From the Practice of the Past to the Practice of the Future

April 26, 2010

Thomas Bodenheimer MD
Department of Family and Community Medicine
University of California, San Francisco
Objectives

- To review the current crisis in primary care
- To describe the features of a primary care practice of the future (“Patient-Centered Medical Home”)
- To explore why interprofessional education is needed to bring the practice of the future into reality
Lone doctor model

• The current primary and specialty care model is a lone doctor model
• The doctor is responsible for everything
• The doctor doles out tasks to other team members but they do not share responsibility or pride for patient outcomes
• Many patients view the doctor as the only person who can solve their problems
The lone doctor model is in crisis in adult primary care

• 2007 survey of fourth-year students, 7% planned adult primary care careers [Hauer et al, JAMA 2008;300:1154].

• American College of Physicians (2006): “primary care, the backbone of the nation’s health care system, is at grave risk of collapse.”

• Reasons for lack of interest in primary care careers
  – PCPs earn on average 54% of what specialists earn and most medical students graduate with >$120,000 in debt
  – More importantly, worklife of the PCP is stressful
Stressful worklife

- Survey of 422 general internists and family physicians 2001-2005
  - 48%: work pace is chaotic
  - 78%: little control over the work
  - 27%: definitely burning out
  - 30%: likely to leave the practice within 2 years

“Across the globe doctors are miserable because they feel like hamsters on a treadmill. They must run faster just to stay still.”

Morrison and Smith, BMJ, 2001
Adult Care: Projected Generalist Supply vs Pop Growth+Aging

Demand: adult pop’n growth/aging

Supply, Family Med, Gen’l Internal Med

Not enough NP/PAs to close the gap

Colwill et al., Health Affairs, 2008:w232-241
Lone doctor model effect on patients

- **Access:** 73% of adults surveyed reported difficulty getting a prompt appointment, getting phone advice, or getting care nights/weekends without going to the ED.

- **Care coordination:** Specialists in one study reported they received no information from PCP in 68% of referrals.

Effect on patients

- A study of 264 visits to primary care physicians using audiotapes
- Patients making an initial statement of their problem were interrupted by the physician after an average of 23 seconds
- In 25% of visits the physician never asked the patient for his/her concerns at all  [Marvel et al.  JAMA 1999;281:283]
Effect on patients

- Despite well-designed guidelines for hypertension, hyperlipemia, and diabetes
- Despite widespread guideline dissemination to physicians for years

  - 65% of people with HBP are poorly controlled
  - 62% with elevated LDL have not reached lipid-lowering goals
  - 63% of people with diabetes have HbA1c > 7

Effect on patients

- Asking patients to repeat back what the physician told them, half get it wrong. [Schillinger et al. Arch Intern Med 2003;163:83]

- Asking patients: “Describe how you take this medication” -- 50% don’t understand and take it differently than prescribed [Schillinger et al. Medication miscommunication, in Advances in Patient Safety (AHRQ, 2005)]

- 50% of patients leave the physician office visit without understanding what the physician said [Roter and Hall. Ann Rev Public Health 1989;10:163]
Effect on patients

- Patients more actively involved in their care had better HbA1c levels than those less involved [Heisler et al. Diabetes Care 2003;26:738]
- More patient participation in the medical visit, more likely to take medications correctly [O’Brien et al. Medical Care Review 1992;49:435]
- In a study of 1000 physician visits, the patient did not participate in decisions 91% of the time [Braddock et al. JAMA 1999;282;2313]
With current panel sizes, lone doctor model is ridiculous

- **Average panel size for many practices**: 2300

- A primary care physician with an panel of 2500 average patients will spend 7.4 hours per day doing recommended *preventive care* [Yarnall et al. Am J Public Health 2003;93:635]

- A primary care physician with an panel of 2500 average patients will spend 10.6 hours per day doing recommended *chronic care* [Ostbye et al. Annals of Fam Med 2005;3:209]
In adult primary care, the lone doctor model isn’t working.

- Plummeting numbers of new physicians entering primary care
- Declining access to primary care
- Physician burn-out
- Unsatisfactory quality
- The primary care medical home is falling off the cliff
Patient-Centered Medical Home (PCMH)

- AAP: pediatric practices for children with special needs (1967) - medical home
IBM, with employees all over the world, concluded that they could buy high quality care at reasonable cost in every country except the US.

Analysis: US needs strong primary care

IBM brought together AAFP, ACP, AAP, and American Osteopathic Association, resulting in Joint Principles of the Patient-Centered Medical Home (2007)
National Committee for Quality Assurance (NCQA)

- Non-profit organization created by health plans in 1990
- Adopted 2007 principles of the PCMH, creating a set of criteria for judging practices
- NCQA is certifying practices as being Level 1, 2, or 3 PCMHs
- Many primary care practices are trying to get NCQA recognition because it may bring higher reimbursements
- www.ncqa.org
PCMH-plus: Practice of the Future

• Barbara Starfield’s 4 pillars -- 4 C’s
  – First **Contact** care
  – **Continuity** of care
  – **Comprehensive** care
  – **Coordination** of care

• Recent additions to the 4 pillars
  – Patient-centered care
  – Addressing the 15-minute visit
  – Team-based care
  – Computerized care linked to medical neighborhood
  – High quality care regularly measured
  – Concern with your entire panel of patients
  – Everyone working at top of their skill level
  – Controlling cost of care
Practice of the Future: the paradigm shift

• **From I to We:**
  - From the lone doctor with “helpers” to the high-functioning team
  - From my patients to our patients

• **From He/She to They:**
  - From a sole focus on individual patients to a concern for the team’s entire panel
The paradigm shift

• Why do we need this change in how we work with each other and how we care for patients?
• The lone doctor ("I") model isn’t working for adult primary care
• The sole focus on individual patients isn’t working well enough
• What kind of medical & interprofessional education is needed to change the lone doctor paradigm?
Practice of the future: Building Block #1
2-part paradigm shift

- **From:** How can the physician (I) see today’s scheduled patients (he/she), do the non-face-to-face-visit tasks, and get home at a reasonable hour?

<table>
<thead>
<tr>
<th>Monday</th>
<th>Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00AM</td>
<td>Sr. Rojas</td>
</tr>
<tr>
<td>8:15AM</td>
<td>Ms. Johnson</td>
</tr>
<tr>
<td>8:30AM</td>
<td>Mr. Anderson</td>
</tr>
<tr>
<td>8:45AM</td>
<td>Sra. Garcia</td>
</tr>
</tbody>
</table>

- **To:** What can the team (We) do today to make the panel of patients (they) as healthy as possible, and get home at a reasonable hour?
Practice of the future
Building block #2

• Primary care’s fundamental reliance on the one-on-one face-to-face visit is obsolete
  • Patients may be cared for via multiple encounter modes – phone visits, e-mail visits, distance encounters, visits to non-physician team members, group visits
  • These depend on patient preference and medical appropriateness
  • Factoria Clinic at Group Health in Seattle: 1/3 face-to-face visits, 1/3 phone visits, 1/3 e-mail visits
Practice of the future
Building block #3

- Different patients have different needs
  - Some only need routine preventive services
  - Others need same-day acute care
  - Some have one or two chronic conditions
  - A small number have multiple illnesses and complex healthcare needs
  - Some have mental health/substance abuse needs
  - Others require palliative or end-of-life care

- Each sub-group of a practice’s patient panel needs a different set of services by different team members
Practice of the future
Building block #4

• No longer possible, given growing primary care physician shortage, for physicians to care for all the patients in their panel
  • Physicians should care for patients requiring the diagnostic and management expertise they have
  • Many routine acute, chronic and preventive care needs can be handled by other team members
• Requires huge change in physician education
Practice of the future
Building blocks 3 and 4

• **Stratify the patient panel according to needs**
  - Routine preventive services: medical assistants working as panel managers
  - Same-day acute care: NP/PA with MD consult as needed. Uncomplicated: RN with protocols
  - One or two chronic conditions: NP/PA working with medical assistants doing health coaching
  - Multiple illnesses and complex healthcare needs: MD with RN care manager
  - Mental health/substance abuse: behavioral health professional
  - Palliative or end-of-life care: MD with RN care manager
Practice of the future
Building block #4

- Physicians are clinical leaders of the team, see 8-10 patients per day, consult with team members, interact with patients by phone, e-mail
- Entire team is responsible for panel of patients
- Culture change from I to We
- NPs/PAs care for the majority of patients
- RNs do care management of complex patients
- Medical assistants/community health workers do health coaching for patients with one or two chronic conditions
- Panel management by medical assistants
Practice of the future
Building block #5

• **Fundamental change in payment for primary care (more and different)**
  - Preferred is risk-adjusted capitation/global budget with extra payments for night/weekend hours, panel management, good access/quality/costs/patient experience
  - If fee-for-service: e-visits, phone visits, and visits to RNs, pharmacists, health educators, health coaches must receive reimbursement

• **Primary care practices and payers make compacts: practice improves, payer increases and revises payment**
Panel management
From He/She to They, From I to We

- Makes sure every patient has all chronic and preventive care tasks done on time
- Every patient with poorly controlled chronic disease is offered planned visits and coaching
- Separates this work from the clinicians, leaving them time for more complex patients
Panel management

- Train medical assistant as panel manager
- Physicians create evidence-based rules
- Panel manager combs registry/data base, identifies patients who need services, contacts patients, orders services
  - Preventive: mammograms, FOBT, immunizations, etc.
  - Chronic: HbA1c, LDL cholesterol, diabetic eye exams, blood pressures, etc.
  - Identifies chronic patients in poor control, arranges planned education/med adherence/lifestyle visits with RN, pharmacist, health educator, health coach
Panel management and team building

- Panel management: great way to build team; allows medical assistants to share responsibility for entire panel; they make sure chronic and preventive care routine tasks are performed.
- Physicians won’t delegate to other team members unless they are highly competent.
- Other team members won’t accept job change unless they share responsibility and pride for the health of their patient panel (not the doctor’s patient panel).
- Panel managers (and the entire team) should share P4P money.
Stratify the patient panel

Health Coach

RN Care Manager

PT

RN

PCP

Health Educator

Behavioralis
Taking care of our panel (past)

PATIENT PANEL

15-minute visit

15-minute visit

15-minute visit

15-minute visit

15-minute visit

15-minute visit

15-minute visit

15-minute visit

E-mail

e-Referral

Return phone message

Health coach

Panel management
Taking care of our panel (future)

PATIENT PANEL

Panel management

E-consults with specialists
Coordinate with specialists, hospitalists
NP-led Group visit
30-minute MD visit
MD Trains/consults with team members

Telephone visits
Health coach visits
Return phone messages
30-minute MD visit
RN visit
PA visit
Pharmacist visit
E-mail
## Template of the past

<table>
<thead>
<tr>
<th>Time</th>
<th>Primary care physician</th>
<th>Medical assistant</th>
<th>Nurse</th>
<th>Nurse Practitioner</th>
<th>Medical assistant</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00</td>
<td>Patient A</td>
<td>Assist with Patient A</td>
<td>Triage</td>
<td>Patient H</td>
<td>Assist with Patient H</td>
</tr>
<tr>
<td>8:15</td>
<td>Patient B</td>
<td>Assist with Patient B</td>
<td></td>
<td>Patient I</td>
<td>Assist with Patient I</td>
</tr>
<tr>
<td>8:30</td>
<td>Patient C</td>
<td>Assist with Patient C</td>
<td></td>
<td>Patient J</td>
<td>Assist with Patient J</td>
</tr>
<tr>
<td>8:45</td>
<td>Patient D</td>
<td>Assist with Patient D</td>
<td></td>
<td>Patient K</td>
<td>Assist with Patient K</td>
</tr>
<tr>
<td>9:00</td>
<td>Patient E</td>
<td>Assist with Patient E</td>
<td></td>
<td>Patient L</td>
<td>Assist with Patient L</td>
</tr>
<tr>
<td>9:15</td>
<td>Patient F</td>
<td>Assist with Patient F</td>
<td></td>
<td>Patient M</td>
<td>Assist with Patient M</td>
</tr>
<tr>
<td>9:30</td>
<td>Patient G</td>
<td>Assist with Patient G</td>
<td></td>
<td>Patient N</td>
<td>Assist with Patient N</td>
</tr>
</tbody>
</table>

5:00 PM | Catch up on notes/eReferrals
6:00 PM | Return phone messages
7:00 PM | Go home

Catch up on notes/eReferrals
Return phone messages
Go home
## Template of the Future

<table>
<thead>
<tr>
<th>Time</th>
<th>Primary care physician</th>
<th>Medical assistant</th>
<th>Nurse</th>
<th>Nurse Practitioner</th>
<th>Medical assistant</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00-8:10</td>
<td><strong>Teamlet 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Huddle and make plan for the day’s work</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8:10 AM</td>
<td>Telephone and e-mail visits - 12 pts</td>
<td>Panel management</td>
<td>RN diabetes visits</td>
<td>Drop-in patients- 4 patients</td>
<td>Assist with drop-in patients, close the loop, phone follow-up</td>
</tr>
<tr>
<td>9:00 AM</td>
<td><strong>Patient D</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9:30 AM</td>
<td>Coordinate with specialists and hospitalists. Consult with team members</td>
<td>Health coach visit with pt J</td>
<td>Group visit for chronic care – 12 patients</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10:00 AM</td>
<td>BP clinic- 3 patients</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10:15 AM</td>
<td><strong>Patient H and Patient B</strong></td>
<td>Phone outreach</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5PM</td>
<td>Team signs out to overnight coverage and goes</td>
<td>Telephone and e-mail visits – 6</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
From I to We: challenge for interprofessional education

• Clinicians have most of knowledge and tell or ask other team members to do isolated tasks for them
  – Do an EKG
  – Do a blood sugar
  – Get an O2 sat

• Diffuse knowledge so that all team members become highly competent at the work they do

• Training is critical for team formation

• Rather than isolated tasks, team members need area of work for which they feel responsible, proud

• Physicians must learn how to delegate responsibilities rather than ordering tasks
Teams and teamlets

- Well-functioning large teams are difficult
  - Energy and time is taken up with multiple team members having to communicate information and coordinate tasks with each other
  - If one person on the team is not cooperative, the entire team can fail
- The smaller the teams, the better
  - 2-person teamlets (MD/RN, MD/MA, NP/MA, PA/MA)
  - Much easier to delegate with teamlet

Bodenheimer, Building Teams in Primary Care, Parts 1 and 2. California HealthCare Foundation, 2007 (www.chcf.org)
Will patients accept team care?

• Are teams patient-centered?
• Patients may initially object since they want to see the doctor
• Over time, if they get good care from all team members, they begin to trust the team
• For continuity of care, teamlets are better than teams
Interprofessional education: necessary for team building

- From I to We is challenging for doctors
- The lone doctor model (taught in medical school) is deeply ingrained
- Without delegation of responsibility (not ordering tasks), teams do not work
- Reasons for not delegating
  - 1. No one to delegate to
  - 2. Other team members not well trained
  - 3. Doc thinks he/she can do it all
  - 4. Doc wants to see all the patients
- Interprofessional education can help with #3 and #4
Why are teams so crucial?

Taming the perfect storm

- Primary care access is deteriorating and quality is inadequate
- Panel sizes too large for lone primary care physicians to manage
- We can’t reduce panel sizes due to worsening shortage of PCPs
- Shortage means larger panels, poorer access, more lone physician burnout
- The only solution to this perfect storm is teams, with physicians not having relationship with all patients on the team’s panel