

# Chiefs Summit – Day 2

The Workforce issue in General  
Internal Medicine





- “An optimist is a person who, while falling ten stories says at each story, “I’m all right so far.” – Gretel Elrich
- “The nice part about being a pessimist is that you are constantly being either proven right or being pleasantly surprised.” -- George Will
- “Some people think of the glass as half full. Some people think of the glass as half empty. I think of the glass as too big.” -- George Carlin

We've heard about workforce shortages before that never materialized. What's different now?

- Declining interest in Internal Medicine, GIM, and particularly ambulatory GIM
- The demographic imperative – explosion of older Americans with chronic disease
- The quality imperative – more to do, must be done better than ever
- Finance – do more and more efficiently with limited resources

# Pennsylvania – an illustration

- Pennsylvania has seen a 10.9% drop in Internal Medicine physicians over the past 10 years
- A majority of practicing internists are over 50 years old
- Only 3.4% are aged 30-35 (compared with 12% 15 years ago)
- Most counties in PA have experienced double digit percent growth in the population aged >70 and > age 85.



# Declining interest

We all have anecdotal evidence of this.

What's the data?

At what level of differentiation does this occur?

i.e. who chooses medicine, makeup of physician workforce (women, IMGs, etc).

What, if anything can be done?



# Trends in primary care specialties (Brotherton et al, JAMA Sept 7 05)

- Descriptive survey of National GME census conducted by AMA and AAMC
- Surveyed 8,246 allopathic GME programs during 2004-2005 academic year
- 101,291 physicians in training counted
- Compared to similar surveys in 95-96, 98-99, 2001-2



# IM programs 95-96 vs 04-05

- Number of programs declined from 416 to 387 during this period
- Total # of residents remained about the same (21,070 vs 21,332)
- US MD remained about the same (11,189 vs 11,271)
- DO almost doubled (697 vs 1097)
- Non US IMG declined and then rose (8030 vs 7481)
- US IMG grew 931 vs 1411



# Total primary care

- Overall numbers 43,760 vs 44,668
- USMD has declined (28,144 vs 26,214)
- DO has increased (1893 vs 3083)
- Non US IMG stable at 11,000 range
- US IMG 1799 vs 3358

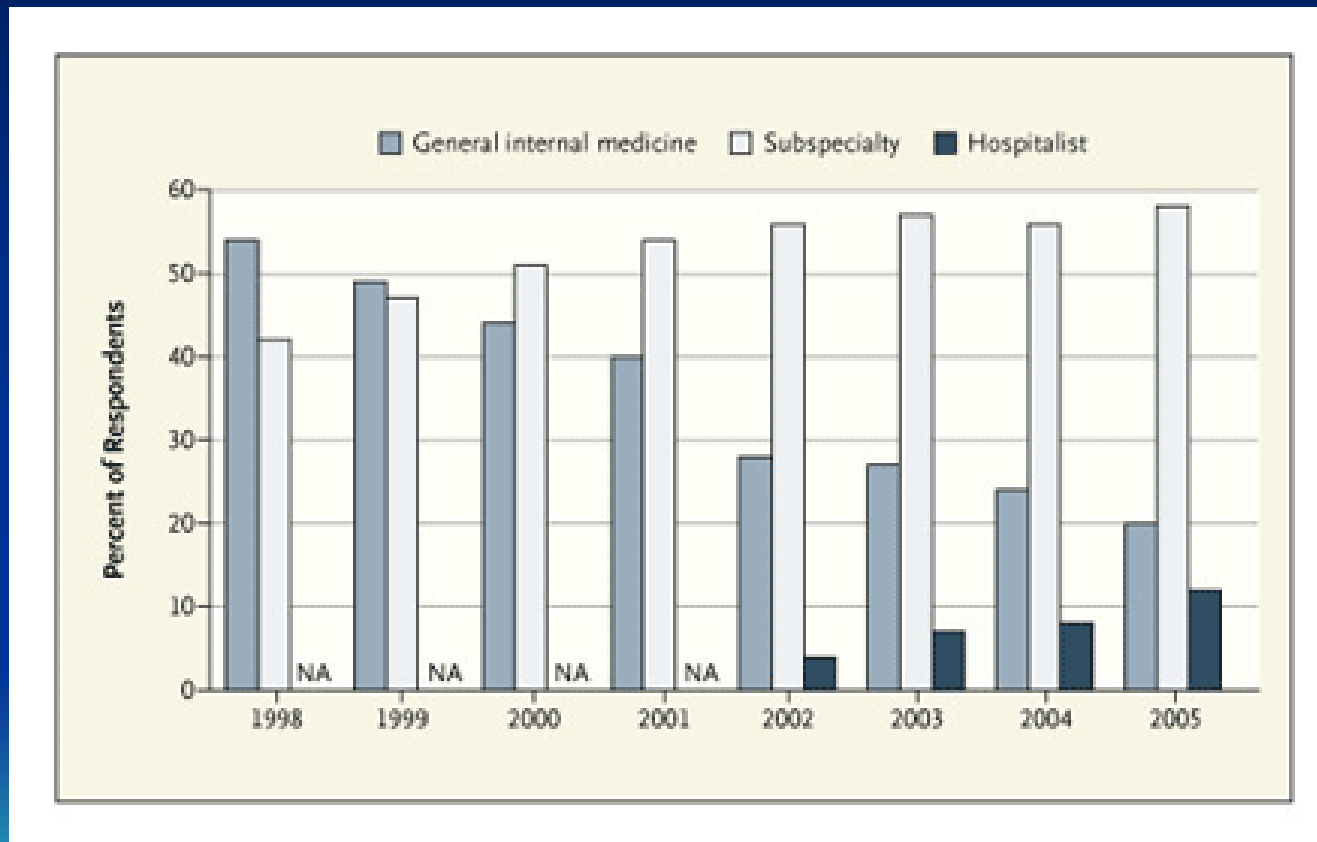


# IM Subspecialties

- Number of programs has remained stable
- Number of trainees has increased from 7742 to 8669
- USMD increased from 4225 to 5156
- DO increased from 199 to 370
- Non US IMG declined from 2614 to 2348  
US IMG increased from 539 to 741

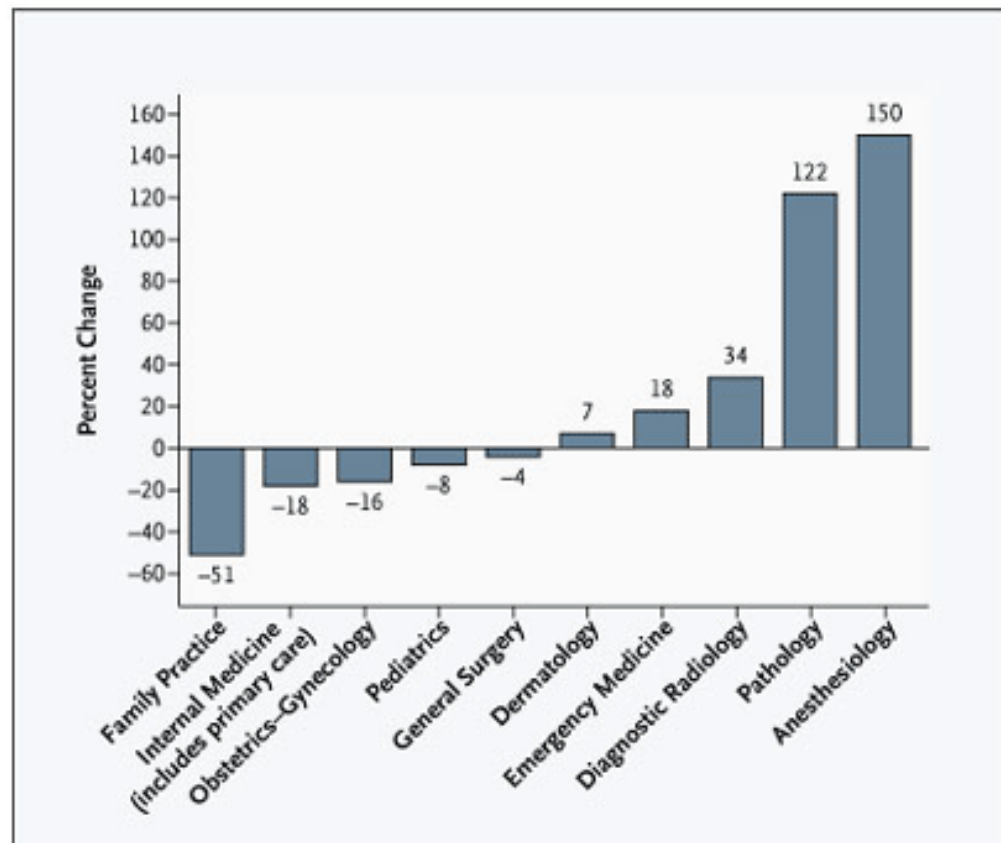


# Decline in GIM, rise in Subspecialists (and hospitalists)



From Primary care, will it survive, Bodenheimer,  
NEJM 8.31.06

# Percent change 1998-2006 in % of US grads filling residency positions in various specialties



# Theories

- It's the money, stupid.
- It's the lifestyle, stupid.
- Increased role of women in Medicine
- Generational issues – Gen X, Y
- Stay on the “ROAD” – Radiology, Ophthalmology, Anesthesia, Derm



# Women trainees in primary care

- Family med: increase from 42.3 to 51.9%
- IM: increase from 33.1 to 41.9%
- IM subspecialties: increase from 23 to 31.9%
- All specialties: 34 vs 41.8%



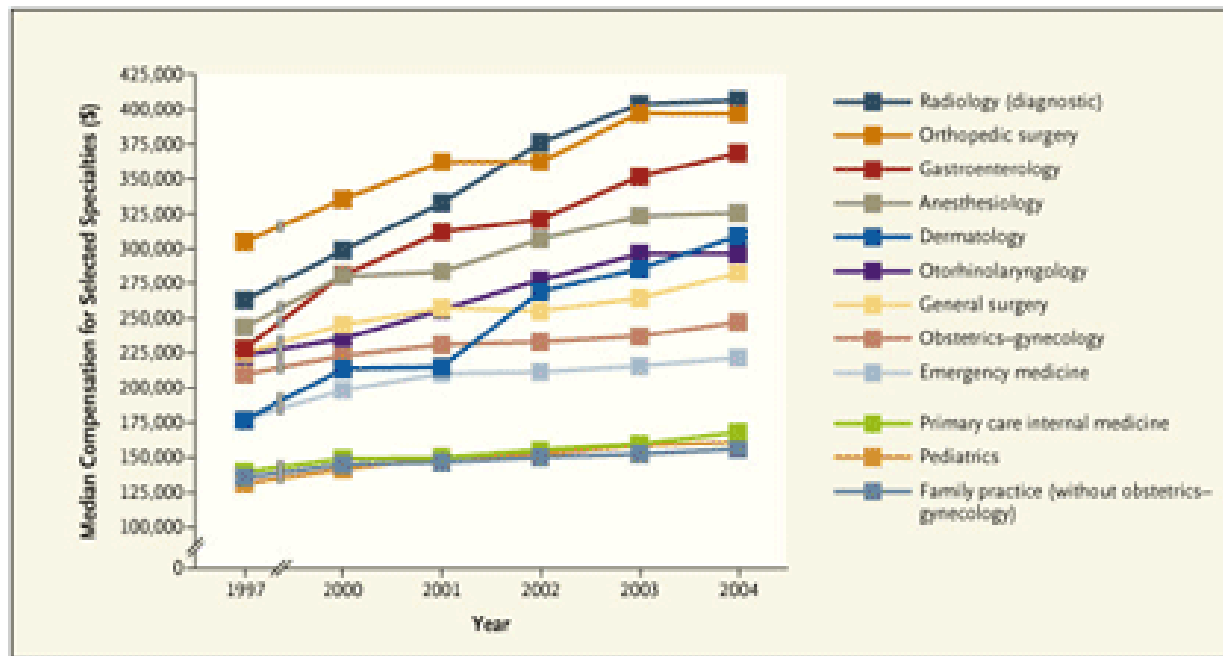
# Other factors: income and lifestyle

- Indebtedness of medical students – 4.5 times higher in 2003 than 1984 (much larger than inflation)
- Income levels of nonprocedural specialists lower
- Lifestyle considerations account for 55% of students' choice of specialty, up from 37% in 1996

*Dorsey et al, JAMA 2003;290: 1173-1178*



# Median compensation 1997-2004



# Predictors of final specialty choice by IM Residents – some evidence

- Women choose generalist careers more often than men
- Students who select primary care are on average older, more likely to have grown up in nonmetropolitan areas, and come from middle-class households
- Less likely to have majored in science in college
- More likely to have attended publicly supported institutions

*Linzer et al, JGIM 1994:9 suppl 1 S14-S23*



# Personality attributes

- Primary care entrants have lower scores on authoritarianism, Machiavellianism, reliance on technology, negative orientation to patients with psychological problems, intolerance of ambiguity than peers selecting residencies in surgery, anesthesiology
- *Merrill et al Am J Med Sci 1993, 1995, 1998*



# More recent data

- JGIM 2006; 21: 1045-9, Diehl et al, U Texas San Antonio
- Compared sociodemographics and personality inventory during residency to career 4-9 years later
- IMGs less likely to practice general internal medicine than US grads ( $p < .001$ )
- Residents with higher loan indebtedness more often became generalists ( $p = .001$ )
- Generalists had trend toward lower scores on authoritarianism, negative orientation to psychological problems, and Machiavellianism
- Regression – graduation from US medical school and perception of low future income predicted entry into GIM



# Workgroups

- Undergraduate medical education
- Graduate medical education
- Recruitment and Retention



# Goals

- Discuss:
  - Strategies on local level
  - Advocacy agenda – letting Chiefs and other GIM leaders' voices be heard on this issue
  - Need for more data: research agenda?

