

**BHA-FPX4106 Assessment 3: Health Care Information Review Proposal**

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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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## **A Proposal to Evaluate Cancer Healthcare Service Quality Through Computerized Physician Order Entry (CPOE) System Documents**

### **Introduction**

During my placement at a cancer center, I realized that cancer patients have relatively few direct or indirect quality indicators available at their disposal to help them select hospitals, health plans, and doctors or even to evaluate the merits and demerits of alternative treatment options. However, this situation has recently changed with the introduction of various scientific approaches to healthcare quality measurements, especially as technology takes over the healthcare sector (Franklin et al., 2017).

This report proposes a service quality assessment approach I would take to measure the quality of services delivered to cancer patients. Using a computerized physician order entry (CPOE) system, I will identify and retrieve patient history and physical information, lab reports, and discharge summaries. These documents will then be used to evaluate the quality of care within the office, considering that a multi-departmental approach would be tedious and overwhelming. Furthermore, the quality assessment will only focus on patients treated and discharged within the past year because this data would be readily available and easily retrievable.

CPOE is especially useful for this purpose as it provides a suitable platform for evaluating service quality by capturing all the treatment instructions and medication orders made by practitioners when delivering care services to patients (Konnoth, 2017). Ideally, according to Pesec et al. (2021), CPOE systems are designed to mimic paper chart workflows and are often integrated with clinical decision support systems (CDSS) to optimize care efficiency and patient safety.

Considering that patient safety and operational efficiency are critical elements of care quality (Buendia et al., 2021), CPOE is the most appropriate information system for the proposed project. Notably, project quality assessment will focus on the clinical and administrative domains of the system. In doing so, the assessment will quickly highlight the quality of clinical care and how it guarantees patient safety, as well as the quality of administrative service and how it guarantees patient satisfaction. Below is an illustration of how the information will be identified, retrieved, evaluated and destroyed.

#### **Data Collection Plan**

The target patient population for the proposed project is cancer patients across all demographics, from 18-80 years. All the required information will be identified and retrieved from the CPOE. In the process, the focus will be on both clinical and administrative documents to fit the purpose of clinical and administrative quality assessment. The hospital's CPOE system allows the operator to print data in various formats, including Excel sheets and Word documents. As such, most of the information will be downloaded and printed, while others will be evaluated as soft copies. The project manager will have the discretion to choose the most convenient form of data. I will focus only on the information from my office to facilitate the retrieval of the most precise data that would aid the development of an improvement plan.

#### **Data Security Plan**

All downloaded information will be stored away from unauthorized disclosure, inadvertent erasure, or alteration (Brower et al., 2021). This will be done using password-locked flash discs for soft copy information and locked safes for hardcopy data. Furthermore, as Cartagena et al. (2020) proposed, disclosure and access will be adequately controlled, with the CPOE system helping track all the downloads, changes and use. More importantly, robust access

control to the information will be maintained. Only the office manager will have access to the downloaded information (both print and soft copy) while the information access within the CPOE system will remain located and displayed in a way consistent with its initial access and use.

All the documents and information retrieved from the CPOE system will meet the available interoperability standards. This will be achieved by evaluating the information's standard specifications and how the information adheres to the Health Level Seven's (HL7) common pillars of interoperability, namely semantic, technical, and functional interoperability (Cai et al., 2019). This will be achieved by integrating the office information with the Health Information of Exchange (HIE), enabling an easier transfer and receipt of information (Dulhanty, 2021). According to Chen (2020), a significant advantage of this integration is that it will enable the evaluation of value-based care.

Three major ethical considerations will be made when dealing with the data, namely, privacy, confidentiality, and security. In this context, confidentiality and privacy refer to the patient's right to keep the information from being disclosed to others and only release it with the client's permission (Buendia et al., 2021). As such, patient information retrieved for quality assessment will only be accessed by the office manager and not used for any other purpose. The access to this information will be only for administrative purposes of checking quality standards and will, therefore, not need patient authorization (Konnoth, 2017).

On the other hand, security refers to the protection of data integrity, availability, and confidentiality (Cai et al., 2019). Since the office manager will be accessing the patient's data from an electronic health records system, there will be strict adherence to the access authentication system, including the protection of passwords and other access information. If the

office manager misplaces or mistakenly discloses the passwords, new passwords will be set immediately according to the hospital's electronic records management policies.

However, it is important to note that the information retrieved will not involve any protected health information (PHI). This is because it is possible to evaluate health service quality standards without PHI (Konnoth, 2017). Furthermore, operating with non-PHI will be easier and cheaper than with PHI. Nonetheless, the office manager will be held accountable under the Health Insurance Portability and Accountability Act (HIPAA) privacy and security rules, whereby the hospitals are sued for the actions of their employees. Therefore, the proposed project will ensure that the office manager knows and adheres to all the HIPAA privacy and security regulations by training and sensitizing them on the rules.

### **Benchmarking Plan**

The comparability of all the data sources can be enhanced by differentiating each data source and aligning them with the respective data collected from each source. In the process, one can identify the existence of any duplicates and merge them. That said, I will organize the data into 'duplicates,' 'source of data,' 'data completeness,' and 'last edited' categories to ensure that I am dealing with the most current data. All the data in each field will be validated and verified, creating an opportunity for faster and more efficient delivery of service and quality care.

### **Quality and change management strategies**

Quality can be influenced by several factors, including clinicians' knowledge, care support systems, level of leadership engagement, and continuous evaluation and improvement of care. As such, health workers are responsible for managing the quality of care and ensuring it meets the required standards. Upon reviewing the quality of cancer care, I will recommend various changes to close the gap between the desired quality of care and the actual quality of

care. This will entail the identification of crucial change areas within the care delivery processes and activities and recommending actionable changes to improve those processes and activities. Based on my findings, I will assume the role of a 'change agent' overseeing all the change management initiatives. As a change agent, I will perform various functions, including the catalytic, prescriptive, confrontational, principle, and theory functions.

### **Implementation**

I will follow the following steps in implementing change:

- I will communicate the study results with everyone within my office and with other relevant stakeholders outside the office, informing them of their role in bringing change
- Collect the necessary information on all the selected patients including lab records, encounter notes, referral information and medication lists
- Analyze the information using line graphs and pie charts to compare the information
- Identify how to enhance consistency and eliminate inconsistency in care
- Develop a plan on how to execute the suggested actions
- Evaluate the change implementation by reassessing patient records after 5 to 10 months.

### **Conclusion**

Ultimately, this document provides a roadmap for the implementation of a health service quality assessment conducted through patient health records. It identifies the CPOE system as the primary source of patient health records and describes how the information life cycle strategy will be used to manage the documents. Similarly, it defines the various patient privacy, security and confidentiality considerations to be made during the project.

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