Appendix 3 Decision Tree for NG Placement

Decision tree for nasogastric tube placement checks in ADULTS
Adapted from the National Patient Safety Agency

Initial placement or replacement of NG tubes should not occur overnight (19:30 to 09:00) unless the administration of medicine or feed is deemed essential.

- Estimate the XEN measurement by placing the exit port at the xiphisternum, extend tube to the tip of the nose and then the earlobe. Add an additional 10cm to XEN measurement i.e. XEN + 10
- Follow manufacturers' instruction and insert fully radio-opaque nasogastric tube for feeding
- Confirm and document the XEN + 10 measurement on the Nasogastric Tube Placement Checklist
- Aspirate with a syringe using gentle suction

**YES**

- **0.5 to 1 ml aspirate obtained?**
  - Try each of these techniques to help gain aspirate:
    - If possible turn the patient onto left side
    - Inject 10-20ml air into the tube with a 50ml syringe. Do not use water to flush
    - Wait up to 60 minutes before re-aspirating again
    - Advance tube by 5 to 10cm
    - Give mouth care to patients who are nil by mouth to stimulate gastric secretion of acid

**NO**

- **pH between 1 and 5**

  - **pH above 5**

    - **YES**
      - **0.5 to 1 ml aspirate obtained?**
        - Proceed to x-ray:
          - All x-ray requests for confirming position of NG tubes must clearly indicate the purpose of the x-ray
          - The Nasogastric Tube Placement Checklist must be sent with the patient
          - In hours:
            - Has the x-ray been examined and the Nasogastric Tube Placement Checklist completed by the Radiologist to ensure that it is safe to feed?
        - Out of hours (19:36 to 09:00):
          - Has the x-ray been examined and the Nasogastric Tube Placement Checklist completed by a registrar grade or above to ensure that it is safe to feed?
  - **NO**

**DO NOT FEED OR USE TUBE**
Remove tube and consider re-siting or call for senior advice

- In all cases if there is any doubt about the tube position this should be discussed with the Radiologist who is available Monday to Friday from 09:00 to 19:30 and at the weekend from 9:30 to 12:30.
- For high risk patients i.e. those with depressed consciousness, impaired gag reflex or ventilated patients, the tube position should be confirmed radiologically. Please refer to the Trusts NG Tube Insertion policy