

LEAN MANAGEMENT OPTIMIZATION OF THE PATIENT CARE PATHWAY IN AN ONCO-HEMATOLOGY OUTPATIENT HOSPITAL

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What was done ?

- Over the last few years, French healthcare establishments have been moving towards a more **ambulatory approach** to medical care.
- The growing number of patients treated in outpatient hospitals (OPH) has necessitated a reorganisation of these units. Staff at the onco-haematology OPH and the team at the centralised cytotoxic preparation unit in our hospital have reported **organisational problems** affecting the care pathway for patients admitted to the units, leading to excessive delays in treatment (TT) and **long waiting times** for patients.
- Waiting time** is one of the **best measures** of the **quality of care** provided.

Why was it done ?

- Improve the overall patient flow within the OPH service by **reducing so-called non-value-added and compressible waiting times**, without affecting the quality of patient care.
- This would make it possible to **homogenise the distribution of work** (pharmacist, OPH)
- Smoother patient flow with no bottleneck effect, resulting in **better patient rotation**

How was it done ?

- Follow-up on 20% of monthly admissions :
 - Patient pathway mapping**
 - Data collection:** waiting times, volume of activity
- For nurse + haematologist **questionnaire**
- Application of Lean : **Kaizen workshops**
- Choice of improvement actions :
 - ✓ Inexpensive
 - ✓ Simple
 - ✓ Easy and quick to set up

↳ **Brainstorming session :**

 - Haematologists
 - Pharmacists
 - Nurses
- Implementation of selected actions :
 - New data collection**
 - Comparison of results**

What was been achieved ?

Nurse : 10 / 10 answers :

- For **90%** : 1st cause of delay: **doctors' responsiveness**
- For **50%** : 2nd cause: time taken to **prepare TT** + no information on **patient arrival**

Doctor : 1 / 7 answers :

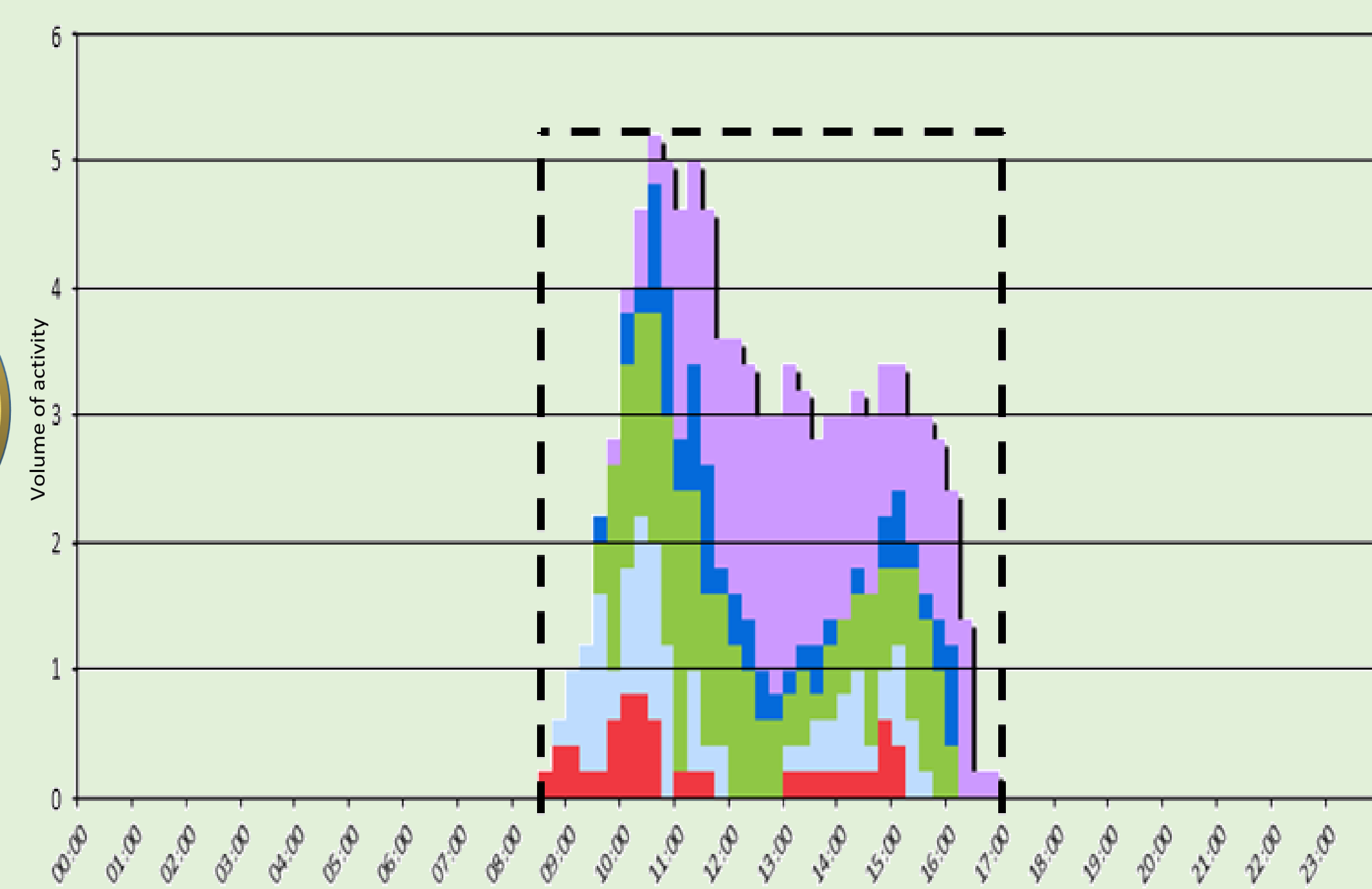
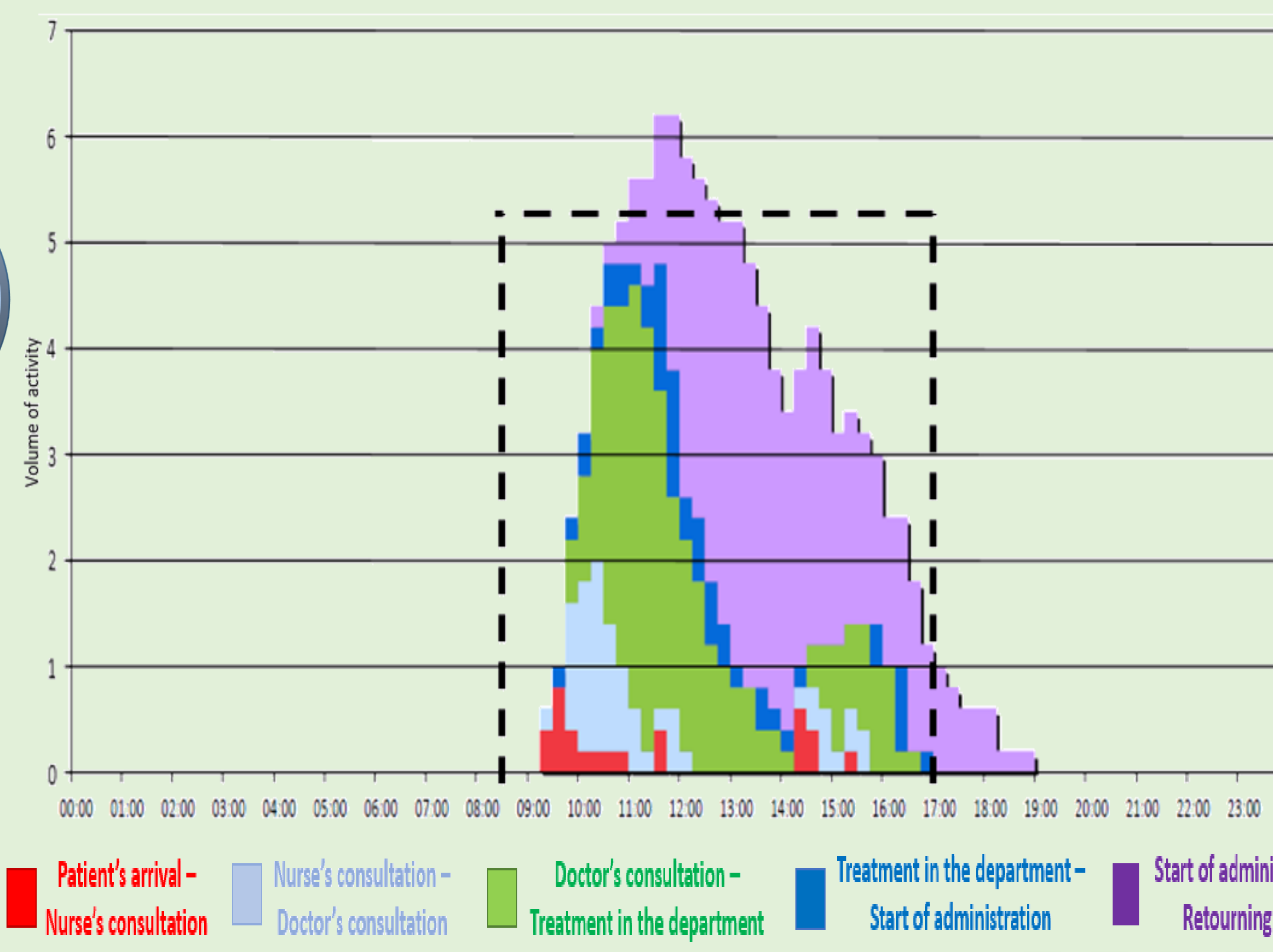
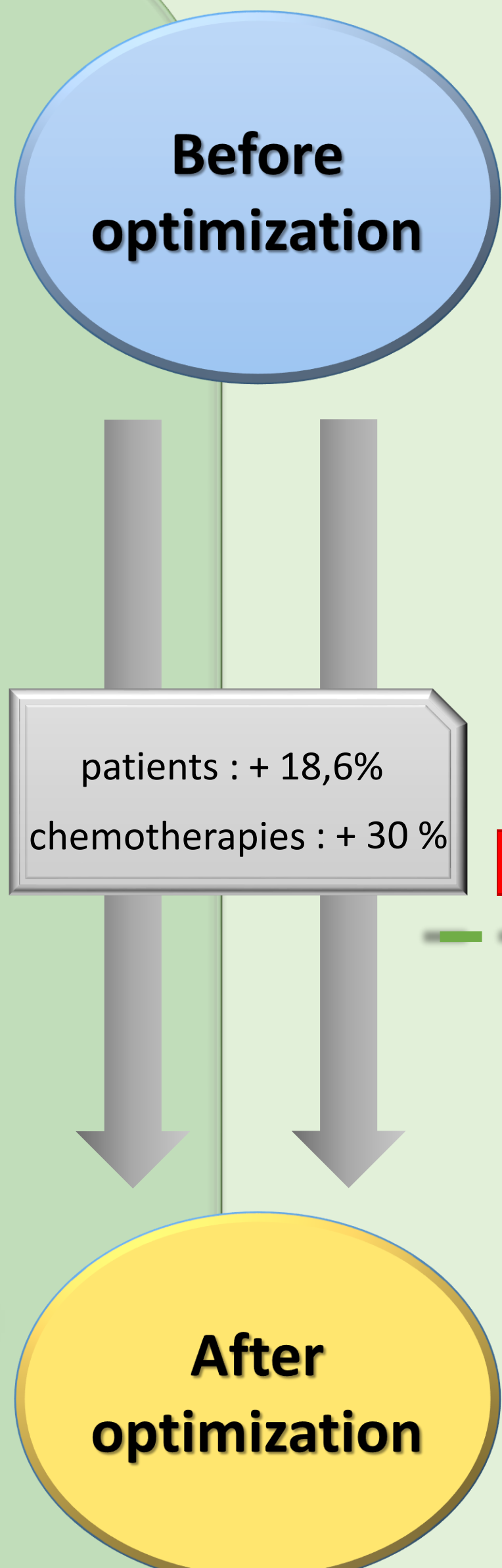
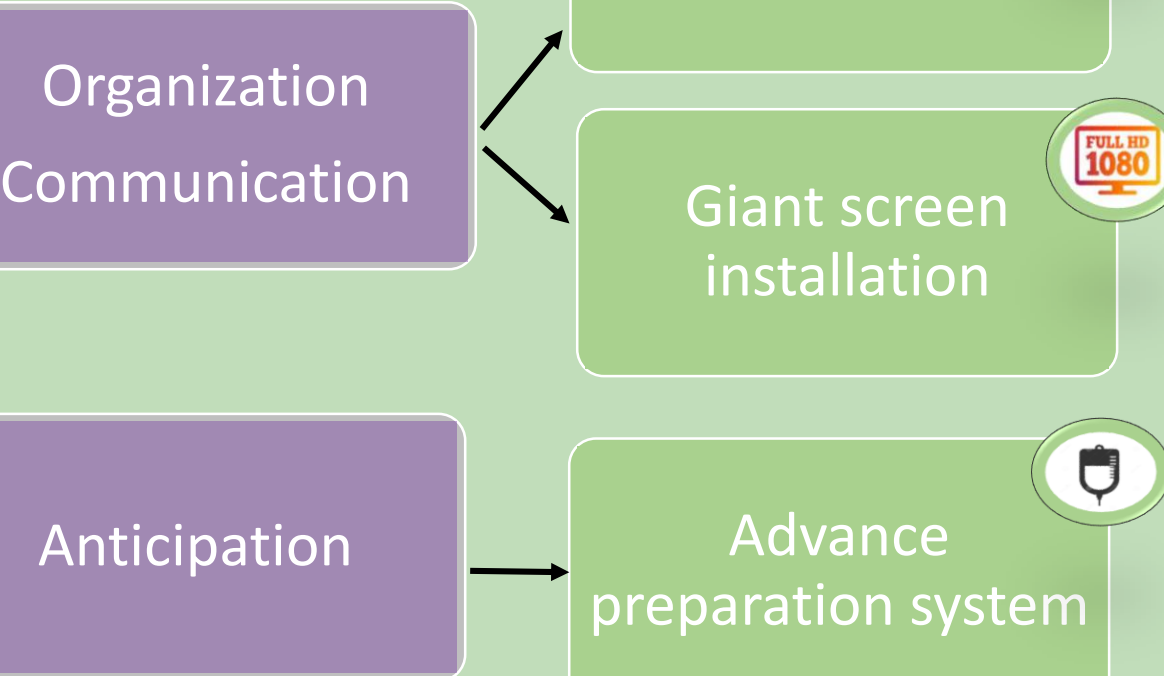
- result not included

Kaizen workshops : 2 nurses + 2 doctors

- **Inconsistent** working methods
- **Communication** problems
- **TT preparation** time seen as a limiting factor

Brainstorming

Problems identified



64 patients

	Time (min)	Time distribution (%)
Accumulated waiting	127	58,8%
Care time	89	41,2%
Total (length of stay)	216	

The **rate of advance preparation** has risen from 0% to **69%**.
More than half of patients arriving at OPH have their TT already **prepared**.

	Time (min)	Time distribution (%)
Accumulated waiting	74	45,4%
Care time	89	54,6%
Total (length of stay)	163	

79 patients

Stage in the patient care pathway	Before OPH optimisation		After OPH optimisation		Δ after - before	Δ (%)	
	Average (min)	Median (min)	Average (min)	Median (min)			
Patient's arrival - Nurse's consultation	12	8	11	8	-1	-8,3%	
Nurse's consultation - Doctor's consultation	17	14	14	10	-3	-17,6%	
Doctor's consultation - OK Chimio®	16	10	6	6	-10	-62,5%	
OK Chimio® - Treatment sent	57	53	28	28	-29	-50,9%	
Treatment in the department - Start of administration	Treatment sent - Treatment with nurse	8	7	5	4	-3	-37,5%
	Treatment with nurse - Treatment administration	8	8	6	5	-2	-25%
End of administration - Returning home	9	5	4	3	-5	-55,6%	

The **total cumulative waiting time** (excluding care time) was **reduced by 42%**, from 127 minutes to 74 minutes.

	Before OPH optimisation		After OPH optimisation		Δ after - before	Δ (%)
	Average (min)	Median (min)	Average (min)	Median (min)		
Patient's arrival - Nurse's consultation	12	8	11	8	-1	-8,3%
Patient's arrival - Doctor's consultation	37	34	33	30	-4	-10,8%
Patient's arrival - OK Chimio®	56	51	49	50	-7	-12,5%
Patient's arrival - Treatment sent	112	104	76	76	-36	-32,1%
Patient's arrival - Start of administration	128	112	89	84	-39	-30,5%
Patient's arrival - Returning home	216	186	163	125	-53	-24,5%

The **patient's stay in OPH was reduced by 53 min** after optimization, from 216 min to 163 min (24.5% less time in the ward for the patient).

What is next ?

Healthcare professionals have notes a **smoother flow of activity** making the **care pathway more fluid** enabling to spend less time in the department, **without impacting on patient care**. This results in a **better rotation** of OPH's beds.

Taking on more and more patients, and therefore increasing activity, would not have been possible without a plan to optimise the OPH.

The actions chosen must be **sustainable** and the project must **continue to be improved**.

However, one of the strengths of the method used is also one of its limitations :

➢ participative continuous improvement = a project that depends on the involvement of all those involved, with the risk that, in the long term, **more costly optimization measures** will be required.

The **economic aspect was given little consideration** in order to focus on the patient perspective.

