

# ASCO's Quality Training Program

## Reducing Burnout among Oncology Physicians in King Abdulaziz Medical City

By: Dr. Nashmia Almutairi

Ministry of National Guard Health Affairs, King Abdulaziz Medical City- Riyadh  
Oncology Department

05 December 2019

# Team Members

**Project Sponsor: Dr. Abdul Rahamn Jazieh**

**Team Leader: Dr. Nashmiah Almutairi**

**Facilitator/ QTP Improvement: Ms. Mona Alshami**

**Team Member: Dr. Nafisa Abdulhafiz**

**Team Member: Mr. Mohammad Al-Kaiyat**

**Team Member: Mr. Tabrez Pasha**

**Team Member: Ms. Manar Almazroua**

**Team Member: Mr. Faisal Al Hamdan**

**QTP Coach: Dr. Arif Kamal**

# Institutional Overview

- **Ministry of National Guard Health Affairs is a medical /academic complex in the Kingdom of Saudi Arabia. It consists of medical cities that are scattered in many regions of Saudi Arabia.**
- **The major and the largest medical city under National Guard Health Affairs is King Abdulaziz Medical City in Riyadh.**
- **Department of Oncology provides patients with cancer and blood disorders personalized, family-oriented, multidisciplinary care that is outcome and value-driven, enhanced by innovative and practice-based research in an academic environment.**
  - **108 inpatient beds, 34 infusion chairs, 91 physicians and clinic working hours: 8:00am to 17:00pm 5 days/week**

# Institutional Overview

ONCOLOGY	
INPATIENT	OUTPATIENT
<b>Total No. of Admission (Adult) By Specialty: 1871</b> Adult Hematology 381 Adult Medical Oncology 759 Palliative Care 109 Gynecology Oncology 279 Radiation Oncology 58 Stem Cell Transplant 285	<b>Total No. of Patient Seen (Adult) By Specialty : 44230</b> Adult Hematology 10269 Adult Medical Oncology 10720 Palliative Care 650 Gynecology Oncology 2276 Radiation Oncology 3379 Stem Cell Transplant 2567 Adult Oncology Day care Unit 15369
<b>Average Length of Stay (ALOS) (Adult) - 13.8</b> Adult Hematology (Ward 41) 16.8 Adult Medical Oncology (Ward 43) 8.1 Palliative Care (Ward 55) 25 Gynecology Oncology (Unit 71) 9 Stem Cell Transplant (Ward 44) 16.1	<b>Total No. of Booked Patients (Adult) By Specialty</b> Adult Hematology 9951 Adult Medical Oncology 10491 Palliative Care 631 Gynecology Oncology 2197 Radiation Oncology 2958 Stem Cell Transplant 2378 Adult Oncology Day care Unit 14139
<b>Bed Occupancy Rate (Adult) - 84.1 %</b> Adult Hematology (Ward 41) 91.8 Adult Medical Oncology (Ward 43) 84.2 Palliative Care (Ward 55) 88.5 Gynecology Oncology (Unit 71) 80.1 Stem Cell Transplant (Ward 44) 72.3	<b>Total No. of Walk-In Patients by Specialty: 2485</b> Adult Hematology 318 Adult Medical Oncology 229 Palliative Care 19 Gynecology Oncology 79 Radiation Oncology 421 Stem Cell Transplant 189 Adult Oncology Day care Unit 1230
	<b>Total No. of No Show Patients By Specialty: 8491</b> Adult Hematology & Stem Cell Transplant 3819 Adult Medical Oncology 1790 Palliative Care 455 Gynecology Oncology 597 Radiation Oncology 448 Adult Oncology Day care Unit 1382

# Problem Statement

**In the fall of 2019, 55% of oncology physicians reported severe occupational burnout, which could negatively effect clinician performance, productivity and quality of patient care.**

# Aim Statement

**We aim to reduce oncology physicians burnout in the Oncology Department at KAMC from 55% to 40% by December 2019.**

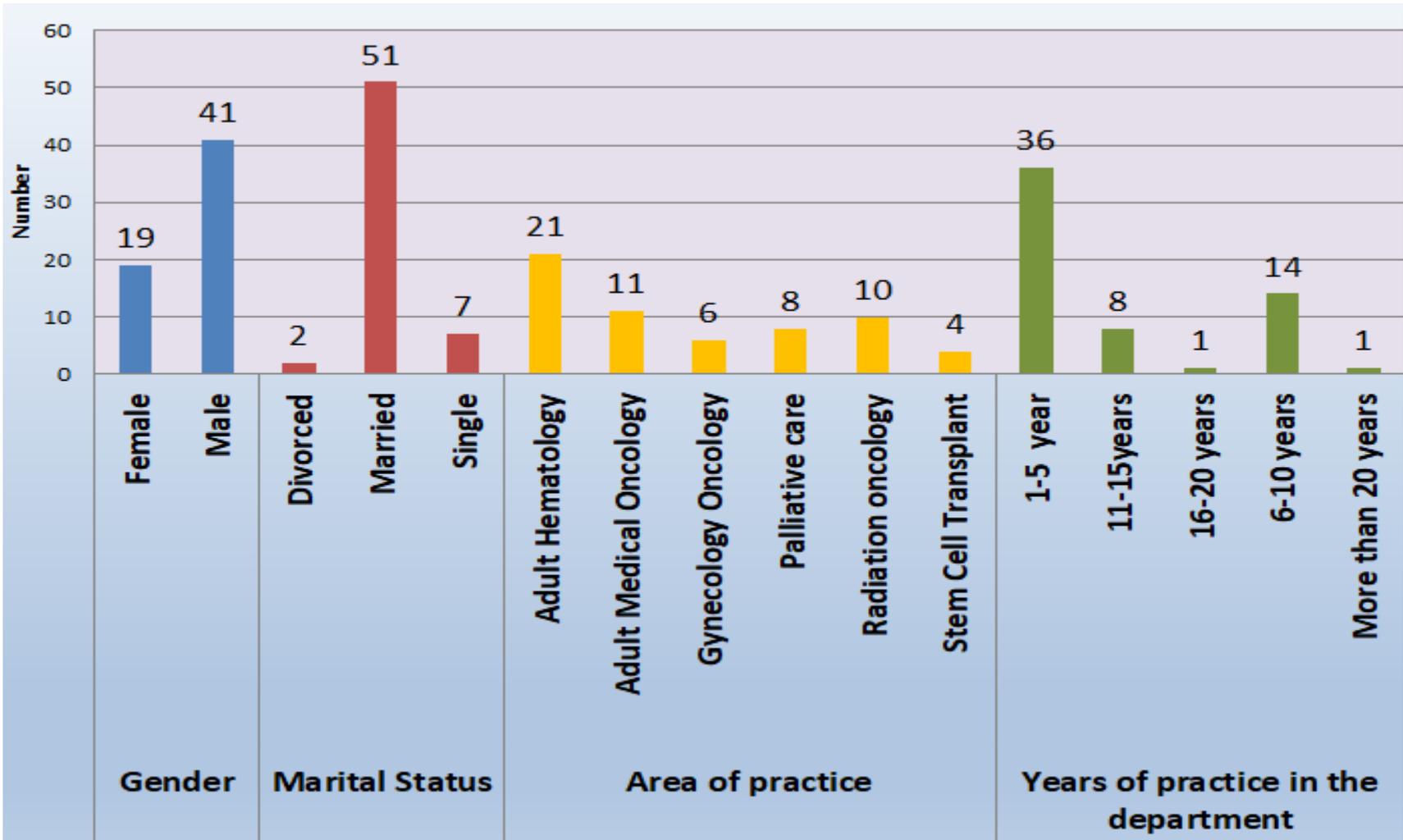
# Outcome Measure: Baseline Data Summary

Item	Description
Measure:	% of oncology physicians with high level of burnout
Population: <i>(Exclusions, if any)</i>	Physicians in Oncology Department
Calculation methodology: <i>(i.e. numerator &amp; denominator)</i>	Maslach-Burnout-Inventory-MBI survey
Data source:	Maslach-Burnout-Inventory-MBI survey
Data collection frequency:	Staff were surveyed twice one pre and one post intervention
Data limitations: <i>(if applicable)</i>	

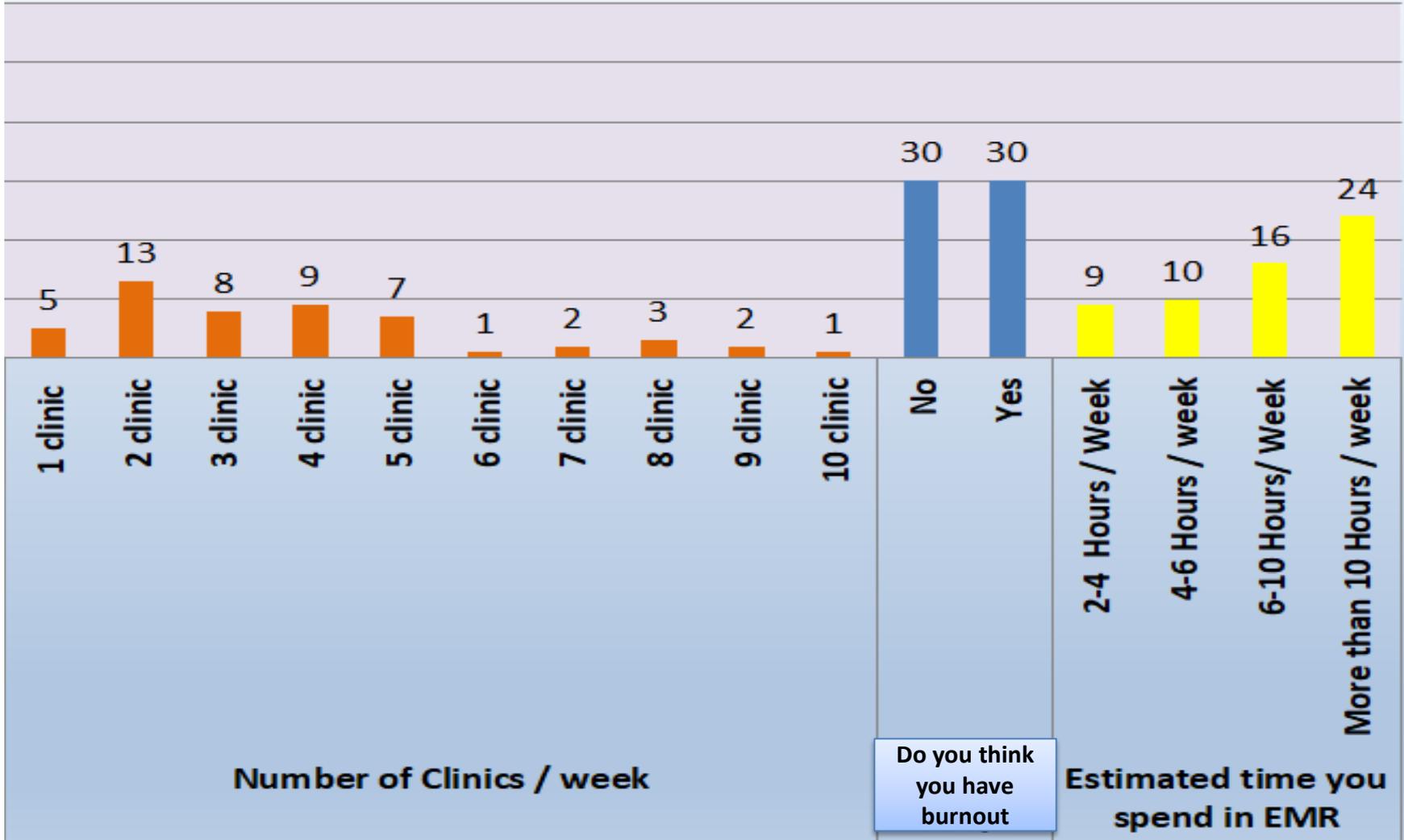
# *Outcome Measure: Baseline Data*

Maslach-Burnout-Inventory-MBI Survey  
60 Oncology physicians responded to the  
survey

# Baseline Demographic Data



# Baseline Demographic Data



# Outcome Measure

- **First Maslach survey result :**
  - **Total of 33 out of 60 physicians met criteria of burnout**
  - **MBI burnout rate among oncology physicians KAMC is 55%**

# Cause and Effect diagram

Project Name: (Reduce Burnout among Oncology Physicians) Date: (11/09/2019)

dd/mm/yyyy

Project No./Code: (OD-19-04)

Improvement Approach: (FB/PDSA)

Phase/Stage: ( )

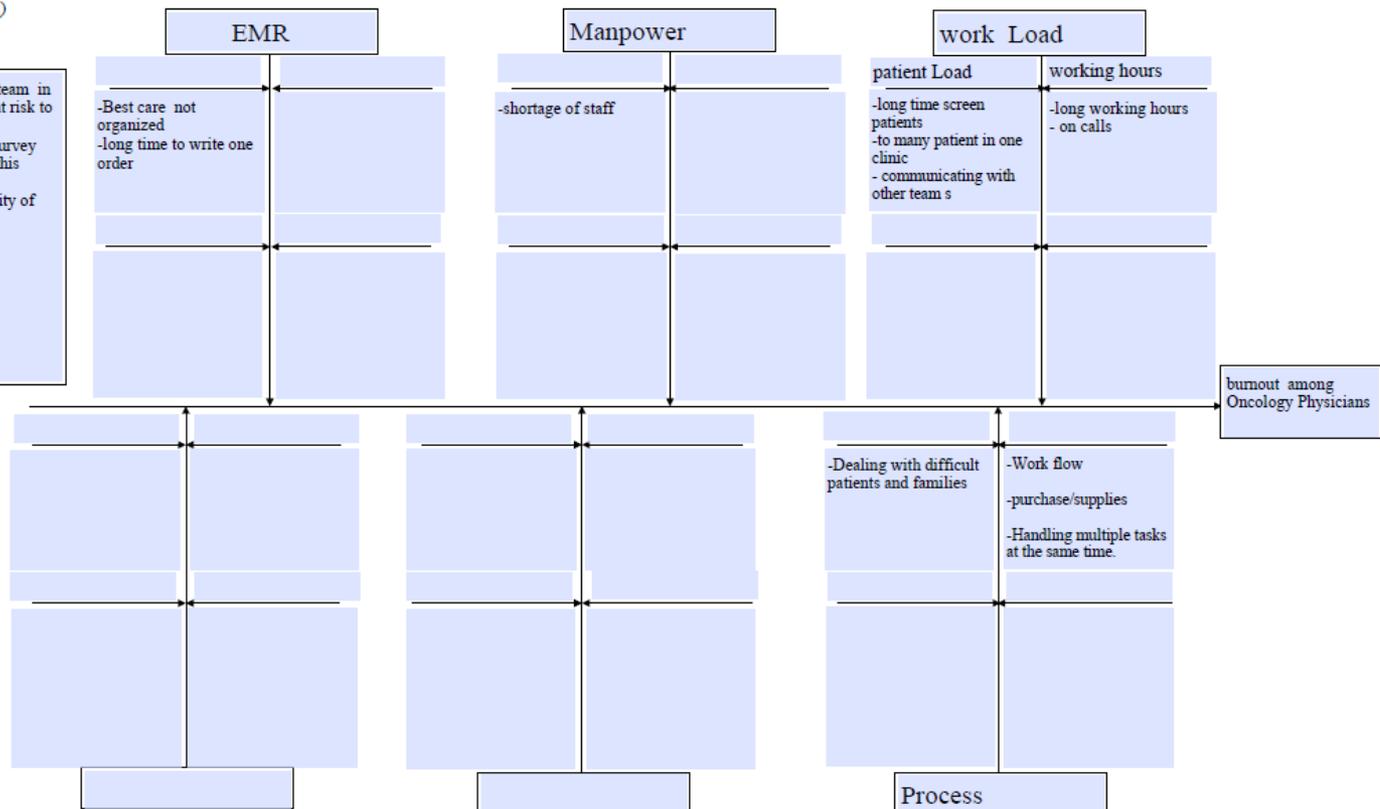
Department of Oncology  
King Abdullah Specialized Children Hospital  
Ministry of National Guard Health Affairs  
Fishbone Diagram  
(Ishikawa Diagram)



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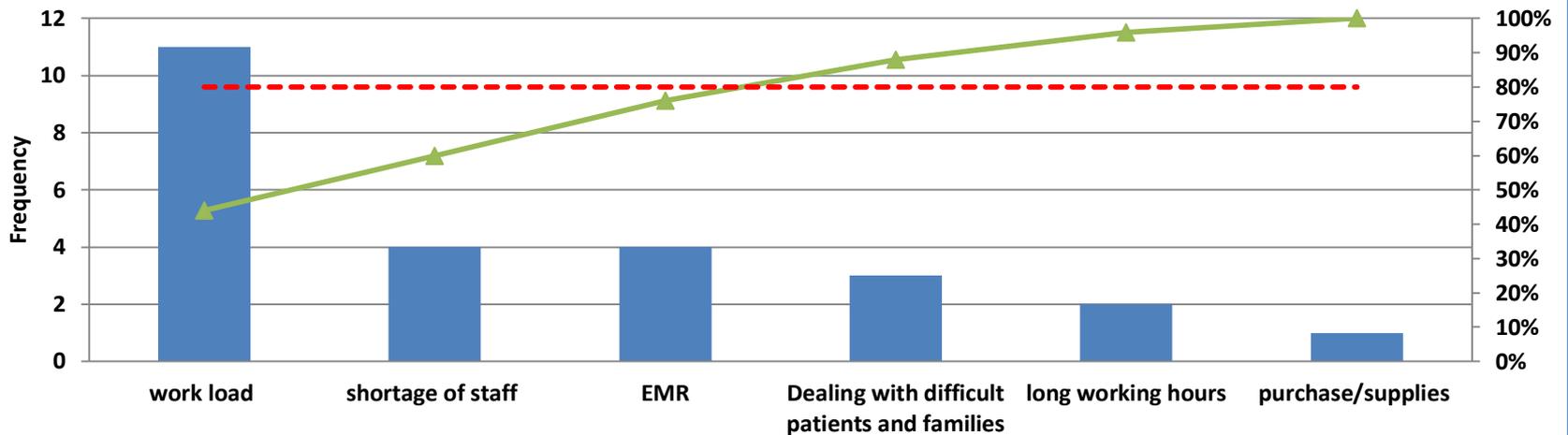
Event's Description:

50% of Physicians and health care team in oncology department KASCH are at risk to have occupational burnout as per Maslach-Burnout-Inventory-MBI survey that conducted in September 2019, this could affect negatively on their performance, productivity and quality of patient care.



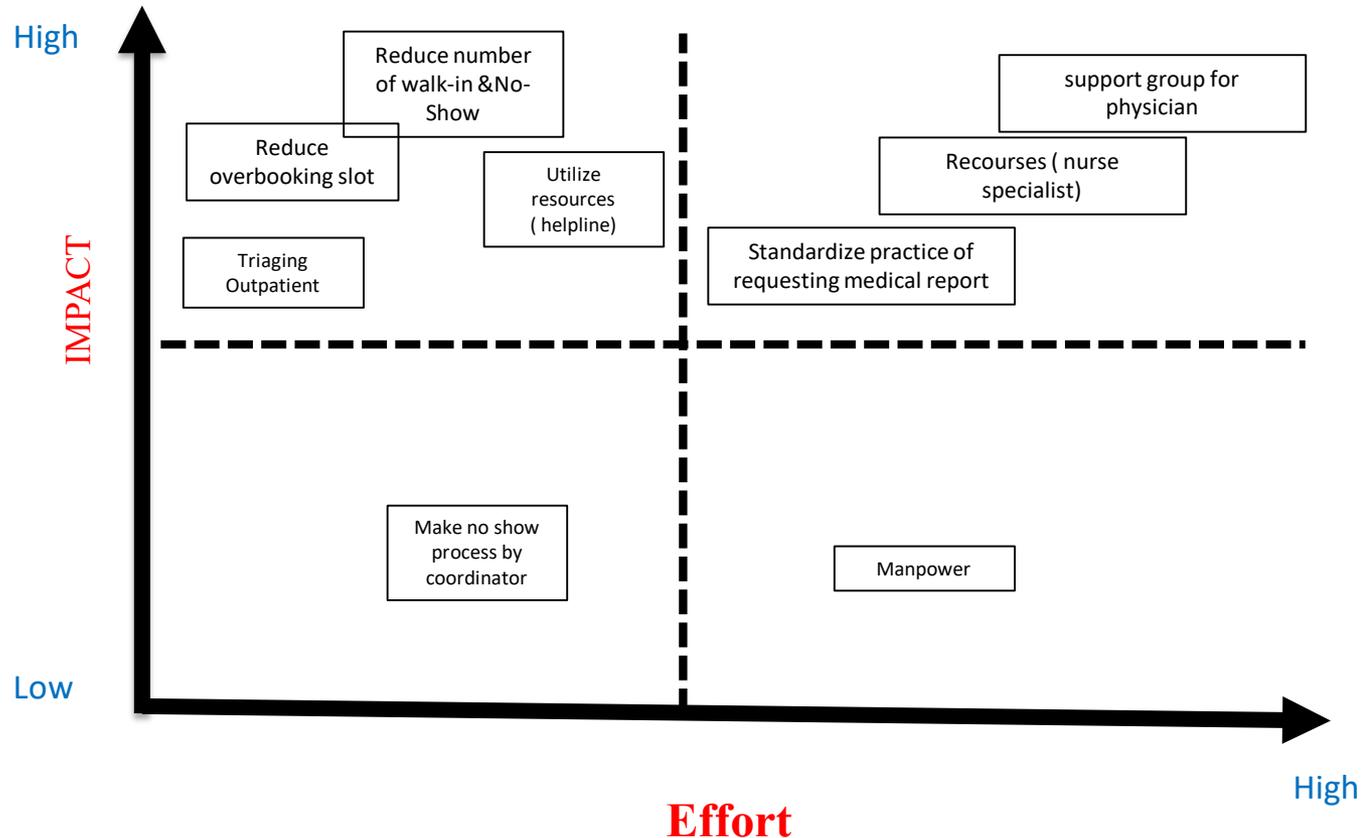
# Diagnostic Data

Pareto chart for main reason that's causing burnout among oncology Physicians



## Priority / Pay-off Matrix

# Countermeasures



# Diagnostic Data Summary

Item	Description
Measure:	Number of walk-in patient in clinic weekly
Patient population: <i>(Exclusions, if any)</i>	Oncology outpatients
Calculation methodology: <i>(i.e. numerator &amp; denominator)</i>	Baseline number of walk-in/number of walk-in post intervention
Data source:	Best care system
Data collection frequency:	Weekly
Data limitations: <i>(if applicable)</i>	

# PDSA CYCLE#1

## **Aim of PDSA cycle:**

Reduce number of walk-in / and overbooking in oncology outpatient clinic as a first cause of work overload that lead to physician burnout by assigned clinical coordinator for triaging patient that comes in to clinic and organize clinic workflow

## **Plan:**

- Assigned clinical coordinator for triaging patient that comes in to clinic and organize clinic workflow
- weekly monitoring rate of walk-in and reason of walk-in
- Involve other resources available in clinic like helpline to reduced number of walk-in

## **Do:**

- Team had tour in outpatient clinic to look at process of patient flow
- Establish Outpatient Triaging desk for walk-in and assigned clinical coordinator for triaging patient that comes in to clinic as walk-in
- Meet with patient services staff to modified slots of walk in in each clinic to be maximum 2 and access by one assigned coordinator and charge nurse of clinic
- Helpline awareness day for all oncology staff and patient
- Departmental meeting lecture about burnout project survey result and update on new clinic walk-in flow pathway
- Physicians mindfulness /street management educational session by psychologist to help staff to cope with stress of workload

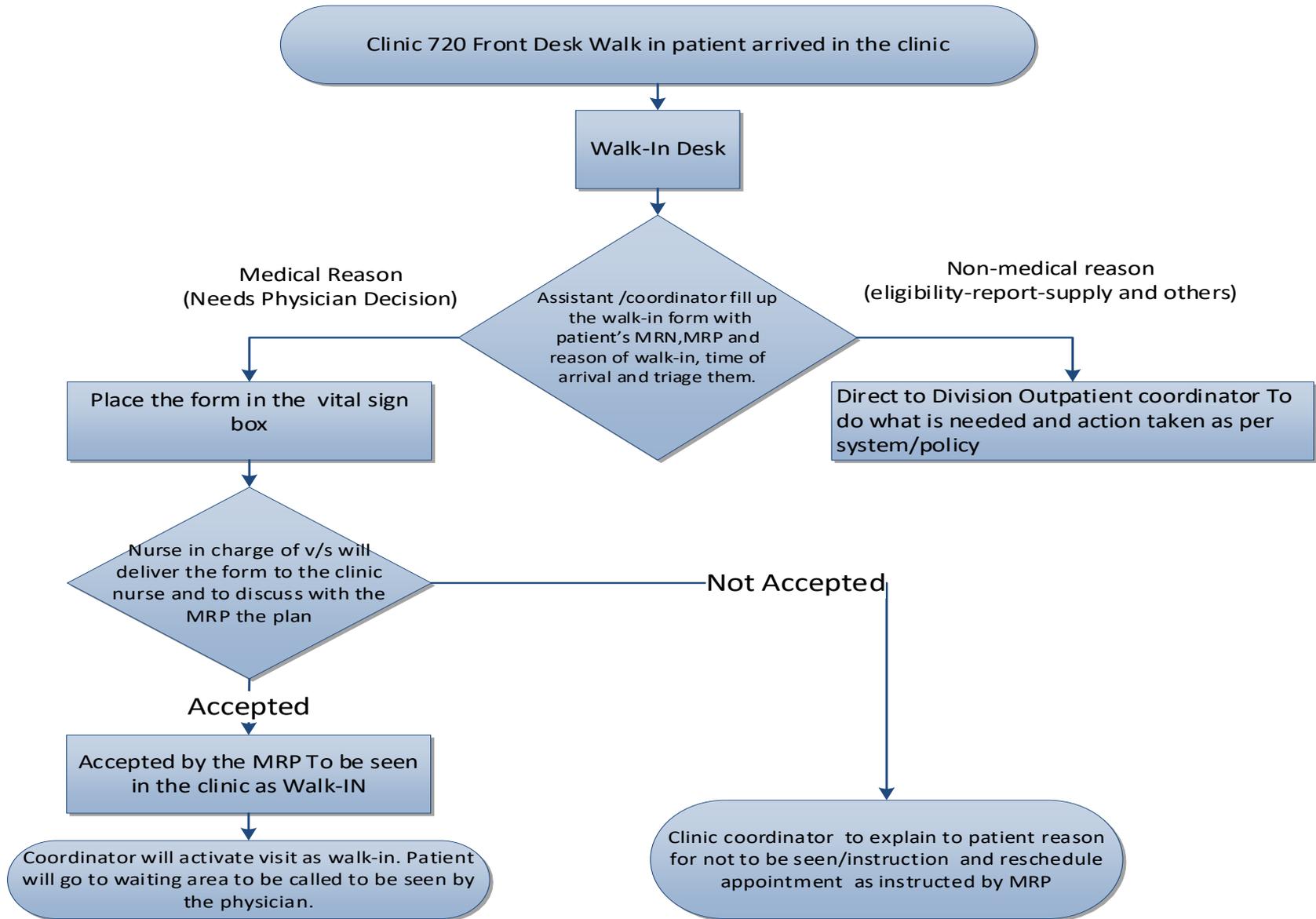
## **Study:**

- Decrease level on medical walk-in rate by 29% from baseline
- No significant reduction in burnout level among oncology staff

## **Act:**

- Still need to work more on nonmedical reasons for walk-in
- Maintain compliance of triaging patients in outpatient clinic
- Continuing Physicians mindfulness /street management educational session

# Clinic720 Adult Oncology/Hematology Patient flow Process MAP



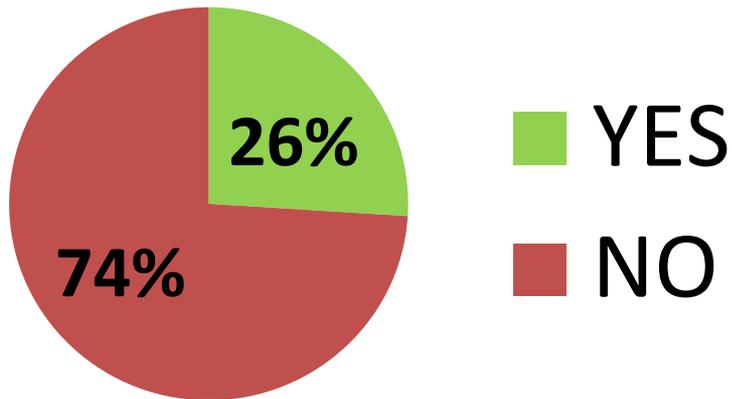
# Process Measure

## Diagnostic Data

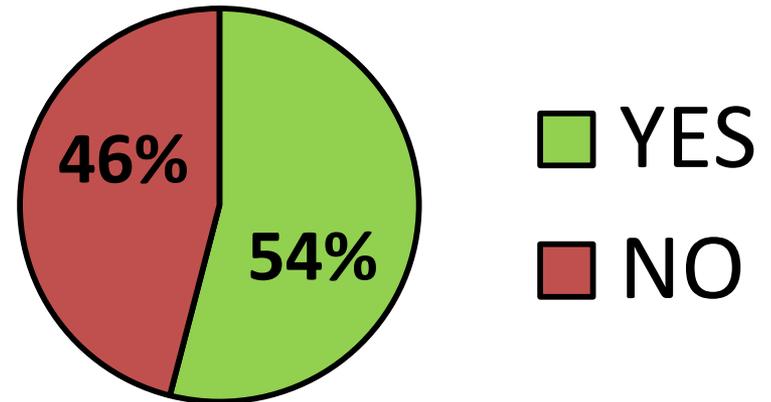
DIVISION	Monthly Average Walk in Patients (Medical Reasons only)		Reduction in Walkin Patients (Medical Reasons only)
	BASELINE	POST INTERVENTION	
Adult Hematology	25	11	56.00%
Adult Medical Oncology	48	34.5	27.62%
Gynecology Oncology	10	10	3.23%
Palliative Care	8	8.5	-2.00%
<b>GRAND TOTAL</b>	<b>91</b>	<b>64</b>	<b>29.93%</b>

# Change Data

Did you Notice a Decrease in the Clinic Workload?  
(Total N= 60)

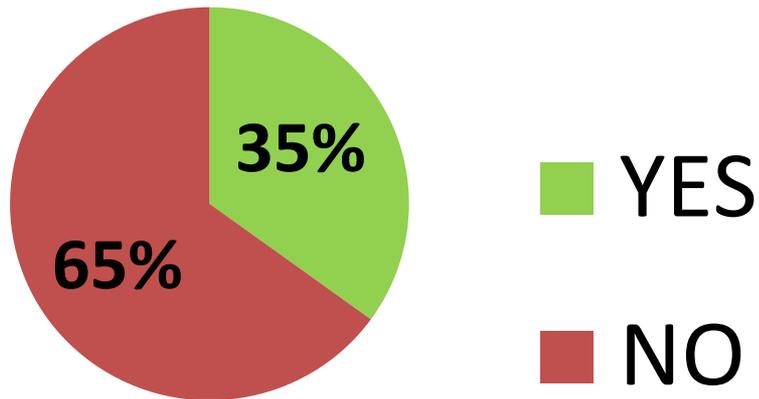


Did you Notice a Decrease the Number of Walk-in Patients in the Clinic? N 60 (%)

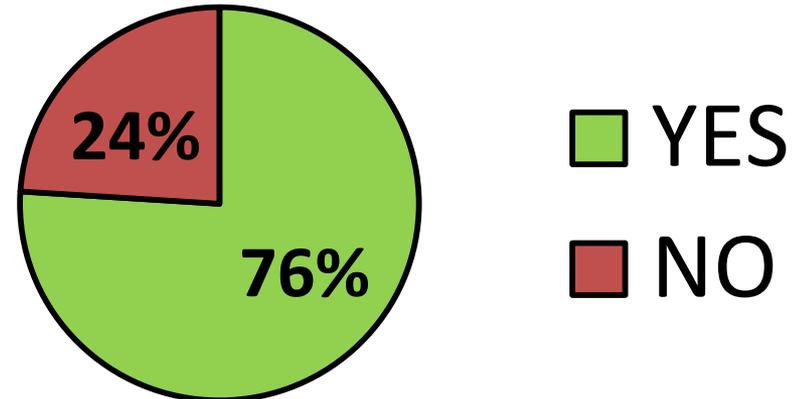


# Change Data

Did you Attend the Psychological Wellbeing Session Offered by the Department Total N= 60 (%)



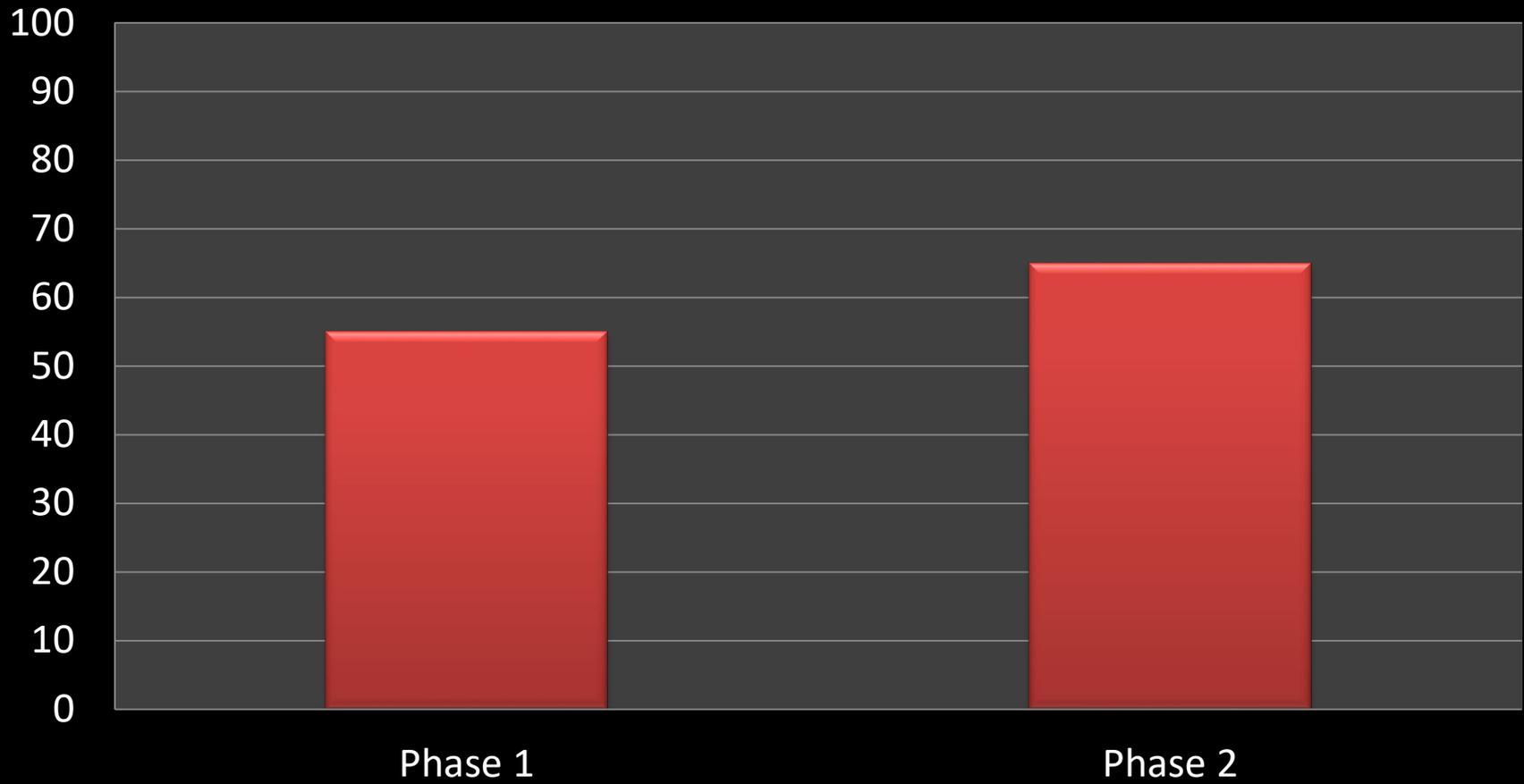
Did that Session Help You to Reduce your Job-Related Stress? Total N= 21 (%)



*Outcome Measure*

# Change Data

## Burnout Percentage

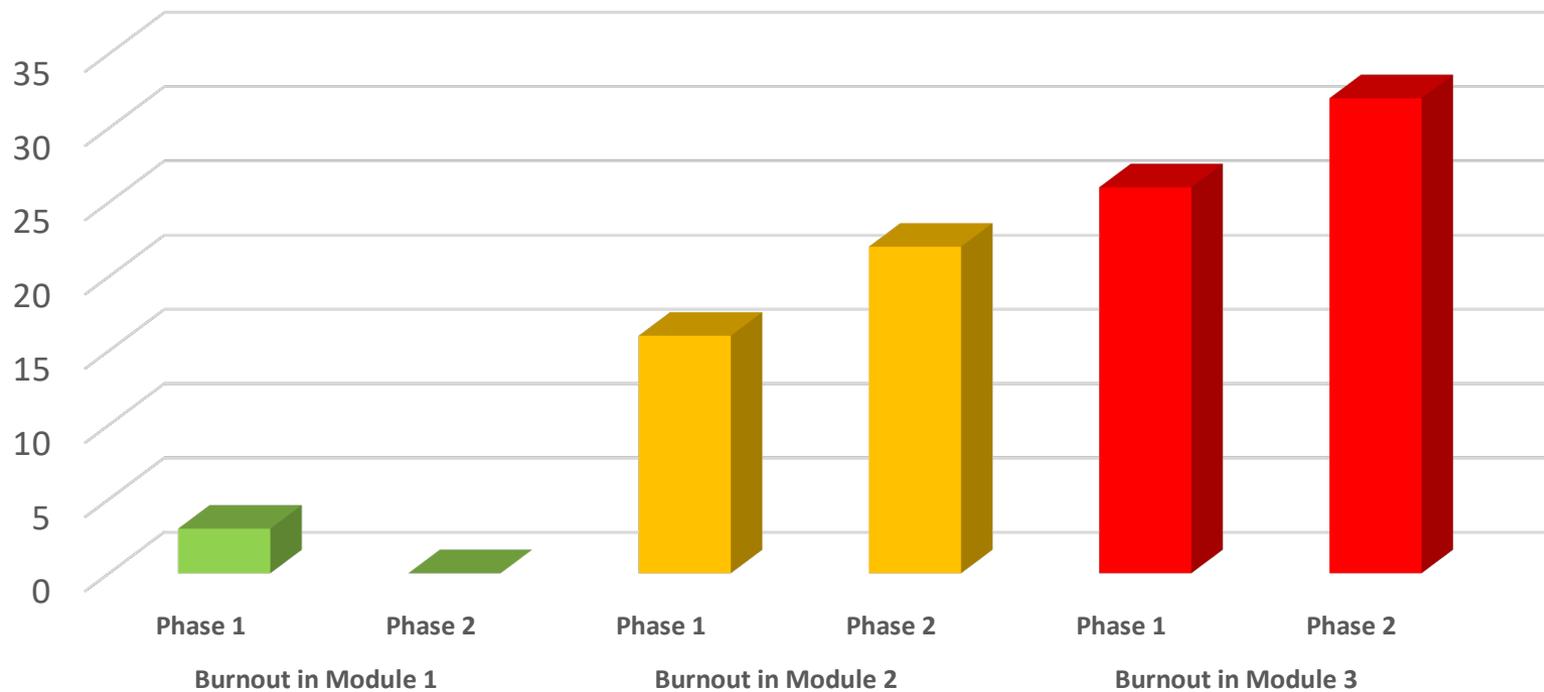


# Maslach Burnout-Inventory-MBI survey Result

	Phase	Number	Percentage
<b>Burnout in Module 1</b> (Burnout or depressive anxiety syndrome)	Phase 1	3	5%
	Phase 2	0	0
<b>Burnout in Module 2</b> (Depersonalization or loss of empathy)	Phase 1	16	26.6%
	Phase 2	22	36.6%
<b>Burnout in Module 3</b> (Personal Achievement )	Phase 1	26	43.3%
	Phase 2	32	53.3%

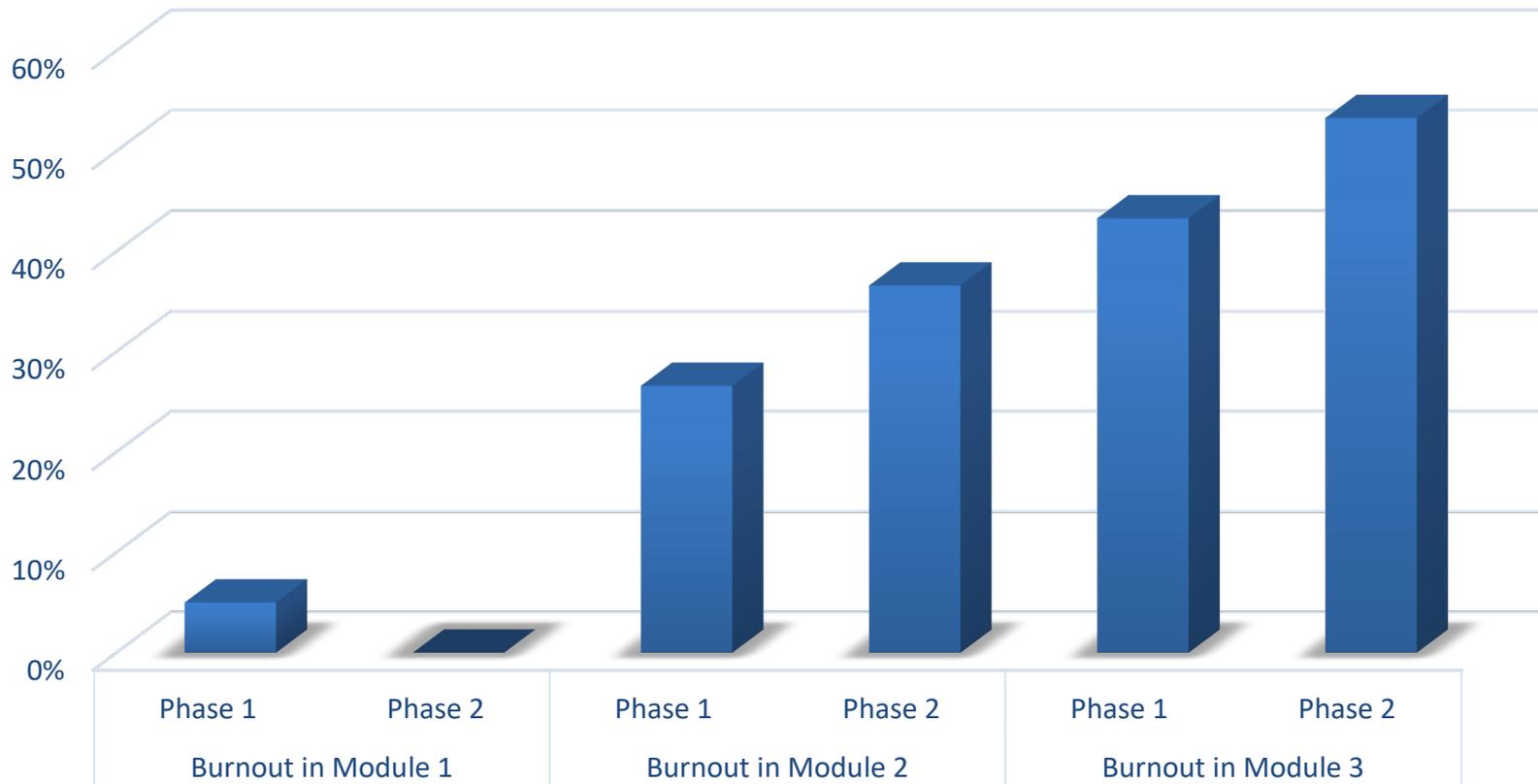
# Maslach-Burnout-Inventory-MBI survey Result

Compare Between Number of Burnout Per Module

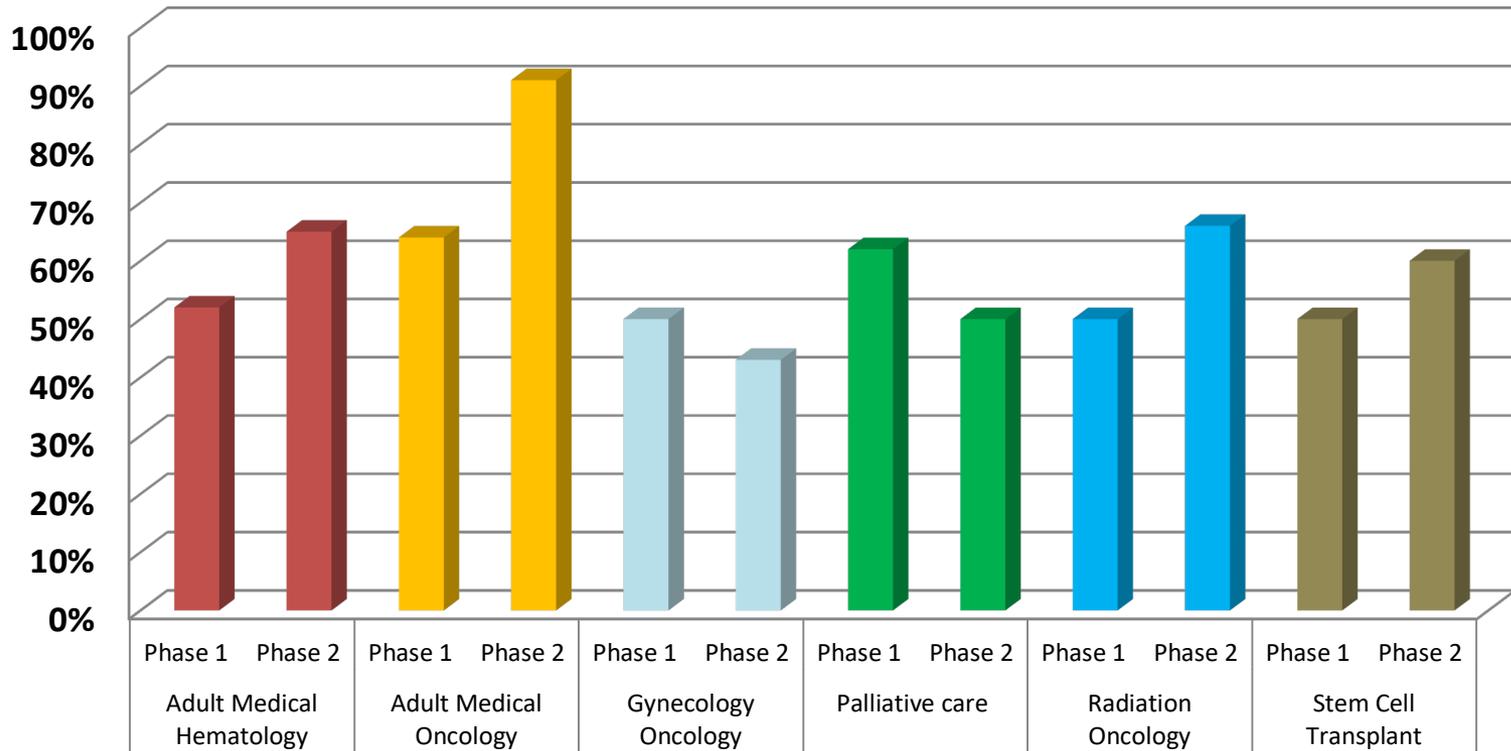


# Maslach-Burnout-Inventory-MBI survey Result

## Compare Between Percentages of Burnout per Module



## Burnout Percentage Per Section (Pre and Post )



# Sustainability Plan

Next Steps	Owner
<ul style="list-style-type: none"><li>• Maintain compliance of triaging patients in outpatient clinic</li></ul>	Quality team
<ul style="list-style-type: none"><li>• Continuing Physicians mindfulness /street management educational session</li><li>• focus group psychological session</li></ul>	Quality team/ psychologist
<ul style="list-style-type: none"><li>• Decrease physician workload from other aspect like reducing non medical reasons patients walk-in</li></ul>	Quality team
<ul style="list-style-type: none"><li>• Involve nurse practitioner in direct patient care</li></ul>	Quality team
<ul style="list-style-type: none"><li>• Root cause analysis /Look for new factors</li></ul>	Quality team

# Conclusion

**Burnout among physician and healthcare team is complicated with multiple factors that's making reduction of high level burnout more complicated and indicate more intervention needed.**

# Reducing Burnout among oncology physicians in KAMC

Nashmia AlMutairi, Mona Shami, Mohammad Alkaiyat, Dr.Nafisa Abdulhafiz Manar Mazroua, Faisal Al-Hamdan, Tabrez Pasha, Abdul Rahman Jazieh

Ministry of National Guard Health Affair, King Abdulaziz Medical City Riyadh - Department of Oncology Quality Management

**AIM:**To reduce oncology physicians burnout in the oncology department at KAMC from 55% to 40% by December 2019.

## INTERVENTION:

- ❖ Cross-sectional data collection technique used to measure the burnout level among doctors in the Department of Adult Medical Oncology as baseline and after intervention (Maslach Burnout Inventory (MBI))
- ❖ **Intervention carried out to reduce burnout**
  - A-Decrease work load by decreasing number of walk in patients**
    - Outpatient Clinic schedules and walk-in data were captured
    - Process map for outpatient walk in was developed
    - Establish Outpatient Triage desk for walk-in and assigned clinical coordinator for triaging patient that comes in to clinic as walk-in
    - Meet with patient services staff to modified slots of walk in in each clinic to be maximum 2 and access by one assigned coordinator and charge nurse of clinic
    - Helpline awareness day for all patients and staff
  - B-Physicians education on burnout and work stress management**
    - Physicians mindfulness /street management educational session by psychologist
- ❖ Outcome and process measures were collected weekly: analyzed and discussed thoroughly by the team.

## TEAM:

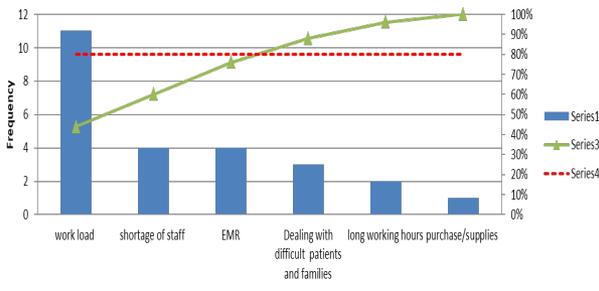
- Department 1: Oncology Dept.
- Department 2: Quality Dept.

## PROJECT SPONSORS:

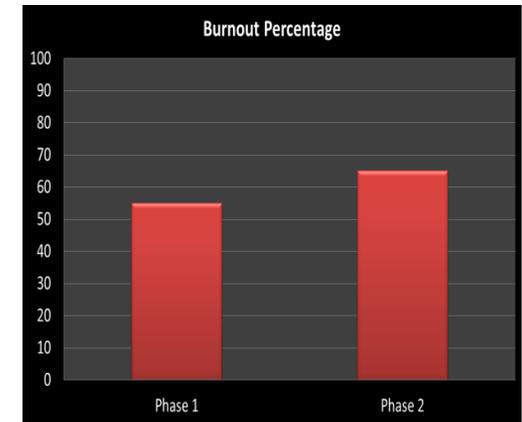
- **PROF. Abdul Rahamn Jazieh**
- 

## RESULTS:

Pareto chart for main reason that's causing burnout among oncology Physicians



DIVISION	Monthly Average Walkin Patients (Medical Reasons only)		Reduction in Walkin Patients (Medical Reasons only)
	BASELINE	POST INTERVENTION	
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## CONCLUSIONS

Burnout among physician and healthcare team is complicated with multiple factors that's making reduction of high level burnout more complicated and indicate more intervention needed.

## NEXT STEPS:

- Maintain compliance of triaging patients in outpatient clinic
- Continuing Physicians mindfulness /street management educational session
- Decrease physician workload from other aspect like reducing non medical reasons patients walk-in
- Involve nurse practitioner in direct patient care