

Show and Tell: *ALM & RITA research update*

Manager: Sylvia Dixon

Deputy Manager: Ning Cruz

tACP: Rodel F. Fajardo



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- Princes Court Background
- How Princes Court became part of the latest research and innovation
- How the role of a tACP benefits residents/Princes Court/others.
- What are the outcomes of the research gathered in improving care for older people?
- Service & Practice Development Plan: *Princes Court Year 2023*

AIM of this session

Show and Tell: ALM and RITA research update.

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- ALM: Assistive Living Monitoring
- RITA: Reminisce Interactive Therapy Activities
- tACP: trainee Advanced Clinical Practitioner
- ICB: North East and North Cumbria Integrated Care Board
- EnCOP: Enhanced Care of Older People

Background: Common Terms

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Background: Princes Court

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Hedley Road, Percy Main NE29 6XP
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- Prince's Court Care Home is situated in North Shields, a short drive from Newcastle and close to the Royal Quays Marina.
- 74 bedded purpose-built care home for nursing, residential and rehab units.

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- Introduction of tACP (Advanced Clinical Practitioner) working in the Nursing Home.
- Introduction of ALM (Assistive Living Monitoring) & RITA as part of the research and data collection.
- Evidence collected from the audits of care
- 2023: Service & Practice Development Plan: Princes Court

Background: Where it *all* Started

Show and Tell: ALM research update



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trainee Advance Clinical Practitioner (Akari Care)

- ICB: North East and North Cumbria Integrated Care Board
- Partnership with Akari Care
- EnCOP- Portfolio
- Advanced Clinical Practitioner (MSc): Northumbria University

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EnCOP- Portfolio



(MSc)Advanced Clinical
Practitioner: **3 years**

trainee Advanced Clinical Practitioner



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ALM (Assistive Living Monitoring): 1st Quarter of 2022

ALM is a non-invasive monitoring system promoting quality and safety whilst supporting independence

Preventative = proactive well-being support

Reactive = Non-invasive monitoring and alerting support



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ALM (Assistive Living Monitoring): 1st Quarter of 2022



Preventative: proactive well-being support

Reactive: Non-invasive monitoring and alerting support are embedded in the ***six rooms*** of Princes Court



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ALM (Assistive Living Monitoring): Preventive and Reactive technologies



- **Sensory lighting** to enhance mood and wellbeing
- **Rehabilitation and Interactive Therapeutic Activities (RITA) Digital Touch Screens** enhancing the quality of life and wellbeing
- **Microwave and thermographic monitoring** to see inside a room without the need for invasive CCTV (alerting staff of any falls)
- **Acoustic monitoring** to alert staff if there is a distressed or agitated service user



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ALM's Preventative: *proactive well-being support: Resident's*



- Behaviour
- Falls events
- Nutrition
- Early detection of falls

Legend: EXPOSURE TIME WITH ALM-RITA: January- September 2022			
1-6 hours	6-12 hours	>12 hours	Updated: 27/09/2022

Research and Innovation
Show and Tell: ALM and RITA research update.

ALM's Preventative: *proactive well-being support: Resident's*



Legend: EXPOSURE TIME WITH ALM-RITA: January- September 2022			
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TABLE 3 NUTRITIONAL AUDIT on PRINCES COURT in Kilograms										
8-A PATIENT	JANUARY	FEBRUARY	MARCH	APRIL	MAY 14/05/2022	JUNE	JULY	AUG	SEPT	
9-A				30.35	30.90	30.45 30.95	31.60 30.85	31.95 31.8 32.5		
16-A										
21-A	69.6 66.2			64.5		61				
10-A					58.45 57	58.9	58.9 58.9	60.5	58.75 59.4	
44-A										
12-W			50	48.90	52.05	48.5 41.4	48 48	49.8	49.75	
20-W	70.65 71		65.10 69.5	69.50	67.80 68.2	67.8 66.8 #	66.8 #	66.8 #	66.8 67.2	
27-W	50.10 48.80	48.48 47.40	45.40 46 48.40	48.40	48.50 47.50	48.10 46.80	47.40 47.20 47.40	47.75 47.85	48.8 48.3 50.45 49.8 49.8	
24-W	39.40 40.80 41.05	40.85 41.50	38.50 40.60	40.20 40.40	40.80 40.20	39.80 39.60 39.90	39.40	40.85 40.85 40.85 39.55	39.55 38.75 37.7 ##	
7-W							70.25 69.7	68	67.1 ###	
19-W					68.80	68.80	68.25 68.2 68.3	68.3 69	66 #### 66	
8-A	89.50	89.50	90.95	90.95	93.10	93.1 94.6	94.7 94.7	94.2	96.3	
21-W	48.55 50.55	52.70 56.45 57.05	55.06 55.80 55.60	57	57 57.3	55.9	56	56	56	

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ALM's Preventative: *proactive well-being support: Resident's*



- Behaviour
- Falls
- Nutrition
- Early detection of falls

Legend: EXPOSURE TIME WITH ALM-RITA: January- September 2022			
1-6 hours	6-12 hours	>12 hours	Updated: 27/09/2022



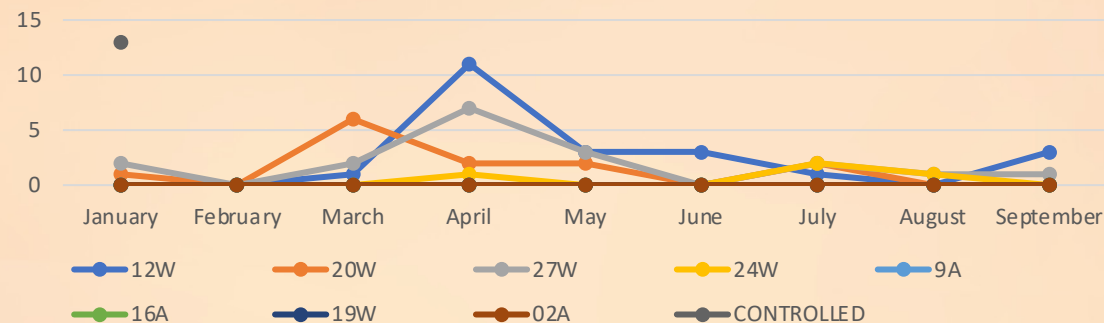
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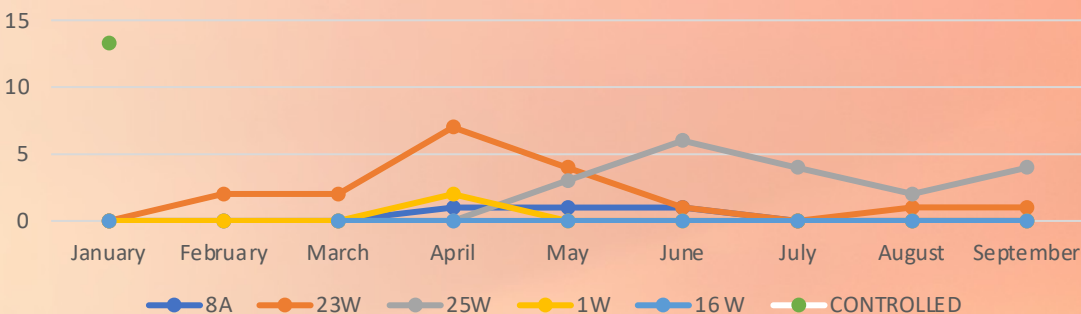
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ALM's Preventative: *proactive well-being support: Behaviour*

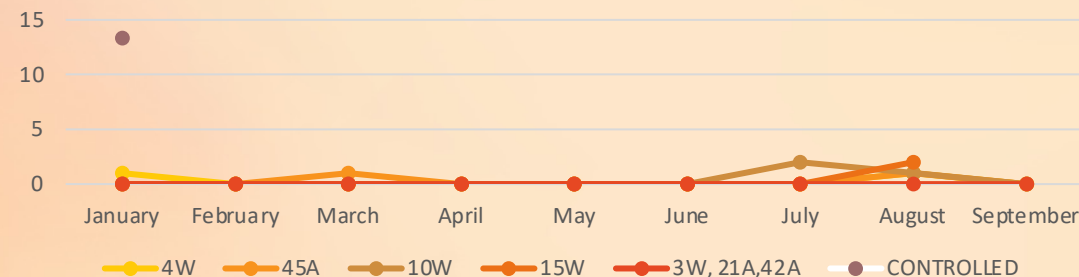
Episodes of behavioural changes of residents at Princes Court from January-September 2022
(ALM-RITA experience between 1-6 hours)



Episodes of behavioural changes of residents at Princes Court from January-September 2022
(ALM-RITA experience between 6-12 hours)



Episodes of behavioural changes of residents at Princes Court from January-September 2022
(ALM-RITA experience between >12 hours)



EXPOSURE TIME WITH ALM-RITA: January- Sept 2022

1-6 hours

6-12 hours

>12 hours

*Updated:
27/09/2022*



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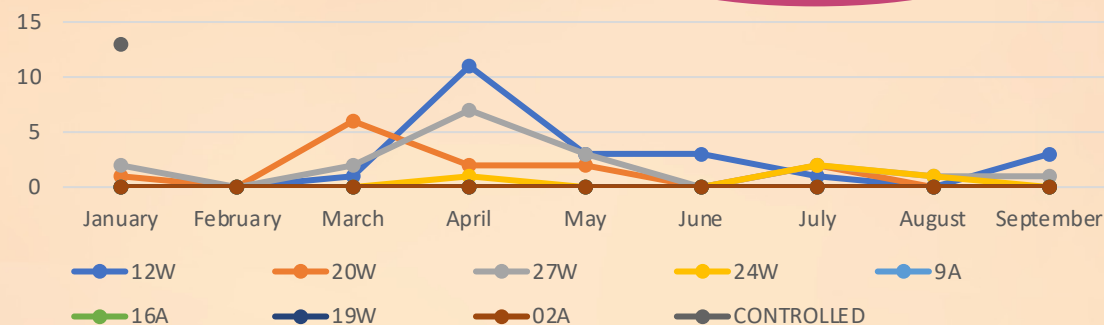


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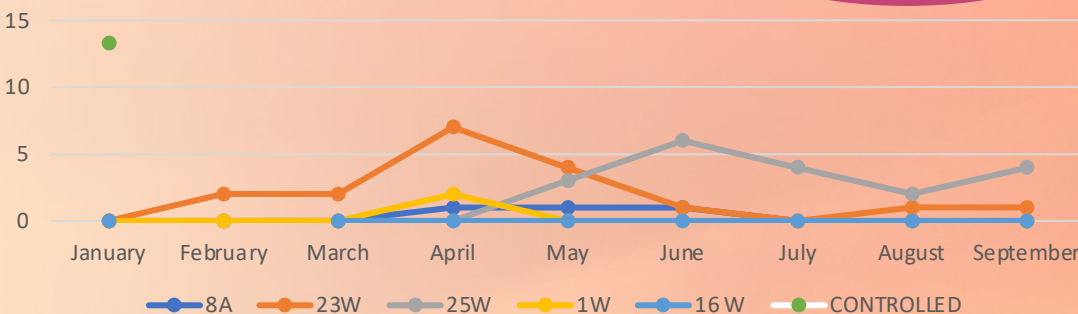
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ALM's Preventative: *proactive well-being support: Behaviour*

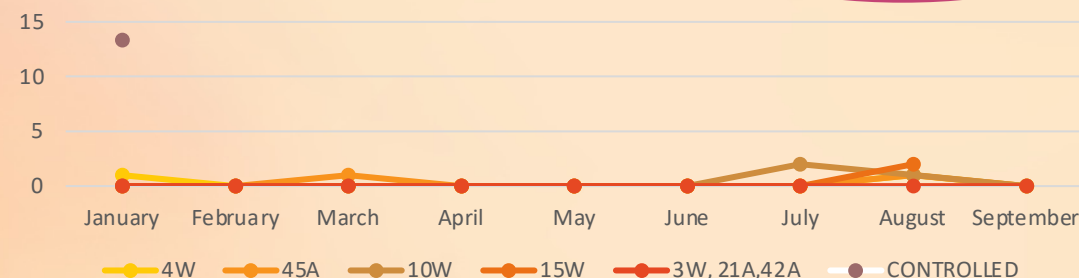
Episodes of behavioural changes of residents at Princes Court from January-September 2022
(ALM-RITA experience between 1-6 hours)



Episodes of behavioural changes of residents at Princes Court from January-September 2022
(ALM-RITA experience between 6-12 hours)



Episodes of behavioural changes of residents at Princes Court from January-September 2022
(ALM-RITA experience between >12 hours)



EXPOSURE TIME WITH ALM-RITA: January- Sept 2022

1-6 hours	6-12 hours	>12 hours	Updated: 27/09/2022
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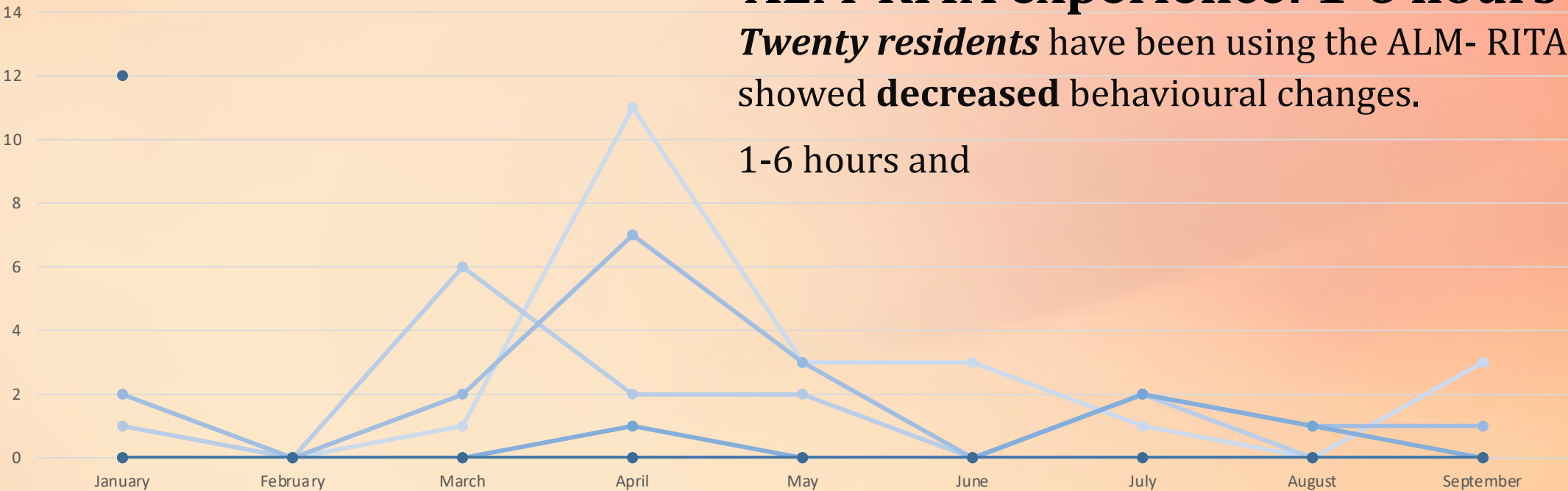
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ALM's Preventative: *proactive well-being support: Behaviour*

ALM-RITA experience: 1-6 hours

Twenty residents have been using the ALM- RITA and showed **decreased** behavioural changes.

1-6 hours and



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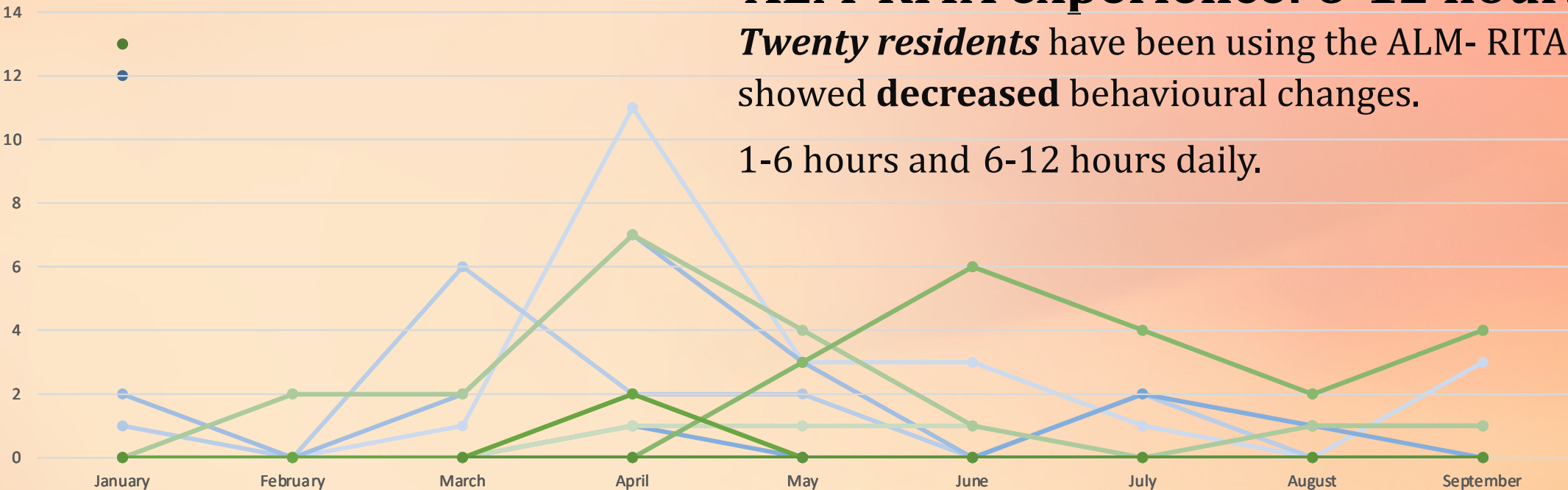
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ALM's Preventative: *proactive well-being support: Behaviour*

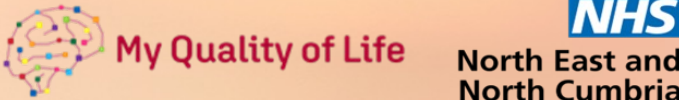
ALM-RITA experience: 6-12 hours

Twenty residents have been using the ALM- RITA and showed **decreased** behavioural changes.

1-6 hours and 6-12 hours daily.



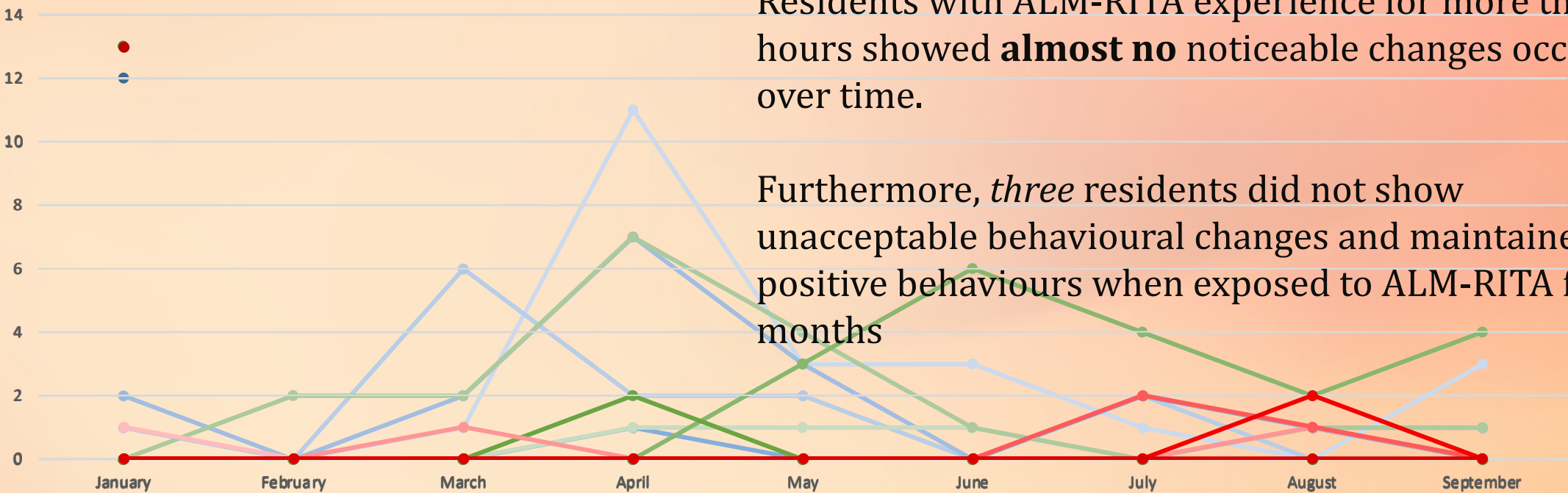
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ALM's Preventative: *proactive well-being support: Behaviour*

ALM-RITA experience: >12 hours

Residents with ALM-RITA experience for more than 12 hours showed **almost no** noticeable changes occurred over time.

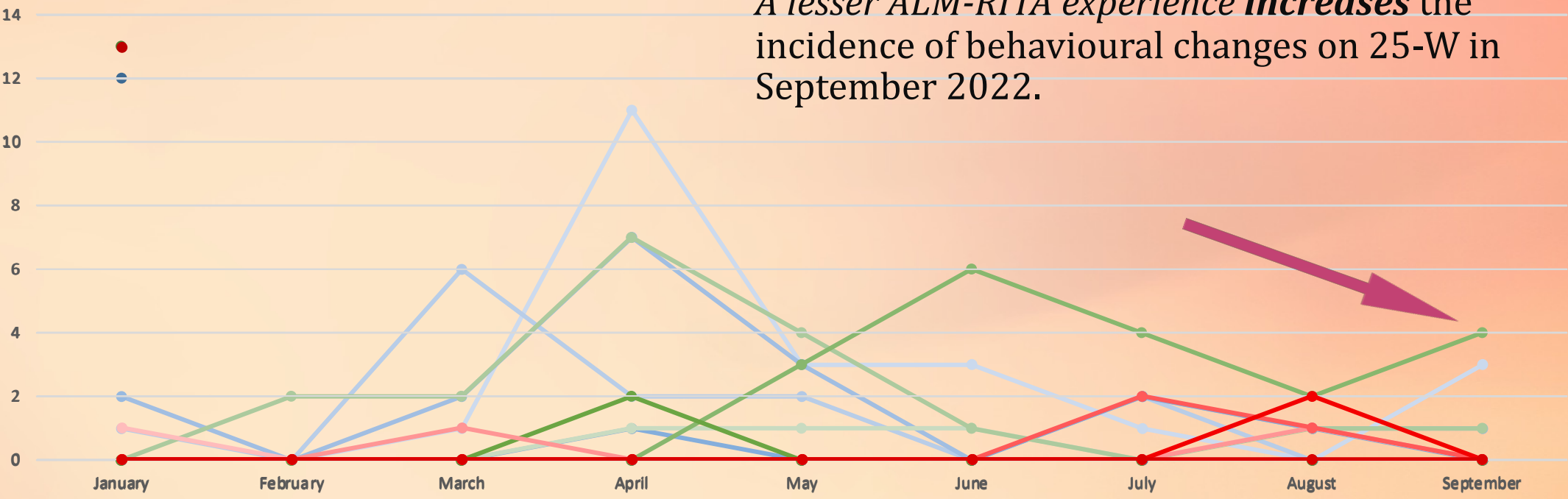


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ALM's Preventative: *proactive well-being support: Behaviour*

Lesser ALM-RITA experience

A lesser ALM-RITA experience *increases* the incidence of behavioural changes on 25-W in September 2022.



ALM's Preventative: *proactive well-being support: Resident's*



- Behaviour
- Falls
- Nutrition
- Early detection of falls

Legend: EXPOSURE TIME WITH ALM-RITA: January- September 2022			
1-6 hours	6-12 hours	>12 hours	Updated: 27/09/2022



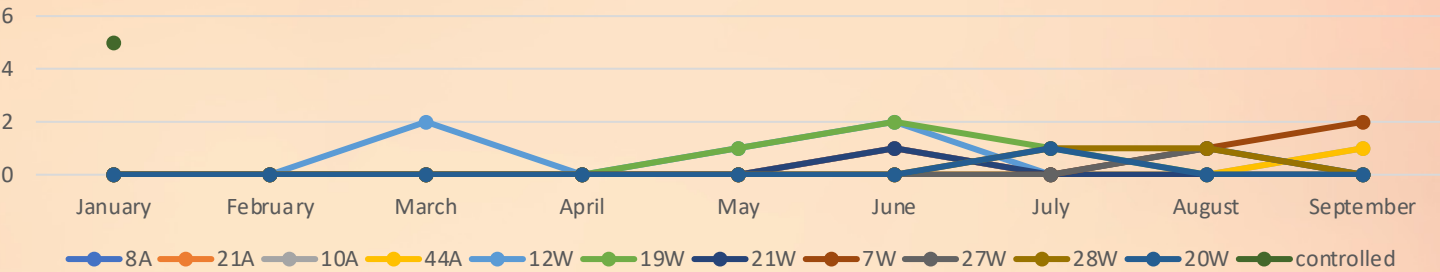
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ALM's Preventative: *proactive well-being support: Falls Trend*

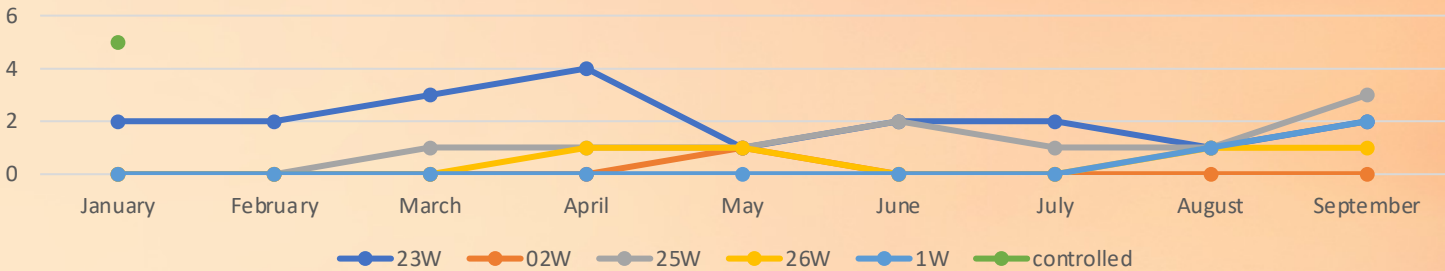
Number of Falls from January-September 2022
(RITA experience for 1-6 hours)



Further analysis and investigation was undertaken for Patient 23W which is the outlier. This patient presented significant behaviours that challenge and was deemed a high falls risk. These falls took place during the night time when RITA was not in use.

This investigation has been useful because the team are going to assess the impact of introducing RITA at night times with scenarios with Patients similar to Patient 23W in the future

Number of Falls from January-September 2022
(RITA experience for 6-12 hours)



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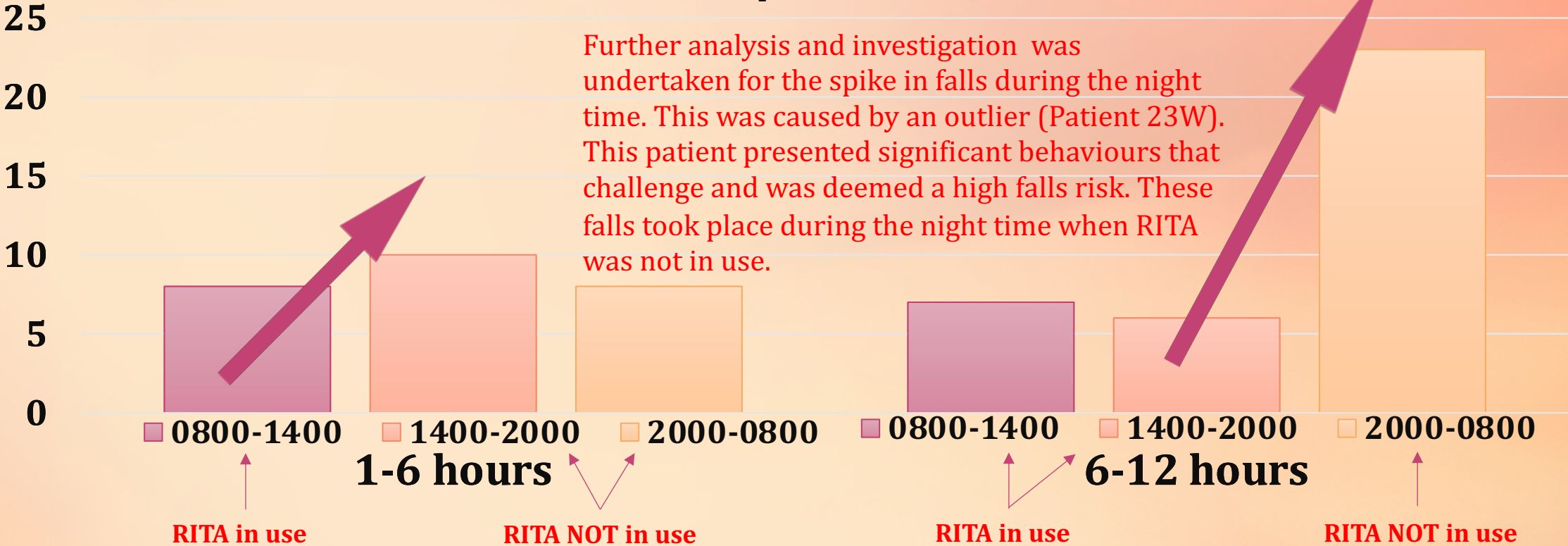
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ALM's Preventative: *proactive well-being support: January- Sept 2022*

Number of Falls who are having **ALM-RITA experience** from January-September 2022
and their respective time of events



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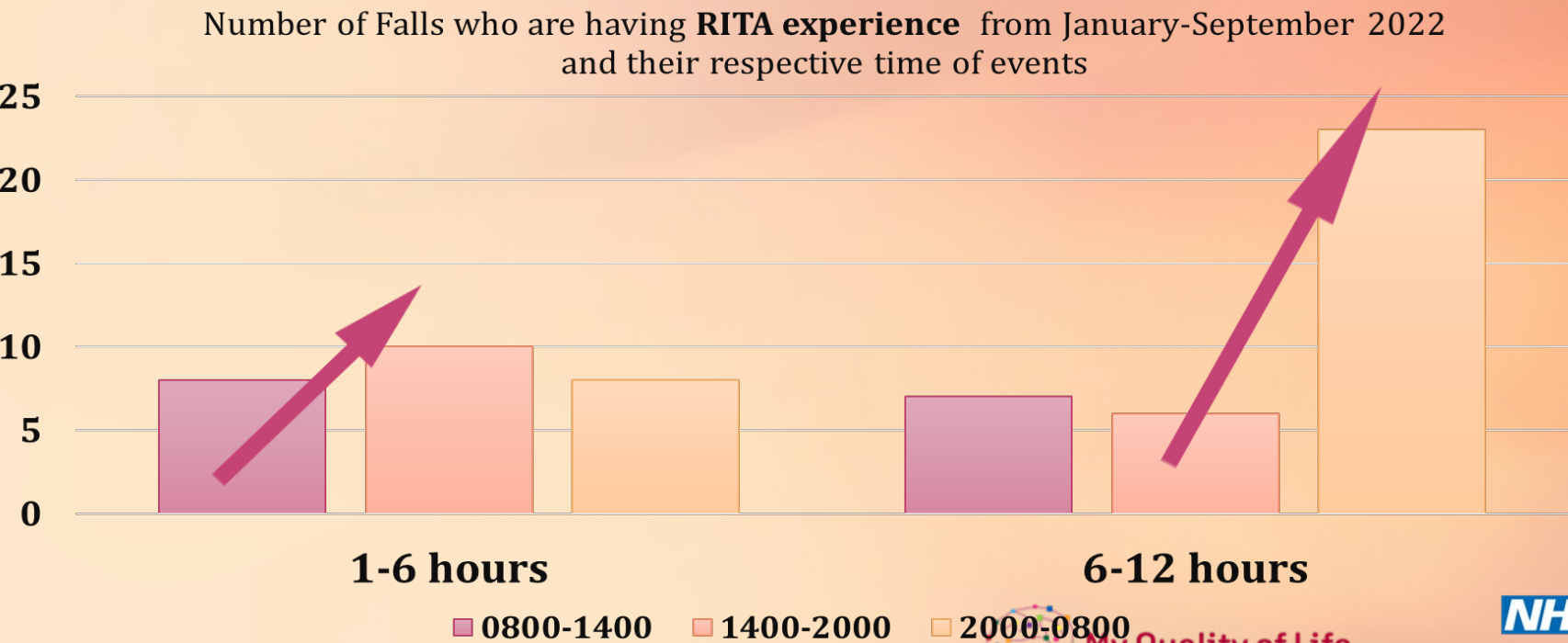
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ALM's Preventative: *proactive well-being support: January to Sept 2022*



In summary: As illustrated from the bar graph.

A Falls analysis has shown that sixteen residents using the RITA showed decreased falls during the RITA experience. However, when the RITA experience stops, an *increased* incidence of falls is noted.



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Show and Tell: ALM and RITA research update.

ALM's Preventative: *proactive well-being support: Resident's*



- Behaviour
- Falls
- Nutrition
- Early detection of falls

Legend: EXPOSURE TIME WITH ALM-RITA: January- September 2022			
1-6 hours	6-12 hours	>12 hours	Updated: 27/09/2022



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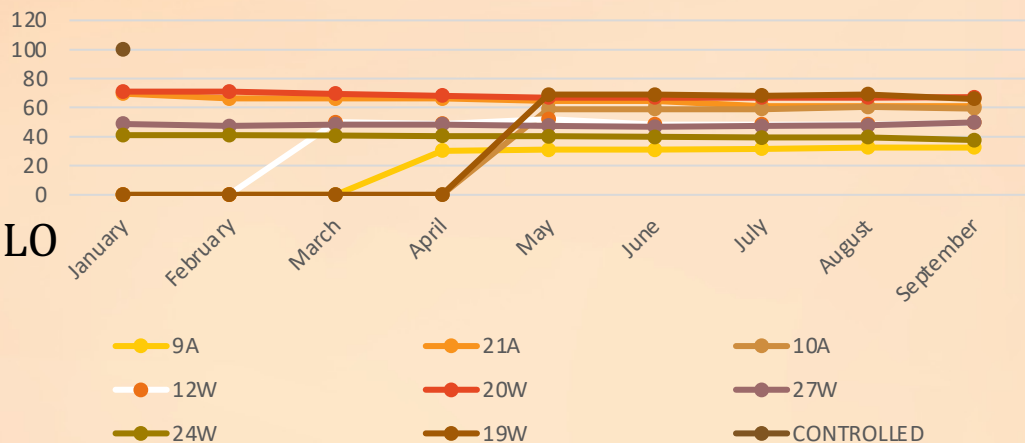


- Behaviour
- Falls
- Nutrition
- Early detection of falls

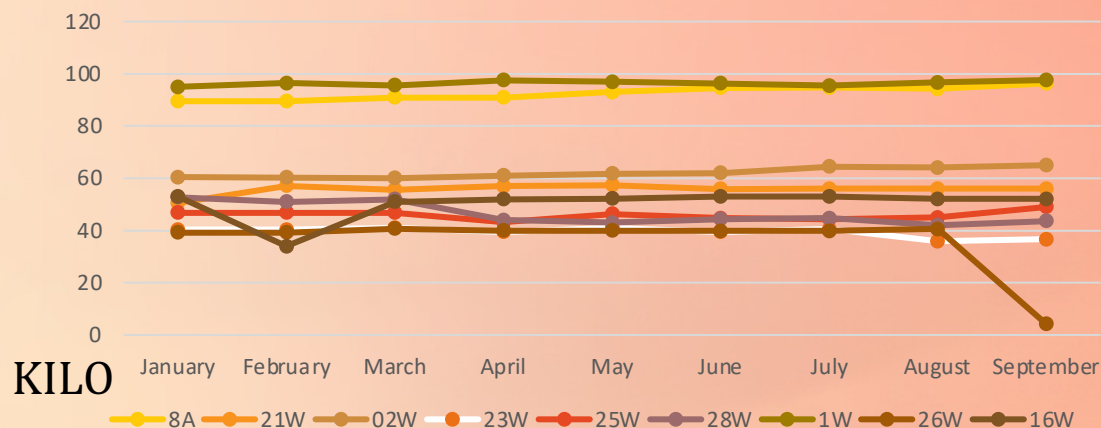
Legend: EXPOSURE TIME WITH ALM-RITA: January- September 2022			
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Nutritional Audit of residents at Princes Court from January-September 2022
(RITA experience between 1-6 hours)

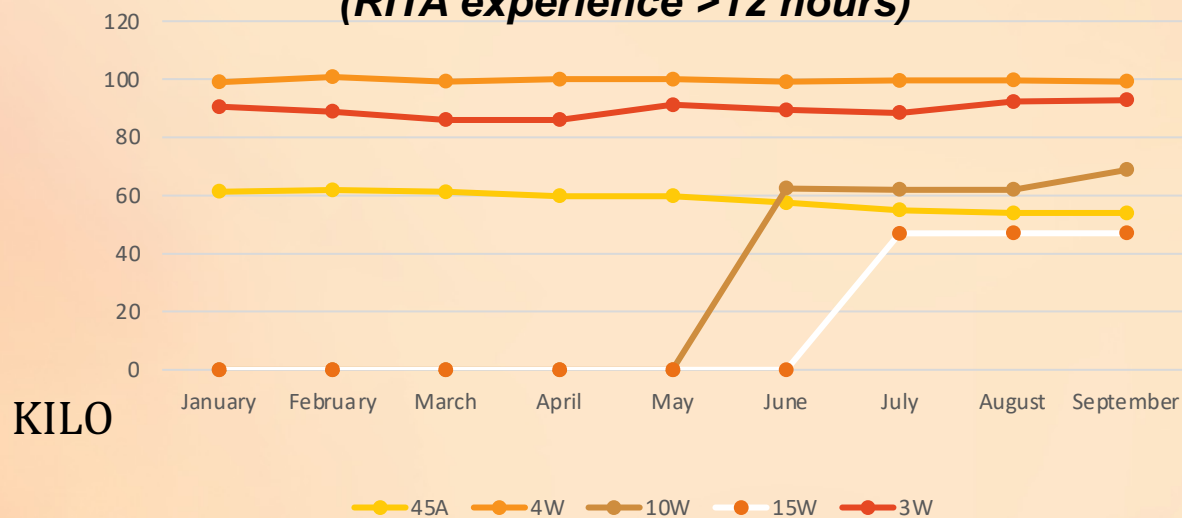


Nutritional Audit of residents at Princes Court from January-September 2022
(RITA experience between 6-12 hours)



In summary: As illustrated from the line graph.

Nutritional Audit of residents at Princes Court from January-September 2022
(RITA experience >12 hours)



A Weight Audit has shown that 27 residents using the ALM-RITA showed increasing weight during the ALM-RITA experience.

However, despite the ALM-RITA experience, the resident's weight is affected when they become *acutely unwell* and start to *deteriorate*



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ALM's Preventative: *proactive well-being support: January to Sept 2022*

ALM's Versatility

ALM-SENSORY/RITA
were placed around the
nursing home.

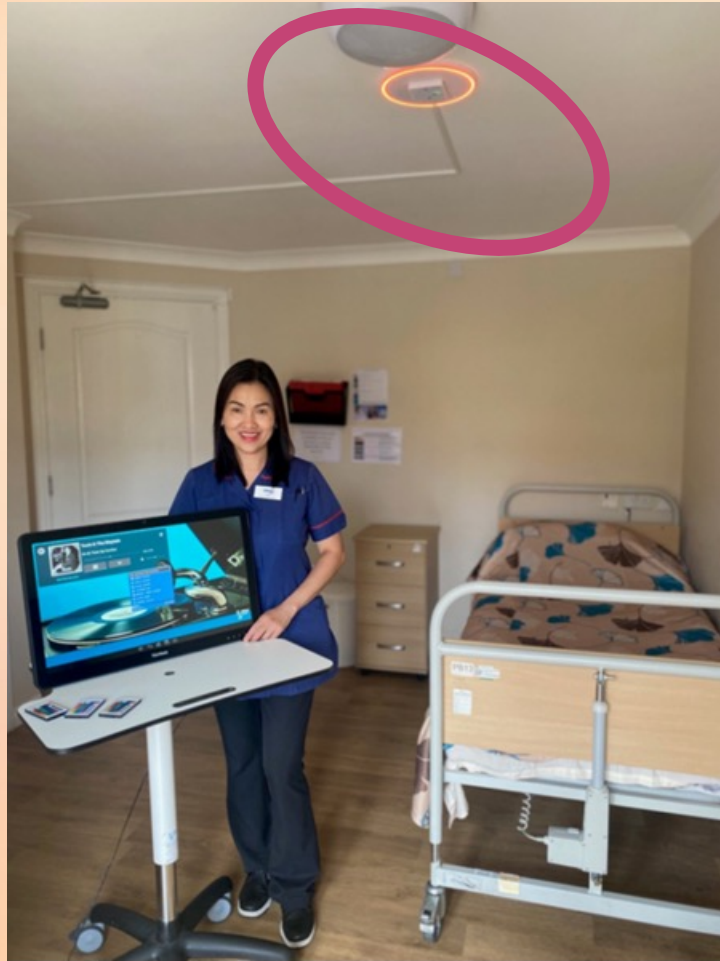
- Hot spots
- During EOL



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Show and Tell: ALM and RITA research update.

ALM's Preventative: *proactive well-being support: January to Sept 2022*

SENSORY-ALM



"The sensory lighting and choice of colours at night-time helps them sleep."



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ALM (Assistive Living Monitoring): 1st Quarter of 2022

ALM is a non-invasive monitoring system promoting quality and safety whilst supporting independence

Preventative = proactive well-being support

Reactive = Non-invasive monitoring and alerting support



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ALM's Reactive: Non-invasive monitoring and alerting support



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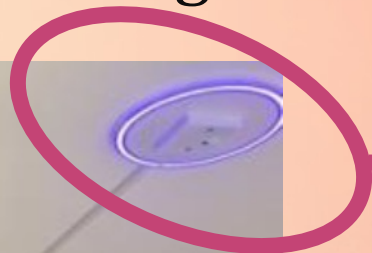
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ALM's Reactive: Non-invasive monitoring and alerting support:



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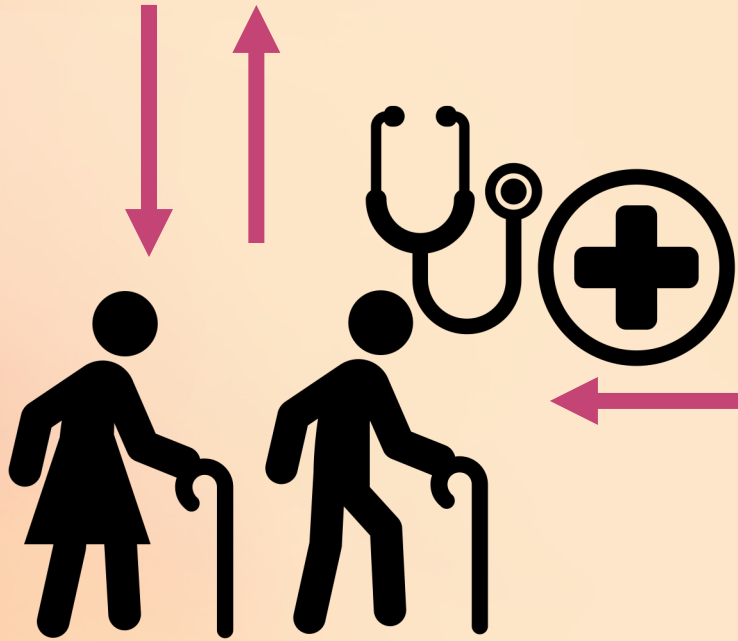
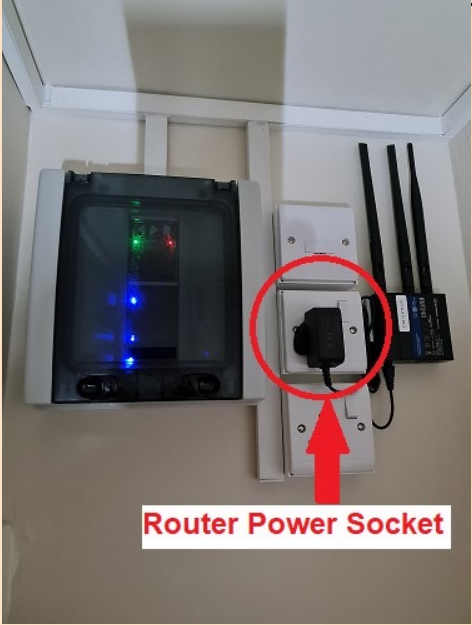
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ALM's Reactive: Non-invasive monitoring and alerting support



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ALM's Reactive: Non-invasive monitoring and alerting support

6 Rooms have an ALM-MONITORING/ALERTING SUPPORT



	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUG	SEPT
30-RQ			25/03/2022 14:30						
26-RQ						12/06/2022 03:00			
32-RQ1				24/04/2022 12:40					
40-RQ1							06/07/2022 17:15		
40-RQ2								22/08/2022 06:20	
32-RQ2									13/09/2022 03:45
40-RQ3									22/09/2022 17:00
Legend:	ALM- not alarmed	NO documentatio n from staff	Detected by ALM	SIX rooms that have ALM at RQ 22, 26, 30, 32, 39, 40					

In summary:
The system has detected **five** falls. Two of these were in the *middle of the night*. Staff immediately attended to the patients and rapid responses were addressed.

ALM's Reactive: Non-invasive monitoring and alerting support



6 Rooms have an ALM-MONITORING/ALERTING SUPPORT

- Response time increases: *below 1 minute*
- Added reassurance, especially during the evening and if the patient is isolated (door closed).
- An “*extra layer*” of care for the patient
- Not intrusive, ensure privacy and dignity with its patients and does not record conversations or film patients.
- Staff can immediately act on an incident, especially during the evenings wherein patients are at higher risk of falls.

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Service & Practice Development Plan: *Princes Court Year 2023*

RITA Award: 'Gold' in reducing challenging behaviours

Best use of RITA for reducing challenging behaviours

Bronze award goes to:
Isle of Wight NHS Trust

Silver award goes to:
New Tyne Care Home - West Sussex

Gold award goes to:
Princes Court Care Home - North Tyneside



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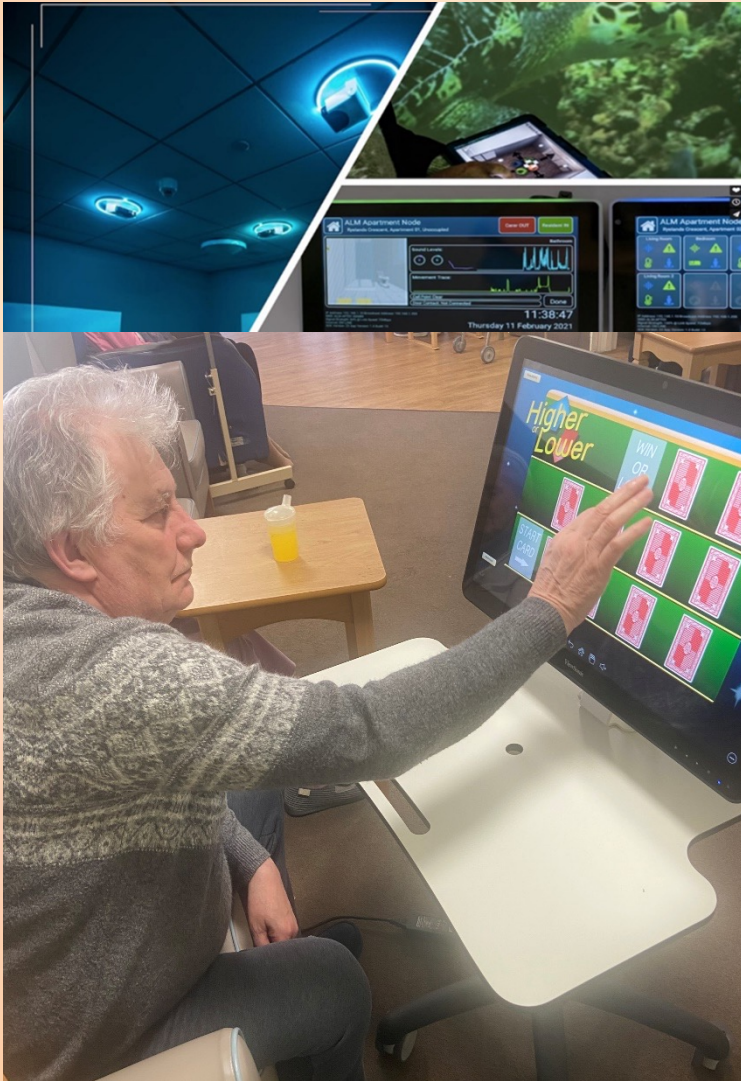
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Service & Practice Development Plan: *Princes Court Year 2023*

Introduction of a 'new' ALM Version 2

- Intricate data collections tools will be used
- Staff, champions, and stakeholders (i.e. ICB, GP) involvement
- Continuous support and guidance from Northumbria University, EnCOP, Practise supervisor, and assessor during the MSc: Year 2



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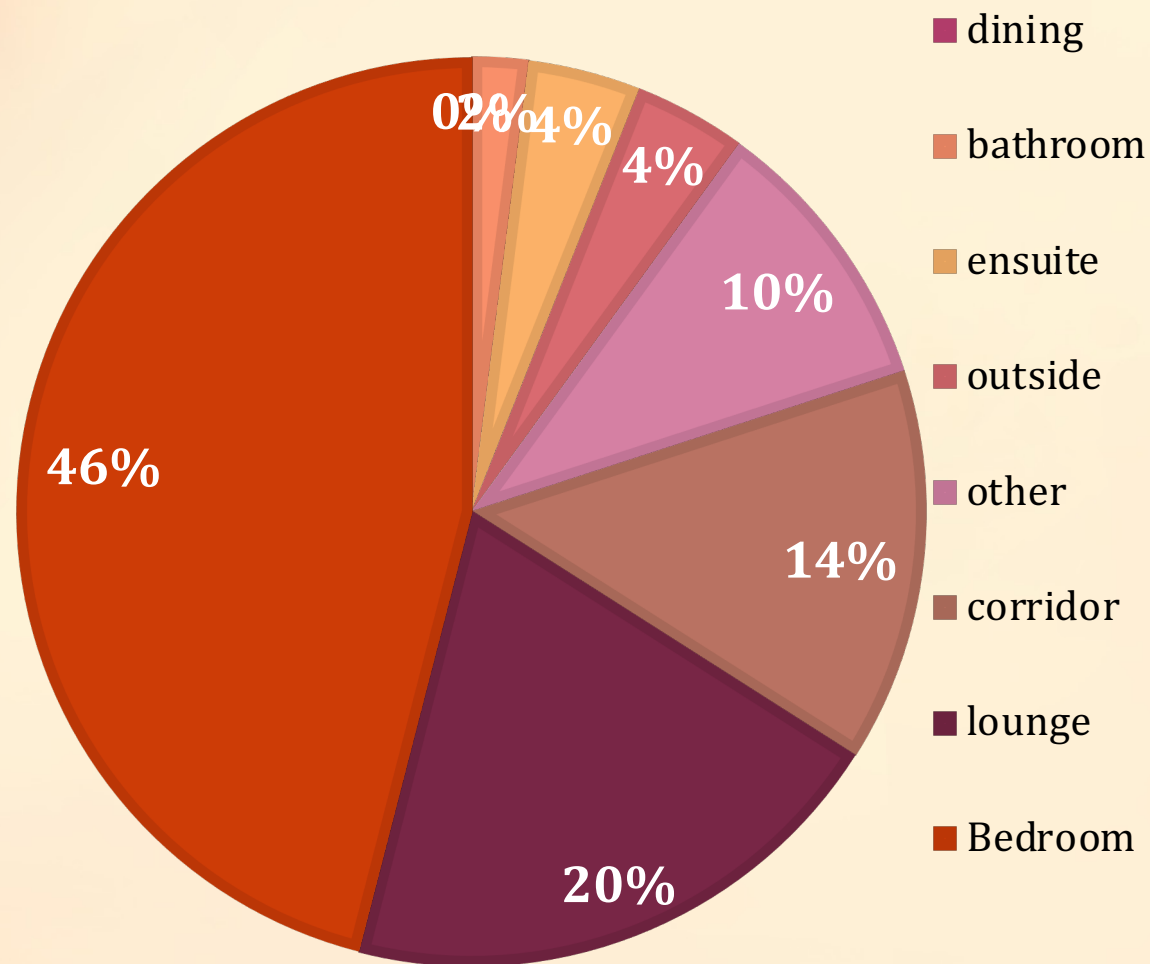
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Akari Care, 4th Floor 84 Albion Street, Leeds, LS1 6AG

Service & Practice Development Plan: *Princes Court Year 2023*

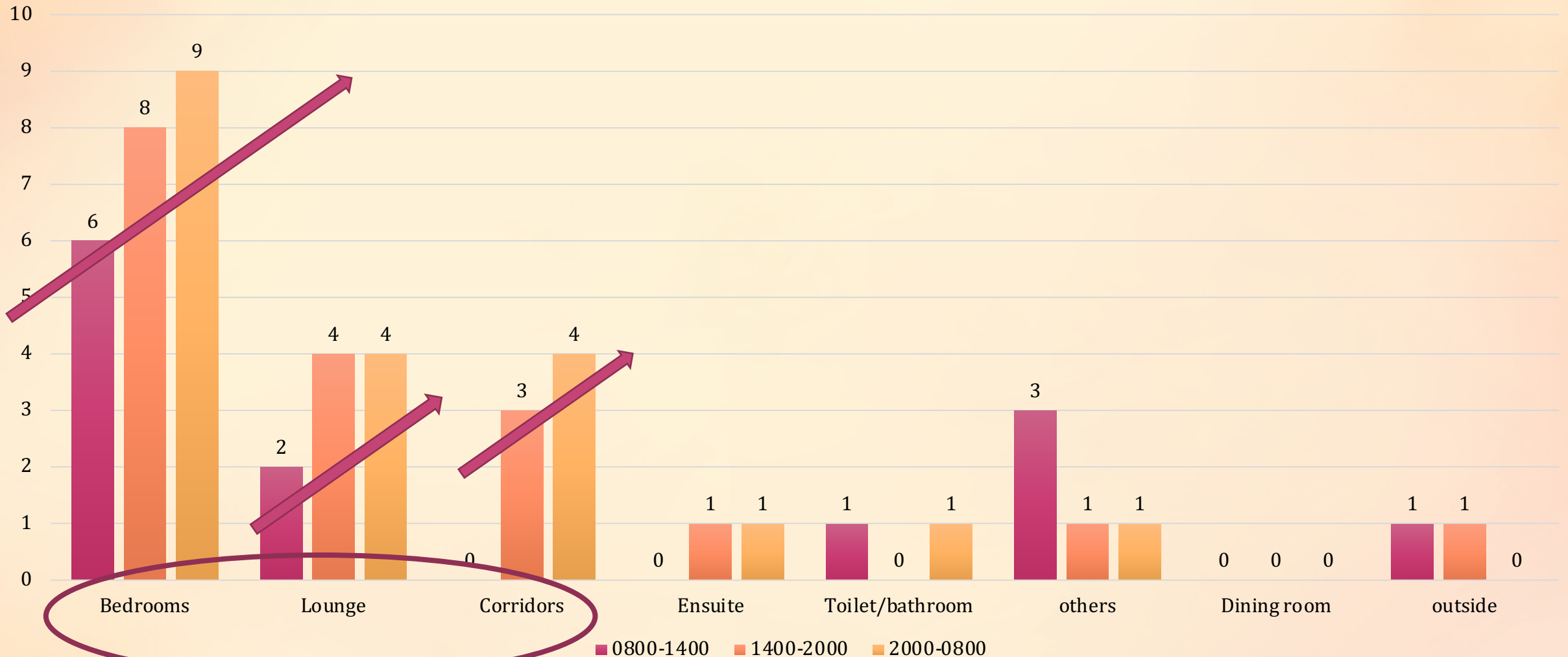


Princes Court: Falls:
Sept-Nov 2022:
“WHERE”

Bedrooms	46%
Lounge areas	20%
Corridors	14%

Data collection to see the effectiveness: “*WHERE and WHEN*”

3 MONTHS FALL ANALYSIS (SEPT-NOV '22): PLACE & TIME



Service & Practice Development Plan: *Princes Court Year 2023*

Introduction of a 'new' ALM Version 2

- Intricate data collections tools will be used
- Staff, champions, and stakeholders (i.e. ICB, GP) involvement
- Continuous support and guidance from Northumbria University, EnCOP, Practise supervisor, and assessor during the MSc: Year 2



Patented Sensor - Five Types of Monitoring

- Plug in, mobile, flexible
- No wiring or installation required
- No skin contact required



Thermographic

Non-invasive way of seeing inside a room through thermal heat. Reports movement and falls immediately



Heart Rate

Provides constant heart rate for an individual and triggers alarm system if HR goes outside chosen parameter



Respiratory Rate

Provides constant respiratory rate for an individual and triggers alarm system is breathing rate goes outside of chosen parameter



Acoustic



Proprietary audio analysis algorithm measures sound levels every 20 milliseconds. Any shouting or screaming notifies staff immediately



Microwave & LiDAR

A Doppler radar sensor produces velocity data to alert if a service user moves, climbs the frame, leaves the bed or falls onto the floor

ALM-V2

Monitoring/Alerting
RITA
Sensory

The ***plug-in*** sensor is mobile and only requires main power and reports ***wirelessly***.

The reporting portal is ***flexible***; Staff carries around a ***small PDA***, which triggers ***an alarm*** if any of the monitoring events occur.

Alternatively, they can download a ***reporting app*** onto their phones.



ALM-2

REFERENCES:

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(4) [NHSNorthCumbria](#) (@NHSNorthCumbria) / Twitter

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Advanced Clinical Practice Nurses Primary Care England | Skills for Health

Advanced Clinical Practitioner MSc (northumbria.ac.uk)

[Care Home in North Shields, Tyne and Wear | Prince's Court | Akari](#) Care - High-quality Care Homes

[Enhanced Care of Older People \(EnCOP\)](#) Competency Framework « I-Care (frailtyicare.org.uk)

Home :: North Cumbria CCG (icb.nhs.uk)

<https://www.advancedpractice.scot.nhs.uk/education/pillars-of-practice.aspx>

Launch of the North East and North Cumbria Integrated Care Board (ICB) :: North Cumbria CCG

[multi-professionalframeworkforadvancedclinicalpracticeinengland](#) (1).pdf (sharepoint.com)

My QoL | Innovative interventions for people with complex needs

Prince's Court care home, Hedley Road, Royal Quays, North Shields, Tyne & Wear NE29 6XP | 45 Reviews

RITA Awards Ceremony.mp4 (sharepoint.com)

Questions?



My Quality of Life



North East and
North Cumbria



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