# Assessing the incidence of "Red Man Syndrome" language in the electronic health record

JACQUELINE EL-SOKKARY, PHARM.D.
PGY1 Pharmacy Practice Resident
University of Washington Medicine, Seattle WA
IRB Exempt

# Disclosure Statement

Conflicts of interest: None

Sponsorship: None

Proprietary Information may be subject to interpretation

Speaker's presentation is educational in nature and abides by the non-commercial guidelines

**UW** Medicine

# Learning Objectives

- Identify the reasons behind the universal call to remove "Red Man Syndrome" from our language
- Assess the prevalence of RMS language in the electronic health record for patients with allergies to Vancomycin
- Create active efforts to remove RMS language from past and future documentation

# UW Medicine Health System including Montlake, HMC, NWH, and SCCA

#### Montlake (ML) Campus

Cancer care
Cardiac surgery, advance heart
failure, and mechanical
circulatory support care
SOT of liver, kidney, heart, lung,
pancreas, intestine



#### FY 2020

Beds: 810

Admissions: 26,998

Emergency Department visits: 56,895

Organ Transplants: 440

Bone marrow transplants(with SCCA):

322

Clinic visits: 408,767

#### Harborview (HMC) Campus

Level 1 adult/pediatric trauma and burn care Emergency medicine and disaster management Comprehensive stroke center



FY 2020

Beds: 413

Admissions: 15,329

Emergency Department visits:

53,550

Clinic visits: 228,852

# UW Medicine Health System including Montlake, HMC, NWH, and SCCA

#### Seattle Cancer Care Alliance

Medical oncology and hematology

Surgical and radiation oncology

Bone marrow transplantation

Immunotherapy

Screening



#### FY 2020

Patient visits: 80,885

Infusion bays: 59 dedicated infusion bays with additional infusion suites

in the Care Neighborhood

Clinical trials: over 350 active

treatment studies

Immunotherapy clinic: 15 patient

care suites

#### Northwest (NW) Campus

Acute care community

hospital

Level 1 Stroke Center

General medicine, cardiology

Cardiac and general surgery

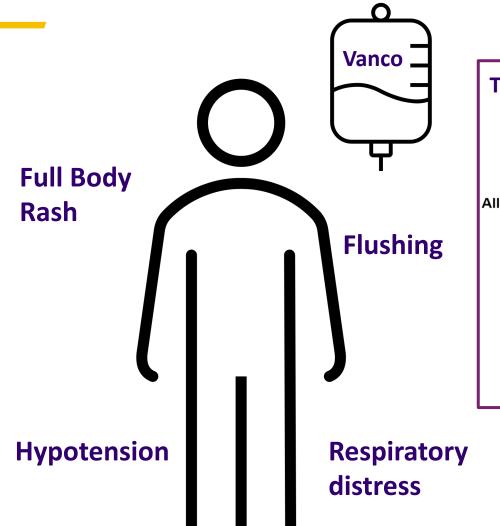


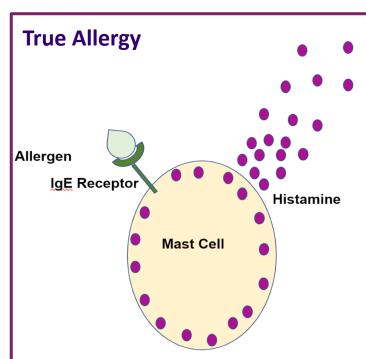
# Study Objectives

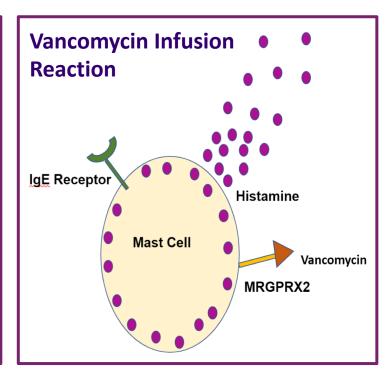
• Determine the frequency of the use of the term "Red Man Syndrome" in the electronic health record through retrospective review

• Identify areas for education efforts to prevent future use of the term

# Vancomycin Infusion Phenomenon







# Introduction

# Removing the slur "Red Man Syndrome"











# Position on Terminology for Vancomycin Flushing Reactions September 2021

#### Position:

The Infectious Diseases Society of America (IDSA), its HIV Medicine Association (HIVMA), the Society for Healthcare Epidemiology of America (SHEA), the Pediatric Infectious Diseases Society (PIDS) and the Society of Infectious Diseases Pharmacists (SIDP) support universal removal of the slur "red man syndrome" and recommend replacing it with "vancomycin infusion reaction," a term that emphasizes pathophysiology over visual appearance on skin. We suggest the following concrete actions:

ONFIDENTIAL – DO NOT DISTRIBUTE UW Medicine

# Background

# Why change the term?

Excludes diverse dermatologic findings

Perpetuates the red-man stereotype against Native Americans and Indigenous People

**Not** a reflection of the physiology of the reaction

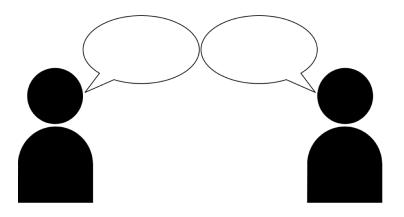
Replacing the term is an effort against institutional racism which can influence social determinants of health

# Background

# How to remove the slur









Remove from the documentation



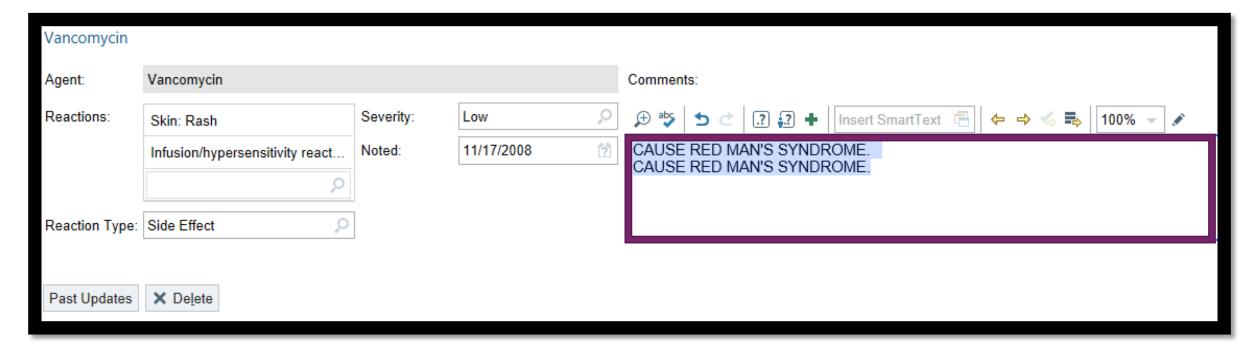
Change our teaching documents



Change our written and verbal communication

# Examples of "RMS" Language in the EHR

- Allergy banners are present in the electronic health record at any point of care
- Study replaced "RMS" with "Vancomycin Infusion Reaction"



# Research Methods

Patient	Patient	Drug	Reaction	Reaction	Allergy	Free Text
Name	MRN			Туре	Severity	Section
XXXXX	XXXXX	Vanco	Swelling	Side	High	Red Man
				Effect		Syndrome

- EPIC report generated with all the patients with Vancomycin allergies documented in the allergy section
- Report was filtered by the free-text containing the word "red"
- If RMS language was detected, it was replaced with "Vancomycin Infusion Reaction"
- Reaction category was also standardized the "Infusion Reaction"

#### WE DID NOT ELIMINATE references within the medical notes

# Results

4137 records of Vanco allergies in 10/2021













4.8 Million
Patients in the
UW Medicine
health system

830 records with the word "red" 662 records removed and replaced! Continued monitoring with an EPIC list

**UW** Medicine

# Discussion

### **Education Efforts for Change!**

#### **Current:**

- Updating Pharmacy School 4th year Orientation Materials
- Educating pharmacy staff in collaboration with Diversity, Equity, and Inclusion (DEI) office
- Created an email flyer for the CMO to email all providers at UW-Medicine
- Educated all nursing staff with an email from CNO's weekly update 04/07/22

#### Future:

- Prospective monitoring list for all campuses
- Educating patients on change in terminology

#### FLYER SENT TO CMO AND CNO

Emailed to all nursing staff!

### Have you seen or heard the term "Red Man Syndrome" to describe Vancomycin infusion reaction?

#### LET'S WORK TOGETHER to fix this at UW Medicine!

#### Why change the term?

- It perpetuates discrimination against Native American & Indigenous Peoples including our patients who may withdraw from receiving our care if referred to as a "red man."
- It is NOT a reflection of the physiology of the reaction—not everyone turns red!
- · It affects women and men equally.

#### ACTION

1) If you hear someone say or write "red man syndrome," please share this information with them. Ask them to say "Vancomycin infusion reaction" instead. Please be kind—this is a new term for most healthcare providers!

2) If you see "red man syndrome" in an Epic allergy banner, replace this terminology- see below:













Position on Terminology for Vancomycin Flushing Reactions (September 2021)

The Infectious Diseases Society of America (IDSA), its HIV Medicine Association (HIVMA), the Society for Healthcare Epidemiology of America (SHEA), the Pediatric Infectious Diseases Society (PIDS) and the Society of Infectious Diseases Pharmacists (SIDP) support universal removal of the slur "red man syndrome" and recommend replacing it with "vancomycin infusion reaction," a term that emphasizes pathophysiology over visual appearance on skin.



Questions? uwmedasp@uw.edu

# Results

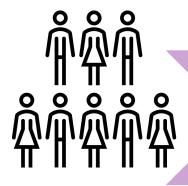
4137 records of Vanco allergies in 10/2021

Ath year pharmacy students

Education Efforts

Nursing Staff

Pharmacy Staff











4.8 Million
Patients in the
UW Medicine
health system



662 records removed and replaced! Continued monitoring with an EPIC list

5 instances of RMS

FIDENTIAL – DO NOT DISTRIBUTE UW Medicine

# Discussion- Did our intervention work?

### Monitoring admitted patients at UWMC-Montlake

- Reviewing a list for admitted patients at UWMC-ML with Vancomycin allergies
  - Proactively changing Allergy banner when "RMS" language is found
- Monitor weekly since 3/20/22
  - 5 incidences of "RMS" language in 5 weeks of monitoring
    - 5/42 (11.9%) entries had "RMS" language
  - Currently the list is only at UWMC-ML site
  - Future efforts would include all UW-Medicine campuses

# Conclusion

"Red Man Syndrome" is an outdated term that we should actively try to replace

#### Replacing Records

- We created an EPIC report with all patients with allergies to Vancomycin to screen for any "RMS" language
- Prospective monitoring list is reviewed weekly for RMS language at one UW-Medicine site

#### Education efforts

• Educated pharmacy students, pharmacy staff at UWMC-ML in collaboration with DEI, and created an email flyer for nurses and providers

# Acknowledgments

Would like to wish a big thank you to:

Rupali Jain, PharmD, FIDSA, BCIDP

Kevin Flynn, PharmD, BCPS

Sumona Das Gupta, JD

# QUESTIONS?

### References

Alvarez-Arango S, Ogunwole SM, Sequist TD, Burk CM, Blumenthal KG. Vancomycin Infusion Reaction — Moving beyond "Red Man Syndrome." New England Journal of Medicine. 2021;384(14):1283-1286. doi:10.1056/nejmp2031891

Austin JP, Foster BA, Empey A. Replace Red Man Syndrome With Vancomycin Flushing Reaction. Hospital Pediatrics. 2020;10(7):623-624. doi:10.1542/hpeds.2020-0125

Nolen L. How Medical Education Is Missing the Bull's-eye. New England Journal of Medicine. 2020;382(26):2489-2491. doi:10.1056/nejmp1915891

Martel TJ, Jamil RT, King KC. Red Man Syndrome. Nih.gov. Published July 10, 2021. Accessed September 5, 2021. https://www.ncbi.nlm.nih.gov/books/NBK482506/

Position on Terminology for Vancomycin Flushing Reactions. Accessed September 12, 2021. <a href="https://www.idsociety.org/globalassets/idsa/public-health/covid-19/vanc-flushing-syndrome-idsa-position-statement.pdf">https://www.idsociety.org/globalassets/idsa/public-health/covid-19/vanc-flushing-syndrome-idsa-position-statement.pdf</a>

Disparities | Fact Sheets. Disparities | Fact Sheets. Newsroom. Published 2013. Accessed September 12, 2021. <a href="https://www.ihs.gov/newsroom/factsheets/disparities/">https://www.ihs.gov/newsroom/factsheets/disparities/</a>

UpToDate. Washington.edu. Published 2021. Accessed September 12, 2021. <a href="https://www-uptodate-com.offcampus.lib.washington.edu/contents/vancomycin-hypersensitivity?search=vancomycin&source=search\_result&selectedTitle=4~149&usage\_type=default&display\_rank=2#H3</a>

Azimi E, Reddy VB, Lerner\* EA. MRGPRX2, atopic dermatitis, and red man syndrome. *Itch*. 2017;2(1):e5-e5. doi:10.1097/itx.000000000000005

Sivagnanam and Deleu, "Red Man Syndrome."