Management of monodose trolleys preparation in a hospital pharmacy

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What was done?

We reorganized the pharmacy service of our hospital in order to improve the total processing time and minimize the dispensation errors in monodose trolleys.

Why was this done?

We observed:

An increase (20%) in the percentage of dispensing errors of the drugs in monodose.

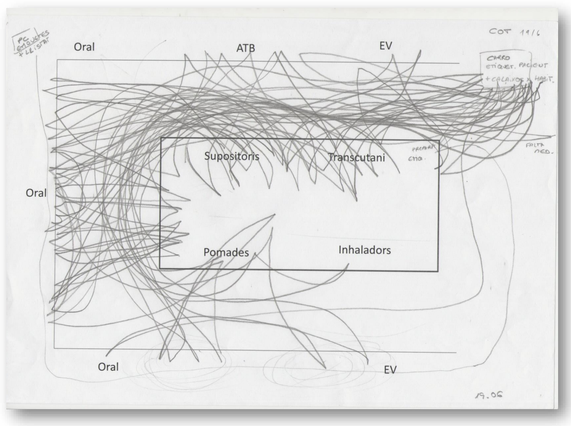
A long processing time to prepare the monodose trolleys.

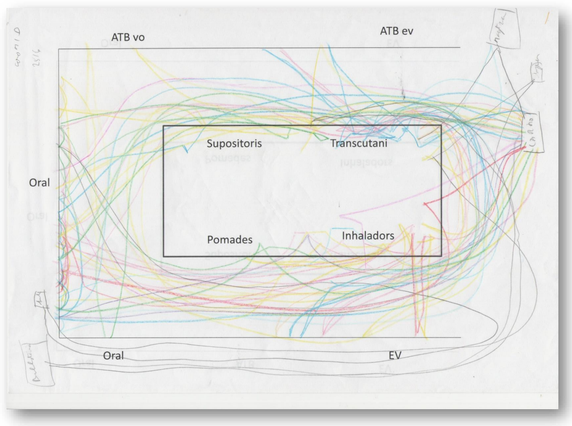
How was it done?

Through Lean methodology, we analysed all tasks of distribution during the service. We used tools like Spaghetti Chart, Value-Stream Mapping, workflow observations, root cause analysis, and five why's.

Value-Stream Mapping

Spaghetti Chart



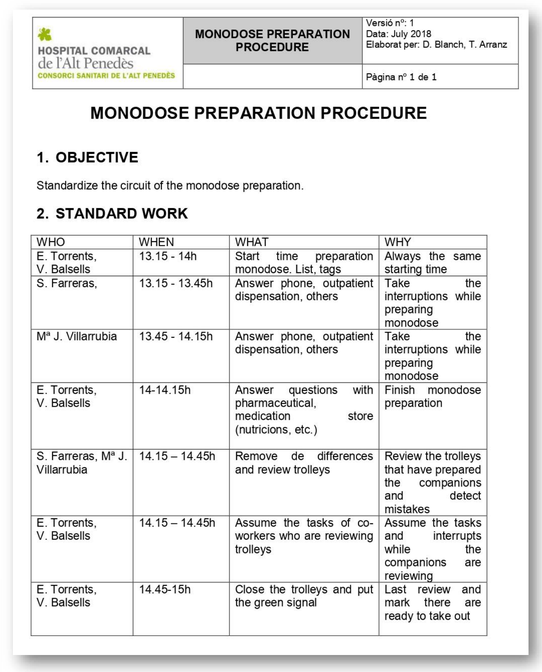


Numerous interruptions were detected such as phone calls, movements to search for material and drugs, reworking, as well as other unnecessary work done at the same time.

We redesigned the task's organisation in order to improve patient's security and reduce the process time.

We modified the distribution of drugs in the preparation area; a responsible to answer the telephone calls during the preparation is defined; the hour of starting preparation is standardized.

Additionally, a person in charge of supervising the process at the end was designated.



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MONODOSE PREPARATION PROCEDURE	Versió nº: 1 Data: July 2018 Elaborat per: D. Blanch, T. Arranz
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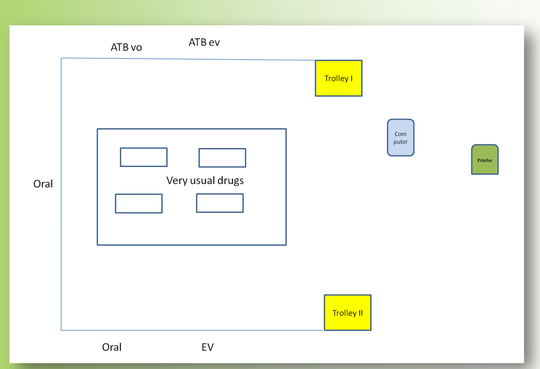
MONODOSE PREPARATION PROCEDURE

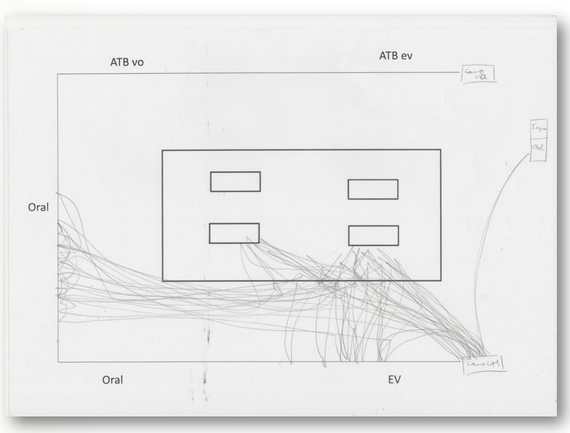
1. OBJECTIVE

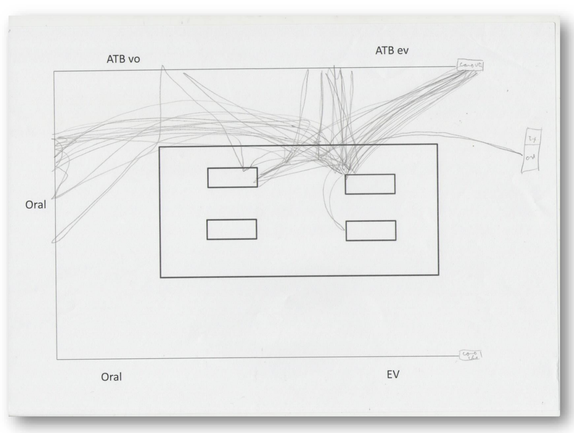
Standardize the circuit of the monodose preparation.

2. STANDARD WORK

WHO	WHEN	WHAT	WHY
E. Torrents, V. Balsells	13.15 - 14h	Start time preparation monodose. List, tags	Always the same starting time
S. Farreras,	13.15 - 13.45h	Answer phone, outpatient dispensation, others	Take the interruptions while preparing monodose
Mª J. Villarrubia	13.45 - 14.15h	Answer phone, outpatient dispensation, others	Take the interruptions while preparing monodose
E. Torrents, V. Balsells	14-14.15h	Answer questions with pharmaceutical, medication store (nutricions, etc.)	Finish monodose preparation
S. Farreras, Mª J. Villarrubia	14.15 – 14.45h	Remove de differences and review trolleys	Review the trolleys that have prepared the companions and detect mistakes
E. Torrents, V. Balsells	14.15 – 14.45h	Assume the tasks of co-workers who are reviewing trolleys	Assume the tasks and interrupts while the companions are reviewing
E. Torrents, V. Balsells	14.45-15h	Close the trolleys and put the green signal	Last review and mark there are ready to take out







What has been achieved?

A significant reduction of the movements in the service, less interruptions and a 40% decrease of the total preparing time of the new drugs' distribution.

At the same time, the dispensation errors decreased a 35%.

What next?

The Lean methodology allows analyzing and redesigning the circuit and activity's distribution in the service. Moreover, it is a good tool to improve the process, optimize time and reduce errors.

http://www.eahp.eu/gpis/management-monodose-trolleys-preparation-hospital-pharmacy