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# KEEP CALM AND INTUBATE

## Neonatal intubation safety checklists reduce anxiety and increase safety

## Introduction

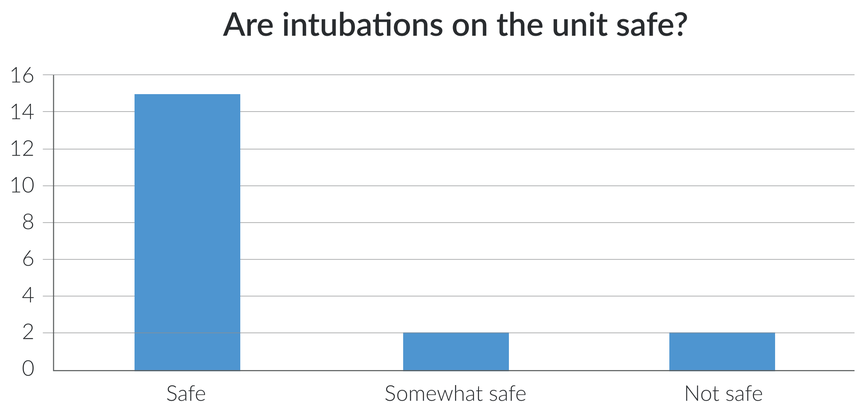
Intubation on a Level 2 Neonatal Unit at a District General Hospital can be risky and stressful for a new registrar. We know that intubations in non-specialist centres have greater risk of adverse events[1], and evidence for the use of safety checklists is well established[2]. We aimed to improve safety and staff confidence in delivery of care on our neonatal unit by launching a safety checklist for invasive procedures such as this. They would function as an aide memoire for the performing clinician, support good team-working, empower assistants to help and to raise concerns when appropriate, whilst also supporting good documentation.


## Method

Taking a quality improvement approach, we set up a team of doctor and nurse champions to develop, pilot and embed our safety checklist. We started with a preliminary staff survey of doctors and nurses via survey monkey and paper questionnaires. We developed a checklist for elective intubation using NHS England's template. These were made widely available and launched via staff seminars, handover, bulletins, and posters. At 3 months post-launch we carried out a Quality Peer Review to assess staff awareness and response to the checklists. Audit data for intubation was collected at 12 months to review quantitative take up of the intubation checklists.

## Results

**RESULTS 1:** Preliminary survey responses: 19 respondents, doctors and nurses working on the unit.




| Will they make intubations | YES | NO |
|---|---|---|
| Safer | 19 | 0 |
| Better documented | 18 | 1 |

**RESULTS 2:** 24 hour Peer Quality review data: themes below which reflected staff perception that checklists were useful, improved patient safety and team working.



**RESULTS 3:** 12 month audit data-Apr 2019-Apr 2020

| Elective intubations | Checklist used | Not used |
|---|---|---|
| 17 | 12 | 5 |

## Conclusion + Learning

Safety checklists were a popular intervention, and had good uptake when launched on our unit. They have improved staff confidence during elective intubations, supporting safer care, good documentation, teamwork, education and training. With their benefits established future work will include piloting their use for emergency intubation also.

**Messages for others:**

Once a need is identified, follow best practice from other units, listen carefully to stakeholders and ensure champions exist at all staff levels to promote and embed behaviour change, and continue to promote through induction and seminars.

**References:**

1 Matettore et al, Pediatric Critical Care Medicine, 2019, vol 20(6) p518-526

2 Dupree Hatch et al, Pediatrics, 2016, 138(4)