Feedback Stroke Conference 2018
Bridging the continuum
Sydney August 7-10th

Smart Strokes and Stroke Society of Australia
Feedback areas: Cognition, stroke prevention, transitions and intensity
Toni Heinemann
Occupational Therapist

Unmet needs of Australian Stroke Survivors and carers post discharge rehabilitation Nadine Andrews

- Around 475, 000 Australians living with stroke
- Survey – 765 respondents, more than 1 year post stroke living in community
- 50% needing assistance with ADL's

Main Unmet Needs – 84% had unmet needs

- Concentration, memory, fatigue and emotion
- Younger SS's had more unmet financial and relationship/social needs. Work and leisure big unmet need
- Greater the disability, especially with poor cognition the more unmet needs reported

Carers and unmet needs -

- 50% of people who have had a stroke require support from formal or informal carers
- Varies from low to high care
- RCT study – patients discharged with ESD vs usual care
- Outcome measure – Carer Strain Index
- Carer Burden was initially higher in ESD program but decreased
- Carers in standard group had increasing care burden and at 8 week mark was higher than ESD service

# Return to driving and work post stroke Maree Hackett

- Predictors of return to driving and work for SS's under 65 years one month post stroke
- 359 participants, 26.7% returned to driving within 1 month
- Strongest predictor: Independent with PADL's at day 28 post stroke
- Private health insurance, younger, returned to paid work.
- 2-3 months average RTW time
- 12 months average RTD time
- 26% returned to driving within 1 month and half of these knew they were not allowed to

Hospital to Home Transition and innovative interventions to improve transitions

Natasha Lannin and Louise Gustafsson

- Hospital to home – systematic review for D/C planning

- Strong evidence for home modifications for visual impaired patients

- Post d/c home visits – prevent falls and functional decline

- Pre discharge home visits – not strong evidence

- New study to commence
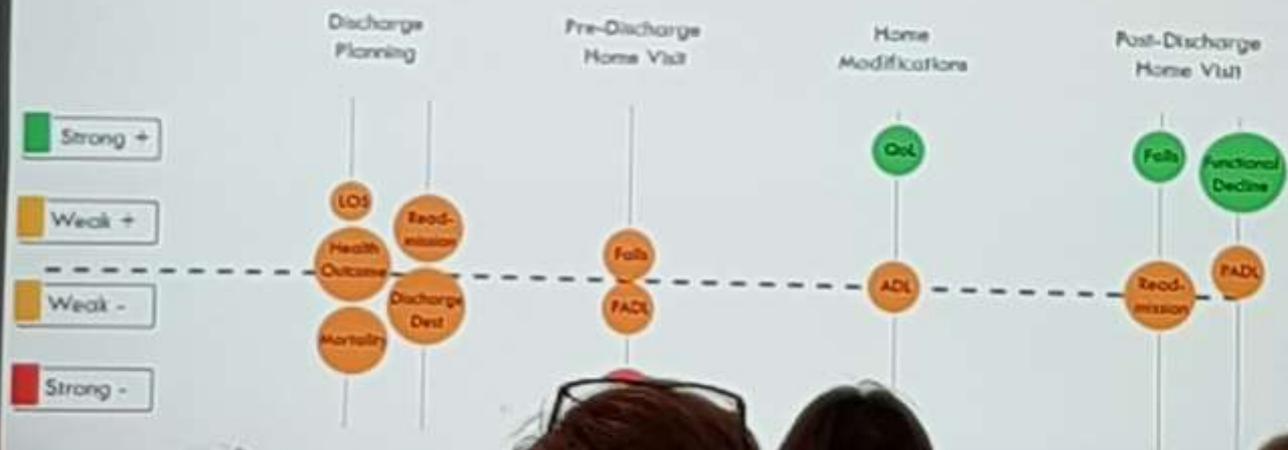
STRENGTH Trial

- Innovative way to complete therapy
- One day a week at patients home 6 month period
- Qualitative interviews undertaken with SS (n=11)
- Themes: Assisted with interdisciplinary goal setting, confidence on discharge, equipment and environmental issues prior to discharge, more real experience

Feasibility of semi structured practice for upper limb rehabilitation – Emma Schneider

- 80% of SS have upper limb impairment
- We need a 240% increase in intensity
- Study reviewed the feasibility of doing an extra 60 minutes, 6 days a week, 4 weeks
- Participants included: Box and Block score less 54, Grade 1 WE, Grade 3 Sh, no severe cognitive impairment (MMSE 24/30) or language concerns
- Outcome Measures: baseline and at completion of program

Semi Structured Practice

- Treatment – 30 minutes GRASP program, 30 minutes Able X (computer based program on a laptop with controller)

- 4:30 to 5:30pm before dinner, difficulty with transport to gym area

- Results: improved scores on outcome measures and doubled intensity

- Feasible with limited input

Implementation of sustainable CIMT program in subacute care Lauren Christie

- National audit of 110 Australian stroke units only 9% were using CIMT
- Review the sustainability of a 2 week program over multiple sites and 2 years

Study completed 1. File audit (20 files per team)

- Audit (baseline): 38% eligible for CIMT, 2 % offered and received.
- Audit (3 months): 51% offered, 27% received
- Audit (6 months): 61% offered, 34% received

2. Interviews and focus groups with clinicians post 2 day CIMT training

- 9 Focus groups and 4 interviews
- Results: Main barriers include knowledge and confidence; environmental context and resources
- Big variation in teams

How to safely increase exercise opportunities in the rehab gym: Kevin Weeks

- Study design: Cross sectional observational study with behaviour mapping, inpatient stroke unit and general rehabilitation unit

- Four times a day, 3 days a week for 10 weeks

- Results: 1319 patients observations, 15% with family, 26% no assistance = 41% total

- No adverse events

Key ideas of how it worked

1. Structured Workstation
2. Environmental Settings
3. Class/group
4. Family Assistance

Cognition on admission predicts motor change in subacute rehab: Observational Study Ingrid Li

- Aim of this study was to assess time in therapy versus number of repetitions as NOT the same thing
- Retrospective audit extracted from notes
- 33 SS's, subacute unit, average 245 repetitions per day
- Data found that admission cognitive FIM was biggest predictor of improvement (1 point reduced cog FIM , resulted in 3.7 increase in motor FIM)
- Poorer cognition, greater motor outcomes
- Higher motor FIM – reduced LOS
- Age was a predictive factor – each year older, 15 less reps a day
- Initial exercise dose was NOT a predictor of FIM motor change
- Need to shift to recoding dose as reeditions
- Advocate for patients with poor cognition to engage in rehab

Clinical practice guidelines provide little guidance for cognitive rehabilitation – Margaret McGrath

- 60% of SS have cognitive impairment on admission

- Less than %% SS have formal cognitive assessment

- Review of cognitive clinical practice guidelines (CPG's)

- 8 CPG's were identified

What they told us?

- No clear or consistent definition of post stroke cognition or domains

- Whole range of assessments – MOCA and MMSE most commonly used

- Oxford cognitive screen – only one developed for stroke

- Lack of consensus across all CPG's

Cognitive Strategy training for increased performance in ADL's following stroke: A systematic Review   Ruth Swanton

- Cognitive strategy

"goal directed and consciously controllable processes that facilitate or support performance as learners develop internal procedures that enable them to perform the desired skill"

- Current evidence to support improvements in performance on executive function measures BUT

- The effect on performance of everyday tasks is inconclusive

Cognitive Strategy training

- Systematic review, key terms 'stroke' 'TBI' 'metacognitive' 'strategy training' 'activities of daily living'
- 6 electronic databases
- Inclusion criteria: over 18 years, neurological condition.
- Intervention: cognitive strategy aimed at improving task performance
- Comparison: Usual care or no intervention
- Outcome measure: at least one measure of ADL or occupational task performance

Cognitive Strategy Training

- Results: wide range of strategies, intensity and frequency, outpatient and inpatient settings
- Main outcome measures: MBI, FIM, performance quality rating scale, GAS, COPM, observation of task performance
- Insufficient evidence to guide clinical practice
- Large scale RCT's are required
- Qualitative research to understand experiences and perspectives of stroke survivors and their support person

Post Stroke Cognition
Dr Jeff Rogers

- 3 of 4 SS will have impairment in at least one domain of cognitive impairment
- Increases risk of low mood
- Increases risk of long term disability
- Unsure of dosage need for cognitive therapy
- Systematic review examined 22 RCTS – overall medium size effect (0.48)
- Largest effect for visuospatial and language domains but smaller for attention, memory and executive function but all POSITIVE outcomes

Post Stroke Cognition

- In these studies, language demonstrated a plateau effect at 15-25 hours a week

- Longer you wait, reduced effectiveness

- Compensatory and restorative approaches BOTH improved, visuospatial domains favoured compensatory

- Focus on domains that will generalise (attention and memory)

- Dosage is important – not necessary MORE

- Need functional outcome measures and better description of interventions in studies

Post Stroke Cognition

- Cognitive and motor functions are integrated
- Tested with a study that looked at virtual reality rehab
- UL and motor recovery were better with visual treatment
- 3 sessions a week for 40 minutes – if decreased or increased amount no change
- Maintained function long term
- Train COGNITION with MOTOR FUNCTION

Anxiety in Stroke – Dr Ian Kneebone

- Anxiety occurs in 10% SS's
- Fear of falling BIG in SS – 47% at phobic levels
- Relaxation in stroke – research showing that even if not specific designed for stroke BETTER than nothing
- Autogenic relaxation
- Effective in normal population
- Practical to organise groups
- Pilot study – CD's sent in post, good results
- Qualitative results – positive experiences for SS's

The ASK study – Marcella Carragher

- Action, success, knowledge trial
- Depression with aphasia – 62-70%
- This study involved an RCT
1. Experimental Arm (psychoeducation)
2. Attention control Arm (stroke ed)
- 20 sites, trained speech therapists to complete treatment

Increasing access to memory rehabilitation post stroke Memory Skills Group   Dana Wong

- Priority for SS's, recent RCT has identified that SS's GAS scores increased with memory groups

- Study reviewed a 6 week program – 2 hour session. Stroke Memory Skills Group

- Used ASSBI resources adapted program 'making the most out of memory'

- Outcome measures ax: GAS, surveys and cognitive assessment

- Results: 95% achieved memory goals, improved clinican skills. No change in cognitive assessment

An economic evaluation of memory skills group

- 6 week review of medical records (pre/post group)
- Site specific therapy costs obtained
- Cost lower in treatment phase (MSG potentially cost effective)
- Improved and more access to memory rehab post stroke with group format

DISCLAIMER

Thanks and questions?