

Poster title: Evidence-Based Recommendations for Providers and Nurses Prescribing and Administering Probiotics

Objective statement: Discuss evidence based recommendations for providers and nurses prescribing and administering probiotics (i.e. *S. boulardii*)

Significance/ Background: *Saccharomyces boulardii* is a strain of *Saccharomyces cerevisiae*, a species of yeast, and is used in the probiotic preparation for the prevention and treatment of various diarrheal disorders (Enache-Angoulvant & Hennequin, 2005). *Saccharomyces* fungemia secondary to the use of the probiotic has been described for patients who have a central line (Venugopalan, Shriner, & Wong-Beringer).

Purpose: Inform nurses and providers about evidence-based recommendations and contraindications for administering probiotics (i.e. *S. boulardii*) to patients with central lines

Framework/Methods: A literature review was conducted as well as benchmarking with other CNSs nationally.

Analysis: A review of literature has shown there have been cases of fungemia in patients with central lines. Benchmarking results showed that 4/6 hospitals nationwide do not order probiotics for patients with central lines. The other two hospitals do not allow medication capsules to be opened in patient rooms.

Findings/outcomes: Providers should avoid prescribing *S. boulardii* to patients with central lines or consider discontinuing *S. boulardii* when patients receive a central line. Nurses must wear gloves during the handling of probiotic agents, promptly discard the gloves, and wash hands with soap and water.

Discussion: Based on a systematic review of literature, it is important for CNSs and other providers to be aware of the risk of contaminating central lines with microorganisms found in probiotics.

Implications: Central line infections are associated with an increased length of stay, increased medical care costs, medical complications, and may even lead to death. These guidelines will enhance awareness of methods to prevent central line infections for patients taking probiotics (i.e. *S. boulardii*).

Learning objectives:

1. To understand the risks of prescribing *S. boulardii* to patients with central lines
2. To inform nurses and providers about evidence-based recommendations and contraindications for administering probiotics (i.e. *S. boulardii*) to patients with central lines