Stroke Navigation Service
trial: An integrated care innovation
Co-Authors

- **Associate Professor Dianne Roy, RN PhD FCNA(NZ)**
- Ms Allanah Harrington, MSc(Neuro), Ngāi Tahu
- Dr Roz McKechnie, PhD
- Dr Victoria Andersen, PhD
- Mr Gerry Fennelly, RN BA(Phil)
- Ms Sue Gasquoine, RN MPhil (Hons)
- Mr Arun Deo, MSc
- Ms S Woods, MOst (candidate)
- Mr Tatsuya Unno, RN MN PgCertHS PgCertPH
Our study

Overall Hypothesis:
That provision of stroke navigation services will improve outcomes and quality of life for stroke survivors and their whānau (families)

Aim:
To trial and evaluate a Stroke Navigation Service for stroke survivors and their whānau across the care continuum; acute to rehabilitation services and into the community

Ethical approval: NZ Health & Disability Ethics Committee - Ref: 15/NTA/11/AM01
Trials registry: Australian & New Zealand Clinical Trials Registry - Ref: 12615000058572
Stroke Navigation Service

- An innovative integrated model of care to support family whānau and patients (stroke survivors)
- Provides post-stroke support and advocacy
- Crosses primary and secondary care services and disciplines
- Identifies and addresses barriers and family whānau strengths and needs within a holistic framework that respects ethical, cultural and religious beliefs
Development of the Stroke Navigation Service

- Informed by findings of Phases 1 and 2 of the longitudinal *Stroke Family Whānau Project* and literature review
- Consultation with health professionals, community stroke advisors (Stroke Foundation), stroke survivors and their family whānau, and cultural advisors from our two local district health boards
- Stroke navigator role defined and job description developed
- Two navigators (one Māori) were employed and trained within the workplace and through a limited e-learning component
The trial

- Mixed-method intervention study of a stroke navigation service compared with usual care
- Convenience sampling was used to recruit participants from two city hospitals (A for intervention group and B for comparison group) between April - October 2015.
- Stroke Navigators worked with intervention families whānau for six months
- Data were collected from both groups at baseline, three and six months (April 2015 - April 2016)
- Post-intervention focus groups with clinical staff
Inclusion/Exclusion criteria

Inclusion:
- Stroke survivor (& family whānau members) aged at least 18 years
- Experienced a first-ever stroke & admitted to Hospital A or B
- At least two other members of family whānau agree to participate
- Sufficient English language skills to complete the written questionnaires and/or participate in interviews

Exclusion:
- Medical condition that prevents the person giving informed consent
- Cognitive or other significant impairment such that understanding the implications of participation is not able to be achieved
# Our participants

<table>
<thead>
<tr>
<th>Stroke Survivors (n=11)</th>
<th>Intervention Group</th>
<th>Comparison Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Māori</td>
<td>3</td>
<td>1</td>
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<tr>
<td>Non-Māori</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Gender - Female</td>
<td>3</td>
<td>3</td>
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<tr>
<td>- Male</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Average age years (range)</td>
<td>69 (42-80)</td>
<td>80 (73-87)</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Whānau Family (n=21)</th>
<th>Intervention Group</th>
<th>Comparison Group</th>
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</thead>
<tbody>
<tr>
<td>Māori</td>
<td>7</td>
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</tr>
<tr>
<td>Non-Māori</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Gender - Female</td>
<td>14</td>
<td>4</td>
</tr>
<tr>
<td>- Male</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Average age years (range)</td>
<td>45 (20-72)</td>
<td>58 (20-86)</td>
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</tbody>
</table>
The intervention

- Stroke navigators worked out of Hospital A
- Māori stroke navigator worked with whānau
- Began as soon as possible after admission, once recruitment processes were complete
- Intervention for six months as the stroke survivor moved through acute, rehabilitation services and discharge into the community
- Primary focus on family whānau during in-patient phase
Stroke navigator: Key competencies

- Understand stroke treatment and rehabilitation
- Ability to recognise boundaries and adhere to scope of practice
- Adaptability and flexibility
- Ability to think outside the square and be proactive rather than reactive
- Knowledge of community services
- Ability to liaise with a wide variety of people of different ethnicities
- Good assessment and evaluation skills
- Ability to remain calm when faced with complex and difficult family situations
- Collaborate well with all members of the multi-disciplinary team
What did the stroke navigators do?

The main tasks of the stroke navigator were to:

- Assess family whānau knowledge, understanding and needs
- Prioritise family whānau concerns
- Explain and provide information
- Develop innovative solutions to problems/barriers
- Liaison and advocacy with community and health services
- Develop and implement care/support plan in discussion with family whānau and health professionals
- Support families whānau in developing strategies for managing caring and maintaining their own well-being
### Stroke navigation hours per family whānau

<table>
<thead>
<tr>
<th>Participant Code</th>
<th>SN intervention Hours per week: 3 months</th>
<th>Preparation hours</th>
<th>SN intervention Hours per week: 6 months</th>
<th>Preparation hours</th>
<th>Comments</th>
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</thead>
<tbody>
<tr>
<td>Fam 001</td>
<td>3-5</td>
<td>2- 4</td>
<td>1-3</td>
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<td></td>
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<tr>
<td>Fam 002</td>
<td>3-5</td>
<td>2- 4</td>
<td>1-3</td>
<td>1-2</td>
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<tr>
<td>Fam 003</td>
<td>3-6</td>
<td>2- 4</td>
<td>2- 4</td>
<td>2- 4</td>
<td>Fam member passed away at 3 months</td>
</tr>
<tr>
<td>Fam 004</td>
<td>3-5</td>
<td>2- 4</td>
<td>1-3</td>
<td>1-2</td>
<td>SS passed away after 3 months</td>
</tr>
<tr>
<td>Wha 001</td>
<td>3-5</td>
<td>2- 4</td>
<td>1-3</td>
<td>1-2</td>
<td>SS passed away Week 4 of intervention</td>
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<tr>
<td>Wha 002</td>
<td>3-6</td>
<td>2- 4</td>
<td>2- 4</td>
<td>2- 4</td>
<td></td>
</tr>
<tr>
<td>Wha 003</td>
<td>3-6</td>
<td>2- 4</td>
<td>2- 4</td>
<td>2- 4</td>
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</tbody>
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(SN = Stroke Navigator, Fam = Family, Wha = Whānau, SS = Stroke Survivor)
Qualitative Findings

Easing the journey - how she made everything easier

- Connecting pathways
- Advocating
- Supporting ‘self’ management
Connecting pathways

- **Walking alongside** - with her backing you up, you felt like you would get heard... Just having someone to talk to ... and have a moan to.

- **Dealing with one person** - the fact that it was just one person you were dealing with instead of trying to deal with multiple different people ... Just easier with the services and stuff, just having the in-between person.

- **Making sense** - what this means or may mean for us. It was just medical jargon, it was chucked at us and I wanted to know “what does it mean?” She [SN] could actually break that down for us.

- **Decreasing the load** - just the ease of it, just the fact that it took all the stress away and we could just ring up and say, “this happened”. It was like oh something has happened, [SN] will help sort it out, it was really helpful.
Advocating

- **Stroke survivor and family whānau** – she [SN] advocated for my Mum’s rights and her rehabilitation and created the opportunities for us all to be part of that whole circle of communication. On a number of occasions the SN would come in and actually ask some of those difficult questions and made some of my mum’s medical team a bit uncomfortable in terms of one, her questioning, and two, really advocating for Mum. That was really powerful for us.

- **Bridging the gap with health professionals and service providers** – Initially we were floundering, like when we went to ask questions “what’s happening with Dad?”, we were always brushed off. When [SN] came on board, she actually created those opportunities for us to have discussions with the nurses and the doctors and things became a little bit smoother.
Supporting ‘self’ management

Developing strategies - accessing information and services

- Writing down questions to ask the medical team
- Identifying key services within hospital and community and how these could be accessed, sometimes being the first point of contact

Stepping in, but not taking over - helped establish systems that work and enable family whānau to manage the best they can

- SN challenged ‘the system’
- Stepped in a walked alongside
- Worked with families whānau to establish realistic plans
Stroke navigation: Easing the journey

Just navigating that mine field, it was a bit of a mine field at the end.

When the SN came on board everything became easier.

Having a SN was beneficial for myself as well as my family in the sense of having that support. Actually having somebody to bounce my concerns or questions off has been really helpful.

It would be beneficial for everyone to have a SN, just to support the families if they want to look after or keep their family member in their home, I think it is a really important role.
What we learnt

- SN services are valued by family whānau and can provide an important adjunct to existing stroke services.
- SN need to be available across the week, at least Monday to Friday, but may be employed part- or full-time.
- SN may be based in hospital or community but navigators need to work across both sectors.
- A SN service has the potential to reduce disparities and achieve longer, healthier, and more productive lives for stroke survivors and their families whānau.
- Cultural support and supervision is required for Māori stroke navigators. We would recommend similar support and supervision for stroke navigators working with other cultural groups such as Asian and Pasifika.
- Stroke navigators require clinical supervision that should fit with existing supervision models within DHBs.
# Stroke Navigation: Future Direction

<table>
<thead>
<tr>
<th>Waitemata DHB</th>
<th>Unitec</th>
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<tbody>
<tr>
<td>Six navigators employed</td>
<td>Development and approval of a work-based Stroke Navigator Training Programme for first delivery 2018</td>
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<tr>
<td>Work-based professional development programme (Unitec)</td>
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<tr>
<td>Clinical supervision</td>
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<tr>
<td>Academic supervision (Unitec)</td>
<td></td>
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<tr>
<td>Delivery of service</td>
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**Evaluation of Service**

Mixed method research study
Conclusion

Integrated models of care, such as a Stroke Navigation Service, that ease transitions and support families whānau across the care continuum are needed to reduce the burden on families, whānau, and hospital, community, and aged-care residential services.