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. 1
- 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.” 2
- Education about the differing needs of non-HO patients is lacking for infusion nurses. 3
- 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

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. 2
- 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.

References:
2) Health Care Manag (Frederick). 2003 Apr-Jun:159
3) J Infusion Nursing 2008;31:360