

REDUCING PRESSURE ULCERS AND REDUCING COSTS – A STEP CHANGE IN CARE DELIVERY, IMPLEMENTING HYBRID TECHNOLOGY AN EARLY IMPLEMENTER VIEW

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Introduction

The Royal Stoke Hospital was an early implementer of hybrid technology, replacing their foam mattresses across the hospital with hybrids (Dyna-Form® Mercury Advance – Direct Healthcare Service – see Figure 1) in September 2012.

Unlike many other organisations we also implemented hybrids in critical care, firstly in cardiac critical care (12 beds). When cardiac patients return from theatre they often need to be static for 12 hours or more. We found that often they are still too unstable to be physically moved onto an AP mattress and we experienced some severe pressure injuries as a result. We were able to eliminate pressure ulcers for this group of patients by providing hybrid mattresses for all beds in the 2 'pods'.

From this we realised that similar circumstances applied to trauma patients in critical care. 80% of the bed base in critical care is now covered by hybrid mattresses.

The number and incidence rate of pressure ulcers fell dramatically following this mirroring the trend across the organisation (see Figures 2 and 3) despite a merger with a neighbouring organisation dramatically increasing admission numbers (See Figure 4.)



Figure 1. The Dyna-Form® Mercury Advance.

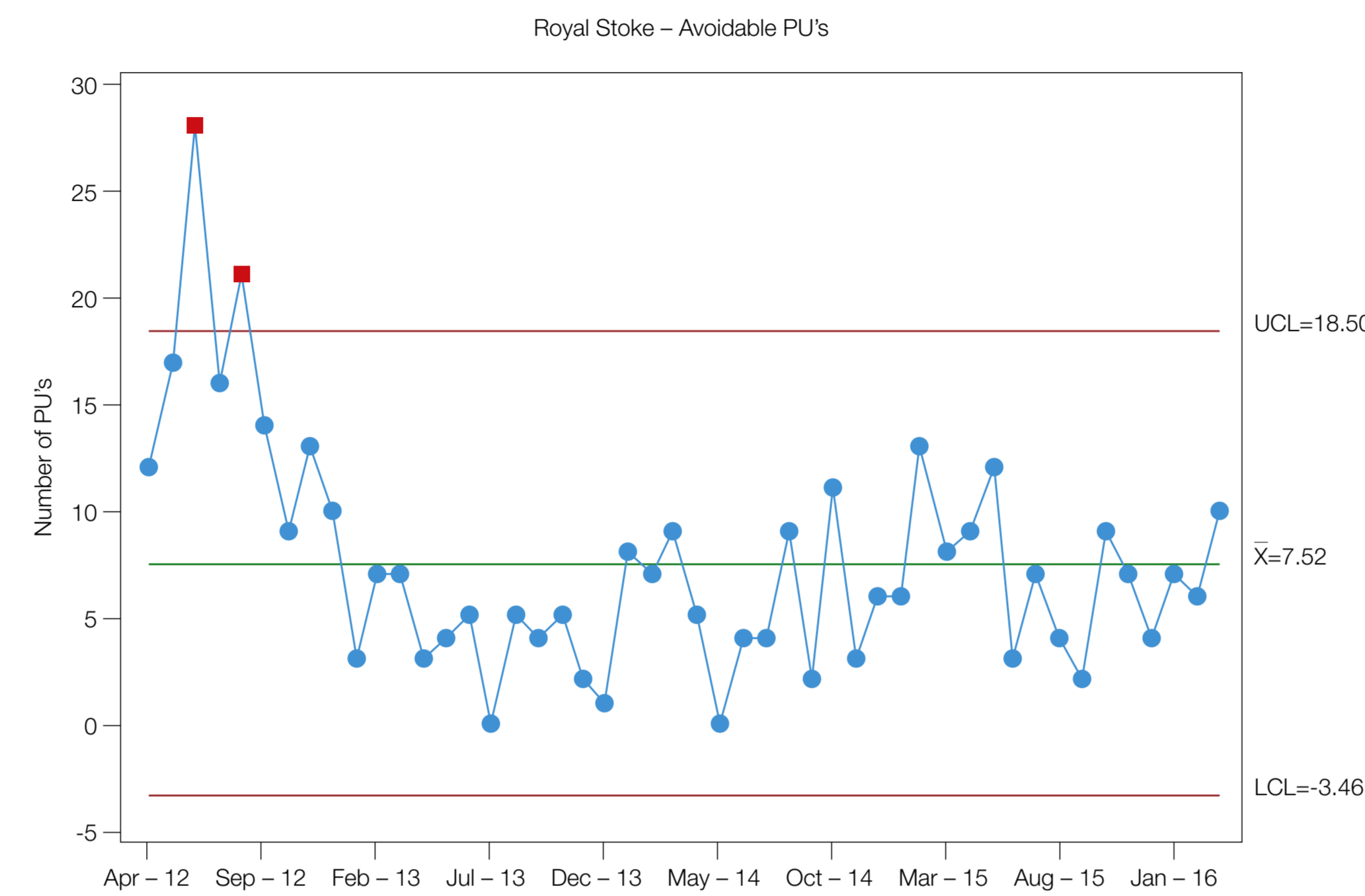


Figure 2. Number of avoidable Pressure ulcers prior to and post implementation of hybrid mattresses in September 2012.

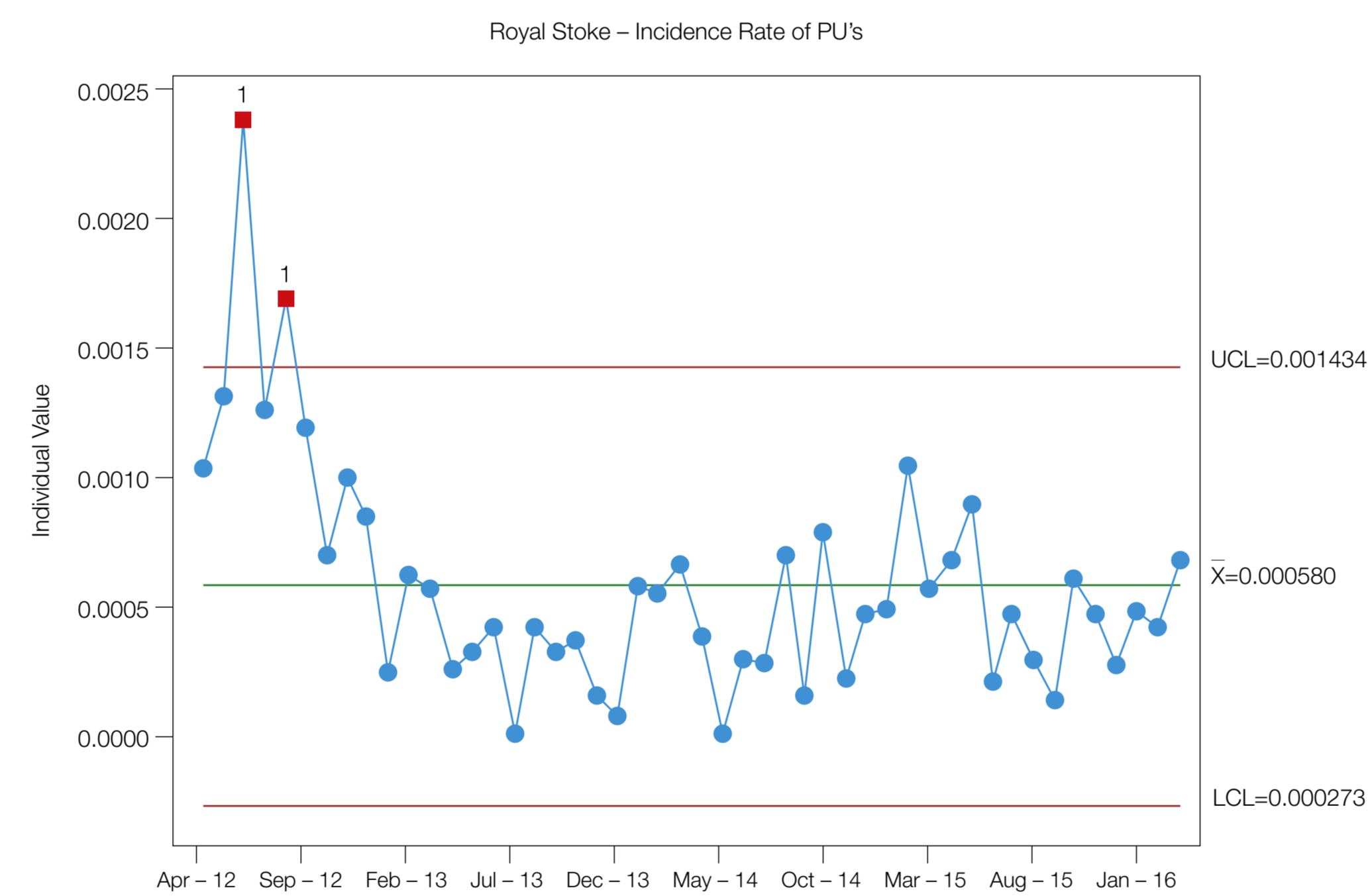


Figure 3. Showing the incidence of avoidable PU rate prior to and post implementation of hybrid mattresses in September 2012, there was a small but neither significant nor sustained increase as the 2 organisations merged.

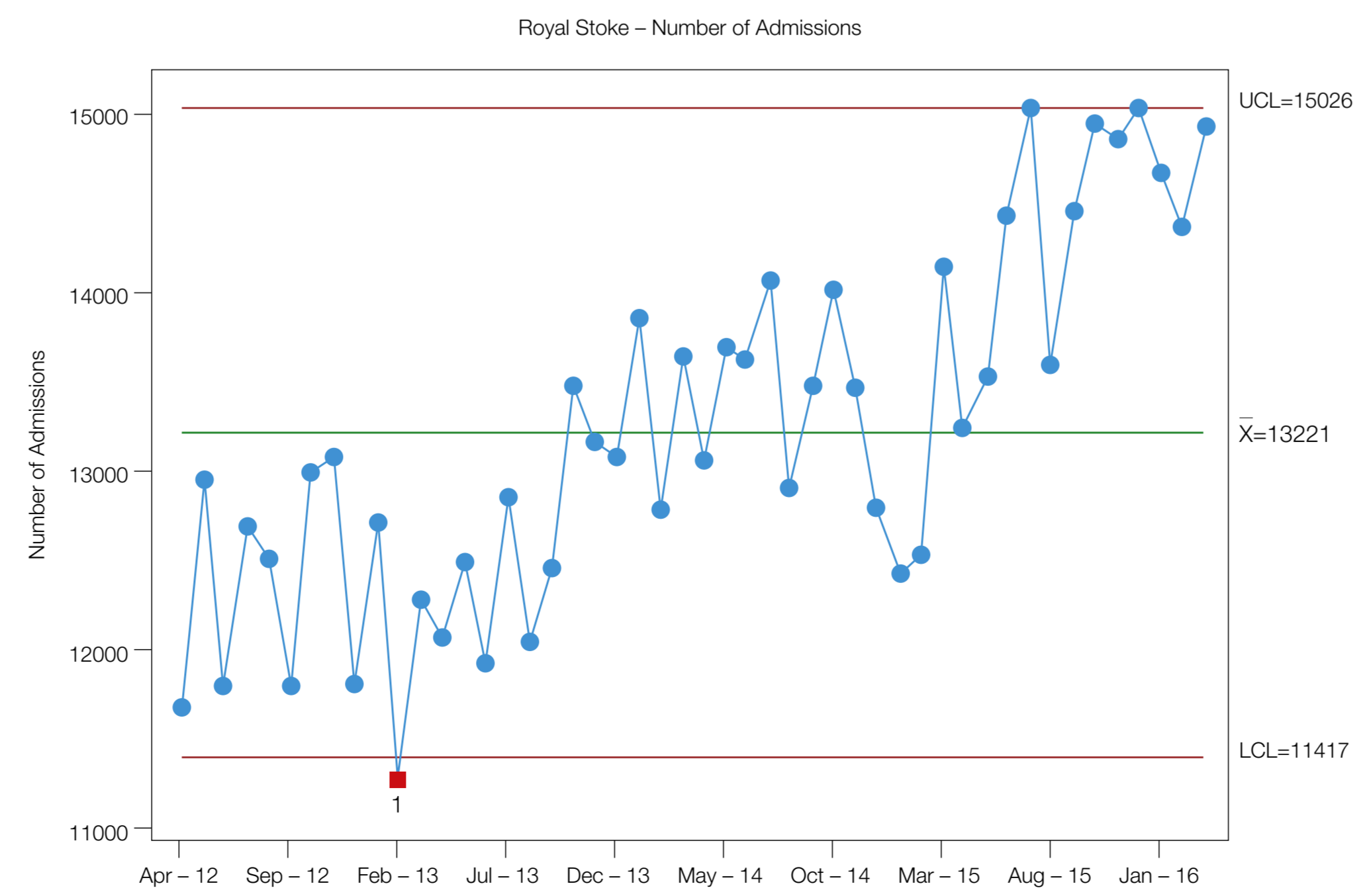


Figure 4. Showing the significant increase in admissions as the organisations merged.

Staff and patient feedback

Improving Care

The physiotherapists also love the hybrids as they provide greater stability for patients transferring into and out of bed (see figure 1 showing the stable edge), unlike the alternating pressure systems which have an unstable edge which can result in reduced independence for patients as they do not feel as safe when transferring off and back onto the mattress.

Patient Benefits

Patients report greater comfort and a better nights sleep on the hybrid compared to standard alternating pressure mattresses. We are able to minimise delays in patient discharge home where they need an alternating pressure mattress; it is cost beneficial for the Trust to purchase a mattress to enable discharge rather than wait for funding. We run at 96% capacity and so bed days are really important.

Releasing Time to Care

The introduction of the hybrids as well as reducing the incidence of avoidable pressure ulcers (and sustaining the reduction over a 4 year period) has resulted in many process changes. Stepping up the mattress as the patients' risk increases is much simpler, the administrative burden associated with ordering and the clinical time for putting the equipment in place is non existent, rehabilitation of patients is easier and safer. This step change in care delivery has therefore impacted positively on patients, nursing and therapy staff, administrative and portering staff.

Cost Savings

The Trust has realised significant cost savings and most importantly patient harms have been significantly reduced.

A STEP CHANGE IN CARE DELIVERY

