

## **Discharge Medication Education**

**Student ID's: 326609248, 915365341 and 997283760**

The fundamentals of care framework encompass a holistic approach to patient care, aiming to address a patient's physical, psychosocial and relational well-being (Dempsey et al., 2013). The framework's components include relationship building, integration of care, and context of care. Integration of care is a major component of the fundamentals of the care framework.

The specific example this article will discuss involves the importance of medication education for patients upon discharge. The chosen example is relevant to this framework as the integration of care includes factors such as providing education and information for patients. Implementing this into nursing care helps address specific patient needs, such as psychosocial needs.

Medication education upon discharge facilitates informed decision-making and empowers individuals to participate in their health management actively. By providing patients with knowledge about their conditions, treatment plans, and self-care strategies, nurses enable them to take ownership of their health and make health-promoting choices. Patient education also fosters patient confidence. When patients know what to expect and feel confident in their understanding of their medications, they are less likely to experience anxiety or stress related to their treatment. Furthermore, educating patients with comprehensive information, including dosage, administration techniques, and potential side effects, reduces the likelihood of medication-related errors post-discharge.

This article will explore the relationships between the fundamentals of care framework, patient education, and the crucial role of medication education in ensuring

patient safety and optimising health outcomes.

### **Background**

The transition from hospital care to discharge poses a significant risk factor for medication-related harm to occur (Flatman, 2021). Alqenae et al. (2020) highlighted that post discharge, over 50% of adult patients encounter medication errors and nearly 20% experience an adverse drug event. Medication education prior to discharge is pivotal in preventing errors, and ensuring the patient feels competent in self-administering the prescribed medication regime to avoid exacerbation of the patient's medical conditions (Hajjalibeigloo et al., 2021). Upon admission, patients' medication regimes have potential to change substantially by discharge, requiring readjustment to this new regime (Weir et al., 2020).

During hospitalisation, healthcare professionals and most typically the nurse are responsible for medication management which upon discharge, responsibility is transferred to the patient with limited external guidance from healthcare professionals (Mortelmans et al., 2021). Mortelmans et al. (2021) also depicts the knowledge required by the patient to safely administer and follow the medication regime post-discharge including knowing and recognising their medications, the medication schedule, and the ability to administer the correct dose at the correct time.

As experienced by students on placement, the nurse taking the time to explain medication administration and regimes to the patient prior to discharge is extremely beneficial to patient confidence and capabilities of self-managing, and adherence to the prescribed medication regimes. For example, a student and RN spoke to a patient prior to discharge feeling anxious and stressed by the medications prescribed for them to follow. The student and the RN took the time to explain to the patient and whanau identifying characteristics and the purposes of each medication, when it was required to be taken and how each medication was prescribed in the regime. The patient expressed genuine gratitude to the student and RN for educating and communicating the requirements of their medication regime, stating as they can

## DISCHARGE MEDICATION EDUCATION

comprehend what is required, they feel more competent to identify and adhere to what is required of them.

### **Discussion**

Phatak et al. (2016) found that pharmacist involvement and medication education when discharging a patient decreased patients from having to be readmitted to the ward due to relapse or their condition worsening. It was also found that having the medication properly explained to the patient decreased the patient's ED visits. Phatak et al. states that adverse drug events paired with patients being uneducated about the medications prescribed post discharge are leading factors in readmission. Similarly, Alper et al. (2023) found in a meta-analysis, medication review by the nurse to the patient is likely to reduce hospital readmission by reducing the likelihood of an adverse drug event occurring. This portrays the importance of education prior to discharge as hospitals are busy environments, the readmission of patients by preventable circumstances will add to the stress of the healthcare professionals, as well as negatively impacting the patient's physical and psychosocial well being. Phatak et al. found "that less than 60% of patients knew the indication for a new medication prescribed at discharge". This shocking statistic demonstrates it is always worth taking the time to educate the patient, as understanding the role and purpose of the medication makes the patient feel more comfortable and in control of their lives, as well as preventing unnecessary adverse drug reactions. Alper et al. also described the benefits of including caregivers and family in the education to increase confidence, knowledge and trust in the prescribed medication regime.

Alper et al. similarly states medication education "provides an opportunity for clinicians to ensure that patients understand what medications they are taking, how to take them, and why they are taking them". The systematic review evaluates that medication education is associated with a decrease in actual and potential adverse drug events. When a patient leaves the hospital, although it may be the end of their journey with the nurses and healthcare professionals, their medical journey continues for the individual and their whanau. Whether the discharged patient is required to

## DISCHARGE MEDICATION EDUCATION

take medications for the rest of their lives, for only a short period or only when experiencing pain, it is necessary that they get the education and develop the proper understanding regarding the medications they are taking so that they can take them safely (Yap et al., 2016).

Aiding to discharge the patient, explaining their discharge summary and medication regime are all part of a nurse's role. Sulosaari et al. (2014) depicts medication management as one of the fundamental roles of the nurse and the importance of ensuring sufficient medication competence to the patient prior to discharge. Although other healthcare professionals such as pharmacists and doctors are responsible to ensure that the person getting discharged is educated appropriately, the relationship established between the nurse and patient allows for information to be conveyed in a manner the patient can comprehend. The established trusting and interpersonal relationship with the patient and nurse over the course of their stay, allows for the nurse to be the person that the patient will go to with questions, which the nurse can competently answer. Often on clinical placements we have found that the patient may believe that they understand what is being explained to them, however then have further questions later on. This is perfectly normal, and often when this situation arises the patient will ask the nurse. It is then important that the RN is taking the time to fully explain the medication and all of the relevant information regarding that specific medication (Flatman, 2021).

## Conclusion

Medication education is a critical component within the fundamentals of care framework as it significantly impacts the outcomes and safety of a patient. This interconnects to the framework's holistic approach of patient care, which integrates physical, psychosocial and relational well-being. The transition from hospital to home care poses a high-risk of medication related harm. However, studies indicate that comprehensive patient education during this discharge transition can effectively reduce medication errors and adverse drug events.

### **Recommendations**

When providing recommendations we want change to align positively with 'The Fundamentals of Care Framework' (Dempsey et al., 2013) because as nurses the trusting relationship we establish with patients is what will aid in us educating a patient well and altering the information given to address their needs. Patients often feel comfortable directing their questions to the nurses involved and usually the nurse spends more time with the patient than other health professionals, and therefore has the ability to accommodate and tailor answers to help the patient understand their medications. Issues around education upon discharge on medication discussed fall towards the medical competency nurses have regarding the medications, how they allow time to discuss information with patients and their family and the systematic way in which nurses deliver discharge education.

With regard to medical competency amongst nurses, programmes such as graduate support and education workshops could provide a safety net to those nurses feeling not fully prepared for the new environment they are now working in. Sulosaari et al. states that based on their study of the education provided in nursing schools for medication there was room for improvement through policy and educational initiatives. Whilst this is for a nursing school level we recommend that similar initiatives, policies and guidelines be put in place as learning should not stop after graduation. Initiatives could be mini workshops nurses can attend each week which speak to a different medication or aspect of clinical knowledge. Health care strives on finding new ways to provide care for patients and searching and achieving better health outcomes for patients and this is a small part that could really change the success of patients and their conditions long term within the community. This change would also empower the nurse to feel confident in giving advice regarding discharge and medication and it also allows the patient consistency in care with the nurses being competent in the delivery and knowledge of information being provided.

Time is another constraint for nurses as hospitals can be busy environments to work in but time allowed for discussions with patients pre-discharge are crucial to

## DISCHARGE MEDICATION EDUCATION

their success in the community (Sinha et al., 2019). With time nurses are able to not only discuss but also help teach patients how to self-medicate their own medications whilst still in hospital. Mortelmans et al. Mortelmans et al. states that during hospitalisation most of the medication administration is done by the health care professionals and this leaves patients feeling unprepared for self-medication post-discharge. If patients were able to practise giving medication to themselves in an environment with a nurse whom they trust and was able to support them psychosocially through encouragement and validation of them self-medicating correctly this also builds confidence for the patient that they can overcome any challenges they may face which can be a big fear (Sinha et al., 2019). On placement, students saw that patients they observed self-medicating with their preceptor were able to ask questions that might arise at home and have them answered in the safety of the hospital environment by a health professional that was able to guide the patient and provide education in a way that tailored to their understanding which would overall reduce readmission (Sinha et al., 2019). We recommend that with support and education from leadership and guidelines if nurses were able to utilise time teaching patients how to draw up and administer their own medications this could significantly reduce the amount of re-admissions, adverse drug events and non-compliance around medication.

Students on placement found that patients expressed it was helpful and easier to understand and comply with medication when it was explained to them and they were provided with a physical reminder and explanation. Everyone is different and we need to remember that to achieve patient-centred care it not only starts with us building and forming a trusting relationship but it relies on how well we know our patient and whether we are able to individualise the care we give to their specific needs as they have a right to quality care that considers their individuality (Nursing Council of New Zealand [NCNZ], 2012). Sinha et al. (2019) conducted a study on whether an educational video on medication upon discharge would benefit patients and nurses experiences at discharge and understanding and confidence

## DISCHARGE MEDICATION EDUCATION

post-discharge. The study concluded that the educational video significantly improved patients' feelings towards preparation for discharge. Whilst this method of education may work for some we are recommending a mixed approach. We would also recommend that flyers or handouts that have all the information written down be given to patients as due to fear and anxiety around hospitalisation and discharge patients are likely to forget what has been explained to them (Roeung et al., 2024). They could include contact numbers for questions they may have, the frequency and times to take medication, do's and don'ts and a brief description of the medication and what it is doing to aid in their recovery or maintenance of their condition. This can act as wrap-around support for a patient so that when they are discharged they can feel well prepared to manage their medication themselves.

Word Count:

### References

- Alper, E., O'Malley, T. A., & Greenwald, J. (2023, February 3). *Hospital discharge and readmission*. Retrieved May 16, 2024, from <https://medilib.ir/uptodate/show/2790>
- Alqenae, F. A., Steinke, D., & Keers, R. N. (2020). Prevalence and nature of medication errors and medication-related harm following discharge from hospital to community settings: A systematic review. *Drug Safety*, 43(6), 517–537. <https://doi.org/10.1007/s40264-020-00918-3>
- Dempsey, J., Hillege, S., & Hill, R. (2013, September 18). *Fundamentals of nursing and midwifery: A person-centred approach to care* (2nd ed.). Lippincott Williams & Wilkins.
- Flatman, J. (2021). How to improve medication safety at hospital discharge: Let's get practical. *Future Healthcare Journal*, 8(3), e616–e618. <https://doi.org/10.7861/fhj.2021-0176>
- Hajjalibeigloo, R., Mazlum, S. R., Mohajer, S., & Morisky, D. E. (2021). Effect of self-administration of medication programme on cardiovascular inpatients' medication adherence and nurses' satisfaction: A randomized clinical trial. *Nursing Open*, 8(4), 1947–1957. <https://doi.org/10.1002/nop2.870>
- Mortelmans, L., De Baetselier, E., Goossens, E., & Dilles, T. (2021). What happens after hospital discharge? deficiencies in medication management encountered by geriatric patients with polypharmacy. *International Journal of Environmental Research and Public Health*, 18(13), 7031. <https://doi.org/10.3390/ijerph18137031>
- Nursing Council of New Zealand. (2012, September). *Code of conduct*. <https://online.flippingbook.com/view/359830702/>
- Phatak, A., Prusi, R., Ward, B., Hansen, L. O., Williams, M. V., Vetter, E., Chapman, N., & Postelnick, M. (2016). Impact of pharmacist involvement in the transitional care of high-risk patients through medication reconciliation, medication education, and postdischarge call-backs (ipitch study). *Journal of*



## DISCHARGE MEDICATION EDUCATION

*Hospital Medicine*, 11(1), 39–44.

<https://doi.org/https://doi.org/10.1002/jhm.2493>

Roeung, S., Lindgren, T. G., & Carley, A. (2024). Improving discharge teaching for adult patients with an ileostomy. *The American Journal of Nursing*, 124(1), 41–46. <https://doi.org/10.1097/01.NAJ.0001004936.98276.ad>

Sinha, S., Dillon, J., Dargar, S. K., Archambault, A., Martin, P., Frankel, B. A., Lee, J. I., Carmel, A. S., & Safford, M. (2019). What to expect that you're not expecting: A pilot video education intervention to improve patient self-efficacy surrounding discharge medication barriers. *Health Informatics Journal*, 25(4), 1595–1605. <https://doi.org/10.1177/1460458218796644>

Sulosaari, V., Huupponen, R., Torniainen, K., Hupli, M., Puukka, P., & Leino-Kilpi, H. (2014). Medication education in nursing programmes in finland – findings from a national survey. *Collegian*, 21(4), 327–335.

<https://doi.org/10.1016/j.colegn.2013.08.003>

Weir, D. L., Motulsky, A., Abrahamowicz, M., Lee, T. C., Morgan, S., Buckeridge, D. L., & Tamblyn, R. (2020). Failure to follow medication changes made at hospital discharge is associated with adverse events in 30 days. *Health Services Research*, 55(4), 512–523. <https://doi.org/10.1111/1475-6773.13292>

Yap, A. F., Thirumoorthy, T., & Kwan, Y. H. (2016). Medication adherence in the elderly. *Journal of Clinical Gerontology and Geriatrics*, 7(2), 64–67.

<https://doi.org/10.1016/j.jcgg.2015.05.001>