

Governing Energy

Workflow Alignment

Volume 3 Number 19—October 6, 2014

Dateline September 25, 2014, Dallas, Texas. According to a recent media report, the information regarding the Ebola virus infected individual's travel history to Liberia was initially disclosed to the nurse per the proper emergency room protocol. Subsequently it appears that the attending physician was unaware of this key piece of information.ⁱ In other words, the set of tasks required to properly diagnose and treat the patient was not properly completed.

Apparently, this voluntarily provided information was not communicated to the physicians due to "a flaw in the hospital's electronic health record (EHR) workflows."ⁱⁱ In other words, while it appears both nursing and physician protocols were followed by the individuals involved; the data integration between these knowledge workers had a gap. Subsequently, the software was updated and this gap was closed.ⁱⁱⁱ

While we will never know how events in Dallas would have unfolded if the knowledge of the patient's travel were available to the entire medical decision making process. However, the trials that have transpired (to-date) are having broad and complex impacts globally. The medical profession is widely acclaimed to have a strong Culture of Safety; however, the lapse in Dallas exposed system vulnerabilities.^{iv}

This problem was not the health care information technology (IT); its probable cause was a failure in the design of the patient care management system. As such, it is a failure of high reliability management processes. Or is it?

High Reliability Management (HRM) has been discussed in these pages a number of times as well as our recent book, *Implementing a Culture of Safety: A Roadmap to Performance-Based Compliance*.^v HRM seeks to create a culture that is mindfulness that failures can take place, complex processes should not be simplified, operations is the focal point, resiliency or the ability to respond and recover is critical and organizations are flexible enough that individuals can take initiative.^{vi}

One of the most overused terms, *A Crisis in Confidence* is unfolding in Dallas as of this writing. This concern is broader than simply a failure of one hospital. How the population perceives the result of the Public Health Care System response to this system failure will have a major impact on its credibility.^{vii}

While we do not know the end game of this problem, one suspects that the health care sector will exhibit the traits of HRM and cure the problem. This is not to say that political pundits on both sides will not attempt to parley these fears for their benefit. However, Public Health practitioners and management will most likely prevail over the current challenge.

Does this seem similar to the deepwater offshore drilling industry, the nuclear industry, the space shuttle program and others? Good practices and other organizational learning from one sector may have applicability in others. Good systems management is the fundamental backbone of HRM regardless of the industry sector or life threatening event.

Much has been written and discussed regarding the plentiful benefits of Big Data to organizations of all sizes. Often overlooked is the system design process.

The nursing staff has a different set of workflow processes and data requirements than the physician. Good systems design (including updates to reflect changing conditions) which must include data sharing should not be under appreciated.

The oil and gas industry is in the process of changing their Operations Management Systems (OMS) to include the new safety requirements. Lessons learned from Dallas include a review of the data sharing requirements of rapidly changing business processes.

The Relationships, Behaviors, Conditions (RBC) model previously discussed by the author in this blog as well as other publications is a good construct for organizations implementing HRM.^{viii} It is important to remember that Relationships can change based on changing Conditions and this often results in new Behaviors.

The system is not static and it now necessary for the physician to understand the recent travel of a patient. This may result in changes to tasks in a workflow with the subsequent impact on other workflows. IT systems must represent the tasks required to accomplish a complex job and workflows must be continuously aligned as necessary.

How does your organization assure that workflows across departments are aligned and data is shared as required to complete the set of tasks?

About the Author

Dr. [Scott M. Shemwell](#) has over 30 years technical and executive management experience primarily in the energy sector. He is the author of three books and has written extensively about the field of operations management. Shemwell is the Managing Director of The Rapid Response Institute, a firm that focuses on providing its customers with solutions enabling operations excellence and regulatory compliance management. He has studied cultural interactions for more than 30 years--his dissertation; *Cross Cultural Negotiations Between Japanese and American Businessmen: A Systems Analysis (Exploratory Study)* is an early peer reviewed manuscript addressing the systemic structure of social relationships.

End Notes

ⁱ <http://www.dallasnews.com/news/metro/20141001-dallas-hospital-knew-man-had-been-to-w.-africa-didnt-isolate-him-for-ebola-testing.ece>

ii http://www.huffingtonpost.com/2014/10/02/dallas-ebola-patient-hospital-error-electronic-health-record-flaw_n_5924698.html

iii Ibid.

iv

<http://www.nursingworld.org/MainMenuCategories/ANAMarketplace/ANAPeriodicals/OJIN/TableofContents/Vol-16-2011/No3-Sept-2011/Teaching-and-Safety.html>

v Holland, Winford "Dutch" E. and Shemwell, Scott M. (2014). Implementing a Culture of Safety: A Roadmap to Performance-Based Compliance. New York: Xlibris.

vi Ibid.

vii <http://www.hhs.gov/ash/initiatives/quality/system/>

viii http://www.amazon.com/Governing-Energy-Organizational-Governance-Century-ebook/dp/B00NB8C91Q/ref=la_B00KNBEQS8_1_5/179-1492846-1205359?s=books&ie=UTF8&qid=1412372804&sr=1-5