Personalization of Patient Education:
A New Frontier Using the Principles of Academic Detailing

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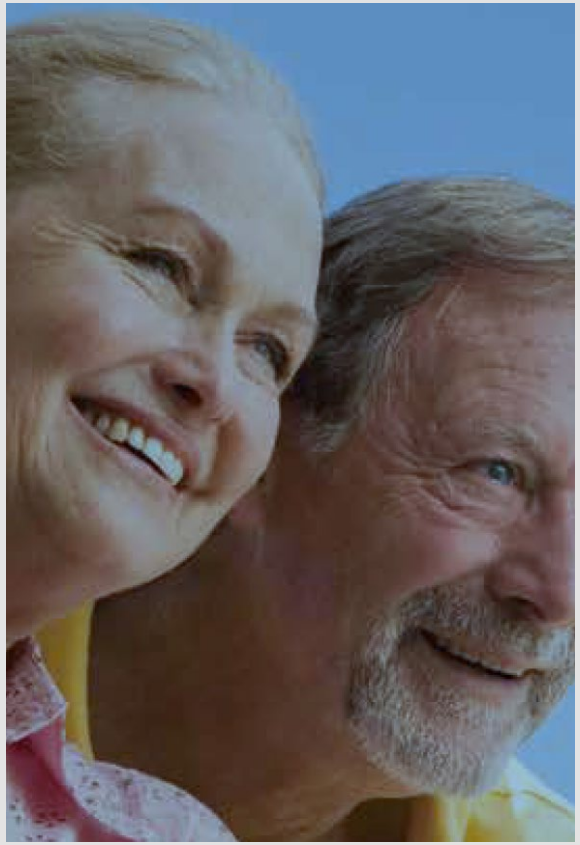


Academic detailing

- One-to-one visiting
- Undertaken in the recipient's own practice setting
- Timing is at the convenience of the recipient
- As close as possible to regular practice time
- A priori key messages are developed which are succinct and directly relevant to patient care

Academic detailing

- Face to face
- Communication using a structured framework
- Deliver to meet the needs, attitudes and beliefs of the person visited (Doctor, pharmacist, nurse)
- Understand motivations for current practice and identify barriers to behavior change both individual and system barriers

Academic detailing

- Moves interaction beyond communicating just information
- Involves understanding existing behavior – what are the key motivations and barriers for current behavior
- Understanding where people are currently at – what people feel/think about the issue - not were you want them to be
- Focuses on how to encourage and achieve ‘voluntary action’ not about coercion or enforcement

Academic detailing

- Academic Detailing brings the best available evidence to the place at which care is delivered and can be tailored to the level of knowledge, interest and responsibility of the person visited
- It draws on principles of social marketing, adult learning, social cognitive theory, the trans-theoretical model of change and diffusion of innovation

Patient-centered care

- Focusing on the interests of the person as the first priority
- Recognizing, understanding and responsively tailoring care to individual preferences, needs and values
- Treating person with dignity, respect and compassion
- Empowering contribution to own health care
- Ensuring that person's choices and values guide clinical decisions

Patient education

- Education in routine clinical practice is often provided in an opportunistic, ad hoc and time-constrained basis
- Most clinicians have not received training in educational theory and behavior change methods
- Many patients now also have ready access to information from social media and the internet
- Much of this information assumes a level of literacy and numeracy
- Patient education may involve information only, counseling or behavioral therapies
- There are issues surrounding patient autonomy and the clinician's role to promote the well-being of the patient

Patient education

Kate Hall
Tania Gibbie
Dan I Lubman

Motivational interviewing techniques

Facilitating behaviour change in the general practice setting

Background
One of the biggest challenges that primary care practitioners face is helping people change longstanding behaviours that pose significant health risks.

Objective
To explore current understanding regarding how and why people change, and the potential role of motivational interviewing in facilitating behaviour change in the general practice setting.

Discussion
Research into health related behaviour change highlights the importance of motivation, ambivalence and resistance. Motivational interviewing is a counselling method that involves enhancing a patient's motivation to change by means of four guiding principles, represented by the acronym RULE: Resist the righting reflex; Understand the patient's own motivations; Listen with empathy; and Empower the patient. Recent meta-analyses show that motivational interviewing is effective for decreasing alcohol and drug use in adults and adolescents and evidence is accumulating in others areas of health including smoking cessation, reducing sexual risk behaviours, improving adherence to treatment and medication and diabetes management.

Keywords
communication; doctor-patient relations; patient centred care; psychotherapy, brief; motivation

One of the biggest challenges that primary care practitioners face is helping people change longstanding behaviours that pose significant health risks. When patients receive compelling advice to adopt a healthier lifestyle by cutting back or ceasing harmful behaviours (eg. smoking, overeating, heavy drinking) or adopting healthy or safe behaviours (eg. taking medication as prescribed, eating more fresh fruit and vegetables), it can be frustrating and bewildering when this advice is ignored or contested. A natural response for a practitioner who encounters such opposition (termed 'resistance' in the psychological literature) is to reiterate health advice with greater authority or to adopt a more coercive style in order to educate the patient about the imminent health risks if they don't change. When these strategies don't succeed, the practitioner may characterise the patient as 'unmotivated' or 'lacking insight'. However, research around behaviour change shows that motivation is a dynamic state that can be influenced, and that it fluctuates in response to a practitioner's style. Importantly, an authoritative or paternalistic therapeutic style may in fact deter change by increasing resistance.[1]

The Stages of Change model and motivational interviewing

Prochaska and DiClemente[2] proposed readiness for change as a vital mediator of behavioural change. Their transtheoretical model of behaviour change (the 'Stages of Change') describes readiness to change as a dynamic process, in which the pros and cons of changing generates ambivalence. Ambivalence is a conflicted state where opposing attitudes or feelings coexist in an individual; they are stuck between simultaneously wanting to change and not wanting to change. Ambivalence is particularly evident in situations where there is conflict between an immediate reward and longer term adverse consequences (eg. substance abuse, weight management). For example, the patient who presents with serious health problems as a result of heavy drinking, who shows genuine concern about the impact of alcohol on his health, and in spite of advice from his practitioner to cut back his drinking, continues to drink at harmful levels, embodies this phenomenon.

Express empathy

- An empathic style of communication, use of reflective listening skills, seeks to understand the patient's perspective, thoughts and feelings, open and respectful exchange with the patient

Develop discrepancy

- Assisting patients to identify discrepancies between their current behavior and future goals or values

Roll with resistance

- MI uses strategies such as simple reflection of the resistance, emphasising the individual's choice to change or not

Support self-efficacy

- The practitioner's belief in a patient's ability to change is a powerful way to promote self efficacy.

Academic Detailing

- In the past 35 years, since the first randomised controlled studies were published of academic detailing, this technique continues to evolve with ongoing research into this quality improvement and professional behavior change method.

- Patient-Centered Education based on the structure of an academic detailing visit

Domains	Subcategories
CONTEXT	• Choice of suitable time and space • Introduction • Addressing immediate needs, confirm availability • Building rapport • Establishing credibility
EXCHANGE	• Eliciting / recognizing information needs • Meeting needs • Presenting information/messages • Use of concise, graphic & written materials • Identifying, negotiating barriers • Employing communication strategies • Insight into impact of communication strategies used • Relating information and messages to current needs • Recognition of own attitudes/beliefs/preconception • Recognition of own responsibility and trust
COMMITMENT	• Gaining commitment to key messages behavior change • Closure of communication loop, offering follow up

A New Frontier Using the Principles of Academic Detailing

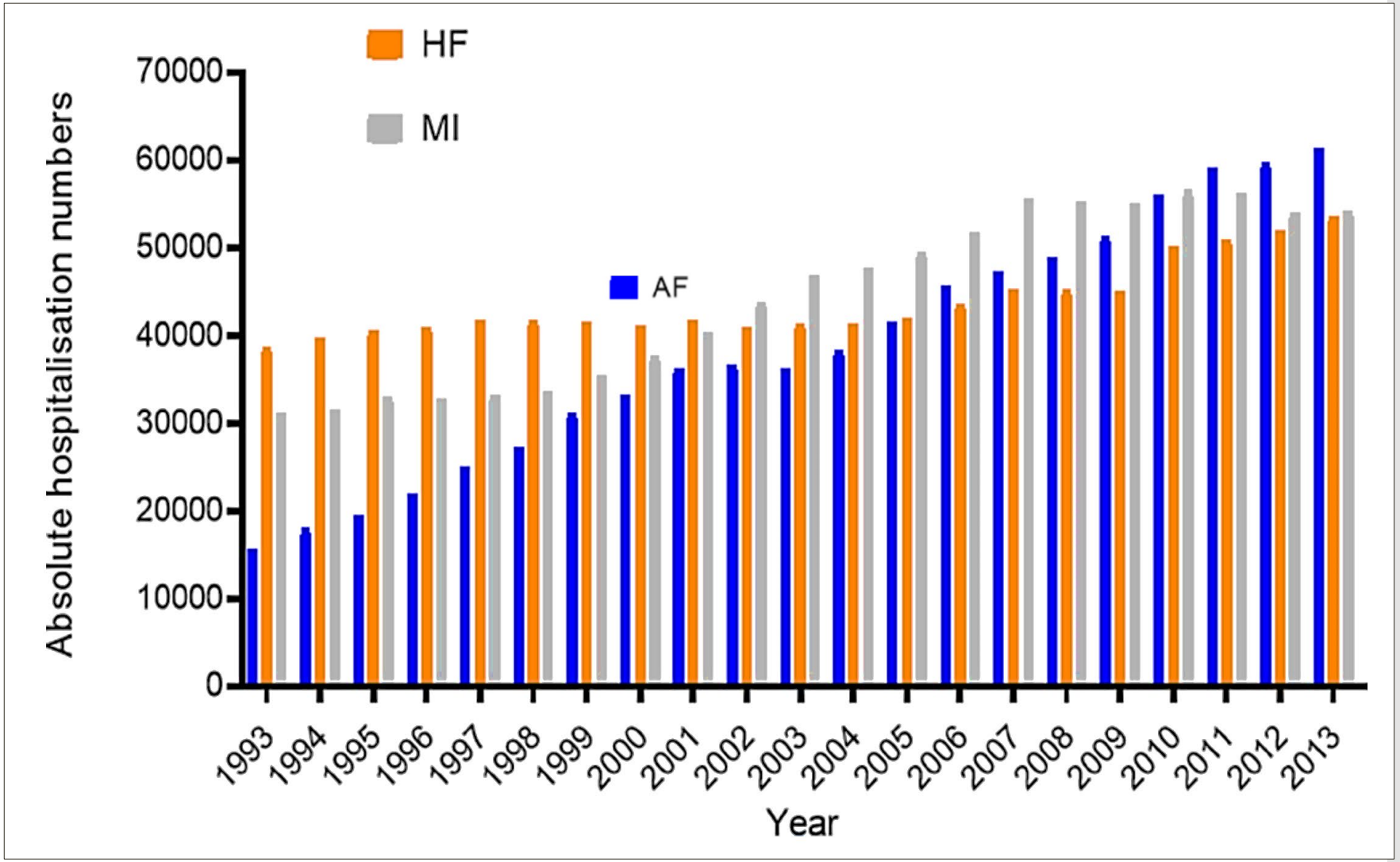
DREAM

DESIGN

BUILD

Burden of Atrial Fibrillation (AF) related hospitalization

- 33.5 million with AF globally in 2010
- increasing AF hospitalisations
- Most common CV cause of hospitalization
- Annual cost $3.5 billion in 2010 in the US



Chugh SS et al. Circulation 2014
Gallagher C et al. Heart 2019
Patel NJ et al. Circulation 2014

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Principles of Academic detailing

- Investigating baseline knowledge and motivations for current activity.
- Defining clear educational and behavioral objectives.
- Establishing credibility through a respected organizational identity,
- Referencing authoritative and unbiased sources of information, and presenting both sides of controversial issues.
- Stimulating active participation in educational interactions.
- Using concise graphic educational materials that highlight and repeat essential messages.
- Providing positive reinforcement of improved practices at follow-up visits.

Avorn J, Soumerai SB. Improving drug-therapy decisions through educational outreach. A randomized controlled trial of academically based “detailing”. N Engl J Med. 1983;308(24):1457–1463.
Soumerai SB, Avorn J. Principles of educational outreach (‘academic detailing’) to improve clinical decision making. JAMA. 1990;263 (4):549–556.
Van Hoof TJ, Harrison LG, Miller NE, Pappas MS, Fischer MA. Characteristics of academic detailing: results of a literature review. Am Health Drug Benefits. 2015;8(8):414–422.

Hypothesis

Patients with AF: A home-based intervention using patient-centred structured educational visiting, will result in reduced hospitalizations and improved quality of life

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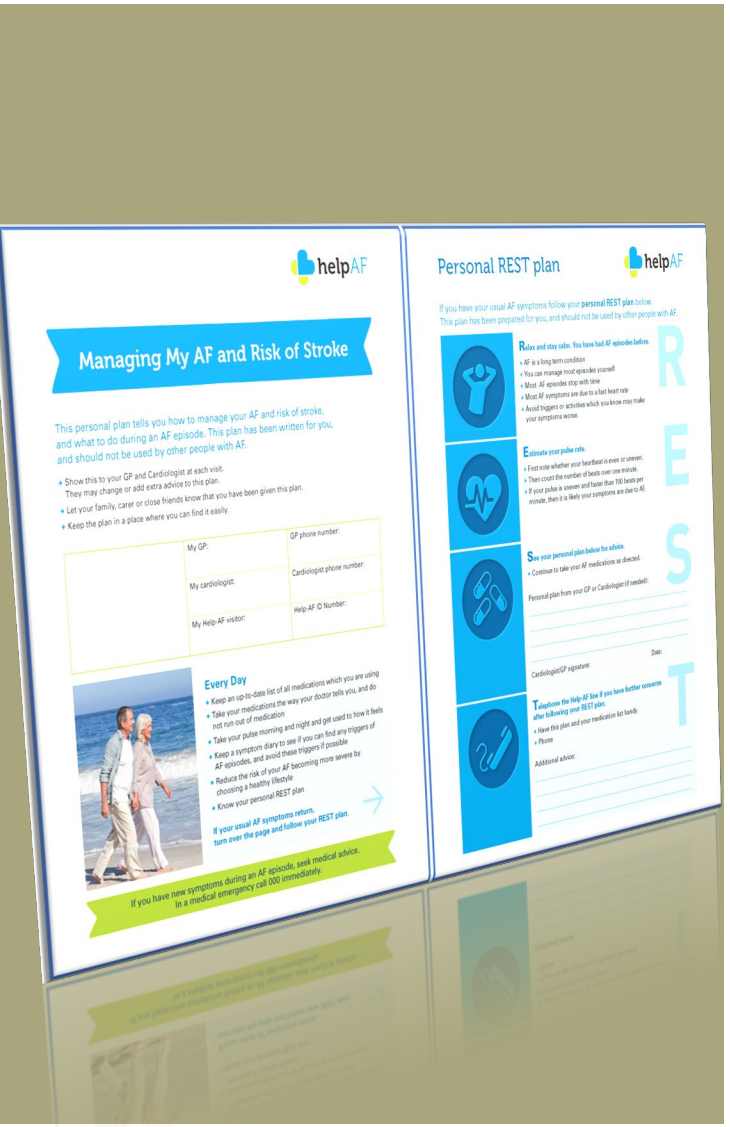


RELAX AND STAY CALM

ESTIMATE YOUR PULSE RATE

SEE YOUR PERSONAL PLAN

TELEPHONE THE HELP-AF LINE

Gallagher C et al. JACC: Clinical Electrophysiology 2019

HELP AF

'a priori' key messages developed for the patient-centered SEV intervention

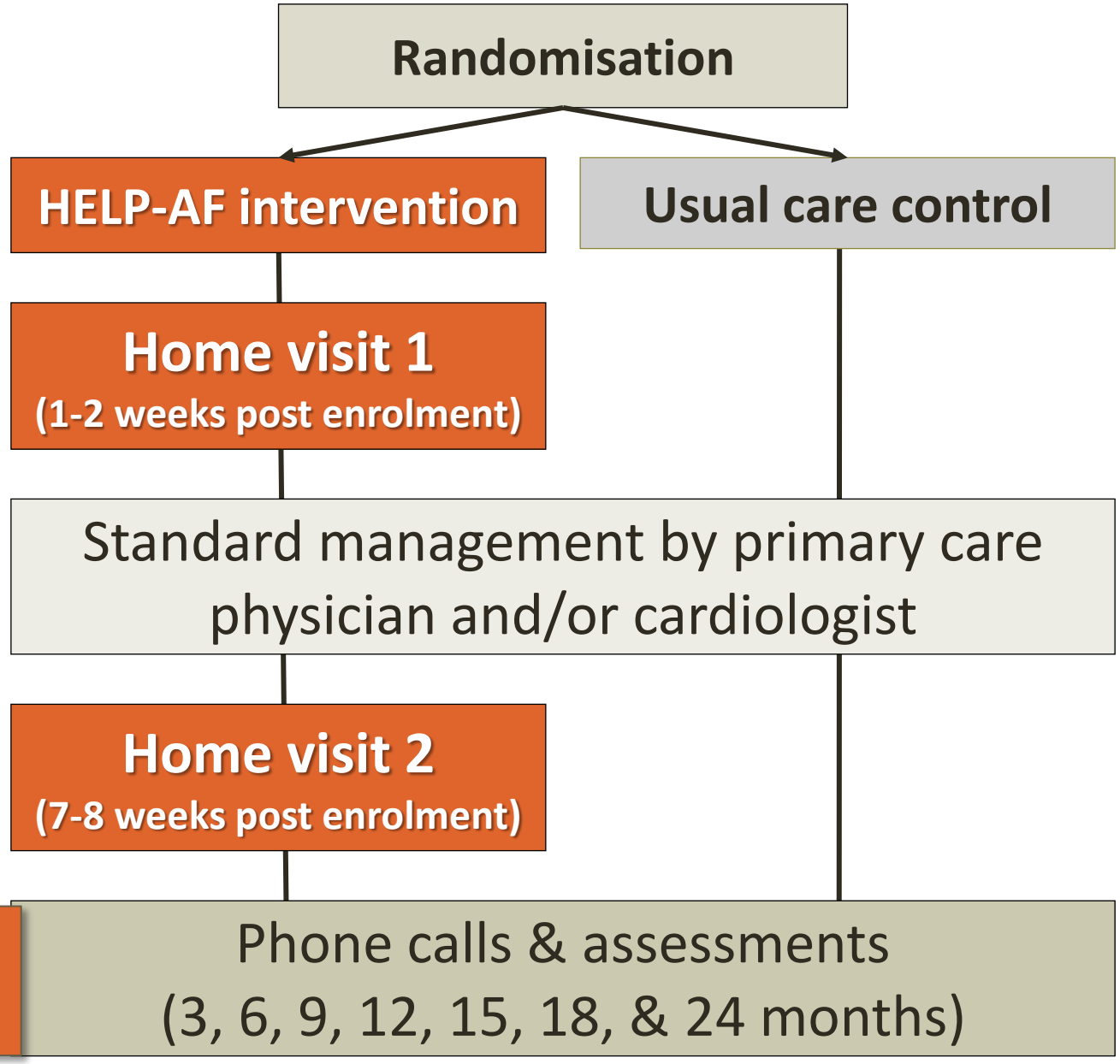
- Take your AF medications as prescribed to reduce your symptoms and risk of stroke.
- Stroke preventing medications can reduce your risk of stroke by up to 60-70%.
- You can reduce your risk of AF becoming more severe and risk of stroke by choosing a healthy lifestyle
- AF episodes are not usually medical emergencies. Follow your personal action plan during an AF episode with usual symptoms

HELP-AF intervention

2 home visits by a nurse or pharmacist trained in the principles of AD

Data collection by an investigator blinded to randomization

Hendriks JM et al. CJC 2019



627 Enrolled & underwent randomisation

Unplanned hospitalization events

Hospitalizations	HELP-AF	Usual Care
Total	233	323
AF-related	73	109
Other cardiac	45	81

A home-based structured patient-centered education program underpinned by the principles of academic detailing :

1. Reduced unplanned hospitalizations:
    a. Total - 26%
    b. AF-related - 31%
    c. Other cardiac - 49%
2. Resulted in some improvement in AF-specific QoL & symptoms
3. No impact on general HRQoL measures

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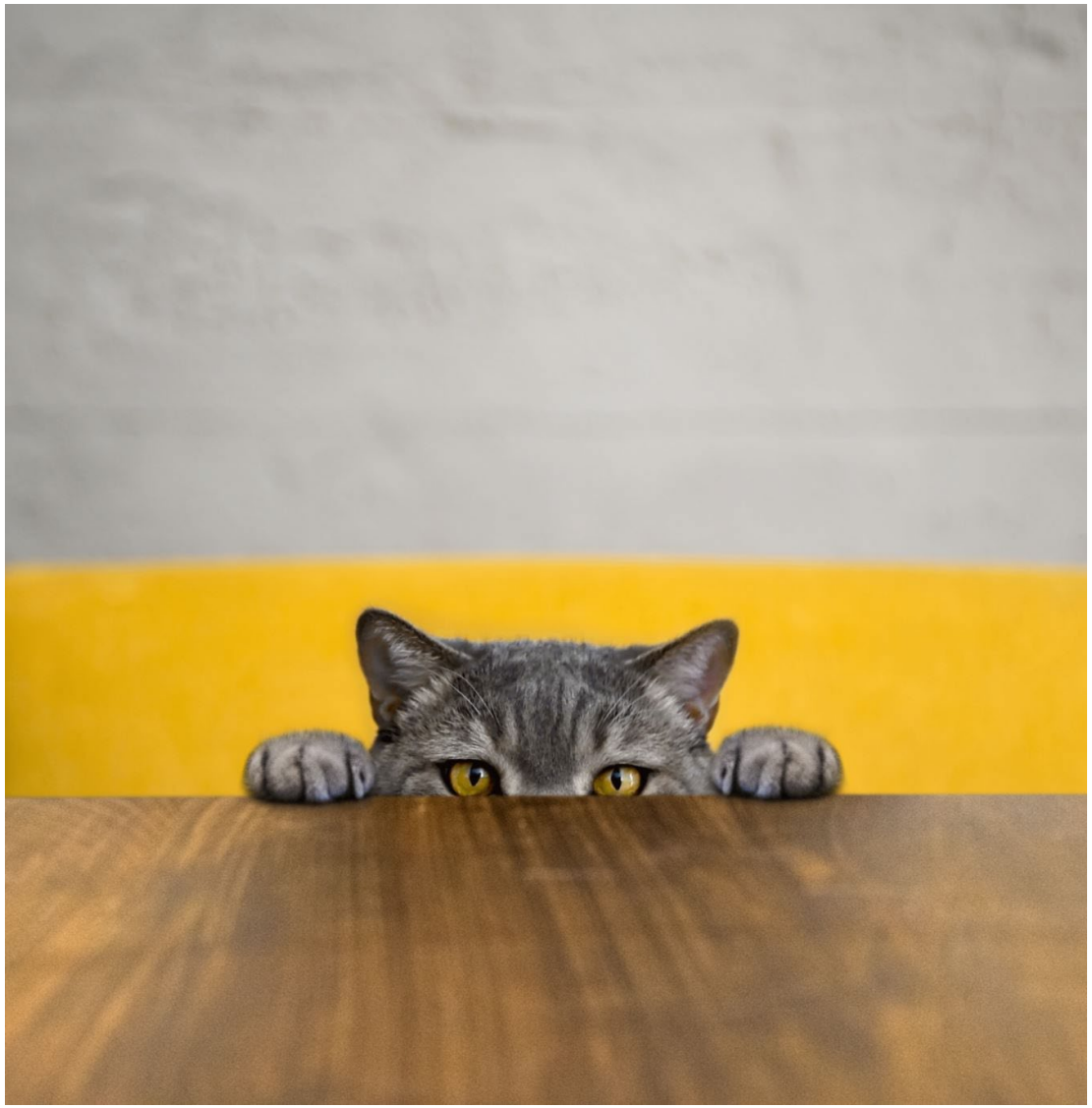
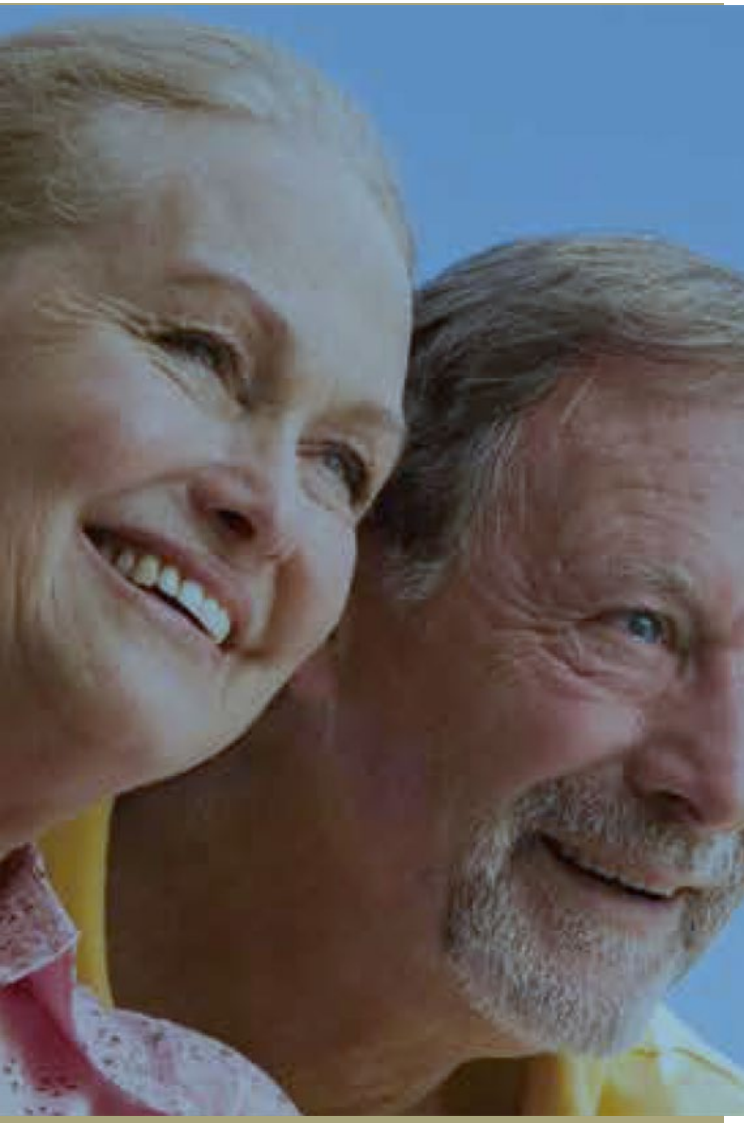
Personalization of patient education

- Context
- Connection
- Conversation
- Commitment





Context

Home environment

Prior clinical and social characterization

Use trusted health care professionals trained in SEV method as educators

Systematic quality assurance

Connection

Use same educator for all phone and in-person encounters

Identify and address patient's interests, needs and motivations

Understand and use patient's experience as a learning resource

Patient-centered SEV

Conversation

Unhurried conversation

Explore and address patient's fears and misconceptions

Individualise a limited number of *a priori* evidence-based key messages

Use graphical aids to assist educational interaction

Commitment

Empower patient to undertake self-care

Agree on behavioural goals

Provide follow-up visit to reinforce key messages and monitor progress

HELP AF

- AD principles - assessing the patient's prior knowledge and motivations, encouraging active participation in the educational interaction, **focusing on a limited number of evidence-based key messages** and using appealing graphical educational material to support conversation with the patient.
- The intervention was tailored to the individual's understanding, level of health literacy, motivations for current behavior and personal barriers to behavior change
- These principles provided a structure for the personalization of the educational sessions.

HELP AF

- In the COVID-19 era many patients are reluctant to visit hospitals and clinics and the opportunity to meet with an educator at home may be embraced by many.
- Not all patients will welcome a health professional inside their home and PC-SEV could be adapted for delivery in the clinic , phone or video visits with some patients in their home.
- Patients valued that they were valued, that they were important enough to be afforded the time for respectful conversations, which is the foundation on which trust can be built over time.
- Traditionally healthcare is organized around the operational and professional needs of clinicians and the healthcare system. In PC-SEV, education is patient-centred and organized around the needs of the patient and at a time and place of their choosing.

HOME SCHOOL HELPING CARDIAC PATIENTS

RELAXED: Heart patient Jacqui Stapleton, with husband John. Picture: TRICIA WATKINSON

DIXIE SULDA

A NEW National Heart Foundation study led by a University of Adelaide professor has shown that home-based education sessions for patients living with an irregular heartbeat can cut their hospital admissions by 26 per cent.

More than 600 patients who previously presented to six emergency departments across South Australia because of atrial fibrillation participated in the two-year trial.

A pharmacist or nurse visited patients at their home every couple of months for an information session to focus on medications, stroke prevention, maintaining a healthy lifestyle, and what to do if they have an AF attack.

The sessions were personalised to suit patients' education level, cultural background and age.

The research team devised a guide for what to do during an AF event called REST – Relax, Estimate pulse, See your action plan, Telephone help line – and family members were encouraged to attend and make themselves familiar with the process.

Project lead and Director at the University of Adelaide's Centre for Heart Rhythm Disorders, Professor Prashanthan Sanders, said the results clearly show that short term intervention not only decreases hospital admissions, but could improve patients' quality of life and deliver major savings for the hospital system.

More than half a million Australians live with AF, which is a major cause of stroke and can also lead to heart failure.

For participant Jacqui Stapleton, the results from the trial mean she can manage her irregular heartbeat and know the correct procedure when she is having an episode. The Eyre woman said when she was first told she had AF she felt petrified.

"It made me feel like I couldn't walk in case my heart started racing," she said.

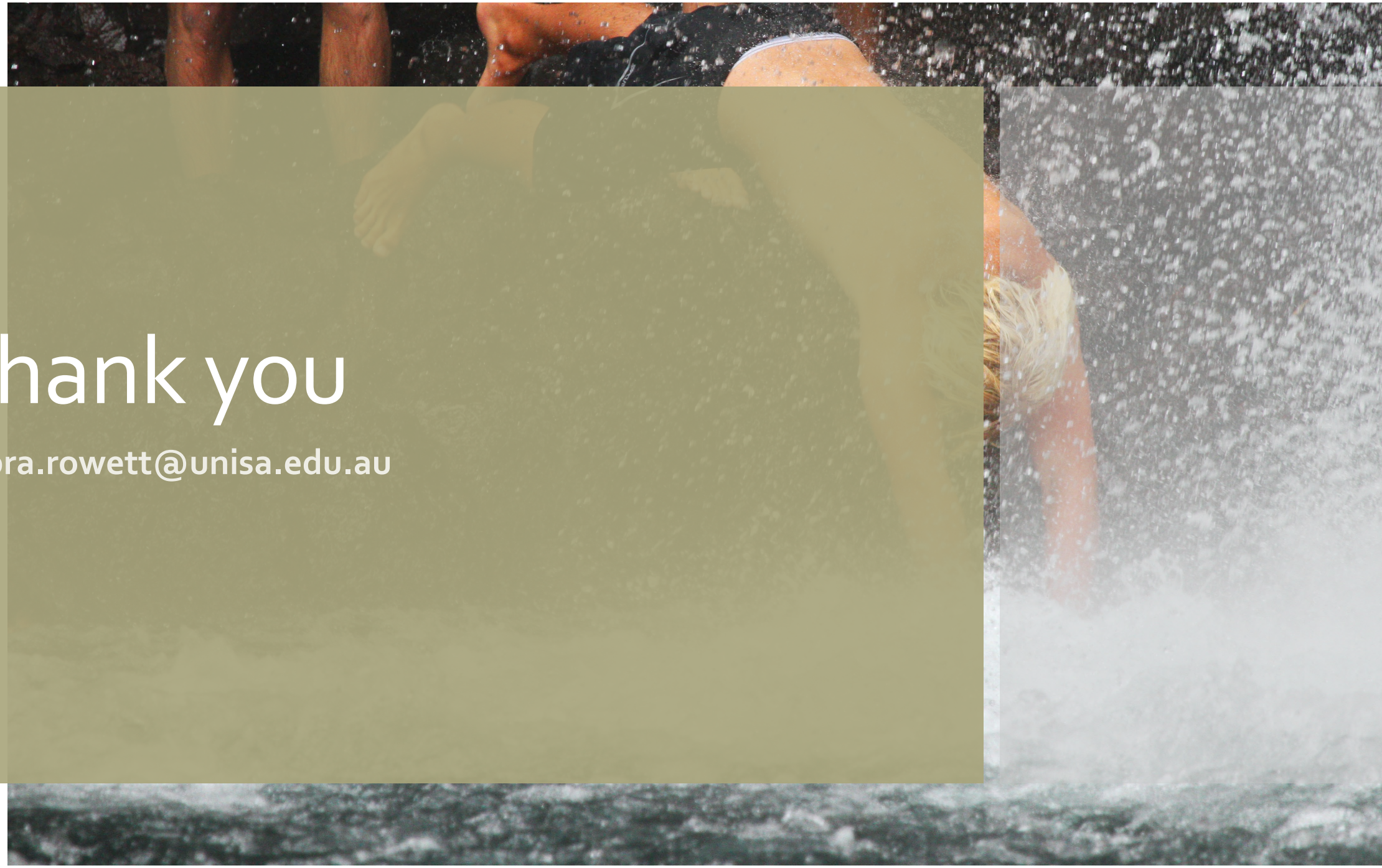
Anxiety can be a trigger for AF, so worrying about her condition only made it worse for the 75 year old.

But since the trial's conclusion, life is different for Mrs Stapleton. "Now I recognise when it's happening, and I know what to do. I was taught how to take my pulse, I was taught breathing techniques, how to relax, wait, and then go hospital if I have to," she said.

She carries her REST card in her purse, and bought a watch that measures her heart rate keep her AF monitored.

HELP-AF Study Group and Trial Investigators

- **Principal Investigator**
- Prashanthan Sanders, MBBS, PhD
- **Steering Committee**
- Prashanthan Sanders, MBBS, PhD
- Debra Rowett, B Pharm
- John Moss, Bec, MSocSci, MBBS
- Anthony G Brooks, BSc, PhD
- Tina Jones, RN, PhD
- **Clinical Event Committee**
- Glenn D. Young, MBBS (Chair)
- Leo J. Mahar, MBBS
- Andrew McGavigan, MBBS
- Kurt C. Roberts-Thomson, MBBS, PhD
- Dimitrios Lypourlis, MBBS
- **Data Safety Monitoring Board**
- Sepehr Shakib, MBBS, PhD (Chair)
- Derek Chew, MBBS, PhD
- Renuka Visvanathan, MBBS, PhD
- Nicholas A. Antic, MBBS, PhD (Deceased)
- **Statistician**
- Gijo Thomas, PhD
- **Site Investigators**
- Dennis H. Lau, MBBS, PhD – Royal Adelaide Hospital
- Joseph B. Selvanayagam, MBBS, DPhil – Flinders Medical Centre and Noarlunga Hospital
- John Beltrame, MBBS, PhD – The Queen Elizabeth Hospital
- Margaret Arstall, MBBS, PhD – Modbury Hospital and Lyell McEwin Health Service
- **Study Team**
- Jeroen M. Hendriks, RN, PhD
- Karin Nyfort-Hansen, B Pharm
- Shalini Simmons, RN
- Celine Gallagher, RN, PhD
- Melissa E. Middeldorp, PhD
- Danielle Wlochowicz
- Jonathon Foote, RN
- Jamie Giang



Thank you

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