



# MONITORING OF WAITING TIMES FOR ANTICANCER CHEMOTHERAPY AS AN INDICATOR OF QUALITY PERFORMANCE

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## Background

In relation to the regional project UFAONCOEMA, at the enterprise level, a set of goals were fixed. They concerns: efficacy, efficiency, quality and performances' safety. Among quality goals, it was chosen the monitoring of waiting time of antiblastic chemotherapies as indicator.

# Purpose

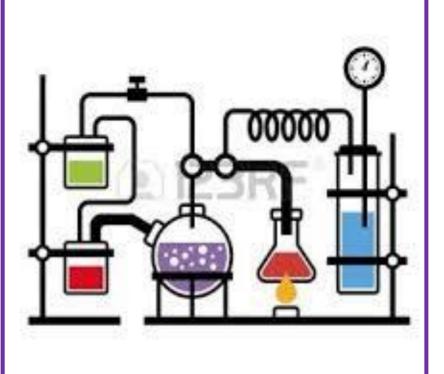
Research's purpose is to assess, for the two UFA (antiblastic-drugs-unit) which joined UFAONCOEMA project, whether the waiting times meet requirements of max 60 mins, set at the enterprise level, according to the standard requirements adopted by others reference enterprises.

# Materials and Methods

Times have been monitored over a period of 3 months. The monitoring starts from therapy's online confirmation by the prescriber, then pharmacist's validation, goes on with preparation and delivering by nurses, and ends when the unit receive that therapy. Therapies for 2018 accesses of patients in Oncology and Hematology Day hospital (DH) have been evaluated (Tab.1). Besides, it has been considered that after verifying appropriateness' prescription, therapies' validation starts at about 8.15am then preparing in clean room starts at about 8.45, due to set up the laminar floow hood and sterile field.













# WAITING TIME

### Results

From when it is possible to make the preparation to the moment of delivery to the unit, in optimal conditions (3 nurses' presence, no extraordinary maintenance for the hood and/or UFA machinery), in case of therapies confirmed the same morning when the administration is expected, waiting times are 60 mins for Oncology and 57 mins for Hematology. Considering that therapies for afternoon shift in Oncology DH and therapies confirmed on time for the following day are made and sent within 1.30pm, waiting time for those patients (10% of therapies) is equal to zero, so the average waiting time reduces in 56 mins (Fig.1).

| DATE       | THERAPY<br>NUMBER | THERAPY<br>CONFIRMATION<br>TIME | VALIDATION<br>TIME | ESTIMATED<br>PREPARATION<br>TIME | PREPARATION<br>TIME | SENDING<br>TIME | RECEPTION<br>TIME | NOTES | PM<br>THERAPY | WAITING<br>TIMES |
|------------|-------------------|---------------------------------|--------------------|----------------------------------|---------------------|-----------------|-------------------|-------|---------------|------------------|
| 02/04/2015 | 1                 | 07:41                           | 08:15              | 8:45                             | 10:02               | 10:25           | 10:35             |       |               | 1:50             |
| 03/04/2015 | 2                 | 14:55                           | 08:15              | 8:45                             | 10:04               | 10:30           | 10:40             |       | PM            | 1:55             |
| 03/04/2015 | 3                 | 14:58                           | 08:15              | 8:45                             | 09:08               | 9:50            | 10:00             |       |               | 1:15             |
| 03/04/2015 | 4                 | 15:02                           | 08:15              | 8:45                             | 09:10               | 9:50            | 10:00             |       |               | 1:15             |
| 03/04/2015 | 5                 | 07:36                           | 08:15              | 8:45                             | 09:15               | 9:50            | 10:00             |       |               | 1:15             |
| 03/04/2015 | 6                 | 14:57                           | 08:15              | 8:45                             | 09:17               | 9:50            | 10:00             |       |               | 1:15             |
| 03/04/2015 | 7                 | 14:54                           | 08:15              | 8:45                             | 09:40               | 9:50            | 10:00             |       |               | 1:15             |
| 03/04/2015 | 8                 | 14:59                           | 08:15              | 8:45                             | 09:30               | 9:50            | 10:00             |       |               | 1:15             |
| 04/04/2015 | 9                 | 08:15                           | 08:15              | 8:45                             | 09:30               | 9:50            | 10:00             |       |               | 1:15             |
| 04/04/2015 | 10                | 08:00                           | 08:15              | 8:45                             | 09:40               | 9:50            | 10:00             |       |               | 1:15             |
| 08/04/2015 | 11                | 07:32                           | 08:15              | 8:45                             | 09:45               | 9:50            | 10:00             |       |               | 1:15             |
| 08/04/2015 | 12                | 07:31                           | 08:15              | 8:45                             | 09:55               | 10:35           | 10:45             | NC1   |               | 2:00             |
| 08/04/2015 | 13                | 07:33                           | 08:15              | 8:45                             | 11:10               | 11:15           | 11:25             |       | PM            | 0:00             |
| 08/04/2015 | 14                | 07:34                           | 08:15              | 8:45                             | 11:12               | 11:15           | 11:25             |       | PM            | 0:00             |
| 09/04/2015 | 15                | 16:43                           | 08:15              | 8:45                             | 10:40               | 11:15           | 11:25             |       | PM            | 0:00             |
| 09/04/2015 | 16                | 16:32                           | 08:15              | 8:45                             | 10:35               | 11:15           | 11:25             |       | PM            | 0:00             |
| 09/04/2015 | 17                | 16:29                           | 08:15              | 8:45                             | 10:42               | 11:15           | 11:25             |       | PM            | 0:00             |
| 09/04/2015 | 18                | 16:39                           | 08:15              | 8:45                             | 09:20               | 9:50            | 10:00             |       |               | 1:15             |
| 24/04/2015 | 19                | 07:53                           | 08:15              | 8:45                             | 09:20               | 9:35            | 9:45              |       |               | 1:00             |
| 24/04/2015 | 20                | 16:44                           | 08:15              | 8:45                             | 09:15               | 9:35            | 9:45              |       |               | 1:00             |
| 24/04/2015 | 21                | 16:42                           | 08:15              | 8:45                             | 09:12               | 9:35            | 9:45              |       |               | 1:00             |
| 24/04/2015 | 22                | 16:39                           | 08:15              | 8:45                             | 09:17               | 9:35            | 9:45              |       |               | 1:00             |
| 24/04/2015 | 23                | 16:43                           | 08:15              | 8:45                             | 09:22               | 9:35            | 9:45              |       |               | 1:00             |

Tab.1 daily activity report waiting times

# Discussion

For therapies confirmed between 8:46 and 9:45 it results an average waiting time of 72 minutes, higher than standar value. Such delay is due to an overload of confirmations coming from all the units during that time range. A possible solution may be the increase of therapies to confirm the day before.

# WAITING TIMES FOR THERAPY HEMATOLOGY THERAPY ONCOLOGY THERAPY AM ONCOLOGY THERAPY AM-PM CONFIRMATION TIME < 08.45 HOURS CONFIRMATION TIME 08.46-09.45 HOURS CONFIRMATION TIME 09.46-10.45 HOURS CONFIRMATION TIME > 10.45 HOURS SENDING TIME

Fig. 1 Average waiting times for therapy

AVERAGE WAITING TIME (MINUTES)

# Conclusions

The assessment shows that the average waiting times are included in a range of fixed requirements. Besides, 32% of morning therapies get the applicant units within 50 mins. The transportation time (10 mins) to the Oncology DH, even it doesn't negatively affect the achievement of the goal, can be reduced with the future transfer of UFA center in that unit. An increasing in confirmed steady therapies for the day after can further reduce waiting time.