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DOM Division	Pulmonary Sciences and Critical Care Medicine
Other team members (optional; not limited to DOM Faculty)	Scott Mueller, Pharm D (dyad partner); Bruce McCollister, MD, Microbiology/ID; Connor Fling, MSII
Title	PREPOSTERUS

Abstract 5.

Background & Project Description:

PREPOSTERUS (PREvention of Pneumocystis jirovecii pneumonia in patients On STERoids at UniverSity of colorado hospital). PJP pneumonia in non-HIV/BMT hosts is often viewed as uncommon. However, after observing numerous cases in the UCH MICU over 2013-18 (some who died) our team performed a COMPASS search and identified approximately 18 cases/yr in the UCH system, of which 75% are non-transplant. A mortality rate of 20-30%, higher than HIV-related PJP, is typical of such cases. We have engaged a multidisciplinary team to address this lapse in patient safety.

AIM Statement:

1. Develop Risk Algorithm. Identify all non-HIV/nonBMT cases at UCH since 2009 (EPIC start) and:
 - a. assess barriers to prophylaxis (we have already found sulfa allergy is one) for this highly preventable illness
 - b. Collect data to inform development of an EPIC-friendly EMR algorithm to both model risk for PJP (steroid dose/days, steroid area under the curve, daily versus intermittent dosing, other immune status contributors, ROC curves) and generate warning flags based on the algorithm
2. Intervention/Prevention: detect those non-HIV/nonBMT patients at PJP risk in real-time over 2019, using interventional (team contact of steroid-prescribing providers, follow-up) and educational interventions to foster prevention while target the clinical areas generating these PJP cases. We will also explore dissemination of the algorithm to other Vizient institutions.

Project Needs:

Coaching; Project Management; Graphic analysis (example: pareto and control charts); Data Support (EPIC, Vizient, PowerBI, COMPASS)