BMJ Quality Improvement Reports

BMJ Quality Improvement Reports 2015; u203210.w1579 doi: 10.1136/bmjquality.u203210.w1579

The Handbook: an end to 'I wish I had known that before I started'

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Abstract

The importance of an effective handover between clinicians is vital, particularly for junior doctors when commencing a new clinical rotation. When junior doctors commence a new rotation there is often a significant amount of new information and tasks that they must learn, whilst also maintaining a high level of care for patients. However, very little information is formally passed from the outgoing junior doctor to the incoming junior doctor when changing rotations, resulting in a gap in knowledge and information having to be relearned by each junior doctor for each ward.

Through a junior doctor led service improvement initiative we created an intranet-based, updateable, easily accessible, and secure resource to assist junior doctors during this transition period. Our project was not only beneficial to junior doctors when starting on a new rotation but also helped them understand their role within the ward environment and become more efficient in their clinical work. The project is an example of a sustainable service improvement project implemented with no cost that due to its format and low maintenance, could be easily adapted on a wider scale in other hospitals or Trusts.

Problem

Starting a clinical rotation on a new ward can be a daunting process, perhaps no more so than in the case of junior doctors. Each ward provides new challenges and tasks that must be learnt in order to work as part of a success team. In addition, junior doctors must effectively and quickly learn the procedures and methods of the ward in order to perform to the highest level and maintain a gold standard care for patients during this transition period. [1] As a result of this, it can take some time before a junior doctor feels confident in their new working environment and their role within it.

Following completion of a clinical rotation (approximately three to four months), junior doctors move on to a new attachment and this learning process must begin again. Despite the volume of information to be learnt and the regularity of which junior doctors change rotations, very little is formally passed on from outgoing to incoming junior doctors. In order to address this, we implemented a junior doctor lead quality improvement project focused on the handover of information between trainees during the clinical rotation changeover period.

Our aim was to provide a framework in which outgoing junior doctors could record relevant information learnt during their clinical rotation, which could then be accessed by incoming junior doctors. By enabling this handover of advice, tips and guidance we aimed to address the often heard statement from junior doctors of “I wish I had known that before I started."

An additional purpose of this project was to encourage junior doctors to be involved with and lead quality improvement initiatives; this is a vitally important process which is increasingly being recognised in medical practice.[2-3]

Background

The importance of an effective handover between medical staff in order to maintain the highest level of clinical care is well documented.[4-7] This is particularly true for junior doctors when first starting as a Foundation Year 1 (FY1) trainee, which is often a stressful and challenging process.[8] With the ever present pressure, stress, and workload facing junior doctors,[9-10] an effective and informative handover is important to help them work efficiently and safely.

The concept of a junior doctor handover is not new; within many Trusts junior doctor handbooks are printed annually to assist trainees starting new rotations. However, these handbooks can be limited as the information may quickly become out of date as there is no mechanism to update them in real time. They may not be produced in time for the new cohort of junior doctors, they cannot contain restricted or sensitive information, and junior doctors must carry the hard-copy handbook with them for reference. Due to the limitations of the existing handover process, there is a recurring problem of junior doctors having to learn a large volume of practical and relevant information for their ward with each rotation, rather than simply focusing on providing the clinical care their patients require.

The solution to this problem lies within the recent advancement in information technology (IT) and trend towards electronic or 'e-' based systems in clinical care.[11-12] An electronic-based handbook can provide the ability to access, amend, and protect information on them in real time presents a solution to the problems currently associated with hard-copy junior doctor handbooks.

Baseline measurement

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A retrospective study was taken from junior doctors who began their foundation training before our project commenced, ie with no electronic-based handbook in place. Participating junior doctors given a questionnaire to comment on several areas, including: how confident they felt when starting on a new ward; how well they felt information was handed over to them by their predecessor; and the challenges they face when starting on new wards. A response rate of 73% was achieved.

The vast majority of junior doctors agreed (93%) there is a variation in how each ward functions on a daily basis and when starting a new rotation these variations in process can be difficult to learn (93%). Forty-four percent of the participants felt that their predecessor had not fully handed over to them how the ward functioned or their role on the ward, with only 3.4% stating that they fully understood their role when starting on a ward as an FY1 doctor.

Ninety-seven percent of participants felt information collated by a predecessor to assist them when starting the rotation would be of value. Junior doctors also felt this information would improve confidence (93%), the continuity of care (86%), and the transition of junior doctors between rotations (98%). The information junior doctors felt would be of most use to them included: advice on the daily routine of the ward (97%), useful tips relating to their ward (90%) and information on requesting investigations (79%), or useful contacts relevant for that ward (86%).

Following this questionnaire, a junior doctor led teaching session with both surgical and medical FY1 doctors was held to address the concept of what information “I wish I had known that before I started”. Through group based discussion and workgroups we assessed not only what information would be useful when starting on a new ward, but also what information would help junior doctors most during their working day in order to complete their jobs more efficiently.

Our baseline measurements indicated a clear trend stating that junior doctors feel there is not only a lot of new information to learn, but also very little communication between outgoing and incoming junior doctors when changing rotations. Information that was handed over is often done so on an informal basis, either being done briefly in person or through written "crib sheets" left by the outgoing doctor for the successor to read on their arrival to the ward. However, these crib sheets are often focussed on clinical information such as working diagnoses, on-going investigations etc for patients on that ward at that time.

Design

Our intervention came in the format of "The Handbook", a secure intranet based resource for junior doctors to access relevant and useful information including: extension and bleep numbers, on-call information, top tips, and most importantly ward transition forms filled in and uploaded by outgoing junior doctors.

The ward transition form can be tailored to the requirements and needs of each department/ward, although the format is designed to be consistent through the use of a set template. Required information input includes: how to complete ward tasks, where items are located, who and how to contact relevant staff for that ward (eg arrange AF nurse appointments, which is a common task on cardiology), how the ward works, and what to complete before ward rounds etc.

The purpose of the ward transition form is to provide this relevant information in a clear and concise manner that junior doctors can have to hand when starting in a new working environment. Subsequently when a junior doctor is coming to the end of their rotation, they simply update or edit the ward transition form so it is available for their successor to access and learn from.

The Handbook is to be located on the intranet system of the hospital, creating a secure location that can only be accessed with a Trust username and password. Read and/or write access can also only be gained through our approval and confirmation from the IT department creating a traceable and limited list of users who are able to access The Handbook. With approval, any department or service (eg radiology, pharmacy etc) is able to upload information or forms to The Handbook to act as a resource for information or updates they would like junior doctors to be able to access and read.

Overall, our aim is create a one-stop, easily accessible, secure, and updateable resource to improve the transition of junior doctors and ultimately patient care during the changeover of junior doctors between rotations.

Strategy

The attached PDSA cycles outline the stages in our intervention from baseline measurement, implementation, results, and development.

See supplementary file: ds4772.docx - “The Handbook PDSA Cycles”

Post-measurement

Following the implementation of The Handbook in comparison with our previous baseline results, 70% of responders found The Handbook beneficial when starting a new rotation, with 67% stating it assisted their understanding of their role on the ward. The majority of trainees (70%) stated that The Handbook improves the transition of junior doctors between rotations and would use The Handbook again when next changing rotations. Nearly half of all responders (47%) also agreed that The Handbook had helped them become more efficient at their job on the ward. The Handbook is a functional resource currently running within the Trust. It is an example of a sustainable project that has been taken from an idea to reality with no cost in its creation, implementation, or maintenance.

Lessons and limitations

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Due to the support from the Trust, The Handbook was created with few complications. As the technology required to implement the project was fairly simple, a pilot could be created on the hospital's intranet with support from the IT and Informatics departments. The uptake among junior doctors contributing to the information within The Handbook was very positive. This perhaps suggests how trainees valued the concept of the project and wanted to assist their successors when starting rather than go through the learning process multiple times as they did. Trainees were also often aware of whose job they would be undertaking next or indeed who would be their successor, a factor which may have encouraged trainees to complete the transition form for their ward.

One obstacle encountered was making the initial transition from the previous paper based junior doctor's handbook to the intranet based paperless system. This change required input from multiple departments to ensure the information was correct and up to date. However, this did also have its advantages as once links with departmental representatives was established, future correspondence when updating sections of The Handbook became easier. In addition, the task of following up contributors to The Handbook and creating the finalised product was often time consuming, however, this was to be expected from the outset.

While the project has been of value and used by trainees, a limitation has been its frequency of use as the majority (93%) accessed The Handbook on average less than once every two weeks. This indicated that the real value and use of the pilot came, as originally intended, at the time of changing rotations and moving to a different ward within the Trust. While this is to be expected, it provides a future goal and area of potential development for The Handbook to become of greater value throughout the rotation and a source of information on a daily basis.

Moving forwards, The Handbook is certainly a transferable model that could be implemented in other hospitals. The project is secure and its content can be easily monitored. At the same time it can provide a central resource for clinicians and departments to add resources they wish their junior doctors to be able to access and learn from.

Conclusion

The Handbook has been created and led by junior doctors with the support of senior clinical staff, IT and Service Improvement teams. It is an example of how quality improvement can be achieved through multi-disciplinary collaboration and effort. Although a pilot project, the fact that a free, junior doctor led initiative has been created and made functional is a success in its own right. We found a clear need by junior doctors when rotating through clinical attachments and a cost effective way to address it. The Handbook has created a resource that not only improves junior doctor confidence but that also is found beneficial by junior doctors when working. The zero cost means the project is sustainable, and the fact that it is intranet-based means it is future proof.

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Declaration of interests

This initiative was supported by the Health Education England Better Training Better Care Inspire Project.

Acknowledgements

Professor John Earis, Dr Rob Jones, Dr Raj Kumar, Dr Claire Cullen, Chris McClearey, and Dr Bethan John.

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