Personal Alert Victoria clients:
Who is falling and what are their thoughts on falls prevention?

Dr Sze-Ee Soh

Dr Darshini Ayton

Senior Research Fellows

Falls and Bone Health Team

Department of Epidemiology and Preventive Medicine

Monash University

The project team

- Victorian Department of Health and Human Services – Ageing and Aged Care Branch

  - *Catherine Thompson*

  - *Sarah Yallop*

  - *Sonya Ellmers*

  - *Aleksandra Natora*

- Monash University School of Public Health & Preventive Medicine, Health Services Research Unit

  - *A/Prof Anna Barker*

  - *Dr Sze-Ee Soh*

  - *Dr Darshini Ayton*

  - *Ms Renata Morello*

Personal Alert Victoria (PAV)

- Personal monitoring and emergency response service

- Funded by the Victorian Government

- Supports frail older people and people with disabilities to live an independent life

- Fosters greater confidence and safety

The problem of falls in PAV clients

- Recent falls, or perceived risk of falls, is a key reason for people to be referred to the PAV service

- Falls are the most common reason clients activate their alert pendant

- Western Australian study

  - 56% of alerts occur in response to a fall

Value of understanding the local problem

- Interventions that are tailored to local problems, barriers and enablers are more effective

- Tailoring requires:

  – Mapping of interventions to underlying demand

  – Understanding the moderators of intervention uptake

  – Creating a solution

Project objectives

1 Identify the patterns, risk factors and outcomes of PAV clients who experience a fall

2 Explore perceptions and experiences of PAV clients who experience a fall

3 Explore perceptions and experiences of assessors about their role in falls prevention

Project design

Sequential explanatory mixed methods study

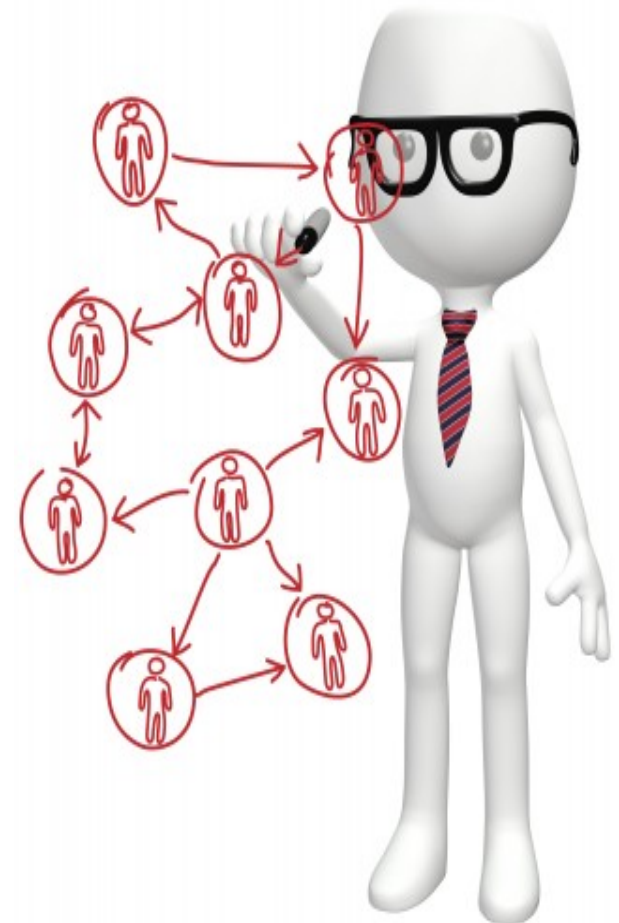| Quantitative Data linkage study | → | Qualitative Interviews with PAV clients | → | Quantitative Assessor survey |

DATA LINKAGE STUDY

Data processing and linkage

- PAV service provider dataset
  - Demographics
  - Number and nature of alarm events raised

- Linked with Victorian DHHS datasets
  - Linking variables: patient identifier, age, gender

Participant cohort

- A total of **48,023** PAV clients between 2012 to 2014

Mean age: 84.1 years

Female: 80%
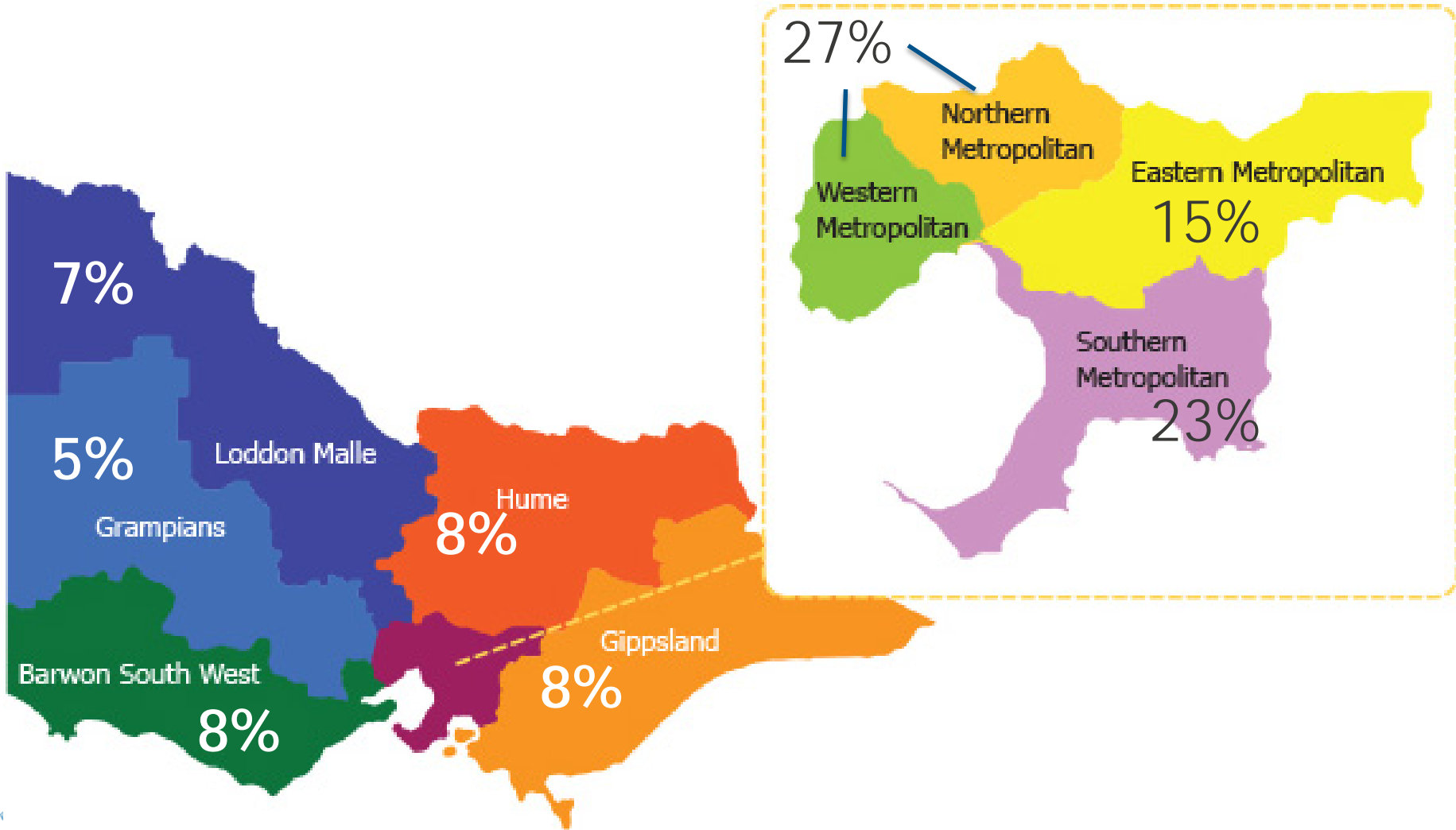
Lives alone: 82%

>3 medical conditions: 12%

Top 3 health conditions:
1. Arthritis
2. Diabetes
3. Asthma

Reason for alarm event:
1. Falls (45%)
2. Unwell (20%)

PAV clients by region

ED utilisation by PAV clients

96,574 ED presentations

Median LOS: 5.0 hours

62% via road ambulance

29,381 PAV clients presented

Transfer to ward: 64%
Usual residence: 31%
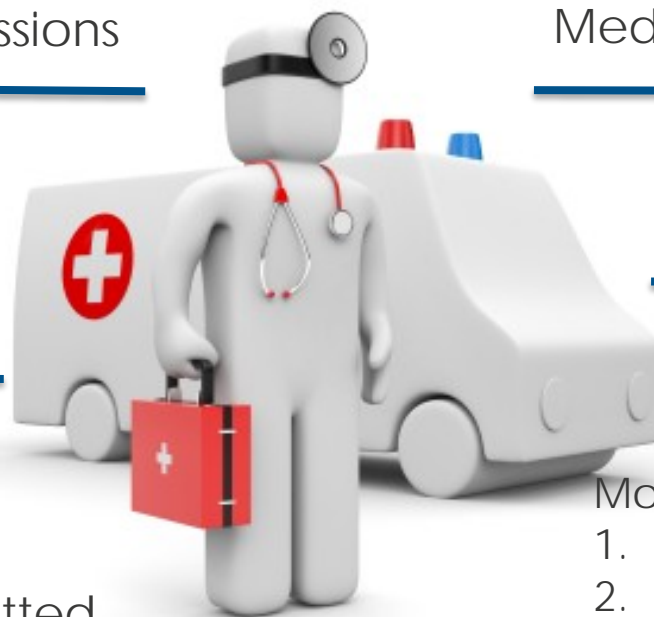
Hospital utilisation by PAV clients

82,280 unplanned admissions

Median LOS: 4.0 days

Multiday stay: 69%
Acute care: 99%

12,574 (15%) for falls

28,682 PAV clients admitted

Most common diagnoses:
1. Acute myocardial infarction
2. Heart failure
3. Fracture femur
4. Fracture pelvis/spine

Reason for callouts

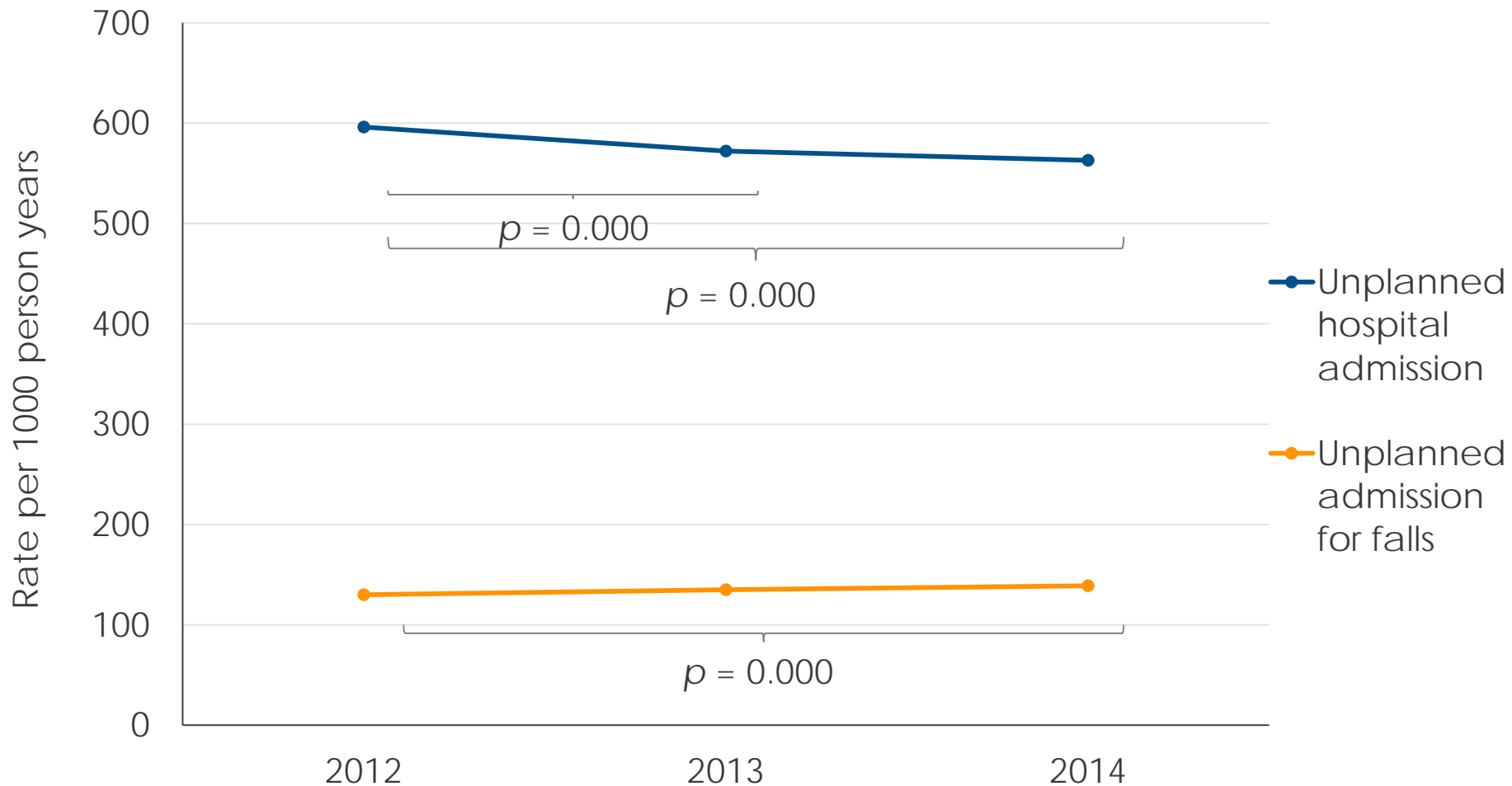| Reason	Number of callouts (N = 38, 084)
Heart-related	2,478 (7%)
Anxiety	713 (2%)
Bleeding	876 (2%)
Confusion	527 (1%)
Falls	16,882 (44%)
Pain	2,904 (8%)
Shortness of breath	2,980 (8%)
Unwell	7,637 (20%)
Other (e.g. locked in)	3,807 (8%)

Callouts between 2012 to 2014
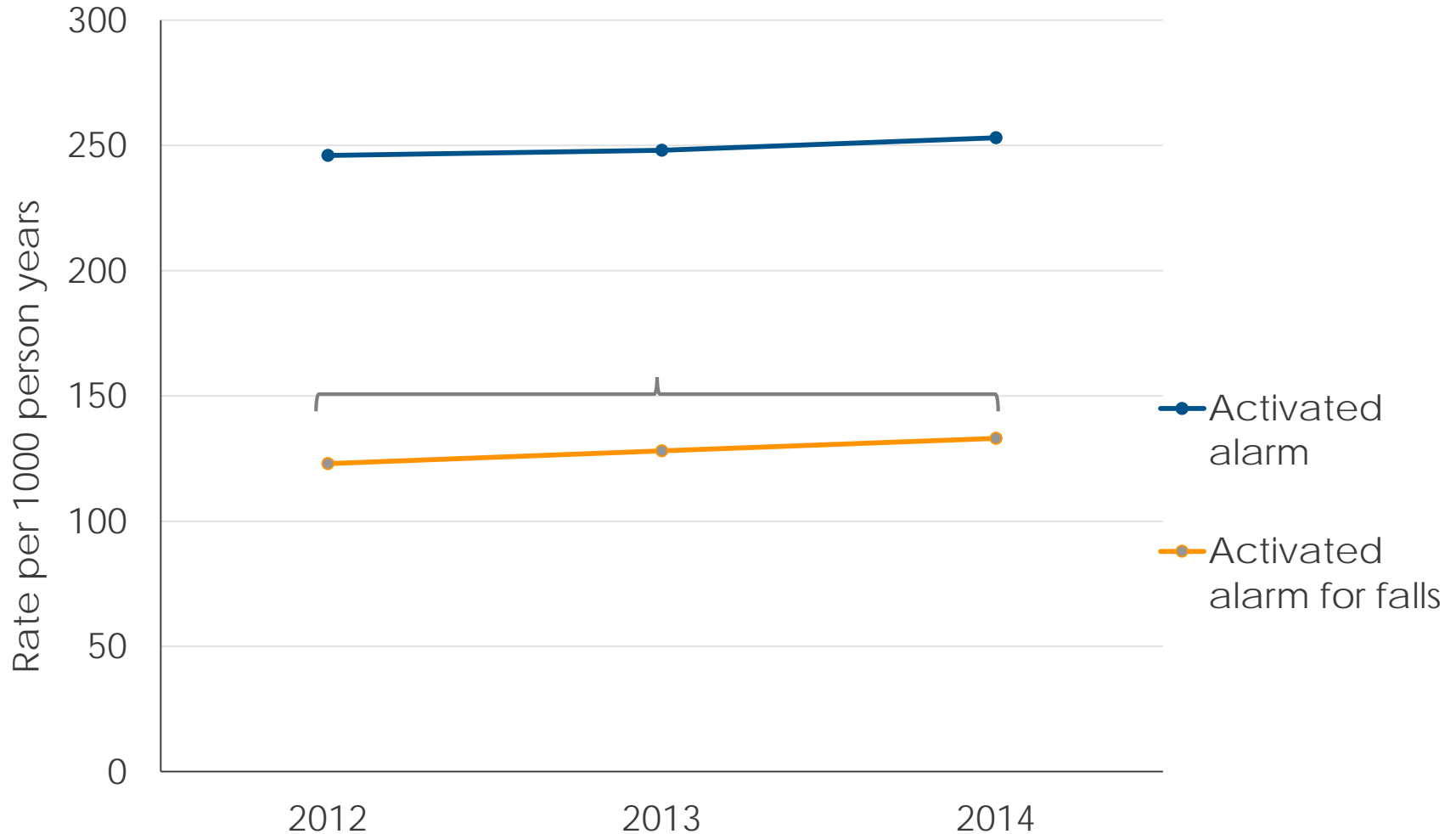
ED presentations between 2012 to 2014
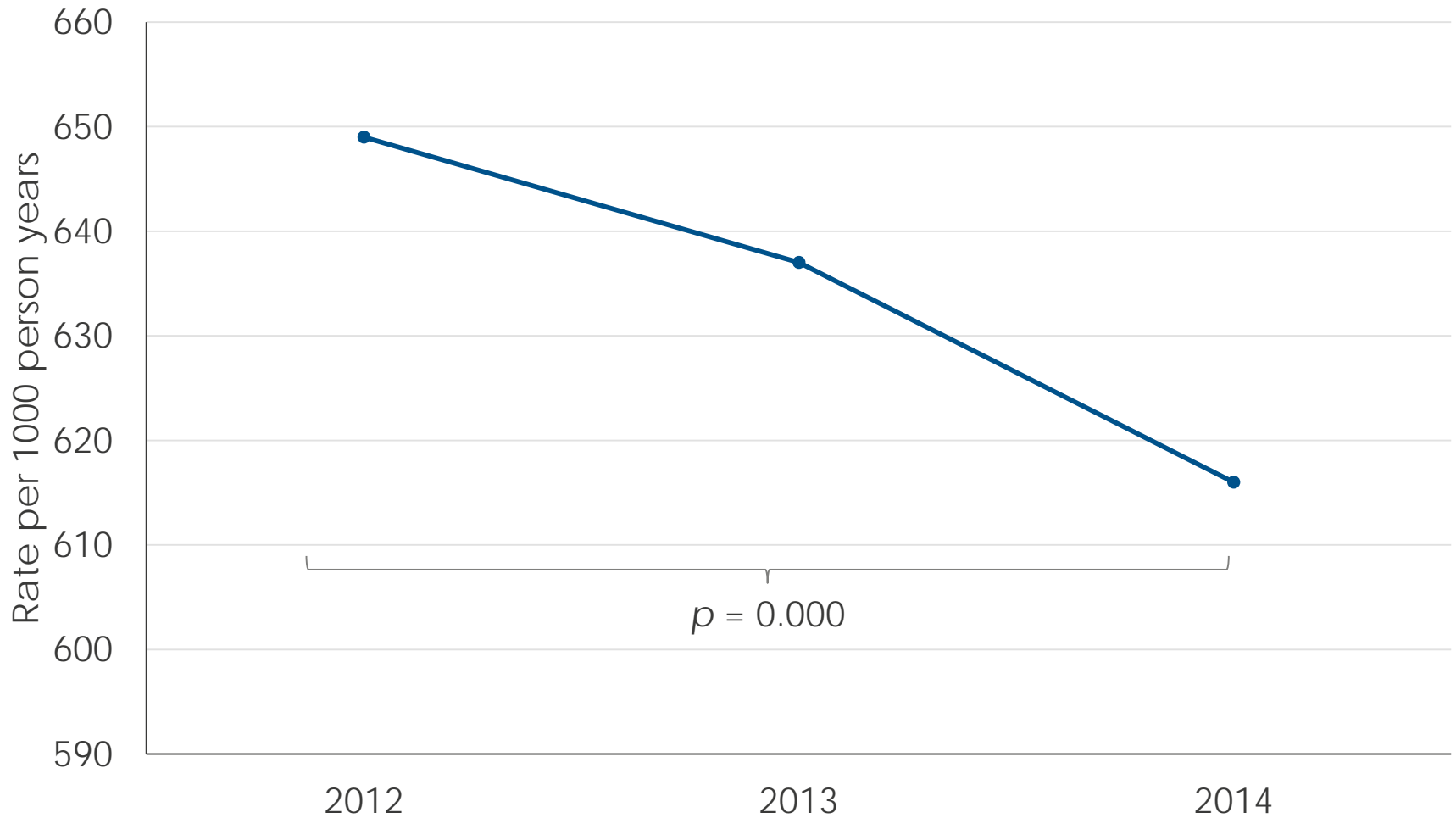
Unplanned admissions between 2012 to 2014

INTERVIEWS WITH PAV CLIENTS

Objectives

- To explore the experiences and perspectives of PAV clients regarding falls and falls prevention interventions and activities.

- To explore barriers and enablers to participation in falls prevention interventions

Avoiding the F word (Falls)

- I had been going to the toilet … and on the way back I thought, "I can't walk." I mean I felt that I was too weak to walk so I was crawling, I must've fainted just outside the bedroom. [F, 74]

- If I bend down too quick I get black outs…it's only temporary. My doctor increased my blood pressure tablets and I seem to be going alright. I collapsed about half a dozen times. [M, 84]

Perceptions on falls risk

Interviewer: Do you think you are at risk of more falls?

Participant: Well I hope not. I haven't had any for a while. I've got a walker and if I go on long walks, because I get a little bit wobbly, I take the walker. But otherwise, I seem to be walking okay. [F, 80]

Participant: I hear on television a few people falling down and I am careful how much I can [do] but if I fall I fall, I couldn't say nothing. Couldn't say, "That can't be happen to me". It happen to many others, it can happen to me too. [F, 78]

Perceptions on the causes of falls

- The truth is I can't believe I am old and when these things happen I think I can do it quickly like before. Of course answer the telephone and you go quickly you fall. Now I pay attention a lot more than before but this is what happened. [F, 80]

- I tripped over one of those half doors across my bedroom to stop the dogs getting in and I leant over that thinking it was fixed to the wall but it wasn't and I fell in the dark and I fell over on top of that. [M,78]

- I have so many falling and sometime it's the doctor's fault too, they give me tablets which doesn't suit me. [F,78]

Engagement in falls prevention activities

- The [local] council –community health services – under that they referred me to the gymnasium. I started going to a physiotherapist and he said yup you qualify and so once a week I go to the gymnasium. Every Monday I go there for an hour and the physiotherapist there will keep an eye on me and I hop on some machine and it costs me $6… It helps enormously! [F, 74]

- I think I do a lot of exercises here without going to physio. I flex my leg muscles and arms every morning to loosen up. [M, 84]

- I do a fair bit of exercise myself. Bend down touch my toes, a few body presses, just moving my body from side to side, my neck and my arms and things, all the exercises I used to do when I was bike rider virtually, and touch my hands on the floor, I still do that. Just mainly to keep my muscles flexible. [M, 78]

Barriers to accessing falls prevention interventions

Appropriateness of venue

▪ I turn blooming 74 and that's the first time I enter the gym. And when you get in there is an enormous steep staircase. There is no lift! [F, 74]

Competing priorities

▪ Look, I can't go to all of this [physiotherapy, falls and balance clinic] because we are alone, my husband is sick and he's always in hospital, I can't go and I only go if it's very necessary. [F, 80]

Cost

▪ Well I think my biggest problem would be the cost of a lot of things. Because I'm on a pension.[F, 80]

Knowledge

▪ **Interviewer:** So, have you accessed any services such as physiotherapy?

▪ **Participant:** Well nobody offered me that. [F, 78]

Role of general practitioner

- All participants reported talking to their GP about their falls.

- Seek advice from GP and oncologist. And also I would talk about it with my son. [F, 74]

- I see my GP at least once a month. Happy to talk to him about black outs. [M, 84]

Participants are happy for the PAV service to contact their GP about their falls.

ASSESSOR SURVEY

Objectives

- To understand PAV client needs from the perspective of assessor

- To gain insight from assessors regarding their experience and knowledge of PAV client falls and referrals to falls prevention interventions

Assessor information

Assessment organisation
- HACC Assessment Services/Regional Assessment services 51%
- Community Health Services 23%

Region
- Northern Metropolitan 23%

Time working as an assessor for PAV
- 5+ years 44%

104 surveys were completed between 28th of July and 20th of August

Assessing falls risk

- 42% report assessing falls risk through a holistic assessment tool

- National Screening and Assessment Form most common holistic assessment tool

  - "Have you had two or more falls in the past 12 months?"

- 10% used a specific falls risk tool.

- Most common tool was the FROP-COM

- Falls risk was typically assessed at

  the PAV service eligibility assessment

Referrals/Recommendations to falls prevention interventions
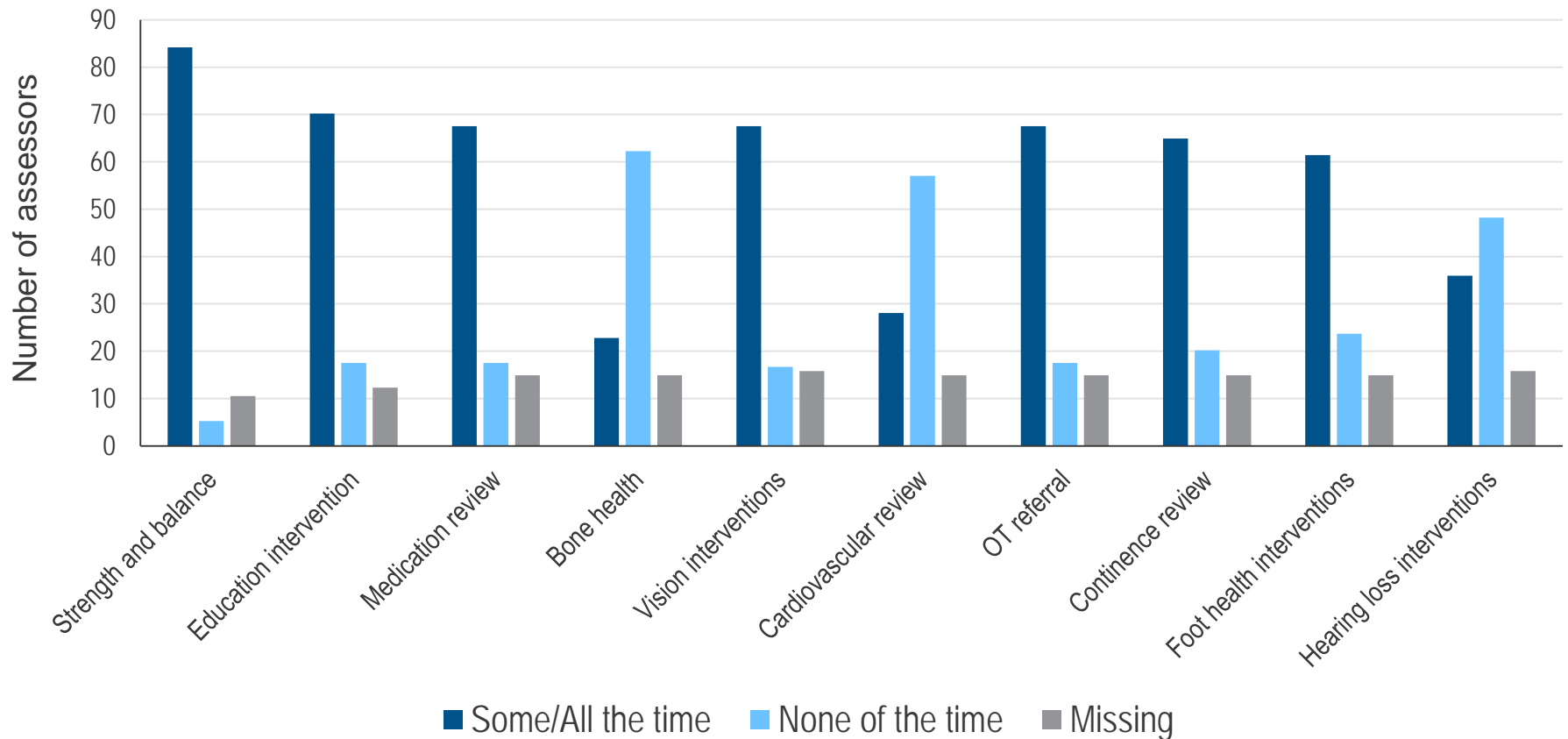
Individual level barriers to accessing falls prevention interventions

Intervention	Transport	Motivation	Funding/ Cost	Relevance	Not a priority	Location	Poor health literacy	Waiting times	Other
Strength & balance	X	X	X	X	X		X	X	No local services Past negative experiences
Education	X	X		X	X		X	X	Access to online information Lack of CALD info
Medication		X	X	X	X		X	X	Trust GP
Bone health	X	X	X	X	X	X	X	X	
Vision	X	X	X	X	X	X	X		
Cardiovascular	X	X	X	X	X	X	X		
Occupational Therapy	X	X	X	X	X	X	X		
Continence	X	X	X	X	X	X	X	X	Fear embarrassment
Foot health	X	X	X	X	X		X	X	
Hearing loss	X	X	X	X	X	X	X	X	

Assessor level & system level barriers

Intervention	Client consent	Referral pathways	Ability to refer	GP com	Long waiting list	Funding	Time to complete referral	Other
Strength & balance	X	X					X	Strict eligibility criteria No local services
Education								Access to online Information overload Lack of CALD info
Medication	X	X		X				
Bone health	X		X	X				
Vision				X		X		
Cardiovascular	X			X				
Occupational Therapy		X			X	X	X	Client doesn't want to change things in house Client does not understand OT role
Continence	X							
Foot health					X	X		Lack of providers
Hearing loss	X		X	X				

Assessor perceived client barriers

- *Motivation*

  - Clients are focussed on obtaining alarm as they feel this will solve all their problems. Most clients are not interested in prevention by this time as they feel they are entitled to it and feel a worker …had promised an alarm, hence they do not always grasp the concept of eligibility assessment or addressing risk factors to prevent falls which will negate the need for an alarm.

  - Clients often feel that the programs aren't worthwhile and feel that they are too old to participate.

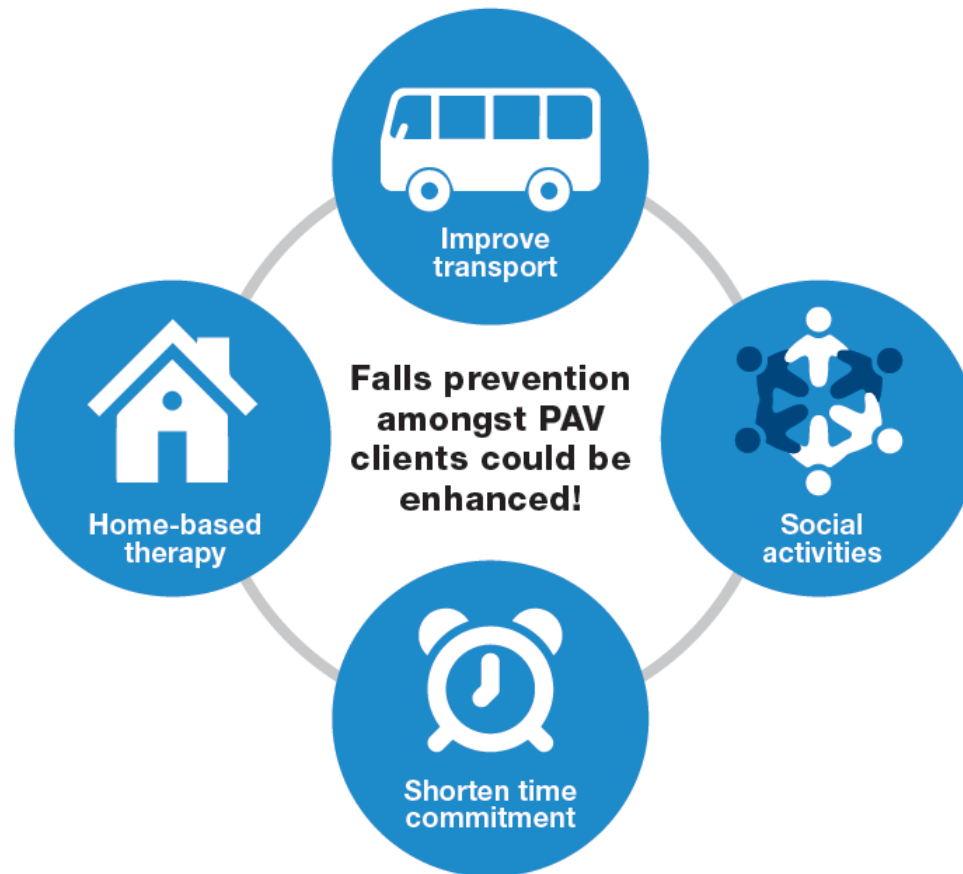- *Transport*

Assessor barriers

- *Client level*

    - Getting the clients consent and getting the client to believe the referral is needed

- *Assessor level*

    - Assessors are not all medical professionals so clients do not always follow our advice

Strategies to improve intervention uptake

Take home messages

1. PAV clients avoided the F word [FALLS!].

2. Callout for falls are frequent and recurring.

3. Rate of fall callouts and falls-related hospitalisations are increasing over time.

4. Assessors felt clients were at risk of falls.

The Falls and Bone Health Team

*We aim to improve the quality of clinical practice by
generating new knowledge through clinical research projects*

 falls6pack.depm@monash.edu

 Falls and bone health team

 @Anna_Barker1

@darsh_deva

@FBHT_SPHPM