

Can we use video preparation control system for performance management and training programs?

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In 2017: installation of the Drugcam® video control system to monitor the stages of chemotherapy preparations.

Method

JAN 2018

Performance criteria analysis

JAN 2020

Discussion

- Learning Drugcam® requires 4 months to reach the performance plateau of the 2 performance criteria training path adapted accordingly
 - High proportion of error correlated with training < 4 months (recent training) and a proportion of preparation > 50% outside the target preparation time.
 - Error profile analysis allows better targeting and illustration of training points Identification of the rate of preparation in error under Drugcam® at 25%.
 - Categorization of the different types of errors encountered (bad detection, real error...)
 - Manual indexing = source of error as such removes the security of automated recognition
- ⚠ Do not neglect them, remain attentive in order to correct the sources of manual indexing which can lead to a preparation error by removing vigilance (e.g.: parameterization defect).

Conclusion

This analysis made it possible to identify a target training time and performance criteria for the follow-up training of the pharmacy technicians. Drugcam® is a good performance management tool. Indeed, with the implementation of indicators, it allows to follow the production process and to adapt the initial and continuous training plan of the pharmacy technicians

Objective

Evaluate the Drugcam® system as a performance management tool (number of errors and speed of completion) in order to adapt the training program (initial and ongoing)

Target preparation time

Determination of the median preparation time ± 20%

Identification of the preparations according to the speed of realization : « normal », « slow », « fast »

Number of errors

Number of manual indexing (MI)

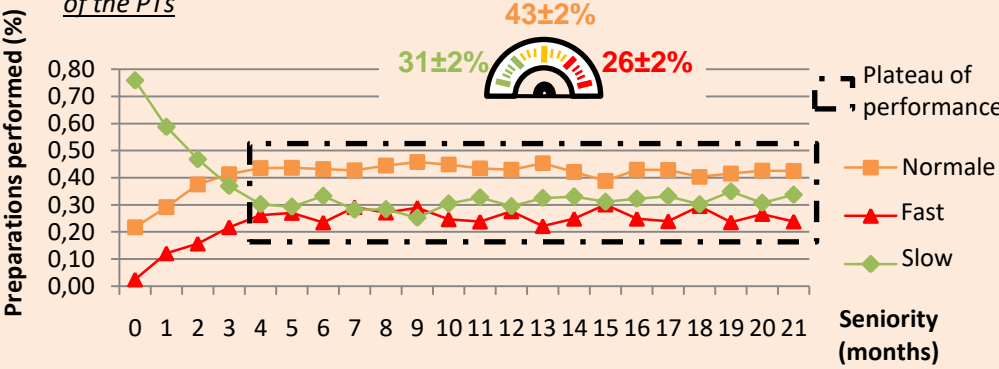
Bottle, sampling, packaging or labeling errors

→ interpreted according to the seniority of the pharmacy technicians (PTs)

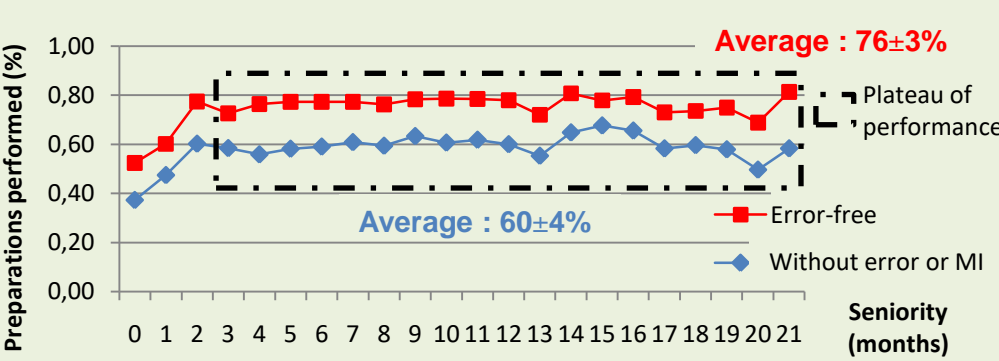
Results

- 40236 preparations were carried out by 17 PTs

Percentage of preparation according to the speed of execution and the seniority of the PTs



Percentage of error-free preparation according to the seniority of the PTs



Préparations	Slow	Normale	Fast
Error-free	71%	77%	84%
Without error or MI	50%	60%	72%