

# Multi-specialty Unit for Infusion Therapy: Patient, Nurse and Provider Satisfaction.

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## Introduction and Background:

- ❖ Treatment of many complex diseases includes infusion therapy.
- ❖ Individuals with autoimmune diseases increasingly have treatments in infusion centers. <sup>1</sup>
- ❖ Infusion nurses more at ease caring for Hematology-Oncology (HO) patients than those with rheumatic diseases due to experience.
- ❖ Patients with rheumatologic diseases might have reservations about being treated in a "cancer unit." <sup>2</sup>
- ❖ Education about the differing needs of non-HO patients is lacking for infusion nurses. <sup>3</sup>
- ❖ Therefore, in 2009, when building a new Cancer Institute, we considered moving non-hematology-oncology (non-HO) pts into a separate infusion unit.
- ❖ We assessed satisfaction with our multi-specialty center to determine whether a separate unit should be recommended.

## Methods:

- ❖ A 7-question Likert scale satisfaction survey was developed.
- ❖ The survey was collected over 2 weeks from 3 groups: infusion nurses, non-HO physicians and non-HO patients.
- ❖ The tool was designed to assess differences in patient satisfaction and *perception* of patient satisfaction by staff with our multi-specialty infusion unit.
- ❖ Reliability of the tool measured using Cronbach's alpha.
- ❖ Mean sums for all questions were calculated for individuals within groups and analyzed using a one-way ANOVA.
- ❖ A post-hoc analysis was examined to determine which groups were similar.

## Infusion Unit

- 18 infusion bays
- 13 Infusion Therapy RNs
- 2008-9: 13,231 total infusions
  - 11,247 oncology pts
  - 1,984 non-oncology pts:
    - Rheumatology - 912
    - Gastroenterology - 268
    - Dermatology - 130
    - Neurology - 88
    - Allergy Immunology - 102
    - Others - 484

## Medications infused:

- Rituximab 80
- Infliximab 794
- Abatacept 177
- Methylprednisolone 298
- Cyclophosphamide 45
- IV immunoglobulin 359
- Zoledronic acid 48

## Questionnaire and Survey Results

	Scale: 4-5 agree/strongly agree 3 neutral 1-2 agree/strongly disagree	Patient Response Average	Physician Response Average	Nursing Response Average
1.	I am/My patients is content having infusions in a cancer infusion center.	4.5 ± 0.9	3.5 ± 1.0	3.8 ± 1.2
2.	I am/My patients is not bothered by the cancer-focused environment ...	4.3 ± 1.1	3.3 ± 1.0	3.6 ± 1.3
3.	I understand/My patient understands that their disease ... is not a form of cancer	4.8 ± 0.6	4.2 ± 0.9	3.9 ± 1.3
4.	It will not bother my patient to enter the Cancer Institute...	4.4 ± 1.1	3.1 ± 1.0	3.4 ± 1.3
5.	I have/My patient has no preference for a non-cancer Infusion Center ...	4.2 ± 1.1	2.5 ± 0.9	3.0 ± 1.2
6.	I am/My patient is not worried about their privacy ...	4.3 ± 1.1	3.2 ± 0.9	2.5 ± 1.1
7.	It will be no problem for my patient to move their infusion unit in the future ..	4.0 ± 1.3	2.6 ± 1.3	2.8 ± 1.2

## Results:

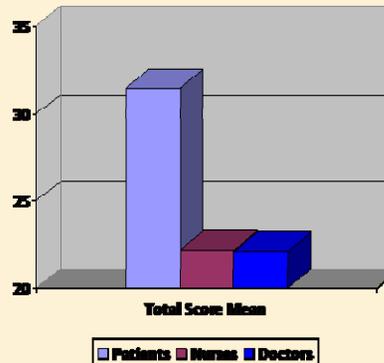
- ❖ Complete surveys were analyzed from 12 RNs, 49 pts, and 14 providers.
- ❖ The tool was reliable:
  - Cronbach's alpha=0.92
- ❖ Overall mean of 7 instrument items was 28.1 ± 6.8.
- ❖ Significant intergroup differences were found (p<0.001)
- ❖ Pts. had higher satisfaction than providers and RNs on all items.
- ❖ Post-hoc analysis demonstrated that:
  - Pts were significantly different from RNs and doctors (p<0.001)
  - RNs and doctors were no different from each other (p=0.9)

## Discussion and Conclusions:

- ❖ Patients were satisfied with therapy in a primarily oncology infusion unit unlike prior assumptions. <sup>2</sup>
- ❖ Physicians and nurses were significantly more concerned about therapy in our multi-specialty but primarily cancer infusion center than the patients.
- ❖ Based on this survey, a combined multi-specialty infusion center is acceptable to patients and will be continued at our institution.
- ❖ Improved understanding of patient preferences were demonstrated to providers and nurses by this survey.
- ❖ Further study of infusion units for rheumatology patients is warranted.

## Figure

Mean Infusion Room Satisfaction Scores



## References:

- 1) Patient Preference Adherence 2009;3 335-344.
- 2) Health Care Manag (Frederick). 2003 Apr-Jun;159
- 3) J Infusion Nursing 2008;31:350