UNC
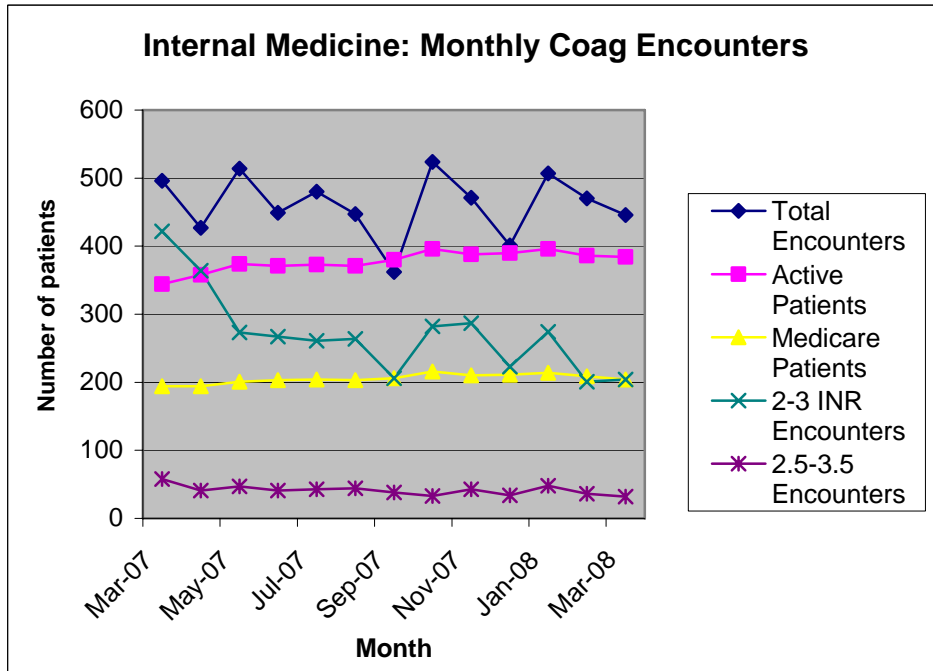HEALTH CARE
CENTER FOR EXCELLENCE
IN CHRONIC ILLNESS CARE

# Enhanced Care Program- UNC Anticoagulation Programs
# Monthly Quality Assessment- Run Charts



**Internal Medicine: Monthly Coag Encounters**

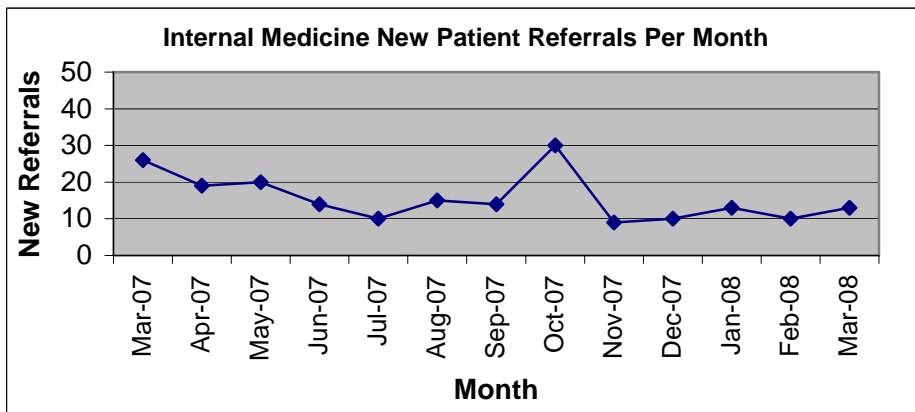## Anticoagulation Clinic Monthly Outpatient Encounters

This graph includes encounter and enrollment data in our ACC, GIM Anticoagulation Clinic. Three data points for encounter information are included above, the total number of encounters per month, and total number of patient encounters by INR goals of 2 to 3 and 2.5 to 3.5. The total numbers of active patients enrolled in the program and the subset who have Medicare coverage are included.
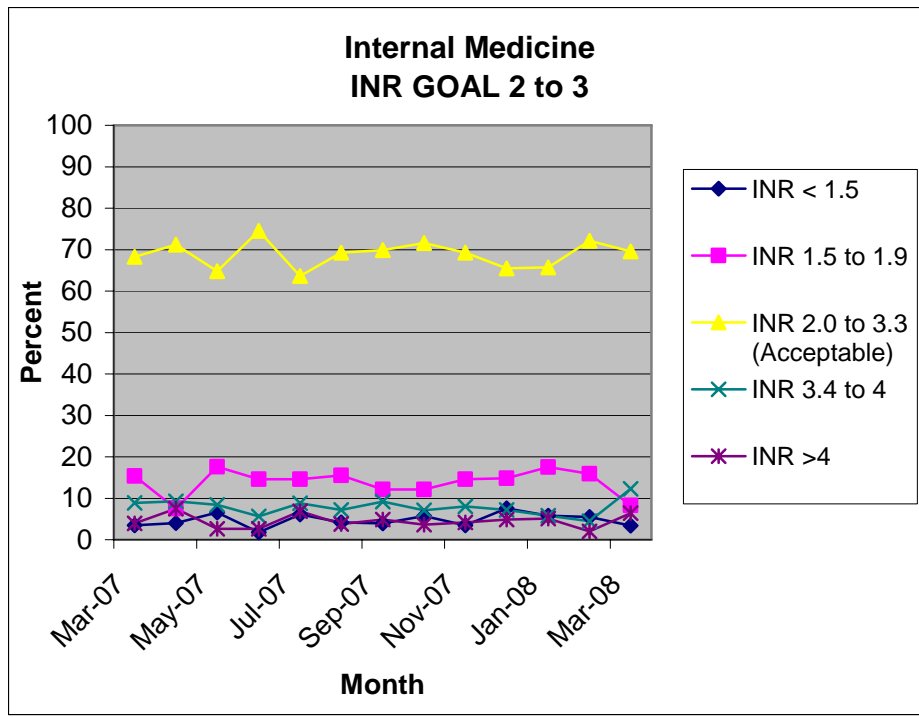


**Family Medicine: Monthly Coag Encounters**

**Geriatrics: Monthly Coag Encounters**
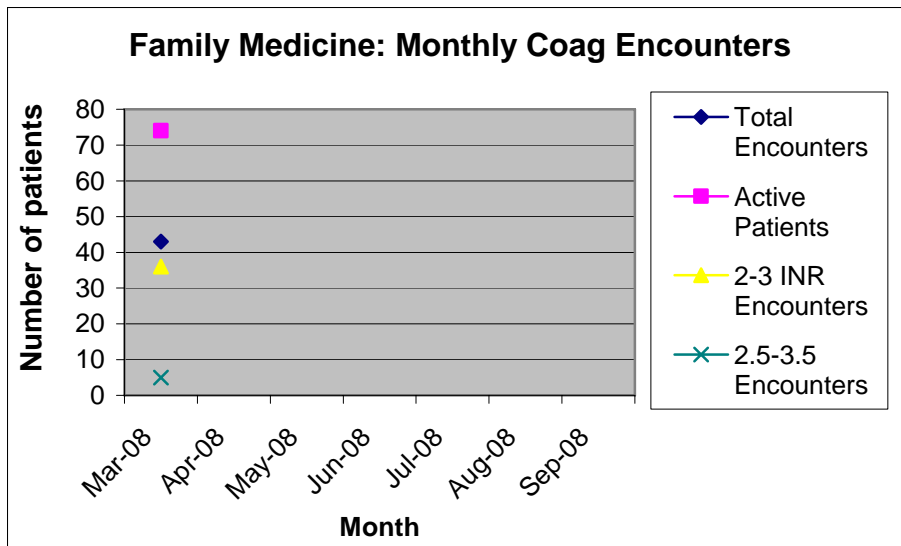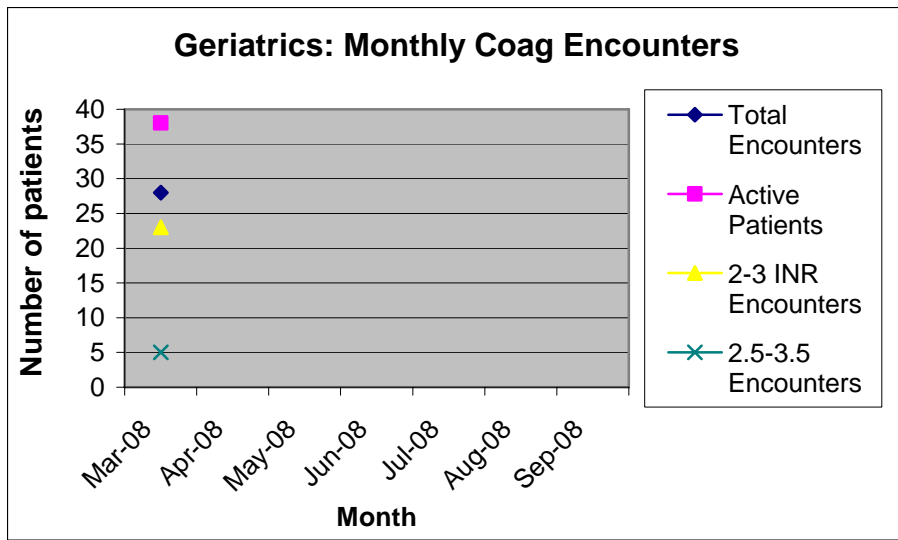


**Anticoagulation Clinic Monthly Outpatient Encounters**
These graphs include encounter and enrollment data in the UNC Family Medicine and Geriatric Anticoagulation Clinics. Four data points for encounter information are included above, the total number of active patients currently enrolled in each clinic, the total number of encounters per month, and total number of patient encounters by INR goals of 2 to 3 and 2.5 to 3.5.



**Number of New Patient Referrals Per Month**
This graph includes the number of new patients referred to our ACC, GIM Anticoagulation Clinic per month.

**Internal Medicine**
**INR GOAL 2 to 3**

Legend:
- INR < 1.5
- INR 1.5 to 1.9
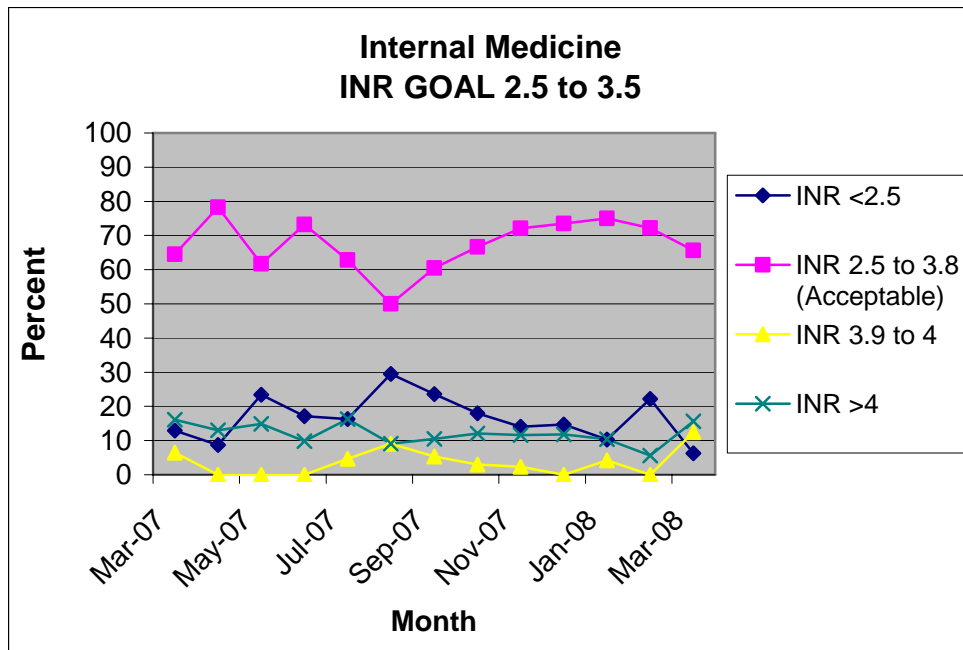- INR 2.0 to 3.3 (Acceptable)
- INR 3.4 to 4
- INR >4

## Monthly Assessment of Patients with an INR Goal 2 to 3

This graph shows the percentage of patients with subtherapeutic (< 2.0), therapeutic (INR 2.0 to 3.3 defined as acceptable based on lab variability), and supratherapeutic INRs (>3.3). Three subsets of patients are broken out to include those with an INR >4.0, since these patients are at an increased risk of hemorrhagic complications from warfarin (Coumadin®) while patients with an INR < 2.0 are at risk for thrombosis, and those < 1.5 are obtaining no therapeutic benefit from warfarin (Coumadin®) therapy.
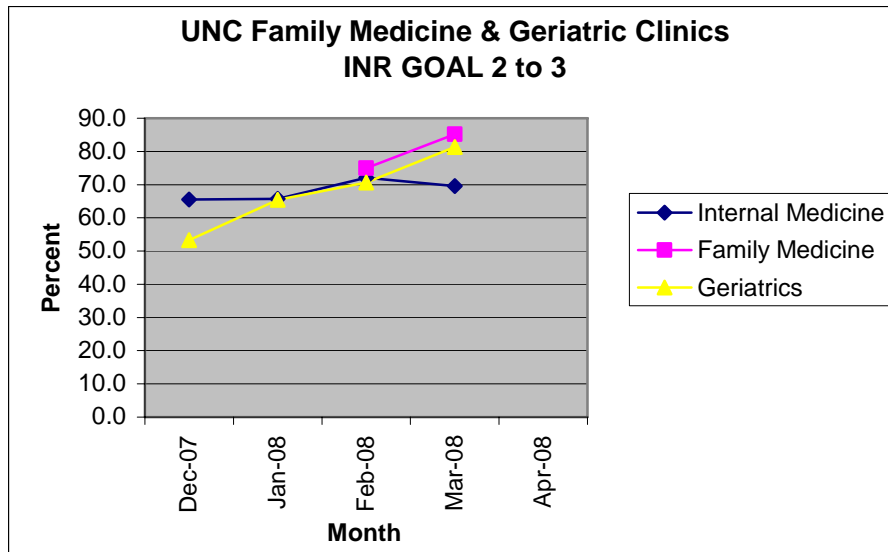


**UNC Family Medicine & Geriatric Clinics**
**INR GOAL 2 to 3**

Legend:
- Internal Medicine
- Family Medicine
- Geriatrics

## Monthly Assessment of Patients with an INR Goal 2 to 3

This graph shows the percentage of patients in the UNC Family Medicine and Geriatric Anticoagulation Clinics with therapeutic INRs (INR 2.0 to 3.3 defined as acceptable based on lab variability).

**Internal Medicine**
**INR GOAL 2.5 to 3.5**

**Monthly Assessment of Patients with an INR Goal 2.5 to 3.5**
This graph shows the percentage of patients with subtherapeutic (<2.5), therapeutic (INR 2.5 to 3.8, defined as acceptable based on lab variability), and supratherapeutic INRs (> 3.8). Patients with an INR > 4 are at an increased risk of hemorrhagic complications from warfarin (Coumadin®). Patients with an INR < 2.5 are at risk for thrombosis.



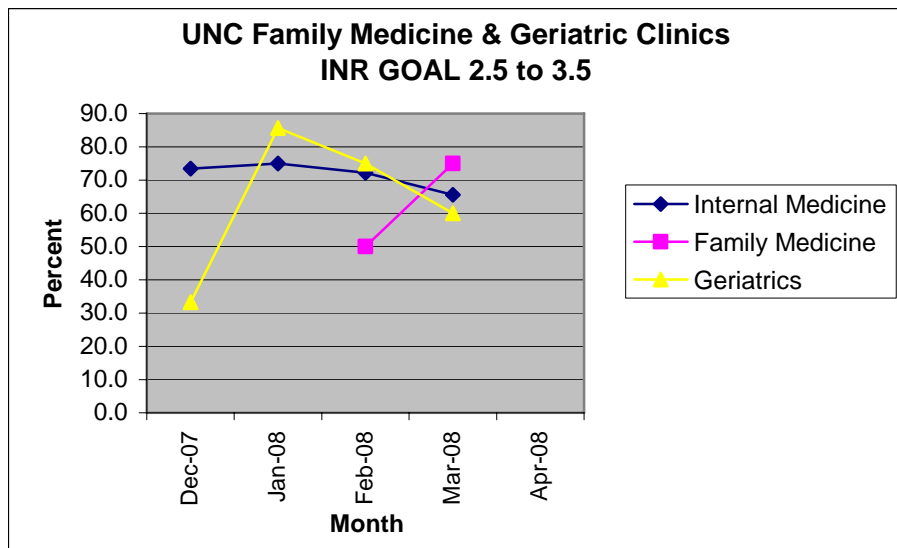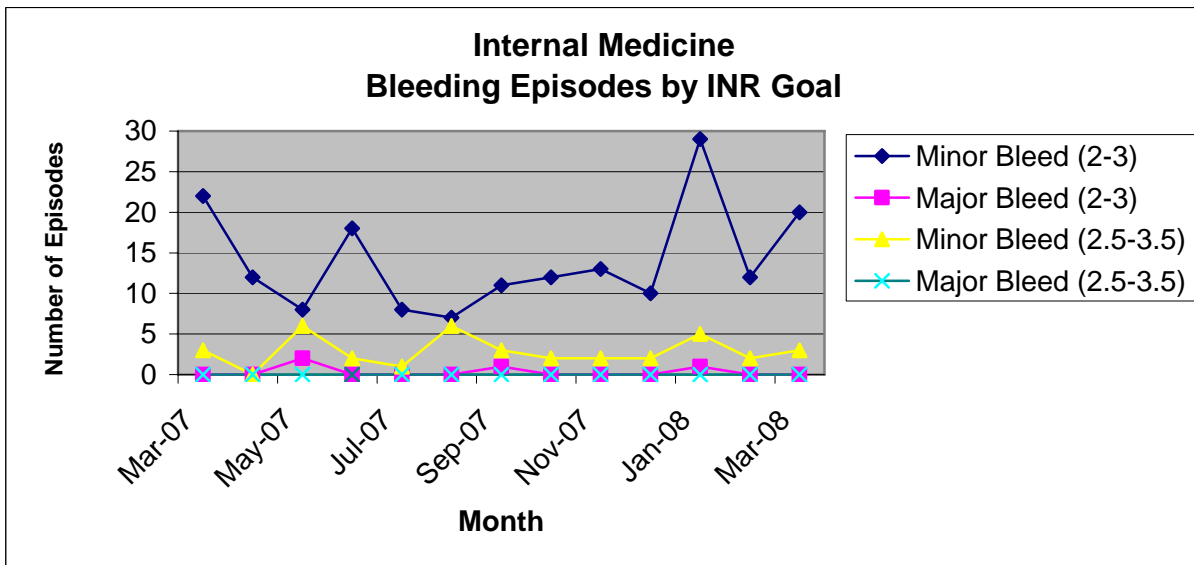**UNC Family Medicine & Geriatric Clinics**
**INR GOAL 2.5 to 3.5**

**Monthly Assessment of Patients with an INR Goal 2.5 to 3.5**
This graph shows the percentage of patients in the UNC Family Medicine and Geriatric Anticoagulation Clinics with therapeutic INRs (INR 2.5 to 3.8 defined as acceptable based on lab variability).

**Internal Medicine**
**Bleeding Episodes by INR Goal**



Legend:
- Minor Bleed (2-3)
- Major Bleed (2-3)
- Minor Bleed (2.5-3.5)
- Major Bleed (2.5-3.5)

Y-axis: **Number of Episodes** (0, 5, 10, 15, 20, 25, 30)
X-axis: **Month** (Mar-07, May-07, Jul-07, Sep-07, Nov-07, Jan-08, Mar-08)

**Bleeding Episodes by INR**

This graph shows the total number of bleeding episodes per month. These events are divided by INR goal because patients requiring higher INRs may experience an increase in reported minor bleeding. Minor bleeding is defined as a bleed reported by the patient or noted on exam that is unexplainable and does not require additional testing, referrals, or visits. Major bleeding is defined as, requiring treatment, medical evaluation, a drop in hemoglobin leading to transfusion of at least 2 units of blood, leading to hospitalization, cardiac arrest, surgical/angiographic intervention, or irreversible sequelae.

**Major Bleeding summary for Internal Medicine for the month of March: none**