

LETTERS

## Neonatal randomised point-of-care trials are feasible and acceptable in the UK: results from two national surveys

Randomised point-of-care trials (POCT)<sup>1</sup> or registry trials<sup>2</sup> offer a potentially efficient, convenient and cost-effective alternative to conventional randomised controlled trials. By using information present in an existing database, registry or electronic patient record (EPR), POCT eliminate the need for duplicative data collection.<sup>1</sup> Neonatal medicine is well placed to use this methodology; an existing national resource, the National Neonatal Research Database (NNRD), holds detailed data extracted from the neonatal EPR of all National Health Service neonatal units in England, Wales and Scotland; contributing units are known as the UK Neonatal Collaborative (UKNC).

We assessed the acceptability of neonatal POCT using the NNRD in two surveys. In the first (March–June 2014), we emailed all English UKNC leads, proposed a neonatal POCT and asked whether their unit would be willing to participate. In the second, we examined attitudes towards the neonatal EPR. We emailed neonatal trainees (n=108) and lead nurses, and asked them to cascade the survey on their unit. Using validated<sup>3</sup> questions, we asked respondents about their current satisfaction with the EPR;

POCT methodology was then described, and respondents rated their predicted satisfaction with using EPR data in this way using a Likert scale.

A total of 111/163 (68%) UKNC neonatal unit contacts responded to the first survey; 97/111 (87%) respondents expressed willingness for their neonatal unit to take part in the proposed POCT. A total of 162 neonatal health professionals responded to the second survey. Respondents were generally satisfied with the neonatal EPR (table 1). Approximately one in three indicated that using EPR data for POCT would lead them to view it as more worthwhile (table 2). A total of 139/157 (88%) respondents agreed with the statement, ‘if parents’ consent, I support using the EPR system to gather data for randomised trials’. The theme that emerged from narrative responses concerned EPR data quality.

We show that neonatal practitioners in England are willing to participate in POCT using EPR. Using neonatal data in this way is acceptable, and associated with greater satisfaction with the EPR in approximately one-third of the respondents. There is currently a high level of satisfaction with the UK neonatal EPR. Those surveyed have identified the need to improve EPR data quality; the neonatal EPR is used clinically and to generate discharge summaries, so enhancing data quality could also benefit patient care. Strengths include the national distribution and high response rates, although the voluntary nature may mean individuals with enthusiasm for the EPR are over-represented.

Neonatal practice is insufficiently evidence-based; 58% of neonatal Cochrane reviews published between 2006 and 2010 were inconclusive.<sup>4</sup> Using existing EPR for randomised POCT would represent an important innovation, potentially improving neonatal care rapidly, and at lower cost than is presently the case. The results of our study are encouraging, and suggest that this approach would be well received, and increase the perceived utility of the EPR. We are currently undertaking work to understand parent views and determine research types suitable for this methodology. In conclusion, POCT using EPR and the NNRD are feasible and acceptable to health professionals.

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**Contributors** CG and NM conceived the study; CG designed the survey and collected study data; CG, NM and all members of the WHEAT trial development group contributed to writing the paper.

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**Data sharing statement** Unpublished data are available on request from the corresponding author.

**Table 1** Current satisfaction with the neonatal electronic patient record (EPR)

	Agreement, all	Agreement, doctors	Agreement, nurses
I feel that the EPR is useful	148/162 (91%)	38/40 (95%)	95/106 (90%)
The EPR is worth the time and effort required to use it	134/162 (83%)	30/40 (75%)	91/106 (86%)
Overall, I am satisfied with the electronic patient record	126/162 (79%)	28/40 (70%)	86/106 (82%)

Data are presented as n/N (%)

**Table 2** How respondent’s perceptions would change if electronic patient record (EPR) data were used for point-of-care trials

	Stronger agreement, all	Less agreement, all	Stronger agreement, doctors	Less agreement, doctors	Stronger agreement, nurses	Less agreement, nurses
The EPR is useful	50/162 (32%)	4/162 (3%)	18/40 (46%)	4/40 (10%)	27/106 (26%)	0/106 (0%)
The EPR is worth the time and effort required to use it	55/162 (35%)	3/162 (2%)	19/40 (50%)	3/40 (7%)	33/106 (32%)	0/106 (0%)
Overall, I am satisfied with the electronic patient record	42/162 (27%)	5/162 (3%)	16/40 (43%)	5/40 (13%)	22/106 (21%)	0/106 (0%)

Data are presented as n/N (%)



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