

**NURS 6051 Week 4: The Impact of Nursing Informatics on Patient Outcomes and Patient  
Care Efficiency**

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Program Name or Degree Name (e.g., Bachelor of Science in Psychology), University

COURSE XXX: Title of Course

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## **The Impact of Nursing Informatics on Patient Outcomes and Patient Care Efficiency**

Nursing informatics links information technology, science, wisdom, and knowledge to nursing practice. The overall purpose of this integration is to improve patient outcomes and care service efficiency. Various informatics projects can be implemented to lead to desirable patient outcomes and improve care efficiency. This essay proposes the implementation of a nursing informatics project. The proposal will entail the project's purpose, relevant stakeholders, the patient care efficiencies, technologies required, and the project team as defined by their roles in the project's implementation.

### **Proposed Project**

The proposed nursing informatics project entails the introduction of an mHealth platform that will be used by healthcare providers and patients in the institution. mHealth is a short form of mobile health. The mHealth platform will be introduced to all registered patients who get services from the institution from outpatient and inpatient departments. The platform will entail an mHealth application that provides patients with information on their health to enhance healthcare services access.

The mHealth project also aims to promote real-time data management to help address current healthcare system inefficiencies. In addition, the project will assist patients in accessing healthcare services from the comfort of their homes through the telehealth option available on the platform. Among the services that will be provided through telehealth include patient consultations with the care providers and follow-up. More so, patient data, including assessment and monitoring reports, will be uploaded on the platform to ease access and communication between the patients and the care providers.

### **Stakeholders Impacted by the Project**

The implementation of the mHealth program in the institution will impact different stakeholders. These stakeholders include the patients, physicians, nurses, and general caregivers. The patients are the most significant stakeholders in this project since their needs are the primary focus of its implementation. The primary purpose of implementing the project is to address patient care inefficiencies. Therefore, patients are one of the key stakeholders that the project will impact. Lavalley et al. (2020) note that patients are essential stakeholders in a mHealth project, and their needs related to the project should be prioritized. Therefore, the mHealth platform will consider different patient needs.

Care providers, especially nurses and physicians, will also be impacted by implementing the mHealth project. First and foremost, the care providers' workflow may increase due to an expected increase in patients seeking care services through the telehealth option. According to Taha et al. (2022), many patients prefer seeking health services online, especially if no tests are required. Therefore, there is a likelihood that the number of these patients will increase, thus impacting the care providers' workflow. Additionally, the care providers' workload will increase since the institution can reach a broader scope, thus providing services for more patients. Furthermore, the caregivers responsible for monitoring the patients' real-time status and vital signs will be able to communicate quickly and faster with the care providers. Therefore, the caregivers will monitor the patients more efficiently. The caregivers will also get feedback from the care providers faster, which they can use to care for their patients more effectively, thus avoiding complications, emergency department visits, and unavoidable hospitalizations.

### **The Patient Care Efficiencies of the Project**

As mentioned earlier, the primary purpose of the proposed nursing informatics project is to address current patient care inefficiencies. The patient care efficiencies of the project will

include improved communication efficiency between care providers and patients/their families, improving the patient flow, easing patients' appointment and scheduling, maintenance of health and wellness outside the clinical setting by enhancing remote care provision, and ease the monitoring and gathering of health-related data. Therefore, the proposed project will generally help address current patient care inefficiencies.

According to Rowland et al. (2020), implementing a mHealth project in healthcare institutions improves communication between care providers and patients. Through the platform, the patients will provide health-monitored data to the care providers, who will be able to provide feedback as soon as possible. In addition, since most patients access their mobile phones many times, it is unlikely to miss messages from the care providers. Communication between care providers and caregivers/family members will also be made efficient through the platform.

The patient flow of an institution may come with a lot of issues. These issues include emergency department overcrowding and difficulty in scheduling surgical departments. Patient flow issues may lead to adverse patient outcomes, including unnecessary hospital readmissions and increased mortality rates (Song et al., 2020). Introducing the mHealth project will address the issues related to patient flows since some patients will access the needed healthcare services from the comfort of their homes through the telehealth option. In addition, scheduling and appointment will be enhanced through effective communication and telehealth services, thus reducing patient flow-related issues.

The other patient care efficiency that will be achieved due to the project is maintaining health and wellness outside the clinical setting. Patients require clinical services even after being discharged and in the community. The care providers will provide these services through the

mHealth platform. More so, the platform will ease patient monitoring and gathering health-related data, thus improving overall patient outcomes.

### **Technologies Required for the Project**

Different technologies are needed to facilitate the implementation of the project effectively. The most essential technology is mobile phones, which the mHealth platform will be installed. Mobile phones are needed for patients and, more so, care providers to demonstrate how the application is used. However, the technology is readily available for both parties.

Electronic health records are also required for the accessibility of patient records from their mobile phones. The mHealth application has patient portals whereby patients can access their health records from their phones. It is worth noting that there is also a need for a technological application or software that will link the health records to the patient portals accessible from the mHealth platform.

Additionally, internet connectivity from both sides is required. Furthermore, patient monitoring technological devices are required for the success of this project. Su et al. (2019) note that the availability and usability of remote patient monitoring technology considerably impact telehealth. Care providers can provide efficient care through telehealth if the patients have and can effectively use the necessary patient monitoring devices. Therefore, patient monitoring technology is vital in this project.

### **Project Team**

The project team will entail representatives from healthcare leaders, pharmacists, doctors, IT specialists, and nurses. The representatives from the institutional leaders will brief the other leaders on the project's progress and help the team to gain support and buy-in. In addition, the doctors and the nurses will work together in delivering care services to the patients through the

mHealth platform. The pharmacists will provide and review medication information on the patient portals. The IT specialists will work with the nurse Informaticists to train the patients on using the proposed platform and assist in case of technical hitches. The nurse informaticist's role in the team is to act as the project manager to oversee and provide directions on implementing the project. Additionally, the nurse Informaticist is best suited to present the proposed project to the institutional leaders by explaining its expected patient care efficiencies.

### **Conclusion**

The proposed project entails introducing an mHealth application for patients and care providers in the institution. The application will have different platforms such as messages, telehealth, and patient records to improve patient care efficiency in the institution. The project team will work together to enhance project success while considering all stakeholder needs and priorities. The project aims at improving communication, patient care access and reducing patient flow issues such as emergency department crowding. From the foregoing, nursing informaticists work with [big data, hence the need to explore their risks and rewards in week 5 discussion of NURS 6051.](#)

## References

- Lavallee, D. C., Lee, J. R., Austin, E., Bloch, R., Lawrence, S. O., McCall, D., Munson, S. A., Nery-Hurwit, M. B., & Amtmann, D. (2020). mHealth and patient-generated health data: stakeholder perspectives on opportunities and barriers for transforming healthcare. *mHealth*, 6, 8. <https://doi.org/10.21037/mhealth.2019.09.17>
- Rowland, S. P., Fitzgerald, J. E., Holme, T., Powell, J., & McGregor, A. (2020). What is the clinical value of mHealth for patients? *NPJ digital medicine*, 3(1), 4. <https://doi.org/10.1038%2Fs41746-019-0206-x>
- Song, H., Tucker, A. L., Graue, R., Moravick, S., & Yang, J. J. (2020). Capacity pooling in hospitals: The hidden consequences of off-service placement. *Management Science*, 66(9), 3825-3842. <https://doi.org/10.1287/mnsc.2019.3395>
- Su, D., Michaud, T. L., Estabrooks, P., Schwab, R. J., Eiland, L. A., Hansen, G., DeVany, M., Zhang, D., Li, Y., Pagán, J. A., & Siahpush, M. (2019). Diabetes Management Through Remote Patient Monitoring: The Importance of Patient Activation and Engagement with the Technology. *Telemedicine Journal and E-health: the official journal of the American Telemedicine Association*, 25(10), 952–959. <https://doi.org/10.1089/tmj.2018.0205>
- Taha, A. R., Shehadeh, M., Alshehhi, A., Altamimi, T., Housser, E., Simsekler, M. C. E., Alfalasi, B., Al Memari, S., Al Hosani, F., Al Zaabi, Y., Almazroui, S., Alhashemi, H., & Alhajri, N. (2022). The integration of mHealth technologies in telemedicine during the COVID-19 era: A cross-sectional study. *PloS one*, 17(2), e0264436. <https://doi.org/10.1371/journal.pone.0264436>

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