

ASCO Quality Training Program

Project Title: Reduce time to chemotherapy administration

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Institution: Grupo Oncoclinicas do Brasil – **NOB-BA**

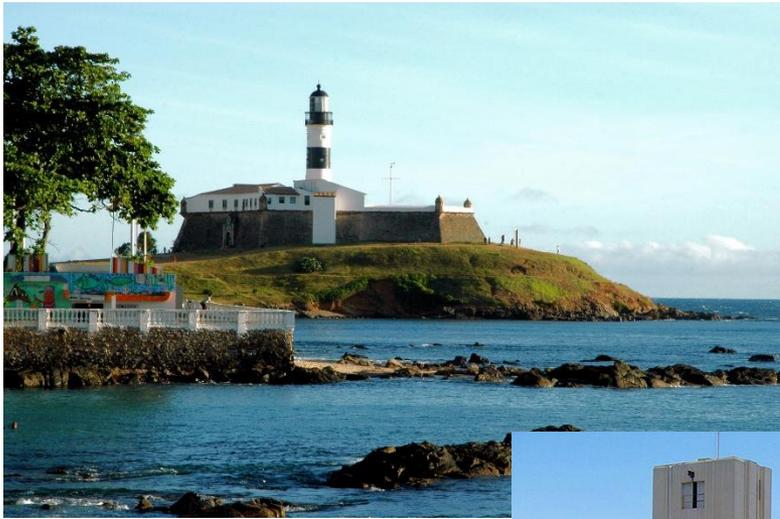
Date: June 29, 2018

Institutional Overview

- Grupo Oncoclínicas is a conglomerate of more than 50 points of oncological care, present in 11 of 27 Brazilian states, with 1300 employees.
- Annually, the group makes 50,000 consultations and 165,000 chemotherapy infusions.
- The project was developed in one of the units of Oncoclínicas do Brasil: Núcleo de Oncologia da Bahia - **NOB-BA.**

Institutional Overview

- This unit is located at northeast of the country, in the State of Bahia, Salvador.



Institutional Overview 2

- This unit was founded in 1992
- Two buildings divided into administrative and care areas:
- Four floors
- 14 doctor's offices
- Two floors for chemotherapy infusions and small procedures
 - 3rd and 4th floor



Team Members

Marcia Menezes, Executive Medical Director, Sponsor

Sandra Soler, Leader and focal point NOB, nurse, MSD

Felipe Ades, Medical doctor, MPhD

NOB

Sandra Soler, leader, nurse

Nursing Staff

Pharmacy Team

Reception Team

Scheduling Team

Quality Department

Samira Mascarenhas and Clarissa Mathias - team member, Doctors

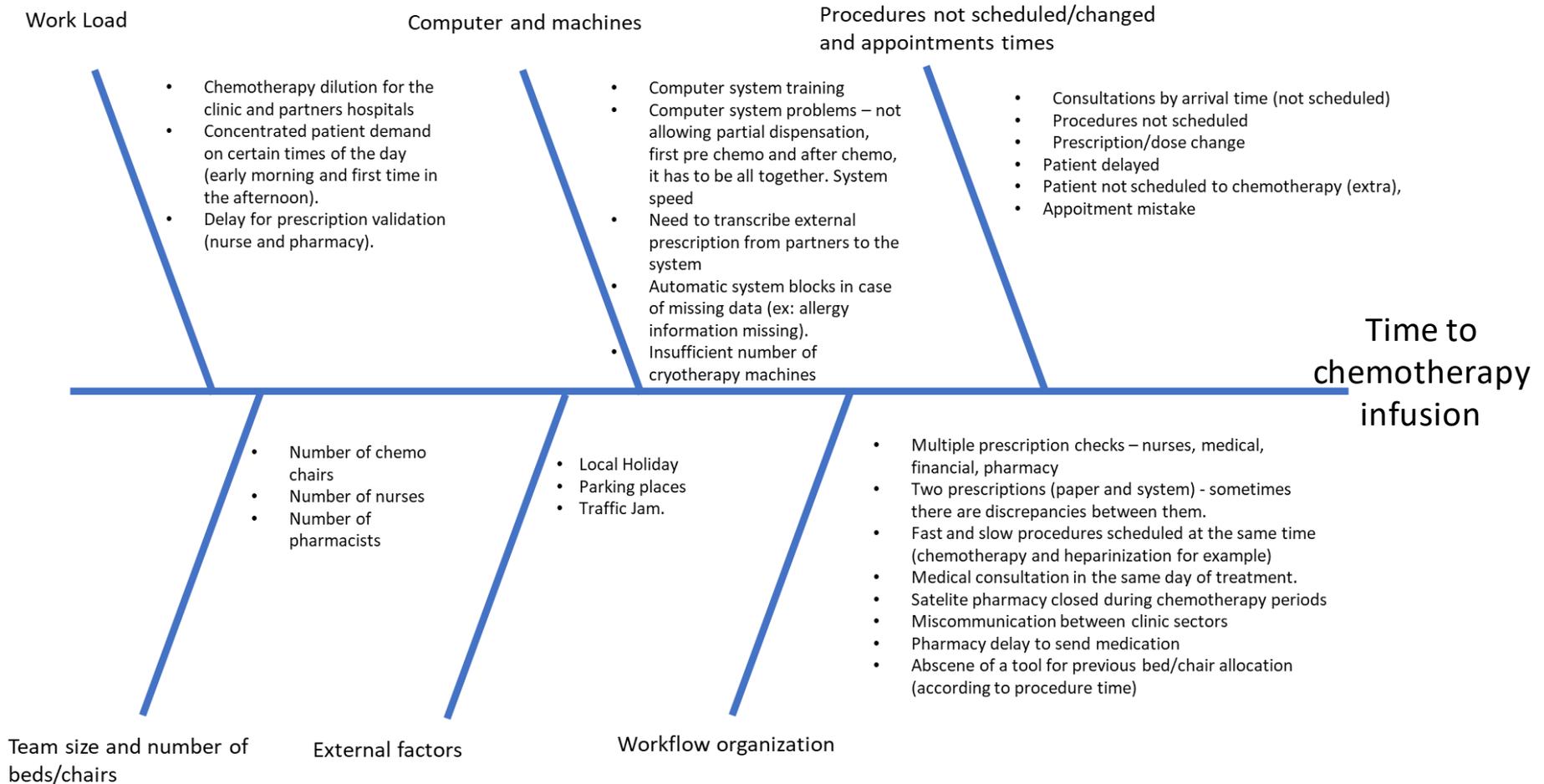
Problem Statement

Long waiting time has been a common complaint in the satisfaction questionnaires regularly distributed in the clinics.

During February and March 2018, the mean time from check in at the reception to (fast track) chemotherapy administration or the procedure was 38 minutes.

Excessive wait times negatively impact patient and staff satisfaction

Cause & Effect Diagram



Cause & Effect Diagram 2

Work Load

- **Chemotherapy dilution for the clinic and partners hospitals**
- **Concentrated patient demand on certain times of the day (early morning and first time in the afternoon).**
- **Delay for prescription validation (nurse and pharmacy).**

Computer and machines

- Computer system training
- **Computer system problems – not allowing partial dispensation, first pre chemo and after chemo, it has to be all together. System speed**
- Need to transcribe external prescription from partners to the system
- **Automatic system blocks in case of missing data (ex: allergy information missing).**
- **Insufficient number of cryotherapy machines**

Procedures not scheduled/changed and appointments times

- Consultations by arrival time (not scheduled)
- Procedures not scheduled
- Prescription/dose change
- **Patient delayed**
- **Patient not scheduled to chemotherapy (extra)**
- **Appointment mistake**

Time to chemotherapy infusion

- **CPO**
- **NOB**
- **Oncocentro**

- Number of chemo chairs
- Number of nurses
- **Number of pharmacists**

- Local Holiday
- Parking places
- Traffic Jam.

- Multiple prescription checks – nurses, medical, financial, pharmacy
- Two prescriptions (paper and system) - sometimes there are discrepancies between them.
- **Fast and slow procedures scheduled at the same time (chemotherapy and heparinization for example)**
- Medical consultation in the same day of treatment.
- Satelite pharmacy closed during chemotherapy periods
- **Miscommunication between clinic sectors**
- **Pharmacy delay to send medication.**
- **Abscense of a tool for previous bed/chair allocation (according to procedure time)**

Team size and number of beds/chairs

External factors

Workflow organization

Diagnostic Data

- From February 27 to March 9, 2018 data were collected.
- During this period of time all patients who came to the clinic for some type of procedure or medication had to fill out a formulary about the time spent in the clinic.
- 334 patients answered the survey (includes 47 fast track patients).

Baseline Data

- 47 patients who had fast track procedure or fast medication had wait time data manually collected.
- The mean waiting time was 38 minutes (reception until medication was received).
- The original three clinic scope was reduced to one clinic (NOB)

Aim Statement

By June 2018, we aim to reduce by 20% the mean time from check in to initiation of chemotherapy at the NOB clinic.

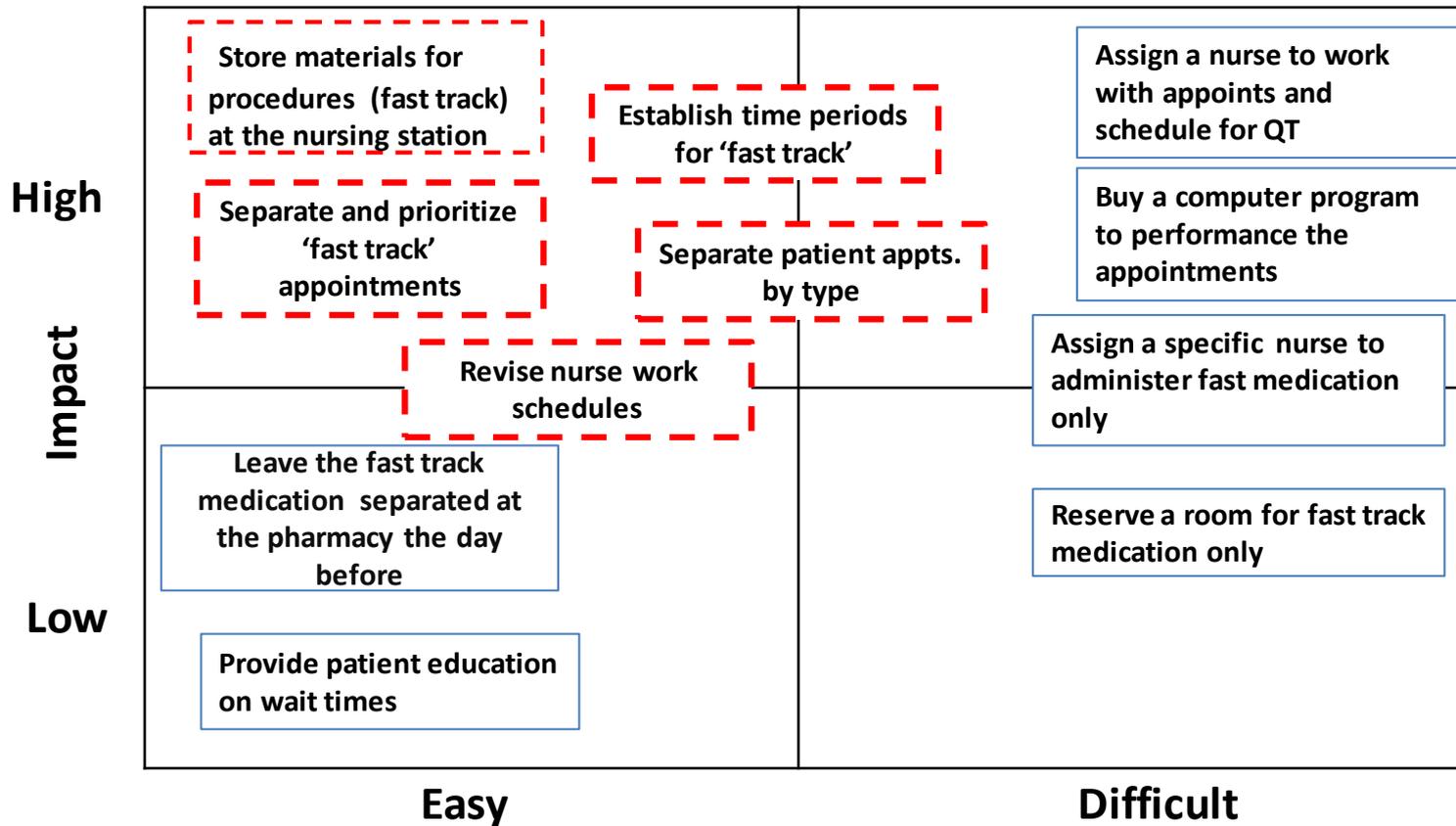
Pre = 38 minutes

Post = 31 minutes

Measures

- Measure: The waiting time between the arrival at the reception of the 4th floor and the beginning of the treatment
- Patient population: Patients included in the fast track medication/procedure
 - 4th Floor – chemotherapy unit
- Calculation methodology: The intervals of time
 - Time of the arrival at 4th floor chemotherapy reception (front desk)
 - Front Desk to Nursing Reception (chemotherapy chair)
 - Beginning of the treatment
- Data source: Formulary filled out by patients who came to the clinic for fast procedure or medication
- Data collection frequency: Daily from April 6th to June 6th
- Data quality (any limitations): potential for human error, sample size, find the right place for the data collection.

Prioritized List of Changes (Priority/Payoff Matrix)



PDSA Plan (Test of Change)

Date of PDSA Cycle	Description of Intervention	Results
4/2/18	Separate chemotherapy appointments to identify those eligible for 'fast track'. These are appointments for simple procedures or single agent administrations where pharmacy review is simplified. These patients are prioritized for treatment.	See Change Data slide
4/2/18	Create a physical space on the counter at the nursing station to put the medical records of patients eligible for fast track	See Change Data slide
5/7/18	Establish set time periods for 'fast track' patients. This will refine the process for identifying these patients and help level-load the appointment arrival rate during the day. This should have a positive impact on the 'complex patients' though the focus is on 'fast track'.	See Change Data slide
5/28/18	Revise the work schedules for the chemotherapy treatment unit nurses. This will allow some staff to arrive/leave early and other to arrive/leave late. The purpose is to match the nursing capacity with the varying patient volume throughout the day.	See Change Data slide

PDSA Plan (Test of Change)



QUIMIOTERAPIA QUIMIOTERAPIA NÚCLEO DE ONCOLOGIA DA BAH

			PACIENTE	NASCIMENTO	PRONTUÁRIO/DIA	PROTOCOLO	MÉDICO	
0730	LT 304	PETROBRAS AMS SUPLE	EDILZA FERREIRA SALES	09/10/1940	15/134342	2	IFO+PACL	GILDETE
	- IFO MESNA D2							
0730	POLT 418 M	PETROBRAS AMS SUPLE	PEIXDO ROSA CAMPOS	14/06/1940	18/143423	1	FOLFIRI	MIRELA ASSISTEN
	- FOLFIRI + CONS 2506 DRA CAROLINA 14HS							
0800	CRIO 01	SULAMERICA SERVICOS	GILZELIA MARIA FERREIRA DE SOUSA MOURINO	20/03/1969	18/143983	2	ADRM+IFO	CAROLINA SILVA
	- DOXIFLOMESNA D2							
0800	CRIO 02	SAUDE BRADESCO	ALTANIR LAZARO FERREIRA MARINHO DE QUEIROZ	24/02/1969	11/121907			
	- TAXOL D08 AVALIAÇÃO							
0800	POLT 401 F	AMLE BLUE LIFE	PATRICIA MARIA DE SEIXAS BITTENCOURT	03/04/1969	13/129654			
	- FERMINJECT (1º VEZ) CONS DRA LUIZA 07:30H							
0800	POLT 402 F	APUBASSOCIAÇÃO PROF	BOCHUMILA SAMPAIO DE ARAUJO	03/06/1930	13/127659	1	HER2 4MG	CLARISSA
	- HERCEPTIN + CONS 2506 DRA CLARISSA AS 15:20HS							
0830	CRIO 03	LIFE EMPRESARIAL	MAGNA DOS SANTOS DURVAL	18/04/1972	16/143986			
	- AC + CONS 228 DRA RENATA + AVALIAÇÃO 268 INTERC							
0830	LT 307	PLANSERV - NOVO	RUBENS ALELLIA DA SILVA	27/03/1949	11/122750	1	FOLFIRI	ALMRO
	- FOLFIRI + AVALIAÇÃO							
0850	SL OBS 4º AND	FUSEX - FUNDO DE SÃO	MARIA HELENA OLIVEIRA DA SILVA	18/08/1951	08/114664			
	- FASLÓDEX + CONS DRA GILDETE A PARTIR 8 HS							
0900	AP 01 - 3º	SULAMERICA SERVICOS	PAULO SERGIO FREIRE DE CARVALHO TOURINHO	20/12/1936	16/138822			
	- TAXOTERE NC. CONS DRA CLARISSA							
0900	ATEND PETRO	PETROBRAS AMS SUPLE	OSWALDO JOAO DE ARAUJO FILHO	22/12/1929	004197			
	- DEGARELIX + CONS 2606 DR ERICO AS 8:20HS							
0900	LT 308	SULAMERICA SERVICOS	REGINA CELIA SALDOMO GIDI	13/12/1954	048601			
	- CMF NC. CONS DRA GILDETE (PARTIR DAS 08H							
0900	POLT 405 F	SAUDE BRADESCO	CLEIDE MOREIRA BORGES LIBERATORI	27/12/1966	17/140509			
	- FOLFOX + CONS 2606 DRA CAROLINA 8HS							
0900	POLT 408 F	PLANSERV - NOVO	MARIA LUCIA CORDIER DE SOUZA	27/05/1951	16/127437			
	- KADYCILIA NC. CONS DR RAFAEL 08H							
0900	POLT 418 M	PLANSERV - NOVO	ERONILDA MARIA DANTAS SANTOS	20/05/1982	17/140774			
	- FOLFOX + AVALIAÇÃO DRA MIRELA (MAI A PARTIR DAS 8							
0920	POLT 401 F	PLANSERV - NOVO	CHRISTIANNE EMBIRUSSU BAPTISTA MEIRELLES	30/11/1955	18/143954			
	- TCHP + CONS 2506 DRA SAMIRA 8:20 DRA RENATA AUSENTE)							
0930	POLT 420 M	PLANSERV - NOVO	ANTONIO JORGE PIWTO DA LUZ	20/05/1958	16/136151			
	- FOL + AVASTIN + CONS EXTRA 2606 DR EDUARDO (A PARTIR DAS 8:4HS							
0930	LT 306	SAUDE BRADESCO	MARISA FARIAS GATTO	26/05/1959	17/142536			
	- AVASTIM NC. CONS DRA CAROLINA 08:30H							

PDSA Plan (Test of Change)

Date of PDSA Cycle	Description of Intervention	Results
06/15/18	Hire a nurse for the nursing staff	See Change Data slide
06/25/18	Store material for procedures (fast track) at the nursing station - 4th floor chemotherapy unit	See Change Data slide
08/18	Revise scheduling template to better schedule appointments by need. Specifically addressing the needs for appointments by 'Chemotherapy only', 'Physician appointment only', and 'Physician appointment followed by chemotherapy'	See Change Data slide

Materials Developed

FICHA DE COLETA DE INFORMAÇÕES

Data da Coleta: _____

Número do Prontuário: _____

MEDICAÇÃO RÁPIDA SEM INTERVENÇÃO DO FARMAÊUTICO

1. Faslodex (fulvestranto)
2. Zoladex (goserrelina)
3. Prolia (denosumabe)
4. Eprex (eritropoietina)
5. Granulofquine (filgastrim)
6. Aranesp (darbepoetina alfa)
7. Clexane (enoxaprina)
8. Humira (adalimumabe)
9. Enbrel (etanercepte)
10. Simponi (golimumabe)
11. Firmagon (degarelix)
12. Citoneurim IM
13. Neulastin (pegfilgrastrin)
14. Degarelix (leuprorrelina, leuprolida)
15. Sandostatin (Ocreotida)

OBS: O agendamento da consulta médica deve ser seguido do agendamento aplicação da medicação levando em consideração o intervalo entre a consulta agendamento da medicação (por ex.: consulta médica às 8:00 – agendamento F TRATAMENTO: 08:40/09:00). **Manter o intervalo de 40 min a 1h.**

MEDICAÇÕES RÁPIDAS COM INTERVENÇÃO DO FARMACÊUTICO

1. Herceptin SC (trastuzumabe)
2. Velcade SC (bortezomibe)
3. MTX IM (metotrexato)
4. VIDAZA (azacitidina)
5. MABTHERA SC (rituximabe)

MÉTODO DA MARCAÇÃO:

- **AGENDAR DAS 07:30 ÀS 08:30 AS MEDICAÇÕES RÁPIDAS** – criaremos um fluxo rápido para essas medicações no período da manhã (principalmente para Heparinizações de CVC_TI). Será atendimento exclusivo (07:30; 08:00, 08:30 – total de 6 pacientes – 2 a cada meia hora).
- **A partir das 08:30 dar preferência para agendar protocolos longos** como: FOLFOX,



INSTRUMENTO DE COLETA DE TEMPO DO PACIENTE

*DATA: _____ *Nº DO PRONTUÁRIO: _____

PASSOU POR CONSULTA MÉDICA HOJE?
() SIM () NÃO

*TIPO DE TRATAMENTO (injeção IM, SC, hidratação, heparinização do cateter, retirada da bomba infusora)

HORÁRIO DE CHEGADA NA RECEPÇÃO: _____

HORÁRIO DE LIBERAÇÃO (ENCAMINHAMENTO) PARA O POSTO DE ENFERMAGEM: _____

*HORÁRIO DE CHEGADA NA POLTRONA OU LEITO (acolhimento e verificação dos sinais vitais): _____

*HORÁRIO DO INÍCIO TRATAMENTO (injeção IM, SC, hidratação, heparinização do cateter, retirada da bomba infusora): _____

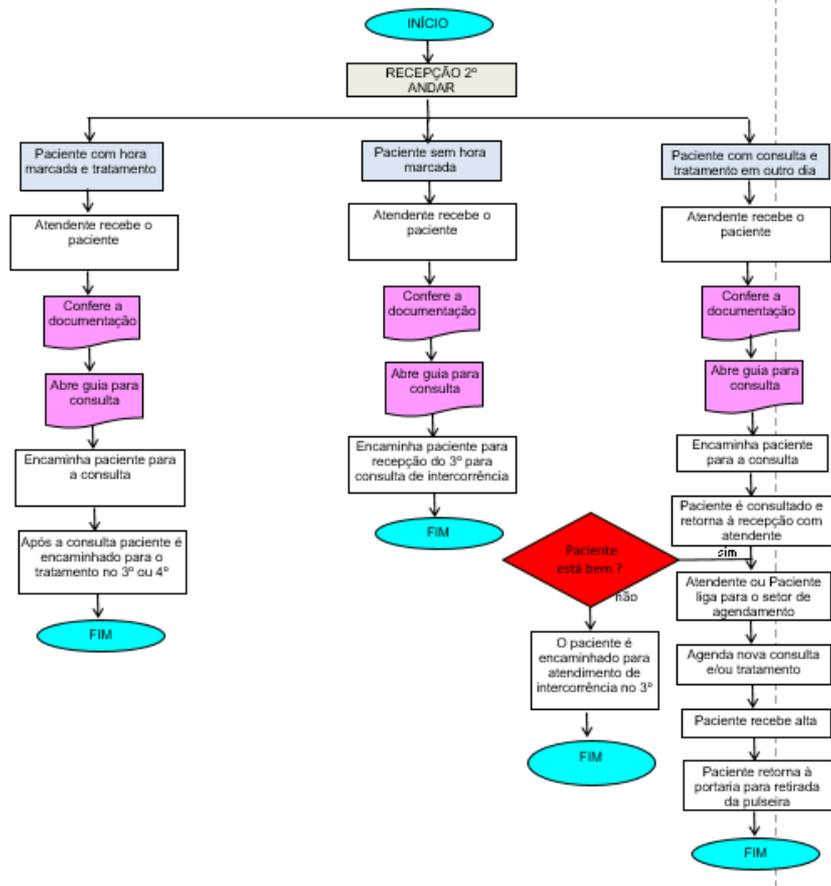
DURANTE O PERÍODO DE TRATAMENTO TEVE ALGUMA INTERCORRÊNCIA?
() SIM () NÃO

***Enfermagem: por favor, preencher!**

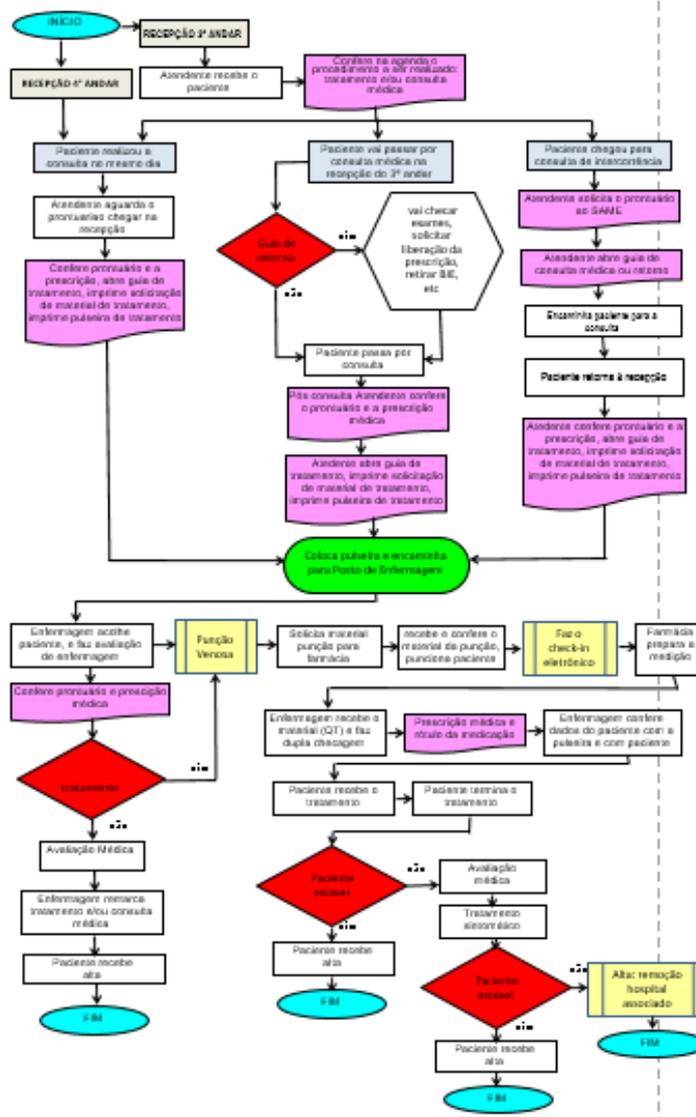
Materials Developed

Post deployment process

1.2 - PROCESSO DE ENCAMINHAMENTO DO PACIENTE DA PORTARIA PARA O 2º ANDAR

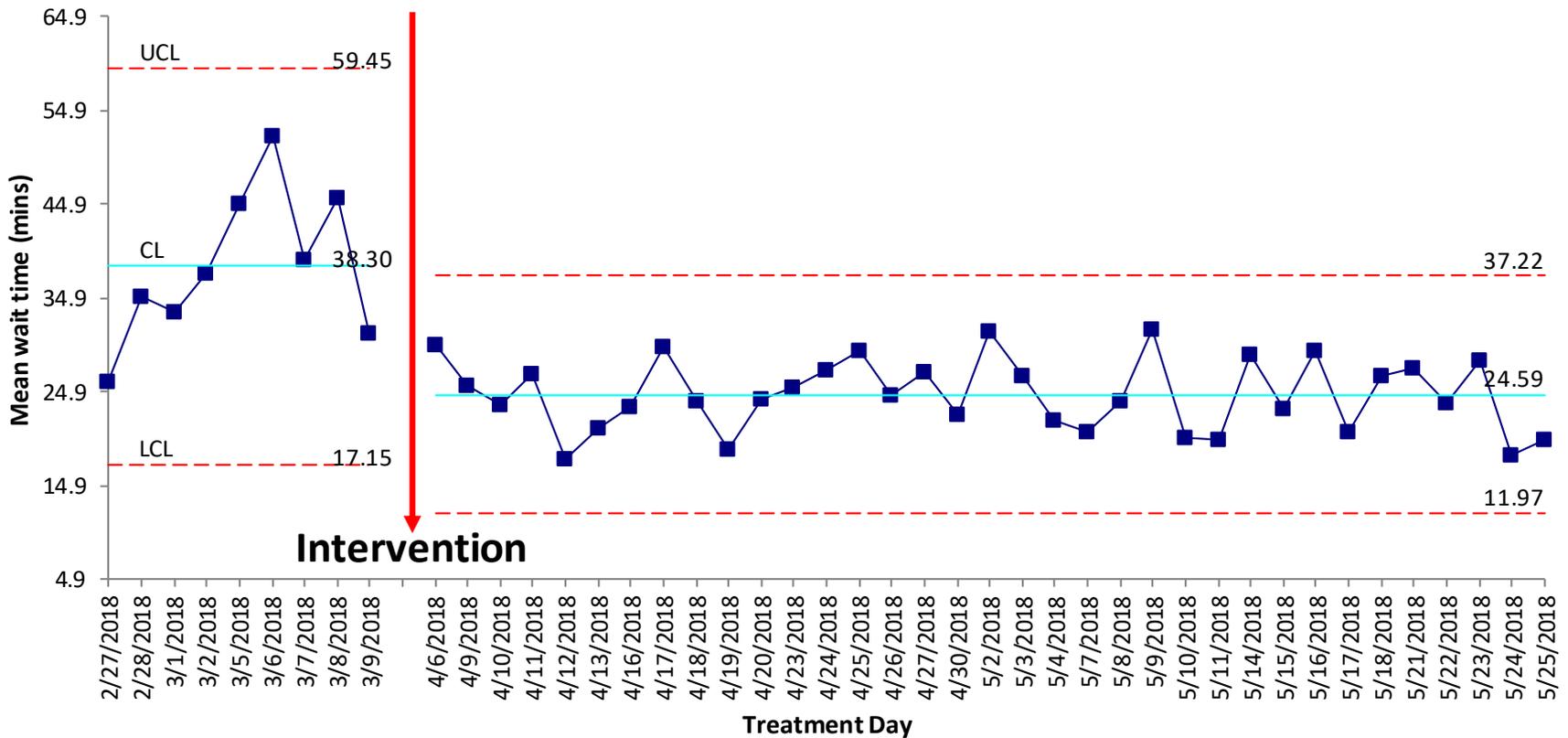


1.3 - PROCESSO DE ENCAMINHAMENTO DO PACIENTE DO 2º ANDAR PARA O 3º E 4º ANDAR



Change Data

XbarR chart: Fast Track Wait Times – NOB Clinic



Pre – 38.30 Minutes Target 31 minutes Post 24.59 minutes

Conclusions

- Important to reduce the scope (from three clinics to one and from the whole chemotherapy agenda to FAST TRACK medication) in order to be successful
- Extremely important to clearly communicate the scope and the goals of the project to be able to measure the outcomes
- Crucial to find the right population and right measures for the data collection of a specific project
- Once the project started with fast track medication, people came with new ideas to improve the patient's waiting time in the clinic
- One change at a time to make sure the change has settled

Conclusions

- Changes are not easy, even the small ones
- Prepare people for the changes that are going to happen
- People need to know exactly what and why they are doing the changes and the advantage of it to get involved
- The project should involve people who know and work in the process to have a chance of success
- Be open to hear positive and negative criticism regarding the project
- Be flexible to change ideas
- Be focused, enthusiastic, positive, study hard and set realistic goals
- Small and simple changes can make a difference in our daily work

Next Steps/Plan for Sustainability

- Continue the project implementing additional actions as planned in the beginning (work with chemotherapy agenda)
- Measure the results over time
- Apply the methodology of this program to solve problems in our institution
- Development of small/simple projects in other departments and among other clinics spreading the concept of continuous quality program
- Participation of others institutions within Oncoclínicas do Brasil in the **One day Workshop –QTP/ASCO** (July 18th, 2018)

Thank You!

