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StrokeLINK

Evaluation of the StrokeLINK approach-is it an effective mechanism for improving patient empowerment and integrating care?

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Introduction

- 2020: **5,800** adults were admitted to acute hospitals with stroke with an 11% mortality rate.
- The average age of patients with a stroke was 72 years;
- Seven days was the median length of stay in a stroke unit.
- After acute care most patients with a stroke **(52%, n=2682)** are discharged home.

Irish National Audit of Stroke National Report 2020

The Irish National Audit of Stroke (INAS) is a clinically-led audit that measures the quality of stroke care, as well as the structure of stroke services, provided to patients in all hospitals that admit acute stroke patients.



Stroke is the leading cause of acquired disability and the 3rd leading cause of death in Ireland. There are approximately 6000 strokes admitted to Irish hospitals per year - this report analysed data on 5,153 stroke patients. While stroke is looked upon as a disease of the older person, over a quarter of the cases were aged under 65 years. 57% of all cases were male.

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Introduction

- Stroke post care recovery can impact on people physically, emotionally and socially (Crowfoot et al., 2018; Sánchez Silverio et al., 2021).
- Surveys identified that patients feel unprepared to meet the challenges of returning home following a stroke (Lutz et al., 2011; Prick et al., 2021; Visvanathan et al., 2019).
- Differences in the access to post-care supports and information for patients can have an impact on their long-term outcomes (Connolly & Mahoney, 2018).

- The Mater Misericordiae University Hospital (MMUH) stroke service was striving to provide multi-disciplinary education to patients and their families.
- Despite this, patients regularly reported feeling disempowered e.g: not knowing the side effects of their medications, who to contact if they were having difficulties and how to keep themselves well.
- In 2019 following funding from the Sláintecare integration fund, StrokeLINK was established.
- Collaboration between stroke service users, the MMUH stroke service and Mater Transformation, CHO 9 Public Health Nursing (PHN), local GPs, University College Dublin Health Systems, and the National College of Art and Design (NCAD).

StrokeLINK innovates care after stroke.



StrokeLINK

Its goals are:

- Holistic support system that seamlessly transitions the patient through the acute phase into the community, via personalised education and support tools, and the support of two StrokeLINK Clinical Nurse Specialists (CNSs),
- To help patients become partners in maximising their own health and wellbeing,
- To provide tools that may be customised to respond to patients' individual needs at the right moment in time,
- To upskill community health care teams in stroke care, and
- To reduce reliance on acute services.



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Refer to:
<https://www.strokelink.ie>



Evaluation Aim

The aim of the study was to explore whether the StrokeLINK approach has been an effective mechanism for improving patient empowerment and integrating care across the community and acute settings, and for spread and scale locally and nationally.

- Has StrokeLINK improved the integration of the patients' care between the acute and the community setting;
- Has the sharing information improved due to StrokeLINK;
- Does the mechanism of design thinking and flexible engagement approaches undertaken as a result of Covid19 enabled inclusive involvement, and
- What is required to spread and scale StrokeLINK locally and nationally.

Methods

- An explorative desk top review of the final report to Sláintecare submitted in May 2021 and other research data compiled by the StrokeLINK team;
- Qualitative interviews conducted with thirteen key stakeholders between August -October 2021.
- A narrative approach was adopted which generated rich story-based data in which the participants narrated their experiences and reflected upon what those experiences meant for them and for StrokeLINK.
 - ***Covid19 & HSE Cyber Attack***

Results

A review of the baseline data indicates that StrokeLINK has:

- ✓ exceeded many of its initial targeted outputs/outcomes;
- ✓ effective in enabling stroke patients to be partners in their own health care, facilitating their independence and supporting healthy living, and
- ✓ shown a possible consequential reduction on reliance on the acute care system and prevention of avoidable crises.

Effectiveness in enabling patients to be partners in their own healthcare, facilitating independence and supporting healthy living

A survey of StrokeLINK patients (n=47), using a subset of questions from the National Inpatient Experience Survey, was conducted, and the results were compared to pre-StrokeLINK patients (n=64).

- 97% versus 69% agreed or strongly agreed that they had all of the **tools and knowledge** needed to keep themselves well (41% relative increase);
- 96% versus 58% reported that they were given **written information** about what they should or should not do after leaving the hospital (66% relative increase);
- 89% versus 28% reported that they were **told about the danger signals** to watch out for after they went home (218% relative increase), and
- 94% versus 48% were told who to contact if they were worried about their condition after leaving the hospital (96% relative increase)

Effectiveness in enabling patients to be partners in their own healthcare, facilitating independence and supporting healthy living

The StrokeLINK service tracked patients' stroke prevention behaviours among StrokeLINK patients (n=62) and compared these with a matched baseline sample of pre-StrokeLINK patients (n=50).

- 95% of StrokeLINK patients, versus 40% in the control group, either gave up or significantly reduced their **alcohol intake** (138% relative increase);
- 67% **stopped smoking** compared with 14% of the control group (379% relative increase);
- 97% of StrokeLINK patients were **monitoring their blood pressure**, either themselves (83%) or having it measured at the GP or pharmacy (14%), compared to 58% in the control group (67% relative increase);
- 100% of StrokeLINK patients versus 68% of the control group, **attended their GP** for follow-up stroke care (47% relative increase).

Preliminary data indicating a possible consequential reduction on reliance on the acute care system and prevention of avoidable crises

Quarter 3 2020 showed that StrokeLINK nurses were able to provide early intervention in the following cases:

- they flagged **5 patients** to their GPs for treatment where blood pressure had elevated;
 - they were able to resolve **8 issues** with medication, without GP input, and
 - they were able to refer approximately **7 incidents** of post stroke side effects and symptoms.
-
- First 81 StrokeLINK of the StrokeLINK cases 0 avoidable presentation to the Mater Emergency Department within three months of discharge home.
 - The current operational costs to deliver the StrokeLINK service at the MMUH are approximately **€110,938 per annum** -estimated direct care costs related to preventable emergency attendances at the MMUH are estimated to be **€459,036** per annum.

StrokeLINK has improved the integration of the patients' care between the acute and the community settings

“So with Sláintecare, the whole thing is about keeping patients out in the community. So our goal is that they don't rely on the acute service and they're not presenting to A&E for reasons that could be preventable. So it's to have the patient empowered with their own care and comfortable and educated in how to monitor themselves at home If I got a phone call from the patient and their blood pressure was elevated, I would discuss it with the patient on the phone for a number of minutes and I would say, "well, how are you feeling?" and assess them over the phone, and if I get the sense that there's something very unwell here, I would advise them to come to the hospital, but if it's something that I could say, "right, let's just leave it 15 minutes", we'll recheck their blood pressure, if it starts to come down, we're alright, but, if we start to see it trending upwards, we make an assessment then about whether the patient needs to be seen by the GP or whether they need to come out to the hospital.” (Irene, StrokeLINK nurse)



StrokeLINK has improved the integration of the patients' care between the acute and the community settings

“I just think of one person particularly and the benefits were that they had more clarity around what had happened to them, what the follow up procedures were, what they needed to do and look out for and who to get in touch with, and from my point of view it was certainly - there was much more clarity around what person had had, what had been organised, because quite often with these things people just come out and they have had have a stroke and you're not sure who is visiting, have they organised home care packages, who is involved?...So it's provided much clearer instructions and information on the patient's care and continuing care needs.” (Niall, GP).

StrokeLINK has improved the integration of the patients' care between the acute and the community settings

*“We've been working with NCAD designer and he has done a huge amount of work to improve the quality of our (hospital) discharge summaries and to always ensure that the StrokeLINK contact details and what's being offered are included. The beauty is that **all the discharge summaries are posted out, but they're also digitally sent to the GP practices so when the patient pitches up to their GP, the information is automatically there.**” (Anthony, consultant).*

*“The **real asset** I have to say is the community people on it (the steering committee), the community managers, GPs and nurse manager”.* (Ciara, Mater Transformation).

Sharing information has been improved due to StrokeLINK

“Everything was explained and in the book. I was lucky to the extreme that I had no facial or speech slurring or anything like that. But for me it was quite a shock because strokes in my family are very prevalent.” (Nora, StrokeLINK patient)

“I got the book in hospital and the nurses went through it with me. It was very clear. That and everyone around me helped me to understand what was going on. I thought the book was very good/very clear.” (Michael, StrokeLINK patient)

“I think StrokeLINK is a very good one. It puts the patient at the centre, I think that it genuinely does. And also, it dismantles a few of the older stereotypes of the GP does this, hospital does that, community nurse does that, and say, “well, OK, let’s just see here how we can do this best for the patient”...” (John, GP)

Spread and Scale of StrokeLINK

“We need funding to keep the StrokeLINK nurses on. That's what we need. That is it. Now there is significant opportunity to transfer this model of patient empowerment, patient education, post discharge care to multiple chronic diseases.”
(Ciara, Mater Transformation).

“I think for the service to, you know, for the moment funding is only until December and it's a fantastic service. I think it's made such a difference personally to our patients. I would just love to see the service rolled out full-time after December. It would be a real shame if it's not.” (Fiona, StrokeLINK nurse)

StrokeLINK-Reflection & Next Steps

1. It is clear from this review that the StrokeLINK model has achieved improved integration of care between the hospital and community settings and the empowerment of patients/carers to be partners in their own health care
2. Patient empowerment is enabled by a continuum of care from StrokeLINK nurses and support over three months post discharge. Having a point of contact is valued.
3. There is an urgent need to ensure that continued resources are provided to the MMUH to support the StrokeLINK nursing service beyond December 2021 to maintain the current level of service. Currently this work is ongoing-issue with integrated care project piloting and not scaling up? What is needed/captured as success?
4. Time and resources are needed to ensure broader GP and community services' involvement in the StrokeLINK service. Lessons from a decade of undertaking integrated care work in England stress the important role of GP's who time and resourcing for involvement is often overlooked(Lewis et al., 2021).

Thank You

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