

**IMPLEMENTING A PROCESS TO REMOVE URINEARY
CATHETERS WITHIN A CERTAIN TIME FRAME AT UROLOGY
WARD**

Abstract

This essay clearly depicts the concept of an initiative of process for removing the urinary catheters from the patients admitted at urology ward. Various issues faced by the long-term usage of catheters has been analyzed here in this piece and here the importance of removing the urinary catheters timely lies down. On the other hand, the importance of a proper implementation process for the patients as well as the medical professionals have been described in this essay. The proposed initiative here is the implementation of process to remove catheter form the patients and the major aim and objective of this initiative has been mentioned here. The analysis of the key stakeholders has been analyzed here properly. PDSA cycle of implementation has been described in tjhis essay which can be beneficial for this proposed initiative.

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Background

A Urinary Catheter is a tube for collecting urine in a bag by emptying the bladder. However, there are various types of urinary catheter and it is implemented as per the prescription of the doctors after analyzing the needs of the patients such as indwelling catheter, external catheter, and intermittent self-catheter etc. This thing is required for those people who cannot control his/her urine or who are not able to empty his/her bladder, or they have any surgery on genitals/prostate. Various issues are also there of using a catheter for a long time and it is required to remove the catheter after a certain time. However, an advanced process for removing the catheter after a proper time is needed a lot for the patients as by that the patients can stay in a safe condition.

The main problem of using a catheter for a long time is that it sometimes allows bacteria to invade the patients' body and it creates infection in the patients' body. However, for reducing these issues it is required to remove catheters from the patient after a time at the ward. It is highly recommended to implement a proper process for removing catheters for providing advanced safety to the patients.

It has also been notified that sometimes the patients suffer due to insertion of the urinary catheter in a wrong way. On the other hand, the patients can also suffer by using the same catheter for a long time without changing it. The patients can also face other complications apart from infection due to using a catheter for a long time. The patients of the urology ward are mainly affected by that. The proper knowledge of the urinary catheter

of the nurses or caregiver is very important for reducing the risk factors of the patients regarding the urinary catheter.

The knowledge of the ways of how to remove the catheter properly is a basic knowledge for the nurses or the persons who take care of the patients. However, all the issues of removing a urinary catheter from a patient can be removed by using a process to remove the catheters after a proper time. However, as cited by Pelling *et al.* (2019), when a patient starts to use a catheter for his/her complications it seems to be very normal but after a certain time of not changing the catheter the patient starts to face various issues. It has been known that catheters are used by the patients for getting relief but then it starts to create complications rather than providing relief.

The patients can get huge relief by the proper implementation process of a catheter as it is harmful to use a single catheter for such a long time. The catheter insertion process becomes much easier and it provides relief to the caregivers or the patients by introducing a proper implementation process. It means the patients are in safe hands. This initiative will be very beneficial for the patients as well as the nurses, doctors or the caregivers. However, sometimes the patients can develop injury in the urethra while inserting the catheter. Bladder injury is also possible at the time of inserting the catheter. Furthermore, it can be said that for reducing those kinds of injuries it is required greatly to implement a process for inserting a catheter.

A proper knowledge of bio-psychosocial nursing is needed for dealing with adult patients by using the components of psychological, biological, and sociocultural. As pointed out by Shepherd *et al.* (2019), the problem their patients face while inserting or removing the catheters can be dealt with easily with the help of bio-psychosocial components/factors

which can be well analyzed by the biopsychosocial nurses. On the other hand, the professionalism of the medical staff is required mostly for dealing with those issues related to the catheters. It is the role of the professional medical staff or caregivers to provide hazard free removal or insertion of catheter to their patients. The unaware person should not try this because it may become harmful for the patients rather than providing them better health.

It is the time to improve the catheter usage and the proposed initiative can help in this situation. The medical professionals have to play the major role to give a proper direction of this initiative for achieving its goal. The professionals have the proper understanding of what is best for the patients of the urology ward of the healthcare center as per that they should proceed with the initiative for the benefits of the patients and the caregivers.

Literature Review

It has been identified from the text that the removal process of catheters from the patient properly is the main issue here. However, if the catheter does not remove in a proper way or does not remove after a certain time it can become dangerous for patients' life. It can be said that it can be a life threat for the patient in the long run. Furthermore, for overcoming these life threatening issues it is much more needed to create an effective catheter removal process in the urology ward for maintaining the safety of the patients. It has already been known how important a catheter is for those people who suffered from

any urological problems . On the other hand, it is also mandatory to know the proper usage and the time of removal of the catheters.

The proposed initiative is to implement advanced ways to remove catheters timely and it is going to be highly beneficial for the clinical practice as well as for this particular service users. The proposed initiative can be implemented through various ways and the objectives and aim should be very clear for taking the best result from this initiative. This initiative can work at its best whenever it will fulfill the key aims and objectives of the purpose of this initiative. Various cases have been found where the patients have suffered a lot due to the ignorance regarding the catheter and its proper removal process. As per the view of various researchers bacteria attacks the urinary tract of the patients for using indwelling catheters. Urinary Tract Infection is a very common disease of using the same catheter for a long time. It has been noticed from various medical cases that UTI mainly affects the patients who use indwelling catheters for a long time.

As per the knowledge of Zeng *et al.* (2020), various complications apart from this UTI can happen to the patients which can also become a major threat for the patients and even if a patient suffers from UTI after using a catheter it is important firstly to treat this. On the other hand, inappropriate self insertion can also be seen among the patients. This tendency can be seen among those people who are using the catheter for a long time and have become habituated to using this. It can be said that this is not a proper method as it sometimes becomes dangerous for them as they cannot insert the catheter properly. However, by seeing this issue it can be said that implementing proper process for removing the catheter is also important for preventing the wrong self insertion process of catheters.

The major aim of this proposed initiative of implementing a particular way to remove urinary catheters is to reduce the risk factors of using urinary catheters. On the other hand, according to Sadeghi *et al.* (2019), the reducing amount of infection in the urinary tract is also a major aim for implementing processes to remove the catheters timely. However, this particular suggested initiative is very much effective for healthcare organizations. The patients and their family members always want an advanced healthcare facility and by using this initiative regarding removal of catheters the healthcare organizations can easily provide the best services to its patients at the urology wards.

It is mandatory for the healthcare staff to have proper knowledge regarding the usage of catheters as well as its removal. On the other hand, cited by Anjum *et al.* (2018), just like it is mandatory to change or remove the catheter after a particular time, it is also important to remove catheters properly by the experts. The catheters are one of the valuable instruments for treatment but the prolonged use or the wrong usage may hamper the patients' health greatly. Removing the catheters properly requires proper catheter removal rules and protocols and it has to be followed by the clinical practitioners or the caregivers. The most used medical device, catheter in any healthcare organization has to be used properly for getting the best result out of it.

The proposed step or initiative is needed for the hospitals for providing the utmost safety of the urology patients. Various interviews have been made upon the patients admitted in the urology ward and those who have taken help of various types of catheters have faced various kinds of complications. Finding the answers of various patients it has been said in many medical journals that urinary catheters should be used by the professionals only

when there are no options left. However, it has also been mentioned in those medical journals that it should be removed as soon as possible as it is not good to use for a long time. There is a proper process to remove the urinary catheters and this has to be followed strictly for removing it without affecting the patients' health.

The removal of catheters does not hurt the patients if it is done properly. However, as opined by Agarwal *et al.* (2019), at the very first level it is required to cut the particular balloon port after identifying it which is at the end of the urinary catheters. It is needed to wait for water to trickle out and later it is important to pull out the catheter. However, it can be said that these steps are the proper and justified for removing catheters and for providing proper safety to the patients these are needed to be followed. These steps are requested to perform by the healthcare professionals for achieving the highest safety of the patient party.

The strengths as well as limitations of depiction of a particular process for removing the catheters are going to be discussed in this portion of this essay. However, depicting a particular way for catheter removal is a strong point for achieving the utmost safety at various healthcare organizations. The health of the patients remains safe by maintaining the protocols of the removal. However, when the healthcare organizations will start to use the proper process for removing the catheter it will be beneficial for the hospital staff as well as the patients because by following steps the patients' safety will be maintained. On the other hand, the limitations are also there. However, if the medical staff is unable to follow the processes due to his/her misunderstanding, he/she will make the process more complicated. The medical staff then can do nothing except increasing the troubles of the patients.

It has been identified from the very early stage that in spite of being one of the most important medical instruments, catheters are not so good for the health of the people. However, sometimes the materials of catheters become dangerous or sometimes the wrong removal process creates hazardous to the health of the service users (A, 2022). It is required to depict a process by following which the medical staff can easily remove catheters after a certain period of time. Furthermore, as pointed out by Yavuz *et al.* (2018), a simplification process for removing the catheter is required in this context. The steps of removal are needed to be more advanced and improved to provide better medical facilities to the patients without giving them any pain.

The usage of catheters are increasing day by day among the men as almost 2 men out of 10 suffer from any kinds of prostate gland issues. They have the urgent needs of urinary catheters sometimes. However, as it is used in a large amount it is much more needed to simplify the use and also the removal of catheters. It clearly states the importance of the proposed initiative regarding the catheters. The importance of the proposed initiative can be analyzed perfectly by seeing the positive sides of this initiative. The positive effect on the patients is very important for giving shape to the initiative. However, when we can see the insertion or removal of catheters in a smooth way by following an advanced process, the effectiveness of the initiative can be measured. As opined by Kleidon *et al.* (2019), it can also be said that it is also mandatory to take care of the patients with catheters even after starting implementation of the process for removal and insertion of catheters.

The professionals have to take the most important role to fulfill the needs of the patients who use catheters by developing the proposed initiative properly. It has already been stated that this initiative is very crucial for developing the treatment at the urology ward.

The healthcare organizations can get immense success after applying the initiative regarding catheters with the help of their professionals. However, a pain free treatment or obstacles free treatment is always required for the patients and as many young adults have the need of catheters due to their various surgeries it will be very beneficial to use advanced process for insertion and removal of catheters.

The proposal

Introduction

Catheter-associated urinary tract infections are very known and common hospital-acquired infections in the urology ward. Catheter-associated urinary tract infections are broadly felt to be the major avoidable hospital-acquired infection, with compatible reduction of occurrence by the performance of standard improvement initiatives. Standard quality improvement is much needed for better implementation for urinary infections. Catheter-associated urinary tract infections are a major safety priority for healthcare organizations and their better implementation relates to its impact on the healthcare organizations. The proposal of this project analysis is to implement an incorporative standard quality improvement program for reducing the use of catheters and catheter-associated urinary tract infection (CAUTIs) rates in the middle of an older population, while at the same time addressing persevering barriers to the success of quality initiatives. Accurate implementation of the standard quality initiatives is more impactful for decreasing the infractions rates for the healthcare organizations. In healthcare organizations, nurses and medical staff take a more vital role in the implementation of the

standard quality initiative. The proposal of the study describes the identification process regarding the mentioned issues and makes better preparation and provides a better implementation initiative plan to reduce the impact of the urinary catheters.

Aim of the QI initiative

The aim of the standard quality initiatives is mainly to reduce the urinary catheter utilization and catheter-associated urinary tract infections in the urology ward of the healthcare organizations. The aim of the qualitative initiatives has been based on two discussions which are the key driver's point and the interventions of the key drives (Takahashi *et al.* 2021). Key drivers of the aim related to increasing the physician's awareness of catheterization status, reframing urinary catheter risk for staff and patients, reducing the proportion of catheters placed with inappropriate indication, reducing the duration of catheterization, and streamlining and simplifying post-catheter care. The key drivers are directly involved in the aim of the qualitative initiatives. The intervention of the aim is directly related to the key drivers of the aim. The aim of quality initiatives is mainly better implementation in the healthcare organizations and to reduce the urinary catheter-associated tract infections.



Figure 1: Aim of the QI initiatives.

(Sources: Self-created in draw.io)

Sets Goals

Setting accurate goals along with the aim of the study is much needed for its success. Goal setting is completely based on the case study and before setting accurate goals, identification of the problem is the only option to improve the motive of goal sets (Spencer *et al.* 2019). The healthcare organization mainly follows the outlined six aims for its improvement. These six aims are the pillar of quality improvement for the healthcare

organization and they can also guide the organization for accurate goal-setting as per the healthcare need. The six outlined improvement aims of goal setting are discussed below:

- **Effective:**
Avoid all the sources which are ineffective for healthcare and underuse of effective care. Match the source of the use in healthcare scientifically.
- **Safe:**
Safety is the first priority for all healthcare organizations. Avoid all injuries to the patients of healthcare from the care that is deliberate to help the patients.
- **Timely:**
Provide the best focus for both patients and those who give care to them. Timing is a big factor to do any work in an accurate way.
- **Patient-Centred:**
Give honour to the individuals of the healthcare staff and patients and respect their choices (Yu *et al.* 2020).
- **Equitable:**
Stop the ethnic gaps and racial health status.
- **Efficient:**
Reducing waste management in the healthcare organization is a big part of efficiency.

Become Familiar with the PDSA cycle

The institution for healthcare improvement recommends the use of the PDSA cycle model for better improvement as a framework to guide the improvement efforts of the healthcare

organization. According to the institution of healthcare improvement, the PDSA cycle model, developed by associates in process improvement, is defined as a simple, yet very strong or powerful factor for accelerating the quality initiative improvement. The model core is based on the Plan-Do-Study cycle, which is popularly known as the PDSA cycle. This cycle is to test the improvement or quality-related changes in the clinical ward. The PDSA model starts with a planning step (Christoff. 2018).

This includes identifying goals or objectives, developing theories, defining indicators of success, and executing plans. These activities are followed by the steps that implement planning components such as product manufacturing. Then the other step is the investigation step. This study monitors the results and tests the progress and signs of success of the plan or problems and areas for improvement. The PDSA model Act step completes the cycle by integrating the learning generated throughout the process. It can be used to extend to larger implementations by adjusting goals, changing methods, rewriting theory, or using learning improvement cycles from the little experimental proposals (Zann *et al.* 2021).



Figure 2: PDSA Cycle of implementation,
(Source: Self-created in MS-WORD)

Key Stakeholders

Stakeholders of the organization are a vital part of the healthcare organization for the success of the advancement plan. Stakeholders of the healthcare organizations should take the responsibility for the needed improvement and implementation of the healthcare organizations. The organization's staffs and nurses are more important factors for the

organization and they take a very effective part in the quality initiative development plan. Stakeholders directly or indirectly take the beneficial part for the healthcare organization and also they are the only responsible person to get benefit or bare the loss for the organization (Van Decker *et al.* 2021). Due to the inevitability of resource requirements associated with process changes, corporate management identifies sources of training funding, purchases and tests innovative technologies and equipment, and actively participates with key stakeholders. The Stakeholders needed to secure adequate financial resources by being able to provide the time and other requirements. The change process provides administrative support. Support time-consuming projects by giving them plenty of time to work, emphasizing safety as an organizational priority, and raising expectations. Senior managers also need to understand the impact of high-level decision-making on work processes and staff time, especially when efforts to change practices are underway, improving quality for overall system management and development.

Impact of QI initiative

Improvement is based on many sources but a quality initiative of improvement is the perfect result for proper success (Crawford *et al.* 2021). Success is the main key point for any kind of plan or program and for providing the accuracy and exact implementation of the project a valuable quality initiative improvement is much needed for its improvement. The impact of a quality initiative always should be in a positive way and by its positive impact the improvement initiative grows more impactful or powerful. The quality initiative can increase the positive outcomes for the healthcare organization and motivate the support staff for better progress in this working field. After applying the quality initiative

method the organization also increases its various facilities and equipment uses, which is very beneficial for the patients and they will get a better outcome from that. Quality initiatives develop the knowledge about the better implementation processes and various improvement way for its sustainability. The positive impact of the QI is always helpful for the organizations and their support staff, and the positive impact set the success rate of initiative for improvement and delivers accurate and easier output for the healthcare organizations (DePuccio *et al.* 2019).

Method

The method of this study analysis shows the activity, impact, and better strategy regarding this case analysis. The method of the case analysis describes the improvement required in the quality initiative for its improvement and the better strategically implementation theory to reduce the facing problems in this case analysis. Technological equipment uses, key factors of the stakeholder, and the improvement process was discussed briefly to accurate implementation process regarding case analysis . The method of this case analysis is based on a strong and proper aim against the facing issues and on behalf of those aims sets the goals to fulfil the quality initiative improvement process. The aim of the case and an accurate goal strategy make the whole analysis very strong and the outcomes of this analysis are also very effective for healthcare organizations. Which process follows in the quality initiative for improvement is described in the methodology portion of this case or project analysis. This process follows all the necessary requirements and maintains the sustainable factor for this analysis. Every involvement

and uses are part of the method portion. QI is most effective and impactful for healthcare organizations and awareness of the QI improvement is also most important for organization staff, nurses, and others. A brief method of the case analysis shows its accurate presentation of the plan as per improvement and implementation. At the time of this case analysis, the PDSA cycle discuss separately, and by using this cycle the QI improvement process is much easier and the outcomes of this analysis help to provide good output (Gas *et al.* 2019).

Improvement in QI initiative

Due to the complexity of healthcare and the massive variability and waste of US healthcare, it seems far possible to embark on a quality improvement initiative. However, quality improvement in healthcare is achievable if the system uses the five principles outlined in this article as a guide, from obtaining physician approval to using a scientific method-based improvement framework. Healthcare organizations could modify the gesture and pace of quality improvement plans by beginning the small tests and learning from those tests. Quality initiatives need to be defined in terms of relevant steps and project scope. Completion times, resource allocations, and possible project costs should be defined early on (Ndomba *et al.* 2021). QI initiatives can be more successful if their scope is consistent with corporate strategy. If the initiative is patient- and family-centric care and focuses on patient satisfaction, we can provide quality care. Involving the patient and family can produce better results for the patient and thus eliminate preventable harm.

Quality improvement projects and few studies were involved in this analysis. The finding of the improvement projects was categorized by the type of quality method staff of the organizations and other employees, including the studies PDSA, Six sigma method, and FMEA method. After that study was found many different themes emerged and were engaged in this analysis . The first emerged theme was, the requirements needed to implement a quality improvement strategy in this analysis, the second emerged theme was, the knowledge about using quality improvement factors in the health care organizations. And the third emerging theme was the learning outcomes from evaluating the impact of change interventions in this project analysis.

Implementation Strategy

Substantial and strong leadership support, dedication, consistent commitment to continuous quality improvement, and both written and physical visibility were essential to making significant changes. It was also pointed out that important commitments from hospital authorities are needed. Leadership is needed to make patient safety an important aspect of all meetings and strategies, create a formal process for setting annual patient safety goals for the organization, and be responsible for patient safety outcomes (Price and McKeon, 2020). Even with strong and dedicated leadership, some individuals within an organization have previously attempted to make a difference through a variety of system factors, lack of commitment across the organization, inadequate organizational

relationships, and ineffective transmission. Has been hindered, so I hesitate to engage in quality improvement efforts.

Establishing Measures

Regardless of the improvements, the care facility is trying to achieve, the source of the improvements lies in the institutional safety culture. Qualitative measurements can provide valuable subjective data that can be used to assess safety culture. Staff awareness, such as managers and staff awareness of resident harm such as CAUTI and falls, and staff harm, such as disciplinary response to mistakes, can affect culture (Matsukawa *et al.* 2021). One way to measure whether a care facility's safety culture is improving is to use a safety survey.

Process measures

Quantitative measurements provide objective data for assessing progress towards a goal. Process indicators such as device utilization and urine culture collection rates can help determine how well the intervention is being performed. It outlines the selection of these measurements, along with a set of selected measurements to consider when measuring performance to reduce CAUTI, and tips for collecting them. Consider joining the Centres for Disease Control and Prevention (CDC) National Medical Safety Network (NHSN) tracking system. For NHSN enrolment training and guides, see the Long-term care facility components drop-down list on the NHSN website (Baboudjian *et al.* 2022). From there,

scroll down to other registration resources to access the registration and set up checklist, weekly recommended tasks list, and other useful registration resources.

Measures Outcomes

Engaging nursing staff, frontline staff, residents, and family members in progress monitoring, as well as managers, promotes team accountability. It also gathers support for improvements being implemented and provides staff with a voice to identify feasible solutions to improve resident safety. Evaluate and share program data to encourage, inspire, and motivate facility staff, residents, and families. Identify where more or different interventions are needed to amplify the positive changes made or optimize the safe care of residents in need of catheters. Strategies for sharing data include newsletters, posters, staff meetings, secret talks, safety committee meetings, board meetings, residents' or family council meetings, and one-on-one meetings.

Data collection

In this preferred case study, the data collection method is based on the secondary qualitative data collection mode. The secondary data collection method majorly follows all the sources such as journals, various online websites, the latest articles related to this case study, daily newspapers, and other sources of this case study related. All the collected data should be genuine and must be valuable for this case study (Shinchi *et al.* 2021). The data collection method is also done by a survey program in the healthcare organization and individually collect the data from the organization's staff and take a brief

review about the facing problem and awareness about the quality initiatives. This data collection method also helps to understand the requirements and identify the accurate problem and problem sources for the case study. The impact of the data collection method is very helpful for the organization as well as the patients and staff both. The data collection process is vital and very important to accurate identification and getting better outcomes, so the process of data collection needs full concentration and brief knowledge about the process.

Data Analyses

After collecting the data from various secondary sources, now it's time to analyse the data to find out the ratio and actual problem in this case study. The analyses of collected data help to make a better plan for improvement in the organization and provide a plan to reduce the facing problems. After the data collection, all the data is put together in a spreadsheet for analysis. The data collection method is a teamwork process and the outcome of the data analyses is the successful outcome of those team members (Tyson *et al.* 2020). The data analysis process provides the accuracy and better strength for making a development improvement plan and makes the implementation process more powerful.

Governance and Ethical issues

Governance and ethical issues take a vital role in this type of case analysis or quality improvement project. At the time of this quality improvement project analysis, uses all

equipment and sourcing materials are authentic and genuine. All the use sources are related to the QI improvement project and any kind of fraud activity does not take any place in this case analysis. Beginning to the end of this case analysis all mandatory precautions are taken very seriously and also noted the rules and regulations of the government-issued regarding this case analysis. During this QI improvement project analysis does not harm any life and the motive of this project analysis is always to implement the quality initiative improvement (Hafizi *et al.* 2018). During this project analysis, all the used source was given proper authentic value and importance.

Conclusion

In this QI improvement project or case analysis, discuss the brief proposal of the quality initiative improvement in the healthcare organizations. During this case analysis firstly identify the proper and accurate aims and goals of the case analysis. The PDSA cycle plan plays an effective and vital role in this analysis. The PDSA cycle describes briefly in this project analysis and during this case analysis maintain all the governance and ethical issues regarding this project analysis to avoid any kind error outcomes of this case analysis. Supportive evidence is also provided in this project analysis. The qualitative data collection process and data analysing process are also described for better implementation of quality initiative improvements. Measure outcome of this project analysis and the proper implementation strategy is also provided in this project analysis.

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