

Improving Mobility for Older People Living with Frailty

A quality improvement and implementation programme embedding objective activity monitoring into routine frailty care to understand inpatient mobility and support sustainable change.

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The Clinical Problem

Older people living with frailty are particularly vulnerable to functional decline during hospitalisation. A local mobility audit found that around one in five patients were not mobilised within 48 hours of admission and around one in four experienced a decline in mobility between admission and discharge.

This was recognised clinically, but not objectively measured. Published evidence supports this concern: hospitalised patients spend very little of the day standing or walking and around one in three older inpatients experience hospital-associated functional decline.¹³⁴

Aim

To use objective wearable activity monitor to understand inpatient mobility on a frailty ward and to inform development of an embedded, multidisciplinary approach to reducing sedentary behaviour and supporting mobility.

Why Objective Monitoring?

Routine assessments such as the Barthel Index or Timed Up and Go capture capability at a single time point. A wearable activity monitor estimates what actually happens across the wider day, over multiple days of admission.

- Objective, continuous measurement of movement across a hospital stay
- Complements - rather than replaces - routine functional assessment
- Makes an often invisible problem visible to the whole ward team
- Supports locally adapted quality improvement, not a one-off audit

Patients value mobility but face physical, organisational and environmental barriers

Our Approach: A QI & Implementation Journey

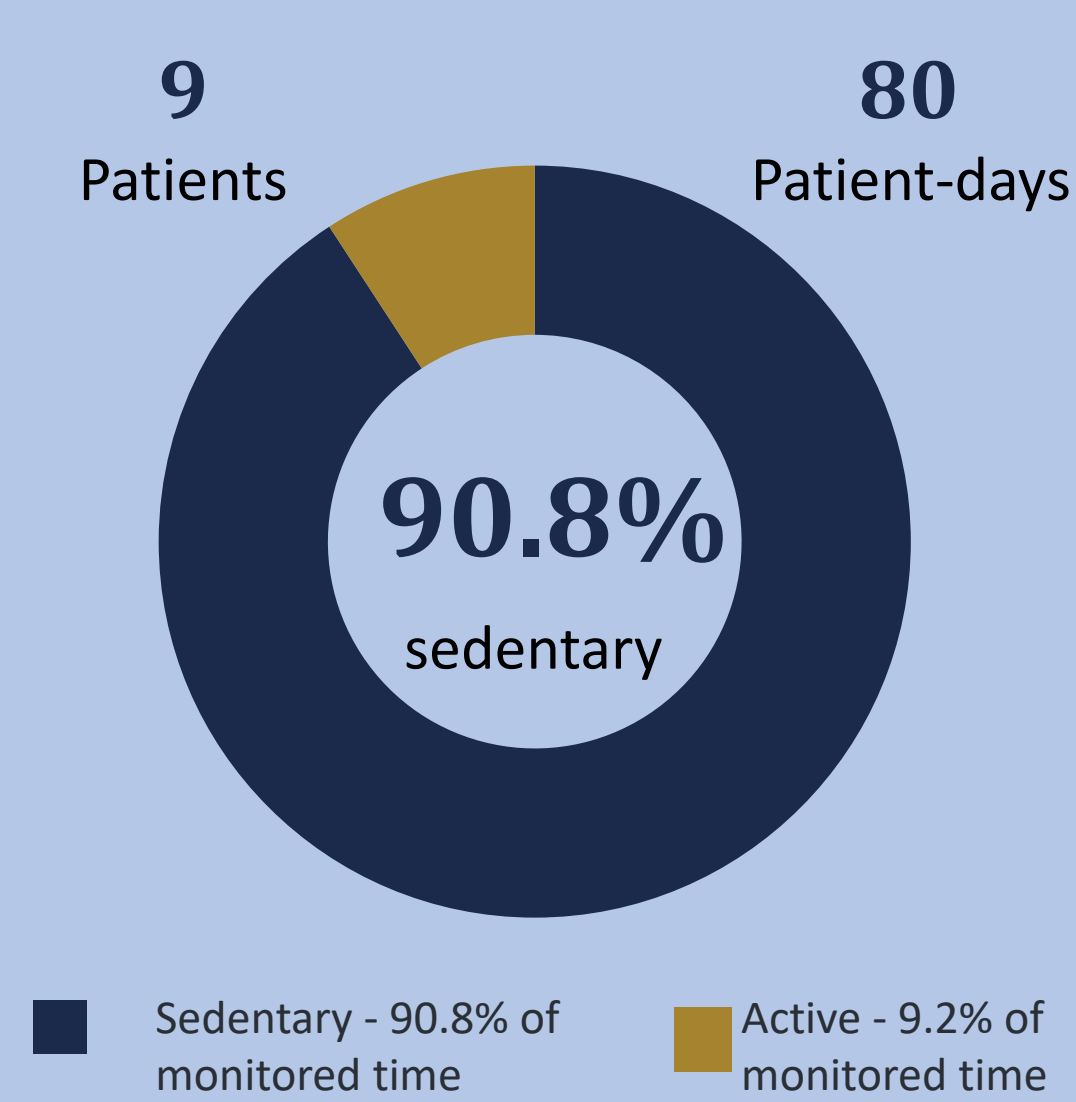
- Clinical mobility audit identified inactivity as a significant local problem on the frailty ward.
- Charitable funding secured; collaboration established with the University of Surrey. PDSA approach using ActiGraph data, staff feedback and learning from practice
- Phase 1 - Hindhead Ward: continuous ActiGraph baseline monitoring in 9 patients.
- Study & adapt: data collection was feasible, but delivering the mobility intervention consistently was difficult while the project lead was not embedded within the ward.
- Phase 2 - Milford Ward: partnership with an established ward deconditioning programme; monitoring is now embedded within routine care (ongoing).

Multidisciplinary Partnership

Sustainable change required ownership beyond a single project lead. The programme brings together:

- | | |
|---------------------------------|--------------------------------------|
| Nursing & Healthcare Assistants | Occupational Therapy & Physiotherapy |
| Frailty Academy | Trust Quality Improvement Team |
| University of Surrey | Trust Research & Development |
| Ward Leadership | Patients & Families (future PPI) |

Baseline Findings - Hindhead Ward



- Key findings**
- Patients spent 90.8% of monitored time sedentary
 - Activity declined every day patients stayed in hospital

Exploratory local baseline from a small sample. Findings are consistent with published reports of approx. 83–95% sedentary time among older hospital inpatients.

Milford Phase - Embedding Mobility

Activity monitoring is now embedded alongside an established ward deconditioning programme. The developing routine includes:

- Washed and dressed prior to breakfast
- Sitting out by breakfast
- Encouragement to mobilise through the day
- Seated exercise
- Continued objective ActiGraph monitoring

Evaluation is ongoing. This intervention is not yet described as “effective” - outcome data from Milford are still being collected.

What We Learned

Objective monitoring successfully quantified inactivity - but the greatest challenge is embedding mobility into everyday ward practice, not measuring it.

- Good evidence alone is rarely enough to change practice
- Staff engagement took time: listening, relationship-building and adapting to existing ward routines
- Clinical champions made a real difference to momentum
- Protected project time is essential - the project required substantial work alongside routine clinical responsibilities
- Implementation required adaptation. Moving from Hindhead to Milford enabled the project to become embedded in routine care.

Why This Approach Matters

Improvement is most likely to be sustained when it is developed alongside everyday clinical practice rather than introduced separately.

- Focuses on at highest risk of deconditioning
- Develops improvement through multidisciplinary partnership
- Adapts through learning from routine clinical practice
- Future Patient and Public Involvement will help shape the next stage of the programme

Patient and Public Involvement will explore acceptability, priorities and meaningful outcomes with people living with frailty and their families.

Conclusion

Objective monitoring confirmed that sedentary behaviour was a significant local issue. Measuring the problem was only the first step; improving practice required multidisciplinary partnership, adaptation and ward ownership.

Future Work

- Continue recruitment and activity monitoring at Milford Ward
- Compare activity patterns before and after implementation
- Explore relationships between activity and clinical outcomes
- Patient and Public Involvement to explore acceptability and priorities
- Develop a sustainable ward-led approach, supported by clinical champions and existing deconditioning work, before wider spread across frailty services

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