OPEN ACCESS Freely available online

Journal of Ergonomics

Perspective

Enhanced Healthcare Safety and Quality

Pande Sudiarta*

Department of Industrial Engineering, University of Indonesia, Depok, Indonesia

DESCRIPTION

Many commercial airlines throughout the world adopt a different strategy to continual quality and safety improvement, which might be adapted to the intricacies of healthcare, including the drug mistake problem. Flight Operational Quality Assurance is a mechanism for monitoring activities FOQA is a procedure in which data from on-board aircraft equipment is gathered while in flight, then downloaded and automatically analyzed. Analyses can detect incidents of concern of varying severity that fall outside of the aircraft's predefined operating limitations, emphasizing possibilities to improve in-flight safety and operational efficiency.

The fact that the automatically analyzed data are integrated with other means of data collecting, such as incident reports filled by pilots for anything they believe to be of concern, is a key feature of FOQA. The automatic system detects situations of concern reported by pilots in around 50% of cases. Many commercial airlines throughout the world adopt a different strategy to continual quality and safety improvement, which might be adapted to the intricacies of healthcare, including the drug mistake problem. Flight Operational Quality Assurance is a mechanism for monitoring activities. FOQA is a procedure in which data from on-board aircraft equipment is gathered during flight, then downloaded and automatically analyzed. Analyses can detect incidents of concern of varying severity that fall outside of the aircraft's predefined operating limitations, emphasizing possibilities to improve in-flight safety and operational efficiency.

The fact that the automatically analyzed data are integrated with other means of data collecting, such as incident reports filled by pilots for anything they believe to be of concern, is a key feature of FOQA. The automatic system detects situations of concern reported by pilots in around 50% of cases. Independent observations are often assumed to give objective measurements of physical characteristics in the realm of physics. Observations of medicine administration behaviour, on the other hand, are far more related to social science than physical science. Measurements are being taken of features of complicated clinical activities carried out in the context of multidisciplinary cooperation. Even when using organized observation methods, some interpretation of the events under investigation is usually required. Events of interest might be very context dependent, necessitating significant clinical expertise on the part of the observer in order to interpret events and gather data in a meaningful manner.

This inescapable component of interpretation may skew measurements or lead to low inter-rater reliability among observers or coders. Furthermore, observers cannot be blinded to study conditions since it is usually clear to an experienced observer or coder whether things are done the traditional manner or with a new allegedly safer approach.

Finally, and most significantly, observation alone cannot separate errors from violations since the main distinction between the two resides in the purpose of the individual being watched, which is not visible in and of itself. A mistake is described as "unintentional; it includes the use of a defective choice or plan to accomplish a goal, or the inability to carry out a planned activity. However, a FOQA-type study may still be conducted using existing data sources.

Electronic an aesthetic records and electronic patient records are presently centrally stored data, encompassing multiple traces of physiologic parameters, timed recordings of drugs administered, allergy information, test findings, days in hospital, procedures performed, and sequelae encountered. Such data may be automatically analyzed using big-data or trigger-tool techniques to detect possible drug mistakes during anesthesia.

Trigger tools are a well-established and well-described approach for detecting signals of adverse events in patient data, and formal frameworks and sets of triggers, including for medication error, have been developed. A typical use of an opioid reversal medication, indicating opioid overdose, or inappropriate scheduling of preventive antibiotics, indicating an elevated risk of postoperative infection are two examples of such triggers. However, triggers might be a variety of other measurable events, such as surpassing threshold values for critical physiological variables such as oxygen saturation, HR, or blood pressure, longer stays in the PACU, or even certain patterns of medicine delivery and blood pressure change.

Correspondence to: Pande Ketut Sudiarta, Department of Industrial Engineering, University of Indonesia, Depok, Indonesia, E-mail: sudiarta@hotmail.com

Received: 08-Jul-2022, Manuscript No. JER-22-16389; **Editor assigned:** 12-Jul-2022, Pre QC No. JER-22-16389(PQ); **Reviewed:** 24-Jul-2022, QC No. JER-22-16389; **Revised:** 03-Aug-2022, Manuscript No. JER-22-16389(R); **Published:** 03-Aug-2022, DOI:10.35248/2165-7556.22.12.340.

Citation: Sudiarta P (2022) Enhanced Healthcare Safety and Quality. J Ergonomics.12:340.