ASCO's Quality Training Program

Project Title: Steroid Tapering for Patients with Spinal Cord

Compression or Symptomatic Brain Metastases

Presenter: David Asher

Institution: Jackson Memorial Hospital

Date: June 29, 2018



Institutional Overview

Jackson Memorial Hospital

- Non-profit, tertiary care hospital
- Primary provider for poor and near-poor population of Miami-Dade County
- ~1400 inpatient beds
- Teaching hospital for University of Miami Miller School of Medicine



Team Members

Team Members		
Janet Diaz-Pujala, RN	Nurse (Radiation Oncology)	
Ana Abad, RN	Nurse (Radiation Oncology)	
Sarah Francis, PharmD, BCOP	Pharmacist (Inpatient Oncology)	
Angela Richardson, MD, PhD	Resident (Neurosurgery)	
Glen Manzano, MD	Attending (Neurosurgery)	
Stuart Samuels, MD, PhD	Attending (Radiation Oncology)	
Benjamin Farnia, MD	Resident (Radiation Oncology)	
Stephen Ramey, MD	Resident (Radiation Oncology)	
Team Sponsor		
Raphael Yechieli, MD	Director (Radiation Oncology)	
Team Leader		
David Asher, MD	Resident (Radiation Oncology)	
ASCO QI Coach		
Duncan Phillips, MBA		

Problem Statement

Between Nov-17 and Feb-18 <u>76% of patients</u> with spinal cord compression or symptomatic brain metastases <u>did not receive appropriate tapering</u> <u>of steroids</u> following completion of radiation treatment. This leads to unnecessary side effects from continued steroid use, ultimately leading to an inefficient use of resources, including time and money.



Aim Statement

To reduce the percentage patients with spinal cord compression or symptomatic brain metastases who receive radiation treatment and do not receive a steroid taper schedule prior to completion of radiation treatment by 30% by June 2018



Measures

Measure: Outcome

Population: Patients with cord compression or symptomatic brain metastases

who receive radiation therapy

Calculation methodology:

Numerator: # of patients who do not receive adequate tapering instructions in discharge instructions or documented in on-treatment visit

Denominator: # of patients with cord compression or symptomatic brain metastases who receive radiation therapy

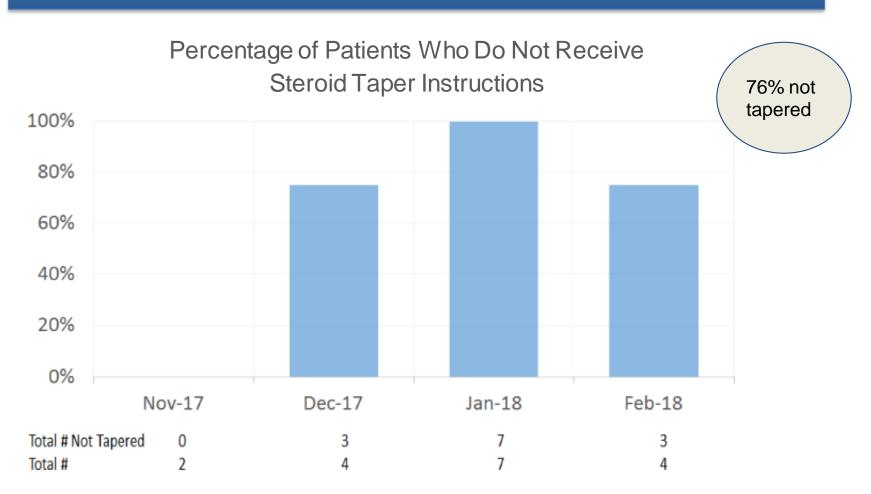
Data source: Chart Review

Data collection frequency: Monthly

Data quality(any limitations): Charting may not reflect clinical reality. Discharge instructions, although written, may not reflect patient understanding/compliance.

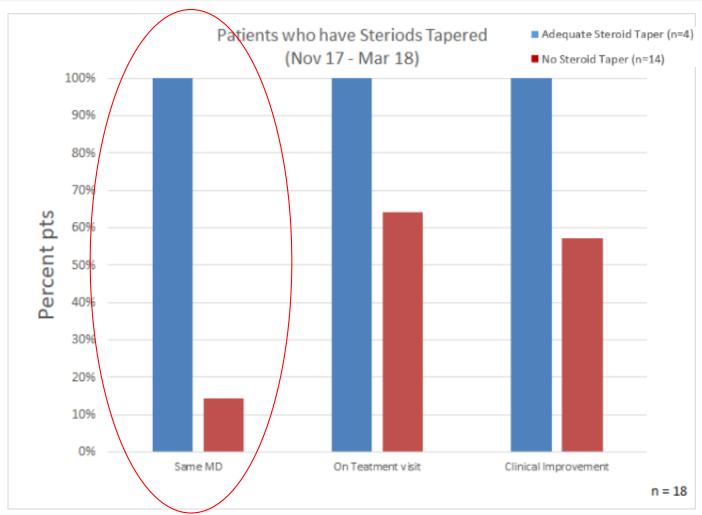


Baseline Data



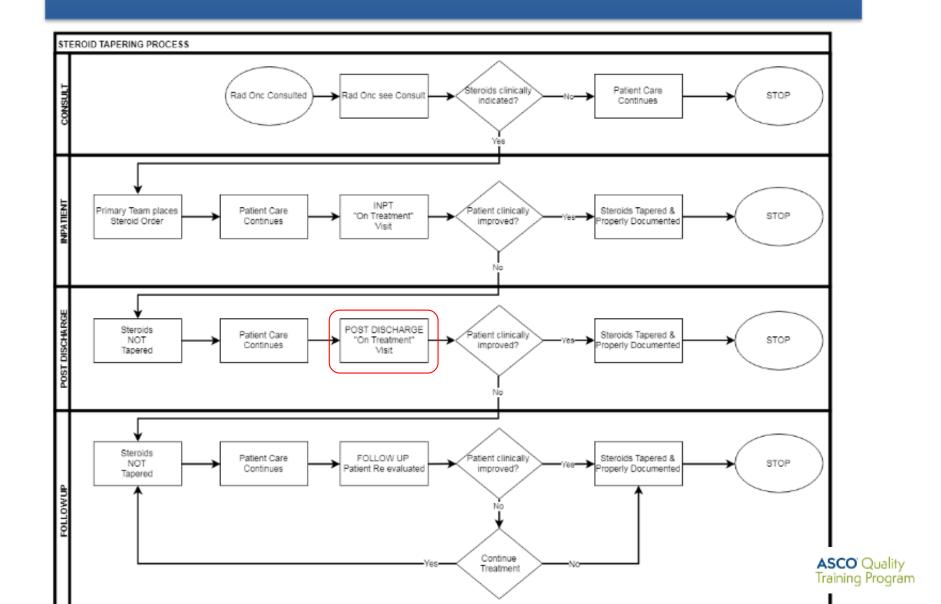


Diagnostic Data

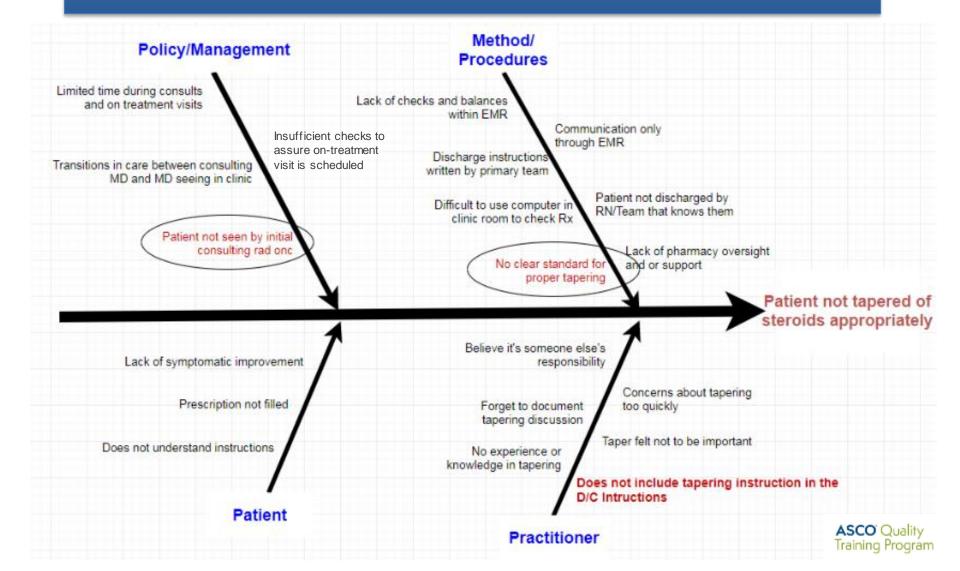




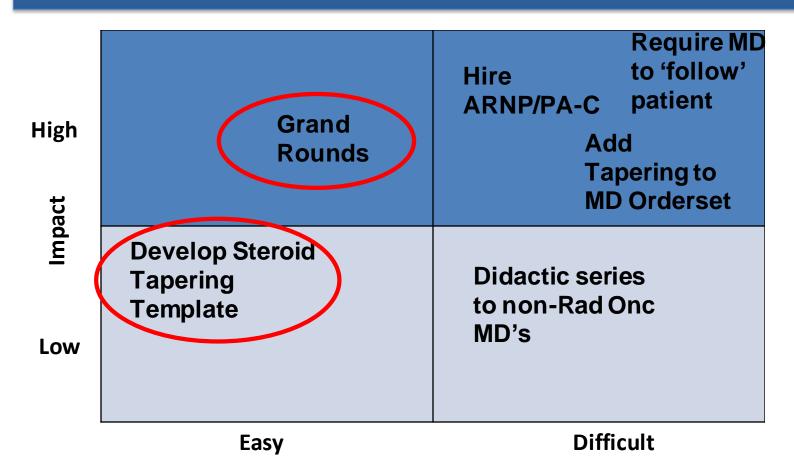
Process Map



Cause & Effect Diagram



Prioritized List of Changes (Priority/Payoff Matrix)



PDSA Plan (Test of Change)

Date of PDSA Cycle	Description of Intervention	Results	Action Steps
4/13/18	Grand Rounds	16 MD attended, Nurse Manager, Lead RT Therapist, Training Material developed	Follow up with individual residents
4/13/18	Developed Tapering Template	Dist. to all Rad Oncs	Edited the Tapering Template
5/18/18	1:1 discussion with residents	Increased Awareness	Add the Tapering Template to the EMR

Materials Developed (optional)

Steroid Tapering Schedule

Dexamethasone 2 mg tablets

	AM	PM
	Breakfast, # of tablets	Dinner, # of tablets
Week 1 //	4 tab (8 mg)	4 tab (8 mg)
Week 2 //	2 tab (4 mg)	2 tab (4 mg)
Week 3 //	2 tab (4 mg)	
Week 4 //	1 tab (2 mg)	
Week 5 //	0.5 tab (1 mg)	

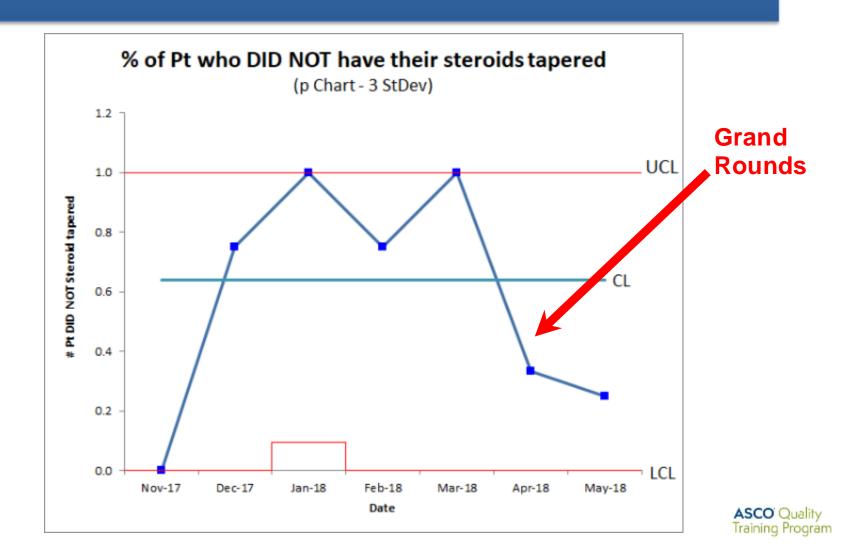
Steroid Tapering Schedule

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	AM	PM
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Week 2 //	_ tab (_ mg)	_ tab (_ mg)
Week 3 //	_ tab (_ mg)	_ tab (_ mg)
Week 4 //	_ tab (_ mg)	_ tab (_ mg)
Week 5 //	_ tab (_ mg)	



Change Data



Conclusions

The percentage of patients with spinal cord compression or symptomatic brain metastases who did not receive appropriate steroid tapering decreased by 38.5%.

- 76% between Nov-17 and Feb-18 to 37.5% in April-18 and May-18
- This exceeded our goal of a 30% reduction by June-18.



Next Steps/Plan for Sustainability

- Continue monthly chart review.
- Add steroid tapering template into EMR.
- Incorporate steroid education into resident lecture series.

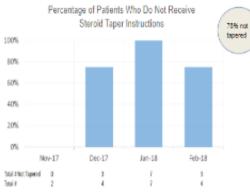


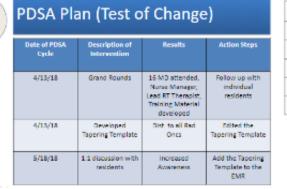
Jackson Memorial Hospital

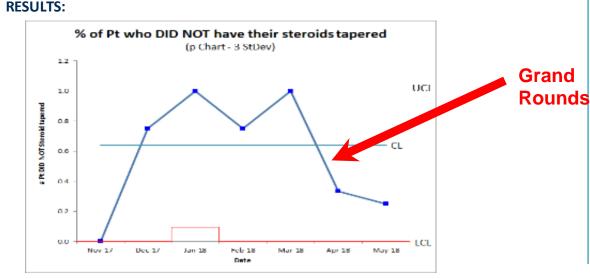
Steroid Tapering for Patients with Spinal Cord Compression or Symptomatic Brain Metastases

AIM: To reduce the percentage patients with spinal cord compression or symptomatic brain metastases who receive radiation treatment and do not receive a steroid taper schedule prior to completion of radiation treatment by 30% by June 2018

INTERVENTION: A didactic grand rounds was created incorporating reviewing our data, potential causes, proper sign-out technique, and introduction of the steroid template. Steroid Tapering Schedule







TEAM:

- Radiation Oncology
- (Attendings, Residents, Nurses)
- Neurosurgery
- (Attending, Resident) Pharmacv (Inpatient pharmacist)

PROJECT SPONSORS:

- Raphael Yechieli, MD
- **Director of Radiation Oncology** at Jackson Memorial Hospital

CONCLUSIONS: The percentage of patients with spinal cord compression or symptomatic brain metastases who did not receive appropriate steroid tapering decreased by 38.5%.

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