Leading Change
The Power of Collaboration and Thinking BIG
Characteristics & Attributes of AHPs

- goal-directed
- hard-working
- responsible
- confident
- calm
- persistent
- hardy
- agreeable
- people
- energetic
- collaborative
- assertive
- empathic
- innovative
- organised
- curious
- negotiation
- positive
- active
- outgoing
- oriented
- conscientious
- complex
- polite
- goal-oriented
- secure
- talkative
- sociable
- determined
- cooperative
- self-disciplined
- principled
- creative
- optimistic
- dedicated
- self-directed
- experientially
- resourceful
- action-oriented
Characteristics & Attributes

Personality traits of OTs & PTs
Conscientiousness > neuroticism
McCombie et al, 2015 IJTR (n=121)

PT traits & the “therapist effect”
Conscientiousness > neuroticism
Buining et al, 2015 BMC HS research (n=39)

Personality AH professionals, rural vs metro
Rural AH have higher novelty seeking traits
Campbell et al, 2014 Australian Health Review (n=562)
My Experience of AH Professionals

1. Respected
2. Hard working (don’t value our time enough)
3. Good at prioritising, action focused
4. Used to working in complex decision making environments
5. Powerful patient advocates
6. Strongly collegiate – team focused

Good collaborators
Allied Health Trained Leaders

**Discipline leaders**
Dr Erin Lalor, CEO
National Stroke Foundation
World Stroke Organisation Board

**Policy leaders**
Dr Gwynneth Llewellyn
WHO Collaborating Centre in Health Workforce Development in Rehabilitation and Long Term Care

**Hospital leaders**
Ms Nicki Doyle, Director
Health Aging and Human Services
KPMG

**Business leaders**
Dr Carmen Lawrence
Former Premier of Western Australia - first women
Collaboration

Growing influence

Recent BIG things

History
"Julie is a sweet girl, but boy can she talk!" Mrs Smith, Prep S
Think Big

Stroke Foundation board, clinical guidelines, clinical trials

Transition and Growth

Clinician

Researcher

Advocate

Mentor

Leader

Influence
Collaboration

Cooperation
Collective action
Collective impact

"Sharing changes everything"
Clay Shirky

Needs:
A focus/idea
Someone to start
Trust
Takes time
Grows momentum
Has risk
Recent BIG things
Idea: Earlier more intensive rehabilitation could reduce stroke related disability & be feasible worldwide

Activity: Phase I, II and III clinical trial
The ‘phasing’ of AVERT

- **Modelling Phase 1**
  - Intervention Outcomes
  - 2002-2003

- **Exploratory Trial Phase II**
  - Feasibility (safety)
  - Defining intervention
  - 2004-2006

- **Definitive RCT Phase III**
  - Fully defined/measured intervention
  - Does it work?
  - 2006-2015
AVERT: A pragmatic, ‘real world’ trial

**Design**

International, multicentre, parallel group, randomised controlled trial testing efficacy and safety of a very early (<24h) frequent, higher dose out of bed (very early mobilisation) protocol compared to usual care post stroke.

**Clinical hypotheses**

1. Improve functional outcome (mRS 0-2) at 3 months
2. Lead to fewer immobility complications at 3 months post stroke
3. Lead to more patients regaining the ability to walk early
4. Improve quality of life at 12 months
5. Be cost effective

*Protocol Bernhardt IJS 2006; Bernhardt IJS 2015 SAP*
Trial pathway

1. **Arrive hospital, screened, recruited < 24 hrs**
   - **Stroke**
   - Stratified by stroke severity & site

2. **First intervention, < 24 hrs PT/Nurse team, 6 days/wk**
   - **Very Early Mobilisation + Usual Care**

3. **Day 14 Treatment ceases**
   - Usual stroke unit care

4. **3 month Ax**
   - **1° Efficacy endpoint** Favourable outcome (mRS 0-2)
   - Safety outcomes: death, SAEs, immobility, neurological

5. **3+ additional sessions out of bed activity**

**Sample size**
n=2104
## Collaborative framework

<table>
<thead>
<tr>
<th>Design Team</th>
<th>Ownership</th>
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<tr>
<td>Interdisciplinary</td>
<td>Mandatory</td>
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<table>
<thead>
<tr>
<th>Treating team</th>
<th>Engagement</th>
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<tr>
<td>Interdisciplinary</td>
<td>Constant</td>
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<tr>
<th>Management</th>
<th>Celebrations</th>
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<tr>
<td>Interdisciplinary</td>
<td>Routine</td>
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International collaboration across 56 sites

UK (29)
  Scotland (7)
  Northern Ireland (4)
  Wales (1)
  England (17)

Australasia (27)
  Australia (24)
  New Zealand (1)
  Singapore (1)
  Malaysia (1)
It took a long time!

25,237 admitted <24 hours of stroke onset

2104 enrolled

2104 randomised

23,133 ineligible

5588 premorbid mRS>2

1136 other clinical trial

7080 medically unstable/unwell

7414 no recruiter/weekend

8151 other exclusion reason

446 refused

2104 enrolled

1054 very early mobilisation

14 never mobilised

13 not stroke

1045 assessed at 3 months

973 alive

72 dead

5 refused follow up

1050 usual care

12 never mobilised

21 not stroke

1054 included in intention-to-treat primary analysis

1050 included in intention-to-treat primary analysis

Follow up complete in 2083 patients (99%)

Bernhardt et al BMJ Open 2015
Top level results

1. We achieved a significant difference in the frequency, amount and timing of rehabilitation, with most patients starting intervention <24 hours of stroke.

2. The very early, higher dose out of bed activity protocol reduced the odds of favourable outcome at 3 months, without accelerating walking recovery or reducing immobility-related SAEs. ‘more is better’ may not apply in the first few days after stroke.

3. We found low rates of death & SAEs, but there were signals of harm in ICH and severe stroke and those aged >80 years. Treatment dose versus benefits/harms warranted further exploration.

4. Pre-planned exploratory analyses show frequency and amount are important drivers of outcome.
What does this all mean?

1. We’ve shown that international complex trials can be done, and done really well

2. We know a lot more than we did before – but not exactly what to do early

3. Guideline creators are struggling to interpret the findings (as are clinicians)

4. More to do! AVERT-DOSE and PhD on offer
Bernhardt J, et al. AVERT² (a very early rehabilitation trial, a very effective reproductive trigger): Retrospective observational analysis of the number of babies born to trial staff. *British Medical Journal*. 2015;351:h6432
Babies born to investigators across 56 hospitals - > 1000 clinicians
Baby: patient ratio = 1:19
Idea: Link talented stroke recovery researchers to build capacity and change the landscape

Activity: 5 year, 20 investigator grant to undertake a work program ranging from biology to implementation

http://strokerecovery.org.au
Idea: Engage best stroke research minds to establish new standards

Activity: Stroke Recovery Roundtable
Idea: Use collective impact to advance women in science

Activity: 5 leading research institutes in Melbourne working together to make change

www.wispp.org.au
Influencing the agenda, equity & representation

WFNR
World Federation for NeuroRehabilitation

World Stroke Organization

AVERT
A Secondary Rehabilitation Trial

Wispp
WOMEN IN SCIENCE PARKVILLE PRECINCT

NHMRC CENTRE OF RESEARCH EXCELLENCE
Stroke Rehabilitation and Brain Recovery
Challenge the status quo

NEJM
Ideas Lab
World Economic Forum, China

Get comfortable leading change
You have the tools, just need to use them
Find a good mentor
If your actions inspire others to dream more, learn more, do more and become more, you are a leader.

- John Quincy Adams
Acknowledgements

Funders

My team
PhD Scholarship Opportunity

The Project:
• Explore AVERT dataset to develop usable clinical guidelines

The Candidate:
• High achieving Statistics, Engineering, Public Health, Allied Health, Psychology graduate or similar
• Developed statistical analysis skills
• Interest in decision analysis
• Experience consulting with clinicians and patients

The Contact:
Email: Julie.Bernhardt@florey.edu.au  Phone: 03 9035 7072