

SMARTPHONE APPLICATION FOR MANAGING EXPIRY DATES IN MEDICINE ROOMS AND REDUCTION OF MEDICINE WASTAGE

What was done?

- A smartphone application for managing expiry dates in medicine rooms and reduction of medicine wastage was applied
- With the application, you can
 - Scan the data-matrix of medicine packages
 - Get a sorted overview of medicine and its expiry dates
 - Register a medicine package as either used, discarded or released
 - By releasing medicine packages, the medicine is made available to colleagues in other medicine rooms at the hospital

ATC	Medicine Name	Dosage	Expiry Date
610160 Intensiv Øst			
N06	Imipramin DAK	25 mg 100 stk.	31. jul. 2022
R03	Serevent	50 mikrog. diskos 60 doser	31. aug. 2022
V03	Flumazenil Hameln	0,1 mg/ml 5 x 5 ml	31. aug. 2022
J02	Ecalta	100 mg 1 stk.	30. sep. 2022
N05	Risperlept Consta	37,5 mg 1 sæt (WM u/nål-deel+glu)	31. okt. 2022
A12	Calcium-Sandoz	500 mg 20 stk.	30. nov. 2022
M03	Lioresal	1 mg/ml 300 ml.	30. nov. 2022
A11	Multi-tabs daglig	190 stk.	31. dec. 2022
S01	Kloramfenikol "DAK"	1 % 5 ml	2022

Why was it done?

- The Hospital Pharmacy is responsible for checking expiry dates of medicines in medicine rooms at the hospital



- We had manual and time-consuming workflows, with the use of paper forms
- An easily accessible digital solution would make workflows more flexible, modern and sustainably

How was it done?

- A smartphone application was developed in close and synergistic collaboration between software engineers, pharmaconomists and pharmacists
- The smartphone application was initially tested in small scale, and then adjusted and implemented among pharmaconomists and pharmacists to be used in up to 129 medicine rooms at Aarhus University Hospital, Denmark

What has been achieved?

- The application creates value because:
 - It takes less time (- 59%) to check and scan expiry dates
 - We avoid misinterpretation of expiry dates
 - By releasing medicines to be used in other medicine rooms, the application makes it easier for us to work sustainably



What next?

- Implementation of the smartphone application in other hospitals within the same region is underway
- Other Hospital Pharmacies in Denmark have shown their interest – a national solution is considered
- A similar application for utensils is considered

