

The Patient-Centered Medical Home

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

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The argument

- **Primary care is a necessary foundation for any health care system**
- **Primary care is unable to do what it is supposed to do**
- **We need to move from the practice of the past to the Patient-Centered Medical Home (PCMH)**
- **PCMH requires a compact between payers and primary care practices.**

Primary care is a necessary foundation for any health system

- **Increased primary care to population ratios are associated with reduced hospitalization rates [Parchman and Culler. J Fam Pract 1994;39:123]**
- **Adults with a primary care physician rather than a specialist as their personal physician**
 - **33% lower annual adjusted cost of care**
 - **19% lower adjusted mortality, controlling for age, gender, income, insurance, smoking, perceived health (SF-36) and 11 major health conditions [Franks and Fiscella. J Fam Pract 1998;47:103]**

Primary care is a necessary foundation for any health system

- **24 common quality indicators for Medicare patients: high quality significantly associated with lower per capita Medicare expenditures**
- **States with a greater ratio of generalist physicians to population had higher quality and lower costs**
- **States with a greater ratio of specialist physicians to population had lower quality and higher costs**

Baicker and Chandra. Health Affairs Web Exclusive. April 7, 2004.

Primary care is unable to do what it is supposed to do

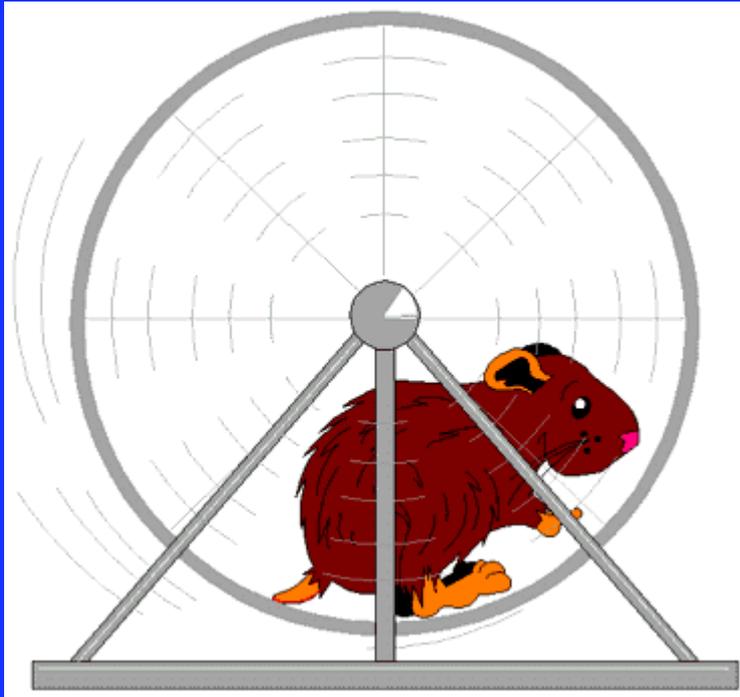
- **Plummeting numbers of new physicians entering primary care**
- **Primary care shortages throughout US**
- **Growing problems of access to primary care**
- **The current primary care medical home is falling off the cliff**



Adult primary care crisis

- **In a 2007 survey of fourth-year students, only 7% planned careers in adult primary care [Hauer et al, JAMA 2008;300:1154].**
- **The 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**
 - **The worklife of the PCP is stressful**

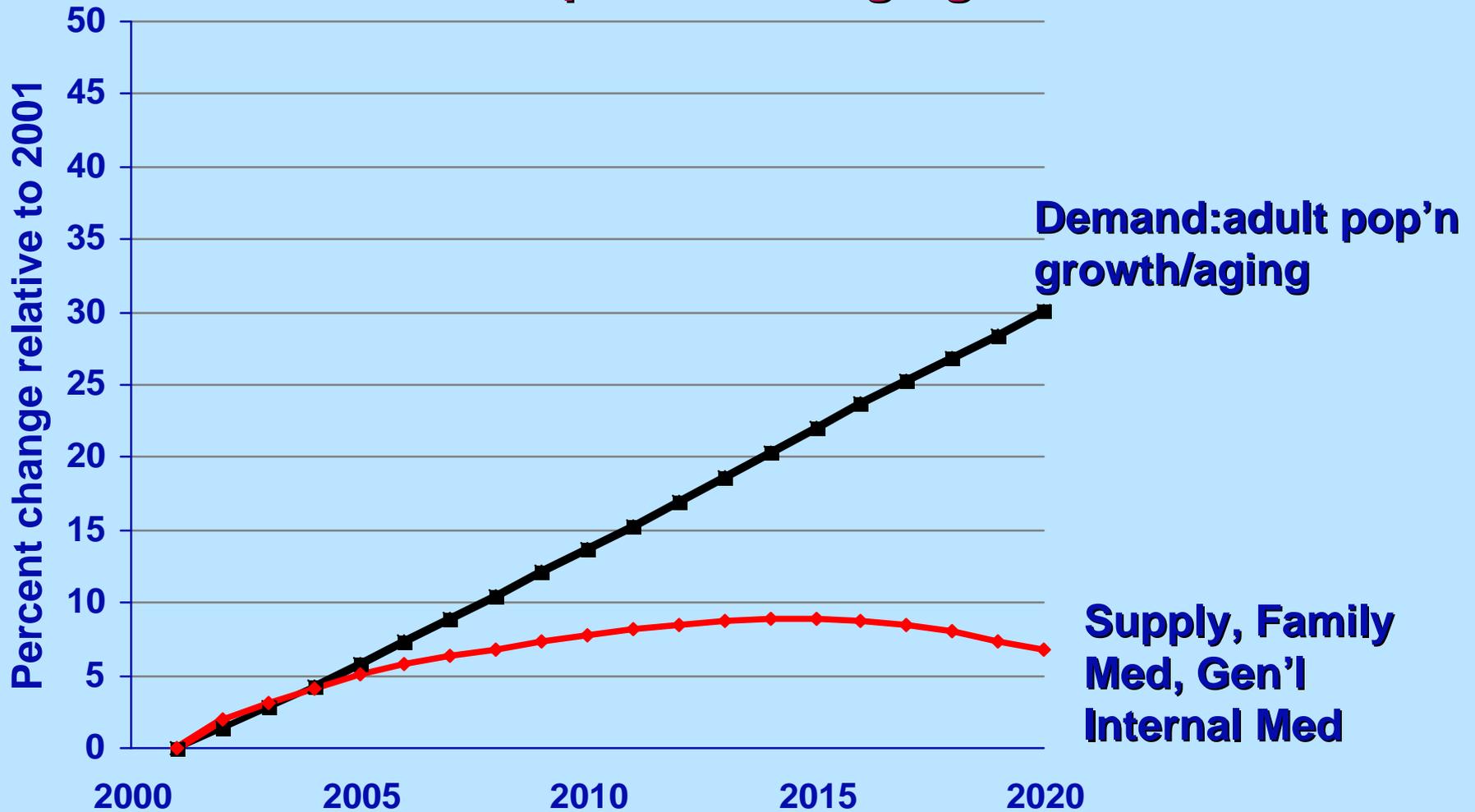
PCP Burn Out



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

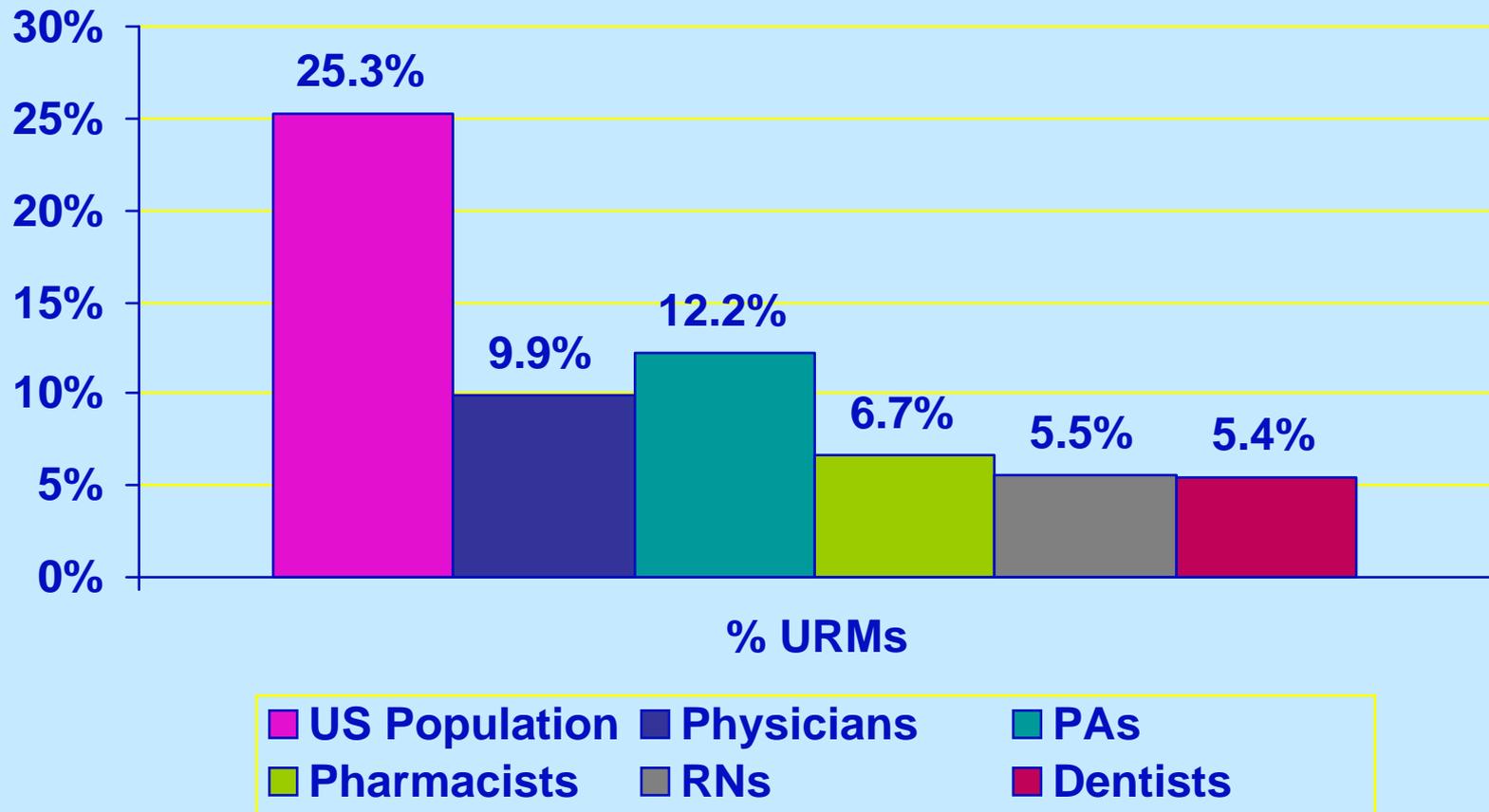
**Morrison and Smith,
BMJ, 2001**

Adult Care: Projected Generalist Supply vs Pop Growth+Aging



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

Underrepresented Minorities* (URMs) as % of US Population and Selected Health Professions



*African Americans, Latinos, American Indians

Geographic distribution

- **Primary care physician:population ratio**
 - **Urban areas: 100/100,000 population**
 - **Rural areas: 46/100,000 population**
- **Rural areas**
 - **21% of the US population**
 - **10% of physicians**
- **65 million people live in Primary Care Health Profession Shortage Areas**

How are we doing?

- ⊖ **National study of physician performance for 30 medical conditions plus preventive care: physicians provided only 55% of recommended care [McGlynn et al. NEJM 2003; 348:2635]**
- ⊖ **66% of people with hypertension are inadequately treated [JNC 7, JAMA 2003;289: 2560.]**
- ⊖ **63% of people with diabetes have HbA1c levels greater than 7.0% [Saydah et al. JAMA 2004;291:335]**
- ⊖ **62% of people with elevated LDL-cholesterol have not reached lipid goals [Afonso, Am J Man Care 2006;12:589]**

Physicians do not explain their care plan and do not make the care plan together with the patient and family

- **Asking patients to repeat back what the physician told them, 50% get it wrong. [Schillinger et al. Arch Intern Med 2003;163:83]**
- **Asking patients: “Describe how your physician wanted you to take this medication,” 50% could not say. [Schillinger et al. Medication miscommunication, Advances in Patient Safety (AHRQ, 2005)]**
- **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]**

Primary care access is poor

- **In a 2006 national survey, only 27% of adults with a regular PCP could easily contact their physician over the telephone, obtain care or medical advice after hours, and experience timely office visits.**

Beal et al. Closing the Divide: How Medical Homes Promote Equity in Health Care. Commonwealth Fund, 2007

Primary care can't do it

- Average primary care panel in US is 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]

The practice of the past: pay for quantity

- **Most primary care practices are paid fee-for-service**
- **The more 15-minute visits, the more money**
- **Physicians cannot provide all acute, chronic and preventive care in the 15-minute visit**
- **The rushed 15-minute visit is largely responsible for**
 - **Doctors interrupting patients**
 - **Poor information giving**
 - **Rare collaborative decision making**
 - **Unsatisfactory patient outcomes**

The diagnosis

**The fundamental pathology of the
primary care practice of the past:**

The 15-minute clinician visit

The treatment:

The practice of the future:

PCMH is a first step

PCMH

- **“Medical home” first used by American Academy of Pediatrics (AAP) to describe pediatric practices that provide primary care and coordinate all care for children with special needs (1967)**
- **American Academy of Family Physicians (AAFP) Future of Family Medicine report used the term “medical home” (2003)**
- **American College of Physicians (ACP) position paper “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)**

Joint Principles

- **Personal physician**
- **Physician leads practice team**
- **Whole person orientation: PCMH responsible for providing or arranging acute, chronic, preventive care for its patients**
- **Care coordination with services outside the PCMH**
- **High quality, information technology, partnership between physicians, patients, family; patients actively participating in decisions affecting their lives**
- **Enhanced access: patients get care when they need it**
- **Payment reform**

National Committee for Quality Assurance (NCQA)

- **Non-profit organization created by health plans in 1990**
- **Created the Physician Practice Connections (PPC) measures to assess how well practices were providing chronic care**
- **Adapted PPC to the 2007 principles of the PCMH, creating the PPC-PCMH set of criteria for judging practices**
- **NCQA is certifying practices as being Level 1, 2, or 3 PCMHs**

PPC-PCMH Content and Scoring

Standard 1: Access and Communication	Pts	Standard 5: Electronic Prescribing	Pts
A. Has written standards for patient access and patient communication**	4	A. Uses electronic system to write prescriptions	3
B. Uses data to show it meets its standards for patient access and communication**	5	B. Has electronic prescription writer with safety checks	3
	9	C. Has electronic prescription writer with cost checks	2
Standard 2: Patient Tracking and Registry Functions	Pts		8
A. Uses data system for basic patient information (mostly non-clinical data)	2	Standard 6: Test Tracking	Pts
B. Has clinical data system with clinical data in searchable data fields	3	A. Tracks tests and identifies abnormal results systematically**	7
C. Uses the clinical data system	3	B. Uses electronic systems to order and retrieve tests and flag duplicate tests	6
D. Uses paper or electronic-based charting tools to organize clinical information**	6		13
E. Uses data to identify important diagnoses and conditions in practice**	4	Standard 7: Referral Tracking	PT
F. Generates lists of patients and reminds patients and clinicians of services needed (population management)	3	A. Tracks referrals using paper-based or electronic system**	4
	21		4
Standard 3: Care Management	Pts	Standard 8: Performance Reporting and Improvement	Pts
A. Adopts and implements evidence-based guidelines for three conditions **	3	A. Measures clinical and/or service performance by physician or across the practice**	3
B. Generates reminders about preventive services for clinicians	4	B. Survey of patients' care experience	3
C. Uses non-physician staff to manage patient care	3	C. Reports performance across the practice or by physician **	3
D. Conducts care management, including care plans, assessing progress, addressing barriers	5	D. Sets goals and takes action to improve performance	3
E. Coordinates care//follow-up for patients who receive care in inpatient and outpatient facilities	5	E. Produces reports using standardized measures	2
	20	F. Transmits reports with standardized measures electronically to external entities	1
Standard 4: Patient Self-Management Support	Pts		15
A. Assesses language preference and other communication barriers	2	Standard 9: Advanced Electronic Communications	Pts
B. Actively supports patient self-management**	4	A. Availability of Interactive Website	1
	6	B. Electronic Patient Identification	2
		C. Electronic Care Management Support	1
			4

****Must Pass Elements**

NCQA Scoring Methodology

Level	Points	Must-Pass Elements
Level 1	25-49	5 of 10, with a performance level of at least 50%
Level 2	50-74	10 of 10, with a performance level of at least 50%
Level 3	75-100	10 of 10, with a performance level of at least 50%

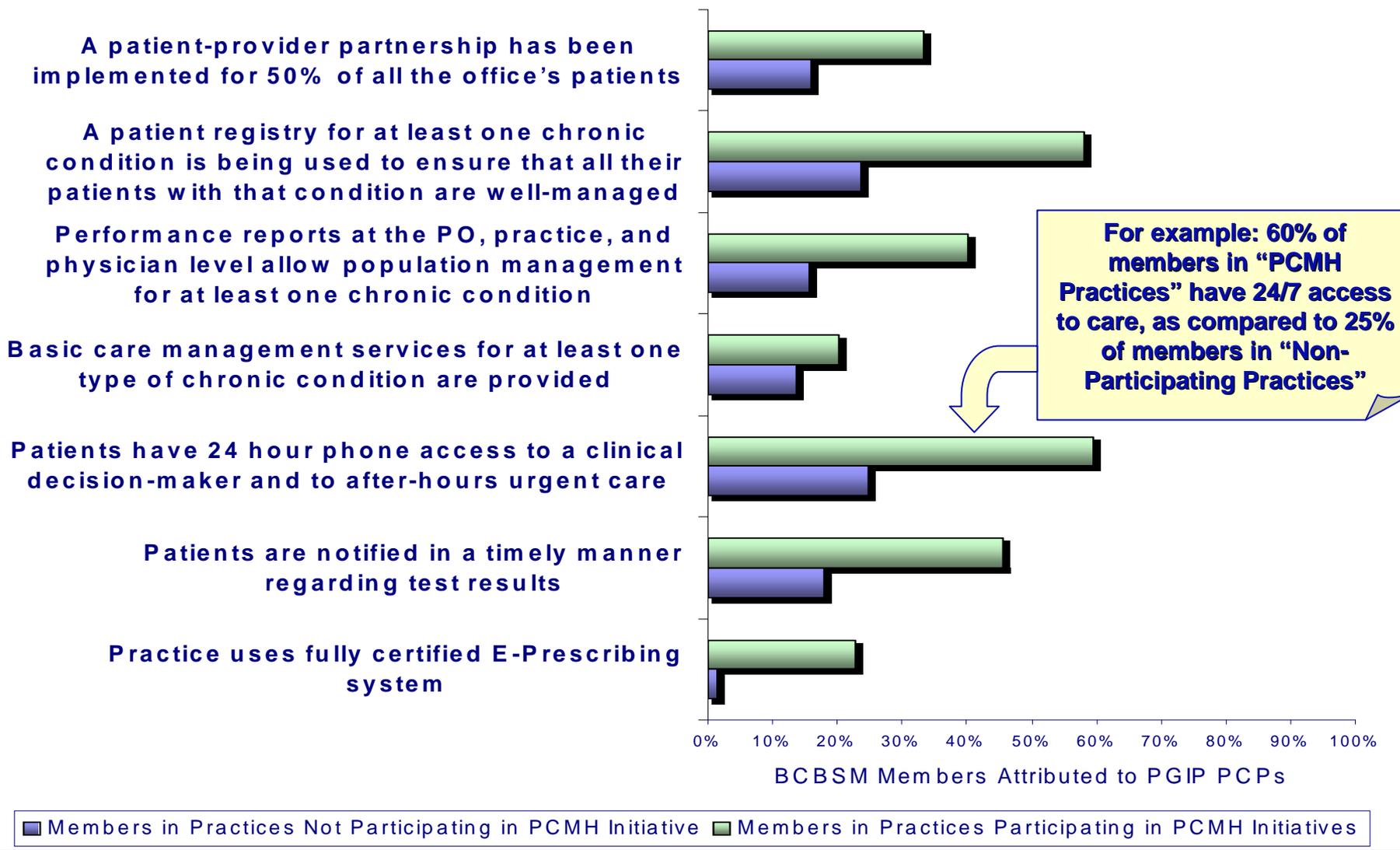
How do practices obtain NCQA designation?

- **AAFP, AAP, ACP, AOA have endorsed using PPC-PCMH standards to designate practices as PCMHs**
- **A practice seeking designation would take the NCQA WebEx training and use the 90-page detailed explanation of the standards**
- **Practices self-assess and complete an on-line application.**
- **Practices send documentation but are not site-visited**
- **Some health plans are paying more to recognized PCMH practices**

PCMH multipayer pilot projects

- **Patient-Centered Primary Care Collaborative (PCPCC) was started by IBM and includes many physician organizations and health plans (www.pcpcc.net)**
- **PCPCC is sponsoring 27 multipayer pilot projects in 20 states**
- **None in California**
- **Does PCMH improve care and reduce costs? Evidence so far is weak**

BlueCross BlueShield Michigan PCMH vs. regular primary care practices

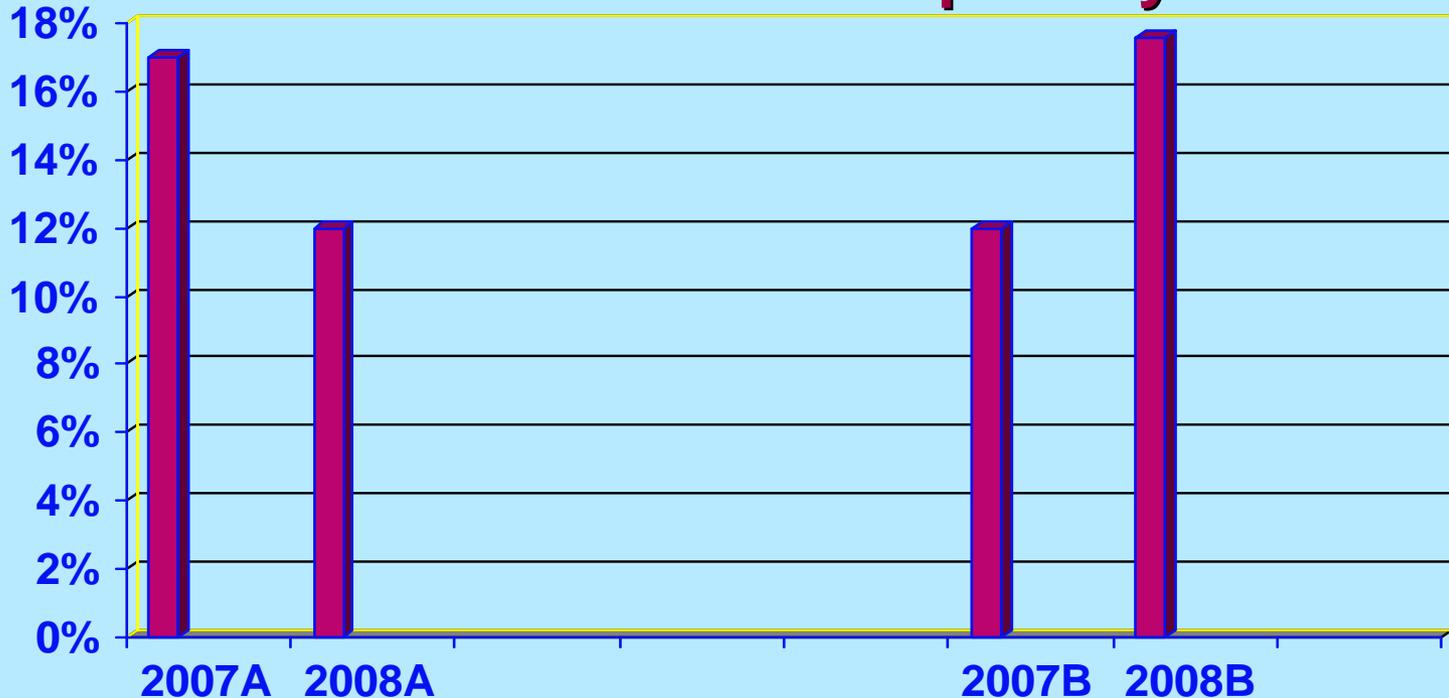


BCBSM PCMH-practices: better risk-adjusted utilization and cost profiles than non-PCMH practices

2008, Risk-Adjusted	PCMH Difference
Inpatient Admissions for Ambulatory-Care Sensitive Conditions	-16.7%
Re-admissions within 30-days	-6.3%
ER visits	-4.5%
Standard Cost of Outpatient Care (PMPM)	0.5%
Standard Cost of High Tech Imaging (PMPM)	-7.2%
Standard Cost of Low Tech Imaging (PMPM)	-7.3%
Self-Referral Rate for Low Tech Imaging	-51.5%

Geisinger Health System

Hospital readmission rates in one year
30% reduction with model primary care



A = model PCMH practices with care managers to coordinate care and reduce unnecessary emergency department visits and hospital admissions B = control practices

Commonwealth Fund, Geisinger Health System, 2009

Reducing ED visits

- **Medicaid patients of primary care practices with more than 12 evening hours per week utilized the emergency department 20% less than those cared for in practices with no evening hours.**

Lowe et al. Medical Care 2005;43:792-800

Care of patients with complex health care needs and high costs

- **10% of Medi-Cal beneficiaries incur 74% of program costs.**
- **4% account for 60% of the costs**
- **Many have serious mental health problems; not addressed here**
- **Some are children with special needs: not addressed here**
- **Key to reducing costs and improving care for patients with high costs/ complex needs is RN care management within primary care and in the transition from hospital-to-home**
- **Discussed in detail in “Care management of patients with complex healthcare needs”** www.rwjf.org/pr/synthesis.jsp

Care of patients with complex health care needs and high costs

- Geriatric Resources for Assessment and Care of Elders (GRACE)
- Low-income population Indianapolis
- RCT compared GRACE and usual care patients
- NP/SW care manager team working with PCPs and geriatrician
- In-clinic, home and phone contacts
- Extensive training of care manager team
- Small case load for care manager team
- Improved quality of life by SF-36, no improved ADLs
- Significantly lower ED visits in GRACE patients
- Higher-risk GRACE subgroup: significantly lower hospitalization rate than higher-risk usual care patients

Counsell et al, JAMA 2007;298:2623

Care of patients with complex health care needs and high costs

- **Care Management Plus (CMP)**
- **Intermountain HealthCare, Utah**
- **7 CMP practices, 6 control practices**
- **Extensive training of care manager RNs**
- **Care managers work in primary care team**
- **Clinic visits, home visits, phone calls**
- **Lower mortality in CMP patients**
- **In the higher-risk subgroup, hospital admissions significantly lower in CMP group**

Dorr et al, J Am Geriatric Soc 2008;56:2195

Care of patients with complex health care needs and high costs

- **Guided Care, Johns Hopkins**
- **Extensively trained RN care managers work with primary care team, case loads about 50**
- **Clinic visits, home visits, phone calls**
- **RNs teach patients/families self-management skills including early identification of symptom worsening**
- **After 8 months of a 32-month RCT, hospital days down by 24% and total costs down by 11% for Guided Care group; not yet statistically significant**
- **Patient experience (patient-physician communication, coordination of care) higher in Guided Care group**
- **Final results expected 2011**

Leff et al. Am J Managed Care 2009;2009;15:555

Critique of NCQA: its standards vs. attributes of good primary care

- **Barbara Starfield's 4 pillars of primary care**
 - **First contact care -- access (weak in NCQA)**
 - **Continuity of care (not in NCQA)**
 - **Comprehensive care (not in NCQA)**
 - **Coordination of care (weak in NCQA)**
- **Modern additions to Starfield**
 - **Concern for entire population of patients (OK)**
 - **Chronic care model (Good)**
 - **EMR linked to rest of medical neighborhood (OK)**
 - **Team care (OK)**
 - **Measurement to drive quality (Good)**
 - **Patient-centered care (weak)**
 - **Payment incentivizes the above attributes (not in NCQA)**

Critique of NCQA

- **Beal et al. created a patient-centered definition of a medical home by asking patients 4 questions:**
 - **Do you have a regular doctor or place of care?**
 - **Can you easily contact your provider by phone?**
 - **Can you easily get care or medical advice weekends or evenings?**
 - **Are your physician visits well organized and running on time?**
- **Practices doing well on these questions may flunk NCQA, or those passing NCQA could flunk the 4 questions**
- **2 practices in upper NY State:**
 - **Solo physician, patients loved her and had excellent access to her. She could never meet NCQA standards**
 - **3 physician practice, meeting NCQA standards. Patients disliked the practice, poor continuity of care, poor access, physicians seemed not to know the patients**

Does the PCMH improve care and reduce disparities?

- **Beal defined “medical home” as practices whose patients answer Yes to the 4 questions**
- **Compared to non-home practices, Beal-defined medical homes are superior, and also eliminate racial and ethnic disparities in**
 - **Access to care**
 - **Preventive care**
 - **Coordination of care between primary care and specialists**
 - **Controlling blood pressure**
 - **Providing diet and exercise counseling**
- **Community health centers are more likely than private practices to be medical homes using Beal’s criteria**

Beal et al. Closing the Divide: How Medical Homes Promote Equity in Health Care. Commonwealth Fund, 2007

Critique of NCQA

- **No evidence yet exists that practices that receive NCQA PCMH designation have better outcomes or reduce disparities compared with non-designated practices**
- **Many of the standards of NCQA require that the practice have a *plan* to improve but do not require that the practice demonstrate improvement**
- **Example: “Has written standards for patient access...Uses data to show it meets its standards”
The standard could be: patients should be able to get appointments within 2 months. There is no access benchmark that practices are required to meet**

Critique of NCQA

- **The fundamental problem of primary care: the 15 minute visit and the large panel size that prevents most physicians from providing excellent care**
- **NCQA standards do not address these issues; many NCQA standards make primary care physicians work harder**
- **Conclusion of critique: NCQA is big step forward, but it may not be feasible for primary care practices to accomplish given the worsening shortage**

Beyond NCQA: the primary care practice of the future

- **Current goal of many PCPs:**
 - **How can I see the scheduled patients and get home in time for dinner with the kids?**
 - **See as many patients as possible in one-on-one visits (which are the only services always reimbursed)**
- **Practice of the future goal**
 - **What can we, the primary care **team**, do today to make our panel of patients as healthy as possible?**

Primary care practice of the future

- **Primary care's 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, visits to non-physician team members, group visits**
 - **These depend on patient preference and medical appropriateness**
 - **Even in the safety net, many patients/families can access e-mail, which reduces barriers to care and is more efficient than face-to-face visits**

Primary care practice of the future

- **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**
- **Stratify the patient panel according to needs**

Primary care practice of the future

- **It is no longer possible, given the growing PCP shortage, for PCPs to care for all the patients in their panel**
 - **PCPs should care for patients who need the clinical expertise that physicians have: diagnostic problems and management of complex patients.**
 - **Many routine acute, chronic and preventive care needs can be handled by NP/PAs, nurses, pharmacists, and better-trained medical assistants**
- **Patients with complex healthcare needs and high costs need care by a multidisciplinary team led by specially trained RN care managers. Physicians should have ample time to devote to these patients. This finding is well demonstrated by the GRACE, Guided Care, and Care Management Plus studies**

Primary care practice of the future: patient-centered care

- **Access to care the same day or next day. It can be done-- many practices have accomplished this. Night/weekend coverage**
- **Continuity of care: see the same small team, who knows you. Continuity of care is associated with better quality and lower costs**
- **Everyone on the team must**
 - **Set agendas with patients -- patient agenda items come before provider agenda items**
 - **Engage in shared decision making with patients/families**
 - **Make sure patients understand the care plan**
- **Will patients accept seeing other team members rather than always seeing the physician? Currently patients are dissatisfied with the 15-minute visit, but we do not know how patients would respond to the practice of the future**

Primary care practice of the future

- **Current payment modes will not sustain the practice of the future**
 - **Payers need to reimburse RN, pharmacist, MA work, e-mail, phone visits -- reward any service that improves patients' health**
 - **A well-functioning primary care practice reduces ED visits and hospitalizations; payers benefit and share their savings with the practice**
- **Payers and practices need to enter into a compact: the practice improves and simultaneously, the payer rewards the practice**

What to do with small practices and rural practices?

Practice size	% of primary care physicians, 2006
Solo	32%
2 physicians	14%
3-5 physicians	32%
6-10 physicians	15%
11 or more physicians	7%

Hing et al. National Center for Health Statistics, 2007

What to do with small practices and rural practices?

- **Few small practices can meet NCQA standards or become practices of the future**
- **Small practices and rural practices need to aggregate with larger organizations providing electronic information systems and personnel (for example, circuit-riding RN care managers for patients with complex needs)**
- **Aggregating organizations could be health plans, hospitals, IPAs, integrated multispecialty or primary care groups**

Practice of the future -- the true PCMH

- **The 12-16-09 concept paper for the 1115 waiver is excellent. But is it realistic about what stressed primary care practices can accomplish?**
- **Medical students are voting with their residency choices -- voting against primary care. They partly vote with their wallets. But mainly, they are saying “Primary care is too hard to do.”**
- **The 1115 waiver must confront a serious primary care shortage: physicians have too many patients and too little time**
- **“Never let a crisis go to waste.” It creates the opportunity to move toward the transformation of primary care into true patient-centered medical homes**