

# **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**

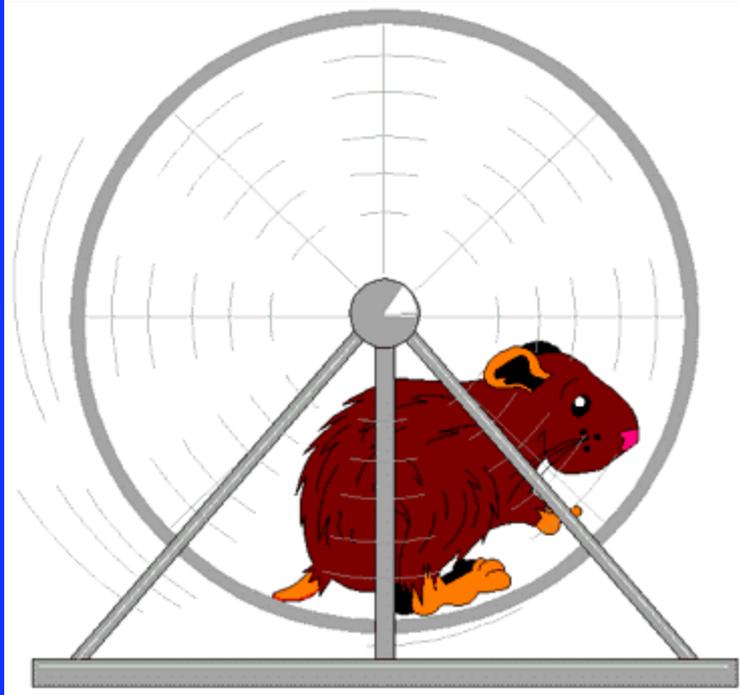
- **2007 survey of fourth-year students, 7% planned adult primary care careers [Hauer et al, JAMA 2008;300:1154].**
- **American College of Physicians (2006): “primary care, the backbone of the nation’s health care system, is at grave risk of collapse.”**
- **Reasons for lack of interest in primary care 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**

**Linzer et al. Annals of Internal Medicine 2009;151:28-36**

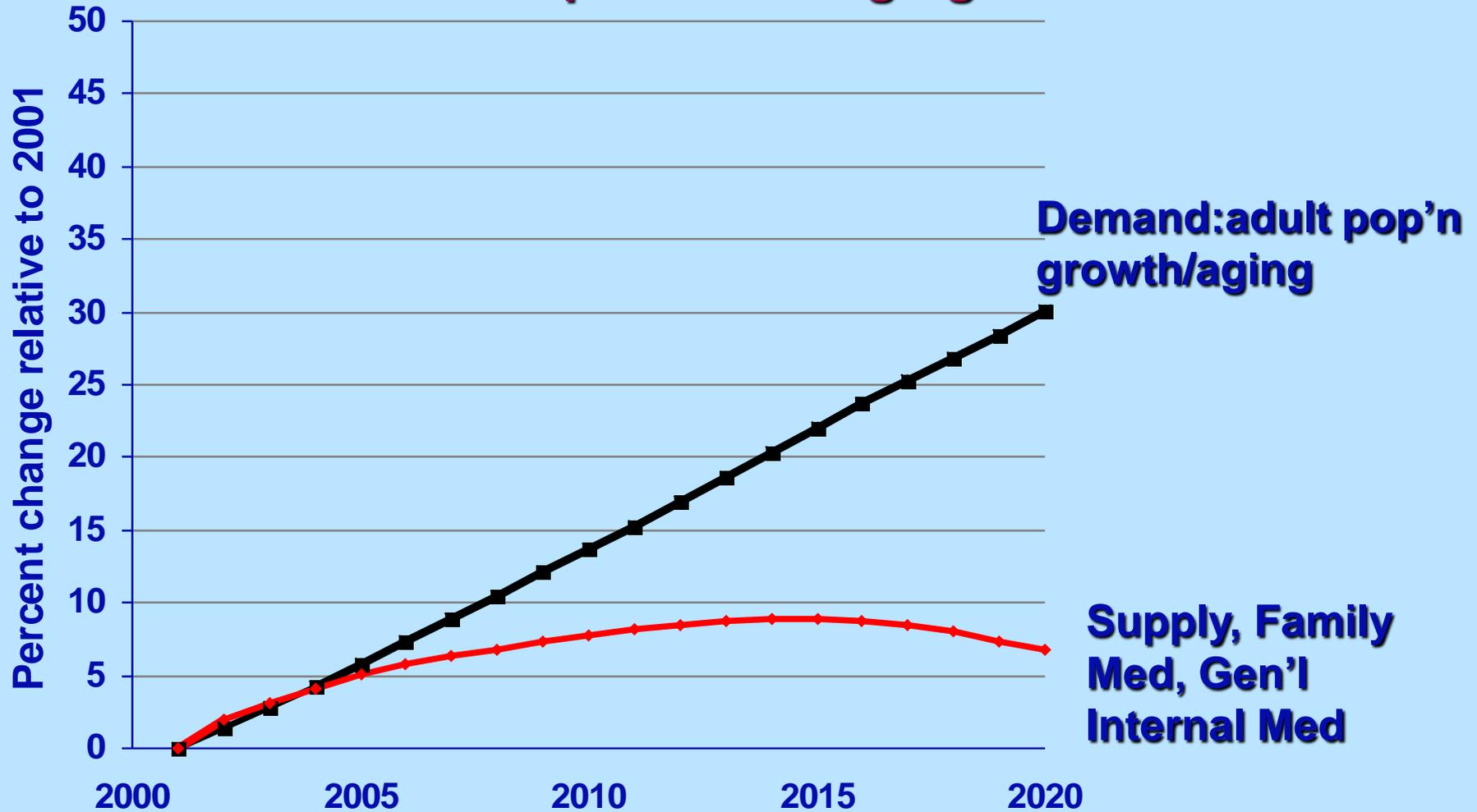
# PCP Burn Out



**“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



Colwill et al., Health Affairs,  
2008:w232-241

**Not enough NP/PAs  
to close the gap**

# **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**

**Public views on of US health system organization, Commonwealth Fund, 2008. Gandhi et al. J Gen Internal Med 2000;15:626. Commonwealth Fund, National Scorecard, 2008.**

# 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**

**Roumie et al. Ann Intern Med 2006;145:165, Afonso et al. Am J Manag Care 2006;12:589, Saydah et al. JAMA 2004;291:335.**

# 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
- AAFP: Future of Family Medicine report (2003) - medical home
- ACP: “advanced medical home” (2006)



# PCMH

- **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](http://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 reasonable hour?

Monday	Patients
8:00AM	Sr. Rojas
8:15AM	Ms. Johnson
8:30AM	Mr. Anderson
8:45AM	Sra. Garcia

- **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**

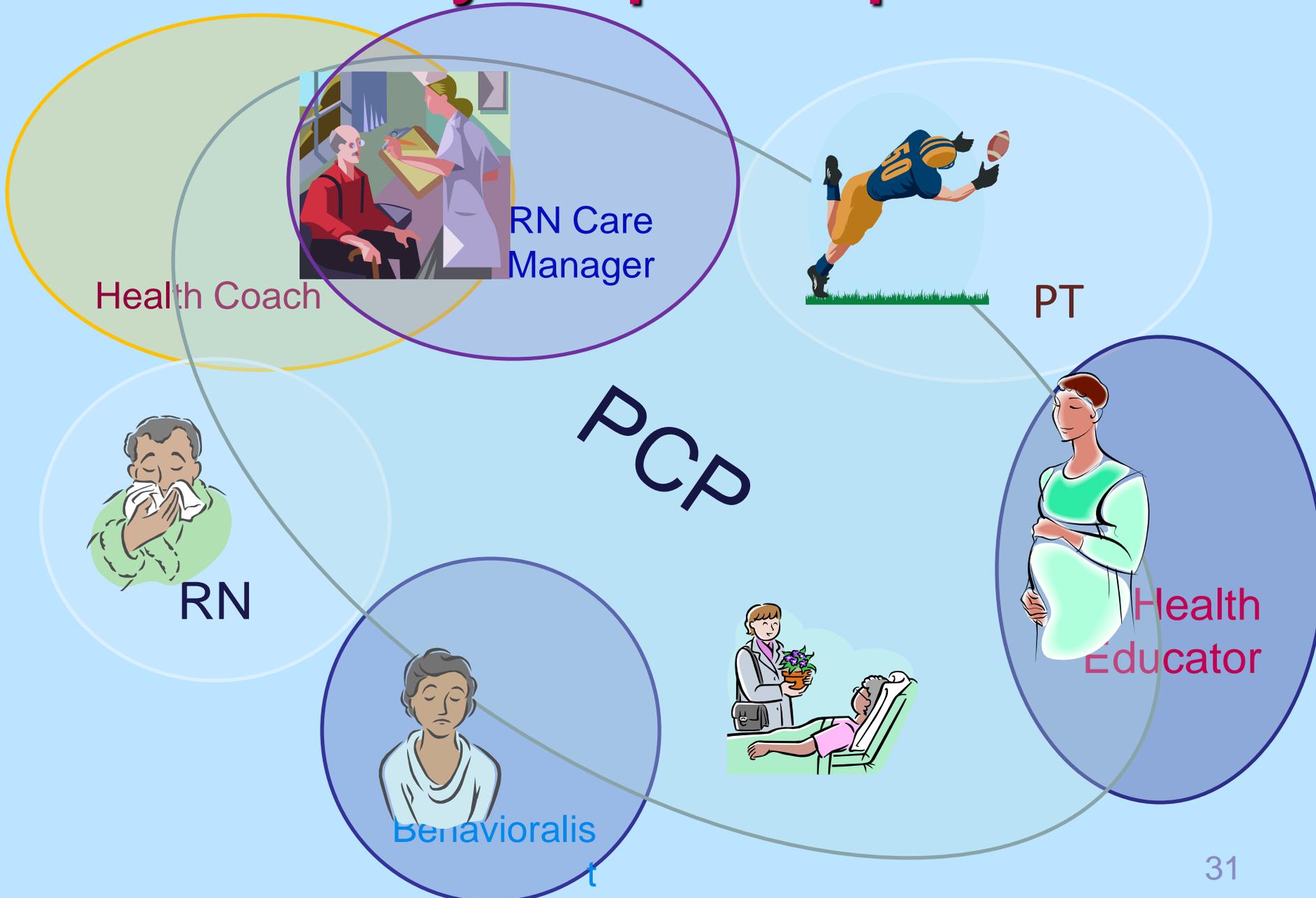
# Panel management

- **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**

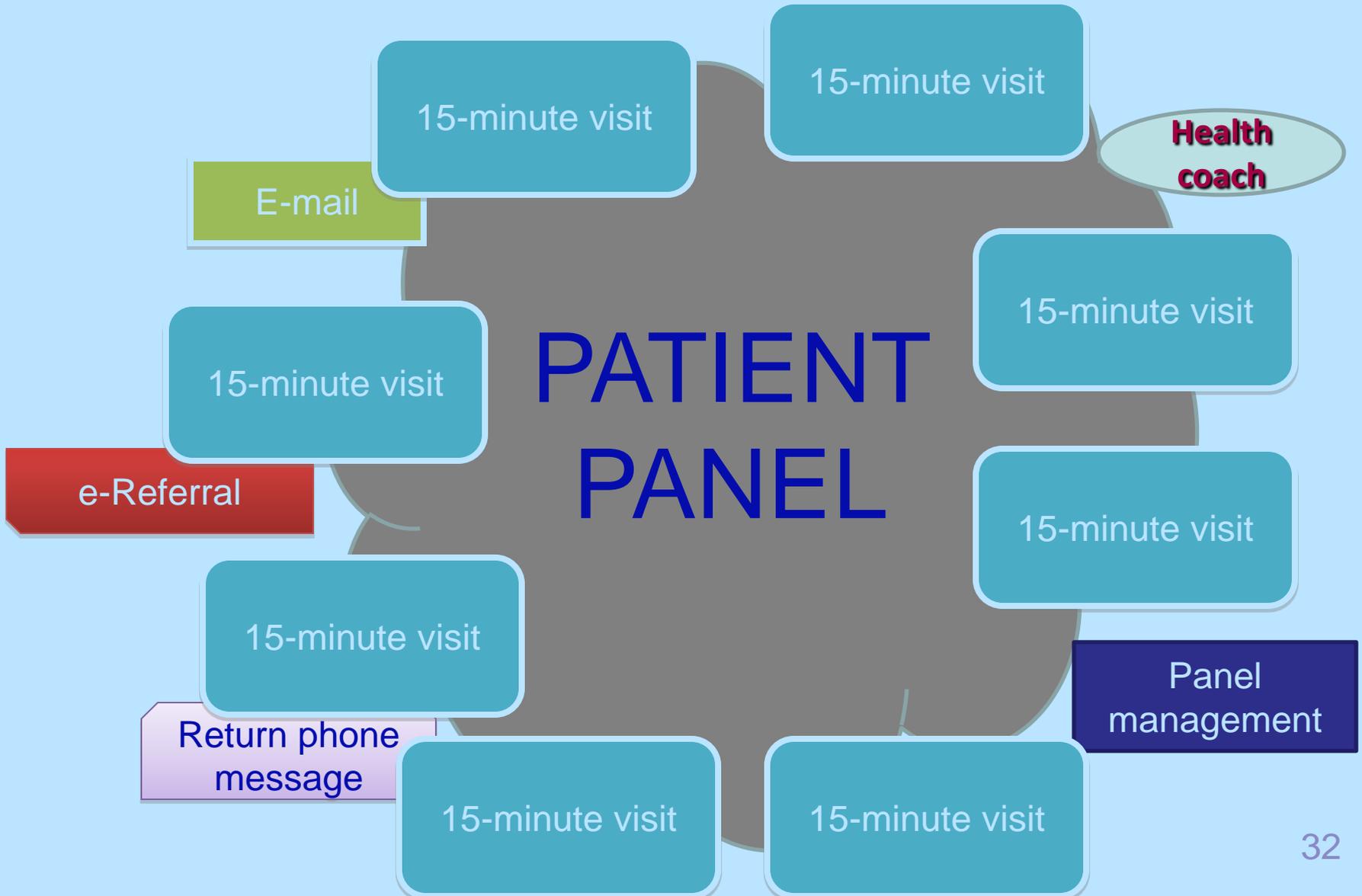
# Panel management and team building

- **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**

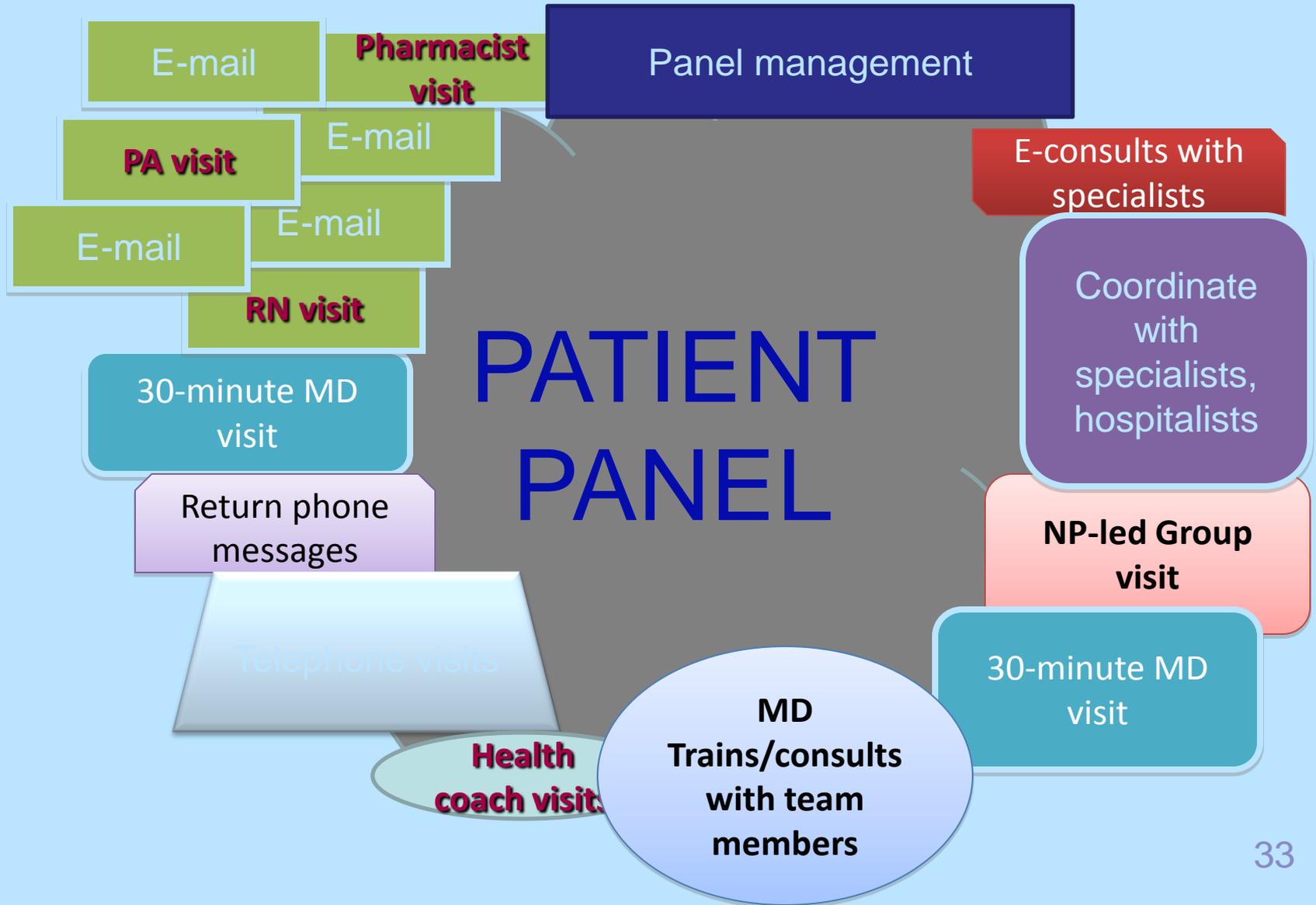
# Stratify the patient panel



# Taking care of our panel (past)



# Taking care of our panel (future)



# Template of the past

Time	Primary care physician	Medical assistant	Nurse	Nurse Practitioner	Medical assistant
8:00	Patient A	Assist with Patient A	Triage	Patient H	Assist with Patient H
8:15	Patient B	Assist with Patient B		Patient I	Assist with Patient I
8:30	Patient C	Assist with Patient C		Patient J	Assist with Patient J
8:45	Patient D	Assist with Patient D		Patient K	Assist with Patient K
9:00	Patient E	Assist with Patient E		Patient L	Assist with Patient L
9:15	Patient F	Assist with Patient F		Patient M	Assist with Patient M
9:30	Patient G	Assist with Patient G		Patient N	Assist with Patient N

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

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

# Template of the Future

Time	Primary care physician	Medical assistant	Nurse	Nurse Practitioner	Medical assistant
	<u><b>Teamlet 1</b></u>			<u><b>Teamlet 2</b></u>	
8:00-8:10	Huddle and make plan for the day's work				
8:10 AM	Telephone and e-mail visits - <b>12 pts</b>	Panel management	RN diabetes visits	Drop-in patients- <b>4 patients</b>	Assist with drop-in patients, close the loop, phone follow-up
9:00 AM	<b>Patient D</b>				
9:30 AM	Coordinate with specialists and hospitalists.	Health coach visit with <b>pt J</b>	Group visit for chronic care – <b>12 patients</b>	<b>Patient K</b>	
10:00 AM	Consult with team members	BP clinic- <b>3 patients</b>		Join group visit for chronic care	Panel management
10:15 AM	<b>Patient H and Patient B</b>		Phone outreach	Telephone and e-mail visits – <b>6</b>	
5PM home...	Team signs out to overnight coverage and goes home...				

# **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](http://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**