Improving NHS investigation of patient safety incidents

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Abstract

We discuss the deficiencies of current NHS patient safety investigation and specifically the need for independence and Human Factors training. We describe the theory behind a regional network approach to improving the quality of investigations, and the development of a pilot study. We report outcomes from the first three investigations and the learning gained from the experience of conducting the pilot study. We make recommendations for how this type of solution to the problem of adequate investigation could be further developed

TABLE 2

Comparison of findings of preliminary internal and Human Factors-led external reviews of the first three incidents investigated. The "dimensions" of the workplace setting identified as relevant to the incident (as described in the text) are noted in parentheses in the Independent Review column.

	Internal Investigation	Independent Review
Incident 1 (Omission of anticoagulation)	Causal influences identified Lack of prompt on EPR* to restart anticoagulation. Inability to review all medications on one screen in EPR	Causal influences identified Failure to seek surgical advice over complex post-surgical effusion *due to* excessive workload and inadequate supervision of junior medical staff. (Culture, Environment, Organisation/System, People) Major delays in decision making whilst anticoagulation was suspended *due to* weak systems for making, recording & and reviewing treatment plans. (Environment, Organisation/System, Task) Inappropriate test (CTPA instead of CXR) ordered to evaluate chest drain, leading to 4 day delay in restarting anticoagulation *due to* lack of appropriate supervision of junior staff *and* absence of systems for regular review of patient status and plans (Tools, Organisation/System, People) Failure to restart anticoagulation after procedure *due to* EPR issues as noted by internal team *and* unclear responsibility for post-procedure care. (Tools, Organisation/System, Culture)
	Recommendations made Omit rather than suspend doses of anticoagulation for patients undergoing a procedure, if date of procedure is unknown. Addition of an EPR function to allow prescribed medication to be viewed by category.	Recommendations made Review interdisciplinary working between resp. medicine and thoracic surgery; develop better referral protocols/guidelines Overhaul ward round & handover procedures on resp. medicine to improve supervision, reduce delays and clarify plans Revise EPR prescribing screens to allow view of all medication, permit a SUSPEND function with regular PROMPTS to restart medication

	Internal Investigation	Independent Review
Incident 2 (Administrative error in reporting)	Causal influences identified **Staff factors**: Inappropriate assumption of authority to change reporting process; no situational awareness of impact of decision. **Organisation**: Lack of governance structure, policies, SOPs, audit, quality control or assurance to guide and monitor reporting. Unreliable general admin systems. **Communication**: Inadequate communication from management to staff and vice-versa **Equipment**: no ability to request histopathology tests electronically	Causal influences identified Internal Investigation analysis endorsed, with one major addition: Appointment of clinical staff to administrative posts without training in required skills, or appropriate time allocation for management duties was an important Culture-related permissive factor allowing the Staff, Organisation and Communication problems to develop.
	Recommendations made Development of policies and procedures to guide reporting process Improved management/staff communication and development of quality assurance processes Extension of electronic requesting and reporting to include histopathology Modification of electronic system to ensure audit of report receipt and action Endoscopists to ensure that referring doctor is sent report	Recommendations made Internal Investigation recommendations endorsed Adequate training in administration, management, governance and quality assurance to be given to Drs with significant administrative responsibilities

	Internal Investigation	Independent Review
Incident 3 (Perinatal death)	Causal influences identified Inappropriate allocation of high-risk labour to junior midwife Failure of midwife to appreciate warning signs and call help Delay in obtaining US scan Failure by US staff to respond rapidly to bradycardia on US scan Failure of Obstetric registrar to attend immediately when shown scan	Causal influences identified Missed opportunities in ante-natal clinics to highlight IUGR and re-categorise pregnancy early on (Culture, Organisation, People) Lack of clear unit protocols or SOPs for IUGR, GpB Strep and PROM (Organisation, Task, Tools) Patient not transferred to specialist unit although no neonatal bed was available locally, *due to* communication breakdown or unclear leadership. (Organisation, Culture, People) Loss of situational awareness leading to decision to repeat USS scan when patient had signs of active labour *due to* lack of experience or supervision in midwifery team (Organisation, People) Communication breakdown between midwifery and obstetric team led to delay in decision to go to section (Organisation, Culture, People)
	Recommendations made Meeting with senior Midwives to stress importance of appropriate staff allocation Training lecture for midwives on premature labour, bradycardia and urgent escalation Training meetings with ultrasound staff around prioritisation of cases and response to warning signs Reflection meeting with Registrar around response to emergencies	Recommendations made Review cultural and leadership issues in Midwifery unit Address workforce and experience issues against clinical acuity in obstetric service Conduct multidisciplinary review of local antenatal care pathways, policies and SOPs for IUGR & high risk pregnancies including policies for escalation of care, against national guidance on best practice Review of training needs and support for midwives and trainee obstetric staff. Review of processes for prioritisation of ultrasound examination of antenatal patients and for escalation of concerns from USS to labour ward. Consider providing USS service at point of care.

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