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New take on the post-take ward round: a quality improvement project undertaken in a district general hospital

Georgia Kate Galloway , Sarah Nahin Choudhury

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Peterborough City Hospital, Peterborough, UK

Correspondence to
Dr Georgia Kate Galloway; georgia.galloway@nhs.net

ABSTRACT

A patient's first encounter with a consultant clinician, known as the post-take ward round (PTWR), is a pivotal encounter at the start of their hospital journey. It is a chance for a review of history, examination and investigations, formulation of preliminary diagnosis and management plan. High-quality patient care is reliant on effective communication of clinical information between teams, and the PTWR record is an integral part of this handover of information across different clinicians, medical teams and wards.

Consensus of consultant opinion allowed for the formation of a standard against which the quality of PTWR documentation could be measured. This project aimed to assess and improve compliance with the devised standard. Following a survey of referrals made to the medical team after the move to electronic record keeping, it was found that important information was being missed from PTWR records. For example, of the 446 records analysed, only 34% had a documented potential discharge date (PDD) and 20% had a documented escalation plan. Analysis showed overall compliance to core criteria was 63%. Several changes within the department of acute medicine were trialled, including the introduction of a checklist, prompt cards for clinical staff to carry and finally the implementation of an electronic form for PTWR records. Over the course of several cycles of data collection, compliance with core criteria improved from 63% to 86%. Most notably, improvement was seen in documentation of social history (42%–87%), frailty score (0%–63%), PDD (41%–81%) and escalation plan (21%–66%).

This work demonstrates the value of development of a standard for PTWR documentation, and of a proforma. The actions taken in this hospital may be of benefit to other medical departments.

WHAT IS ALREADY KNOWN ON THIS TOPIC

⇒ The initial encounter between patient and consultant is an important step during a patient's journey in hospital.
⇒ Good quality documentation is vital for continuity of care and patient safety, with proformas known to be helpful in promoting this.
⇒ This study was required to improve medical post-take ward round documentation in a district general hospital.

WHAT THIS STUDY ADDS

⇒ This study offers a standard for the post-take ward round and evidence that its use can improve the quality of documentation.

HOW THIS STUDY MIGHT AFFECT RESEARCH, PRACTICE OR POLICY

⇒ The established standard can be used in other medical departments with an aim to improve the quality of post-take ward round documentation.

PROBLEM

In Spring 2020, the Department of Medicine at Peterborough City Hospital (PCH) changed from using paper notes to electronic documentation. In this transition, a well-established PTWR paper form was removed, and clinicians were invited to document the patient encounter in an electronic free-text box.

A survey of referrals to the medical team was undertaken at PCH in June 2020. This survey was named the Medical Admissions Care Evaluation (MACE) and took place after the introduction of electronic record-keeping. This review indicated omissions in documentation. For example, only 34% of the 446 PTWRs analysed had a documented potential discharge date (PDD) and 20% had an escalation plan. Recording these accurately can assist discharge planning and is important for patient care.[1]

It was hypothesised that the switch to electronic documentation with a free-text box had contributed to the gaps in documentation. To explore this, a case note review was undertaken from when PTWRs were recorded on paper. Entries were reviewed against a set of criteria. These criteria are discussed in more detail later in the study and can be seen in table 1. Analysis demonstrated that since moving to electronic documentation fulfilment of the set criteria had fallen from 79% to 63%. It has been shown that blank spaces for documentation of the PTWR can result in significant omissions and implementing proformas can be helpful in improving this.[2 3] Proformas can also be important in helping standardise this important patient encounter.[4]

Table 1 Standard for documentation of the post-take ward round

Step	Documented element
1	Named consultant
2	Presenting complaint
3	Medical history
4	Social history
5	National Early Warning Score
6	Examination findings
7	Relevant investigations
8	Medication review
9	Working diagnosis
10	Plan
11	Frailty score
12	Potential discharge date
13	Escalation plan
14	Venous thromboembolism prophylaxis plan

MACE demonstrated that almost three-quarters of the PTWRs were completed within the acute medical team (medical assessment unit, emergency department and short stay unit). The department of acute medicine was therefore the focus for this project.

The aim was to improve the quality of the PTWR back to the levels seen prior to the switch to electronic documentation. The core criteria would be developed further to form a standard to measure improvement against. The aspiration was to surpass this and aim for 100% compliance against the standard in all PTWRs completed in the department.

BACKGROUND

The PTWR is the first medical consultant review with the patient; exploring the history, examination and investigations, before formulating the plan. By ensuring good documentation of this encounter, safe patient care is prioritised from the beginning of their hospital stay. High-quality documentation is important for continuity of care and patient safety.[5]

The PTWR acts as an important reference for handover for patients moving to new clinical areas. For the team taking over care of the patient, the PTWR is crucially important. A project carried out in Plymouth showed that a PTWR proforma was beneficial to both clinicians and other members of the multidisciplinary team when patients were moved to a new ward/area.[6]

When approaching the concern over documentation in the department, there was limited guidance on what should and should not be included in medical PTWR documentation. Guidance released in 2012 from the Royal College of Physicians (RCP) discussed the importance of ward rounds that emphasise patient care and safety.[7] The advice also noted the usefulness of checklists in reducing both omissions in documentation and variation in practice between clinicians.

Multiple local guidelines exist for what makes up a standard ward round. These include the University College London Hospitals (UCLH) ward safety checklist and the Caldwell Checklist.[8 9] However, none of these recommendations or examples are specific to the PTWR. In surgery, proformas have been demonstrated to be an effective method of improving documentation for PTWRs.[10 11]

Many of the existing guidelines are aimed at patient encounters undertaken within the traditional ward environment. Since MACE indicated a significant number of PTWRs are undertaken within emergency department (ED), it was important to identify a method of ensuring adequate documentation that could be used in both on the wards and in ED.

The team set out to define a standardised method of ensuring all PTWRs undertaken within the medical department at PCH were documented appropriately. The overall aim was to ensure safe, thorough and reliable documentation.

MEASUREMENT

In the absence of formal clinical guidelines, it was necessary to devise a standard against which the quality of PTWR records could be measured. Opinion was sought from consultant clinicians in multiple teams across PCH, and recommendations from RCP about effective ward round documentation was also considered.[7] Since no national standard exists for the PTWR specifically, this method was felt to be adequate to analyse quality of PTWR documentation until such time that a national standard or guideline is created.

The creation of standard criteria also considered the fact that 29% of PTWRs were carried out in the ED, therefore it was important to devise criteria that met the minimum amount of clinical detail to be considered safe and thorough, without creating complexity that would create unnecessary stress within the team.

When designing the criteria, certain recommendations and toolkits were consulted. For example, the Specialised Clinical Frailty Toolkit recommends use of the Clinical Frailty Score to guide care and to help estimate length of stay.[12] The score is straightforward to calculate and would not add undue time to the PTWR. Documentation of a potential discharge date has been shown to facilitate earlier discharge planning, which has been recommended to commence at the point of admission.[1]

The standard was devised as shown in table 1, with 14 core criteria. These included named consultant responsible for care, presenting complaint, medical history, social history, National Early Warning Score (NEWS), examination findings, relevant investigations, medication review, working diagnosis, management plan, frailty score, PDD, escalation plan and venous thromboembolism prophylaxis plan.

For a PTWR record to be considered to have met a particular criterion, any effort at documentation for that heading was accepted. For example, documentation of smoking history was considered to fulfil the standard of documentation of a social history, even without any further aspects of a social history being documented. This was decided in an effort to acknowledge that clinical judgement can be used when taking a social history to obtain only clinically relevant information, and therefore a PTWR need not include every possible aspect of a social history to be considered compliant to the standard. Limitations of this method of measuring compliance are acknowledged and discussed below.

Measurement of compliance against this standard would be measured at intervals, following cycles of intervention, to determine the effect of each intervention and overall quality of PTWRs. A baseline set of data would be obtained prior to any intervention. In addition to mean compliance, we would consider each documented element individually. We also chose to evaluate the range in compliance to ensure the spread of quality improved from baseline data. The aim was for all PTWR records to be 100% compliant with the standard.

DESIGN

Barriers to high-quality PTWR records were discussed and identified. The first area identified was lack of understanding of exactly what should be documented in a PTWR, and second was the inability to recall every section/category that should be included in a PTWR. An intervention needed to be designed to aid both understanding and recall.

The first intervention designed was a checklist that covered the 14 core criteria, including subheadings to act as further prompts. For example, within the 'relevant investigation' section, there was a prompt for blood results, chest X-ray, ECG and urine dip.

This checklist was turned into a business-card sized prompt card that was given to all clinicians working in the acute medical department. This card could be attached to ID badges so that clinicians could carry it with them on the PTWR to act as an aide memoir to remind clinicians what categories should be discussed and documented. As part of this initial phase, the checklist was also printed and displayed in key clinical areas.

The second phase of improvement came at the start of a new doctor's rotation to the acute medical unit. This was an opportunity to ensure that doctors working in the department had a clear understanding of what constitutes a high-quality PTWR. A teaching session was embedded in pre-existing face-to-face group induction, and checklist cards were also handed out to new doctor at this time.

Previous studies have shown that proformas aid in effective clinical documentation.[2 3 6] The final stage of intervention was the design, creation and implementation of an electronic form that integrated with the current electronic notes system. Extensive collaboration between the medical team and information technology (IT) department was required to develop this form.

STRATEGY

Baseline compliance against the standard was assessed before any interventions were carried out. A sample was taken from the medical referrals received following the change to electronic record keeping (10 per day over a 7-day period). The referrals to medicine during the period were assigned a number, with a random number generator being used to obtain the sample of 10 patients from each day. Patients that did not have a PTWR by a consultant were excluded (eg, patients that underwent a medical registrar review and were then discharged from ED). A total of 66 PTWRs were analysed. The mean number core criteria met in this sample was 8.8 out of 14 (63%). The range in core criteria being met in the sample was 1–13. This method of patient selection and assessment of compliance against the core criteria would be used following each intervention to monitor improvement.

Plan-Do-Study-Act (PDSA) cycle 1

The first intervention was the distribution of the core criteria in the format of a PTWR checklist. The checklist was designed in a way that it could be printed and laminated to be carried on ID badges. It was also printed as a poster and placed in key areas. Given the results of MACE, posters were placed in the areas where PTWRs most commonly occur (Medical Assessment Unit, Medical Short Stay Unit and the ED). The new standard for the PTWR was also sent via email to all medical junior doctors in the hospital. Our hypothesis was that these actions would make clinicians completing PTWR documentation more aware of the new expected standard, and that the prompt cards would aid recall.

Two weeks after checklist implementation, a further 70 PTWRs were selected for analysis. The mean compliance against the core criteria increased from 8.8 to 10.6 (63%–75%). There was an increase in the documentation of every core criteria following the implementation of the checklist. The range in core criteria being met in the sample was 7–14.

Following these actions, compliance against the core criteria had improved. There was room for further development. The team considered whether junior doctor induction would be a better way to share this information.

PDSA cycle 2

The aim for our next cycle was to use junior doctor induction as a time to impart our expectations on documentation of the PTWR to the team. Clinicians rotate through the department regularly, so ensuring that the methods of PTWR documentation are provided to them is important. It was hypothesised that this education intervention would enhance compliance further.

Teaching was delivered at the existing junior doctor induction with a focus on the PTWR and what should be

documented. The checklist cards were also issued to all new junior doctors at induction, with slight adaptations to the visual appearance from its initial design.

Further data were collected using the methods described above. Due to a larger number of patients not having a PTWR in the sample (more patients were discharged by a registrar prior to consultant review), a smaller data set of 59 PTWRs were analysed. The mean compliance against core criteria increased from 10.6 to 10.9 (75%–78%). Documentation of medical history, NEWS and escalation plan fell. The range in core criteria met was 5–14.

This intervention resulted in only a marginal improvement in overall documentation and saw compliance in some areas decrease. Given the more significant improvement that was seen with the implementation of the PTWR checklists, it was clear that this should be the focus. Work began to consider an electronic form for the documentation of the PTWR within pre-existing electronic patient record systems.

PDSA cycle 3

This cycle aimed to design and implement an electronic PTWR form that would integrate with the pre-existing patient record system (E-track). At the time, the PTWR was documented in a free-text box with the aid of the checklists which had been distributed. The box was within the 'doctors notes' section of E-track and was blank with no subheadings or prompts. There was no time limit on its completion, but the entry had to be completed in one session. There was no ability to save the entry as a draft and return to it later.

Our hypothesis was that an electronic form would aid completion and reduce the chance of elements being forgotten or omitted. It would have relevant subheadings for the core criteria and could be saved as a draft. Saving the entry in this way would allow the prompts to be used and would give clinicians the ability to return to their entry and complete missing information.

This took considerable time to develop and required significant collaboration with IT colleagues. Boxes on the form were designed to align with the core criteria, with additional contextual elements. It was decided to make a small number of elements compulsory for the record to be saved. These included the consultant reviewing the patient, presenting complaint, examination findings, working diagnosis and plan. It was decided not to make all criteria compulsory. This is because clinicians may not always have every piece of information at the time of the PTWR, so making every field compulsory is likely to cause difficulty. This decision is under review as the project evolves.

Compliance was reviewed several months following implementation of the electronic form. The same method of analysis to previous cycles was used. Mean compliance increased from 10.9 to 12.1 (78%–86%). The range of compliance was 9–14. Following this encouraging result, it was decided to allow further time for the electronic form to become integrated in the department. Further data collection and analysis was planned to be undertaken in Summer 2022.

RESULTS

As discussed above, results were measured through case note review following each intervention. The data were added to the retrospective review of paper-based PTWRs that had been obtained. Data sets were numbered chronologically, with the paper-based review acting as data set 1. This would assist in evaluating the extent of any improvement and compare it with when documentation was on paper. The baseline data following the switch to electronic documentation was considered as data set 2. Data set 3 was following the implementation of the checklist. Data set 4 was after the teaching intervention. The final data set was after implementation of the electronic form as described above. The outcomes measured included overall compliance against the core criteria (as a number out of 14 as well as a percentage figure), the range of compliance in completed criteria and considering each individual criterion. The full results can be seen in table 2.

Across the course of multiple interventions, overall compliance with the core criteria increased from 63% following the switch to electronic documentation, to 86%. This surpasses the previous compliance level of 79% seen when PTWRs were documented on paper. The largest improvement was seen following the implementation of the PTWR checklist, with only a very modest increase seen following the introduction of teaching.

Considering the range in criteria being met, this also improved with the interventions. At data collection point 2, the range was 1–13 (7%–93%), with 12% not meeting 50% of criteria. At data collection point 5, the range improved to 9–14 (64%–100%), with zero meeting <50% of criteria. In the final data collection, 18% of PTWRs met all 14 criteria.

Individual criteria were also reviewed across the stages of intervention. Considering data set 2 to data set 5, the greatest impact has been seen in documentation of social history (42%–87%), medication review (38%–76%), frailty score (0%–63%), VTE prophylaxis plan (41%–91%), PDD (40%–80%) and escalation plan (21%–66%).

There was one area where there was a decrease in compliance with the standards. Documentation of NEWS fluctuated throughout interventions. The largest reduction in compliance was seen following the introduction of the electronic form (80%–52%).

The significant impact on documentation of frailty score is noted. This was not previously documented at all and is now seen in almost two-thirds of PTWRs sampled. This was especially seen after the implementation of the electronic form where compliance increased from 10% to 63%. Another criterion particularly impacted by the electronic form was escalation plan, with compliance almost doubling (34%–66%).

Table 2 Documentation of PTWRs with mean compliance

	Data set 1: June 2019			Data set 2: June 2020			Data set 3: July 2020			Data set 4: September 2020			Data set 5: December 2021		
N	66			66			67			59			67		
Mean compliance	78.57%			62.88%			75.37%			77.72%			86.35%		
Core criteria	**Yes**	**No**	**Compliance**	**Yes**	**No**	**Compliance**	**Yes**	**No**	**Compliance**	**Yes**	**No**	**Compliance**	**Yes**	**No**	**Compliance**
Named consultant	66	0	100.00%	64	2	96.97%	66	1	98.51%	59	0	100.00%	67	0	100.00%
Presenting complaint	66	0	100.00%	62	4	93.94%	67	0	100.00%	59	0	100.00%	67	0	100.00%
MHx	60	6	90.91%	54	12	81.82%	63	4	94.03%	55	4	93.22%	65	2	97.01%
SHx	34	32	51.52%	28	38	42.42%	45	22	67.16%	43	16	72.88%	58	9	86.57%
NEWS	55	11	83.33%	44	22	66.67%	58	9	86.57%	47	12	79.66%	35	32	52.24%
Examination	63	3	95.45%	61	5	92.42%	64	3	95.52%	58	1	98.31%	67	0	100.00%
Relevant investigation(s)	66	0	100.00%	53	13	80.30%	64	3	95.52%	58	1	98.31%	65	2	97.01%
Medication review	25	41	37.88%	25	41	37.88%	42	25	62.69%	41	18	69.49%	51	16	76.12%
Working diagnosis	63	3	95.45%	57	9	86.36%	60	7	89.55%	57	2	96.61%	67	0	100.00%
Plan	63	3	95.45%	65	1	98.48%	67	0	100.00%	59	0	100.00%	67	0	100.00%
Frailty score	0	66	0.00%	0	66	0.00%	4	63	5.97%	6	53	10.17%	42	25	62.69%
PDD	51	15	77.27%	27	39	40.91%	44	23	65.67%	42	17	71.19%	54	13	80.60%
Escalation	43	23	65.15%	14	52	21.21%	29	38	43.28%	20	39	33.90%	44	23	65.67%
VTE	45	21	68.18%	27	39	40.91%	34	33	50.75%	38	21	64.41%	61	6	91.04%

MHx, medical history; NEWS, National Early Warning Score; PDD, potential discharge date; SHx, social history; VTE, venous thromboembolism.

Lessons and limitations

Over the course of three stages of intervention, this project has demonstrated reproducible methods for improving the quality of PTWR documentation. The results align with similar research that has also seen improvement in documentation as a result of PTWR checklists.[2 6] In wider fields, proformas have also been shown to be beneficial. This includes their use in ED and pathology reporting.[13 14]

This project did not meet its aim of reaching 100% compliance with core criteria. We hypothesise that clinicians may not have all the required information available to them at the time of the PTWR to fully meet the criteria. This would include relevant investigations not yet undertaken or lacking the information required to develop an escalation plan. Additionally, clinicians may have difficulty locating information such as the paper-based observation chart in ED. If clinicians do not have the observation chart with them at the time of completing the electronic record, this could explain why the documentation of NEWS fell.

Considering escalation specifically, the Resuscitation Council notes it is essential to document decisions regarding resuscitation,[15] however at the beginning of the acute admission it may not be appropriate, or information to guide decision making may not be available. Other teams that have implemented proformas have had similar difficulties in documentation of escalation plans, noting both clinician attitudes to these discussions as well as inadequate prompting as having a possible impact on this.[2] Acknowledging this, the electronic form has an option to indicate resuscitation has not yet been discussed. This will prompt the next clinical team that a decision is still to be made. While PTWRs without a documented resuscitation plan will remain under 100% compliance, this option on the form will promote ongoing decision making during the patient's stay.

A limitation to this work is in the measuring of some criteria against the standard. Criteria such as frailty score or named consultant are straightforward to mark as documented, however social history is more challenging. During analysis, any attempt to document a social history was marked as compliant. While it is acknowledged that social history can encompass a multitude of factors, it was decided that any documentation would be an improvement. An element of information bias is recognised due to this process. However, when considering how less than half of PTWRs had any attempt at a social history being documented in data set 2, it is still significant that this has now improved to almost 90%. With more time, it will be beneficial to assess each criterion in more detail. Specific salient criteria for compliance in subsections could then be decided for future data collection.

As discussed previously, this study aimed to minimise selection bias through adequate randomisation in identifying data sets. Confirmation bias was reduced through involving multiple clinicians in the analysis of data, including clinicians that had not involved in the study design and implementation of interventions. However, it is appreciated that confirmation bias cannot be completely excluded.

A further limitation is the creation of the checklist card itself. Initially, the cards were made at home by a team member. In advance of the new doctors' induction, the PCH Education Department produced them, however this was not guaranteed long term. The electronic form now overcomes the difficulty recalling what should be documented, hence the checklist cards have been superceded. Given the improvement in compliance that was seen with the checklist card implementation, it would still be of benefit to other hospitals (particularly those without an electronic patient record system, or as an interim while an electronic proforma is being implemented). If colleagues in other hospitals were to use the concept of the checklist card, they would need to consider production processes.

The small benefit seen following the junior doctor teaching has been recognised. Despite the small improvement seen in the data, ongoing teaching on documentation is important. When the checklist cards were introduced, there was promotion within the department, including a rollout email to all clinicians. This, combined with regular reminders, acted as informal ongoing education. To sustain the benefits seen through the stages of interventions, it is important to educate new colleagues. Therefore, while the objective benefit following the teaching has been small, the quarterly inductions provide an opportunity for PTWR education, and will be continued going forward.

When creating the form, the team discussed which sections of the form to make mandatory. It is important that the form is straightforward to complete and not time consuming, therefore it was decided that making all fields compulsory could be detrimental. However, given the decline in compliance in documentation of NEWS score, it may be worth making this a compulsory field. All patients should have their observations recorded for assessment and ongoing care.[16] This is therefore an area identified for further improvement.

CONCLUSION

This project demonstrates two main points. First, it shows the importance of having a standard against which the quality of PTWR documentation can be measured. Without such criteria, teams are unable to identify whether their PTWR records contain all important clinical information. Without national guidance available, a standard was created using a variety of clinical recommendations, as well as consensus between expert opinion. This standard was used throughout the project to assess the impact of each intervention. Until such time as a nationally recognised standard is available, the criteria in this project are valuable as an objective measure of the quality of a PTWR record. This standard can be applied widely in other hospitals, with the possibility, although not the necessity, for adaptation to individual hospital

contexts. The next step will be for locally and nationally recognised guidance to be created.

The second impact of this project is the demonstration of reproducible methods of improving the quality of PTWR documentation. The introduction of a checklist saw PTWR compliance increase from 63% to 75% overall. Integrating teaching into departmental induction saw a marginal improvement from 63% to 66%. The final evolution of this project was the cross-department design and implementation of an online proforma for use during the PTWR, which saw compliance improve from 78% to 86%.

The implementation of an online form is not applicable to all hospitals, but it does demonstrate, alongside other projects carried out before, that the use of a proforma holds significant value for a PTWR. It is acknowledged that the implementation of an electronic form requires significant time from members of multiple teams, however it has undeniably made an impact on the measured outcomes. Other trusts and hospitals can implement this in ways that suit their systems and teams.

At PCH, the work to improve quality of PTWR documentation continues. Adaptation of the online form is ongoing, and the team will continue to aim for 100% compliance to the 14 core criteria. Future work will promote sustainable results for the department, ensure confidence within the team and fundamentally promote the best care for patients.

Twitter Georgia Kate Galloway @Georgia_Kate7

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ORCID iD

Georgia Kate Galloway http://orcid.org/0000-0003-4288-533X

REFERENCES

1 National Institute for Health and Care Excellence. Emergency and acute medical care in over 16s: service delivery and organisation. In: *Chapter 35 discharge planning*, 2018.
2 Patel K, Roth H, Wilkinson J. The post-take ward round pro Forma: more than a blank space. *Future Healthc J* 2019;6:93.
3 Wright DN. Does a post-take ward round proforma have a positive effect on completeness of documentation and efficiency of information management? *Health Informatics J* 2009;15:86–94.
4 Mansell A, Uttley J, Player P, *et al*. Is the post-take ward round standardised? *Clin Teach* 2012;9:334–7.
5 Mann R, Williams J. Standards in medical record keeping. *Clin Med* 2003;3:329–32.
6 Thompson AG, Jacob K, Fulton J, *et al*. Do post-take ward round proformas improve communication and influence quality of patient care? *Postgrad Med J* 2004;80:675–6.
7 Royal College of Physicians. Ward rounds in medicine. London; 2012.
8 Amin Y, Grewcock D, Andrews S, *et al*. Why patients need leaders: introducing a ward safety checklist. *J R Soc Med* 2012;105:377–83.
9 Caldwell G. Western Sussex hospitals wards round Considerative checklist; 2010.
10 Al-Mahrouqi H, Oumer R, Tapper R, *et al*. Post-Acute surgical ward round proforma improves documentation. *BMJ Qual Improv Rep* 2013;2:u201042.w688.
11 Green G, Aframian A, Bernard J. Ward round documentation in a major trauma centre: can we improve patient safety? *BMJ Qual Improv Rep* 2014;3:u206189.w2537.
12 Specialised Clinical Frailty Network. Specialised clinical frailty toolkit; 2021.
13 Robinson SM, Harrison BD, Lambert MA. Effect of a preprinted form on the management of acute asthma in an accident and emergency department. *EMJ* 1996;13:93–7.
14 Siriwardana PN, Pathmeswaran A, Hewavisenthi J, *et al*. Histopathology reporting in colorectal cancer: a proforma improves quality. *Colorectal Dis* 2009;11:849–53.
15 Decisions relating to cardiopulmonary resuscitation. Joint statement from the British Medical association, the resuscitation Council (UK) and the Royal College of nursing; 2002.
16 Royal College of Physicians. National early warning score (news) 2; standardising the assessment of acute-illness severity in the NHS. updated report of a working Party. London RCP; 2017.