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Conducting a good ward round: How do leaders do it?

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Abstract

Rationale, Aims and Objectives: Ward rounds (WRs) are complex social processes. Done well, WR discussions and decisions contribute to timely, safe, effective progression of care. However, literature highlights medical dominance; marginalisation or absence of other perspectives, safety risks and suboptimal resource use. This study examined leadership behaviours and what supported good interprofessional WRs, defined as enabling interprofessional collaboration and decision making which progresses patient care in a safe and timely manner. Deepening appreciation of this art should support learning and improvements.

Method: Mixed-method appreciative inquiry (AI) into how WRs go well and could go well more often. Context: daily interprofessional consultant-led WRs in a large adult critical care unit. Data: ethnographic and structured observations (73 h, 348 patient reviews); AI conversations and interviews (71 participants). Inductive iterative analysis shaped by Activity Theory. Participants: 256 qualified healthcare professionals working in the unit.

Results: Leadership of good WRs supported (and minimized contradictions to): making good use of expertise and time, and effective communication. These three key activities required careful and skilled orchestration of contributions to each patient review, which was achieved through four distinct phases (a broadly predictable script), ensuring opportunity to contribute while maintaining focus and a productive pace. This expertise is largely tacit knowledge, learnt informally, which is difficult to analyse and articulate oneself, or explain to others. To make this easier, and thus support learning, we developed the metaphor of a conductor leading musicians.

Conclusions: Whilst everyone contributes to the joint effort of delivering a good WR, WR leadership is key. It ensures effective use of time and diverse expertise, and coordinates contributions rather like a conductor working with musicians. Although WR needs and approaches vary across contexts, the key leadership activities we identified are likely to transfer to other settings.

KEYWORDS
interprofessional, leadership, tacit knowledge, ward round

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1 | INTRODUCTION

Ward rounds (WRs) occupy a substantial proportion of hospital healthcare professionals' (HCPs') time which has significant cost implications. In 2014, Caldwell estimated that staffing WRs cost the National Health Service in England approximately £10 million per day[1] and costs have risen since. This represents a major investment of human and financial resources, yet the literature reports that WRs are undervalued, have low engagement from some HCPs; they can be ineffective, ritualistic, and underdeveloped.[2–4] This increases WR costs by increasing the opportunity costs of participating: HCPs not progressing their work, financial and human costs from missing timely progression of care, and lapses in quality and safety. Nevertheless, WRs are important for reviewing patients' progress and needs, and the shared decision-making of updating priorities and care plans which drive coordinated multidisciplinary input towards agreed objectives. This directs attention to ensuring that WRs are as clinically effective and resource efficient as possible. Recognising the importance of WRs, medical and nursing professional bodies jointly published *Principles for Best Practice for Conducting Ward Rounds*[5] and subsequently, *Modern Ward Rounds*[6] concluding that to support safe care, WRs should be interprofessional and viewed by HCPs as having central importance in the working day.

We studied WRs holistically as complex social interactions and asked: What are the components of a good WR? How might we develop things so that more WRs are good WRs? Expanding on a theme from C. M.'s doctoral study,[7] this paper focuses on the influence of the WR leader (in this study site, always a consultant doctor) and we develop the metaphor of consultant as conductor. Close analysis enables us to show how consultants create the conditions for good WRs, with efficient and effective review and planning of patient care.

2 | METHODS

2.1 | Study design

This predominantly qualitative study adopted a collaborative mixed-method design underpinned by appreciative inquiry (AI)[8] methodology. AI seeks to understand what is happening when things go well in the inquiry context, then works generatively with the AI participants to imagine and work towards more things going well more of the time. Good practice guidance emphasizes the importance of interprofessional WRs and earlier research identified concerns about ineffective WRs (see Background above). Therefore, this study examined what supported good interprofessional WRs, defined as enabling interprofessional collaboration and decision making which progressed patient care in a safe and timely manner.

3 | SETTING

A large, modern, purpose-built adult critical care unit (ACCU) in the United Kingdom, with 44 beds in eight 4-bedded bays and 12 single rooms: 28 intensive care beds and 16 'high-dependency' beds. The study focused on morning interprofessional WRs, the Unit's main forum for clinical decision-making through review and care planning. A single WR could not review every patient within a reasonable time, so three simultaneous consultant-led WRs ran. The ACCU core team was 48 doctors (16 consultants and 32 doctors known as 'trainees'), the full-time equivalent (FTE) of 166 nurses (including over 150 FTE bedside-nurses), pharmacists (3FTE) and unregistered support staff such as health care assistants and technicians. HCPs from other hospital teams had time allocated to ACCU, particularly physiotherapists and occupational therapists. Specialist HCPs visited ACCU patients throughout the day, according to need (e.g., trauma, neurosurgery).

4 | PARTICIPANTS

Qualified HCPs working in the ACCU were included. Unqualified HCPs (e.g., students on placements, health care assistants) were excluded as they were not routinely part of the WR team. After careful consideration, patients were not invited to participate in the research, as most would not be able to contribute due to their clinical state. Patients' relatives were not present during WRs, so excluded.

5 | DATA COLLECTION

Seven phases of data collection by C. M. over 22 months, each phase informed by preliminary analysis of data from earlier phases. C. M. is a senior critical care and practice development nurse in another city. Qualitative data came from ethnographic observations of 28 WRs (73 h, 348 patient reviews) using a semi-structured observation form, designed and piloted for this study; simple numerical and categorical observations (e.g., times, roles); detailed categorisation of 1978 acts of communication (67 patient reviews) using Bales' Interactive Process Analysis[9]; brief conversations with HCPs to clarify observations; nine semi-structured interviews, interview prompts arising from earlier observations; AI discussions with the project steering group (10 senior ACCU staff from four professions), during five nursing team development days (NTDs) (62 participants), and with managers, each discussion structured by emergent understandings of all data collected to date.

6 | DATA ANALYSIS

Inductive analysis using the Activity Theory Framework[10]: this identifies multifaceted *activity systems* which support desired outcomes (here a good WR) and *contradictions* which inhibit the performance of

an activity system. Ethnographic and AI field notes, interview transcripts, and reflective diary notes were organized and coded using NVivo software. SPSS software was used to organize and summarize categorical data from structured observations. C. M. and D. F. worked cyclically, separately, and together, using the AI framework to catalyse findings shaped by AI questions. Categories and themes were identified in the qualitative data, which provided rich descriptions of WR processes. This generated provisional understandings and further questions which were checked and refined across the whole data set in NVivo and SPSS. The iterative analytic process continued to develop and check the findings. This included a deliberate search for disconfirming cases[11] and participant validation of emergent findings through appreciative discussions with ACCU staff, particularly the steering group, at NTDs and with senior managers.

7 | ETHICAL CONSIDERATIONS

Ethical approval for the study was granted after scrutiny by the Queen Mary University of London and the Barts Health NHS Trust joint ethics committee. The main ethical considerations were that the study should not jeopardise patient care or confidentiality, it should enable genuine choice for potential participants and obtain informed consent. C. M., a critical care nurse who works in a different city, was at patients' bedsides only when with the circulating WR team.

8 | RESULTS

Observed WRs lasted between 95 and 250 min (mean 157.9). They involved complex interpersonal activity between dynamic groups of HCPs: a circulating WR team (consultant, senior trainee, nurse in charge [NIC] and pharmacist) and the patient-specific HCPs (the patient's reviewing doctor (normally a trainee) and bedside nurse (BSN); possibly other specialist input as required, if available). All participants had a role in supporting interprofessional collaboration and decision-making which progressed patient care in a safe and timely manner, but the key role was the WR leader.

The inductive activity-theoretical analysis identified three interlinked activity systems which supported good WRs: good use of expertise, good use of time and good communication (Figure 1) (see also reference[7] for detailed description). During patient reviews, these activity systems supported effective decision-making, a clear plan understood by all, and appropriate allocation of responsibilities for follow-up work. Contradictions were identified in each activity system, which when present, inhibited the performance of the individual patient review (or entire WR) and illuminated opportunities for improvement.[7] For example, contradictions included: starting the WR late (often compounded by not communicating the late start to colleagues); running the WR in a way that decreased the likelihood of certain professionals contributing[12]; not maintaining a productive pace (too fast or too slow); permitting a culture of interruptions or of incomplete preparation for the WR discussion; not keeping the

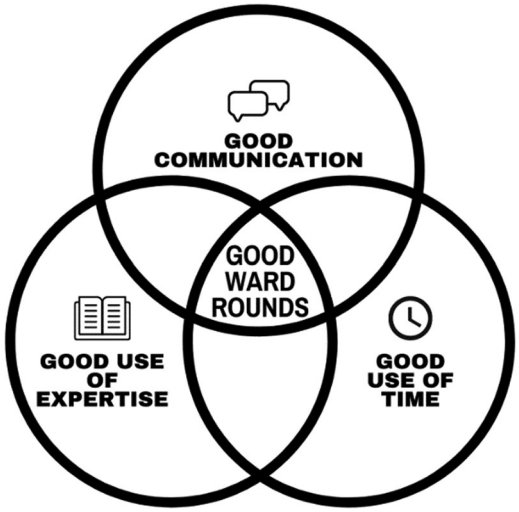

FIGURE 1 Good ward round interlinked activity systems

discussion well focused and structured; leaving people's questions or concerns unaddressed. From the beginning of the study, participants articulated some of the contradictions to leading a resource efficient WR which supported effective multidisciplinary care. They concentrated on a subset of contradictions and were less aware of their interconnectedness. The appreciative and activity-theoretical approaches of this study,[8,10] resulting in easy to remember graphics such as Figure 1, were successful in both highlighting complexity and distilling it into manageable forms. This helped study participants to notice when they were overemphasising the prevalence or impact of a particular contradiction (such as overestimating the prevalence of starting the WR late).

Very few bad WRs with serious or multiple contradictions were observed, but there was scope for improvement in most WRs. Some WRs were exemplars of good practice. There was no discernible connection between length of time as a consultant and the quality of WR leadership. The way each consultant led the WR was pivotal in the performance of all three activity systems and for minimising contradictions. There was little evidence of planned development for WR leadership. Participants described learning these skills informally from WR participation.

Ethnographic, interview and AI data sets showed that HCPs (including consultants who led WRs) recognized a spectrum of WR leadership expertise. While some facets of good (or poor) practice were identified by study participants, the complexity of WR leadership needed further deconstruction. To make the art of good WR leadership more visible and explicit we will develop the metaphor of consultant as conductor and describe a four-stage script for patient reviews, which when performed consistently well, produced a good WR.

8.1 | Assembling well-prepared performers

Just as orchestral conductors need well-prepared musicians to create the performance they conduct; consultants need to assemble well-prepared clinicians. Key to this is pre-WR communication to help

assemble the right people at the right time. Consultants conducting good WRs set expectations of completed pre-WR preparation by trainees and other members of the multidisciplinary team and they gathered members of the circulating WR team at the unit's agreed interprofessional WR start time (10:00 h) or notified colleagues if delayed. For clinicians joining the WR for specific patient reviews, reasonable predictability of the WR route and tempo enhanced their ability to be at the bedside at the right time.[12] Nobody expected complete predictability, clinical work is not like that. Nevertheless, good pre-WR communication supported good WRs by increasing the likelihood of being able to make good use of diverse expertise and clinicians' time.

This observational field note is a positive example of a consultant gathering the WR team members:

> *09.55 h-Consultant walks into the doctors' office and says to trainees 'Are you ready? I have seen the nurse-in-charge, and she is on her way. Can one of you bleep the pharmacist and tell them we are starting in the first bay?'.....we arrive in the first bay. NIC and pharmacist are not there. Consultant says to BSN 'we are just waiting for the nurse-in-charge and pharmacist, they are on their way'*

Lack of pre-WR communication resulted in several WRs starting without key members. This contradiction meant their expertise was not available to contribute to the review of the patient's condition and the associated decision-making. Often this required extra time for repair, as in the field note below:

> *Pharmacist joins the WR at patient three, she contributes to the discussion. As the team walk to patient four, she says to the consultant 'can I ask what the decision was about* (patient two), *regarding his antibiotics as he has been on them for longer than expected now?' Consultant, provides an update and she says 'OK, I will pop back later and take a look'*

8.2 | Managing the tempo

During a good WR, the consultant managed the tempo and duration of the overall WR by keeping the patient review discussions well-focused and well-structured, allowing time for everything necessary, whilst minimising interruptions and digressions and avoiding lengthy teaching. This increased the predictability of the circulating WR's arrival at each bedside and limited WR participants' fatigue, loss of concentration and discomfort due to dehydration, hunger and so forth.

8.3 | Orchestrating good patient reviews

Consultants conducting good WRs created conditions enabling each patient review to be a good review. A good interprofessional patient review had these key features: the right people present, those present were able and willing to contribute to the discussions, and the consultant managed the interprofessional dialogue to optimize communication and decision-making; thus, enabling good use of both time and diverse expertise.

A four-phase 'script' was discernible in good patient reviews: Phase 1, focusing attention; Phase 2, sufficient gathering of information, opinions and suggestions and formulating a management plan; Phase 3, articulating and checking the management plan; Phase 4, agreement, and closure. The example in Figure 2 passes through each phase once, but more complex reviews loop back to Phase 2 or 3 as often as necessary to achieve agreement and closure. Therefore, the consultant as conductor had to be sufficiently skilled to create something akin to a successfully improvised jazz piece, not just following a fixed composition.

Interprofessional collaboration happened when WR communication supported participation, role clarity and information exchange. To achieve this, consultants fostered behaviours to ensure the WR was inclusive, supportive and conducted in an atmosphere where its participants felt able and willing to contribute, listen and discuss issues openly. Consequently, there was a collegial atmosphere and productive collaboration during a good patient review, not just the presence of an interprofessional team. Consultants' actions included listening actively, using positive language, treating team members with respect, giving constructive feedback and seeking input from all team members. This observational field note provides an example:

> *The consultant is actively listening to the BSN, who is expressing her concerns about the patient, he is nodding, smiling in what appears to be appropriate places. Once she has finished he says 'thank you, let's address each of your concerns one at a time, shall we start with....'*

Despite their complexity, patient reviews need to make good use of time and in good WRs, on average, reviews lasted around ten minutes: the four-phase script supported efficiency. The consultant used clinical and leadership expertise to ensure that focused relevant information was shared, gauging what information was important to enable the WR team to make appropriate decisions for the patient. The consultant also ensured that team members had the opportunity to share information, raise concerns or ask questions. Most consultants demonstrated these skills consistently.

The reasonably self-contained WR discussion in Figure 2 illustrates the four-phase script. This exemplar is about and with a patient ready to leave ACCU. It was selected because it is succinct and can be understood without contextual clinical understanding. It is unusual because this patient, on the cusp of leaving ACCU, was able to interact with the WR team. Nevertheless, the same script was observed across all levels of patient acuity.

8.3.1 | Phase 1: Focusing attention

Just as musical conductors focus the attention of the audience and musicians immediately before a performance begins, during

FIGURE 2 Dialogue demonstrating the typical four-stage script observed during patient reveiws

Phase 1 - Focusing Attention	***Cons***: *'Hi' directed at the nurse and patient* ***Cons***: *speaks directly to the patient, 'I am xxx, we are here to do the WR I am going to hear a bit about you and then I will come and speak to you and let you know what the plans are and let you ask any questions you may have'* ***Patient***: *Smiles at the consultant* ***BSN***: *finishes what she is doing and joins the WR team at the end of the bed*
Phase 2 - Sufficient gathering of information, opinions & suggestions & formulating a management plan	***Trainee***: *presents the patient using the traditional medical systems approach* ***Cons and BSN***: *nodding as the trainee is presenting the patient* ***Cons***: *'Do you have anything else to add?' (directed at the BSN)* ***BSN***: *'No he is doing really well from my point of view'* ***Cons***: *looking at the patient's drug chart, 'Any concerns here?'* ***Pharmacist***: *shakes her head* ***Cons***: *'Renal function OK?'* ***NIC***: *finds the blood results and shows them to the consultant and says 'Look good to me.'* ***Cons***: *looks at the results and nods his head in agreement. Now looking at patient monitor and directs a question to the team 'He is a bit hypertensive for a young man?'* ***BSN***: *'Non-invasive pressure is fine'* ***Cons***: *'Let's remove the A line then', which is directed at the BSN* ***BSN***: *'Can we remove the central line also?'* ***Cons***: *'Yes if we don't need it we should remove it. What are we doing for the patient?' (directed at the BSN)* ***BSN***: *'Nothing much.'* ***Cons***: *looking at the patient and then asks 'Is he wardable do you think?'* ***BSN***: *'Yes.'*
Phase 3 - Articulating & checking the management plan	***Cons***: *'OK, plan is to remove the lines and then go to the ward today.'* ***NIC***: *'Brill, I will let the bed manager know.'* ***Cons***: *'Anyone else have any questions?' there is a chorus of 'No.'* ***Cons***: *goes to the patient and updates him on the plan* ***Patient***: *thank you very much for everything you have done*
Phase 4 - Agreement & closure	***Cons***: *shakes patient hand then says to the BSN, 'Happy?'* ***BSN***: *'Yes thanks.'* ***Cons***: *speaks to the team 'Let's move on.'*

good WRs the consultant focused participants' attention before commencing each patient review. Typically, they introduced the circulating WR team to the BSN and patient (when able) and asked them to join the WR team (see Figure 2). This demonstrated good leadership and communication. First, it informed the patient about the purpose of the gathering of professionals at their bed space and, for patients able to communicate, promised an opportunity to contribute information and ask questions. Otherwise, the WR may have felt intimidating and alienating. Second, it prompted the BSN to join the WR and gave them permission to pause other tasks (if clinically appropriate). BSNs gained a sense that their expertise was valued and needed by the WR team.

During an AI discussion (NTD data collection) one nurse commented:

> *'we* [bedside nurses] *appreciate it when the consultant introduces the ward round to us, it means they value us and is a sign they want us to join the ward round team'*

Consultants also recognized how important this introduction was to the BSN:

> *'I think it is important that we* [consultants] *ask the bedside nurse to join the ward round, it seems to give them the permission that some of them need to stop what they are doing and join in with the ward round discussions'* (interview)

8.3.2 | Phase 2: Sufficient gathering of information, opinions and suggestions to formulate a management plan for each patient

Phase 2, of the script tended to be the longest phase during a good WR. It involved interprofessional communication whereby the WR team gathered sufficient information about the patient's current clinical and social status through information exchange and sharing clinical opinions and suggestions. Good communication was enhanced by all WR HCPs delivering information succinctly and prioritising the most relevant and timely matters. This required clinical expertise and judgement alongside interpersonal skills. It supported formulation of a management plan. Information-gathering was orchestrated by the consultant through asking questions and inviting contributions from WR team members, based on their clinical expertise (somewhat like an orchestral conductor coordinating well-timed and well-pitched contributions from different instruments to create a desired performance).

The turn-taking had some flexibility. During a good WR all members of the WR team and any other HCP who may be at the bedside at the time of the WR review (e.g., therapists or visiting teams) would stay attentive to the discussion and would make professional judgements about whether and when to contribute. This field note provides an example:

> *trainee is presenting the patient to the WR team, he starts to provide information regarding patient's mobility, the physiotherapist interjects, confirms trainee's report is correct, and follows up 'he is trying to prone himself, I was going to hoist him out however I do not think it will be safe as he is very agitated' The BSN says 'I agree, he can be agitated.' They all agree that the patient should not be hoisted at the moment and the trainee resumes his presentation of the patient*

During this observation the physiotherapist used her professional judgement to interrupt and join the discussion. For HCPs to feel able and willing to contribute, the WR needed to be conducted in a manner that encouraged contributions. This happened in most observed WRs, significantly supported by non-verbal communication centred on predominantly positive gestures indicating agreement and/or demonstrating attentiveness to the interaction, for example, nodding or smiling. When this did not occur, some pertinent insights may have been excluded, potentially putting patients at risk. Thus, not encouraging contributions from all WR team members was identified as a contradiction to a good WR.

8.3.3 | Phase 3: Articulating and checking the management plan

Good communication during Phase 3 involved synthesising and proposing a management plan to check that it was clinically and practically suitable, so allowing the possibility of change if WR team members saw problems or omissions. The consultant synthesized the information, opinions and suggestions for ongoing care gathered during Phase 2 and, as conductor, communicated this synthesis to the WR team for checking. In Figure 2 this begins 'OK plan is….' The following field note was typical of what was observed for more complex situations. In this example, during Phase 2 there had been discussion around speaking to the patient's family. When this did not appear in the management plan the NIC raised this with the consultant, who amended the articulation of the plan.

> *Consultant 'OK, the plan is to take out as many of the lines as we can, arrange a follow up CT, continue with physio to see if we can get his chest any clearer'*
>
> *NIC 'what about speaking to his family about long term plans'*
>
> *Consultant 'let's wait until we have the results from the CT scan so that may have to occur tomorrow, so let's add speak to family when result of CT scan'*

Articulating and checking the management plan might include several rapid iterations of improving the initial proposal, based on additional comments or questions.

8.3.4 | Phase 4: Agreement and closure

The final stage of communication during each patient review focused on agreement and closure. This stage involved the consultant or trainee documenting the agreed management plan. In a good WR the consultant, as conductor, would confirm that the WR team understood the agreed management plan, including their specific

roles in it. By agreeing with the management plan, each WR team member was committing to their role. Rarely would consultants verbalise each person's role, but frequently they made eye contact with the relevant person while stating the plan. A potential concern that only using eye contact, not names or a process such as 'read back', would not support good communication was checked. There were no reports from participants that they were not aware of their role in implementing the patient management plan and there was no indication from ethnographic observations, interviews, or opportunistic conversations that WR team members did not complete WR-generated tasks.

Once the management plan was agreed, a recurrent pattern was observed: the consultant doing a final check with the BSN, confirming that they were 'happy' (Figure 2). Another frequent phrase was 'do you need anything else from us?' When one of these questions was posed BSNs frequently asked further questions, either about the management plan or a particular issue they had with their patient, for example:

> *BSN 'should I continue to give him* [drug] *….'*

Observations included one consultant (among 16 observed) who consistently demonstrated a contradiction to good communication, as described in this field note:

> *The consultant asks the BSN if they have any questions. The BSN starts to ask a question, but the consultant has already started to move on to the next patient and the BSN stops mid-sentence.*

This halted communication had the potential for impact on patient safety and timely care. It underscores our earlier point that good communication relies on inviting contributions in a supportive manner.

During a good WR, the consultant would formally close each patient review by using phrases such as, 'if everyone's happy let's move to the next bay' or 'shall we move on?' These questions gave WR team members an opportunity to confirm their readiness to move on. Once the circulating WR team arrived at the next patient, the four-phase patient review script started again.

8.4 | Curiosity and reflection

At the end of WR observations, some consultants asked C. M. for feedback on how they led the WR, how they could improve or what they could do differently. Their enquiries suggested that these consultants realized that their leadership skills impacted on the WR and were curious. Consistent with AI methodology, during these conversations, C. M. highlighted areas of good leadership she had observed and discussed with the consultant how they could demonstrate these more often. Interestingly, when components of good WR leadership behaviour were highlighted, mostly, consultants had not realized how their actions were supporting a good WR. For example, the final check with the BSN in Phase 4 elicited the following comment from one consultant:

> *'oh, I just started doing that as they* (bedside nurse) *are left with the patient as we move to the next. It is much better that they get all their questions/queries answered whilst we are all there'*

Thus, it could be suggested that the consultants conducting good WRs were using tacit knowledge.

The length of the WR often figured in these discussions. All consultants were conscious that an excessively long WR was a contradiction to a good WR. Some reflected that they needed to get '*better*' at keeping the WR focused and not getting distracted by what they called '*other business*'. However, attempts to avoid excessively long WRs were sometimes misaligned with other facets of conducting a good WR. For example, a consultant whose WRs were set at a much quicker pace than normal, and the Phase 4 example above of a different consultant asking questions while walking away, both inhibited contributions from others. Both consultants gave similar replies after C. M.'s feedback, commenting that they always '*walk and talk*' to save time.

In the discussion, we will develop a model (Figure 3) which links participants' curiosity and reflection to moving away from the tacit knowledge through which they operated largely unconsciously, towards a more explicit understanding of WR leadership which is better suited to supporting learning, teaching and quality improvement.

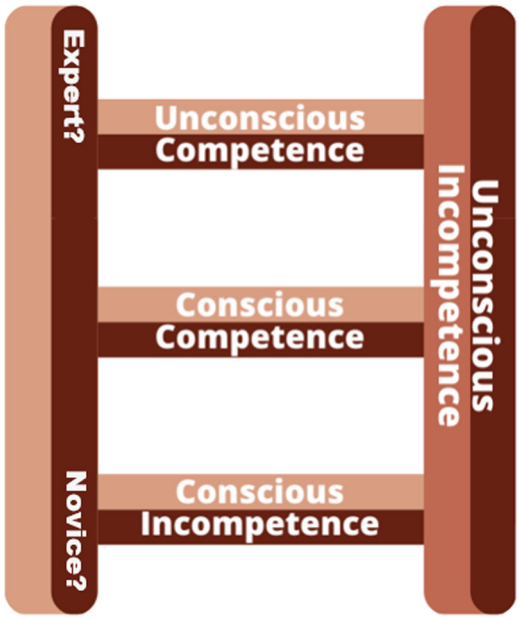

FIGURE 3 A ladder of competence awareness

9 | DISCUSSION

This study examined complex social interactions among participants to identify what supported good interprofessional WRs, defined as enabling interprofessional collaboration and decision making which progressed patient care in a safe and timely manner. All participants had a role in supporting good WRs, but the WR leader was the most influential role. Study participants reported variation in the quality of daily interprofessional WRs but struggled to describe what was happening when things went well. Their knowledge was tacit rather than explicit. This inhibits development of self, juniors and quality improvement cycles. Inductive activity-theoretical analysis identified three interlinked activity systems which supported good WRs: making good use of participants' expertise, ensuring good use of time, and supporting good communication (Figure 1). These activity systems supported efficient patient reviews, effective decision-making, a clear plan understood by all, and appropriate allocation of responsibilities for follow-up work. Contradictions to effective functioning were identified in each activity system. We also identified a recursive four-phase script which supported efficient and effective implementation of the three key activities in each patient review: Phase 1, focusing attention; Phase 2, sufficient gathering of information, opinions and suggestions and formulating a management plan; Phase 3, articulating and checking the management plan; Phase 4, agreement, and closure. In complex case reviews, Phases 2 and 3 might be revisited before Phase 4 was completed. By making the three key activities and the script explicit, and describing contradictions which limit their success, we provided a set of concepts and a language through which HCPs could reflect, teach, and enact quality improvement. To make this more memorable we developed the metaphor of a conductor working with musicians: assembling well-prepared performers, managing the tempo of discussion and decision, and orchestrating good patient reviews which made good use of diverse professional expertise efficiently and supportively.

Reviews which examined leadership styles in relation to the quality, safety, and efficiency of care[11,12] found these were strongly connected and that good leadership styles are a core element of well-coordinated and integrated provision of care. Thus, developing good WR leadership is important. Similar to this study, Ten Have and colleagues[13] identified that creating opportunities where WR team members feel safe and thus able to contribute to the WR discussions, is a hallmark of good WR leadership. A safe atmosphere will encourage people to contribute and enable more open and honest communication about difficult ethical issues,[14,15] thereby allowing professionals to express their emotions and moral concerns.[16] In our study, most consultants were consistently observed leading the WR in a manner that provided an atmosphere of trust and safety that enabled interprofessional communication, which in turn encouraged and supported interprofessional collaboration and decision making. Thus, good WRs mitigate the traditional hierarchical power relations that have been identified as inhibiting interprofessional collaboration and communication. For example, Kets de Vries,[17] and Miller et al.[18] found that a major barrier to open interprofessional communication is the so-called 'doctor-nurse game', which builds on traditional hierarchical power structures between nurses and doctors.

Nevertheless, this study found a cultural expectation of consultant led WRs (and i.e., why we used the alliterative phrase consultant as conductor). Exclusively consultant led WRs suggest positional authority, perhaps linked to clinical experience and expertise. Positional authority is common in the hierarchical professional relationships within healthcare settings.[19] But this study showed that WR leaders need more than positional authority, clinical expertise, and experience. They need to be able to create conditions which support good use of expertise, good use of time and good communication and, within the tough constraints of everyday clinical practice, minimize the contradictions to these key activities. This is a complex professional skill and study participants, across professions and levels of experience, were unable to describe what was happening when it was done well. This limits the potential for learning from WR leaders who have achieved high-quality mastery. The findings of this study have helped to make the imperceptible more visible (Figures 1 and 2) and consequently more readily usable in professional development and quality improvement.

We captured no examples of coaching or other preparation for the role of WR leader, and little to suggest consultants held a conscious understanding of how they performed the complex social task of leading the WR. Before reaching consultant level they had participated in many WRs, generating observational and situational understandings of WR leadership. Once appointed as consultant there was little opportunity to observe others performing the role and they received very little feedback on their WR leadership. The four-phase script described in this paper grew organically, through imitation, trial and error. In a spectrum from unscripted to strongly scripted encounters,[20] the WR patient reviews were strongly scripted. This occurs through repetition and familiarity. It provides predictability, shapes expectations and signals the sequence and style of contributions. This reduces cognitive load. Nevertheless, scripts are not rigid, people can use them in contextually and scripts should evolve as contexts evolve. Organically developed WR scripts have been studied elsewhere, for example, paediatric settings,[21] and research has linked scripts to HCP's perceptions of cooperation and team effectiveness.[22] Studies have also considered very strong scripts (checklists) and reported positive results for targeted clinical outcomes.[23] However, it is a moot point whether a checklist script is too strong and rigid, which risks promoting ritual and may restrict engaged problem-solving.

The conversion of experience to learning requires feedback and reflection and is enhanced by intention to learn. The consultants we studied appeared to be working through tacit knowledge. Tacit knowledge develops as professionals gain experience and expertise in their workplaces. Analysing the Drefus' model of skill acquisition[24] which brings together situational understanding, routinised action and decision-making along a continuum from novice to expert, Eraut[25] highlights that situational understanding develops with experience and remains largely tacit: importantly, it may also be biased or mistaken. Routinisation is necessary to meet workplace demands

and avoid overload, it may begin as explicit knowledge then become more automatic and increasingly tacit through repetition. This increases speed and productivity. Decision-making becomes increasingly intuitive, partly reliant on pattern-recognition. Although explicit knowledge or an explicit rationale can often be articulated for intuitive decisions if they are reviewed or questioned, in the moment an intuitive decision is likely to be tacit application of tacit rules, tacit knowledge or tacit theory. Such expertise is difficult to examine for learning. This study made key activities of WR leadership more explicit and memorable, thus easing the paths to learning, teaching and quality improvement.

Tacit knowledge resonates with the variously attributed idea of unconscious competence, which is linked with three other states: unconscious incompetence (or blind spot), conscious incompetence, and conscious competence. We have developed an additional graphic, Figure 3, which like Figure 1 highlights complexity and distils it into a manageable form. Together, these four states may form a continuum from novice towards expert, although we argue that unconscious incompetence can occur at any stage because practitioners at all levels can have development needs of which they are unaware. In our study, this included consultants at several stages of experience and seniority who had developed habits which were contradictions to the achievement of a good WR. Thus, in Figure 3, unconscious incompetence is placed on a vertical support rather than positioned as the bottom rung of the ladder. Furthermore, we question the linear model of climbing the ladder from novice to expert and have included question marks in Figure 3. We suggest that a clinician may be standing on a different rung for different aspects of professional practice. Moreover, an insightful clinician should be able to move down the ladder to conscious competence (e.g., to examine their own practice or to help teach others) and to conscious incompetence (e.g., to address a deficiency they recognize, or when they notice that the context has changed and a different approach needs to be explored). We argue that excellence does not lie in reaching the top of the ladder but in being willing and able to keep climbing up and down.

Some consultants were curious and used our study as an opportunity to seek individual feedback on their performance. This curiosity indicates an interest in learning. It was beyond the scope of this study to revisit these consultants individually and investigate subsequent learning or behaviour change. Arguably, the whole leadership team in this study setting was curious, as demonstrated by their willingness to participate in the AI, which resulted in some rapid cycles of improvement activity.[7] The study was able, for a limited period, to observe subsequent WRs, have brief appreciative conversations with HCPs and to continue AI discussions with steering group members. This captured some early outcomes such as more consistent start time and increase in the BSN contribution to the WR.

9.1 | Limitations

The acuity of patients in ACCU and the absence of family from WRs made it appropriate to exclude patients and their significant others from this study. In other contexts, patients and their significant others can be important contributors to WR discussions and decisions, providing valuable expertise. We must learn from studies elsewhere that capture this important omission.[2,4] However, the key activities of making good use of time and expertise, and supporting effective communication would still apply. The phases of the patient review script (Figure 2) would also accommodate patient and family contributions.

This in-depth study was conducted in a single ACCU and its findings should be tested elsewhere. All WRs in the study setting were consultant-led. Additional research into WR leadership by other professions and other grades of doctor would be useful. Critical care differs from less acute care where different approaches to WRs have developed to meet different needs and ways of working. Specific aspects of our findings may not transfer to other clinical settings, but it seems reasonable to argue that WRs everywhere should support good use of time and expertise, and support good communication, so that the resources invested in WRs to update plans for each patient's care, are invested wisely and effectively.

10 | CONCLUSIONS

WRs are complex social interactions, and it can be difficult to apprehend what is supporting (or inhibiting) good quality, effectiveness and efficiency. WR leadership is linked to the quality, safety and efficiency of care. This study examined leadership behaviours to identify what supported good interprofessional WRs, defined as enabling interprofessional collaboration and decision making which progresses patient care in a safe and timely manner. Good WR leadership can seem effortless or a personal strength, rather than a learnable and teachable expertise which can be refined iteratively. It may be part of an expert practitioner's tacit knowledge and thus difficult for them to articulate and use to support wider improvement. The findings of this study have helped to make the imperceptible more visible and consequently more readily usable in professional development and quality improvement. Three interlinked activities are key: creating conditions that make good use of expertise, make good use of time, and support good communication (effective, focused discussions during which people are able and willing to make pertinent contributions). Our findings also identified contradictions, which when present, inhibited the performance of the individual patient review (or entire WR). This illuminated opportunities for improvement. The appreciative and activity-theoretical approaches of this study were successful in both highlighting complexity and distilling it into manageable forms: the interconnected key activities in Figure 1; the alliterative musical metaphor of consultant as conductor providing a useful mental model of the art of leading good WRs through, assembling well-prepared performers, managing the tempo, and orchestrating good patient reviews; the four-phase recursive script, illustrated in Figure 2, through which good patient reviews are orchestrated; and highlighting the importance of curiosity and reflection which help HCPs move on the ladder in Figure 3 as necessary

to move judiciously from the unconscious states and ongoing application of tacit knowledge (which may be biased, incomplete or incorrect) into conscious states which support learning, teaching and quality improvement. To meet workload demands, day-to-day practice of WR leadership will quickly return to the well-scripted, less conscious application of tacit expertise, hopefully improved by incorporation of the key findings of this study. Figure 3 remains as a reminder to WR leaders to revisit conscious performance of WR leadership from time to time.

CONFLICTS OF INTEREST

The authors declare no conflicts of interest.

DATA AVAILABILITY STATEMENT

Research data are not shared.

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