

EXPERIENCE OF A HOSPITAL IN SOUTHERN BRAZIL IN THE IMPLEMENTATION OF A DIGITAL TOOL FOR NOTIFICATION OF CARE RISKS

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Abstract: Goal: To report the process of implementing a digital tool for notification of care risks in a municipal hospital in southern Brazil. **Method:** This is a descriptive experience report study that analyzed the records of events and incidents in a hospital in 2020, during which a digital platform was used. Notifications that were previously made through printed forms are now carried out through an online form through digital reading (Qrcode). **Results:** The tool has simplified the incident notification mode making the process more agile. The easy access to the notification link through digital reading (QRcode) has allowed more autonomy and guarantee of confidentiality to notifiers. For the hospital management team, there was optimization in the treatment of data received, with greater capacity for analysis and resolution of non-compliance situations. The new system provided a significant increase in the total number of notifications (around 512%), mainly in relation to situations related to breaches of norms and routines. The peak of notifications occurred shortly after the system was deployed; then there was a reduction and stabilization of records, maintaining a higher average compared to the previous mode. **Conclusion:** There was an excellent adherence to the platform, which has brought practicality in the management of care risk situations, contributing to the dissemination of the patient safety culture in the institution. **Keywords:** *Notification of assistance risks. Digital tool. hospital notification system.*

GOAL

To report the process of creation and implementation of a digital tool for notification, investigation and monitoring of risks related to health care in a Brazilian hospital.

INTRODUCTION

Health care processes may contain several weak points with the potential to generate risk to the patient. In this context, patient safety represents a structure that generates cultures, processes, procedures, behaviors, technologies and environments aimed at care with less avoidable harm, reducing the probability of error and reducing the impact of harm when it occurs (World Health Organization, 2021).

The International Classification of Patient Safety (*International Classification for Patient Safety* – ICPS) defines an adverse event as an incident that results in harm to the patient. Studies carried out around the world indicate that, on average, 10% of hospitalized patients suffer some type of adverse event and that, of these, 50% are preventable (MINISTRY OF HEALTH, 2014). In terms of costs, it is estimated that the social damage generated to the patient generates an expense of US\$ 1 to 2 trillion per year (SLAWOMIRSKI; KLAZINGA, 2020).

Thinking about modernizing health care, with patient safety as a strategic priority, the World Health Organization (WHO) helped launch the World Alliance for Patient Safety in 2004. In partnership with professional health leaders and bodies, the Alliance has become a global vehicle for promoting policies and resources aimed at improving patient safety. Along with other countries that joined the Alliance, Brazil is also politically committed to these same purposes (WHO, 2005).

In 2016, WHO together with the World Alliance for Patient Safety established decisive initiatives to establish priorities in the search for safer health care. One of these initiatives was the emblem “A Decade of Patient Safety 2021-2030”, whose main focus is to formulate and implement the Global Action Plan for Patient Safety, aiming at the great challenge of achieving universal coverage in safe care (WHO, 2021).

Among the seven guiding principles of the Global Action Plan for Patient Safety are: analyzing and sharing data to generate learning (ANVISA, 2016). Thus, reporting adverse events in health services represents a valuable surveillance tool as well as a source for us to understand the causes of these events and possible solutions (WHO, 2021).

In Brazil, the National Health Surveillance Agency (ANVISA) advocates the notification of incidents as a strategy to optimize the reduction of care risks. At the same time, it is known that, for the viability and success of this process, the full involvement of care professionals is imperative (SOUSA; LAGE; RODRIGUES, 2019).

Given this context, the objective of this work is to describe the experience of the Patient Safety Center (NSP) of a municipal hospital in Paraná in structuring an effective notification system in its service.

METHOD

This is a descriptive study aimed at reporting the experience of implementing a digital tool for notification, investigation and monitoring of risks related to health care in a Brazilian municipal hospital.

The hospital and maternity hospital located in the metropolitan region of Curitiba-PR is 100% public and municipal, has a total of 153 beds and is part of the state's Urgency and Emergency Network. The institution provides an average service of 250 ambulances/month, providing support to several nearby municipalities. It is also a reference for high-risk pregnancy, in addition to neonatal intensive care and monthly assistance of, on average, 240 births.

This work analyzes the records of adverse events and other hospital incidents within the aforementioned Institution during the year 2020. Until May 2020, notifications were made through a paper form. As of June 20, 2020, a

digital platform tool was used to facilitate communication within the service. Incidents that were previously reported by filling out printed forms are now reported via an online form in the Google Forms system.

This online form became available through digital reading (Qrcode) in banners displayed on bulletin boards at strategic points in the hospital, as well as in the network folder (Institutional Documents) on all hospital computers. The professional now has the option of reporting failures in the safe surgery protocol, problems in communication between professionals, errors and failures related to care and medication, pharmacovigilance and technovigilance issues, errors and failures in patient identification, in addition to breaches of rules and routines, falls and pressure injuries. The notifications are subject to investigation and verification of the facts by the sectorial coordinations for the appropriate measures. Situations of non-compliance receive specific flows of direction, which can be forwarded to ANVISA (through Notivisa) to the internal ombudsman and/or to the department of high hospital management.

Later (from February 2022) there was an improvement of the resource with the change of the system from Google Forms to Airtable, which has been providing a better management of the information obtained through the notifications.

RESULTS

The digital platform established an official communication channel for the notification of non-conformities, improving the information exchange logistics as a whole. Within this new practice, the health professional has more autonomy to identify risks and point out care failures and errors, which reinforces the performance in the improvement processes and implementation of changes, contributing to the safety culture. The notification process

has become simpler and faster as it used to be necessary to find the printed form in the work sector, manually describe the incident and deposit the completed paper in urns established at specific points in the institution.

For the NSP team, there was greater agility in receiving, analyzing and directing the notifications since the system allows for the standardization of information collection, facilitating the tabulation of the collected data. In addition, a more secure way to maintain the secrecy of the notifier was provided, thus stimulating a greater number of notifications, since the registration is carried out through an access link by computers or personal cell phones through digital reading (QRcode).

The subsequent change to the Airtable system allowed even easier handling of the information obtained. This platform modernization provided an easy-to-view database generation through Kanban format, allowing the quality management team to feed each notification with its specific flows and treatments. It also became possible to establish priorities among the generated records and thus a “status” classification was created for each notification as well as the establishment of agreed deadlines with calendar visualization. The notifier also now has the option of attaching documents such as photos and short videos if necessary, thus making the information more complete.

Over the year 2020, after the implementation of notifications through the online mode, there was a 512% increase in notifications compared to the physical model. Among all the records, the most frequent were related to breaches of norms and routines and in this regard there was an increase of 536% in relation to the traditional way. Through the graph below, it is possible to see that from the month of implementation of the digital platform (June) the number of notifications increased significantly. In that month of June

there were only 5 paper notifications until the 20th and 62 notifications through QRcode in the remaining 10 days of that month. The peak of notifications occurred in the month of July (total of 132 records). In the months of October and December, however, there was a significant reduction in reports (44 and 35 respectively) but still much higher than in the months of March to May when the notifications were still on paper.

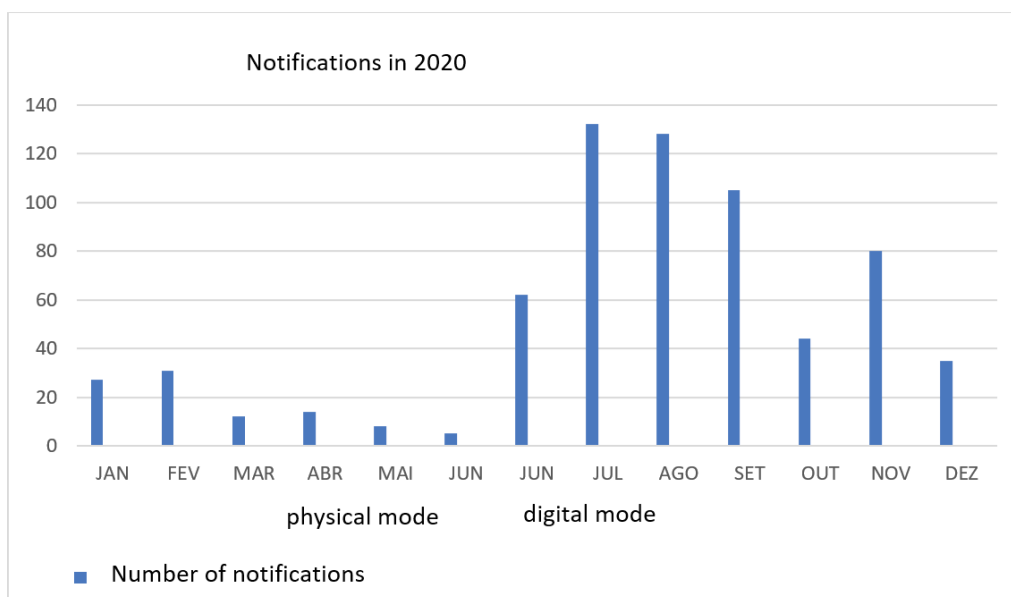
CONCLUSION

The significant increase in notifications after the implementation of the digital model denotes an excellent adherence to the platform by professionals. On the other hand, the occurrence of the peak of notifications one month after the implementation of the

system, followed by the drop in records in the month of December, refers to the need for continuous training of employees, reinforcing the importance of this record for the management of care risks.

The implementation of the digital platform proved to be a differential compared to the traditional way since it provides the data already spreadsheet and tabulated, in addition to being free. In addition, it made it possible to save the use of paper, collaborating with sustainable economic and environmental development.

In general, it has been possible to experience a tool aimed at improving care that reveals in itself the importance of working on a patient safety culture, always seeking non-punitive actions focused on improving processes.



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