

Quality Training Program

Project Title:

ANALYSIS OF THE HOSPITAL ADMISSIONS OF
ONCOLOGICAL PATIENTS

Presenter's Name:

BEGOÑA CAMPOS BALEA & MARÍA FERREIRO DURÁN

Institution:

HOSPITAL UNIVERSITARIO LUCUS AUGUSTI (HULA)

Date: 14 DECEMBER 2020

Institutional Overview

- ✓HULA is a 3rd level hospital located in the city of Lugo (>800 beds)
- ✓It is part of the Health Care Area of Lugo, A Mariña e Monforte de Lemos
- ✓The Oncology Service is made up of 12 oncologists, 27 nurses, and other personnel (orderlies, administrative assistants and health assistants)
- ✓Oncology outpatient consultations (OC) and DH (Day Hospital) in all three hospitals
- ✓UNE standard 197003 of patient safety
- ✓In the HULA we have *a hospital ward* with 30 beds (26 in double rooms and 4 singles) and 1 DH with 36 chairs and 2 beds, shared with Hematology

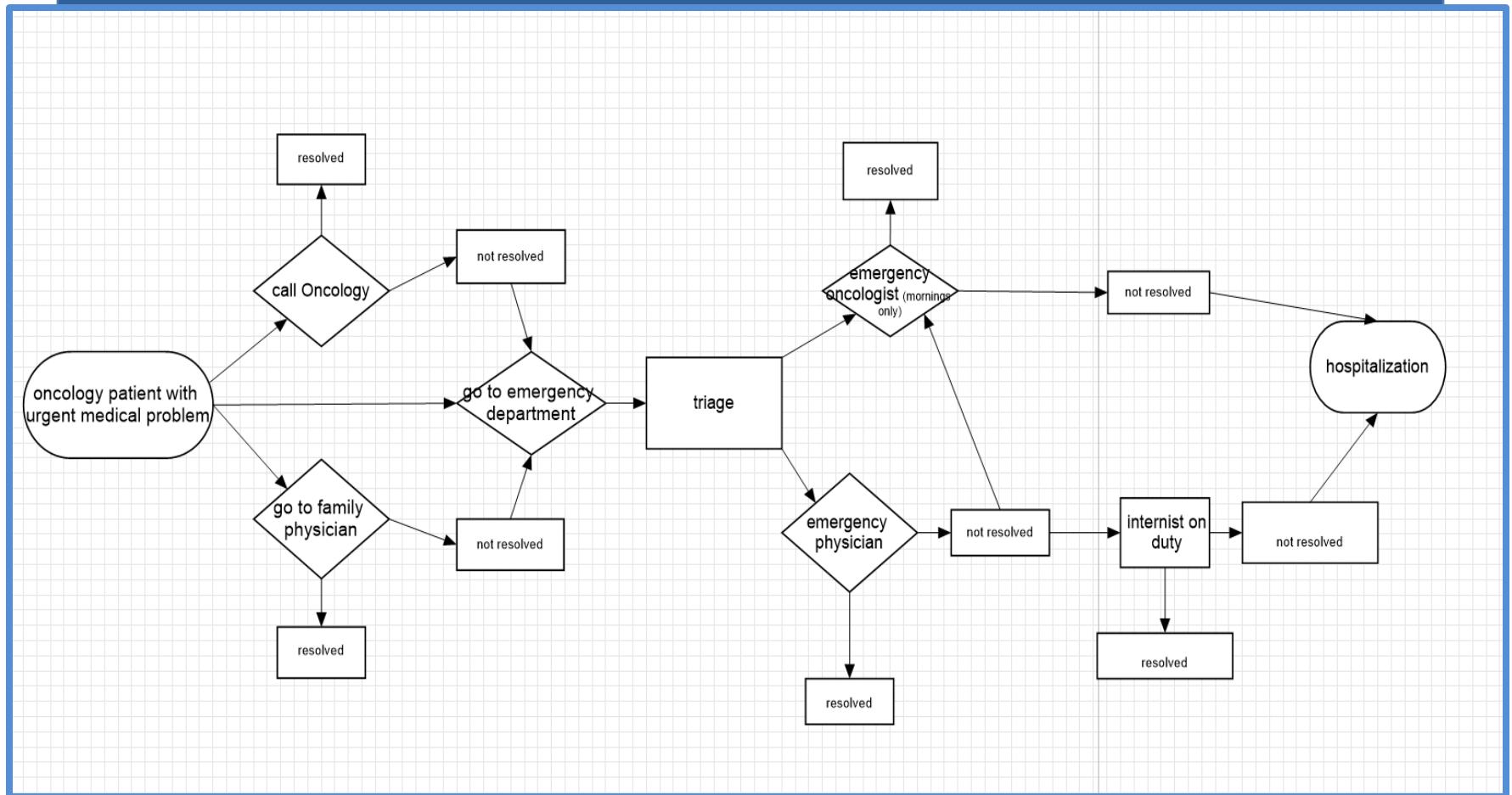
Problem Statement

An increase has been observed in the number of cancer patients admitted to the Oncology Service in recent months:

12-15 → 24-26 patients admitted / day

It affects the quality of patient care

Process Map



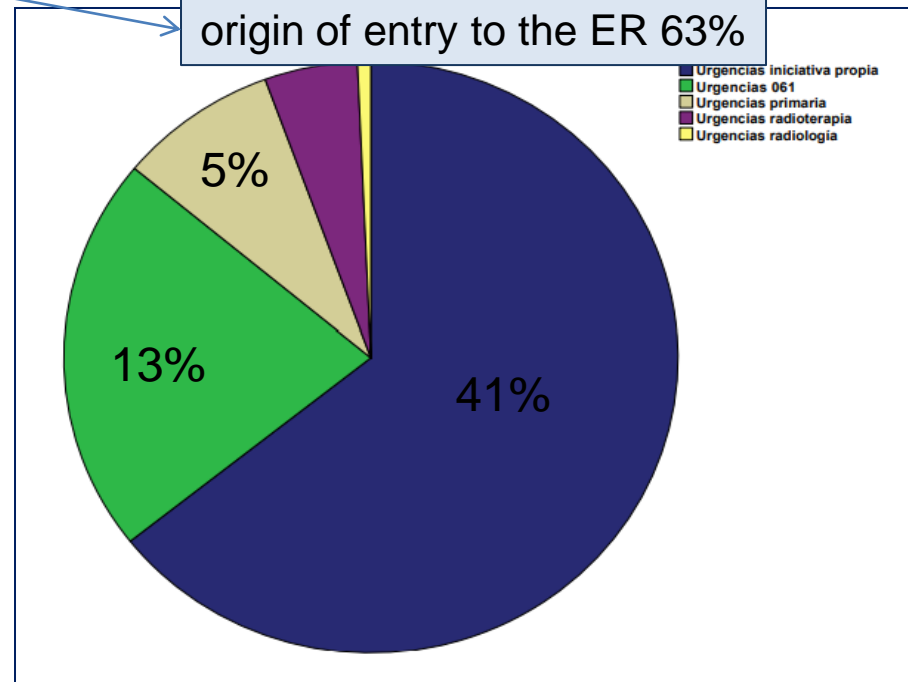
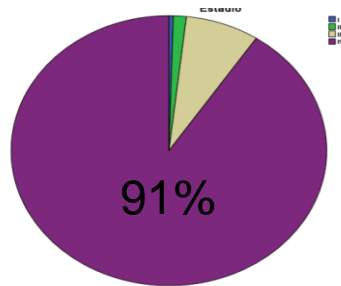
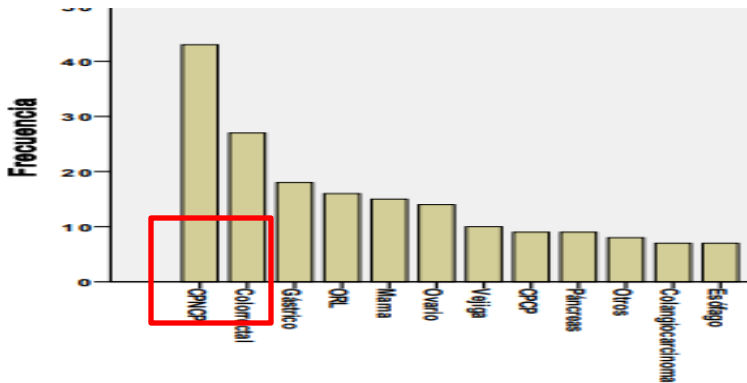
Team Members

- Sponsor: Sergio Vázquez Estévez -- Head of the Medical Oncology service and Radiation Oncology Coordinator
- Leader: Begoña Campos Balea – medical oncologist
- Facilitator: María Ferreiro Durán – nurse (Oncology Nursing Consultant)
- Team:
 - Laura Torrado – radiotherapy oncologist
 - Jonathan Grandío – emergency physician
 - Pilar Rodríguez – family physician
 - Olga Roca – quality department nurse
 - Alberto Carral – medical oncologist

Baseline Data

Admitted between 10/1/19 and 12/31/19 in the Oncology Service:

- 225 patients
 - Admission from Oncology consultation 23%
 - Transfer from another service 13%
 - origin of entry to the ER 63%
- Average age: 67 (36-92)
- 103 patients >70 years old (45%)



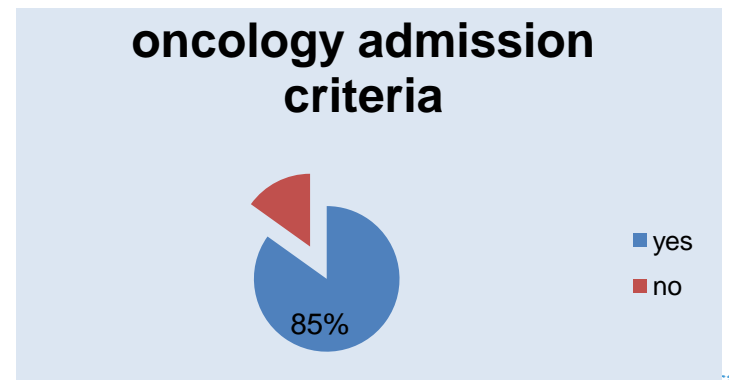
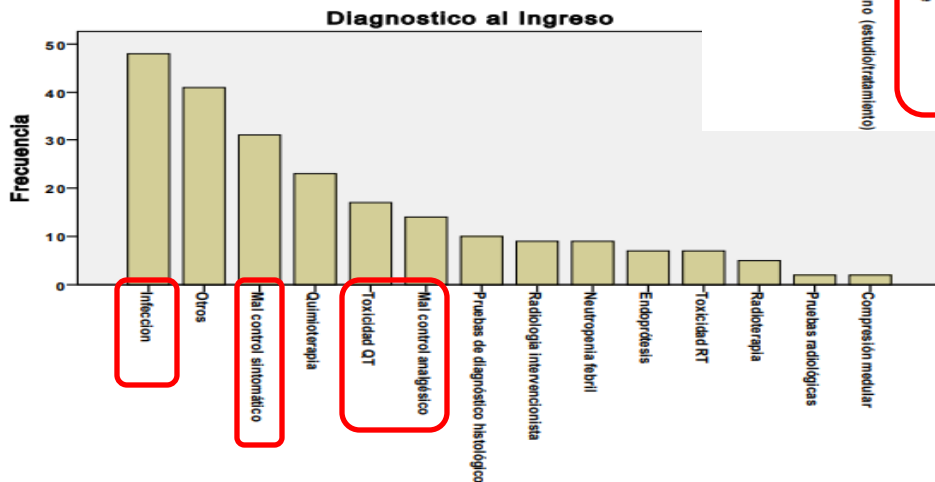
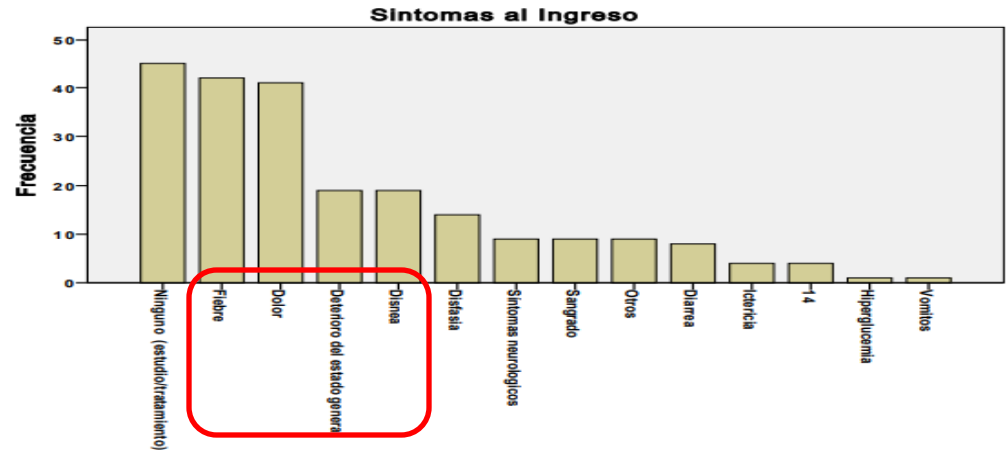
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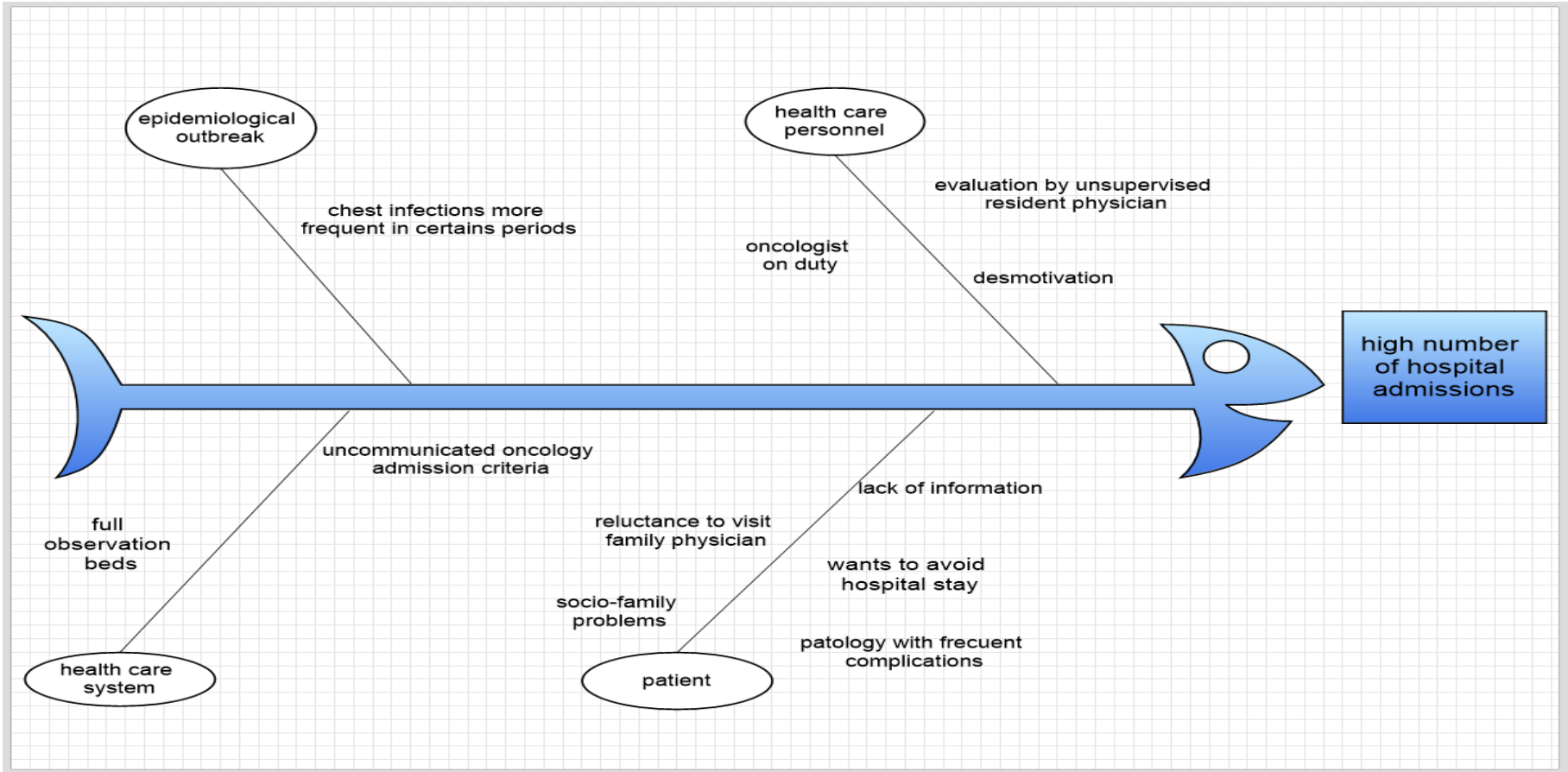
225 patients

Average age: 67 (36-92)

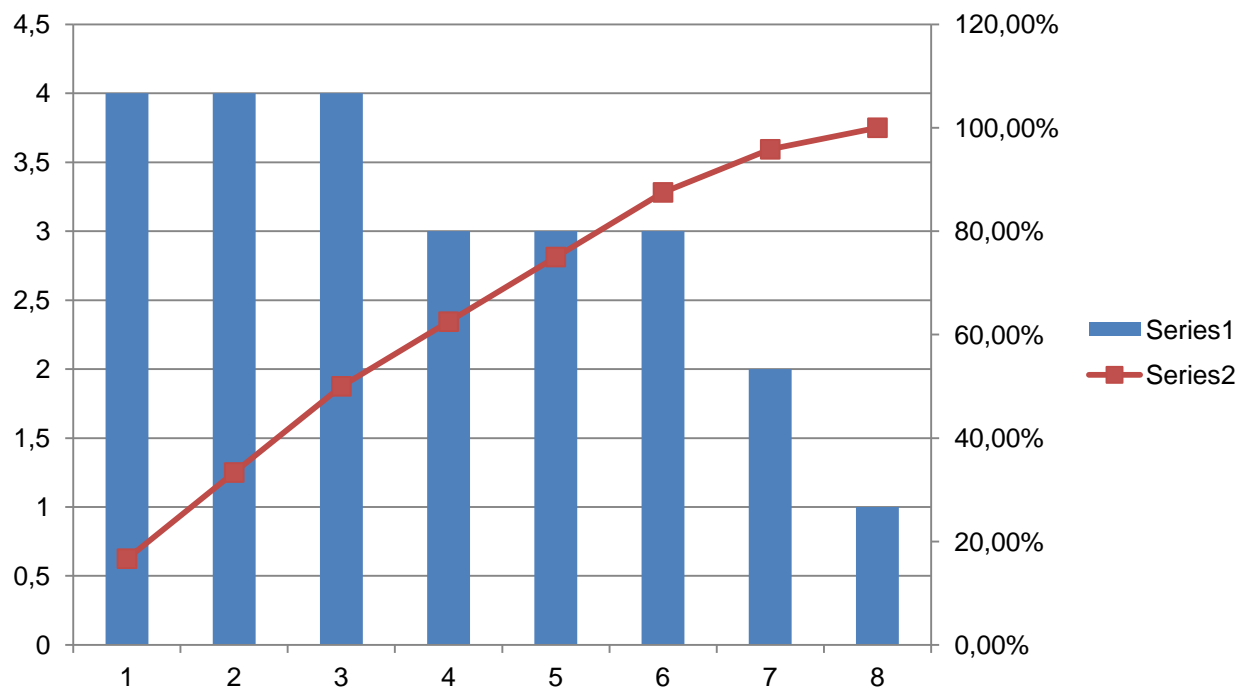
103 patients >70 years old (45%)



Cause & Effect Diagram



Diagnostic Data



1. AUTUMN AND WINTER
2. LACK OF DISSEMINATION OF ADMISION CRITERIA IN ONCOLOGY
3. THE PATIENT DOES NOT WANT HOSPITALIZATION
4. NO ONCOLOGIST ON DUTY
5. DEMOTIVATION OF HEALTH PERSONNEL
6. PATHOLOGY WITH FREQUENT COMPLICATIONS
7. SOCIO-FAMILY PROBLEMS
8. LACK OF INFORMATION

Aim Statement

The objective is to analyze the causes of the increase in the average number of cancer patients admitted, in order to act on them and reduce the number of admissions.

S decrease the number of admissions
M : yes
A 15 -20 %
R improves quality of care and reduces costs
T : 6 months

Measures

- **Measures:**
 - Promote the flu and pneumococcal vaccination campaign in Oncology and oncology nursing consultations
 - Disseminate the admission criteria for Oncology among emergency physicians, internists on duty and residents (Medical Director)
 - Increase hours of the Oncology Emergency consultation
 - Promote the oncology nursing consultation for more personalized care for cancer patients and their caregivers (TELEA design)
- **Patient population:**
 - All cancer patients under active treatment and / or follow-up in Oncology
- **Calculation methodology:**
 - Comparison of monthly average admissions
- **Data source:** hospital registry of patients admitted to Oncology
- **Data collection frequency:** quarterly
- **Data quality(any limitations):** none... ¿COVID pandemic?

Prioritized List of Changes (Priority/Pay –Off Matrix)

High Impact	<ul style="list-style-type: none"> ○ Disseminate the admission criteria for Oncology among emergency physicians, internists on duty and residents (Medical Director) ○ Increase hours of the Oncology Emergency consultation 	<ul style="list-style-type: none"> ○ Promote the oncology nursing consultation for more personalized care for cancer patients and their caregivers (TELEA design)
	<ul style="list-style-type: none"> ○ Promote the flu and pneumococcal vaccination campaign in Oncology and oncology nursing consultations 	
Low		

Easy

Ease of Implementation

Difficult

Prioritized List of Changes (Priority/Pay –Off Matrix)

New meeting with the working group in November

High Impact	<ul style="list-style-type: none"> ○ Disseminate the admission criteria for Oncology among emergency physicians, internists on duty and residents (Medical Director) ○ Increase hours of the Oncology Emergency consultation 	<ul style="list-style-type: none"> ○ Promote the oncology nursing consultation for more personalized care for cancer patients and their caregivers (TELEA design)
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Impact	High	<ul style="list-style-type: none"> ○ Disseminate the admission criteria for Oncology among emergency physicians, internists on duty and residents (Medical Director) ○ Increase hours of the Oncology Emergency consultation ○ Define subgroups of patients to refer to observation prior to admission 	<ul style="list-style-type: none"> ○ Promote the oncology nursing consultation for more personalized care for cancer patients and their caregivers (TELEA design) ○ Surveys to patients and develop specific courses of symptom management
	Low	<ul style="list-style-type: none"> ○ Promote the flu and pneumococcal vaccination campaign in Oncology and oncology nursing consultations ○ Publicize the criteria for entry into Primary Care 	<ul style="list-style-type: none"> ○ Calculate percentage of cancer patients who come to the emergency room and are admitted

Easy

Ease of Implementation

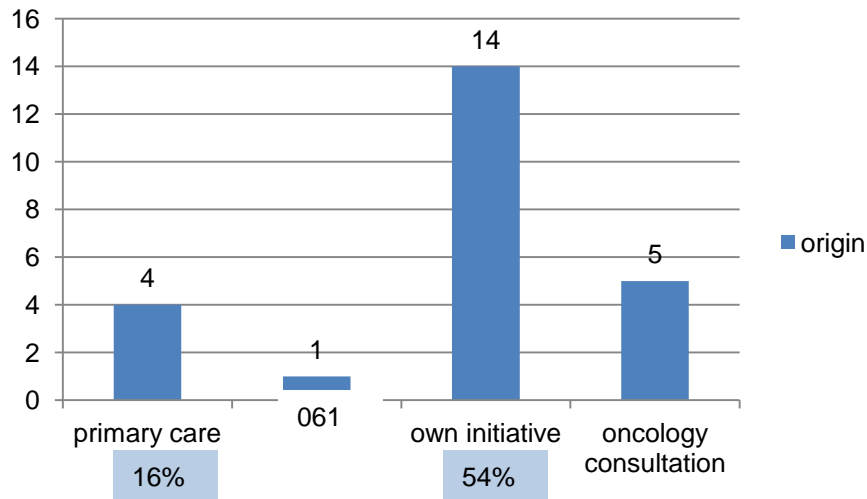
Difficult

New data (I)

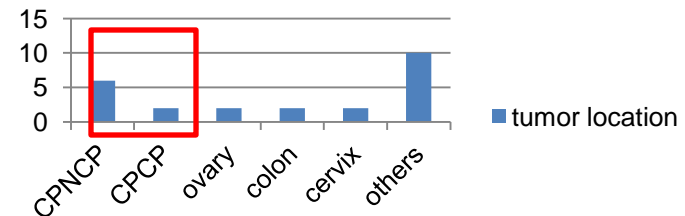
Admitted between 9/11/20 and 15/11/20 in the Oncology Service:

- 28 patients (4 not evaluable)
- Average age: 68 (50-91)
- 8 patients >70 years old (33%)

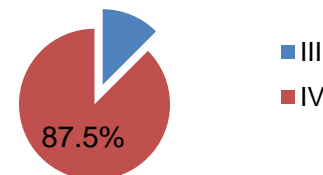
origin



tumor location



tumor stage

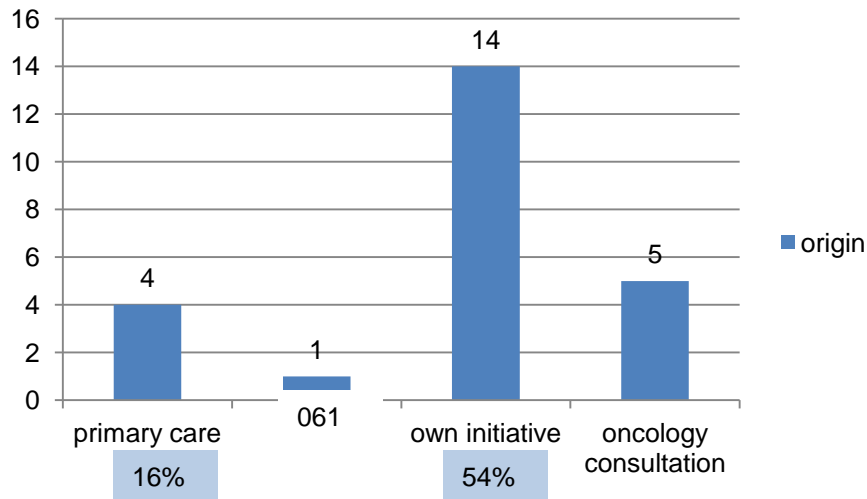


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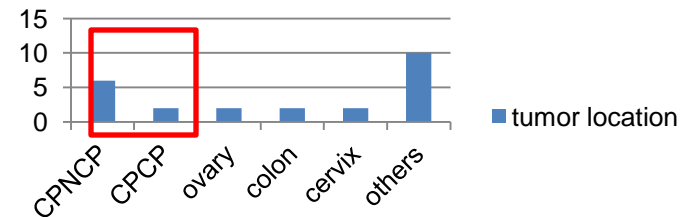
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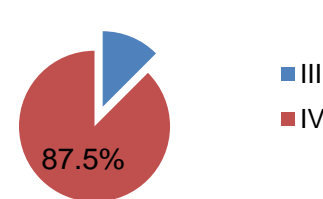
origin



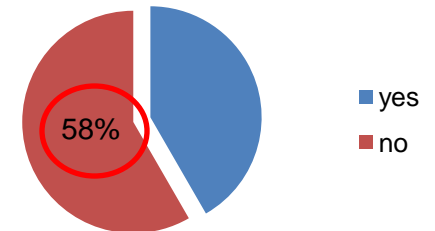
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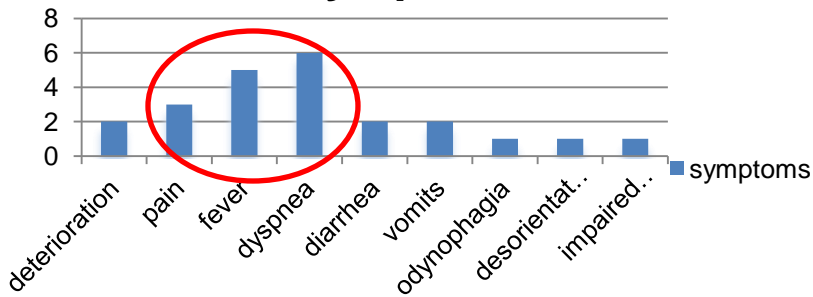


vaccinated

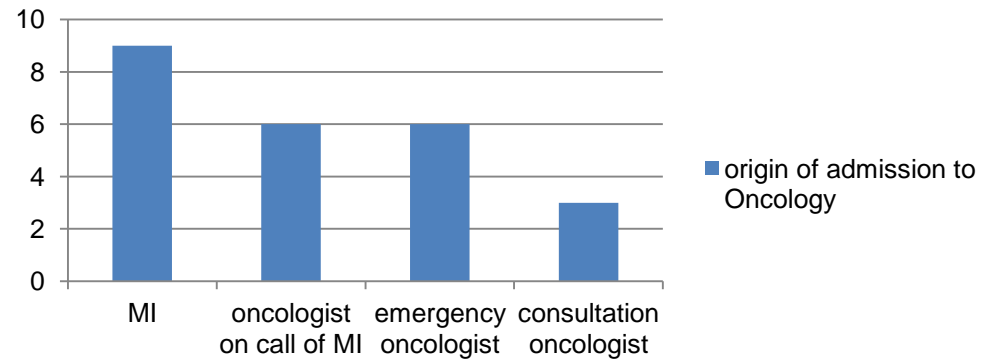


New data (II)

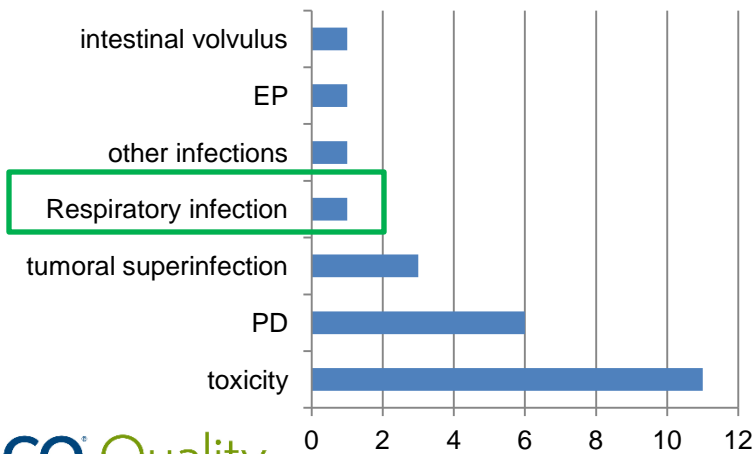
symptoms



origin of admission to Oncology



diagnosis



oncology admission criteria



PDSA Plan

Date of PDSA Cycle	Description of Intervention	Results	Action Steps
15/09/20	<p>Publicize the criteria for admission to Oncology</p> <ul style="list-style-type: none"> ○ Subsequent survey of the physicians of their knowledge ○ Review the percentage of patients admitted to Oncology 		
6/10/20	<p>Spread the flu and pneumococcal vaccination campaign</p> <ul style="list-style-type: none"> ○ Analyze the percentage of vaccinated among the oncological population that attends consultation and among those admitted ○ See the percentage of respiratory infections among those admitted 		

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6/10/20	<p>Spread the flu and pneumococcal vaccination campaign</p> <ul style="list-style-type: none"> ○ Analyze the percentage of vaccinated among the oncological population that attends consultation and among those admitted ○ See the percentage of respiratory infections among those admitted 	<p><u>9-15/11/00:</u></p> <ul style="list-style-type: none"> ○ 50% of patients who attend the Oncology consultation are vaccinated ○ 42% vaccinated in patients admitted ○ Respiratory infections admitted: 1:24 (0.04%) vs 20:225 (0.08%) 	

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PDSA Plan... The future...

Date of PDSA Cycle	Description of Intervention	Results	Action Steps
23/11/20	Surveys of patients to detect problems in home management of certain symptoms	<ul style="list-style-type: none"> ○ Pain ○ Vomiting ○ Diarrhea ○ Constipation ○ Mucositis 	Develop specific courses for patients and caregivers relatives of ...
December 2020	Review of certain admission criteria with the emergency room doctors to establish admission criteria for emergency observation	<ul style="list-style-type: none"> ○ Poor analgesic control ○ Febrile neutropenia with good prognosis ○ Small symptomatic brain metastases ... 	Visit of the oncologist every working day first hour in the morning to assess emergency observation patients

Materials Developed (optional)

CRITERIOS DE INGRESO EN EL SERVICIO DE ONCOLOGÍA MÉDICA DEL HULA

1. Complicaciones directas del tratamiento oncológico.
2. Urgencias oncológicas directamente relacionadas con el tumor (hipercalcemia tumoral, hiponatremia por SIADH, compresión medular, síndrome de vena cava superior, metástasis cerebrales, etc.).
3. Mal control analgésico en paciente oncológico, que precise ingreso.
4. Infecciones de cualquier tipo en pacientes *con tratamiento activo*

NO SON MOTIVO DE INGRESO EN ONCOLOGÍA:

1. Descompensaciones de Diabetes Mellitus.
2. Tromboembolismo pulmonar.
3. Trombosis venosas profundas.
4. Pacientes seguidos por la Unidad de Cuidados Paliativos del HULA (según quedaría reflejado en IANUS).
5. EPOC reagudizado.
6. Insuficiencia cardíaca.
7. Infecciones de cualquier tipo en pacientes oncológicos *sin tratamiento activo*.

- a. Derrames pleurales sintomáticos subsidiarios de tubo de tórax y pleurodesis. Estos pacientes ingresarán a cargo del servicio de *Neumología*.

Los pacientes no seguidos por el servicio de Oncología, que precisen ingreso hospitalario, no se ingresan en Oncología:

Los ingresos se realizarán a cargo del Servicio responsable y, en caso de precisar atención oncológica, se realizará interconsulta al Servicio de Oncología para solicitar valoración y eventual traslado.

Actualizados a fecha de 15 de septiembre de 2020

Fernando F. Lamejo

Director de Atención Hospitalaria

Materials Developed (optional)



ENCUESTA DIRIGIDA A FACULTATIVOS DEL HULA QUE REALICE[N]
GUARDIAS DE MEDICINA INTERNA

1- ¿Sabes que existen unos criterios de ingreso en Oncología?

- Sí
- No
- No sabe/No contesta

2- ¿Conoces esos criterios?

- Sí
- No
- No sabe/No contesta

3- ¿Están accesibles esos criterios en la intranet?

- Sí
- No
- No sabe/No contesta

4- ¿Crees que deberían difundirse más para su adecuado conocimiento?

- Sí
- No
- No sabe/No contesta

SUGERENCIAS

GRACIAS DE NUEVO POR VUESTRA COLABORACIÓN

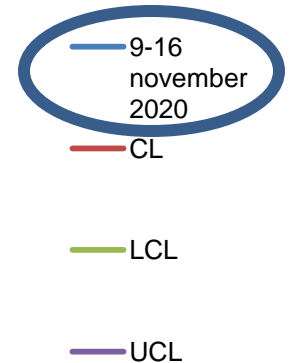
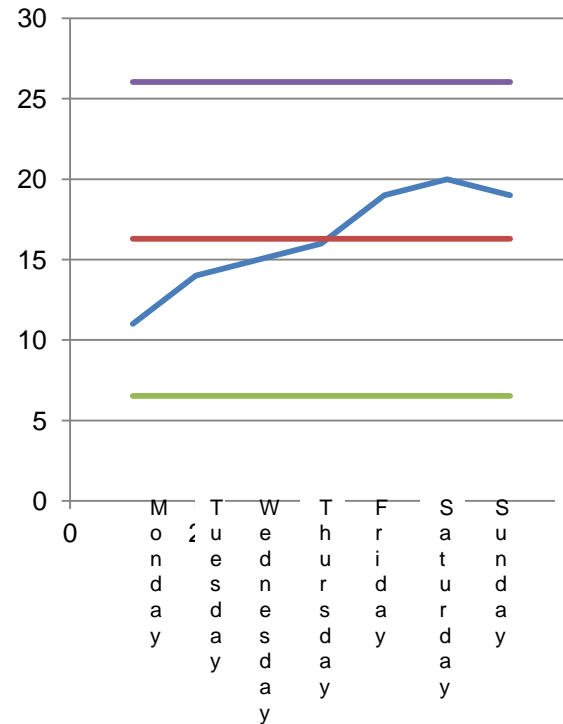
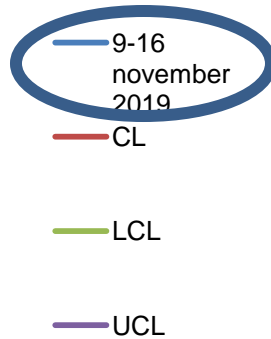
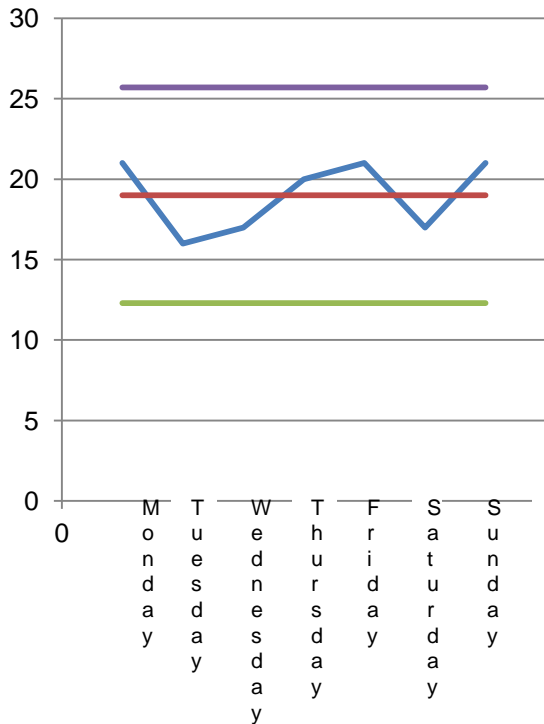
Por favor, cubrir y enviar por correo interno a la consulta de Oncología, Dra. Campos, 2ª planta, bloque A, 202, o a la secretaria de la Unidad 48.

25 doctors answered the survey (19 + 6)

1. They know there are admission criteria in Oncology: 23:25 (90%)
2. They know the criteria for admission to Oncology: 19:25 (75%)
3. They know where to look for them: 11:25 (44%)
4. Believe they should be more widely spread: 12:25 (48%)

Change Data

Average number of admissions



Conclusions

- Cancer patients present a complex pathology, with difficult symptomatic control, which requires frequent hospital admissions
 - Especially in stages IV and in lung cancer
- Calls to 061 have been reduced and consultation in Primary Care has increased before going to the Emergency Room
- Admissions for pain and fever have decreased
 - It probably reflects the work carried out from the Oncology consultation and the Oncology nursing consultation in the "education" of the patient and their family
- Admissions for respiratory infections have decreased
 - Possible role of influenza and pneumococcal vaccination, and most likely due to the beneficial effect of the anti-COVID campaign

Conclusions

○ Despite having disseminated the admission criteria among the physicians responsible for them, the percentage of compliance with these criteria has not improved

We will keep trying ...

○ We would like to be able to continue with the project given the existing limitations this year beyond our control that have prevented us from fulfilling the proposed improvement projects

Next Steps/Plan for Sustainability

- Remember **the criteria for admission to Oncology** quarterly
- Further enhance the **vaccination campaign** from consultation
- Raise awareness in Primary Care of the priority of the vaccine in cancer patients
- Develop specific courses for patients and families to manage certain symptoms
- Continue evaluating the results
 - collect data from patients admitted one week, twice a year
- Continue to improve the project over time

ANALYSIS OF THE HOSPITAL ADMISSIONS OF ONCOLOGICAL PATIENTS

AIM: The objective is to analyze the causes of the increase in the average number of cancer patients admitted, in order to act on them and reduce the number of admissions by 15-20% within 6 months.

INTERVENTION: After analyzing the most frequent reasons for admission of cancer patients by the team, improvement measures have been established to try to reduce them by 15-20%:

- Promote the flu and pneumococcal vaccination campaign in Oncology and oncology nursing consultations
- Disseminate the admission criteria for Oncology among emergency physicians, internists on duty and residents (Medical Director)
- Increase hours of the Oncology Emergency consultation
- Promote the oncology nursing consultation for more personalized care for cancer patients and their caregivers (TELEA design)

Due to the current health situation, the adequate implementation of these measures has not been possible. Despite them, we have noticed beneficial changes for our objective

•TEAM:

•**Leader:** Begoña Campos Balea

•**Facilitator:** María Ferreiro Durán

•Team:

•Laura Torrado – radiotherapy oncologist

•Jonathan Grandío – emergency physician

•Pilar Rodríguez – family physician

•Olga Roca – quality department nurse

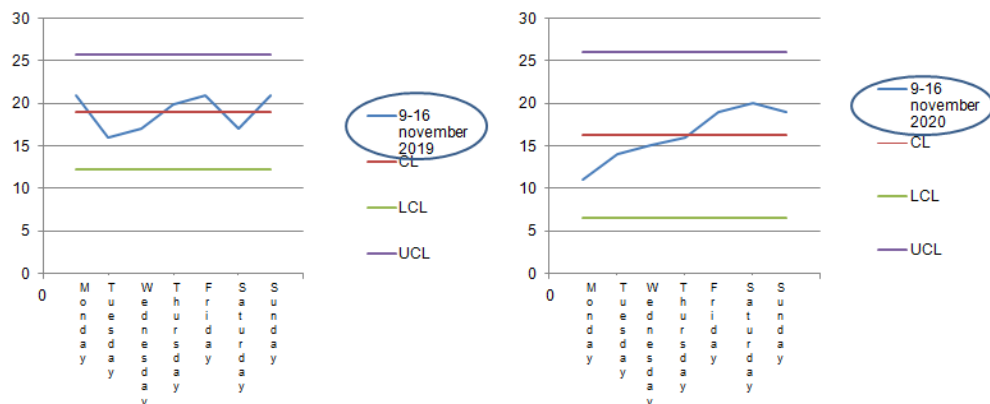
•Alberto Carral – medical oncologist

PROJECT SPONSORS:

Sergio Vázquez Estévez - Head of the Medical Oncology service and Radiation Oncology Coordinator

RESULTS:

Graph title: number of patients admitted to the Oncology service: November 19 / November 20



CONCLUSIONS:

- Cancer patients present a complex pathology, with difficult symptomatic control, which requires frequent hospital admissions
- Calls to 061 have been reduced and consultation in Primary Care has increased before going to the Emergency Room
- Admissions for pain and fever have decreased
- Admissions for respiratory infections have decreased
- Despite having disseminated the admission criteria among the physicians responsible for them, the percentage of compliance with these criteria has not improved

NEXT STEPS:

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- Continue evaluating the results (collect data from patients admitted one week, twice a year)
- **Continue to improve the project over time**