463 **CAN ORGANISATIONAL RESTRUCTURING OF HOSPITALS IMPROVE QUALITY AND SAFETY? THE EXPERIENCE AT SYDNEY CHILDREN'S HOSPITALS NETWORK**

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10.1136/bmjqs-2015-IHIabstracts.3

Background In New South Wales serious publicised adverse events in 2006 brought quality and safety to community attention. The Garling external review of 2008 made 139 recommendations, including the creation a single children's hospital. This was addressed by the creation of the Sydney Children's Hospitals Network (SCHN) in June 2010. SCHN brought together the boards and management structures of Sydney Children's Hospital Randwick and the Children's Hospital at Westmead.

Objectives In business, restructures are often implemented to improve performance, safety and customer satisfaction, but improvement has been difficult to demonstrate in healthcare. This study asks whether quality and safety have been improved by the formation of SCHN in June 2010.

Methods Quality data within IHI domains of quality (safe, effective, patient-centred, timely, efficient) has been compared

Years	SCH	CHW	Total
2005	13868	26,702	40570
2006	14182	26775	40957
2007	14556	27625	42181
2008	15025	25732	40757
2009	14987	27347	42334
2010	15617	28880	44497
2011	17994	28987	46981
2012	18284	29415	47699
2013	18862	29985	48847
2014	18878	31800	50678

Figure 1 SCHN inpatient activity including day cases 2005–2014.

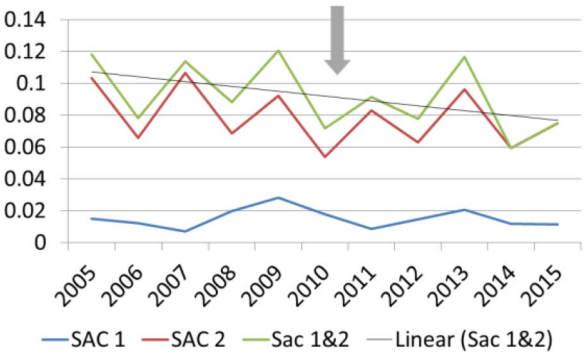

Figure 2 SCHN SAC 1 and 2 incidents as a % of separation.

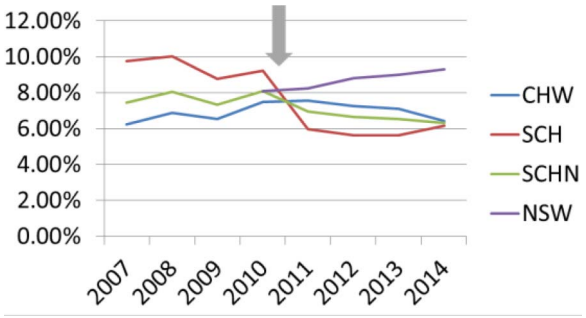

Figure 3 Total incidents reported SCHN as a percentage of separations.

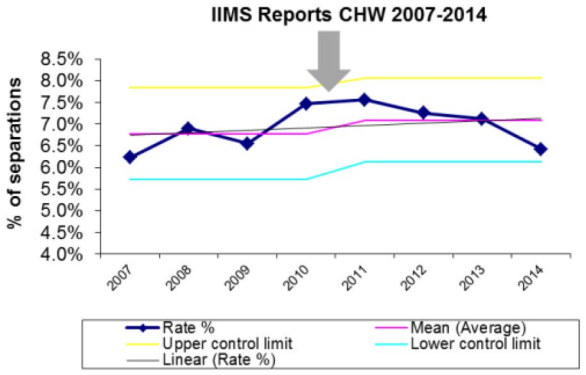

Figure 4 Total incidents reported at CHW increased p<0.05.

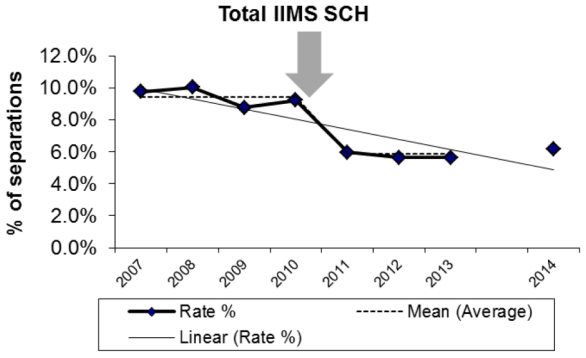

Figure 5 Total incidents reported at SCH decreased p<0.05.

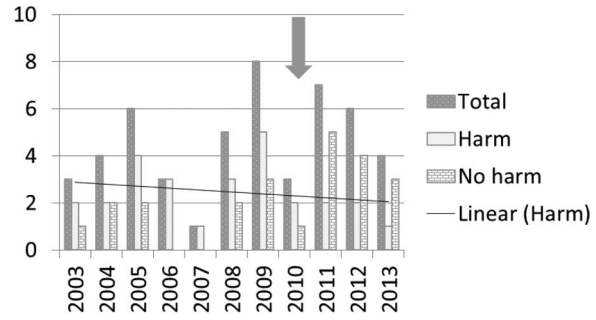

Figure 6 SAC 1s at CHW: harm is reduced.

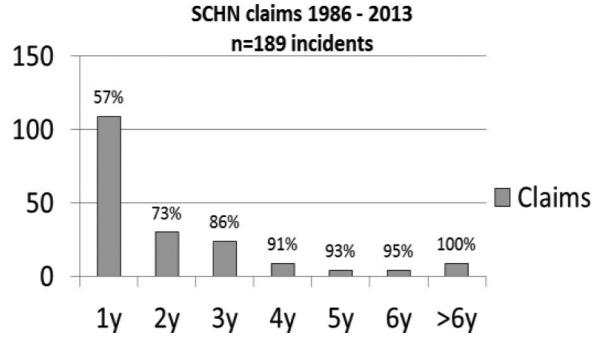

Figure 7 Time delay in medicolegal notifications.

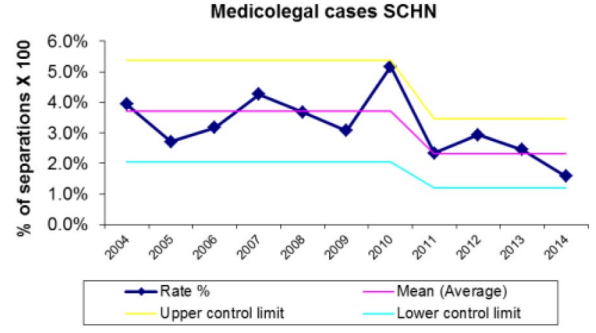

Figure 8 SCHN Medicolegal cases reduced ($p<0.05$).

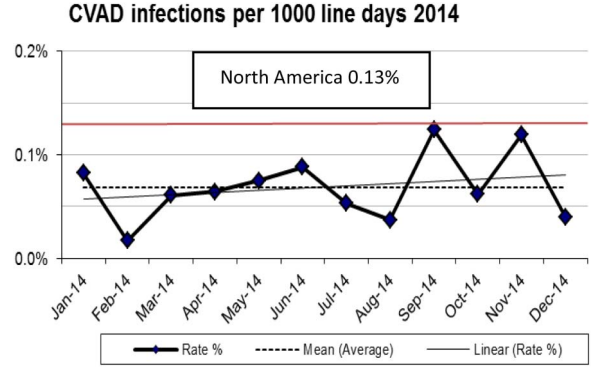

Figure 9 SCHN CVAD infections: benchmarking with North America.

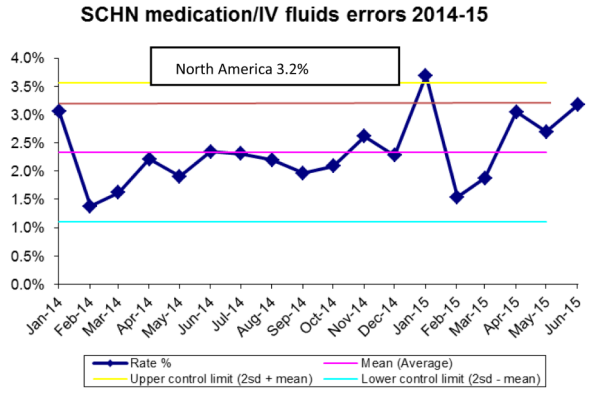

Figure 10 SCHN medication errors: benchmarking with North America.

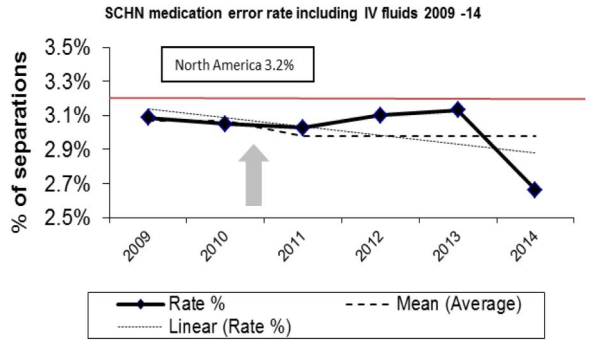

Figure 11 SCHN medication errors 2009–2014.

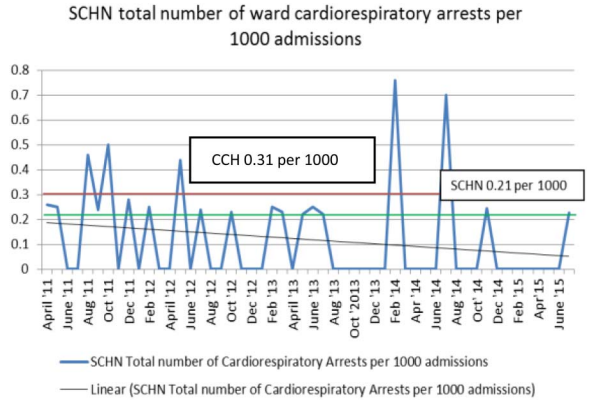

Figure 12 Total number of ward arrests: benchmarking with Cincinnati Children's Medical Centre.

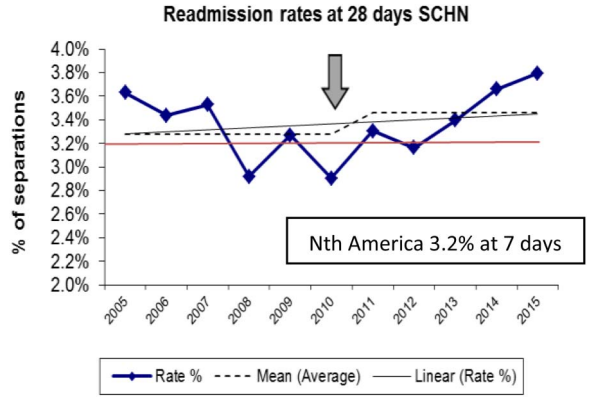

Figure 13 SCHN readmission rates increased at 28 days.

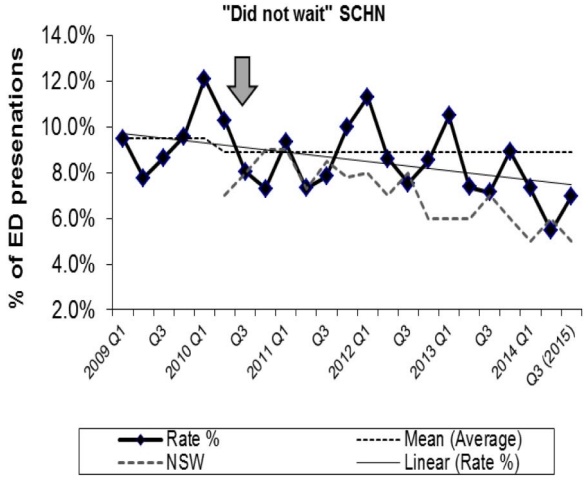

Figure 14 SCHN "Did not wait" significantly reduced (p<0.01).

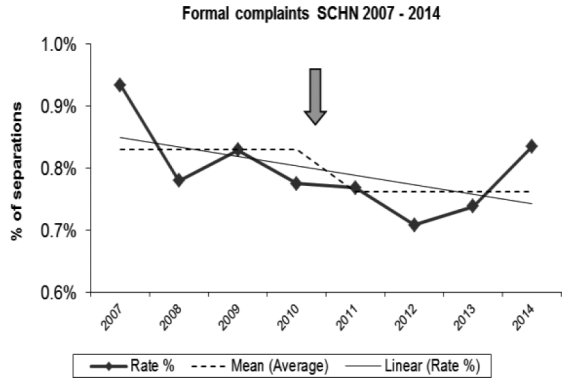

Figure 15 SCHN formal complaints reduced (p<0.1).

pre and post SCHN. Results are analysed in split control charts, with Chi squared analysis, P scores and benchmarking with data from the Clinical Excellence Commission NSW, and "Solutions For Patient Safety" a North American collaboration of 80 children's hospitals. Restructuring of clinical governance was based on the principals of alignment, networks and improving situational awareness.

Results Significant improvement was seen in several parameters of quality and safety including fewer serious incidents, fewer medico legal cases, fewer medication errors, better access to emergency departments, fewer complaints and maintaining readmission rates despite a 20% increase in activity.

Conclusions At SCHN organisational restructuring has improved quality and safety performance. Structural alignment within agreed quality standards, network roles that share learnings between facilities and better situational awareness are thought to be responsible.