

Evidence-based Practice Project using a Hand-off Tool

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Implementing a Succinct Checklist

Introduction

The post anaesthesia care unit can be made much better by using a succinct checklist. One of the best ways to go about it is to have an anesthesia team-to PACU nurse handoff. As a matter of fact, handoffs can be fraught with many challenges and hindrances which may interfere with the best possible outcome for the patient. The problem of poor communication may hinder the application of the best medical care for the patient. The anesthesia handoffs in the operating rooms are some of the biggest challenges that many face in order to give medical care.

The ASA already has a number of guidelines that are to be used to implement during the OR-to PACU handoff. These guidelines give just a basic overview of what is to be expected meaning that medical providers have a wide area to choose from. The handoff tool should be designed such that the quality and quantity of information is correct and sufficient to be understood further along. In this case, it is clear that a verbal report would suffice to explain the next course of action for the new nurses (Kitch et al 2015).

Process of instituting standardized handoff

The process entails a very intricate process that governs how it will be implemented. For the design, the persons involved have to be aware of what procedures have to be undertaken with the patient. There are numerous handoffs that can occur while in the hospital environment. It can be stated that for the best practice, there has to be a link that will match the process of the Medicare to the results expected at the end of it. This means that there are a lot of changes that can be made so as to add on the overall efficiency in the end.

The handoff process should be designed such that the most important information is passed from one person to another. Furthermore, there should be as few omissions as possible. These omissions create an environment that does not allow for the most information to be shared between the parties involved. As such, a checklist would be an important learning tool to be used to evaluate the situation for PACU. Nevertheless, it is an important monitoring tool for the nurses to use to check on the care of the patient throughout the handoff procedure. It should be understood that those who are more experienced in the hospital may have a better understanding of the handoff process. Moreover, they can be able to have a better grasp of the checklist instituted and may not have to abide by all its specifications unlike new individuals to the system.

For it to be introduced for PACU handoffs there has to be a standardized process to be followed. This tells us that mapping the process will be the best course of action as nurses will be better equipped to understand it. The basis of this thinking is not just focusing on the individual physician or nurse, but all the other processes and methods being applied to give specific results for PACU. In this case, a flow chart diagram of the steps to be taken can give an overview of what is to be expected in the end for every individual.

Process Mapping

The process mapping is a useful tool as it defines the parameters that the care giver has and to what extent their role is to the patient. Furthermore, we get a clear idea of the scope of the systems and the interactions between it and other users who are involved in the handoff. In many cases, there are actions and goals that will be used to assess the quality and appropriateness of the system in response to the work of the nurses. In the steps involved, tools like interviews and observations paint a clear picture of what is happening thus one can relate to how it is working out (Patterson & Wears 2010).

The process maps can vary in their scope, intensity, reach and application. Some may have additional roles added which means that they are more intricate having more processes to be expected. This addition is normally done so as to increase the efficiency outcome at the end of it. For nurses and doctors, the process mapping is a stepping tool towards having lesser barriers on the way of the care being provided to the individual. With more details being specified for the problem, the system becomes better in fulfilling the goals that have been set for the handoffs.

Methods of PACU Neurology Standardized Handoff

The basis of the handoffs was based on previous research which provided the information needed. This information based on studies conducted thus gives a direct understanding of the procedures to be used. The checklist created from this further extends the checkpoints that the physicians would otherwise use while administering care to the patients on the other hand, repeated or redundant items could be excluded from the checklist so as to avoid wastage of time and resources. Finally, the overall outcome gives a checklist of seventeen items that could be used effectively on the patients (AANA & CE 2015).

The PACU handoff checklist was then assessed to predetermine how effective it would be. The checklists were each individually assessed and tested to determine what else could have been left out in the entire process. Moreover, the physicians could now get an accurate understanding of what processes in the handoff were essential to the overall viability of the problems. The missing items that had been left out could be included depending on their relevance to the situation. The preoperative vital signs and medication were now integral parts of the handoff checklist that was to be used for PACU. The use of closed loop communication became a key component to be added in the long run. The role that it played was to ensure a clear line of communication between the physician and the anesthesia

provider involved in the treatment process. To be deemed as successful, any item discussed between these two parties had to be mentioned explicitly (Smith, Pope, Goodwin & Mort 2008).

In this study, the focus was on 10 PACU handoffs that would explain what would be undertaken. The PACUs were chosen randomly and observed to understand what process was being done. There were more screenings which were undertaken in order to determine what more items would have to be added in the final checklist to be issued. The information was mostly based on the people directly involved with PACU such as anesthesiologists and nurses and the residents. Volunteers from medical school were used to observe the handoffs and record the time involved. Nevertheless, they were limited on what they could assess based in their observations and determine the quality of the process.

Data collection

The study assessed two groups in which different methods were used. In the first one, the PACU handoff was done without the checklist in place. For the second process, the PACU handoff was done with the checklist being followed. The baseline data was collected prior so as to give a scope of the situation before the study was done. The test was carried out for a period of three months so as to gauge the response of the checklist when applied with PACU. For the second group, there were 50 handoffs that were observed and a similar number was also observed for the control group of the experiment. The data for the second group was collected based on the checklist specified in the PACU handoff as stated earlier.

Results

For the first group, there were fourteen residents observed while eight were done so for the second group. A total of six residents were used in the handoffs for both groups in the

study. The number of handoffs each of them had ranged from between one to eight. The number of items handed off for the second group with the checklist was much higher than that of the first group. Group 2: average, 69.5% +/- 16.5%, Group 1: average, 51.50% +/- 8.28% $p = 0.018$). An observation that was made is that there were eight items that were handed off by the second group a whole lot more as compared to the first. The closed loop communication was completed extensively for the group. The other items were Antibiotics, Standing Medication, Preoperative Cognitive Function, Complications, Patient Positioning, Limb Restriction, and Preoperative Activity Level.

Another issue that was noted is that the checklist made the handoff take a much longer time to complete. The second group took significantly longer time to complete the procedure ultimately. (Group 2: 126.4 +/- 52.25 seconds; Group 1: 100.86 +/- 36.00 seconds, $p = 0.011$). Effectively, this means that spending more time on the handoff process made sure that more items were covered in the process. However, the handoffs with the checklist did not discuss the items for as long as the ones that did not. This was however too small to consider and focus on.

Implication of PACU handoff Checklist

The checklist was an important tool as it was able to significantly increase the number of items that were transferred during the handoff. As such, it was evident that a whole lot more information was passed between the physicians during the handoff process. The system was not inherently perfect. However, it offered significant increase in the amount of information shared which means that the handoffs were a much better success. The items that were observed to have been missed in most of the cases were mostly deemed to be non-essential to the handoff process thus the error occurring. Furthermore, the residents could

have been unaware of the items that were missed in the checklist in the long run (Starmer et al 2013).

The problem of failure of communication seemed to have been alleviated by the introduction of the checklist. It was clear that the checklist were very useful in reducing the mortality of the patients especially in the post-operative handoff period. The transition of care was very vital for the various departments ranging from the operating room to the intensive care unit. Thus the outcome presented indicated that there were fewer complications that arose at the end of operations as a result.

The overall effect of the PACU checklist was that there was more information being exchanged between the physicians. This was useful part of the process as it portrayed the PACU checklist system to be effective enough. However, it also meant that it took a longer time for the completion of the handoff as the checklist introduced new elements that took more time to process and handle. This time addition may thus be a hindrance to others who may be cautious about introducing the checklist based on the extended period that it adds to the process. There is also a significant burden that is added to those who use the system to implement the handoff process.

The fact is that there are clearly benefits that were observed immediately after the introduction of the checklist to the PACU handoff. With more experience, a physician would thus be able to effectively use the system more efficiently without missing the finer details of the process. In addition, it would also rely on the skills of the person to be able to determine the correctness of the checklists as defined in the handoff procedure for PACU. In the end, the study was not all inclusive as there were points that may have been missed.

Conclusion

The case study did have a number of challenges which may have skewed the data a little bit. The data collection method did not look into the quality of the handoff procedure for both either with the checklist and ones without. This means that it would be difficult to ascertain the true overall outcome in the end. There may have been errors that happened during the handoff procedure, though the method applied in the collection of data did not allow for the determination of this factor. The quality of the process thus becomes wanting and lacks the appropriateness to ascertain its levels. Evidently, any tool introduced to the PACU handoff process would inherently increase the amount of time spent in completing the entire process.

The process analysis indicates to us that the main purpose is to understand and comprehend the PACU handoff process. This case would have sufficed as the handoff is mostly the shifting of responsibility from one person to another. The transfer of information makes this possible to complete who means it should be clear and concise for the other parties in the process to understand and comprehend. With a standardized tool, one can thus be able to find errors and correct them in the handoff procedure undertaken. The use of closed loop communications forms an integral part that permits follow-ups in case there is a need to complete it. The use of standardized handoff tools needs to involve all the stakeholders from the resident to the anesthesiologist. Furthermore, the management of the hospital would be expected to be at hand to ensure the success of the matter in case of hospitals. It offers one of the best possible solutions to patient handoff care possible for the hospitals and patients.

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