



# Preventing Complications of High Dose Steroids for Patients at the Orlando VA Healthcare System

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Project Site: Orlando VA Healthcare System



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# Problem Statement

- High-dose steroids are the mainstay of therapy for a wide variety of conditions, but have several risks and side effects.
- Prophylaxis can be used to prevent severe complications including PCP pneumonia, GI bleeds, or fractures.

# Background:

- Guidelines exist from a multitude of specialties regarding prophylaxis of steroid-induced adverse events for patients on prolonged high-dose steroid therapy
- However, there is a paucity of data regarding the practice patterns among providers who prescribe prolonged high-dose steroids.



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# Current Condition

- Retrospective chart review among all patients prescribed high dose prednisone from January to December 2022 in the Orlando Veteran Affairs (VA) Healthcare System (prednisone > 20mg daily through a 30 day duration or dose equivalent)
- PCP prophylaxis criteria: Prednisone or dose equivalent of > 20mg with other immunosuppressives or > 30 mg a day for > 30 days
- PPI prophylaxis criteria: patients with previous peptic ulcer disease, heavy smoking, heavy alcohol use, patients > 65 years of age, and patients taking other medications that may increase the risk of PUD
- Bone prophylaxis criteria: Prednisone or dose equivalent of > 30mg for > 30 days



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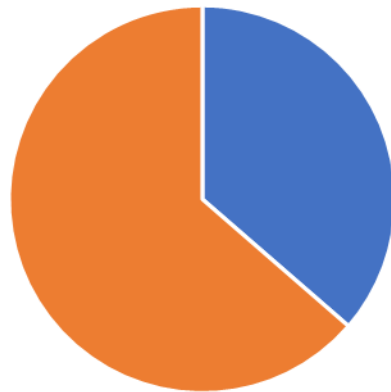
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# Current Condition

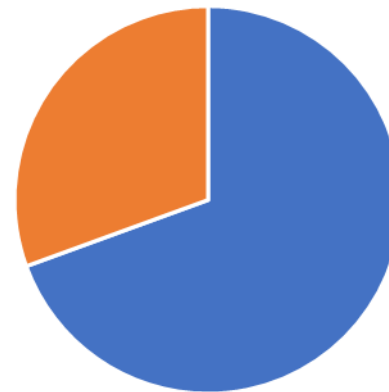
- 50 patients met inclusion criteria (prescribed prednisone > 20mg daily through a 30 day duration or dose equivalent)

33 patients qualified for PCP prophylaxis



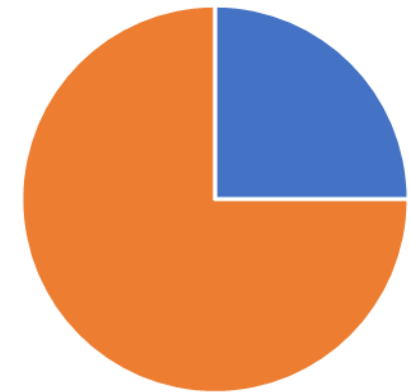
■ On ppx ■ Not on ppx

36 patients qualified for PPI prophylaxis



■ On ppx ■ Not on ppx

32 qualified for bone prophylaxis



■ On ppx ■ Not on ppx

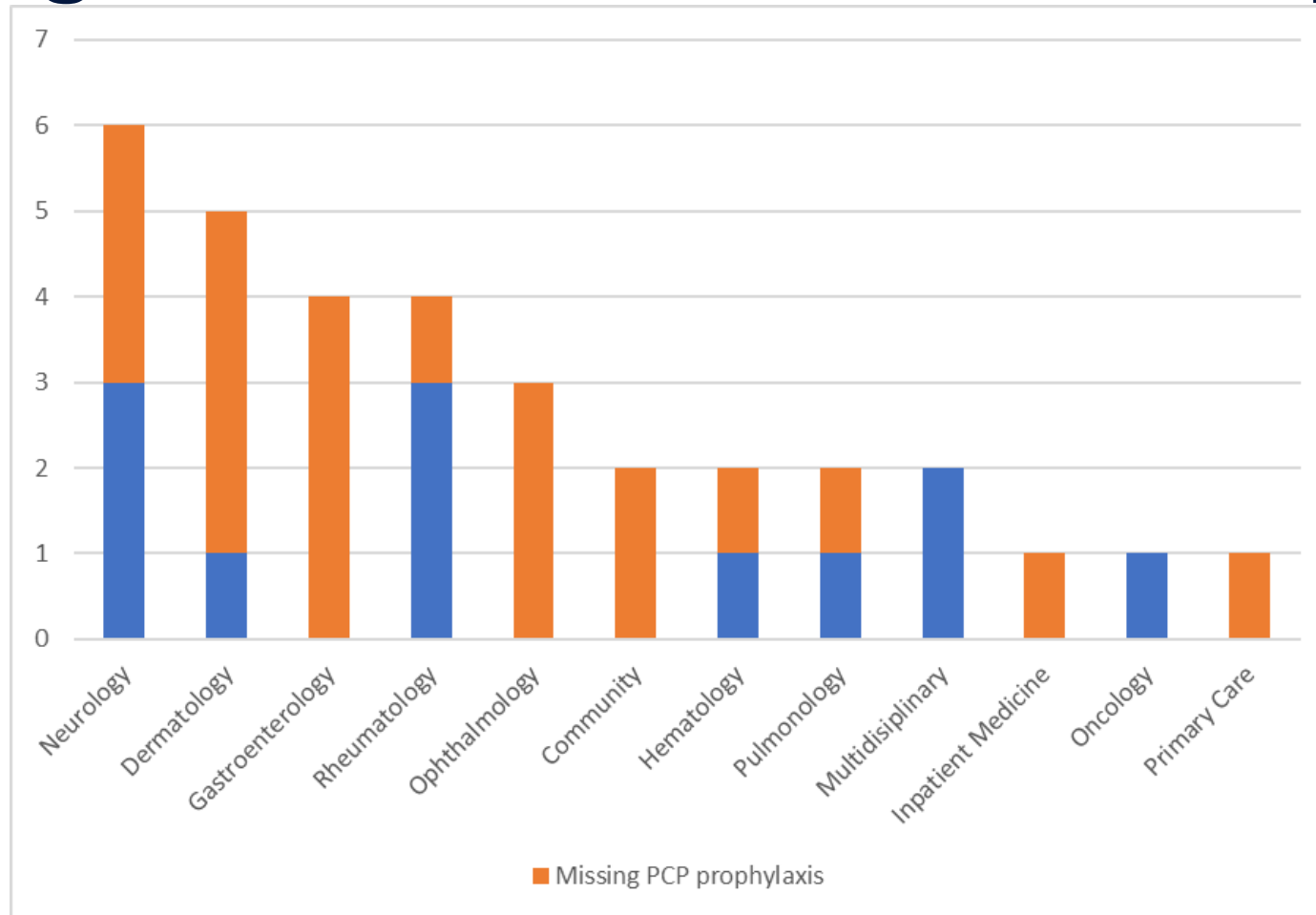


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# Prescribing Provider Service: PCP Prophylaxis



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# PCP Cases 2019-2022 at Orlando VAHCS

- 15 PCP cases identified between 2019 to 2022
- 5 cases were prescribed high dose steroids, however these were all by a provider outside the VA
- Among these cases, 2 required hospital admission for PCP and were discharged
- 3 expired: 1 multifactorial respiratory issues, 2 colonization and cancer



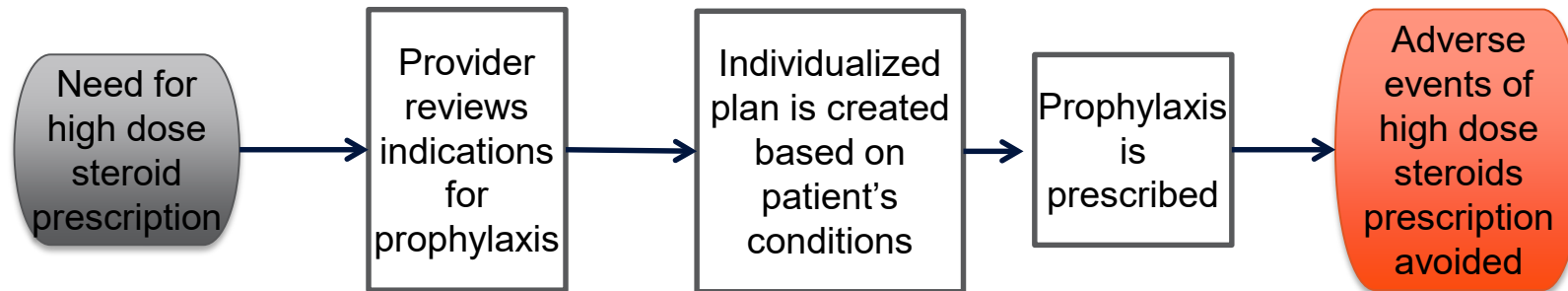
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# SIPOC

Suppliers	Inputs	Process	Outputs	Customers
Provider  Pharmacy	High-dose steroid prescription		Appropriate prophylaxis is given to eligible patients.	Veteran



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# Target Condition/AIM Statement

- Increase the % of patients on appropriate PCP prophylaxis\* from 36% to 50% by 1/1/24.

\*PCP prophylaxis criteria:

Prednisone or dose equivalent of > 20mg with other immunosuppressives or > 30 mg a day for > 30 days



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Patient

EMR

Policy

**Overwhelming to start a lot of medications**

No alert for high doses

**Guidelines are not consistent**

Noncompliance

**Difficult to track cumulative dose**

Guidelines from multiple specialties

Prophylaxis for Patients on High Dose Steroids

**May not know duration of treatment initially**

Coordination with outside providers

*What discipline is responsible?/  
Communication*

**May not be aware of guidelines, specialty literature may not include**

Medicolegal liability from risks from meds

Difficult to track outcomes

**Overwhelming to provider in 1 limited appointment**

Tracking meds from outside VA

Providers

Environment

System

# Fishbone Diagram



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# Follow up / Next steps

- Interview Stakeholders: Spoke with Dermatology, Rheumatology, Pharmacy
- Need to Speak with: Neurology, Gastroenterology, Ophthalmology
- Once we speak with stakeholders, will strategize a process to close knowledge gaps, identify at risk patients, improve communication between services.



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# Thank you



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