Assessing iREAP over an 18 month period

Integrated – Rehabilitation and EnAblement Program

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Why we needed change?

++Single discipline treatments

Difficulty discharging

Overloaded outpatient departments

Pseudo-case management

WMH seen as a PD specific option

Complexity of clients

Lack of integrated care available
The issues

**Frailty**
- 10% aged >65yo, between 25-50% aged >85yo
- Frail older people are 1.2-3.6 times more likely to fall than non-frail

**Falls**
- 30-40% community-dwelling aged >65 fall each year
- Greatest proportion of falls resulting in hospitalisation aged > 85yo

**Parkinson’s Disease (PD)**
- 52,000 Australians aged ≥ 65yo have PD = prevalence of 1.7% in this age group
- Greatest proportion of fall-related hospitalisations occurs 75-84yo

2. Tinetti ME, NEJM 2003
3. Paul et al 2017
What do we know works?

✓ **Best Practice principles:**

✓ Multidisciplinary Teams (Gillespie et al, 2009)
✓ Integrated Care (Dorling et al 2015, Nuffield Trust 2011)
✓ Intensive program, reducing falls (Sherrington et al 2008)
✓ Patient Generated Goal Setting (ACI, 2013)
✓ Health Coaching (Gale J, 2014)
✓ Early Intervention- cost effective (Campbell and Robertson 2007)
How did we go about the change?

2015:
Identification of gap and need to redesign model of care

Consultation of consumers, GPs, staff. Steering committee established

ACI funding through Building Partnerships framework

March 2016:
Roll out of program with pilot group: TICC funding

PHN information evenings

June 2017:
Translational research grant to undertake analysis

Uniting

NSW Government

Health South Eastern Sydney Local Health District
What is iREAP?

- Client attends 3x/week for 8 weeks
- Referral by GP, specialist or AHP - Proactive/anticipatory to avoid hospitalisation
- Individualised care planning and goal setting with personalised timetables
- Health coaching and weekly education
- Linkage with community programs
- Integrated care: Geriatrician, PT, OT, Speech, Dietitian, Continence RN, Psych, Hydro, SW.
- MDT case conferencing and discharge planning

iREAP: Integrated Reablement for Elderly People
Referral criteria: Falls frail group

- 65 years and older
- Patient questions / presenting symptoms:
  - Have you been feeling weaker lately?
  - Do you feel tired?
  - Are you going out less than before?
  - Are you losing weight for no apparent reason?
  - Are you walking slower and slower?
- 1 or more falls in the last 12 months or at risk of falls
- Multiple presentations to GP or ED in the last 12 months
Referral criteria: neurodegenerative group

Recent diagnosis of PD (1-2 years) or Hoehn Yahr Criteria 1 to 3
Client answers yes to the following questions:

1. Are your movements getting slower and smaller?
2. Have you or others noticed if your posture has changed?
3. Is your balance worse now than before you had Parkinson’s Disease?
4. Do you need help to complete activities like dressing or getting up?
5. Are you feeling more fatigued so doing less outside your home?
6. Are you willing and able to participate in an intensive 8 week day rehab programme?
Aim

- To determine effect of the iREAP intervention through analysis of pre- and post-intervention measures of:
  - Frailty
  - Physical function
  - Quality of life
  - A patient’s “activation”
  - Frequency of falls
Demographics

- 111 clients through (March 2016 - Sep 2017)
- 99 clients’ data analysed
- 45 clients from FF group, 51 from Neurodegenerative group
- Sex: 55 male, 41 female
- Age: Mean 76.79 (Range 60-91)
- 12 dropped out; e.g. ankle # (prior), UTI, VP shunt repair, Fall > Hip # (during), illness, did not meet expectations.
Measures

- Frailty: Rookwood Clinical Frailty Score (CFS)
- Physical measures: Timed up and go (TUG), 6 Minute walk test (6MWT), 10 metre walk test (10MWT) and Berg balance scale
- Quality of life measures: QOL-Bref, PDQ39
- Patient Activation Measure (PAM): knowledge, confidence and motivation in managing one’s own health
- Follow up measure: self-reported falls and hospitalisations at 3 month, 6 months, continued enablement
Rookwood Clinical frailty scale

Rookwood et al, 2005
Outcomes - CFS

Clinical Frailty Scale

Administered by Care coordinator

- Pre program number: 90
- Post program number: 88
- Full data set on 85 clients
- Mean: 4.93 → 3.76
- P-value: 0.0001 (sig. set at 0.05)

Would frailty be better assessed with a battery of tests?
Timed-up and Go (TUG)

- 74 clients with full data set
- Completed by PTs; involves STS, mobility and turn
- Consideration of clinical meaning; >14 secs = high falls risk$^1$

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p = 0.007

1. Shumway et al, 2000
QOL-BREF and PDQ-39

**WHO-QOL-Bref**: 26 questions exploring 4 QOL Domains: Physical health, Psychological health, social relationships and environment

Looking at specific domains; there were statistically significant changes in the;

- Physical domain $p < 0.05$
- Environmental domain $p < 0.05$
- Potentially in these domains due to heavier PT/OT focus in iREAP

**PDQ-39**: 39 questions looking at 8 domains

- Complete data on only 32 clients
- PDQ-39 Single index: 0-100, where lower score = better health
- Changes statistically significant $p = 0.004$

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<td>PDQ39 – mean single index score</td>
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Patient Activation Measure (PAM)

- Knowledge, confidence and motivation to manage one’s own health
- Pre and post measure
- Higher level indicates higher “activation”
- Also used to tailor care → health coaching guide

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TOTAL SCORE •

Insignia Health, 2018.
Patient Activation Measure – Levels

**Level 1**
Disengaged and overwhelmed
Individuals are passive and lack confidence. Knowledge is low, goal-orientation is weak, and adherence is poor. Their perspective: “My doctor is in charge of my health.”

**Level 2**
Becoming aware, but still struggling
Individuals have some knowledge, but large gaps remain. They believe health is largely out of their control, but can set simple goals. Their perspective: “I could be doing more.”

**Level 3**
Taking action
Individuals have the key facts and are building self-management skills. They strive for best practice behaviors, and are goal-oriented. Their perspective: “I’m part of my health care team.”

**Level 4**
Maintaining behaviors and pushing further
Individuals have adopted new behaviors, but may struggle in times of stress or change. Maintaining a healthy lifestyle is a key focus. Their perspective: “I’m my own advocate.”

©2018 Insignia Health. Patient Activation Measure® (PAM®) Survey Levels. All rights reserved.
PAM results

- Analysis on 74 clients’ full data set
- Form completed by clients
- Mean: 55 → 61
- $p < 0.001$
Health Coaching

• Adapted from GROW model used by SESLHD
• Individually; initial and f/u
• As group session

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<th>Health Coaching session</th>
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<td><strong>Goal</strong></td>
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<td>What do you want to get out of J-REAP?</td>
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[Health South Eastern Sydney Local Health District logo]
[Uniting logo]
Where to next?

- Ongoing running of program as standard business
- Ongoing collection of data
- Full analysis to occur with multiple corrections and correlations
- Write up of results and program as observational study
- Potential for carrying out RCT if funding available; small site allows trial of novel programs
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• ACI **Translational research grant**
• Primary Health Network – central and eastern Sydney collaboration
• UNSW South Eastern Sydney Research Collaboration Hub (SEaRCH)
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