Improving academic primary care

Tom Bodenheimer MD
Department of Family and Community Medicine
University of California at San Francisco

TBodenheimer@fcm.ucsf.edu

Goals for this presentation

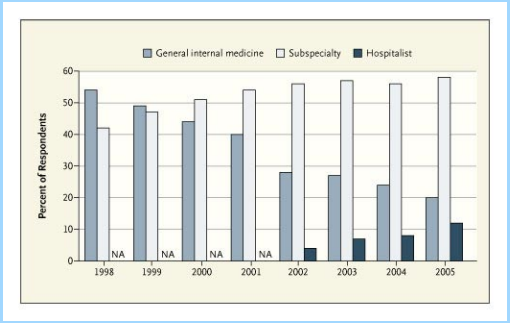
- The crisis in primary care access
- Reasons for the crisis
  - How academic primary care aggravates the crisis
- Can we improve academic primary care practices?

Dwindling Numbers

	# US grads entering family medicine residency
1997	2340
2005	1132

Pugno, Fam Med 2005;37:555

Dwindling Numbers:
Career Choices of Third-Year Internal Medical Residents



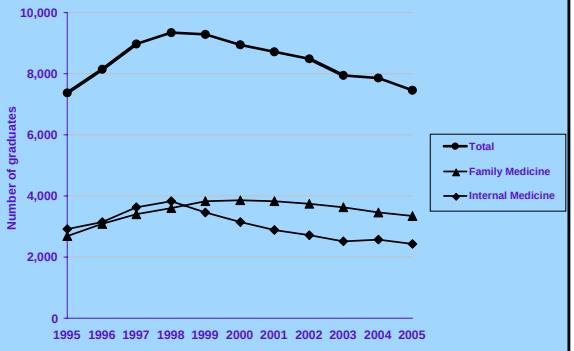
Bodenheimer T. N Engl J Med 2006;355:861-864

Dwindling Numbers

- 2005 survey of internal medicine physicians who received board certification in early 1990s (in practice 10-15 years):
- Had left practice entirely
  - Primary care internists 21%
  - Medical specialists 5%

Sox. Ann Intern Med 2006;144:57

EXHIBIT 2
Generalist physician graduates, 1995 to 2005



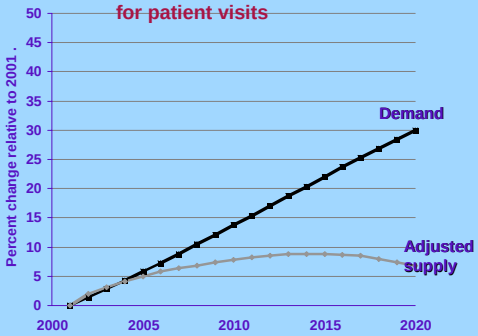
SOURCE: Colwill, unpublished manuscript
NOTES: Figures include Allopathic and Osteopathic physicians, US graduates and IMGs. Total includes pediatricians.

NP/PAs to the rescue?

- Nurse practitioner graduates have fallen from a peak of 8,200 in 1998 to 5,900 in 2005. Physician Assistant graduate numbers have remained stable at about 4,200 for several years. Probably fewer than half of NP/PAs are in primary care as they are increasingly employed in specialist offices, emergency rooms, and inpatient settings.

Colwill et al. Will generalist physician supply be adequate to meet tomorrow's demand? Unpublished manuscript.

Adult Care: Projected Generalist Supply and Demand for patient visits



SOURCE: Colwill, unpublished manuscript
NOTES: "Adjusted supply" - adjusted for age and gender and extends the 2001-2004 rate of decline of graduates through 2007.

Access to primary care

- A 2006 national survey: 24% of Medicare beneficiaries (10 million people) and 25% of privately insured patients reported having a problem obtaining a new primary care physician.

A Data Book: Healthcare Spending and the Medicare Program. Medicare Payment Advisory Commission, June 2007

- A 2006 California survey: 46% of patients visiting the ED said that they went to the ED because they could not access their primary care physician.

Emergency Department Utilization in California. California Healthcare Foundation, Harris Interactive Inc, October 2006

Access to primary care

- 49% of Massachusetts internists were not accepting new patients in 2007, up from 36% in 2006.
- The average wait time for an appointment to see an internist was 52 days in 2007, up from 33 days in 2006.

Massachusetts Medical Society Physician Workforce Study, 2007

Access to primary care

- In the U.S. the average time a patient spent with a primary care physician over the course of a year (2001-2002) was 29.7 minutes, compared to 55.5 minutes in New Zealand and 83.4 minutes in Australia.

Bindman et al. BMJ 2007;334:1261

Access to primary care

- A 2006 international survey found that the US has the smallest proportion of primary care practices that provide after-hours care if needed (not ED):
  - US 40%
  - Canada 47%
  - Germany 76%
  - Australia 81%
  - UK 87%

Schoen et al.Health Affairs, November 2, 2006

The crisis in primary care

- Patients are already having difficulty accessing primary care
- The primary care workforce is shrinking while the population is aging and demand increasing
- Patient access to primary care will certainly get worse unless more primary care clinicians enter the workforce

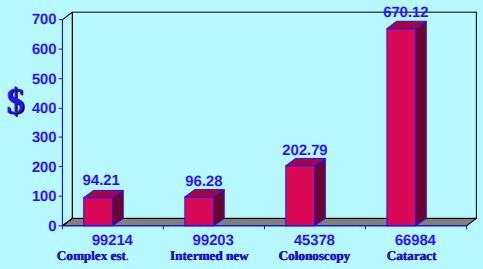
Goals for this presentation

- The crisis in primary care access
- ✓ The reasons for the crisis
  - ➢ Primary care-specialty income gap
  - ➢ Uncontrollable worklife
  - ➢ How academic primary care practices aggravate the crisis
- Can we fix academic primary care practices?

Median compensation, 1995-2004 -- MGMA data
In thousands of dollars, before taxes

	1995	2004	10-yr increase
All primary care	133	162	21%
Family practice	129	156	21%
Internal medicine	139	169	21%
All specialists	216	297	38%
Invasive cardiology	337	428	27%
Noninvasive cardiology	239	352	47%
Dermatology	177	309	75%
Gastroenterology	210	369	76%
Heme/Oncology	189	350	86%
Orthopedics	302	397	31%
Radiology	248	407	64%
Surgery, general	217	283	30%

2007 Medicare payment for 30 minutes physician time



Assumes geographic index approximately 1.0

The primary care-specialty income gap and uncontrollable worklife

- Average medical student debt is $120,000 for public, and $160,000 for private, medical schools
- The primary care pipeline is dwinding in part because of the primary care-specialty income income gap
- An even stronger factor reducing primary care career choices is uncontrollable worklife
- The income gap and uncontrollable worklife are related: primary care practices cannot survive without very large patient panels, and large patient panels create the uncontrollable worklife

Dorsey et al. JAMA 2003;290:1173, Whitcomb and Cohen NEJM 2004;351:710. Bodenheimer NEJM 2006;355:861.

Dysfunctional academic practices

- Academic primary care practices are *the* models experienced by medical students and residents
- When these practices do not work well, medical students and IM/FP residents hate working in them
- As a result of these negative experiences, medical students and IM/FP residents look for any career except primary care

Views from the literature on academic primary care practices

- Weak ambulatory training fails to support the formation of continuous healing relationships between patients and physicians, undermining one of the most cherished aspects of becoming an internist. [IOM. Crossing the Quality Chasm:Washington, DC: National Academy Press, 2001]
- Exposure to dysfunctional ambulatory settings leads students and residents to choose career paths other than general internal medicine and/or primary care. [Weinberger et al. Ann Intern Med 2006;144:927]

Views from the literature on academic primary care practices

- Few internal medicine residency graduates have the skills needed to function effectively in the ambulatory setting. If one does not feel confident doing certain work, one avoids that work. [McGlynn et al. NEJM 2003;348:2635]
- Only 13% of internal medicine residency training takes place in continuity clinic. [Bowen et al. JGIM 2005;20:1181]
- Moreover, continuity clinic is often not continuity clinic; many residents are seeing each other's patients.

Views from the literature on academic primary care practices

- Hospital out-patient medical clinics are often frustrating, chaotic places to practice
- Patients often see unfamiliar physicians
- Physicians often see unfamiliar patients
- Lack of continuity experiences is a factor turning residents away from primary care careers

Association of Program Directors in Internal Medicine position paper. Ann Intern Med 2006;144:920

Academic primary care practices

- Leaders might respond: "It's not our fault. Research shows that 3rd year internal medicine residents are more likely to choose primary care careers than first year residents. So we're doing an excellent job."
- That's great, but the % of internal medicine residents going into primary care dropped from 54% to 20% from 1998 to 2005 (a 30 percentage point drop), and the increase from year 1 to year 3 is 6 percentage points. Moreover, the data came from only 14% of all internal medicine residents. [Sox, Ann Intern Med 2006;145:782]

Summary: why is primary care in crisis?

- Reimbursement is low compared to specialist reimbursement
- Uncontrollable lifestyle
- Negative experiences in medical school and residency

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- Can we fix academic primary care practices?

Continuity of care

- 2 adult patient surveys in the late 1990s
- 3/4 of adults place high priority on continuity of care (seeing their PCP when they need care)
- Only 16% prioritized access and convenient appointment times over continuity

Safran, Ann Intern Med 2003;138:248.

Continuity of care

- Continuity of care is associated with
  - Improved receipt of preventive services including cancer screening
  - Decreased frequency of ED visits
  - Fewer hospital admits
  - Greater patient satisfaction

Summarized in Koopman et al. Arch Intern Med 2003;163:1357

Continuity of care

- "Hand-offs" from one clinician to another are a necessary feature of discontinuous care
- Communication failures in hand-offs is a major source of medical errors
- Continuity of care is safer

Philibert and Leach. Qual.Saf.Health Care 2005;14:394

Continuity of care

- Review of 40 studies reporting 81 outcomes
- Positive association with continuity of care in 51/81
- Outcomes included
  - Preventive care
  - Quality of doctor-patient relationship
  - Chronic illness measures
  - Maternity care outcomes

Saultz and Lochner, Ann Fam Med 2005;3:159

Continuity of care

- 20 studies were reviewed for associations between continuity of care and
  - Reduced hospitalizations
  - Reduce emergency department visits
  - Declines in overall costs
- 19/20 studies: significant association between continuity of care and at least one cost measure. Strongest was for reduced hospitalizations

Saultz and Lochner, Ann Fam Med 2005;3:159

Continuity of care

- Danish study of 474 primary care physicians and 1136 patients with diabetes
- Patients who were well known by their physician had lower HbA1c than those not well known by their physician

Drivsholm and Olivarius, Fam Pract 2006;23:192.

Continuity of care

- Patients with asthma who have increased continuity of care (seeing the same clinician) have a reduced use of the ED, fewer hospital admissions and hospital days

Cree et al. Dis Manag 2006;9:63.

Continuity of care

- Continuity of care with a primary care physician for patients with type 2 diabetes is associated with improved processes of care and better glycemic control

Parchman et al. Medical Care 2002;40:137; Parchman et al. J Fam Pract 2002;51:619.

Continuity of care

- It is unusual for a health system property to have so much evidence supporting it
  - Patient satisfaction
  - Outcomes
  - Costs
- Continuity of care is a winner

Continuity + Trust

- Trust is a patient's expectation that the clinician will act to enhance the patient's well-being
- Trust involves patients' perceptions of a clinician's
  - Technical ability
  - Interpersonal skills
  - Concern for the patient's welfare

Thom et al Health Affairs 2004;23:124.

Continuity + Trust

- Trust and adherence to physician recommendations
  - Highest quartile of trusting the physician: 62% adherence
  - Lowest trust quartile: 14% adherence

Thom et al Health Affairs 2004;23:124

Continuity + Trust

- Patients who trust their physician stay with their physician; those who don't are far more likely to leave their physician. So trust increases continuity
- Continuity (long relationships) can increase trust
- So, trust and continuity are interrelated

Thom et al Health Affairs 2004;23:124.

Continuity + Trust

- Safran et al linked attributes of primary care to 3 outcomes: adherence to physician advice, patient satisfaction, and health status.
- The primary care attributes most closely associated with those outcomes were
  - Physicians' knowledge of the patient (the "whole person") -- which is related to continuity
  - Patients' trust in the physician.

Safran et al. J Fam Pract 1998;47:213.

Continuity + Trust

- For elderly Medicare beneficiaries, the longer the relationship with a physician the greater the
  - Physician knowledge of the patient
  - Trust
  - Delivery of preventive services

Parchman and Burge. Fam Med 2003;36:22

➢How do we fix academic primary care practices in order to

▷Make them more satisfying for students and residents?

▷Improve care for patients?

Visions of a new academic primary care practice

- Continuity of care is the fundamental principle
- Patients, students, residents want continuity
- Seeing your patient is 100x more satisfying than seeing someone else's patient
- We are not discussing the business case. The overall vision and fundamental principle must come first; second you figure out how to make it work financially
- Some residency programs have already accepted this as the principle and are working to implement it

Visions of a new academic primary care practice

- How do we organize an academic primary care practice based on continuity of care when residents necessarily rotate?
  - Change how residents rotate (e.g. the long block)
  - Establish a team in which someone else is the glue creating continuity
  - Both

Visions of a new academic primary care practice

- Full-time NP or PA as the glue
- Patients are panelized to the NP/PA
- A few residents become a "pod" which cares for the panel of one NP/PA. The fewer residents in each pod, the greater the continuity
- Each resident in the pod is responsible, with the NP/PA for a portion of the patients in that panel

Visions of a new academic primary care practice

- If NP or PA is not available, the glue could be a RN
- In that case, the care she/he could provide would be more limited and more consultations would be needed with the resident

Visions of a new academic primary care practice

- Teams are proposed as the solution to almost anything
- Research on teams is discouraging; many studies of teams reveal that they are often dysfunctional
- One uncooperative person can destroy team cohesion
- Team members must have clear division of labor, training, and clear modes of communication
- A team of 3-4 people needs to communicate constantly. The more the work is divided up, the more handoffs are needed. More handoffs means more fumbled handoffs

Bodenheimer and Grumbach. Improving Primary Care: Strategies and Tools for a Better Practice (McGraw-Hill, 2007).

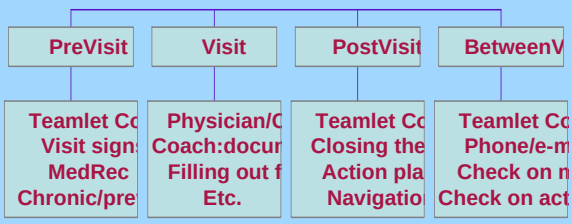
Teamlets

- If the problem with teams is the transaction costs of handing off work from one team member to another, perhaps a team of 2 would allow for the advantages of a team while minimizing the disadvantages
- At SF General Hospital Family Health Center, we have large teams; when we created small teams of 2 people we called them teamlets (a subunit of the team or a small team)

Teamlets

- The teamlet concept is an attempt to address the fundamental pathology of primary care -- squeezing everything (preventive, chronic, acute, care coordination, relationship building) into the 15 minute visit
- Instead of a doctor seeing a patient in 15 minutes, the teamlet encounter involves a doctor plus another person seeing a patient for more time -- previsit, visit, postvisit, between visit care

Teamlets



Teamlets

- Who is the Teamlet Coach?
- It could be RN, health educator, medical assistant, community health worker
- Coaching means helping patients and families to learn the skills and knowledge needed to be active, informed participants in their care
- Good coaches make visits more meaningful for patients because they are longer and more things are done
- Good coaches make worklife better for physicians because they offload work that one doesn't need an MD degree to do

Teamlets

- Teamlets can address continuity of care
- A patient is panelized to a resident and a teamlet coach
- If residents are in clinic 3 half-days per week, each coach works with 3 residents
- The coach is present all clinic hours and is available to the patient during clinic hours
- The coach can contact the resident if the patient needs a physician
- The coach can make more or fewer decisions depending on whether the coach is RN or MA

Teamlets at SFGH Family Health Center

- Coaches are mainly MA, community health worker
- Coaches ethnic/language concordant with patients: Spanish, Cantonese, Mandarin, Burmese, Cambodian, Laotian, Vietnamese, Russian, Bosnian
- 11 coaches working with first-year family medicine residents in Thursday afternoon chronic care clinics
- Coaches in visit (may translate) plus do post visit and between visit care
- Patients can call coach if problems develop between visits, and coaches can contact resident
- Goal is continuity between patient, resident and coach -- logistically difficult to achieve

Final thoughts

- There is a growing crisis in the primary care workforce, and in patient access to primary care
- Reasons for the crisis
  - Primary care-specialty income gap
  - Uncontrollable worklife
  - Negative training experiences in academic primary care practices
- Our responsibility as primary care educators is to fix academic primary care practices, in particular to re-design curricula and practice organization to maximize continuity of care for patients, residents, and medical students