

**The Impact of Diabetes: Quality Improvement**

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## **The Impact of Diabetes**

The strategy for methodically enhancing care is called quality improvement (Deshpande et al., 2018). Quality improvement eliminates variation, achieves predictable outcomes, and improves outcomes for patients, healthcare systems, and businesses (Deshpande et al., 2018). Identifying and addressing poor operating procedures is necessary to implement a quality improvement program (Deshpande et al., 2018). Therefore, Quality and Safety Education for Nurses (QSEN) educates future nurses with the knowledge, skills, and attitudes required to consistently enhance the quality and safety of the healthcare systems they practice (Deshpande et al., 2018). When delivering compassionate and coordinated care based on respect for the patient's preferences, values, and requirements, patient-centered care views the patient or designated person as the control source and complete collaborator (Deshpande et al., 2018).

Additionally, it is crucial to keep an eye out for signs and symptoms based on the patient's diagnosis, particularly Diabetes, and how to treat the patient correctly and efficiently to provide high-quality patient care and promote open communication (Galicia-Garcia et al., 2020). *Diabetes* is a long-term metabolic condition marked by high blood glucose levels, which seriously harms the heart, blood vessels, eyes, kidneys, and nerves over time (Galicia-Garcia et al., 2020). The holistic care of the patient and the successful management of their condition dramatically influence the need for nursing impact of diabetes education, nursing techniques, illness awareness level, complications, and patient compliance (Galicia-Garcia et al., 2020).

## **Article Summary**

A series of illnesses referred to as diabetes mellitus alter how the body utilizes blood sugar (Galicia-Garcia et al., 2020). For the cells that make up the muscles and tissues, as well as the brain, glucose is a crucial energy source (Galicia-Garcia et al., 2020). Regardless of the form, diabetes can result in excessive blood sugar levels because its primary causes vary (Galicia-Garcia et al., 2020). An extreme sugar level in the blood might cause serious health problems (Galicia-Garcia et al., 2020). Additionally, the article's introduction, summary, and quality improvement will go through the science behind controlling blood sugar levels and how changing to a healthy lifestyle will lead to a significant loss of weight and a decreased risk of acquiring diabetes (Galicia-Garcia et al., 2020). The nursing profession is essential to managing diabetes and patient care regarding patient education and medication adherence (Galicia-Garcia et al., 2020).

## **Introduction**

Diabetes is one of the chronic illnesses that regularly influences how people perceive their quality of life in terms of their health and degree of depression (Galicia-Garcia et al., 2020). As a result, there is a higher risk of morbidity, death, and poor treatment compliance (Galicia-Garcia et al., 2020). Nurses play a critical role in promoting awareness of the warning signs and symptoms to help guarantee quick diagnosis and treatment by offering helpful dietary and lifestyle advice to persons at risk of developing diabetes and helping lower their risk (Galicia-Garcia et al., 2020). Because nursing is a practice-based specialty, research solves problems that directly impact nursing practice, whether in patient care, administration, or education (Galicia-Garcia et al., 2020). The cornerstone of healthcare is education which allows nurses to identify and teach about these problems early and provide the needed care (Galicia-Garcia et al., 2020).

## **Overview**

Diabetes is becoming more common worldwide, affecting adults in every country (Hirsch & Gaudiani, 2021). Nurses are essential in assisting people with diabetes to understand and manage their disease (Hirsch & Gaudiani, 2021). However, many people go without the necessary care due to the 5.9 million nurse shortage worldwide (Hirsch & Gaudiani, 2021). People with type two diabetes or at risk of developing it may be unable to prevent serious complications such as heart attacks, strokes, renal failure, blindness, and amputations (Hirsch & Gaudiani, 2021). Nurses are essential in supporting persons with diabetes (Hirsch & Gaudiani, 2021). They are frequently the most crucial parties in caring for someone with diabetes and the individual they support (Hirsch & Gaudiani, 2021). Nurses not only assist in administering medication, such as life-saving insulin, but they also provide critical health and psychological counseling to help patients deal with the everyday struggles that a chronic condition that lasts a lifetime can bring (Hirsch & Gaudiani, 2021).

Furthermore, nurses frequently create the networks of social support that many people with diabetes rely on for direction and certainty (Hirsch & Gaudiani, 2021). According to the QSEN competency Quality Improvement, evidence-based practice is necessary to deliver the greatest possible healthcare by integrating the most recent research findings with clinical knowledge, patient/family preferences, and values (Hirsch & Gaudiani, 2021). By implementing evidence-based knowledge in their daily practice, nurses will promote effective and efficient quality care for patients and promote better healing practices (Hirsch & Gaudiani, 2021).

## **Quality Improvement**

Home care, various clinics, and hospitals are among the care environments where the implementation of Quality Improvement initiatives can be applied (Khan et al., 2019). Effective

diabetes management improves by collaborating with a team of healthcare specialists (Khan et al., 2019). It is crucial for people with diabetes to participate actively in their care and work together with their diabetes care team to share their triumphs, worries, and challenges (Khan et al., 2019). Patients are ultimately in charge of their diabetes care because they are the one who handles most of the care, along with diabetes educators, who may be registered nurse, dietitian, or pharmacist (Khan et al., 2019). Sometimes, a diabetes care provider may be a doctor, nurse practitioner, or physician's assistant (Khan et al., 2019). Resources such as a responsive healthcare team and support system at home must be readily available during all implementation stages of these Quality Improvement efforts (Khan et al., 2019). They use data to monitor the outcomes of care processes and use improvement methods to continuously design and test changes to improve the quality and safety of healthcare systems (Khan et al., 2019).

Additionally, during the pre-, intra-, and post-stages of implementation for Quality Improvement programs, resources such as a responsive healthcare team and home support system should be easily accessible (Khan et al., 2019). Patients' intentions and behavioral requirements are essential during the pre-implementation stage, also referred to as the preparation stage (Khan et al., 2019). When managing a patient with diabetes care, healthcare team members and patients should agree on the best course of action (Khan et al., 2019). The patient should feel responsible for adhering to their prescription regimen and checking their blood sugar levels (Khan et al., 2019). The healthcare team will be held accountable for ensuring that patients receive proper education on monitoring for adverse effects and what steps to take (Khan et al., 2019). In the intra-implementation stage, people should take action and alter their experiences, behaviors, and environments to solve their problems (Khan et al., 2019). This stage's steps entail the most prominent behavioral changes and demand a significant investment

of time and effort (Khan et al., 2019). Some patients could fail to follow instructions, but healthcare personnel should educate the patient thoroughly and stress the value of controlling compliance to prevent subsequent difficulties (Khan et al., 2019). The post-implementation of Quality Improvement requires maintenance (Khan et al., 2019). Patients work to prevent relapse and consolidate the gains attained during the previous stage (Khan et al., 2019). Maintaining management of diabetes through physical activity and a healthy diet is vital in caring for patients with this condition because it is a lifelong fight (Khan et al., 2019). As patients fully understand the effects of this condition, they are more aware of the complications that could occur and educated on appropriate preventable measures (Khan et al., 2019).

Although many individuals are reluctant to seek care for managing their diabetes, numerous organizations provide financial assistance to help lessen the high costs of treating and managing the condition (Khan et al., 2019). The finance government has formally acknowledged that charitable groups can fill the gap for people who have insurance but cannot access benefits owing to a lack of funds to cover required premiums and copays (Khan et al., 2019). Allowances to assist in managing diabetes mellitus are one type of financial benefit (Khan et al., 2019). These allowances, also known as reasonable accommodations, consist of the opportunity to store diabetic supplies and meals close at hand, the flexibility to work a modified schedule to accommodate better, breaks throughout working hours to check blood sugar levels, and more (Khan et al., 2019).

It is possible to systemically improve care by standardizing processes and structure to reduce variation, achieve predictable results, and improve outcomes for patients, healthcare systems, and organizations (Khan et al., 2019). By implementing Quality Improvement changes to impact the institution financially, patient satisfaction, nursing satisfaction, increase patient safety, and

nursing safety to attain the ultimate result, open communication should be easily accessible (Khan et al., 2019). The healthcare staff holds patients equally accountable for their treatment plans, which will positively impact the care plan (Khan et al., 2019).

### **Application to Nursing**

One of the most prevalent illnesses in the world today is diabetes mellitus (Skyler et al., 2017). Genetics, environmental factors, excess weight, and inactivity are a few possible causes of diabetes (Skyler et al., 2017). Patients can achieve effective diabetes treatment through appropriate lifestyle management and nursing guidance (Skyler et al., 2017). Practice, education, and medical research help nurses give accurate and current knowledge about the patient's health to deliver the right interventions and care (Skyler et al., 2017). The participation of the healthcare team in putting interventions into place for their patients further improves the patient experience and nursing as a profession in managing diabetes (Skyler et al., 2017).

### **Practice**

The best or preferred nursing practice for managing diabetes entails teaching patients about home glucose monitoring, assessing the type of insulin given, and routinely checking injection sites (Skyler et al., 2017). It will be possible for patients to examine how their dietary decisions, physical activity, and medication use affect their blood glucose management by talking about glucose monitoring at home according to specific parameters (Skyler et al., 2017). Reviewing the type of insulin used will help the patient become more aware of expired insulin, the temperature it is stored, and how long insulin vials are effective (Skyler et al., 2017). Regularly inspecting injection sites will help prevent lumpy skin and the potential for infection

(Skyler et al., 2017). Evaluations must be completed after interventions because the healthcare team is also responsible for determining their effectiveness (Skyler et al., 2017). In addition to assessing the client's understanding of the factors contributing to varying blood glucose levels, diabetes nursing practice also verbalizes successes in altering factors that avoid or limit changes in glucose levels (Skyler et al., 2017).

### **Education**

The current requirements for training personnel in patient care or nursing practice related to diabetes management include a long-term commitment and a trusting connection that promotes open communication (Trikkalinou et al., 2017). Some responsibilities include teaching about healthy nutrition, checking blood sugar levels, administering insulin, and caring for their feet and skin (Trikkalinou et al., 2017). The risk of morbidity and mortality decreases for people with diabetes by helping them manage and treat their illness at the right time, lowering risk factors and lessening the possibility that they will develop complications (Trikkalinou et al., 2017). Prevention advice also approaches for behavior modification and health coaching (Trikkalinou et al., 2017). A program called diabetes self-management education and support helps people with diabetes acquire the knowledge and skills they need to change their behavior and improve their health (Trikkalinou et al., 2017).

### **Research**

Glucose self-monitoring, medication adherence, and a healthy diet are priorities for additional research in diabetes care from a nursing clinical or professional standpoint. When caring for diabetic patients, medical practitioners prioritize restoring fluid and electrolyte balance, managing the underlying cause of diabetes, and avoiding diabetic complications (Trikkalinou et al., 2017). Glucose self-monitoring and medication adherence are the diabetes



requirements addressed most frequently by patients (Trikkalinou et al., 2017). Plans for treatment and education for this population should include interventions that address their overall health and social needs (Trikkalinou et al., 2017).

### **Conclusion**

The quality improvement aim of the QSEN competency of quality improvement specifies the knowledge, skills, and attitudes that should become part of nursing pre-licensure programs to satisfy each competency's objectives (Trikkalinou et al., 2017). These programs address the challenge of continuously preparing aspiring nurses to improve the standard and security of their healthcare systems (Trikkalinou et al., 2017). The goal of diabetes management is to keep blood glucose levels as close to normal as is safe (Trikkalinou et al., 2017). When directed by nurses, controlling blood pressure and cholesterol levels is essential to diabetes care because diabetes may considerably increase the risk for peripheral artery disease and heart disease (Trikkalinou et al., 2017). Promoting self-care, screening, and early detection are necessary for diabetes management (Trikkalinou et al., 2017).

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