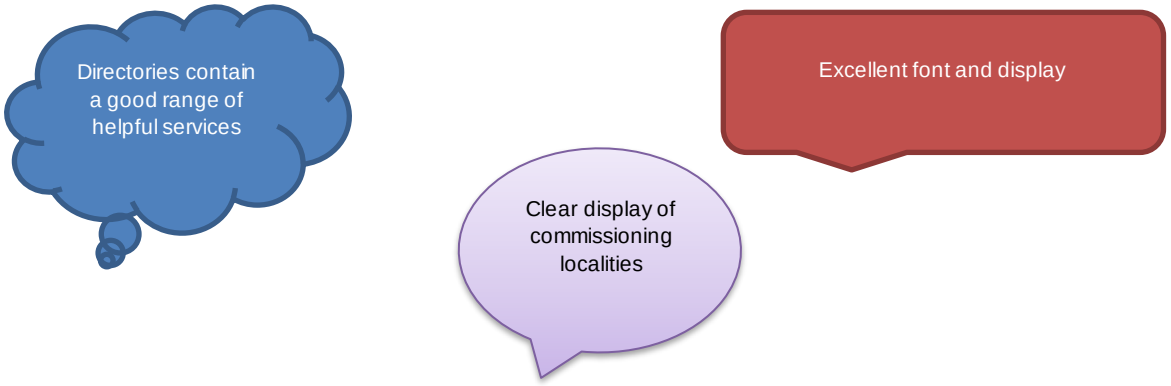
d. Stroke Services Directories

Through the creation of stroke service directories, the Stroke Rehabilitation Programme had made direct impact to stroke survivors through the provision of localised information about available services. We have achieved this through engaging with providers of all parts of the stroke care pathway in each area of the East Midlands to collect information on the availability of services. We have formatted this information into a patient friendly document, relevant for each

geographical area of the East Midlands to help patients across the region understand and be aware of what services are available to them *(appendix 1j).*

Directories have been adopted by four of the eight acute stroke units in the East Midlands, which admit approximately 3200 patients each year. Two Community hospitals and four Stroke Association Co-ordinators are also disseminating directories which are available online on the EMAHSN, Nottingham Clinical Commissioning Group and Nottinghamshire County Council 'Help Yourself' websites. Directories have been downloaded from the EMAHSN website 524times.

Feedback was gained via a Survey Monkey survey. 91% of respondents stated the directories were 'easy to understand' and 'about the right length'.73% rated the resource as 'very useful' or 'useful' and commented:



Directories have also been shared with East Midlands Clinical Commissioning Group Leads developing 'Care Navigator'; a database of services for Health Care Professionals.

To address continued use and sustainability of these patient focused resources, original file documents have been sent to 41 service providers and 6 commissioners.

A key part of this project has been the close links we have maintained with the Nottingham Stroke Research Partnership Group. This group of stroke survivors have provided guidance and input to our programme activities. The stroke survivors supported the idea of developing patient friendly information after we had produced a detailed report mapping service provision across the East Midlands. Their input has helped shape the directories and ensure that they are appropriate for use by stroke survivors and their families.

This project has been successful due to our continued engagement with key stakeholders in the stroke care pathway. Our other streams of work enabled a

close working relationship and opportunities for face to face meetings to develop high quality, bespoke directories. Additionally, in house graphic design expertise allowed for the production of high quality and professionally presented directories that are visually appealing to both patients and staff.

Our work has helped patients understand what services are available to them after leaving hospital so that they are able to make informed decisions.

e. Wider dissemination

The Stroke Rehabilitation Programme has strived to build and maintain networks extending beyond geographical boundaries. Dissemination of outputs at national and international meetings and conferences has led to our work contributing towards stroke service re-configuration in areas outside the East Midlands.

Notable national presentations by Dr Rebecca Fisher have included speaking at two Yorkshire and Humber Strategic Clinical Network stroke events, and at the Welsh and UK Stroke Forums. In addition, Stroke Rehabilitation Programme team members have presented posters and platform presentations at UK Stroke Forum. On an international level, Dr Fisher has highlighted the impacts of this work at European and World Neurorehabilitation conferences.

f. Impact Matrix

To provide a summary document of Stroke Rehabilitation Programme impacts, we have produced an impact matrix (available on request). This has framed our programme activities and impacts, in relation to overarching aims of the EMAHSN.

5. Sustainability

Throughout the course of the Stroke Rehabilitation Programme, we have produced a number of high quality resources which have been disseminated widely to key stakeholders and members of the public. These resources feature on the EMAHSN website and many will remain relevant following the closure of the programme. However, some resources will become out of date over time and will no longer be hosted on the website.

The programme's success has depended on programme team members being embedded within the community stroke provider and commissioning community and maintaining strong working relationships with stakeholders. This has been facilitated by close working during the educational workshops and through running workshops and meetings to support teams in the use of data. Community stroke team members from across the East Midlands region have used these opportunities to form a clinical network; a supportive community where they can

share good practice, motivate and encourage each other. There is a risk that this network may not continue upon closure of the Stroke Rehabilitation Programme. Identification of champions within each of the community teams and empowerment of team leads will help to ensure its continuation and further measures to identify an appropriate social media platform have been discussed and will be taken forward in collaboration with the EMCN.

The Stroke Rehabilitation Programme represents the EMAHSN at the East Midlands Stroke Clinical Advisory Group (run by the EMCN) and the Nottinghamshire Stroke Network Board. Dr Rebecca Fisher will remain embedded in the stroke care environment and is well-known for her stroke research at the University Of Nottingham.

The resources from the educational workshops will be hosted on the EMAHSN website, allowing teams from other areas to access them and use them to drive their own projects of service improvement. However, the success of the MDT effectiveness workshops lies in part to the fact they were facilitated by the EMAHSN Stroke Rehabilitation programme, who were external to the teams involved and credible advisors. As such the impact of the resources without the additional facilitation after the closure of the programme may not be as substantial.

Our work to influence commissioners has been successful because we have been well placed to enter into discussions and provide resources at times appropriate to the commissioners. However, after the closure of the programme, these opportunities may not be capitalised upon and there is a risk that momentum to commission new services will slow.

6. Return on investment

It is difficult to calculate the return on investment as this programme has focused on empowering community stroke teams to take ownership of their own service development and tackle local issues as a community of good practice across the East Midlands. Through these service improvement initiatives teams will be able to work more effectively and deliver a more efficient service.

Our work to influence commissioners in the provision of community stroke services in areas where they do not currently exist is unlikely to realise a cost saving in the immediate future but will result in a higher quality of service delivery for patients in these areas (as will be evidenced in the national stroke audit). Additionally, it will increase the level of independence that some stroke survivors are able to achieve, which could facilitate their return to work in some circumstances, and reducing reliance on social care packages. However, providing accurate quantification of these impacts, without collection and analysis of routine data, is not possible.

7. Lessons learnt

Throughout the work of the Stroke Rehabilitation Programme, several lessons have been learnt. Firstly, the success of engaging with stakeholders and being able to influence decisions relies on being in the right place at the right time in order to be available for important discussions. Our flexible and sustained collaborative approach enabled us to do this, but we have also been successful through knowing when to give stakeholders time and space. This is particularly important when dealing with commissioners, as we were able to offer support, advice, and resources when the time was appropriate in line with commissioning cycles, but then to step back whilst commissioning processes took place. Balancing between maintaining a supportive presence without becoming overbearing is challenging, however a skill which Stroke Rehabilitation Programme members developed.

We have also worked hard to establish ourselves within the stroke care network so that we are accepted as credible and valued collaborators. A key part of this was retaining clarity around what the aims of our programme were throughout its lifetime, and continually reminding stakeholders of our focus on evidence based practice and facilitation of commissioner and provider activities.

The Stroke Rehabilitation Programme has been able to operate in flexible and responsive way to the local and varied issues raised by our stakeholders. This has ensured that their needs are satisfied, but also that the programme has matured and developed to tackle the aim of reducing inequalities and variation in stroke care from a diverse range of angles. The adaptability of the programme was helpful in situations where particular elements of the programme did not progress, as we were able to look at an issue from a different perspective, and tackle it in a new way. For example, we initially planned to create a repository of stroke data measuring the quality of service provision. However, through engaging with providers, information governors, and data controllers it became clear that the risk and costs associated with trying to obtain the necessary governance approvals were too high. Critically, use of the proposed repository would not offer benefits above and beyond information provided by the existing national stroke audit (appendix 1i). We were able to work with providers to come up with a different idea of how to measure the quality of stroke services across the region through collecting additional metrics. This plan has been implemented in collaboration with the EMCN.

The importance of building and maintaining networks has been very clear during the course of the programme. Through engaging with teams across the East Midlands we were able to develop a network of providers who are able to work

together to share knowledge and good practice, for example around the use of data. Prior to the development of this network, providers of community stroke services across the East Midlands were connected and were unaware that they faced similar challenges. Through creating a supportive and collaborative environment for providers to come together to discuss their issues, they have been able to work together to develop solutions for their problems.

Critically we have successfully maintained engagement and aligned our work and priorities with the East Midlands Strategic Clinical Network. This ensured that we have presented a united front across the region and have worked together to address difficult local issues. It has also meant we have not duplicated activities, and have instead optimised resource and skill sets to achieve our goals.

The Stroke Rehabilitation Programme has had the benefit from close engagement with stroke survivor colleagues throughout the lifetime of the programme. This has ensured that the needs of the stroke patient remain at the core of all aspects of our work. We worked closely with three stroke survivors to produce short video clips emphasising the importance of community stroke care which we used at one of our commissioning engagement events. We have also had close links with the Nottingham Stroke Research Partnership Group to understand the stroke survivor's perspective with regard our project activities.

One issue that the Stroke Rehabilitation Programme has faced relates to whether to encourage patients to advocate for equal or similar services across the East Midlands. Whilst we have worked hard to ensure stroke survivors are aware of what services exist in their particular region, many patients may not be aware that they do not receive the same services as those living in other areas. Raising awareness of the importance of addressing inequality in service provision has been effective in our close working with individual stroke survivors, and their attendance at our commissioning events has been thought provoking and facilitatory. However, we believe there are important ethical issues to consider before involving stroke survivors at scale in a direct lobbying capacity.

8. Conclusion

The Stroke Rehabilitation Programme has had a positive impact on the delivery of community stroke services across the East Midlands through influencing commissioning, improving efficiencies in provider teams, translating research evidence into practice, and benefitting the patient experience. Through our role as facilitators and our ability to provide support and information, there is the potential that the impacts realised during the course of the programme will be maintained after the programme's closure.

This report has been written by Dr Jen Yates, Hazel Sayers and Dr Rebecca Fisher on behalf of the Stroke Rehabilitation Programme of the East Midlands Academic Health Science Network. For more information please contact: rebecca.fisher@nottingham.ac.uk

9. References

Damschroder, L. J., Aron, D. C., Keith, R. E., Kirsh, S. R., Alexander, J. A., & Lowery, J. C. (2009). Fostering implementation of health services research findings into practice: a consolidated framework for advancing implementation science. *Implentation Science, 4*(50), 1-15. doi:10.1186/1748-5908-4-50

Fearon P, Langhorne P, Early Supported Discharge Trialists. Services for reducing duration of hospital care for acute stroke patients. The Cochrane database of systematic reviews. 2012;9:CD000443.

Fisher RJ, Gaynor C, Kerr M, Langhorne P, Anderson C, Bautz-Holter E, et al. A consensus on stroke: early supported discharge. Stroke; a journal of cerebral circulation. 2011;42(5):1392-7.

May, C., & Finch, T. (2009). Implementing, Embedding, and Integrating Practices: An Outline of Normalization Process Theory. *Sociology, 43*(3), 535-554.

National Audit Office. (2005). *Reducing brain damage: Faster access to better stroke care* (HC 425 Session 2005-2006). Retrieved from National audit office website: http://www.nao.org.uk/wp-content/uploads/2005/11/0506452.pdf

Saka, O., McGuire, A., & Wolfe, C. (2009). Cost of stroke in the United Kingdom. *Age and Ageing, 38*, 27-32. doi:10.1093/ageing/afn281

Stroke Association. (2013). Stroke Statistics. In S. Association (Ed.), (Version 1 ed., Vol. Resource sheet 11, pp. 1-13): Stroke Association.

The European Stroke Organisation (ESO) Executive Committee and the ESO Writing Committee. (2008). Guidelines for Management of Ischaemic Stroke and Transient Ischaemic Attack. *Cerebrovascular Diseases, 25*, 457-507. doi:10.1159/000131083

Walker, M. F., Sunnerhagen, K. S., & Fisher, R. J. (2013). Evidence-based community stroke rehabilitation. *Stroke, 44*, 293-207. doi:10.1161/STROKEAHA.111.639914

10. Appendix 1 – key outputs

1a Provision of Care Pathways for Stroke Survivors across the East Midlands Report

1b Heatmap of Regional Community Stroke Service Provision

1c Updated Heatmap of Regional Community Stroke Service Provision

1d Stroke Six Month Reviews: A National Audit of Service Provision across England

1e Commissioner Toolkit - Six Month Reviews

1f Commissioning Guidance for Rehabilitation

1g Supplementary Helpnotes for Early Supported Discharge & Community Rehab Teams: Stroke Sentinel National Audit Programme

1h Barriers to Data Sharing across the Stroke Care Pathway Report

1i Final MDT Effectiveness Programme Reports

1j Stroke Patient Service Directories

- Nottingham City
- Mid Nottinghamshire (Newark & Sherwood)
- Mid Nottinghamshire (Mansfield & Ashfield)
- Nottinghamshire South/County
- Northamptonshire
- Lincolnshire
- South Derbyshire
- Leicestershire

11. Impact matrix

Available on request/EMAHSN website.

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