

Objectifs :

To evaluate the impact of automated dispensing cabinets (ADC) on the dispensing error rate, interruptions and pillboxes preparation time

Conclusions :

ADCs reduce dispensing errors, interruptions and time when preparing pillboxes. Services having implemented the “more time for the patient” project, have a lower error rate in comparison with non-participating services.

Method

- Prospective observational study in 16 wards of two departments (general internal medicine and surgery)
- The study compared 8 wards with an ADC (Pyxis Medstation®, BD) and 8 wards with a traditional dispensing cabinet (TDC) involving a manual picking of drugs
- Observations were made by a single observer using the disguised observation technique



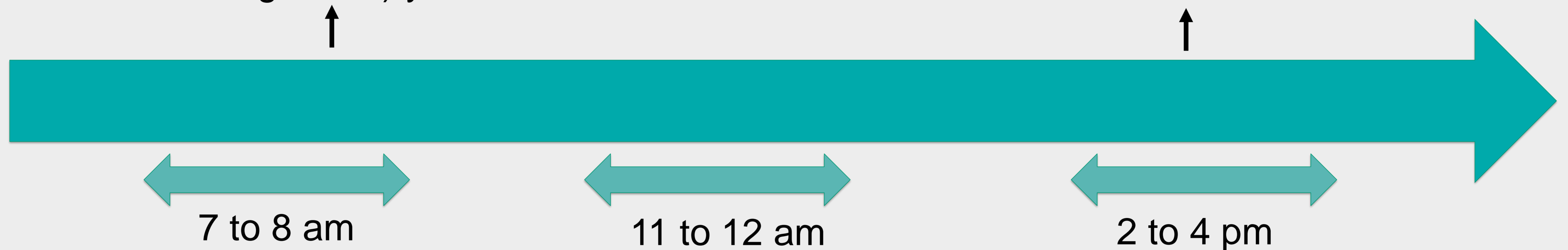
Typical Journey of observation

1. Data collection

- Pillboxes content
- Preparation time
- Interruption
- Project «more time for patients» (Lean management) yes/no

2. Analyse

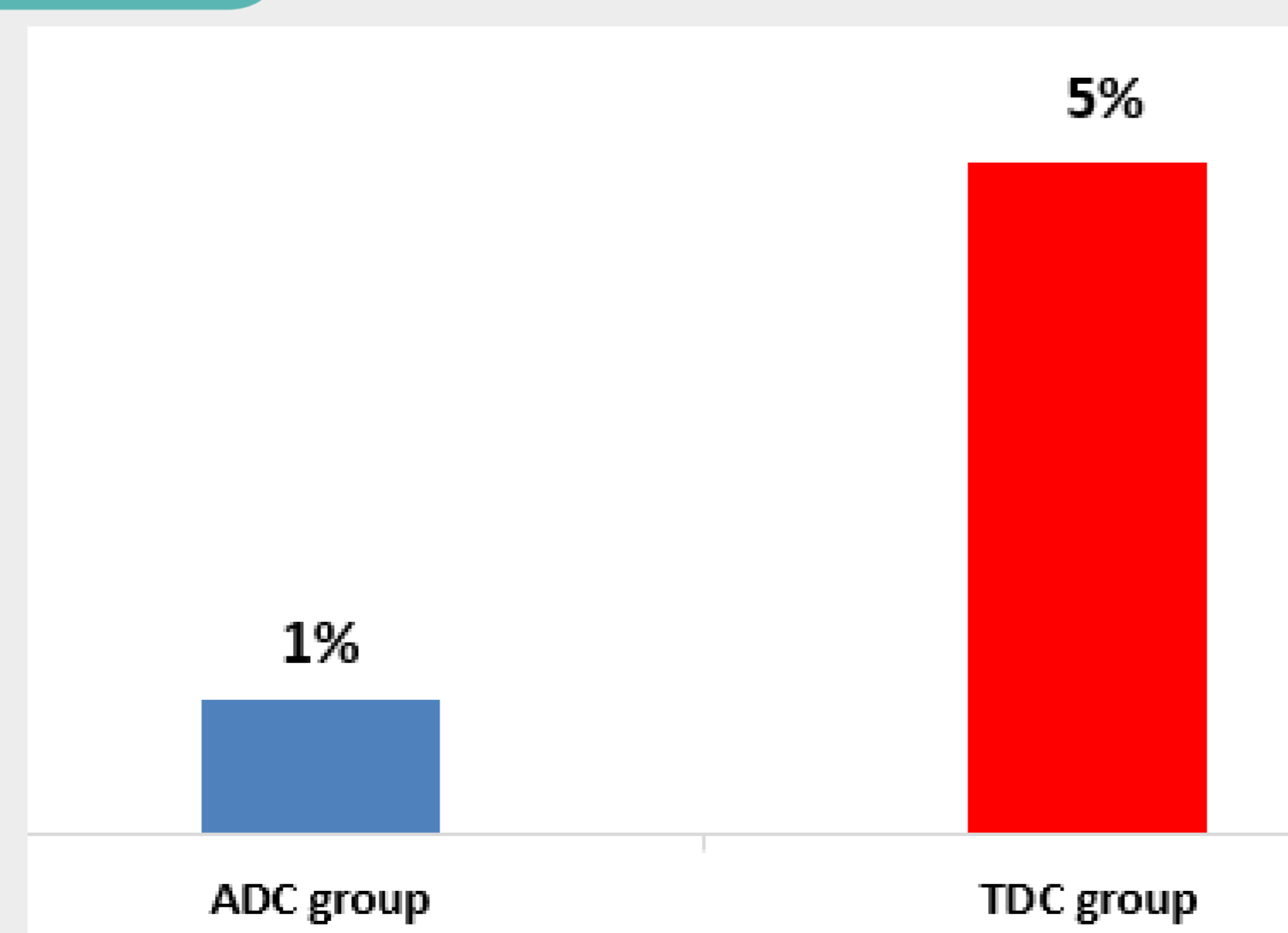
- Comparaison with the information contained in the patient's electronic chart



Results

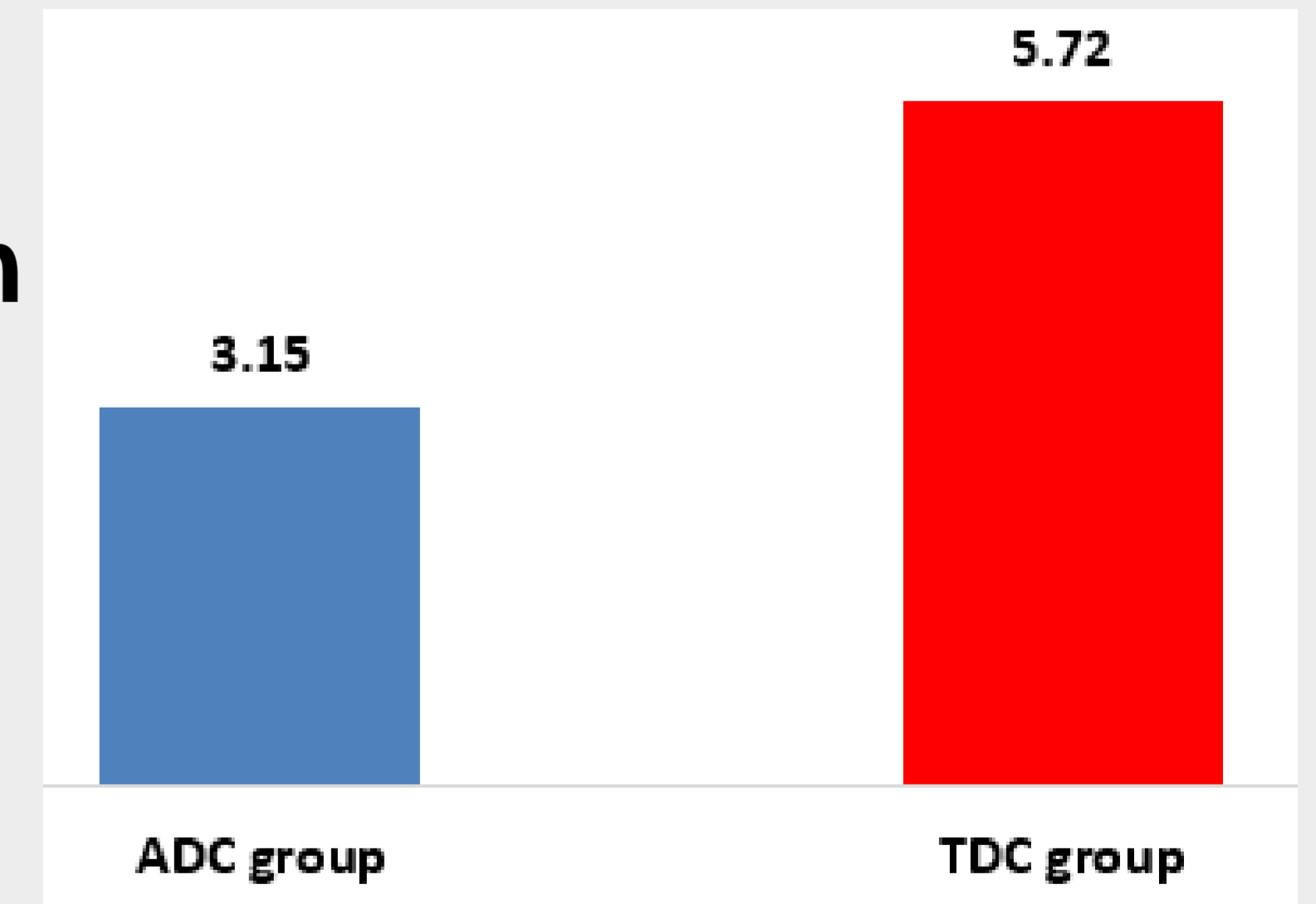
Error rate

p = 0.001



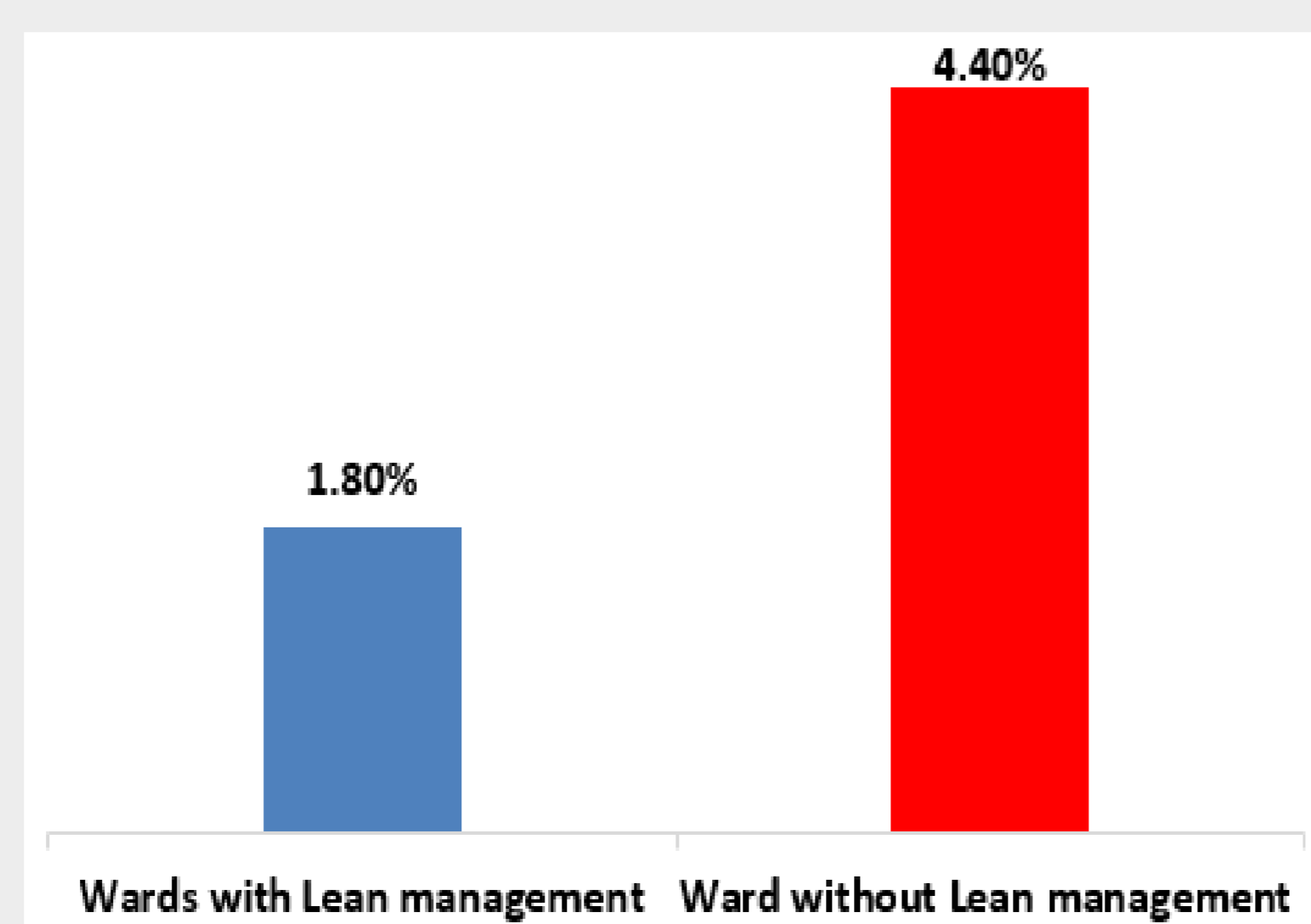
Number of interruption per hour

p = 0.008



Error rate : Lean Management Project

p = 0.0268



Preparation time (seconds/drug)

p = 0.0017

