

---

# eStrokeNav: Better Individualised Stroke Care

Initiative Type

Service Improvement

Technology

Status

Deliver

Added

27 August 2019

Last updated

11 August 2021

URL

<https://cnxp3cuvtvrn68yjaibaht5ywrxspj7m.clinicalexcellence.qld.gov.au/improvement-exchange/estrokenav-better-individualised-stroke-care>

## Summary

The Stroke Portal (eStrokeNav) app is intended to be a key "cog" in the model of stroke care for Metro North Hospital and Health Service (MNHHS) stroke survivors. The app helps stroke patients,

---

their family and carers to navigate and access their individualised goals and recovery care plan, evidence-based stroke information and self-management tools and relevant community health and support service information. The project has successfully navigated healthcare system challenges to deliver change, improvement and innovation in the health service and has presented at the Clinical Excellence Queensland Showcase 2019.

#### Key dates

Aug 2018

#### Implementation sites

Metro North Hospital and Health Service.

#### Partnerships

Queensland University of Technology, consumers and clinicians.

## Key Contacts

Kevin Clark

2115

[paul.blee.hiu](mailto:paul.blee.hiu)

Nursing Director, Medicine Stream

Metro North Hospital and Health Service

(07) 3646 1787

Kevin.Clark@health.qld.gov.au

---

## Aim

eStrokeNav offers patients to the following key functions;

1. their stroke information,
2. individualised goals for their recovery care plan,
3. evidence-based stroke information and self-management tools, and
4. relevant community health and support service information.

The advantages of an application are that information is 'pushed' to the consumer rather than have them decide what to 'pull' from existing information. Clinicians benefit from access to a longitudinal view of a patient's reported outcomes trend, providing crucial data to identify goals of discharge trajectory, both positive and negative thus better inform treatment decision-making throughout the course of the patients post discharge from acute care.

## Benefits

An innovative response was required to find ways to provide patient information and access to support services. Australian stroke audit data (2017) (1) suggest that less than half of hospitals routinely provide a discharge care plan (personal recovery plan) to these patients to support self-management. True continuity of care to support patient-driven self-management and decision-making in the early post-discharge period remains fragmented, due potentially to a lack of inter-professional collaboration (2). Research suggests more than half of stroke patient readmissions within 30 days of discharge can be attributed to inadequate outpatient care coordination and incomplete initial evaluations or inadequate discharge instructions (3,4). Currently, we are not meeting the care needs of stroke survivors and their families during their transition home from hospital, with limited access to appropriate resources (5,6).

## Background

Stroke is the second most common cause of mortality and a major cause of disability and dependence in adults contributing to low health-related quality of life and high burden of care. In 2014/15 financial year stroke patients occupied 122, 370 Queensland public hospital bed days (combined acute / rehab) with 52, 689 bed days in acute episodes of care, and 69, 681 bed days in subacute.

## Evaluation and Results

Development and testing of the eStrokeNav with extensive consultation has resulted in an app that is

---

useful and reflective of the needs and interests of stroke patients and their carers. The App scope was expanded to include the AboutMe application (initially piloted by the Cancer Stream, currently under the operations of Values Based Health Care team for MNHHS). This enables an opportunity for patient reported outcomes to be collected at specified time points and can be reviewed by clinician's prior to patients' appointment. Additionally it allows a secondary research aim to obtain patient outcomes relating to mood, functioning and quality of life. App development was a collaboration between MNHHS information Technology (MINT), MNHHS clinicians, The Stroke Foundation and Queensland University of Technology (QUT) students. This collaboration demonstrated feasibility of engaging student researchers in app design development with collaboration in MNHHS information technology department.

## Lessons Learnt

Time was the main challenge faced throughout this program of work. Time during the implementation phase was significant to coordinate QUT Infrastructure Technology student needs with that of MNHHS to facilitate app design and development. However once established, the collaboration with students has been a key success of the program. The preparation to ensure a robust research evaluation has also been time consuming yet the enthusiasm from all staff involved has maintained momentum during these challenges.

## References

1. Cadilhac DA, Andrew NE, Lannin NA, Middleton S, Levi CR, Dewey HM, et al. Quality of acute care and long-term quality of life and survival: the Australian Stroke Clinical Registry. 2017:STROKEAHA. 116.015714.
2. Ploeg J, Matthew-Maich N, Fraser K, Dufour S, McAiney C, Kaasalainen S, et al. Managing multiple chronic conditions in the community: a Canadian qualitative study of the experiences of older adults, family caregivers and healthcare providers. 2017;17(1):40.
3. Condon C, Lycan S, Duncan P, Bushnell CJS. Reducing readmissions after stroke with a structured nurse practitioner/registered nurse transitional stroke program. 2016:STROKEAHA. 115.012524.
4. Koehler BE, Richter KM, Youngblood L, Cohen BA, Prengler ID, Cheng D, et al. Reduction of 30-day postdischarge hospital readmission or emergency department (ED) visit rates in high-risk elderly medical patients through delivery of a targeted care bundle. 2009;4(4):211-8.
5. Kitzman P, Hudson K, Sylvia V, Feltner F, Lovins JJJoch. Care coordination for community transitions for individuals post-stroke returning to low-resource rural communities. 2017;42(3):565-72.
6. Macneill H, Meighan K, Nguyen T, Cameron JJJJoS. timely stroke education: Longitudinal educational needs of stroke survivors in transition: rhb. 153. 2015;10:90.

