Summary of cases.
The cases may be divided into 2 groups and I have assigned each case to a likely group.

1. The death/collapse is explained but may have been prevented with different care, and learning may improve outcome for other babies (date of first collapse is noted).

I&S		11.12.15
Child H	(?outcome)	21.9.15
Child Q	(survived)	25.6.16
Child E		3.8.15
I&S		27.1.15
Child C		PD 6.15
I&S		18.2.16
I&S		8.1.16
I&S	(survived)	6.4.16
I&S		6.3.16
I&S	survived)	9.14
I&S		3.9.15
Child D		22.6.15 (changed following PM review)

2. The death/collapse is unexplained. It is the investigation of these cases which would potentially benefit from local forensic review as to circumstances, personnel etc (date of first collapse is noted).

Child O	23.6.16
Child A	PD 6.15
Child P	24.6.16
Child I	22.10.15

*Cause of death as given in post mortem report should be reviewed given baby stable in air in days preceding collapse

Recommendations.

1. If COCH is to continue to serve as a local neonatal unit which provides intensive care for "up to 48 hours" and if there is continued cross-cover by doctors of neonatology and general paediatrics, the criteria for birth at or transfer from this local neonatal unit should be reviewed, supported by the network and the transfer service.

2. There should be review of criteria for consultant attendance out of hours, and junior doctors and nurses should be empowered to apply these.

3. A quality improvement programme to improve birth/decision to needle time for antibiotics should be considered.

4. If not already in place a "difficult airway pack" should be prepared in conjunction with Alder Hey Hospital paediatric anaesthetists and ENT surgeons.

5. Although no death in the series was known (subject to outstanding post mortem reports) to be secondary to undiagnosed pneumothorax or duct dependent congenital heart disease, consideration should be given to training and check lists in the event if unexpected collapse to consider these.

6. Subject to coroner's post mortem reports, there should be broader forensic review of the cases described in category 2 above as after independent clinical review these deaths remain unexpected and unexplained.

October, 2016