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CRICOS PROVIDER 00123M

Professor Renuka Visvanathan

Hospitals as Healing Environments for Older People

adelaide.edu.au

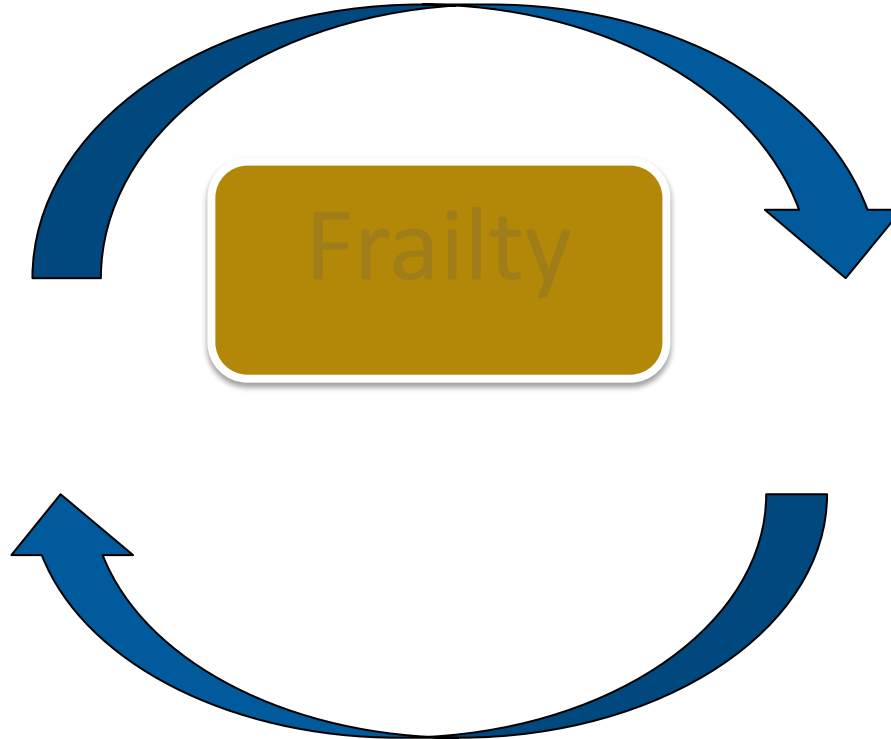
seek LIGHT

Presentation Outline

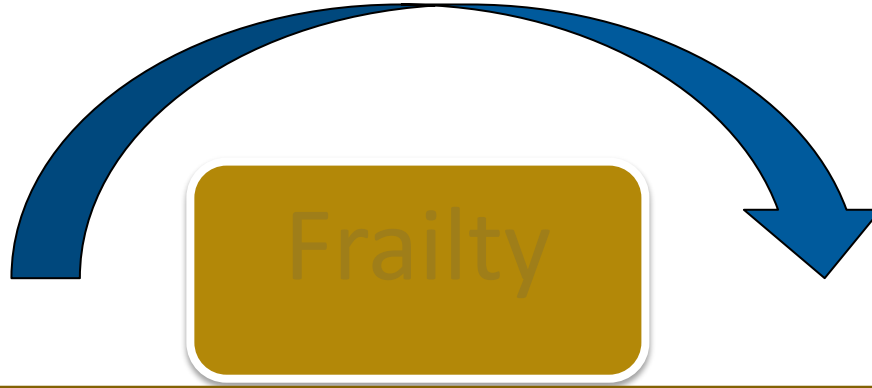
- **Introduce Built Environment Design Considerations**
- **Some Examples From South Australia**
- **Some Preliminary Research Findings From Observations and Interviews**



Ageing Process



Ageing Process

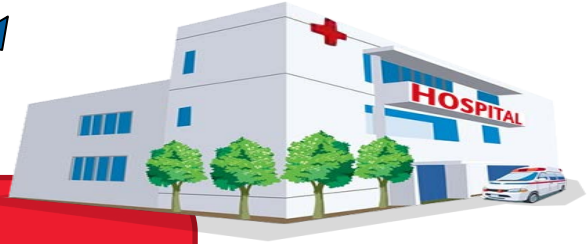
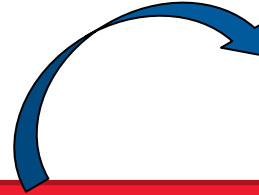


Loss of physiological reserves that predisposes to accumulation of deficits and increased vulnerability to adverse outcomes

Ageing Process



- Falls
- Injuries
- Acute Hospitalizations
- Disability
- Institutionalization
- Death



Loss of physical
to accumulate
vulnerability to adverse outcomes



Concepts In Healthcare Design

- ***Positive Distraction***: The ability to allow the individual to shift focus from negative foci within the health environment to the more restorative aspects of the non-medical world

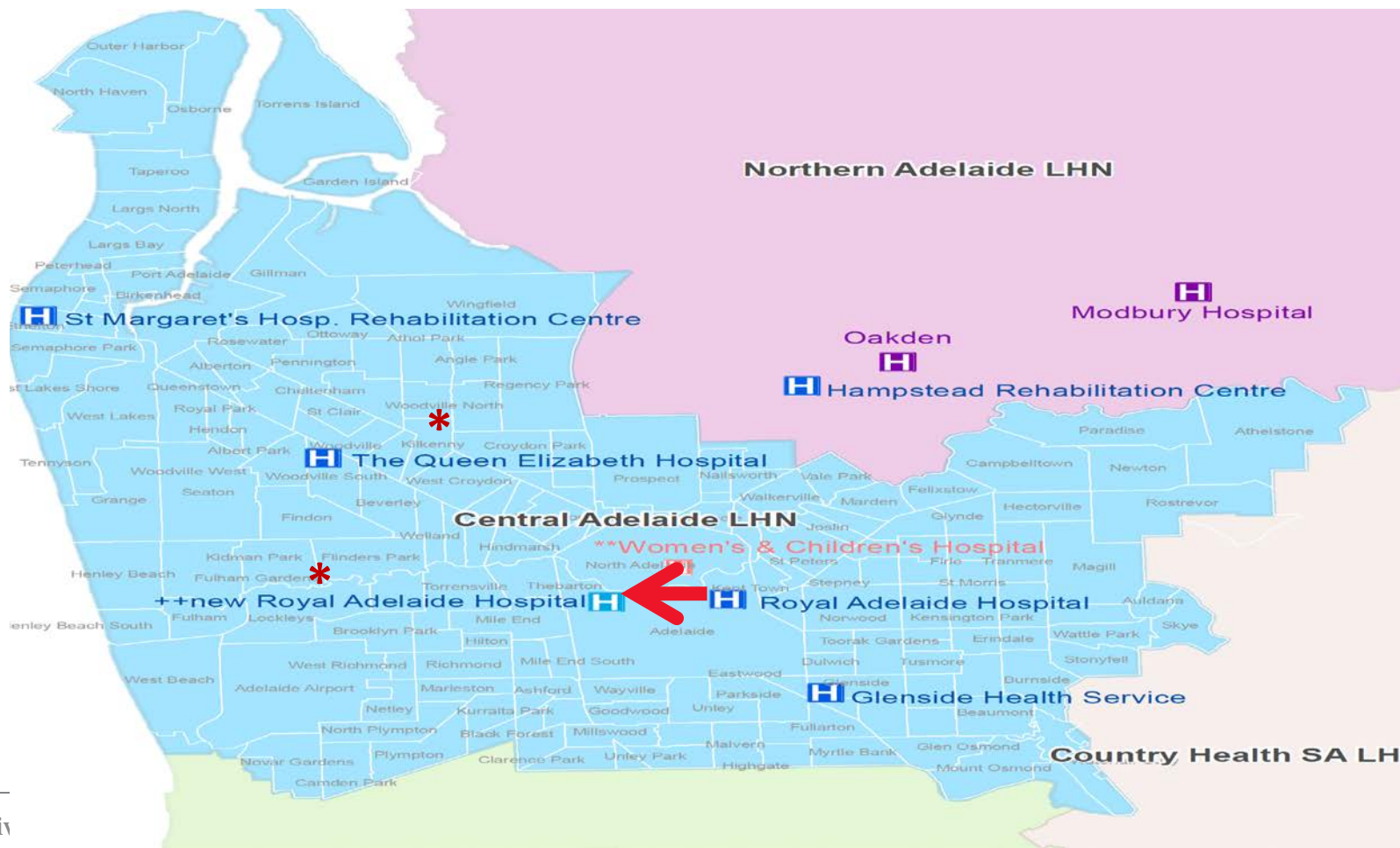
Shepley M (2006). The role of positive distraction in neonatal intensive care unit settings. Journal of Perinatology, 26, S34-S37.

- Roger Ulrich's ***Theory of Supportive Design*** - "design characteristics that are effective in fostering recovery from stress in patients, visitors and health care staff"

Ulrich RS (1997). Pre-symposium workshop: A theory of supportive design in healthcare facilities. J Healthcare Design

Design Features Of Relevance

- Natural Light
- Noise
- Temperature
- Access to nature
- Encouragement of social interaction
- Supporting safe mobility
- Art (includes music and entertainment)





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THE QUEEN ELIZABTH HOSPITAL
HEALING ENVIRONMENTS FOR OLDER PEOPLE

All rooms have views to nature
Natural light through windows



Therapy areas have view to nature
Lots of natural lighting



Patients Have Access To Nature
Their Families Have Access
Staff Have The Benefit Of Nature



All rooms have views to nature
Natural light through windows

Therapy areas have view to nature
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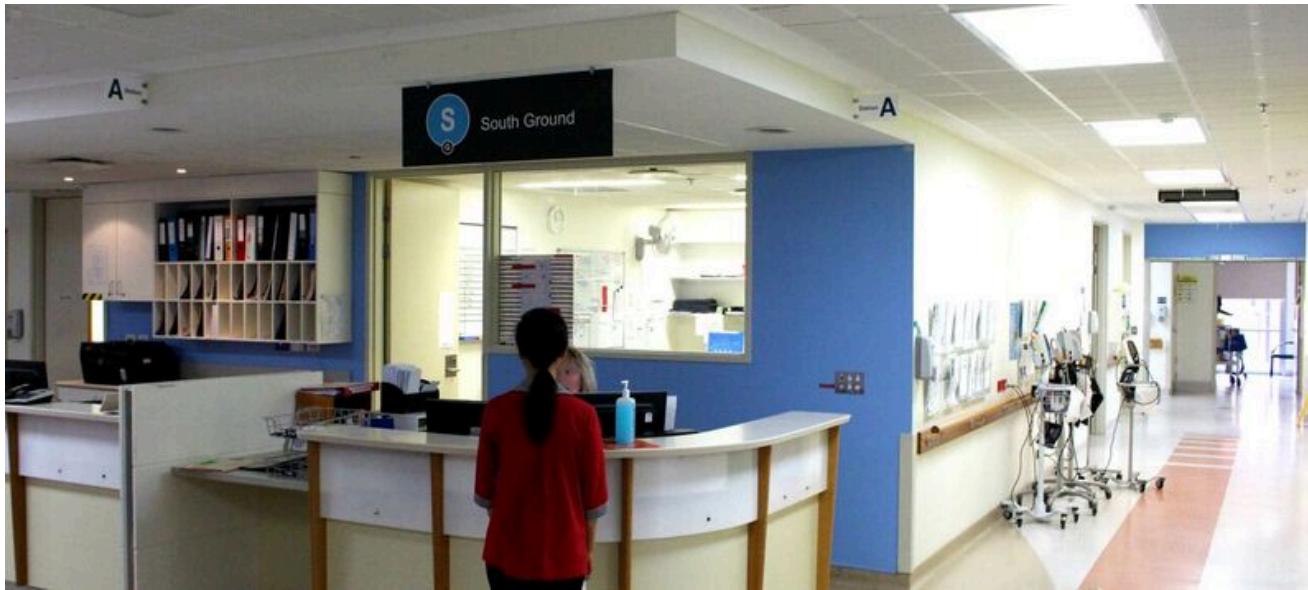


Earlier Restoration Of Function
Improved Mood

Reduced Stress
-consumers
-staff



Patients Have Access To Nature
Their Families Have Access To Nature
Staff Have Access To Nature



Wide Corridors
Well Lit
Slip Safe
Observation Points
Reduced Clutter
Safer For Mobility

DEMENTIA CARE ENVIRONMENTS



Internal Gardens



Raised Garden Beds



Backyard Garden

AMBULATORY PHYSIOTHERAPY GYM
ADJACENT TO INPATIENT WARDS





Objective

- Capture the experience and perceptions of older adults attending the Queen Elizabeth Hospital (Adelaide)

PhD candidate: Dr Beatriz Martins

Supervisors: Soebarto V, Barrie H, Visvanathan R

Population and Settings

Inclusion Criteria

- Older Adults (>65 yo)
- Community Dwelling
- Able to talk and converse in English

- Recruited from:

The Queen Elizabeth Hospital – geriatrics outpatients clinics

Informed consent

Ethics - HREC/16/TQEH/26 (TQEH - HREC)

- H-2017-010 (University of Adelaide - HREC)



I012 (map 01)

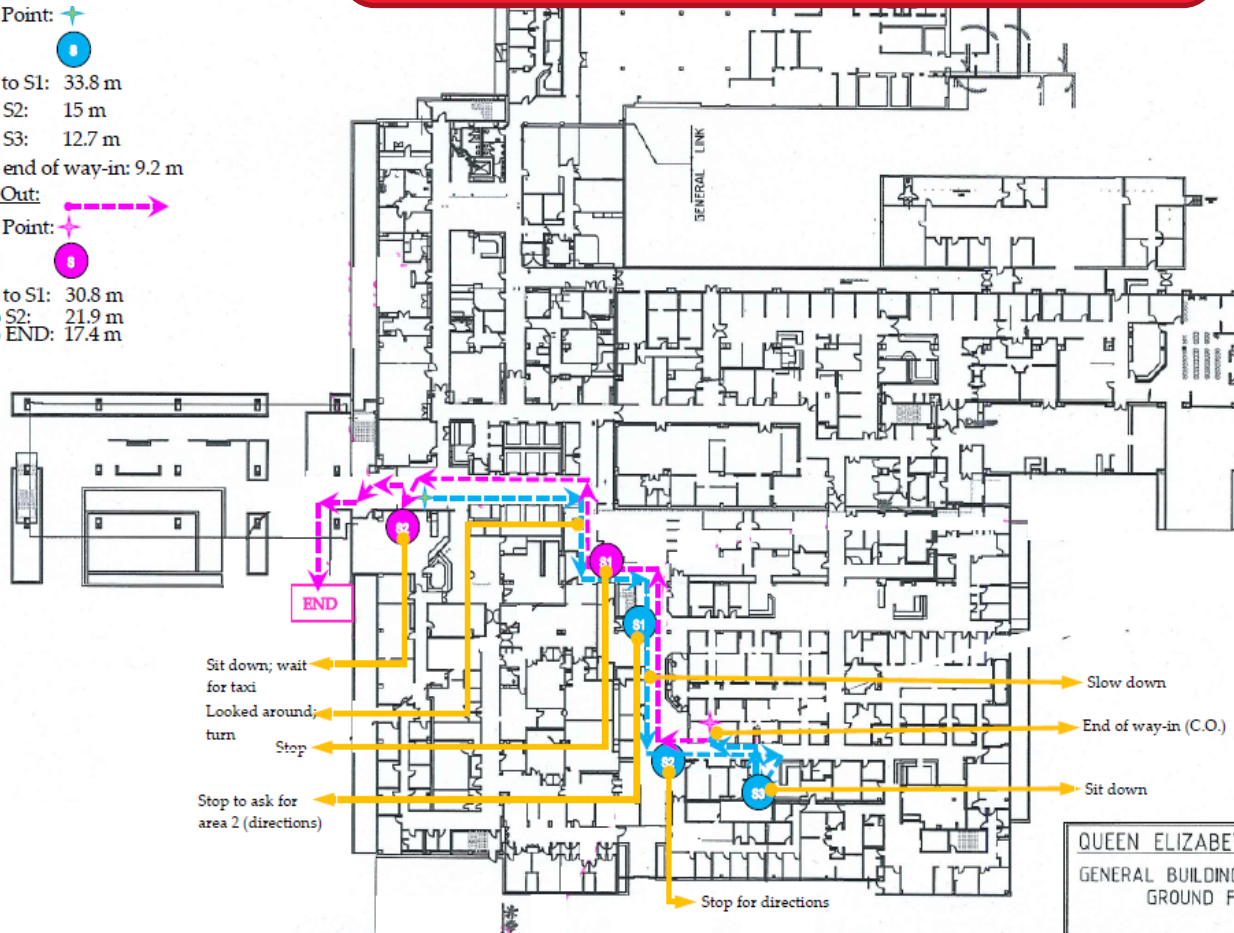
Walking Observation



Frailty and
Healthy Ageing
Centre of Research Excellence

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- Start Point:
- Stop:
- Start to S1: 33.8 m
- S1 to S2: 15 m
- S2 to S3: 12.7 m
- S3 to end of way-in: 9.2 m
- Way Out:
- Start Point:
- Stop:
- Start to S1: 30.8 m
- S1 to S2: 21.9 m
- S2 to END: 17.4 m



QUEEN ELIZABETH HOSPITAL
GENERAL BUILDING & LINK WING
GROUND FLOOR
Scale NTS



Semi-structured Interview

- What can you tell us about your journey?
- What do you rely on to find your way?
- Do you use technology to help you navigate spaces?
- What do you like and dislike about this public space?

Environmental Audit

Results

	Total (n=16)
Age (range)	80.36 (69-91)
Gender (Female)	10 (67.5%)

	Total (n=16)
Frailty Levels (FRAIL scale)	
Frail	6 (37.5%)
Pre-frail	7 (43.75%)
Robust	2 (12.5%)



Walking Observation- Hospital



	N=16
Time spent in hospital	1h10min (16min – 2h40min)
Average Walking Speed	0.42 m/s
Use of Assistive Device	4 (25%) participants
Average distances	269.8m



THEMATIC ANALYSIS

- Transportation
- Environment
- Assistance
- Individual Experience



Thematic Analysis



Transportation

- Parking Issues
- Disabled Car Park
- Public Transportation Use
- Driving and traffic
- Taxi

“Absolutely shocking. [...] I think we have got to have more room for people. I mean it’s packed out by nine o’clock.”

ENVIRONMENTAL AUDIT

TAXI STAND



Street street area to quite good, but not well maintained.

Woodville road, including taxi rank:

- Route characteristics:
 - Foot path has very steep gradient (toward road), particularly at the taxi rank;
 - Paved with small red-pavers, reasonable condition;
 - No seating provided (even at taxi rank), however observed some people sitting on low wall adjacent hospital carpark;
 - Footpath generally suitable for two people to walk abreast;
 - Adjacent road (Woodville) is very busy (60km/h), few pedestrians (two pedestrian crossing within close proximity of hospital), no cyclists observed; and
- Safety and wayfinding:
 - Good passive surveillance from road users.

LOCAL GOVERNMENT



Figure 7. Obstruction in the middle of a footpath (left); no dedicated footpath to carpark (centre); no ramp to a building (right)

ENVIRONMENTAL AUDIT

DISABILITY CARPARK

Disabled carpark (between C Wing and corridor to North-east building):

- Area more sheltered than main carpark – predominantly from C Wing building and two storey corridor;
- 22 disable carparks are available in this area;
- Route characteristics:
 - Paths only provided around the edges of the carpark, consistent with the other hospital carparks;
 - Very poor surface – asphalt is cracked and raised, lots of leaf litter from tall eucalypts;
 - Fewer users than main carpark;
- Safety and wayfinding:
 - Poor passive surveillance; and
 - Signage provided outside of the entrances to the corridor but not directly inside (observed older person walk in, then look for signage).

Lack of seating

HEALTH DEPARTMENT-STATE



Thematic Analysis - Hospital

Environment

- Lack of seating
- Adequate toilets
- Adequate lighting and temperature
- Not noisy
- Old section- Narrow aisles, lots of steps, difficult to access
- New section- Better

'Knock the whole area out and get started again.'





Thematic Analysis

- Being Accompanied
- Assistance for transportation
- Signage (font, obstructed, location)
- Wayfinding issues

Assistance



“They have to think very seriously about some of these things we’ve been talking about because...You don’t always get a daughter or a son driving Mum or Dad to an appointment. You might get Dad or Mum driving the other one too.”





Walking Observation- Hospital



Average n of stops	3.68
Asked for directions	10 (62.5%)
Looked around for directions	8 (50%)
Looking for signage	6 (37.5%)
Directions from carer	6 (37.5%)
Resting	8 (50%)





Thematic Analysis

Individual Experiences

- Frequent users, rely on habit or routine
- Health and mobility issues (e.g. SOB)
- Good relationship with staff and volunteers
- Technology not a preference
- Safety is important



Conclusions - Hospital

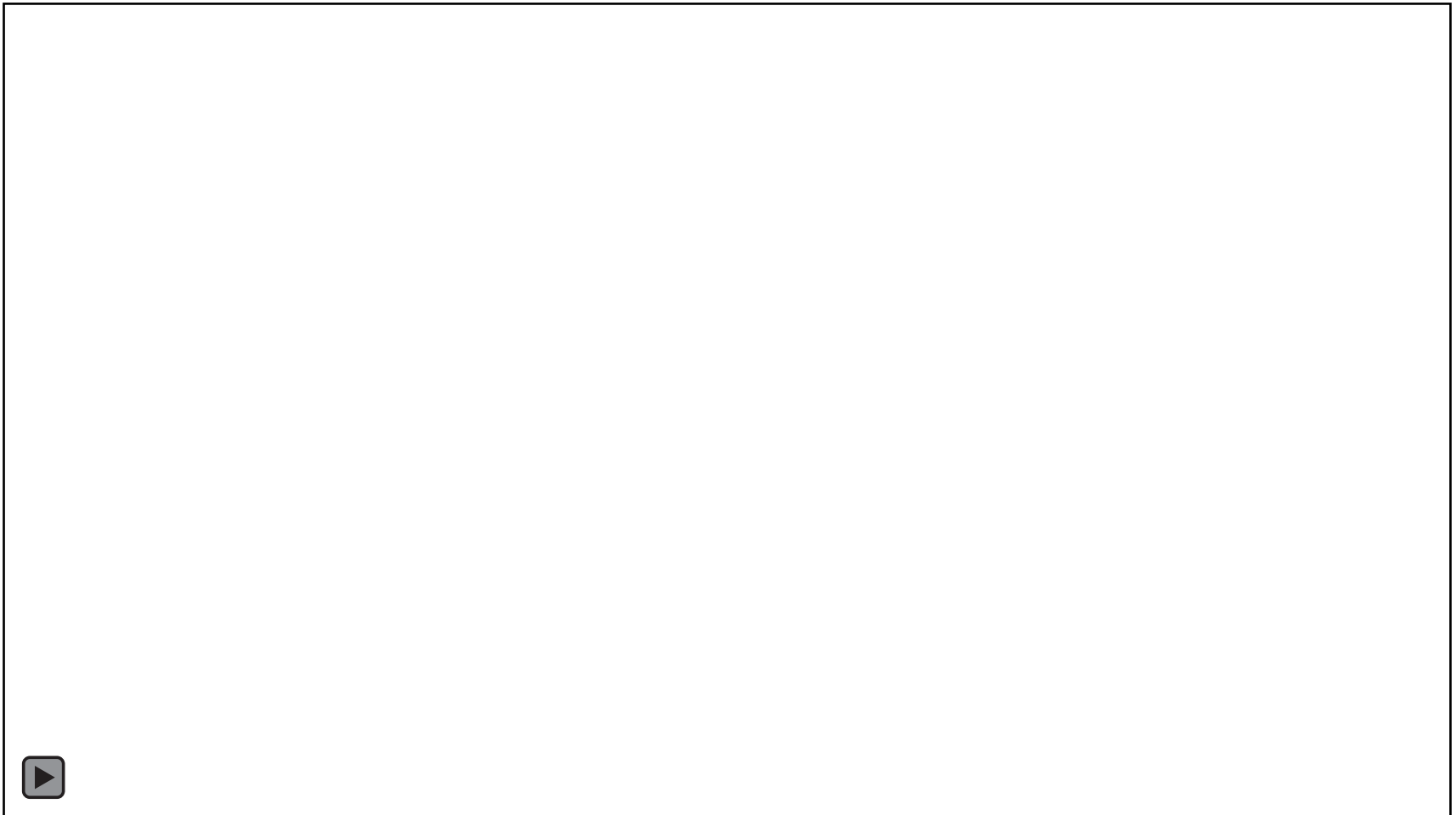
Perceptions of current patients of TQEH:

- The hospital is perceived as having adequate facilities, but overall opinion is that the older buildings need of an upgrade
- Appropriate aged friendly car parking is very important!
- Need a lot of assistance when navigating through public spaces but prefer humans rather than technology



Video link: <https://youtu.be/HVEe0y2VNCw>

FLINDERS UPGRADE- REHAB/PSYCHOGERIATRICS/PALLIATIVE CARE



Video link: https://youtu.be/bDO_onHo-Ok



Video link: <https://youtu.be/OnhjOYZiljw>



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