**Implementation of mandatory EHR training for documentation of care as alternative measures to reduce medication errors**

**Introduction**

 The systems theory can be used to describe how different units or departments in any organization work with each other to react to their environment (Wang, Shi, Nevo, Li, and Chen, 2015).  This is a theory which can be used to assess the coordinating and collaborative work of numerous units or departments in an organization and how such coordinating work can help secure a unified work environment.  This paper will study the emergency unit of a hospital and how the functions of this unit match systems theory.

**Emergency unit and systems theory**

 The emergency unit of a hospital is made up of interconnected elements which respond to its environment.  The emergency unit is first made up of objects which include its parts, elements, and variables. This comes in the form of physical or abstract objects.  These physical objects are the health personnel making up the emergency unit, as well as the medical equipment and resources which match their work within the unit.  Abstract objects include the skills of these medical personnel, skills which help them carry out their tasks in the emergency unit.   The system is secondly made up of attributes or qualities of the system and the objects.  This includes qualities of the medical personnel being quick-thinking and being alert in responding to the emergency needs of patients seeking medical attention. Third, the emergency unit is made up of subsystems and personnel who have internal relationships with each other.  Lastly, the emergency unit, based on the systems theory is a set of numerous things which impact on one another in their environment and they make up a larger pattern which is different from its other parts (Wang, et al., 2015).

**Emergency unit and open systems theory**

The emergency unit in a hospital is an open system as it receives information, and uses such information to interact with its environment.  Openness expands its ability to survive as well as prosper.  Some system qualities for emergency units include wholeness and interdependence, hierarchy, correlations, self-regulation and control, inputs/outputs, change and adaptability, and chain of influence among others (Andrade, 2015).  The EHR system in the emergency unit based on systems theory is noted as an integrated process, not an isolated incident.  The input here would be the patients and their numerous illnesses and health issues entering the emergency unit.  It also includes the health care professionals working in the emergency unit, armed with the necessary skills and knowledge to respond to any emergency.  The environment is the emergency room which is made up of numerous emergency equipment which can respond to the emergency needs of patients.  The output here is the patient whose emergency needs are managed or are endorsed for further care to the appropriate healthcare department.  Throughput refers to the organizational and environmental factors, and in the emergency unit of the hospital, this would include the hospital organization in general, the environmental setup and the complexities of the emergency room (Wang, et al., 2015).  Negative feedback refers to the internal data about the ER system functioning and is used to make adjustments in how resources and personnel are used in the unit. Cycles of events in the emergency unit refers to the processes in exchanging and transforming energy to improve the system and secure a sustained series of activities (Meyer & O’Brien-Pallas, 2010).

**Problem identified**

The problem identified within the emergency department or unit in the context of the open systems theory is on issues related to inadequate electronic health record systems in the unit (Meyer & O’Brien-Pallas, 2010).  The open systems theory acknowledges the presence of a hierarchy within organizations and this is the same in the emergency unit with work in the ER divided and assigned to multiple health care professionals (Meyer & O’Brien-Pallas, 2010).  The challenge is on how to transform the energy in the ER as one energy which can meet the requirements of tasks and promote task accomplishment in the context of technical proficiency.  In the systems theory model, the failure of the EHR system can be seen in the throughputs, specifically the ER production subsystem which includes the nature of the work of each personnel where the inadequate EHR system includes inadequate technology and poor input quality.  The inadequate EHR system issue can be seen in how the different health personnel are not adequately trained to use the system and there may be errors in entries to the records.

**Addressing the problem**

*Desired outcome*: All health personnel in the emergency unit being highly trained in the use of the EHR system.

*Goals and objectives*:

* Reduce to their most minimal levels medical errors attributed to errors or failures in electronic record-keeping (Peck, 2013).
* Reduce miscommunication among health personnel

*Policies and procedures for the department or unit*

* Policy 1: Weekly trainings for all members of the emergency unit on how to use the EHR system.
	+ *Procedure:*
		- Once every week, all the health personnel working in the emergency unit have to undergo training and retraining on the use of the EHR system.
		- All staff members have to be given a chance to express their concerns, opinions, and suggestions in the use of the system
		- Training will continue until all the staff are fully skilled in the system.
		- New staff or personnel will undergo training in the system first before starting their work in the emergency unit.
* Policy 2: Regular updates to match latest EHR technology
	+ *Procedure*
		- Health systems operations manager have to keep abreast of latest developments in EHR and to schedule regular skills updating for health staff in order to promote better and more quality record-keeping.

Relevant professional standards include improved lines of communication among staff members in the emergency unit.  Other relevant professional standards include the accurate transmission of information between and among healthcare personnel in the emergency unit, with the ultimate standard of ensuring quality healthcare for patients as well as minimal errors in the delivery of care (Wang, et al., 2015).

My proposed resolution to the problem would secure the hospital’s mission and values and improve the culture and climate.  The hospital organization’s mission is to provide quality and safe care to patients (Wang, et al., 2015).  Improving the lines of communication between health personnel can help reduce errors, improve the quality of care administered to patients and help promote a safe culture and climate for both patients and health personnel.

**References**

Andrade, J. A. (2015). Reconceptualising whistleblowing in a complex world. *Journal of*

*Business Ethics*, *128*(2), 321-335.

Meyer, R. M., & O’Brien‐Pallas, L. L. (2010). Nursing services delivery theory: an open system approach. *Journal of Advanced Nursing*, *66*(12), 2828-2838.

Peck, A. (2013). EHR implementation: Training pays dividends. *Medical Economics*, 53-56. Wang, Y., Shi, S., Nevo, S., Li, S., & Chen, Y. (2015). The interaction effect of IT assets and IT management on firm performance: A systems perspective. *International Journal of Information Management*, *35*(5), 580-593.