



# MAXIMISING THE QUALITY OF STROKE CARE IN IRELAND - DEVELOPMENT OF A NATIONAL STROKE AUDIT

Moran CN<sup>1</sup>, Merriman NA<sup>1</sup>, McCormack J<sup>2</sup>, Harbison J<sup>2</sup>, Sexton E<sup>1</sup>, Williams D<sup>3,4</sup>, Kelly PJ<sup>5,6</sup>, Horgan F<sup>7</sup>, Collins R<sup>8</sup>, Ní Bhreacáin M<sup>9</sup>, Byrne E<sup>10</sup>, Thornton J<sup>11</sup>, Tully C<sup>2</sup>, Hickey A<sup>1</sup>

1Dept. of Health Psychology, RCSI, Dublin. 2National Office of Clinical Audit, Dublin. 3Dept. of Geriatric and Stroke Medicine, RCSI, Dublin. 5Dept. of Neurology, Mater University Hospital, Dublin. 6Neurovascular Clinical Science Unit, University College Dublin. 7School of Physiotherapy, RCSI, Dublin. 8Dept. of Geriatric and

Stroke Medicine, Tallaght University Hospital, Dublin. 9Patient Representative, Dublin. 10Elaine Byrne, Institute of Leadership, RCSI, Dublin. 11Dept. of Radiology, Beaumont Hospital, Dublin.

## Research Background

#### QUALITY OF CARE IN STROKE

- Stroke is an important health issue in Ireland, with approx. 5,500 adults admitted to hospitals with an acute stroke in 2019, and 30,000- 45,000 stroke survivors in the community/nursing homes. 1,2
- Significant advances in stroke treatment -> improved survival -> more people in need of post-stroke care<sup>3</sup>.
- variations in outcomes for stroke patients depend on the quality of care received across different hospitals and practices.
- Stroke -> significant impact on physical, cognitive, psychological, & social wellbeing; with a wider effects on health system resources & expenditure.
- Need for continual audit of stroke healthcare services to evaluate the delivery of evidence-based practice in a high quality and equitable manner in the short and longer term after stroke.



#### IMPORTANCE OF NATIONAL STROKE AUDITS

- Clinical audit: "clinically-led quality improvement process that seeks to improve patient care & outcomes through systematic review of care against explicit criteria & acting to improve care when standards are not met."4
- Through audits, the provision of high-quality comparative data has been a real stimulus for service delivery improvement, allowing the identification of processes associated with better outcomes. <sup>5</sup>
- Key challenges:
  - the heterogeneity of data collected internationally
  - update registries alongside evolving stroke therapies
  - predominant focus to date on the acute phase of care
  - Lack of systematically collected patient-reported outcome measures.
- A national stroke register for Ireland was initially developed in 2010-2011. In 2019, this register was taken over by the National Office of Clinical Audit (NOCA), to develop it into the Irish National Audit of Stroke (INAS)

### The Present Research

#### **OBJECTIVES**

- To develop an internationally benchmarked core minimum dataset
  - In line with best practice standards and local priorities
  - Incorporates structure, process, care quality, and outcome indicators, especially PROMS
  - Developed collaboratively through continuous engagement between the research team, national and international collaborators, patient representatives, and knowledge users
  - Covers the continuum of the patient journey from hyper-acute, acute, rehabilitation, to community care

#### RESEARCH DESIGN & METHODOLOGY

#### Phase 1: Acute Care Stroke

- Scoping review of international stroke audits & current audit guidelines & recommendations
- Inventory of existing and recommended data items included in acute care stroke audit datasets internationally
- Scoping review protocol published<sup>6</sup>
- Eligible national stroke audits/registries identified
- Data charting to compare Irish items against international registries

Scoping & systematic reviews <sup>6</sup>

Item extraction & data charting

Stakeholder interviews and focus groups

Consensus agreement & Delphi consensus





- Inventory of existing and recommended data items included in non-acute care stroke audit datasets internationally, based on scoping review and qualitative interviews with relevant stakeholders (ethics approval obtained)
- Systematic review of PROMs available for use with stroke patients
- Delphi-process with relevant stakeholders to arrive at a consensus-based outcomes dataset

#### Phase 3: Resourcing & Data Collection Procedures

- Scoping review of resourcing and data collection procedures
- Stakeholder engagement in Ireland to investigate the feasibility of implementing the audit based on current resources.

### POTENTIAL IMPACT FOR PATIENTS, POLICY, & PRACTICE

- Facilitate prospective data collection of high quality and rich data to:
- Review unmet needs & improve patient outcomes locally & nationally
- Assess accessibility & equitability of services in urban or remote settings
- Inform future policy decisions and practice initiatives in Ireland
- Be used in research trials to further understand the lived experience and patient reported outcomes of stroke survivors post-acute care

>Place health outcomes at the heart of healthcare decision planning







26;4(31):31.

PowerPoint icons

Figures adapted from INAS Report (2019) &

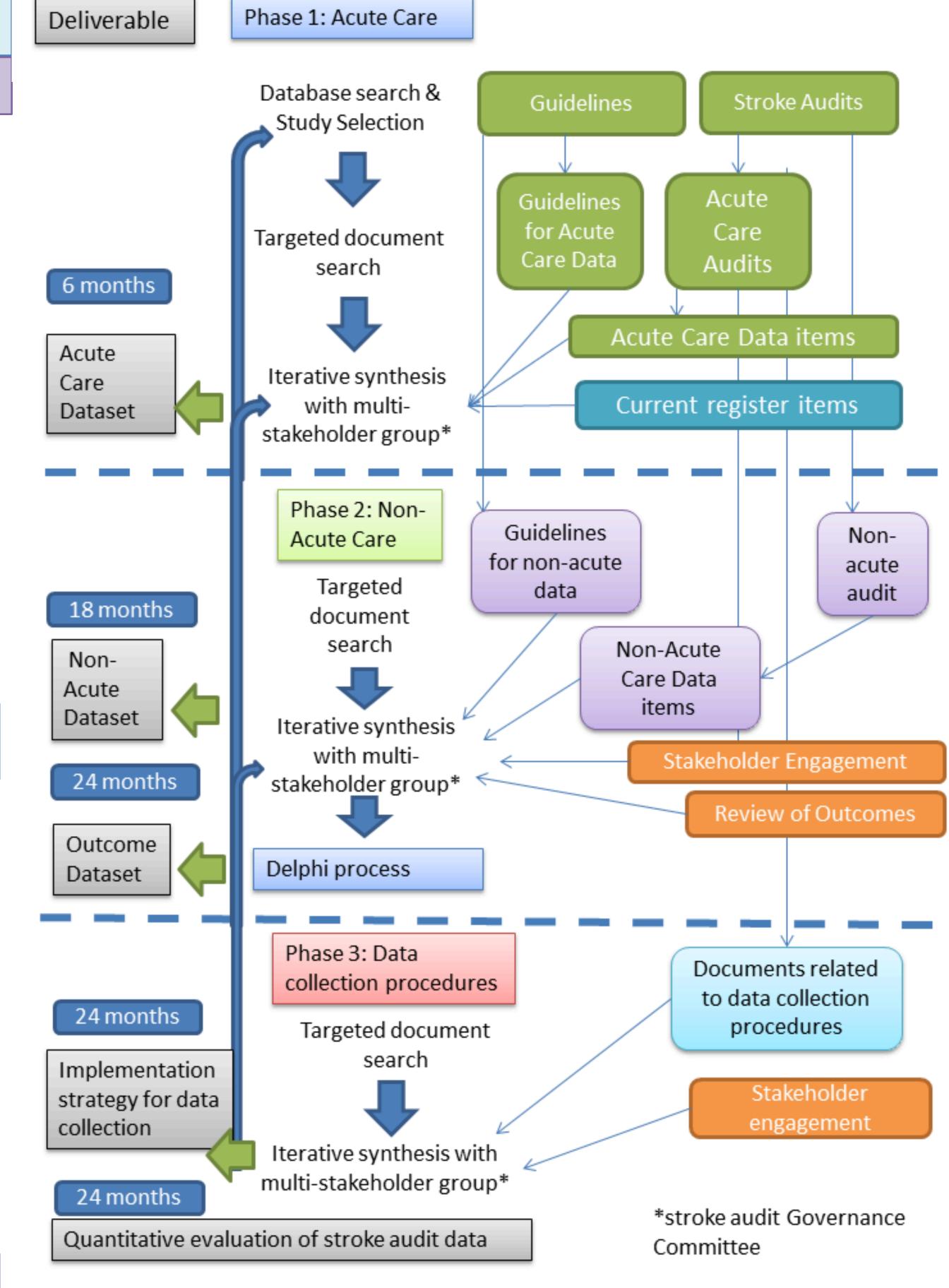


Figure 1: Overview of research methodology and deliverables

#### Acknowledgements References APA Core Management Team Irish National Audit of Stroke Report (2019) Governance Committee Smith et al. (2008). Cost of Stroke in Ireland Patient representatives Estimating the annual economic cost of stroke and National & International Collaborators transient ischaemic attack (TIA) in Ireland. Dublin: Irish Heart Foundation HRB Applied Partnership Award Seminog. (2019). BMJ; 365(I1778). Funded by the Health Research Board in Ireland Grant No. APA-2019-036 Commission of Patient Safety and Quality Assurance (2008) **Contact Details** Bray (2013). BMJ;346(7912):1-12. Principal Investigator: Prof. Anne Hickey Bruen et al. (2021). HRB Open Research;

ahickey@rcsi.ie

catherinenmoran@rcsi.ie

Corresponding Author: Dr. Catherine Moran