How can the UK's National Stroke Audit drive quality improvement in post-hospital care?

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Background: National registries and audit programmes are recognised methods of assessing quality of healthcare delivery[1]. The Sentinel Stroke National Audit Programme (SSNAP) collects a clinical dataset for stroke patients in England, Wales and Northern Ireland (85,000 patients annually)[2]. SSNAP has historically focused on hospital-based care and evidence suggests the audit has been successful in driving improvements[3]. The audit has more recently expanded to include post-acute services, providing rehabilitation for survivors of stroke in their own home. However, its impact in this setting has yet to be established.

Challenges exist in collecting national data beyond the hospital setting. Community services are diverse, with variations in the commissioning and models of services[4]. This research explored stakeholder perceptions of SSNAP, their engagement and the role of SSNAP feedback in quality improvement.

Phase One: research questions

- How do stakeholders perceive SSNAP?
- How is data from SSNAP currently used by services?

Methods:

An online survey was used to access a national sample of stakeholders, distributed via social media and clinical networks in England. Individuals were invited to participate if they worked in, managed or commissioned community stroke rehabilitation.

Free text, yes / no options and 5-point Likert scales were used to gather both qualitative and quantitative data. Free text was analysed thematically.

Results:

A diverse sample of stakeholders from across the post-acute audit pathway was achieved (n=206).

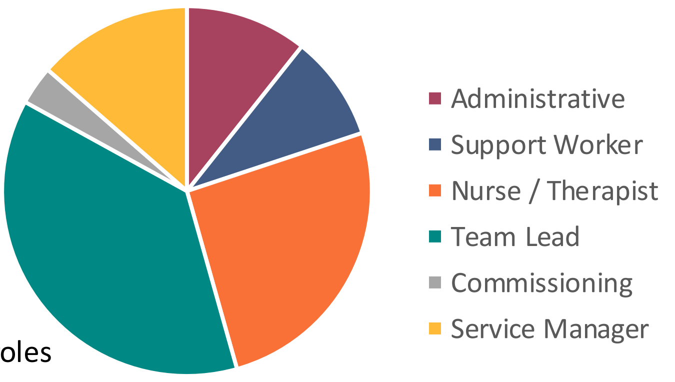

Fig 1. Survey participant roles

▷Participants reported that audit feedback failed to reflect progress made by stroke survivors, or the rehabilitation delivered in this setting.

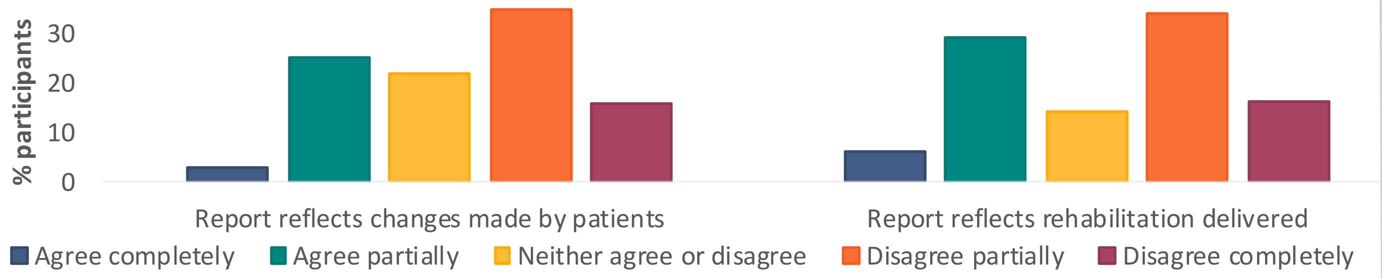

Fig 2. Participants' perceptions of audit feedback

▷39% of participants reported SSNAP feedback being used to support planning a range of quality improvement activities within their organisation.

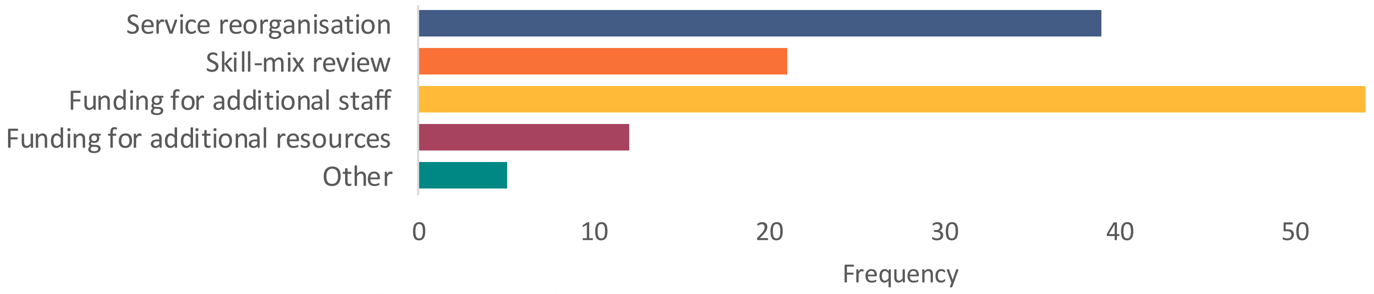

Fig 3. Improvement purposes for which audit feedback used

Qualitative findings

Free text offered an opportunity to explore challenges to participating in SSNAP and perceptions of its impact.

"Not completed in time so data is often lost"
[P-154: Service Manager]

"Data is inconsistent due to lack of dedicated admin staff to complete"
[P-91: Clinician]

"We used SSNAP data in conversations with commissioners. This helped us expand the team to cover the whole region"
[P-78: Team Lead]

Phase Two: research question

- What influences the ability of SSNAP to drive quality improvement in this setting?

Methods:

Realist qualitative interviews[5] were undertaken with stakeholders, recruited through established clinical networks and social media in England. These collaborative semi-structured interviews were completed online using MS Teams™.

Results:

A diverse sample of stakeholders from across the post-acute audit pathway was achieved (n=20).

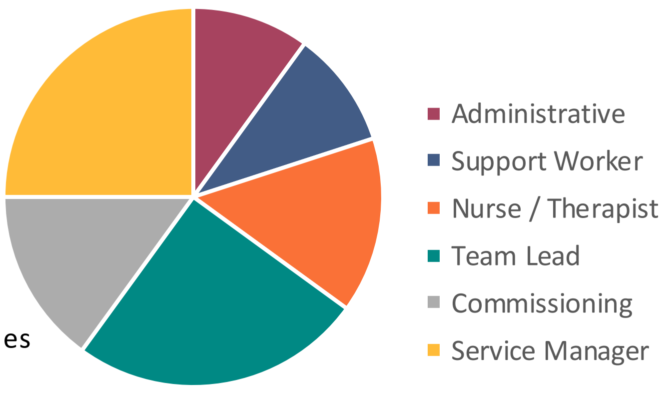

Fig 4. Interview participant roles

Four distinct themes identified in Phase One were explored in interviews. These were organisation, data extraction, managing records and using data. Findings are summarised in Table 1.

Outcome of interest	Components
1. Organisational support How teams are enabled to be actively engaged in SSNAP.	• Leadership interest • An "Audit Champion" • Dedicated administrative support
2. Accessibility of findings The ease with which "headlines" can be identified, reports navigated, and salient details signposted.	Feedback contains: • Common metrics • A consistent format • Clear signposting • A concise summary
3. Pathway communication Effective channels of communication across the whole stroke pathway	• Local forums to collaborate • Established networks • Availability of up-to-date contact details
4. Accurate data Stakeholders are more confident to use data they perceive to be accurate	• Complete data for entire caseload • Reflects the services delivered by community teams • Captures changes made by stroke survivors in the community setting

Table 1. Summary of interview findings

Conclusion:

Stakeholders are actively engaged with the post-acute audit and describe committing significant efforts to support participation. Despite the reported limitations of data and the challenges to participation highlighted, SSNAP feedback is being used to inform quality improvements.

There are key messages from this study regarding the organisational culture and support necessary for teams to actively engage with SSNAP beyond data collection alone. Efforts are required from rehabilitation teams, healthcare organisations and SSNAP in order to realise the potential of national clinical audit as a tool for quality improvement in the post-acute setting.

References:

1.Ivers N, Jamtvedt G, Flottorp S, et al. Audit and feedback: effects on professional practice and healthcare outcomes. Cochrane library. 2012
2.Sentinel Stroke National Audit Programme. National Annual Results 2022. Available at:https://www.strokeaudit.org/results/Clinical-audit/National-Results.aspx [Accessed 22.04.23]
3.Rudd AG, Hoffman A, Paley L, Bray B. 20 years of researching stroke through audit. Clinical Rehabilitation. 2018; 32(8): 997-1006.
4.Chouliara N, Fisher RJ, Kerr M, Walker MF. Implementing evidence-based stroke Early Supported Discharge services: a qualitative study of challenges, facilitators and impact. Clinical rehabilitation. 2014;28(4):370-377.
5. Manzano A. The craft of interviewing in realist evaluation. Evaluation. 2016; 22 (3): 342-60.

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