

# Quality Training Program

**Project Title:** Reduce the waiting time from arrival at the hospital until the administration of immunotherapy in an oncology unit.

**Presenter's Name:** Juana Oramas MD , Rosa Garcia MD.

**Institution:** MEDICAL ONCOLOGY SERVICE  
HOSPITAL UNIVERSITARIO DE CANARIAS-SAN CRISTOBAL DE LA LAGUNA-TENERIFE

**Date:** Sep 14<sup>th</sup>, 2020

# Institutional Overview

- Hospital Universitario de Canarias, founded in 1971.
- Tertiary care referral center
- 655 bed-hospital, 1 million population area of influence
- Teaching hospital for Faculty of Medicine, La Laguna University.
- The work team is formed by 11 oncologists, 9 physicians residents, numerous specialized nurses, various nursing assistants, a Nursing Manager, large administrative staff, 3 data managers, a team of clinical pharmacists and medical students who participate in service activities.
- Our outpatient oncology unit have 17 places for outpatient patients to manage chemotherapy/immunotherapy treatment daily (5 beds and 13 armchairs). The schedule is from 8 am to 9 pm, from Monday to Friday.

# Problem Statement

- Many oncology patients at our hospital are admitted for scheduled outpatient immunotherapy administration, really short-term infusions for established diagnoses.
- These patients frequently experience delays in starting immunotherapy average many hours after their arrival on the outpatient oncology unit. Delays are made known by patient complaints.
- These delays negatively impact healthcare resource utilization, length of stay, may delay other patients' admissions and decrease patient satisfaction.
- In addition, this delay also leads to a disproportionate amount of immunotherapy assigned to the same shift, affect patient safety and may result in increased immunotherapy related errors.

# Team Members

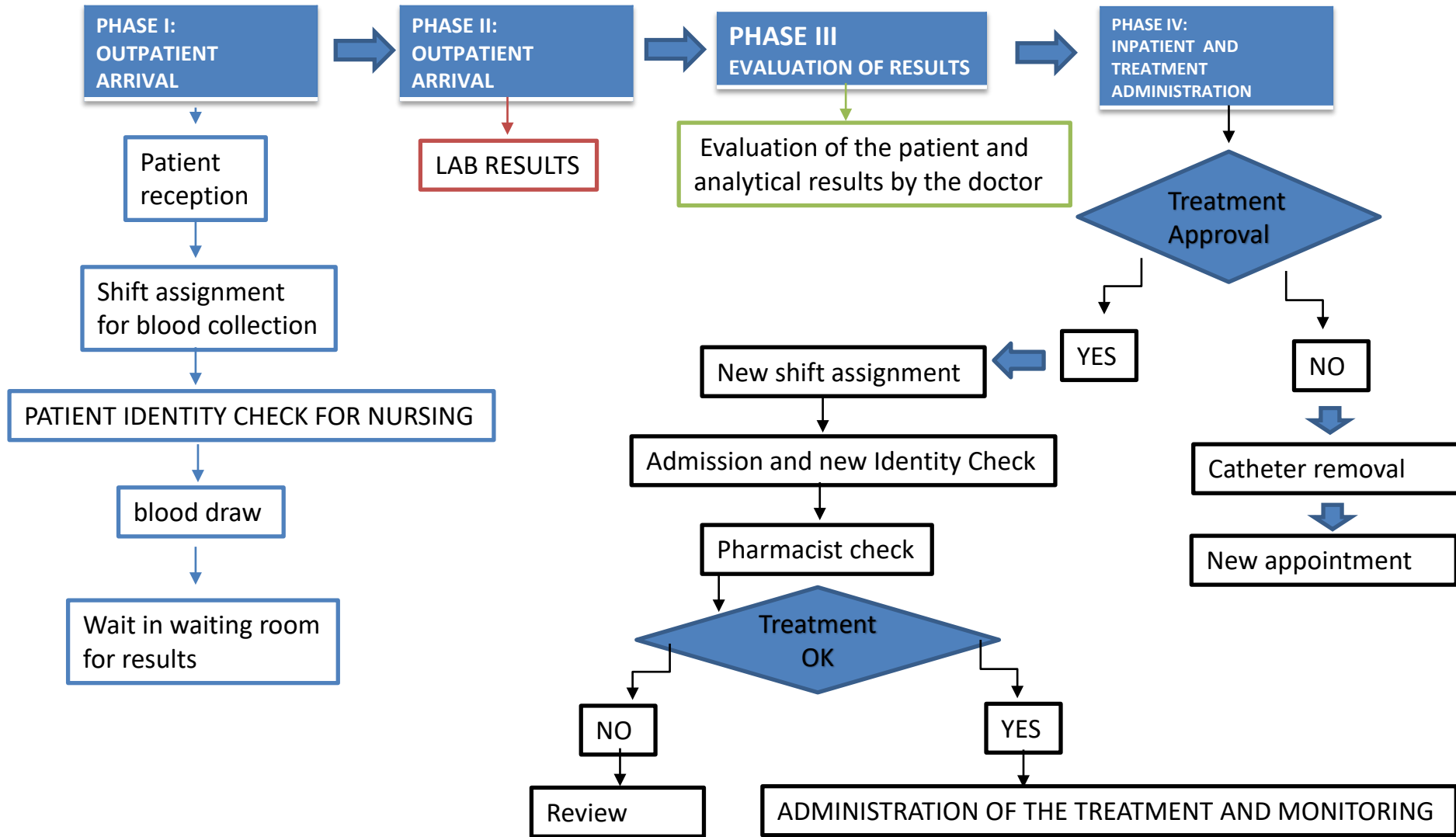
## Team member

- **DOLORES FERNANDEZ PEREZ**
- JUANA ORAMAS RODRIGUEZ, MD
- ROSA GARCIA MARRERO, MD
- ANA TERESA CARRIÓN
- CANDELARIA BENITEZ VERA
- ALBERTO MORALES BARRIOS
- RUBEN HERNÁNDEZ PÉREZ
- RITA M. ALONSO ADRIAN

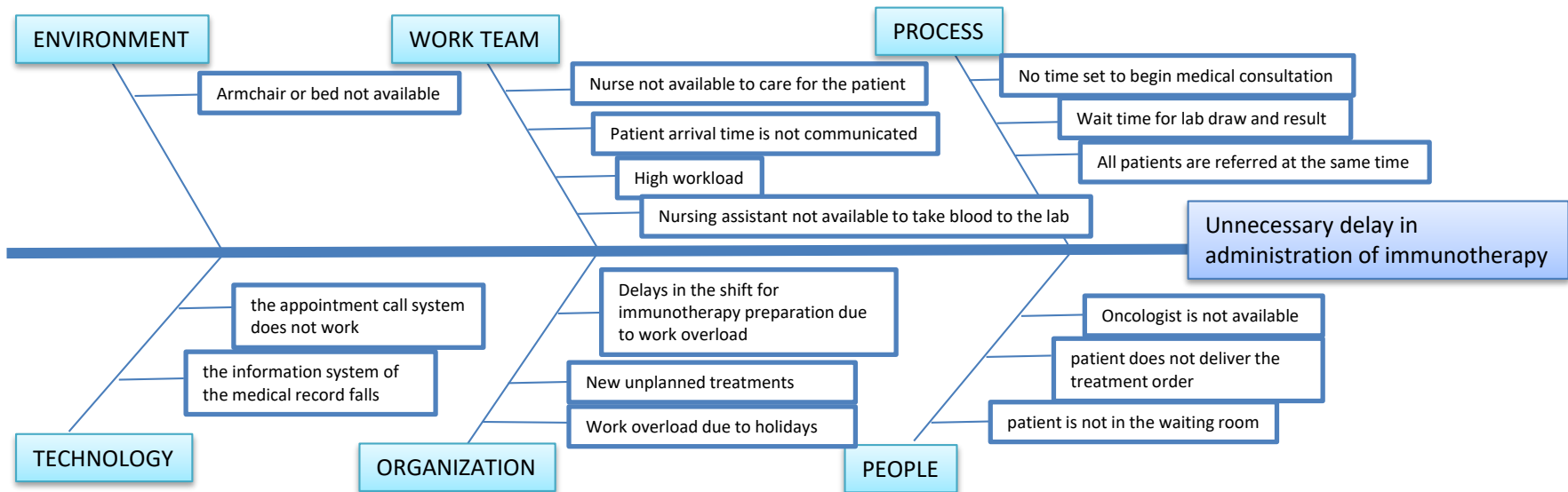
## Role/discipline

- **QTP IMPROVEMENT COACH**
- TEAM LEADER
- CORE TEAM MEMBER
- NURSING MANAGER
- NURSE TEAM MEMBER
- PHARMACIST
- ADMINISTRATIVE STAFF
- DATA MANAGER

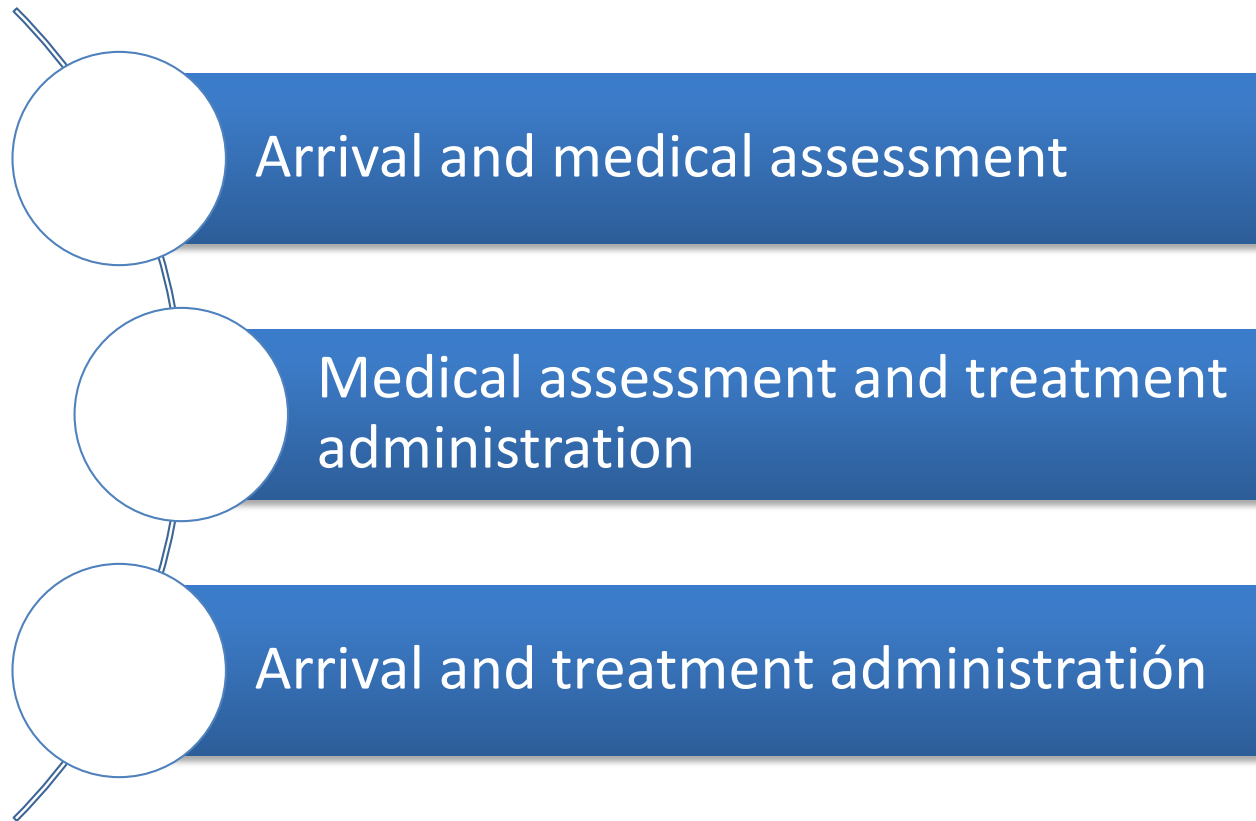
# Process Map



# Cause & Effect Diagram

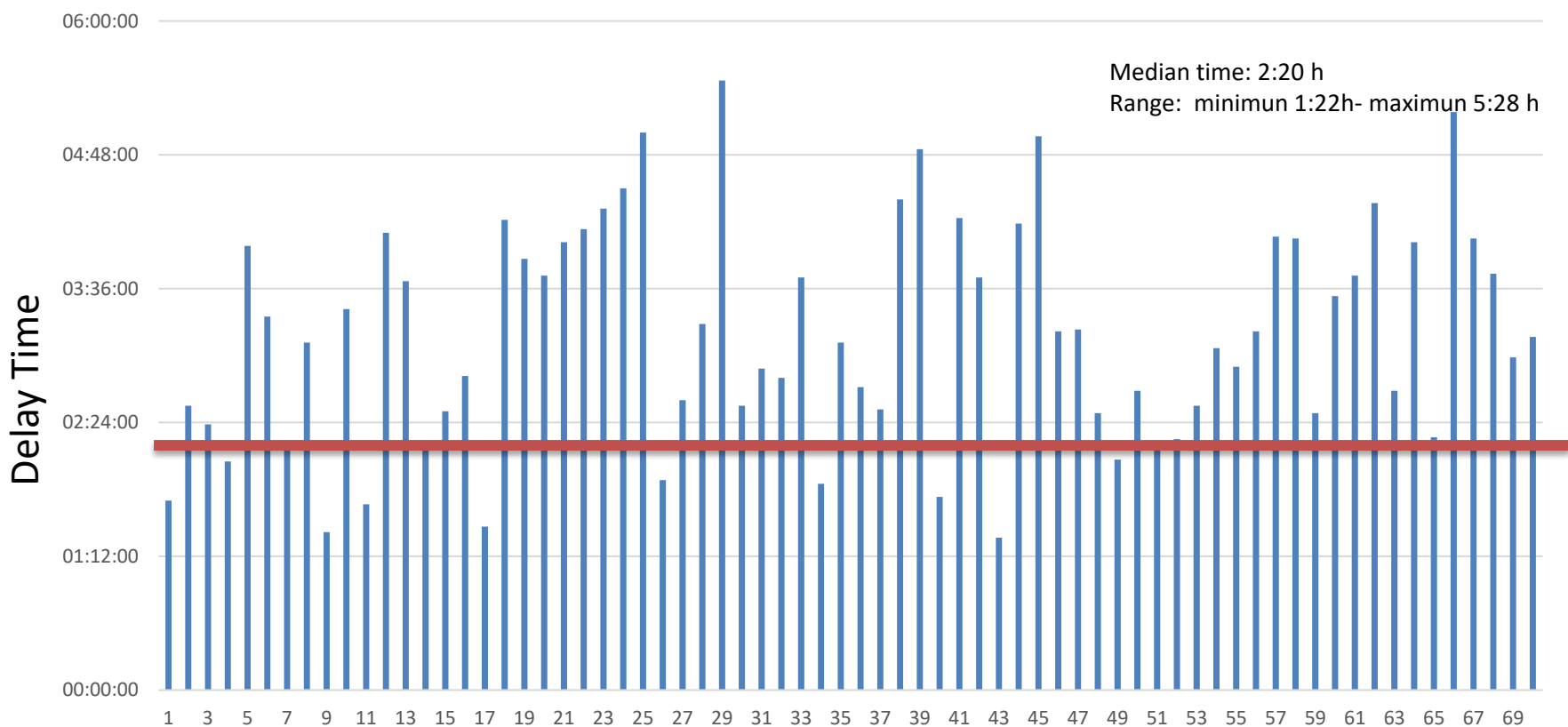


# Diagnostic Data- Time between...



# Diagnostic Data

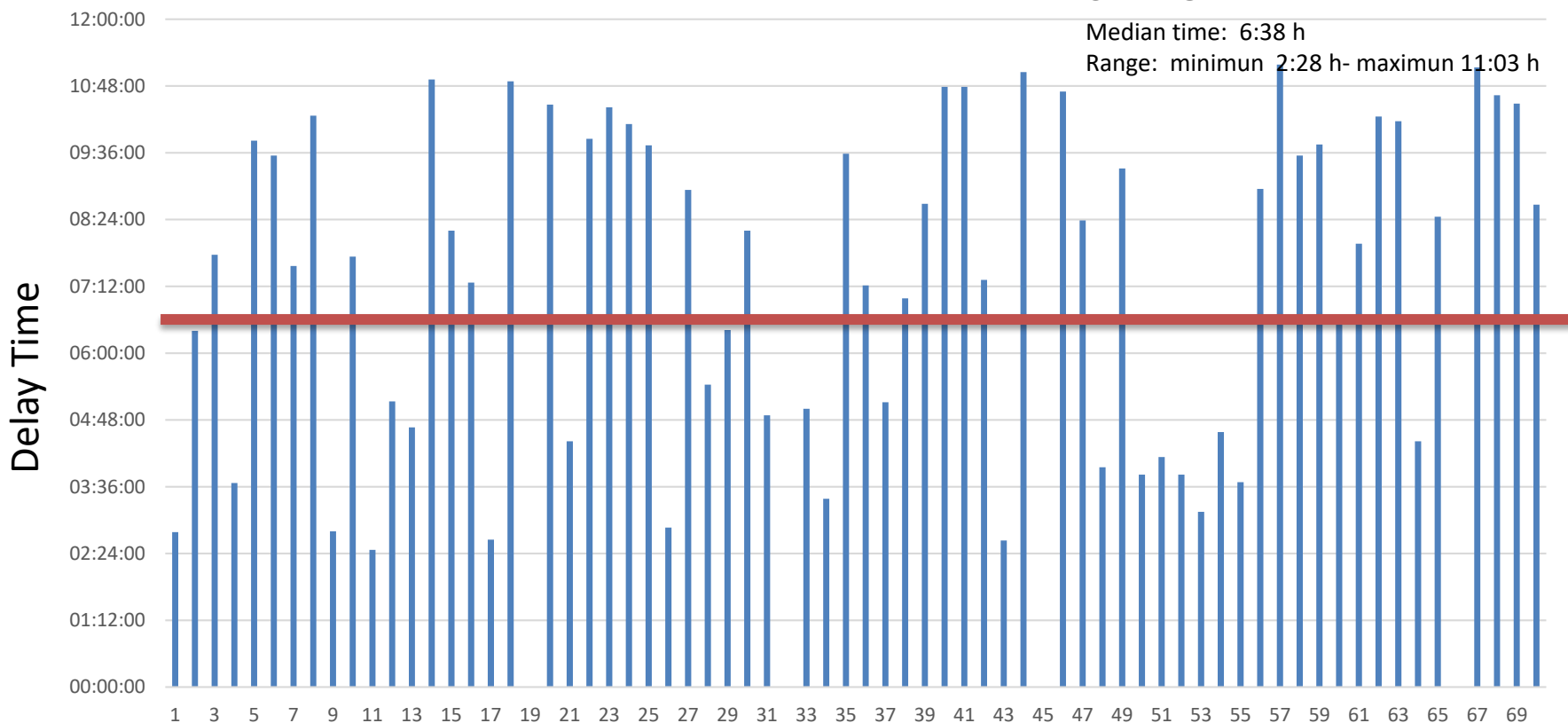
TIME BETWEEN ARRIVAL AND MEDICAL ASSESSMENT





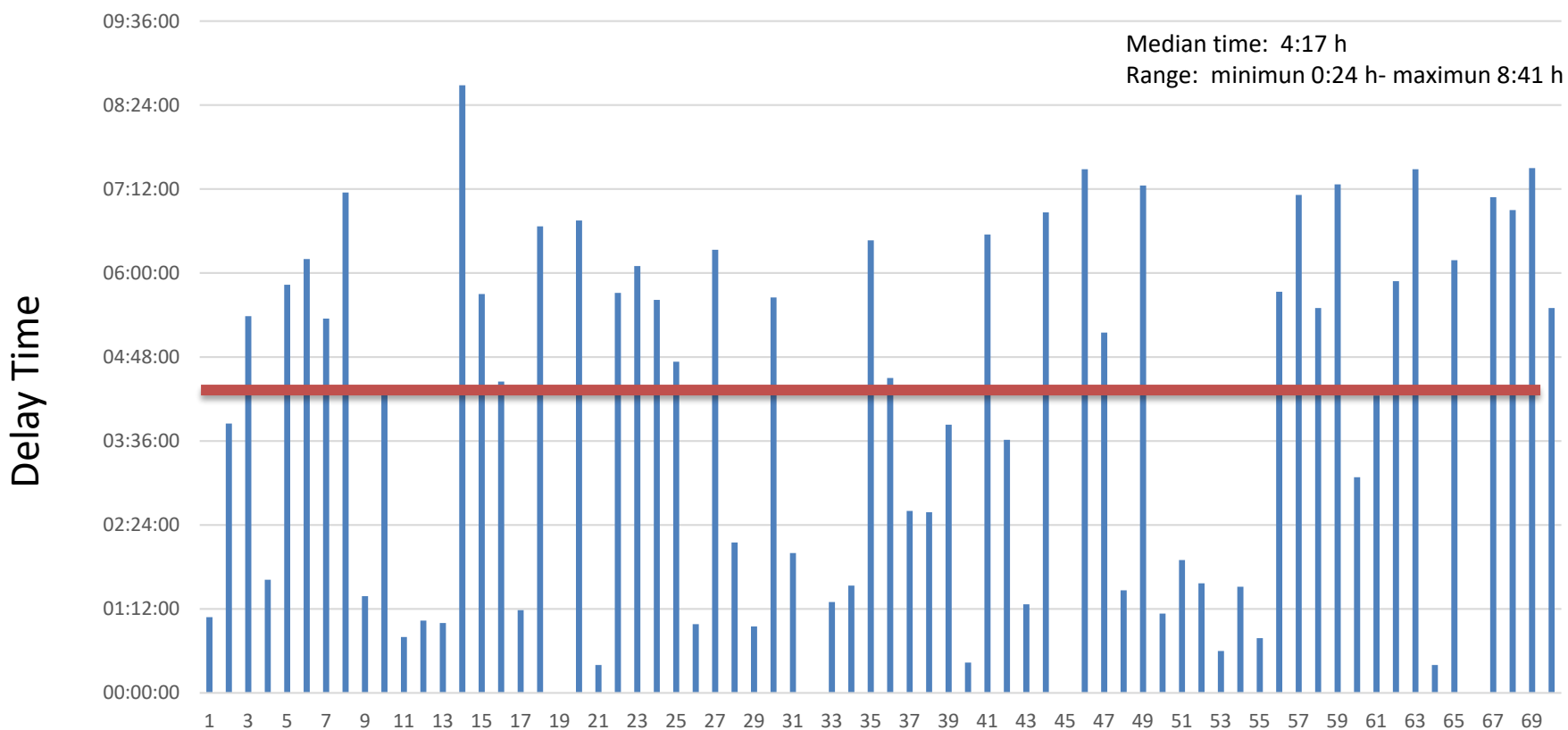
# Diagnostic Data

TIME BETWEEN ARRIVAL AND TREATMENT ADMINISTRATION



# Diagnostic Data

TIME BETWEEN MEDICAL ASSESSMENT AND TREATMENT ADMINISTRATION



# Aim Statement

We aim to reduce the waiting time in the waiting room by 20% in those patients who come for the administration of immunotherapy from the time their treatment is approved until it is administered.

# Measures

- Measure: Time lag in the administration of immunotherapy in outpatients
- Patient population: Patients receiving immunotherapy.
- Calculation methodology: We are measuring difference in time between admission and key measures. i.e
  - Time from admisión to immunotherapy is authorized
  - Time from immunotherapy authorized to administered by the nurse
- Data source: Electronic history data.
- Data collection frequency: Every three weeks
- Data quality (any limitations): Admission time/date is based in the electronic record, which may not be reflective of time patient arrives to the floor.

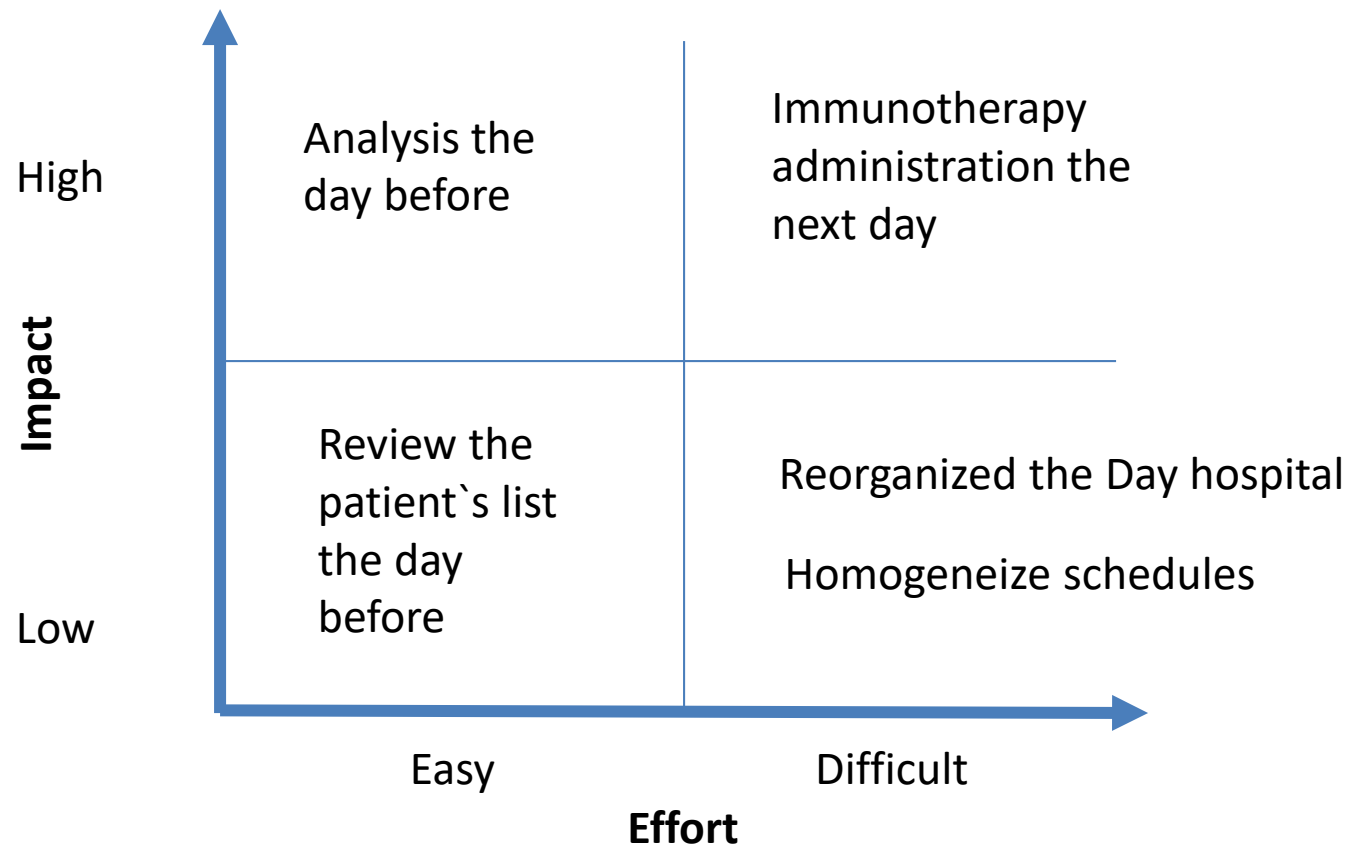
# PROJECT CHARTED

We propose a change of management in the appointment of patients who go to the outpatient oncology unit to receive immunotherapy, avoiding wait time in the hospital waiting room.

The blood test was doing the day before in their health centre or the same day of the consultation but without staying to wait the results in hospital

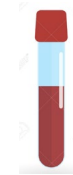
The doctor contacts the patient by phone with the approval of the drug administration and a specific time to come to de outpatient oncology unit.

# Action Priority Matrix (List og changes)



# Study population

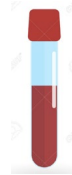
Period 1: 22 patients of 69 pts



The same day

Period 2: 135 patients

Period 2: 90 patients were analyzed



The same day

# PDSA Cycles

## Cycle 1

- Time period analyzed:
  - Between November 1 -December 31, 2019
- Measure:
  - Time lag in the administration of immunotherapy in outpatients (22 patients). The blood test was doing the same day.
    - Time from admisión to immunotherapy is authorized
    - Time from immunotherapy authorized to administered by the nurse



# PDSA Cycles

## Cycle 2

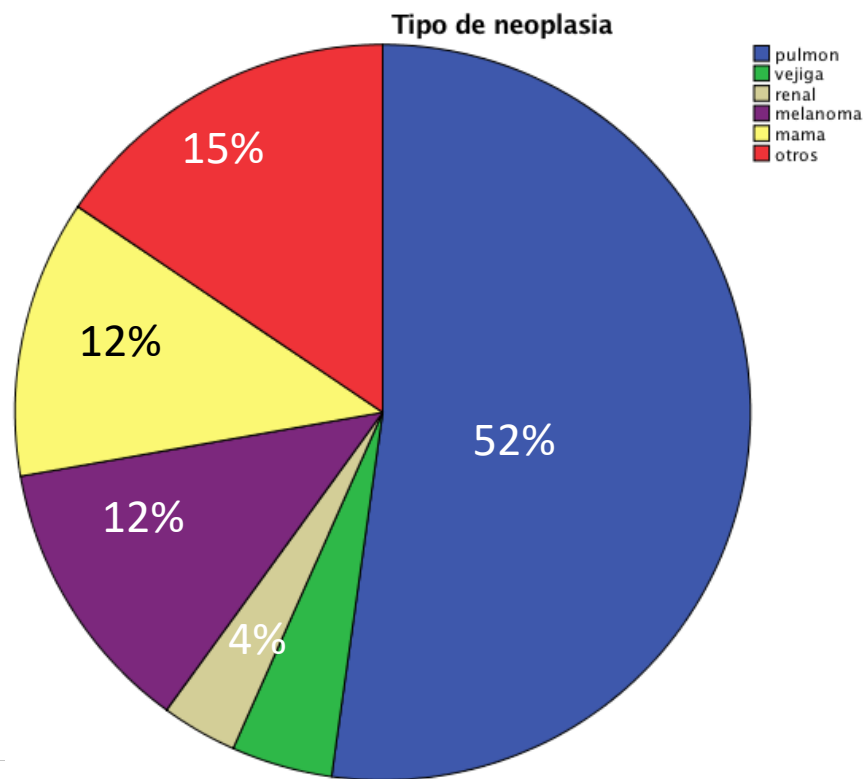
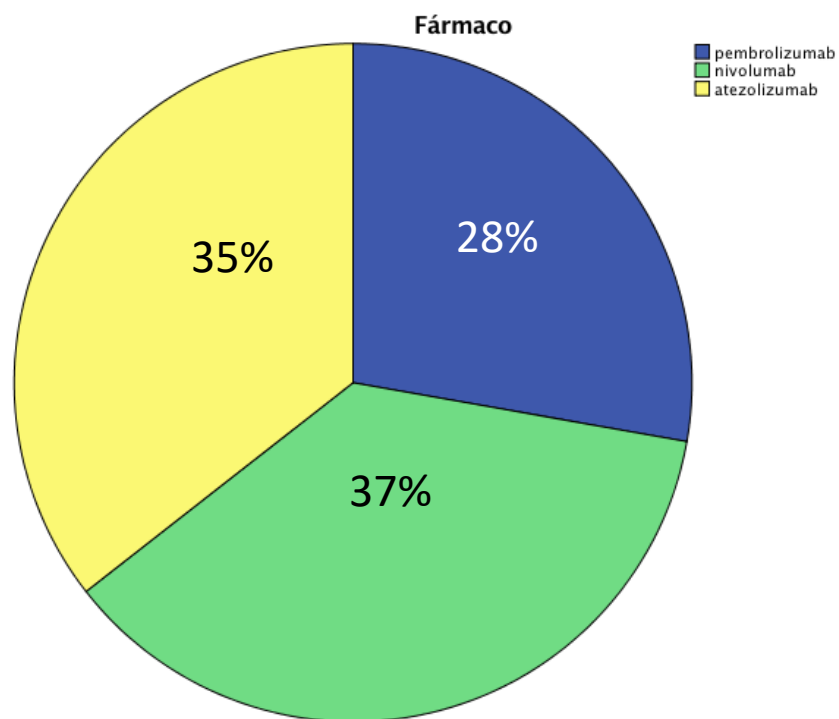
- Time period analyzed:
  - Between September 1 -November 30, 2020
- Measures (90 patients):
  - Time lag in the administration of immunotherapy in outpatients with the blood test was doing the same day.
    - Time from admisión to immunotherapy is authorized
    - Time from immunotherapy authorized to administered by the nurse
- Various factors differentiate the periods evaluated:
  - COVID-19 PANDEMIC
  - a change in the performance of medical visits: telephone consultations (75-80%)

# Change Data

N= 90 pts

Sep-Nov 2020

Median: 62 years (34-84 y)



# Change Data

## Time between arrival and medical assessment

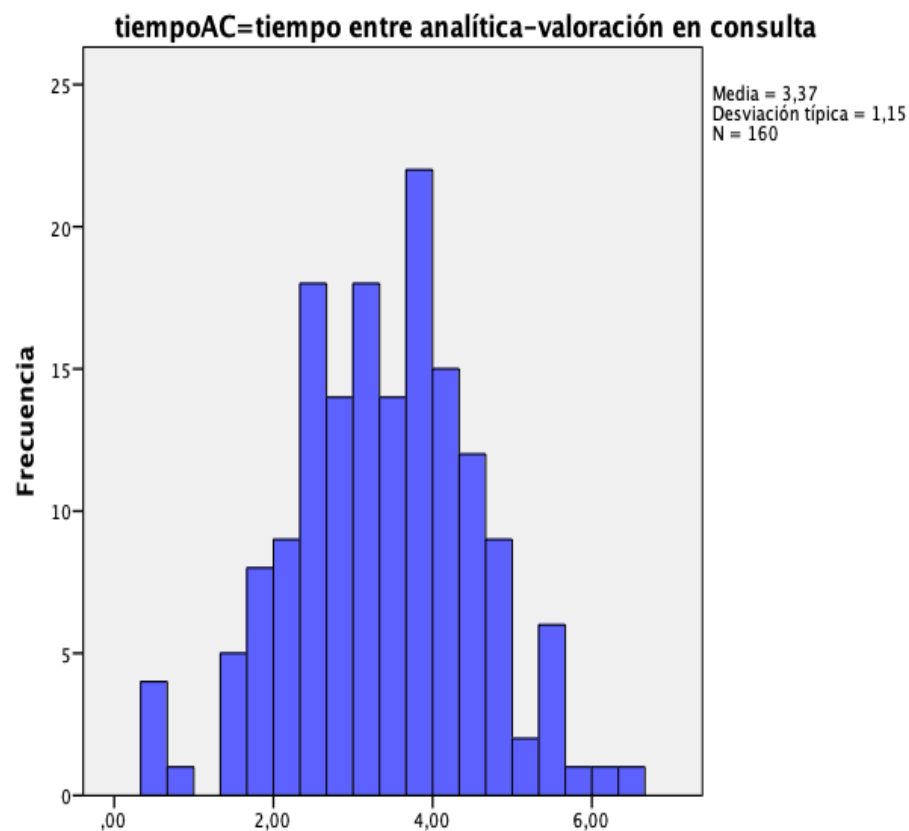
### Period 1

- Median time: 3,1 hours
- Between 2-4 hours: 83% patients were evaluated

### Period 2

- Median time: 3,37 hours
- Between 2-4 hours: 79% patients were evaluated

t-student :p = 0,091  
no statistically significant differences



# Change Data

## Time between medical assessment and treatment administration

### Period 1

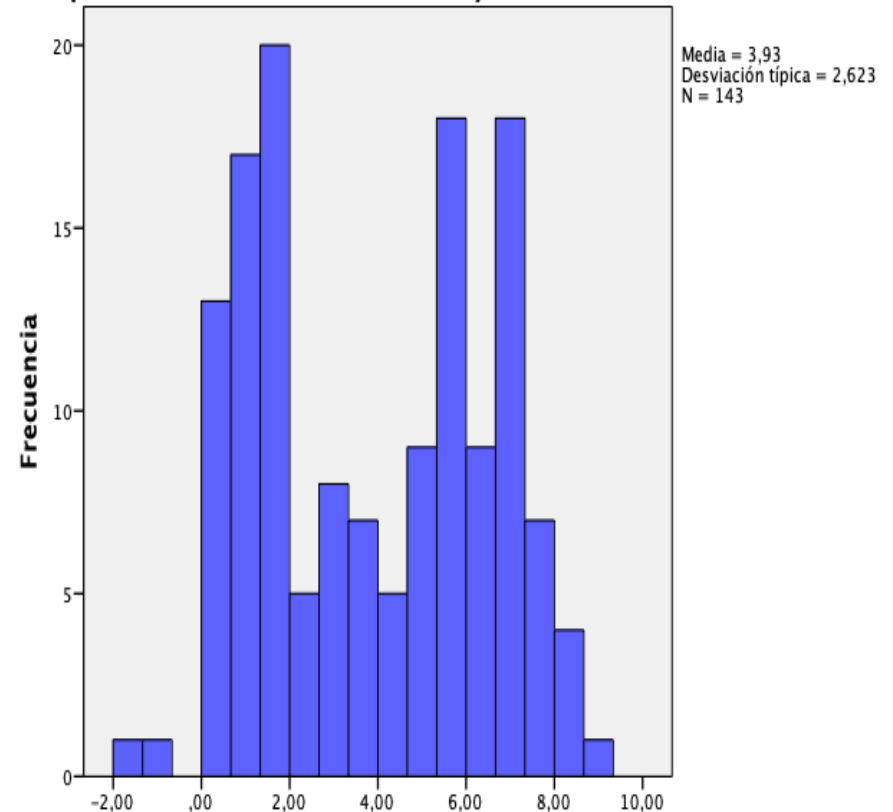
- Median time: 3,89 hours

### Period 2

- Median time: 3,93 hours

t-student :p = 0,884  
no statistically significant differences

tiempo entre la valoración en consulta y la administración de tratamiento



# RESULTS

## OUR AIM STATEMENT

We aim to reduce the waiting time in the waiting room by 20% in those patients who come for the administration of immunotherapy from the time their treatment is approved until it is administered.

## WHAT WE OBTAINED

No statistically significant differences between the times evaluated in both periods

- Between arrival and medical assessment
- Between medical assessment and treatment administration

# Nevertheless....

## Not good news could be good news

- Despite the health crisis that we are currently experiencing: COVID-19
  - significant work overload
  - changes in patient profile: worse clinical situation in many cases
- A new way of caring and evaluating patients: telephone consultations (more difficult than a face-to-face assessment)
- We have managed to ensure that there are no significant delays in the care of outpatients treated to receive immunotherapy

# Conclusions

- Telephone assistance as an alternative to consultation can become a useful tool in exceptional situations. However, it takes more time and requires training.
- Despite the existing health crisis we have managed to ensure that there are no significant delays in the care of outpatients treated to receive immunotherapy.
- We must try to continue looking for alternatives in the outpatient management of patients to minimize their waiting times.

Thank you