NHS England & NHS Improvement
Skipton House
80 London Road
London
SE1 6LH

21st April 2017

Dear Chief Executive, Medical and Nursing Directors,

Prevention of future deaths: Nasogastric Tubes Patient Safety Alert

A recent Coroner's report on the death of two patients has highlighted the dangers of nasogastric (feeding) tubes. In both cases the tubes were inserted into the lung - not the stomach as intended - and safety checks to confirm tube placement were misread. Approximately 800,000 nasogastric tubes are used in the NHS each year. Fatalities are rare, but there have been 100 incidents and 32 deaths in England over the last 5 years.

A national NHS Improvement Patient Safety Alert (NHS/PSA/RE/2016/006) [1] is due for completion 21st April 2017. It asks senior members of Trust Boards, typically the medical and nurse directors or CEO, to take a personal interest in nasogastric tube safety. Key to this is ensuring systematic training for medical and nursing staff of all grades who are required to confirm nasogastric tube placement. It is also vital to ensure all staff, particularly at induction, are aware that they should not be undertaking confirmation of nasogastric placement until they have completed such training. Over and above a plan, safety processes and Trust culture should support every doctor and nurse to confidently manage nasogastric tube safety, even in the early hours on a busy acute ward, mental health unit, or community service.

Analysis of incidents shows two major concerns:

1. **Misinterpreted X-Rays**: more than half of all fatal cases reviewed related to misinterpretation of X-rays, or in some cases failure to review the most up-to-date x-ray and predominately involved doctors (of all grades). Causes typically included lack of training in the 'four criteria[2]' technique

[1] NHS Improvement Patient Safety Alert *'Nasogastric tube misplacement: continuing risk of death and severe harm'* https://improvement.nhs.uk/news-alerts/nasogastric-tube-misplacement-continuing-risk-of-death-severe-harm/ issued via the Central Alerting System July 2016

[2] NHS Improvement *'Resource Set: Initial placement checks for nasogastric and orogastric tubes'* https://improvement.nhs.uk/resources/resource-set-initial-placement-checks-nasogastric-and-orogastric-tubes/ published July 2016.

2. **Misinterpreted pH testing**: misinterpreted pH tests, predominately carried out by nurses (of all grades) accounted for about a third of cases. Causes typically included a lack of training or gaps in the content of training.

Trusts can find more information and staff support in the resource set[2] with the Alert provided by NHS Improvement, but in summary:

- Embed competency based **training** for all doctors and nurses of all grades who are required to check nasogastric tube
- Ensure all staff who have not received this training understand they should not be undertaking these checks
- Improve **X-ray interpretation** by using the '**four criteria'**
- Better bedside documentation formats to embed safe checking processes
- Clarifying communication to **radiographers** and from **radiologists**
- Improved **pH test interpretation** using CE pH strips marked for human gastric aspiration
- Avoiding **outdated methods** for safety checks, NEVER use the Whoosh or Bubble test
- **Buying safe equipment;** such as fully radio-opaque NG tubes with clear external length markings.

We hope you will support us to ensure every Trust complies with the Alert action to ensure the NHS does all it can to prevent future patient deaths due to misplaced nasogastric tubes. Together we can make the NHS the safest healthcare system in the world.

Yours sincerely,

Professor Sir Bruce Keogh
National Medical Director
NHS England

Professor Jane Cummings
Chief Nursing Officer England
NHS England

Dr Kathy McLean
Executive Medical Director
NHS Improvement

Ruth May
Executive Director of Nursing
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