



Improving the communication, teamwork and work processes during delivery

Background

The improvement work was performed from January 2013 to March 2014 at the maternity ward at the University Hospital in Hvidovre in the Capital Region of Denmark as part of a national perinatal safety program.

Aim

The aim was to prevent birth-related harm and reduce the number of liveborns with asphyxian with 50%.

The measures:

- The number of deliveries between liveborns with Apgar score < 7 after five minutes and/or with arterial cord pH < 7
- 95% or more of the mothers are receiving all elements of the Check In and Time-out in the delivery checklist at the end of September 2013

Change concept

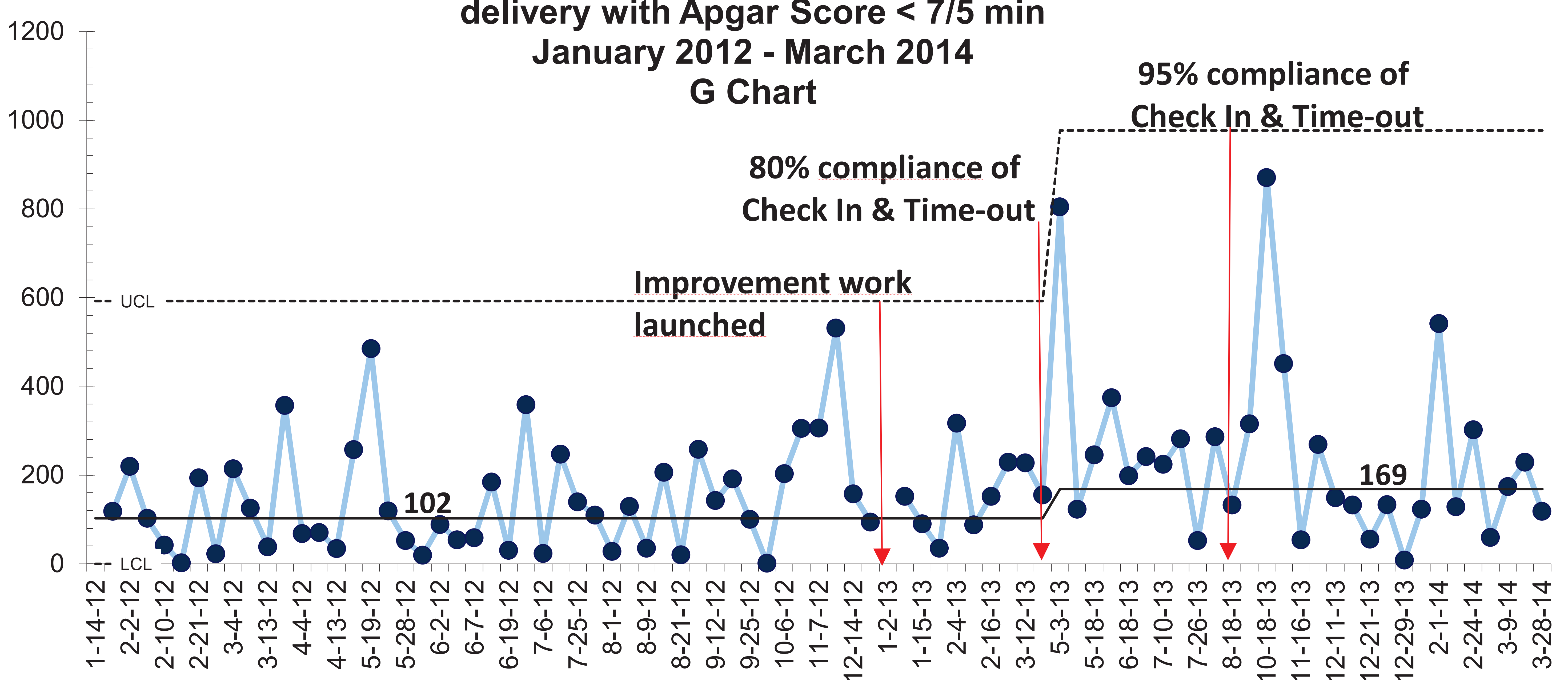
One of the changes we made was standardization of the communication, teamwork and work processes by use of the delivery checklist:

1. Check In at admission for intended vaginal delivery
2. Time-out at transfer of care, new risk factors, and at least every four hours.

Rapid PDSA test of:

- Whiteboard with Check In information at the bedside and visible to the family
- New workflow process for handovers (Time-out) at bedside with the family
- The delivery checklist integrated in the medical record as a standard text
- Daily data samples to assess the use of the delivery checklist

Deliveries between Apgar < 7



Delivery with Apgar Score > 7/5 min.

Effect of changes:

Compared to baseline, the median number of deliveries between liveborns with Apgar score < 7/5 increased from 102 to 169 during the improvement work.

Message for others?

1. The multiprofessional leadership and improvement team have been very strongly committed to the improvement work and met weekly
2. The Model for Improvement with rapid PDSA cycles involved the staff and the families in the improvement work
3. Coaching from an improvement advisor was helpful

