

# Translating Research Into Practice

An example of a falls intervention programme

Angelique Chan

Executive Director, Centre for Ageing Research and Education

Associate Professor, Health Services and Systems Research, Duke-NUS Medical School

“Every 32 minutes, an elderly person turns up at a public hospital emergency department because of an injury from a fall. Each month, about 100 seniors find themselves in hospital staying a week or more because of such injuries.”

--published on Strait Times July 3, 2015

# Falls are a particular hazard among the elderly population.

- In a previous MOH-funded randomised controlled trial, we examined the effectiveness of the Steps to Avoid Falls in the Elderly (SAFE) programme.



Archives of Physical Medicine and Rehabilitation

journal homepage: [www.archives-pmr.org](http://www.archives-pmr.org)

Archives of Physical Medicine and Rehabilitation 2017;98:1086-96



## ORIGINAL RESEARCH

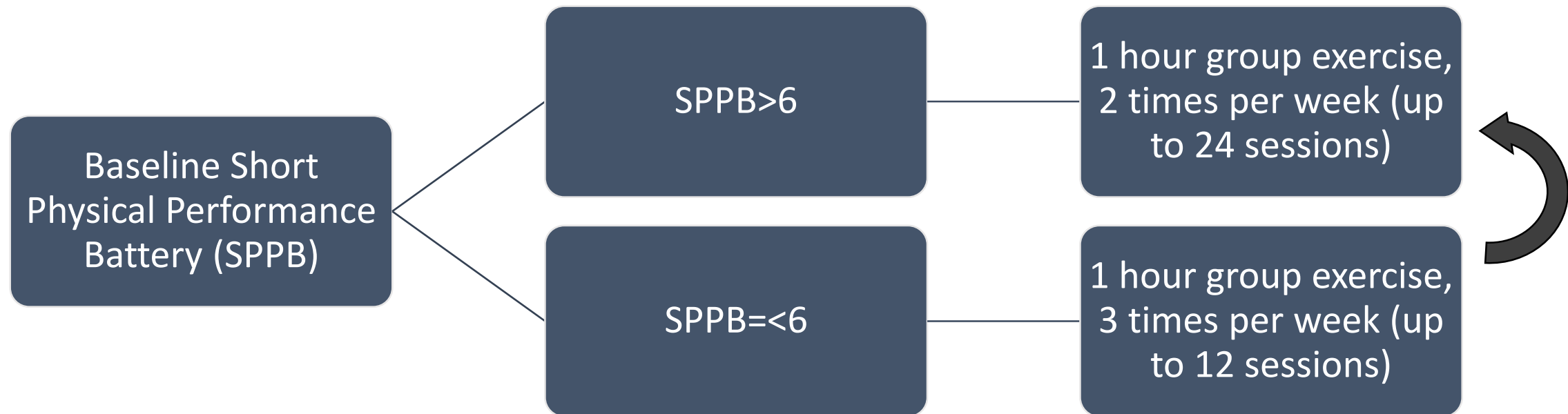
### Randomized Controlled Trial of Screening, Risk Modification, and Physical Therapy to Prevent Falls Among the Elderly Recently Discharged From the Emergency Department to the Community: The Steps to Avoid Falls in the Elderly Study



David B. Matchar, MD,<sup>a,b</sup> Pamela W. Duncan, PhD, PT,<sup>c</sup> Christopher T. Lien, MBBS, MPA,<sup>d</sup> Marcus Eng Hock Ong, MBBS, MPH,<sup>a,e</sup> Mina Lee, MASc,<sup>f</sup> Fei Gao, PhD,<sup>a,g</sup> Rita Sim, BSc,<sup>a</sup> Kirsten Eom, MPH<sup>a</sup>

# SAFE intervention

SAFE intervention is a broad range of exercises designed to be adaptable to a wide spectrum of physical function. The focus is on strength and balance – elements that are closely related to falls.

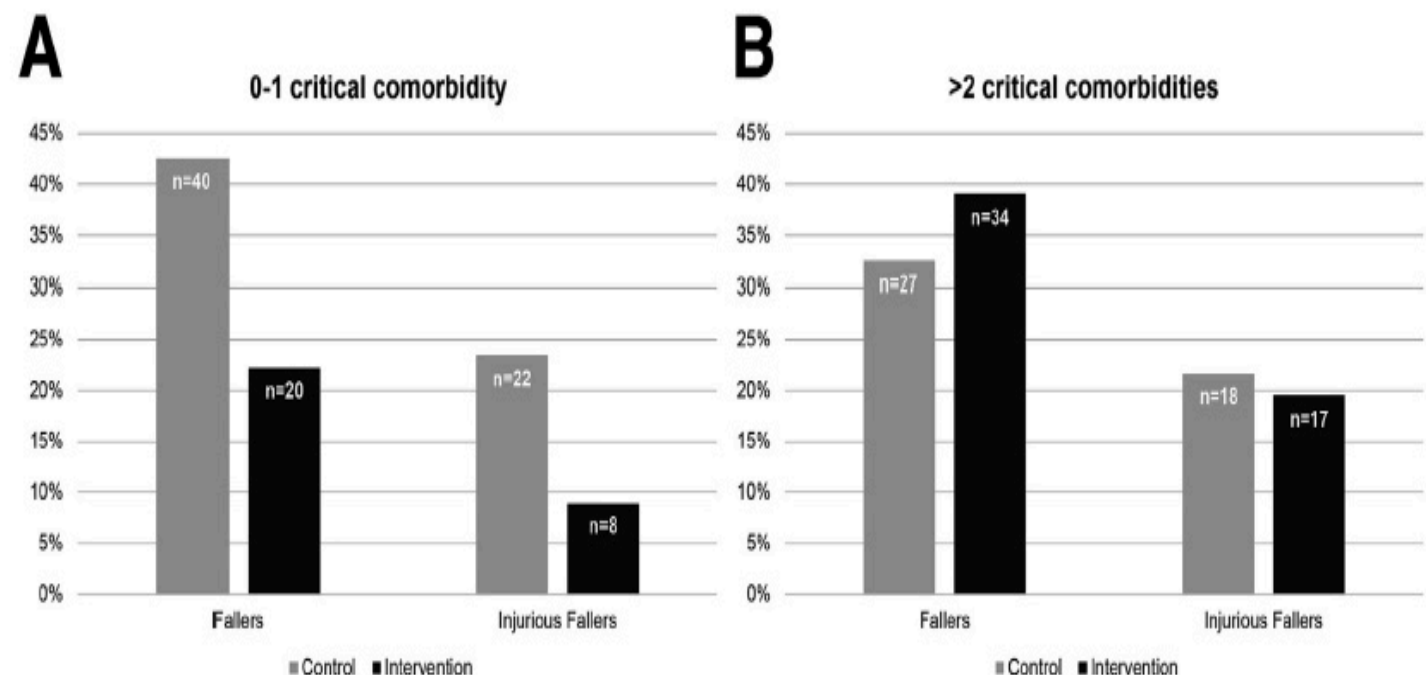


The intervention group had fewer individuals with injurious falls. Multivariate analyses indicated a strong interaction effect between the intervention and presence of 2 or more major comorbidities

**Table 2** Number (%) of participants in each group and relative risk (95% CI) of falling or incurring injurious falls over 9 months between groups

Group	Control (n= 177)	Intervention (n= 177)	Relative Risk Between Groups
Fallers	67 (37.8)	54 (30.5)	.72 (.46–1.12)
Injurious fallers	40 (22.6)	25 (14.1)	.56 (.32–.98)

NOTE. Values are n (%) or relative risk (95% CI).  
Abbreviation: CI, confidence interval.



**Fig 3** Proportions of fallers and of injurious fallers in 2 groups stratified by the number of critical comorbidities.

# From RCT to implementation in the community

## Steps to Avoid Falls in the Elderly - Translating Research into Practice (SAFE TRIP)

- Ministry of Health, Singapore - National Innovation Challenge on Active and Confident Ageing Healthy Ageing Innovation Grant 2018
- Started fieldwork in August 2018.

## Overall aim:

- To identify **innovative** strategies for implementing SAFE programme in the community in a way that maintain **high fidelity** and **optimising acceptability** and **cost**.
- To develop a **toolkit** for implementing a proven programme of falls prevention that will allow **broad dissemination** of the SAFE programme across Singapore

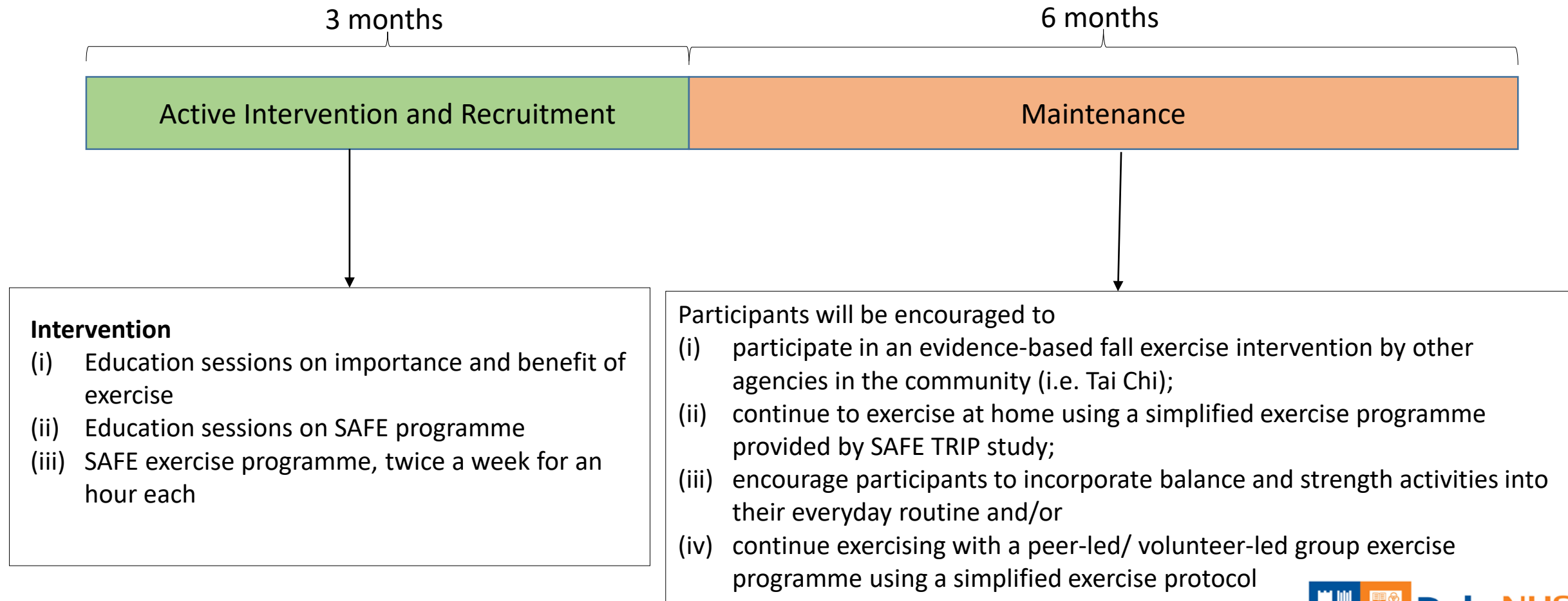
# Target participants

Inclusion criteria for participation at all sites are:

- ✓ Age 60  $\geq$  years
- ✓ Singapore citizen or Permanent Resident
- ✓ Had a fall in the last one year
- ✓ Short Physical Performance Battery (SPPB)  $\geq 6$
- ✓ Has not more than 1 major comorbidity (Heart attack, heart failure, cerebrovascular disease & cancer )
- ✓ Abbreviated Mental State (AMT)  $\geq 6$



# Methodology: Intervention





## Current status

- Community
  - Marine Parade: Recruited 56 participants
  - Beach Road and Bukit Panjang recruitment starts October 2018.
- Rehabilitation Centres
  - Recruitment starts in October 2018.
- Home-based
  - Development of gamification

## Part 1: Community

- To determine whether SAFE can be established in existing location with high concentration of eligible individuals
- N=160

## Part 2: Rehabilitation Centres

- To understand the requirements for a successful implementation of the SAFE in locations that already provide rehabilitation to older adults
- N=40

## Part 3: Home-based

- To develop 3 innovative approaches: (i) video conferencing; (ii) gamification and (iii) self-guided exercise program and to pilot these approaches
- N=120

# Caring for Persons with Dementia: Towards a Sustainable Community Based Dementia Care System

8 February 2018

# Objectives

- To understand the met and unmet needs of cognitively impaired persons (CIPs) and their caregivers in Whampoa community
- To evaluate a pilot model of dementia care, Hua Mei Dementia Care Services (HMDCS)
- To develop a conceptual model of a Dementia Friendly Community

# Methodology

- Qualitative interviews with community stakeholders, e.g., police, hawkers)
- Survey interview on caregiver needs
- Evaluation of an intervention of a dementia care service provided by Tsao Foundation
- Aims:
  - To reduce care recipient memory and behavioural problems
  - To decrease caregiver burden
  - Establish whether programme is cost effective compared to usual care

# Importance of community engagement

- Both research and translation projects involve close collaboration with community partners
- Community engagement is crucial to the success of research in the community, and translation of research into practice

# Citation Guidelines

- To cite the presentation slides, please use the following:  
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# “THE HOME ISN’T A HOSPITAL”

Translating older patients’ perspectives into better community care research and intervention design

Ad Maulod, Lu Si Yinn  
Centre for Ageing Research &  
Education, Duke-NUS Medical  
School

# OLDER RESIDENTS IN CHINATOWN, SINGAPORE

In Singapore, majority of patients who were identified as at high-risk for readmission tend to be poor elderly living alone in public rental flats

- Complex care needs
- Dependent on financial assistance
- Little to no social support in case of need

(Source: Chin Swee Community Survey, 2016)

In 2016, a **Communities of Care (CoC)** model was developed to integrate health and social care to address the medical and social needs of high-risk older clients in public rental housing



# In the Community of Care model, nurses are embedded in the community as Patient Navigators



## GOAL

Help patients **navigate** healthcare system and **coordinate** care transition through entire care continuum

### Roles of PNs (3Cs)

Clinical Assessment

Care Coordination

Care Navigation

Post-discharge  
follow up  
(2 visits + tele support)



Right-site &  
minimise  
re-admission



Prevent/delay  
progression of  
condition



Keep patients in  
community

Monitor patients' health and refer them to appropriate care transition programmes in the community



# TRANSLATING PATIENTS' PERSPECTIVES TO RESEARCH/ INTERVENTION DESIGN

## Objective of Research:

- Explore the role of patient navigation as a tool in healthcare delivery for vulnerable elderly communities
- Identify components of patient satisfaction to delivery and outcomes of integrated care
  - i. Describe and analyze patient navigator (PN) activities as experienced by patients during home-visits (from patients' point of view)
  - ii. Assessing impacts of PN's activities through client satisfaction of care received
- Capture other outcomes of integrated care delivery that are important to the patient and frontline staff but tend to be overlooked by administrator

## Methodology

- Qualitative research conducted over 6 months between August 2017 to January 2018 → total of **45 homes**
- “Go-Along” interviews with PNs (n=9)
- In-depth interviews with patients (n=22) recruited through PN referrals as well as PNs



# #1 NEGATIVE PERCEPTION TOWARDS HELP/ CARE IN ELDERLY POOR COMMUNITIES



# DEEP-ROOTED STRUCTURAL AND PERSONAL CIRCUMSTANCES: DISTRUST IN PROVIDERS AND HEALTH SYSTEM

Patients who were dissatisfied with the service expressed the following:

**1. They are a burden**

*"I just don't want to burden nurses to take care of me. I feel like they are here because it's their job...why else would you come and visit?"*

**2. They are doing just fine**

*"Whatever doctor say, I do. I can eat. I got a job. What is there to help me? No need to ask me what I need, if I don't feel comfortable, I can see doctor myself."*

**3. They do not have a choice**

*"Whether the nurses come or don't come [to my house], my life still goes on...can't be they come and I "show face" and tell them to go away.*

*"If nurses want to come and check, let them check. I don't have a choice?"*

**4. The people caring for them are just doing their job**

*"Nurses don't have a choice, they see me because supervisors ask them to come."*

*"I watch how nurses behave in hospitals, they can't act immediately on a problem because they don't want to shoulder the blame if something wrong happens to me. How can I trust them with my health, when they are not actually the one making the decisions?"*

**5. Those people are going to leave anyway**

*"They come, ask me questions, take my blood pressure, check my medication and they disappear for quite long. I don't even know if they are coming again, and then suddenly, they appear."*

**#2 FOR AN INTERVENTION TO BE EFFECTIVE IN  
MODIFYING HEALTH BEHAVIORS, CLIENTS NEED  
TO KNOW WHY THEY ARE ENROLLED AND  
HOW IT WOULD BENEFIT THEM**





# AWARENESS OF PURPOSE/BENEFITS OF H2H MAY INCREASE LIKELIHOOD OF COOPERATION

*Do you know why nurses visit you at home?*

50% of the participants did not know the purpose of home visits even though they welcome PNs into their homes

- H2H is a research survey
- Not sick enough to warrant home visits
- Nurses are just saying 'hello'
- H2H is a befriending service
- Nurses appear at the door, so just let them in
- No reason to reject good intentions

**Trust to do no harm → Trust to bring benefits**

- Generally, patients feel safe with PNs and trust that PNs have good intentions but may not understand how it will benefit them
- Patients who are more cooperative trust and understand the benefits of home visits

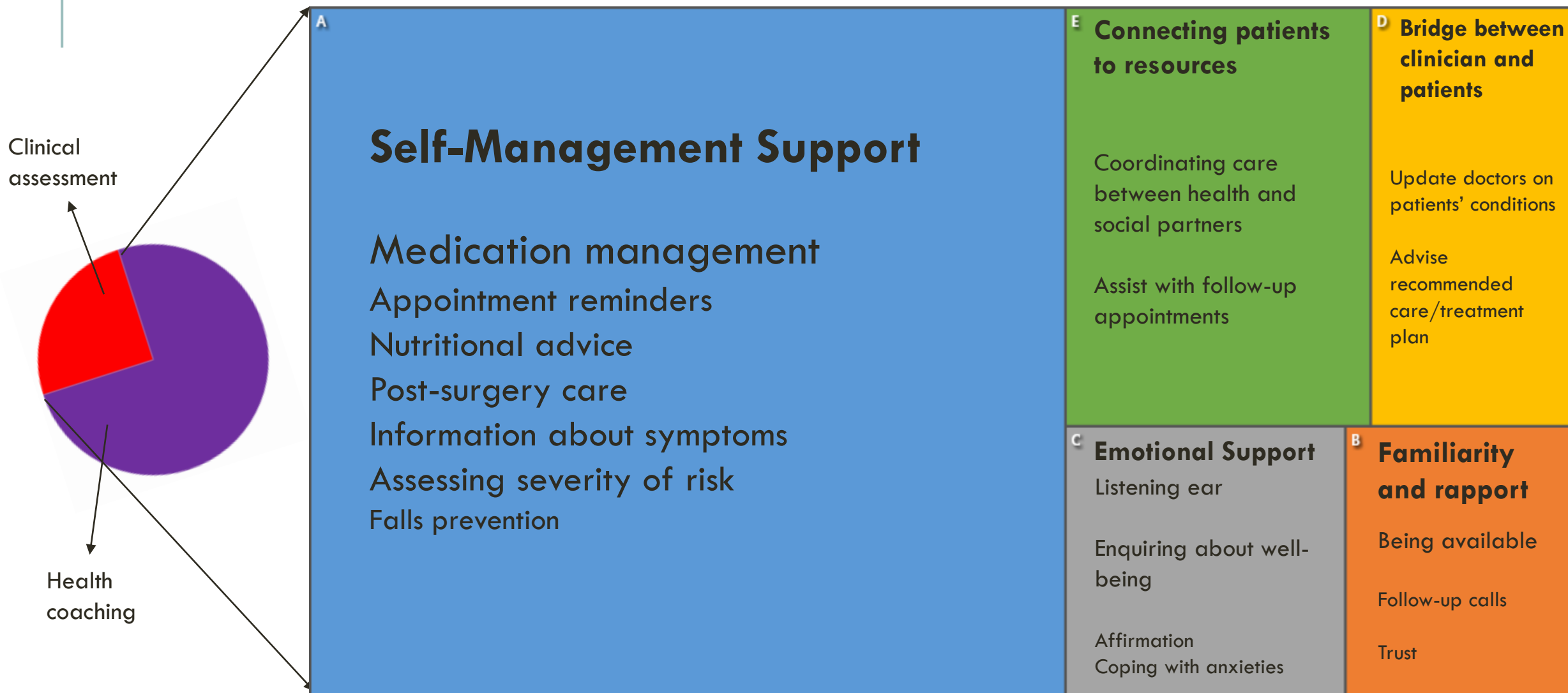
**Importance of familiarity**

- Patients who were more cooperative recognized PNs as those they had interacted with (screener) while they were admitted in the hospital

# #3 WHAT PATIENTS REMEMBER ABOUT A HEALTH SERVICE REVEAL CRUCIAL INTERVENTION COMPONENTS



# PATIENTS WERE MORE LIKELY TO RECALL *HEALTH COACHING* ASPECTS COMPARED TO *CLINICAL ASSESSMENT*

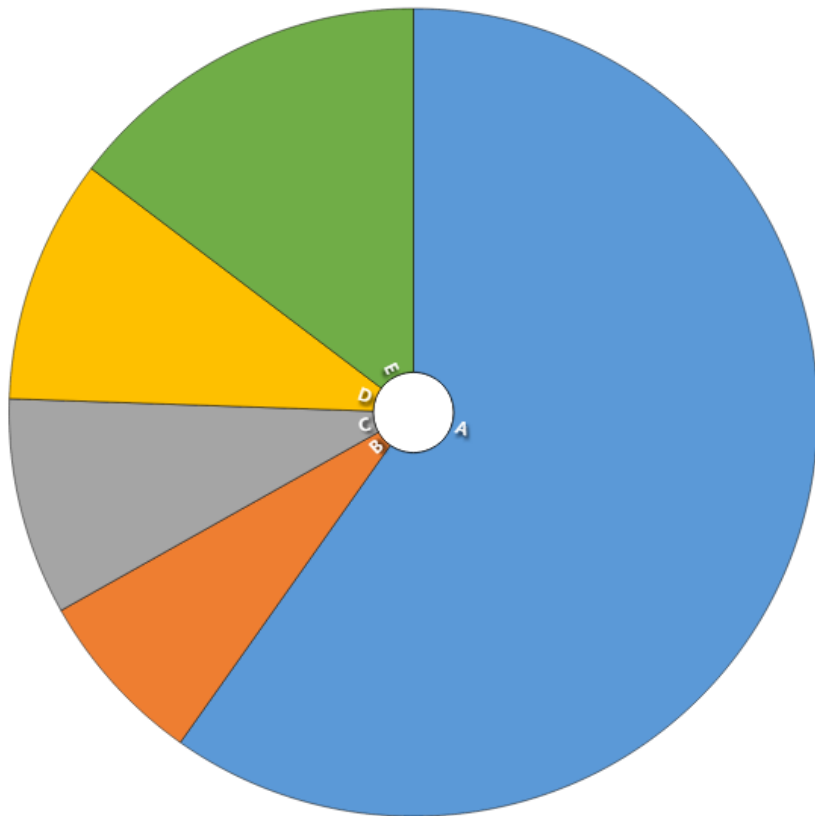


# POSITIVE EXPERIENCES CAME FROM GENUINE INTERACTIONS WITH PNs

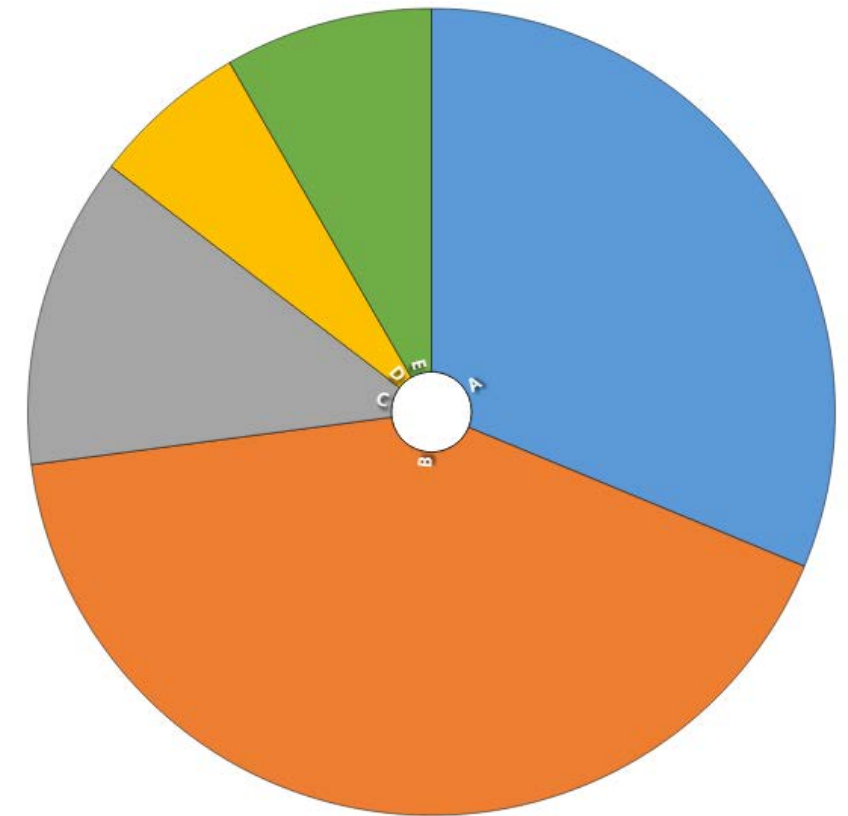


# UNDERSTANDING OLDER PATIENTS' SATISFACTION WITH COMMUNITY CARE

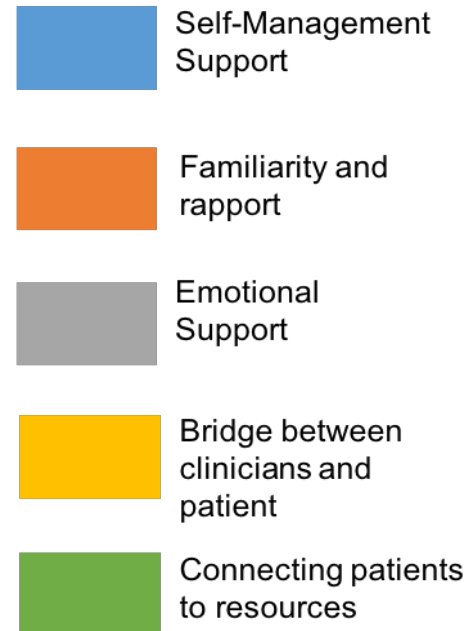
PNs health coaching intervention



Areas of patients' satisfaction



## Legend



# PATIENT NAVIGATION IN CHINATOWN: PYRAMID OF CARE

Communicating to the  
needs of older adults

Cultivating Connection takes time

## Roles of PNs (3Cs)

Clinical Assessment

Care Coordination

Care Navigation

# TAILORING CARE STRATEGIES FOR SOCIALLY DISADVANTAGED OLDER ADULTS

- Community care needs to take into account different patient activation levels/ resource capacities in recommended care plans
  - Patient capacities are not necessarily tied to their medical conditions, but other individual, social and economic resources that shape people's capabilities
- Rapport building is important and takes time
  - Establishing a relationship of trust increases elder clients' sense of ownership towards managing their health and well-being
  - Benefits of the programme has to be consistently communicated
- A “virtual” or “community” ward is first and foremost, a person's home
  - Care providers are guests—accord the same respect towards entering someone's home
- Dignity and affirmation of the individual as a whole person instead of “patient” (self-worth, autonomy, efficacy)



# KEY TAKEAWAYS FROM USER EXPERIENCE

**A**ffirmation of the individual as a whole person instead of “patient” (self-worth, autonomy, efficacy)

**B**enefits of the programme has to be consistently communicated

**C**are expectations have to be properly managed

**D**eciding with patients on the appropriate course of action

**E**fforts towards adherence are impeded by continual lack of reliable social support and poor living conditions

**F**inancial barriers to care remain an issue

**G**reat relationships take time to build and develop

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# CITATION GUIDELINES

To cite the presentation slides, please use the following:

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