

**Project Title: Enhancing the Adherence of Diabetes Patients towards Self-Monitoring Blood Glucose Levels**

**Student Name:**

**Project Plan**

**Rationale**

The main aim of this project is to address the problem of non-adherence of diabetes patients towards self-monitoring of blood glucose levels. According to the literature, self-monitoring of blood glucose levels by individuals suffering from diabetes is considered as an important health management strategy that not only reduces the financial burden on the individuals (such as the extra cost of frequent hospital admissions) but also reduces the healthcare burden (NHS England, 2017). Evidence has further informed that the number of diabetes patients is significantly increasing in the UK, which has many health implications (Whicher, O'Neill, & Holt, 2020). Baird et al., (2018) argued that hyperglycaemia can lead to increasing increase the risk of cardiovascular disease, kidney diseases, lifelong disability as well as premature mortality.

Zhu, et al. (2016) identified in their randomised control trial that self-monitoring of the blood glucose level could significantly improve HbA1c levels and reduce the other health-related complications, as the individuals will be well equipped to identify the events of hypoglycaemia and hyperglycemia, which would improve self-care management. According to Roze, et al (2020) also confirmed in their study that around 700 people are diagnosed with diabetes every day in the UK, which displays that the burden of disease is very high. However, the main problem identified through the literature is that people suffering from diabetes display non-adherence behaviour towards self-monitoring of blood glucose. It is mainly because of the lack of knowledge, health education and motivation (Adu et al., 2019).

The existing body of research informs about the problem of poor health education and knowledge about the disease as the main reasons for non-adherence (Brohi et al, 2020). However, there is limited evidence related to the involvement of health professionals in enhancing knowledge of diabetes patients and the use of

strategies to engage individuals in self-management of disease. Therefore, this project identifies an opportunity to further investigate the importance of adopting relevant strategies to engage the individual in self-care behaviour to improve their adherence to self-monitoring of blood glucose levels (Parsons et al., 2017). This project would be significant in meeting the need that is not being currently met. One of the most important quality dimensions associated with this project is “*responsive and personalised*” care and support to improve the health outcomes of individuals and reduce the burden on the healthcare system.

### **Objectives**

Following are the objectives of this project:

- **Specific:** This project will focus on developing a Nurse Champion specifically for diabetes, who would educate and empower the diabetes patients to improve their skills related to self-monitoring blood glucose levels and enhancing their engagement in their own care.
- **Manageable:** Nurse Champion 4 days training to ensure that he or she will have detailed knowledge about self-management strategies of diabetes and knowledge about influencing individual’s health behaviour.
- **Achievable:** Since this project focuses on responsive and personalised care, Nurse Champion will focus on providing monthly telecare or telephonic support to individuals.
- **Realistic:** For achieving the complete self-monitoring skills, the project will support individuals for a period of 12 weeks.
- **Timescale:** Diabetes patients would receive complete self-monitoring skills and knowledge within the period of 12 weeks.

### **Potential Benefits**

Self-monitoring of blood glucose levels is considered the most effective strategy in the self-management of diabetes. Hannon et al (2018) have considered that self-management of diabetes is the most significant way of reducing diabetes-related health complications, reducing hospitalisation and also improving long-term health outcomes for diabetes patients. Therefore, when the project will achieve its objectives, the added benefit of the project for patient who would be able to manage their lifestyle, manage their diet and would have better engagement in self-care and will also improve their quality of life (Hannon et al., 2018). Clinical

benefits would be that encouraging self-care behaviour would empower individuals and will reduce the financial burden on healthcare systems (Robson et al., 2015). The project will also bring organisational benefits by improving the quality of care delivered and reducing negative health outcomes. Staff members would gain knowledge about engaging diabetes patients in their care and will bring financial benefits for all individuals, families and the whole healthcare system. Providing responsive and personalised care would empower people and help them to design their own care.

### **Context**

Initially, this project will be implemented in one locality to test the project as a pilot project. One Nurse Champion would be trained to carry out the project at the first locality (ward). If the pilot project is successful, it can be duplicated at other localities as well. Firstly, the project would be conducted at the locality, where the caseload is not very high, in order to assess the benefits and challenges of encouraging individuals in self-care behaviour. Later, the project will be progressed to other hospitals where the number of diabetes outpatients would be more than 100 per day, and where the number of diabetes patients is high. One Nurse Champion would be trained in every location. The main intention towards starting this project was specifically associated with personal experience with diabetes patients. It was found the number of individuals with uncontrolled diabetes was increasing, thus there was a need to develop a project through which this health complication could be regulated.

### **Intervention**

Band 5 Nurse champion plays the main role in this project. According to NHS, band 5 nurses are the newly qualified nurses. The main driving force behind the pursuit of champion nurses is to make difference in the life of people and improve their health outcomes (Drayton & Luck, 2021). Therefore, the band 5 champion nurse would be selected on the basis of their experience with diabetes patients, who would receive 4 days of training. This training would include four different parts- understanding pathophysiology of diabetes in detail, understanding the importance of self-management in diabetes, understanding strategies to engage diabetes patients in self-care and learning about the importance of patient's

motivation and behaviour in their own care to enhance their self-monitoring blood glucose levels. Patient education and empowerment is the main purpose of this project, thus nurse champions would be trained in using various forms of patient education strategies, such as educating them through pictures, videos, testimonies and lifestyle modification approach.

Intervention would include people diagnosed with diabetes (male and female both). Recruitment would be done by analysing the health records of individuals and patients with most instances of uncontrolled diabetes would be selected. The intervention would be delivered by one-to-one interaction of the nurse champion with diabetes patients. This interaction would involve conducting weekly health discussions with individuals, which would include patients' health education sessions. The second approach would be telephonic interaction with individuals once a week to make the process more personalised. To improve interaction, the nurse would focus on building partnerships with every patient in order to be more responsive to their needs. According to Vuohijoki et al. (2020) responsive and personalised care planning help in improving the adherence of diabetes patients towards their treatment and care.

### **Implementation Plan**

Effective implementation of the healthcare strategies is significant to bring desired results and healthcare outcomes. Vuohijoki et al. (2020) develop an effective care plan for individuals suffering from chronic conditions like diabetes, require health professionals or care providers to develop a partnership with care receivers, and deliver personalised and responsive care to improve health outcomes. Although, according to NHS (2016) only 3.3% of diabetes patients receive personalised care, which further supports enhancing their adherence to their own care plan, effective planning and focus on these outcomes can be improved. However, for effective implementation, the adoption of an appropriate leadership style is most significant. Studies have identified that for developing and implementing strategic change in service delivery, leadership may play an important role (Braithwaite, 2018).

According to Diabetes UK (2017), organisational leaders have an important role in supporting the development of quality improvement programs that could bring improved health outcomes for diabetes patients. Sfantou et al. (2017) there are six

most common forms of leadership styles “transformational, transactional, autocratic, laissez-faire, task-oriented, and relationship-oriented leadership”, each of which has its own benefits and challenges. However, this project would be guided through transformational leadership, which can be supportive in improving staff engagement, partnership working, shared goal and enhancing productivity (Sfantou et al., 2017). Transformational leadership is also strongly associated with developing the culture of patient safety and empowering employees and staff members in enhancing their capabilities (Głód, 2018). Nurses are required to play a leadership role in their everyday practice, as nurses are expected to take innovative roles, use critical thinking to overcome quality issues, work in partnership with multi-disciplinary teams and critically reflect on their own practice (Bianchi et al., 2018). Therefore, this project is based on transformational leadership to bring desired quality improvement and also for improving patient care quality.

Another important aspect of a project is to implement it with a realistic time frame. Therefore, this project uses GANTT Chart to provide the realistic time frame for the completion of the project (Zhang et al., 2019). The overall time frame for the completion of the project is 12 weeks. Thus, a GANTT Chart included in Appendix A would provide complete details about the timeframe. A nurse champion, who will be trained to implement the intervention, would be the primary nurse for 10 diabetes patients and will focus on improving their self-management skills and health education to enhance their self-monitoring of blood glucose levels.

A project communication plan is another important part of effective project implementation. A communication plan is intended towards sharing every bit of project information among all team members and stakeholders (Strand & Tveit, 2020). Clear and consistent communication is considered to be necessary for bringing meaningful change in healthcare practices and policies (Giddens&Morton, 2018). Therefore, this project will focus on developing effective communication among different stakeholders by using e-mails and face-to-face meetings. Progress of the project would be shared with all stakeholders including organisational leaders, staff members and other nurses (to develop shared vision) weekly through e-mail, while face-to-face meetings would be conducted biweekly. If the stakeholders would be unable to attend any meeting, then information would

be conveyed through emails.

### **Team Structure and Roles**

The main stakeholders involved in this project would be senior management of the organisation, registered nurses, nurse champions, and individuals with diabetes. Senior management would be responsible for guiding the project, while registered nurses will have the responsibility of training nurse champions. Nurse managers would have the responsibility of providing time to nurse champions for training and intervention implementation.

A quality improvement project always involves the stakeholders, who could be considered as the people, who either have an interest in the project or could be affected by the proposed quality change (Balbale, Locatelli & LaVela, 2016). According to de Groot et al. (2018) encouraging an organisational change could be affected by the change resistance of the involved stakeholders. Resistance of the stakeholders can also lead to affecting the quality of decision making. Therefore, for continuous quality improvement and success of the project, effective dissemination of information among stakeholders is necessary (Ginnard et al., 2021).

Another aspect of preventing resistance from stakeholders is by effectively involving them from the early stage of project implementation. Early involvement of stakeholders in change management projects can bring many benefits. For example, the involvement of stakeholders in quality improvement can bring different perspectives that may enhance the value of the project, increase the transparency of the project, and also enhance the likelihood of increased support from all stakeholders (Leviton & Melichar, 2016). According to Laycock et al (2019) shared decision making and involvement of stakeholders can strengthen the capacity of all and can lead to project success.

### **Risk Management**

Strength, Weakness, Opportunities and Threats (SWOT) is a risk management approach that helps in identifying and analysing the internal and external factors that could affect the success of a project (Benzaghta et al., 2021). Strength and weakness could be considered as the internal factors that could be controlled,

while opportunities and threats are external factors on which project managers have limited or no control (Benzaghta et al., 2021). (Appendix B).

### **Evaluation Plan**

The main purpose of project evaluation is to ensure evidence-based knowledge is developed (Antonacci et al., 2018). Evaluation tools also help in assessing the success or the failure of the project. Thus, most important evaluation tools that would be applied in this project include patient feedback survey (Questionnaire-based survey) and interview, collecting feedback from staff members, and collecting feedback from organisational leaders or senior management. The evaluation plan would include both qualitative as well as quantitative methods (Antonacci et al., 2018). For example, the patient's questionnaire survey would be analysed using quantitative methods using the numerical analysis of the data (by collecting information about events of hyperglycaemia, financial spending on healthcare, and quality of life scores), while the interviews will be used for producing qualitative findings. Questionnaire would be based on five-point Likert Scale on the continuum of strongly disagree to strongly agree. This method would be highly supportive in assuming the attitude and responses of patients.

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## Appendix B: SWOT Analysis

<p><b>Strength</b></p> <p>Patient education is already considered as most effective for diabetes management (Zhu, Zhu&amp; Leung, 2016).</p> <p>Intervention improves partnership working among nurses and patients (Brohi et al., 2020).</p> <p>Supports the quality dimension of healthcare (Balbale et al., 2016).</p>	<p><b>Weakness</b></p> <p>Staff resistance is the main weakness, as staff may resist changing in everyday practice (de Groot et al., 2018).</p> <p>Patient resistance to participate (Robson et al., 2015)</p> <p>Challenges in managing the long-term effectiveness of the project.</p>
<p><b>Opportunities</b></p> <p>The project supports and promotes individualised and responsive care (Ginnard et al., 2021).</p> <p>Supports in developing therapeutic relations with patients (Parsons et al. 2017).</p> <p>Supports saving healthcare costs. (Roze et al., 2020)</p>	<p><b>Threats</b></p> <p>The patient may choose to leave intervention in middle or may choose not to adhere to self-monitoring intervention.</p> <p>Patients' employment status or working status may affect their ability to participate in the intervention.</p>