

# Preventing Infection in the Neutropenic Patient: Implementing Safe Patient Assignments



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## Background

The healthcare associated infection rate among hospitalized patients with severe neutropenia is at least 40% - this is associated with higher rates of **mortality, increased LOS** and a **higher cost of care**.

Current practices to reduce disease transmission at EMMC include hand hygiene and isolating neutropenic patients into single rooms.

By assigning healthcare personnel to care only for patients infected or colonized with a single target pathogen, disease transmission to uninfected patients can be further prevented.

## Practice Change

Educate staff about neutropenic precautions and determine unit acceptance of the implementation of patient assignments that do not include both neutropenic and contact precautions.

## Methods

- Present information to staff** about:
  - appropriate assessment of and care for neutropenic patients
  - the potential benefit of implementing patient assignments that do not include both neutropenic and contact precautions
- Measure staff acceptance** of changes to patient assignments using an anonymous survey.

## Measures and Results

### Education for Management of the Patient with Neutropenia

#### Nursing Management

##### DO:

- Provide patient with bottled water
- Provide patient with private room
- Practice strict hand hygiene
- Encourage oral care with a soft toothbrush and keep lips moist
- Provide meticulous care to catheters
- Assign patient specific blood pressure device or stethoscope
- Instruct patient to wear closed toe shoes when out of bed
- Provide stool softeners as required to avoid straining with bowel movements
- Administer antibiotics as ordered ASAP

##### DO NOT:

- Allow live plants or flowers
- Cause trauma to perineal area with suppositories or rectal temps
- Administer live vaccines

## Survey

(n=8)

	No	Yes		
I am confident that I adhere to the five moments of hand hygiene 100% of the time.	50%	50%		
	Never	Hardly Ever	Some of the time	Most of the time
Currently, I have both neutropenic patients and contact precaution patients on my patient assignment:	0%	0%	50%	50%
	None at all	A little	Moderate amount	A great deal
I think that preventing patients on neutropenic precautions and on contact precautions from being on the same patient assignment would reduce the rate of infection in neutropenic patients:	0%	0%	25%	75%
	No	Yes		
I would be willing to dedicate the extra time and effort to making patient assignments that do not include both neutropenic patients and those on contact precautions.	0%	100%		
	Definitely would not	Probably would not	Probably would	Definitely would
Knowing that it could reduce the transmission of disease to patients with neutropenia, I would accept either a patient assignment with several neutropenic patients or several patients on contact precautions.	0%	0%	37.5%	62.5%

## Summary/Discussion

Some challenges identified unanimously by staff in implementing patient ratios with all neutropenic or all contact precaution patients include:

1. "Having more than one neutropenic when they're actively febrile and requiring multiple antibiotics, blood cultures and Tylenol"
2. "Gowning and gloving for contact takes significantly more time when entering rooms."

Also, unanimous in the survey, was the identified need for a "reduced [patient] assignment" to support the proposed changes in patient assignment

## Conclusion

Considering that only 50% of surveyed staff are confident that they perform the 5 moments of hand hygiene 100% of the time, and that 100% of staff express having patient assignments with both contact and neutropenic precautions, there is need for **increased interventions to protect neutropenic patients**

The next step in implementing this EBP would be to implement the suggested changes in patient assignments, considering that **100% of surveyed staff** was willing to participate in these changes, including willingness by **100% of surveyed charge nurses** to put in the extra effort required to make these patient assignments

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