

Improving the inpatient oncology experience through a new consultant ward round

Vishal Navani

Brighton and Sussex University Hospitals NHS Trust

Abstract

Regular consultant ward rounds have been shown to reduce the length of stay and improve the discharge planning for patients (1). To balance the competing demands of outpatient activity and inpatient oncology, it has been difficult to provide specialist care in our hospital. Previously, inpatients were managed primarily by the oncology specialist trainees, who are qualified in internal medicine, with an ad-hoc review by their named consultant. A regular consultant ward round was introduced for the first time on the 7/1/13. Each consultant was timetabled to give a twice weekly morning ward round on a rolling rota.

To evaluate this intervention, a retrospective case note analysis was undertaken. This included all patients admitted under oncology for the two months preceding and succeeding the new ward round. For each patient the admission date, time to first consultant review, number of consultant reviews, time to discharge after consultant review, and discharge date was identified. A staff survey also took place. Statistical analysis was performed using Mann-Whitney U or Chi-Squared tests.

85 patient episodes met the inclusion criteria. Case notes were available for 63 episodes (74%). The average length of stay significantly decreased from 11 days to three and half days ($p < 0.05$). The time to discharge after first consultant review also significantly decreased from six days to two days ($p < 0.05$). The number of consultant reviews and time to first consultant review remained unchanged ($p > 0.05$). The percentage of patients receiving a consultant review increased, from 54.3% to 71.4%, though this was not statistically significant. However it is likely such a large increase is clinically significant. Medical and nursing staff satisfaction also improved.

This study suggests that a regular consultant ward round improves length of stay for patients. This is possibly because an increase in patients received a consultant review and that the treatment and discharge decisions were expedited after such a review.

Problem

Since the inception of the specialised oncology inpatient ward at our hospital, there had been conflicting demands on consultant staff. Inpatients on the ward were admitted under their named oncology consultant, but only saw that consultant on an ad-hoc basis. The majority of inpatient care was coordinated by the general medicine trained, MRCP holding, oncology registrars. Oncology is primarily an outpatient based specialty, with was no devoted professional activity time in the consultant job description for inpatient reviews.

The lack of regular weekly consultant review for these inpatients was brought up by the range of junior staff on the wards, in addition to the nursing staff. They felt that patient experience could be improved and average patient stay shortened with a regular consultant presence. Furthermore, the majority of other specialties were able to provide regular consultant ward rounds and there was an argument for this level of consistency to be translated into the oncology department.

Background

There has been a drive to increase the amount of consultant directed care on wards. As written in the 2010 Time for Training

recommendations, consultants must be more directly responsible for the delivery of 24/7 care (2). This viewpoint was emphasised by the 2012 Academy of Royal Medical Colleges report (3) The Benefits of Consultant Delivered Care, which identified that when healthcare is delivered by consultants there is: rapid and appropriate decision making, improved safety, fewer errors, improved outcomes and benefits for the supervised training of junior doctors.

A year long study in the Royal Liverpool Hospital (4) shows that shifting consultant ward rounds from twice weekly to twice daily on acute medical wards led to a significantly decreased average length of stay for patients (from 10.4 to 5.3 days). It also found a significant increase in the number of discharges, from 116.1 per month compared to 68.6 discharges per month previously. Another study, undertaken in a gastroenterology ward at the Royal Bolton Hospital (5), changed their twice weekly consultant ward rounds to a once daily model and found that the average length of stay for the first 12 months of the initiative dropped by 25% (8.9 days), compared to the preceding 12 months. Even more impressive was the study's absolute reduction in inpatient mortality, which noted a fall from 11% (88 patients) to 6% (62 patients) following the new ward round.

Baseline Measurement

Prior to the new consultant ward round, a retrospective case note analysis of all patients admitted under the care of oncology for the preceding two months was undertaken. Patients were identified from the oncology junior doctor's list, available on the trust intranet. For each patient the admission data, time to first consultant review, number of consultant reviews, time to discharge after consultant review, and discharge data were identified from the patient notes.

Patients were excluded if they were admitted electively for treatment/investigations (these patients had a very short length of stay and would skew data). They were also excluded if they were under shared care with other specialties or if their period of stay overlapped the date of the start of the new consultant ward round.

35 notes were available for analysis, out of a possible 46 (76%). Of these patients, the median length of stay was 11 days. 19 patients (54.3%) were seen by a consultant, and of these patients the median time to be seen was four days. They had a median time to discharge of six days after being seen by a consultant and were on average only seen once during their inpatient stay by a consultant.

Design

A regular consultant ward round was introduced for the first time in January 2013. This came from an understanding that increasing seniority lowers length of stay (6) and that leadership is vital to effective discharge planning (7). There was also an appreciation that oncology suffered, when compared to other specialties in the hospital, from a lack of a regular consultant ward round.

One consultant was timetabled to give a twice weekly morning ward round. Whilst based on the ward, they provided cover for all inpatients regardless of tumour site. The oncology specialist registrars directed the consultant to appropriate patients to review on the round. Each consultant was expected to reschedule their morning programmed activity for each ward round. The weekly ward consultant led discharge planning, liaised with patients, named consultants over treatment decisions, and expedited treatment and discharge decisions.

Strategy

During the first two months of the new ward round, data was collected for the same outcomes as the baseline measurements. A figure of two months was used so that all oncology consultants were able to undertake their ward round commitments during the evaluation phase. The new consultant ward round was made mandatory for all consultants and information regarding the structure and purpose of the round was clearly disseminated to all junior medical staff and the oncology nursing staff.

Statistical analysis was performed using SPSS (IBM Corp. Released 2012. IBM SPSS Statistics for Windows, Version 21.0. Armonk, NY) using Mann-Whitney U or Chi-Squared tests when appropriate. P values less than 0.05 were considered significant.

Results

Of the 44 patient notes meeting the inclusion criteria for the first two months of the consultant ward round, 28 (63.6%) were available for analysis. The median length of stay dropped to 3.5 days, compared to the baseline of 11 days, which was statistically significant ($p=0.012$). Of these 28 patients, 20 (71.4%) were seen by a consultant. This was not statistically significant, but an increase from a baseline of 19 (54.3%) is likely to be clinically significant.

Of those patients seen by a consultant, the median time to be seen fell slightly from four days to 3.5 days and was not statistically significant ($p=0.289$). However, the time to discharge after being seen by a consultant dropped markedly, from six days at baseline to two days after the new consultant ward round and this was statistically significant ($p=0.021$). The average number of times a patient was seen by a consultant after the new ward round remained unchanged at one.

The staff survey also provided illuminating comments on the effect of the consultant ward round, and is included in the table attached.

See supplementary file: ds2093.jpg - "Staff Survey"

Lessons and Limitations

Our study found that the average length of stay was reduced after the new twice weekly consultant ward round. This was achieved potentially by the decreased time to discharge after a consultant review and the increased chance of being seen by a consultant. Junior doctors informed the research team that having a consultant present on the wards "ensured that the ward consultant can have a discussion with the patient's named consultant and ensure decisions get made that day, expediting discharge planning." The staff survey also suggested that having a consultant presence speeds up discharge planning.

However, there are a number of limitations that should be noted. The study had a small sample size, with a total of only four months of data being evaluated. Furthermore, only 70% of all patient notes met the study's inclusion criteria to be considered for analysis. The new consultant round would have to be monitored for a longer period of time for any conclusions to be made with confidence. Furthermore, this study's data was concentrated solely on length of stay and how improvements in that may have been achieved. That is not the sole clinical quality measure and any extension to the study should at minimum evaluate inpatient mortality, number of discharges, and re-admission rates.

It should be noted that this new consultant ward round was not cost-neutral. Numerous outpatient clinics had to be cancelled to allow some consultants to undertake ward rounds. Not only did this cause loss of income to the trust for those cancelled clinics, but it also placed an increased strain on outpatient clinic waiting times.

Conclusion

The joint Royal College of Physicians London and Royal College of Nursing statement (8) in 2012 called for ward rounds to be made

central to patient care, and for a 'concerted culture change' focusing on improving the quality of ward rounds. Thus it is evident that high quality clinical care which utilises consultant led ward rounds is necessary in order to improve the quality of healthcare delivery. Regular consultant ward rounds greatly improved the length of stay and staff morale on our oncology ward. Our strategy for achieving this however needs to be evaluated for a longer period of time, with more clinical outcome measures in place and with particular further study on the effect that these additional time requirements have on the consultant work force.

References

1. Eccersley L, Tan L. The impact of twice-daily consultant ward rounds on the length of stay in two general medical wards--effect on training? *Clin Med*. 2012 Apr;12(2):186–7.
2. Temple J. Time for Training: a review of the impact of the European Working Time Directive on the quality of training. Secretary of State for Health. May 2010. Available at: http://www.mee.nhs.uk/PDF/JCEWTD_Final%20report.pdf
3. Academy of Medical Royal Colleges. The Benefits of consultant-delivered care. Academy of Medical Royal Colleges. 2012
4. Ahmad A, Purewal TS, Sharma D, Weston PJ. The impact of twice-daily consultant ward rounds on the length of stay in two general medical wards. *Clin Med*. 2011 Dec;11(6):524–8.
5. Singh S, Lipscomb G, Padmakumar K, Ramamoorthy R, Ryan S, Bates V, et al. Republished: Daily consultant gastroenterologist ward rounds: reduced length of stay and improved inpatient mortality. *Postgrad Med J*. 2012 Oct;88(1044):583–7.
6. Rich EC, Gifford G, Luxenberg M, Dowd B. The relationship of house staff experience to the cost and quality of inpatient care. *JAMA*. 1990 Feb 16;263(7):953–7.
7. Pethybridge J. How team working influences discharge planning from hospital: a study of four multi-disciplinary teams in an acute hospital in England. *J Interprof Care*. 2004 Feb;18(1):29–4.
8. Royal College of Physicians, Royal College of Nursing. Ward rounds in medicine: principles for best practice. London: RCP, 2012. Available at: <http://www.rcplondon.ac.uk/sites/default/files/documents/ward-rounds-in-medicine-web.pdf>

Declaration of interests

I declare that I have no conflicts of interest.

Acknowledgements

Dr. David Bloomfield, Consultant Oncologist, Royal Sussex County Hospital