# Unit Dose in a Cyberattack Scenario

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## BACKGROUND AND IMPORTANCE

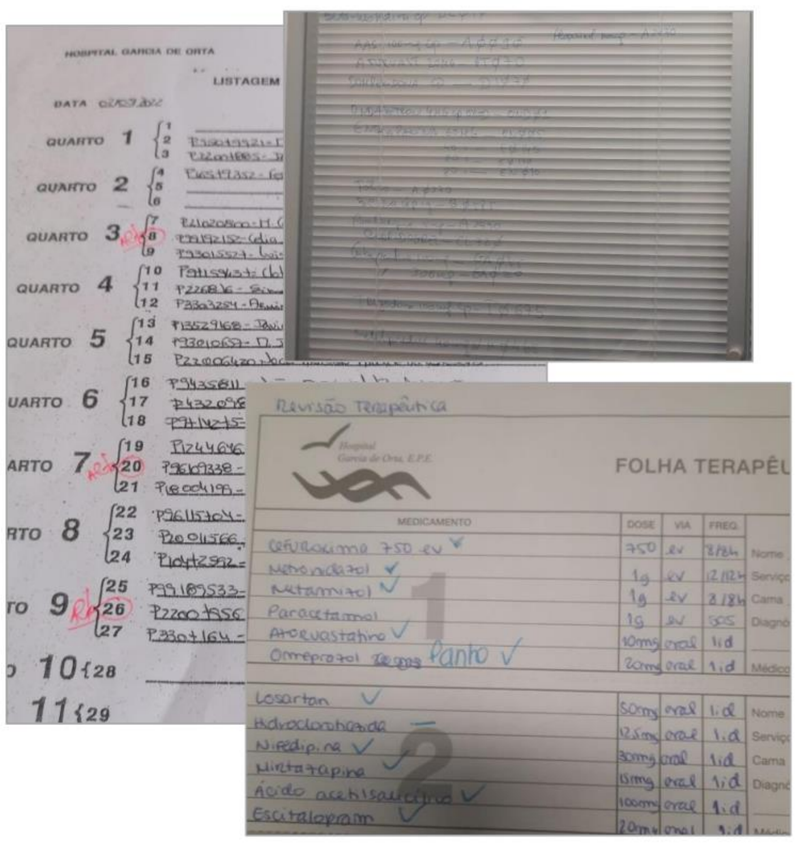
At dawn on the 26th of April 2022, our hospital suffered a cyberattack. All hospital´s computer systems and applications were inaccessible, and the network and most workstations inoperable. The only few computers that remained operational were standalone, that is, not connected to a network. The institutional email was only available on mobile phones. At that time, we were considered a paper-free hospital, totally computerized, with electronic patient records and online prescription totally implemented, and pharmaceutical procedures highly dependent on technology and automation so, it was particularly challenging to continue to provide pharmaceutical care in this scenario.

## AIM AND OBJECTIVES

Description of procedures implemented in a scenario of cyberattack by the pharmacy department and establishment of preventive measures for the future.

## MATERIALS AND METHODS

This study is a description of a case.




## RESULTS

Due to lack of access to clinical and pharmacotherapeutic profile of patients, it was necessary to reverse the prescription for paper support, in inpatient wards. The Kardex System remained operational, having been disconnected from the network in a timely manner, allowing the reconstitution of the history treatment of patients through the previous day therapeutic map files. Microsoft Excel files were created for all patients admitted to services with unit dose distribution, using laptops stand-alone. The communication with the nursing team was made daily, by telephone, with conference of all the patients. The Excel files with the transcription of the prescriptions, per patient, were manually coded by service, patient and drug, and, at the end of the day, transformed into the appropriate format to be correctly read by Kardex system, transferred to it by pen-drive, allowing the Unit Dose preparation. Contact was strengthened with the medical and nursing staff to avoid duplication of drugs or inadequate posology errors. Paper file folders were created by service for all prescriptions made and updated daily. All Excel files were posteriorly accounted for regularization of consumption.

## CONCLUSIONS AND RELEVANCE

In this cyberattack context, it was evident the difficulty in reversing the prescriptions for paper support, especially by young doctors. It will be necessary to implement validated procedures with periodic measures, including training in contingency protocols and cloud backup information maintenance.

## REFERENCES

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