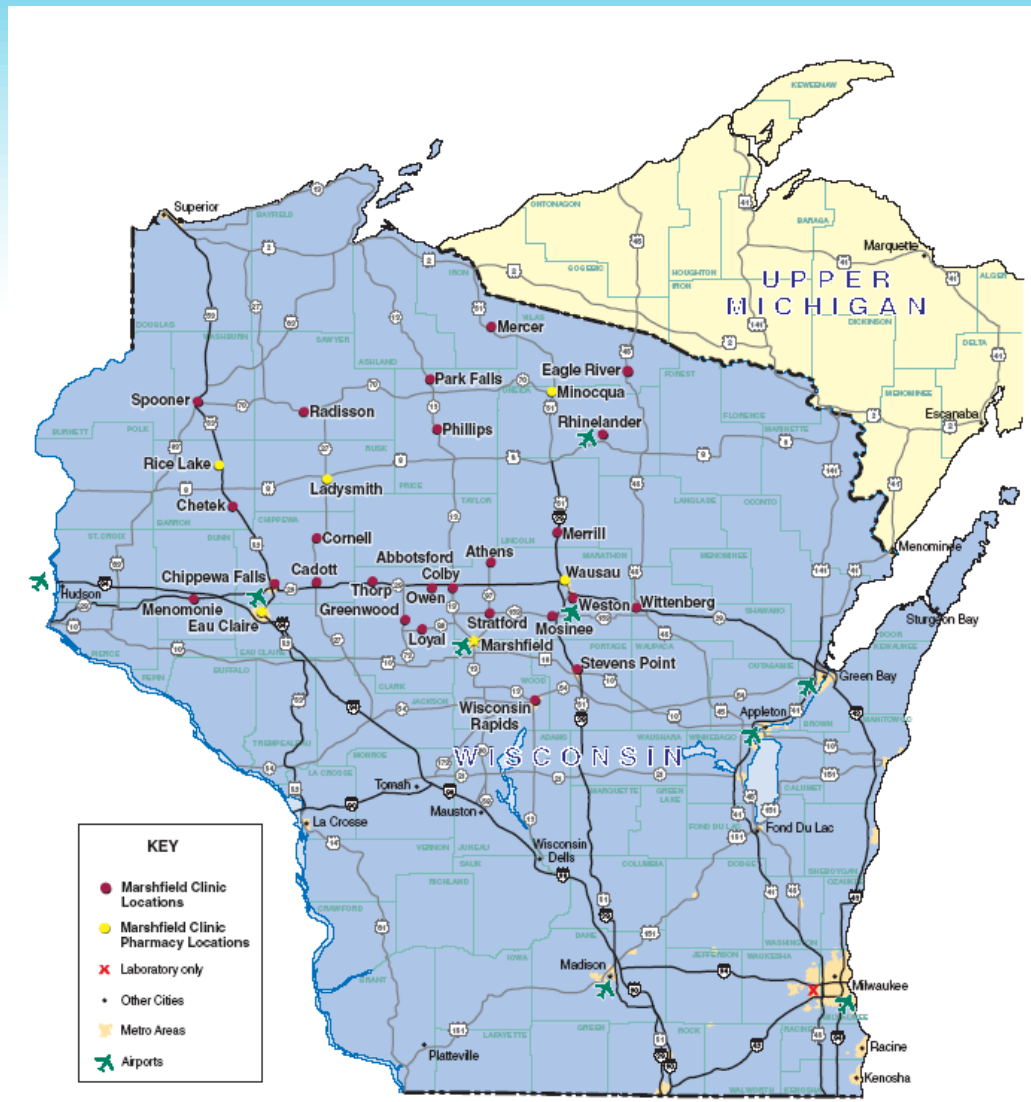
Disclosures

- Neither of today's presenters has any relevant financial interest or other relationship(s) with a commercial entity producing health-care related product and/or services.

Who / What is Marshfield Clinic?

- Provide care within 80 specialties at >50 Practice locations spread over 40,000 sq miles
- 5th largest non-profit multi-specialty clinic in North America
- > 375,000 unique patients seen each year
  - 3,500,000 annual patient encounters
- Research Foundation involved in more than 450 clinical trials

Marshfield Clinic's System of Care



Marshfield Clinic participated in the Physician Group Practice Demonstration Project

- **Multiple simultaneous** interventions
  - Best practice models developed for core conditions
  - Computer based CME opportunities
  - Care management programs
  - Population based feedback to providers
  - Health Information Technology
  - Physician/Clinical Nurse Specialist regional teams
- *ALL interventions for the CMS PGP demo were applied to ALL Marshfield Clinic patients.*

Summary Results of the Physician Group Practice Demonstration, Performance Years 1–4.*

Physician Group Practice	Percentage of Quality Goals Attained				Shared Savings Payments ($)			
	Year 1	Year 2	Year 3	Year 4	Year 1	Year 2	Year 3	Year 4
Billings Clinic, Billings, MT	90.91	97.78	98.11	92.45	0	0	0	0
Dartmouth–Hitchcock Clinic, Lebanon, NH	95.45	97.78	92.45	94.34	0	6,689,879	3,570,173	328,798
Everett Clinic, Everett, WA	86.36	95.56	94.34	94.34	0	129,268	0	0
Forsyth Medical Group, Winston-Salem, NC	100.00	100.00	96.23	96.23	0	0	0	0
Geisinger Clinic, Danville, PA	72.73	100.00	100.00	100.00	0	0	1,950,649	1,788,196
Marshfield Clinic, Marshfield, WI	81.82	100.00	98.11	100.00	4,565,327	5,781,573	13,816,922	16,154,242
Middlesex Health System, Middletown, CT	86.36	95.56	92.45	94.34	0	0	0	0
Park Nicollet Clinic, St. Louis Park, MN	95.45	97.78	100.00	100.00	0	0	0	0
St. John's Clinic, Springfield, MO	100.00	100.00	96.23	98.11	0	0	3,143,044	8,185,757
University of Michigan Faculty Group Practice, Ann Arbor	95.45	100.00	94.34	96.23	2,758,370	1,239,294	2,798,006	5,222,852

* Because the CMS applied different weights to each of the quality measures, the agency calculated the quality goals attained as percentages, rather than absolute numbers of measures. Data are from RTI International.

n engl j med 364;3 nejm.198 org january 20, 2011

Marshfield Clinic PGP Interventions

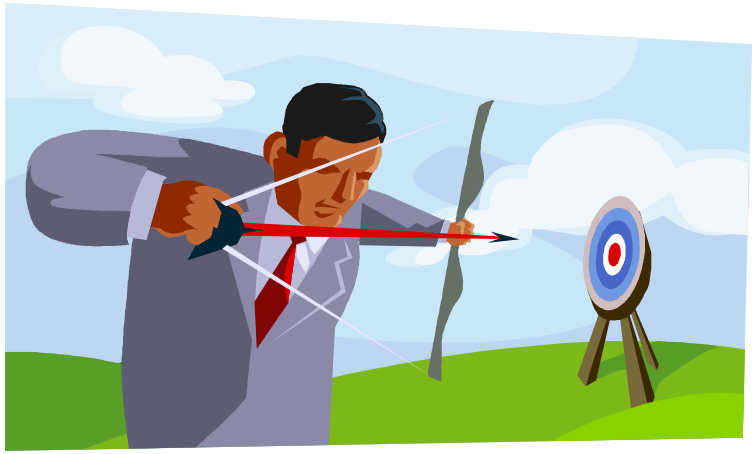
- Care Management – populations of patients
  - Anticoagulation System
  - Telephonic heart failure care management
  - Dyslipidemia program
  - NurseLine
    - 24/7/365 – 100+K calls/yr

  **all of the above are currently non-reimbursed services*
- Development and Deployment of Evidence-based Guidelines
- Deployment of Health Information Technology

AMGA-Premier-NPC Collaboration: The Role of Pharmaceuticals in ACOs

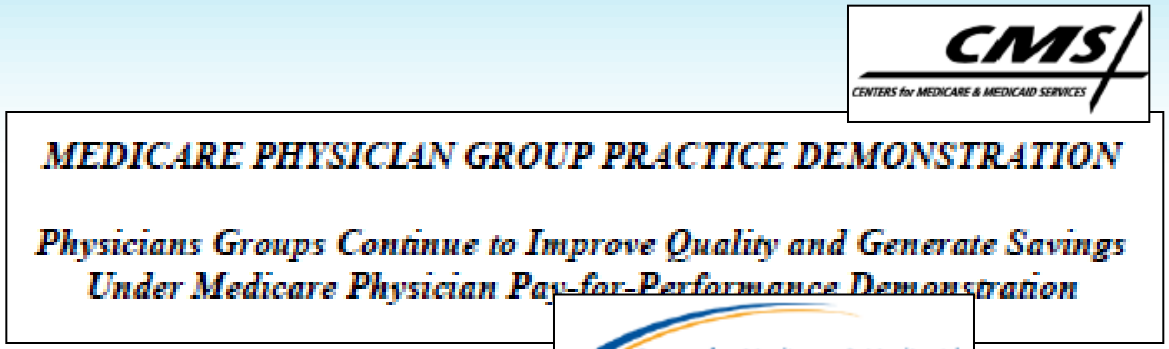
Goal: develop a framework for considering the role of pharmaceuticals in helping ACOs succeed

- Meet financial targets
- Meet quality benchmarks



Working Group Encompassed a Breadth of Value-Based Knowledge & Experience

- Provider Organizations
  - Baystate
  - Billings
  - Fairview
  - Geisinger
  - Marshfield Clinic
  - Sharp
  - University of Utah
- Premier
- American Medical Group Association
- National Pharmaceutical Council



Framework Example

Condition	Condition Type: Chronic or Hospital	Rx Focus: Inpatient or Outpatient	Quality Benchmarks		Cost	
			Quality Measures Impacted by Pharmaceuticals	Quality Measure in CMS ACO Regulations?	Rx Share of Cost	Cost Offsets from Rx
Congestive Heart Failure	Chronic, Hospital	Outpatient	Receiving Rx therapy; % of patients requiring re-hospitalization	Yes	Low	Impact on re-hospitalization
Rheumatoid Arthritis	Chronic	Outpatient	Receiving Rx therapy; Functional Status	No	High	Unknown

The work group explored the role of the pharmacist in the ACO environment

- Thought to be important because pharmacists play an expanded role in advising prescribers regarding the relative effectiveness and value of their drug treatment options in an ACO.

- In the ACO environment, we see pharmacists and other health care professionals accept greater responsibility for the ongoing management of medication therapy and outcomes measurement.

- Ensuring efficient and consistent pharmacotherapy as patients move across the health care continuum is critical to help ACOs achieve quality benchmarks and financial targets.

The potential impact of appropriate drug therapy is stimulating this trend

- 32 Million Americans take three or more medications daily.
- Nearly 75% of Americans report not always taking their medications as prescribed.
- Almost 30% of Americans stop taking their medicine before it runs out.
- Only about half of patients with high blood pressure take their prescribed doses of drugs.

Clearly the dollars are being spent

but the value is not being realized

Source: PhRMA; National Council on Patient Information and Education; WSJ reporting.

Specific changes have started to transform the pharmacists' role in many practices

- Formation of ambulatory drug use and evaluation committees to facilitate application of evidence-based information to define the “place in therapy” for drugs.
- Inclusion of clinical pharmacists in selected patient management clinics.
  - Anticoagulation
  - Diabetes
  - Heart Failure
  - Bariatric Surgery
- Identification of high-risk patients who will benefit from pharmaceutical case management
- Leverage the investment in I.T. and Meaningful Use

Leveraging IT to support desired therapeutic and economic outcomes

- "Meaningful Use" and Electronic Prescribing
  - Decision Support at POC
  - Back end reporting and quality metrics
- Preferred Alternatives
  - Identified three drug classes for intervention at point of prescribing.
  - Pushed a message with the "Preferred Alternative" drug when another drug was initially selected at point of prescribing.
  - $2.4 Million Cost Avoidance
- Specific Prescribing Opportunities

Drug Safety Alerts

Medication	Identifying group	Reason for letter	Date provider letters sent/Data pull	Unique providers	Unique patients	Action: Follow up recommendation (Patient Safety)
Glyburide	Endocrinology, DEC	Not best choice due to adverse effects	June 2011	233	1448	**December 2013**
			January 2012	183	639	
			June 2012	117	286	
			December 2012	108	235	
			June 2013	102	200 (86% decrease from baseline)	
Simvastatin	FDA, DEC, IQIPS	Increased risk of myopathy (DDIs and high dose)	July 2011	355	6125	**December 2013**
			March 2012	285	2598	
			September 2012	245	1672	
			December 2012	237	1396	
			July 2013	213	1068 (83% decrease from baseline)	
Citalopram	**FDA, DEC, IQIPS**	**Increased risk for QT prolongation with doses > 40 mg/day. New max dose by FDA from 60 mg/day to 40 mg/day**	September 2011	178	740	**April 2014**
			May 2012	107	196	
			November 2012	74	115	
			April 2013	53	76	
			October 2013	**48**	**69 (91% decrease from baseline)**	

Latest Initiative

- ACE Inhibitors and/or ARBs in diabetic patients with hypertension
  - Providers received lists of diabetic hypertensive patients who have not been prescribed ACE Inhibitors or ARBs
  - Results Pending

PGP Improvement in Management of Hypertension Obtained with Population Level Intervention

- CNSs working with Department Managers assure equipment is in good working order
- CBT training for BP training/testing for staff
- Population Health Dashboards

Marshfield Clinic

Population Health Management

Help

Last Refreshed Date: 7/8/2013

Disease Based Conditions Age Cap ○ 75 yrs ◉ All Patients

Summary | Trending | Comparative | Monthly Control Charts

Marshfield Clinic System

Marshfield Clinic System

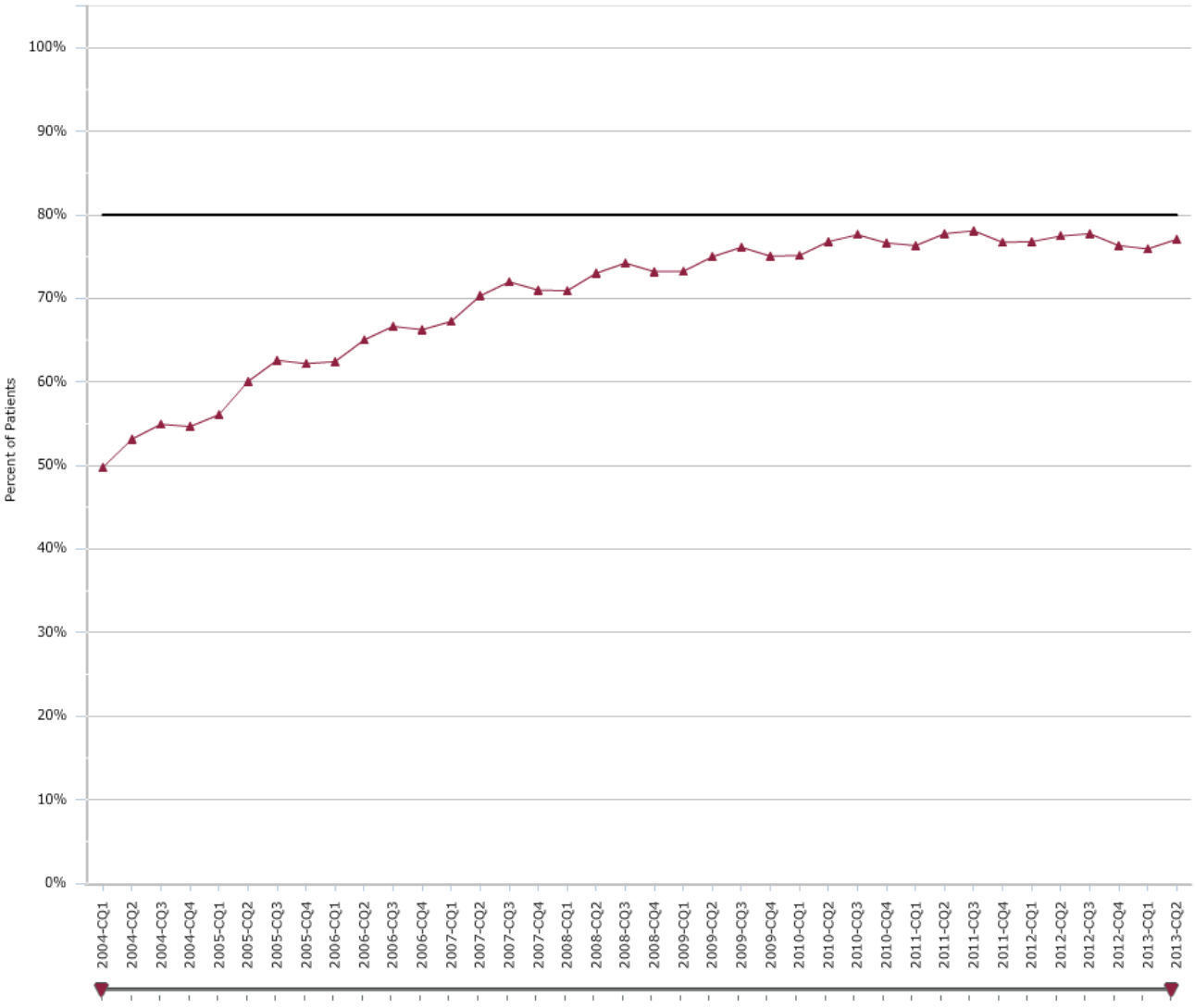
Quarterly Data Through 6/30/2013

■ Benchmark ▲ Marshfield Clinic System

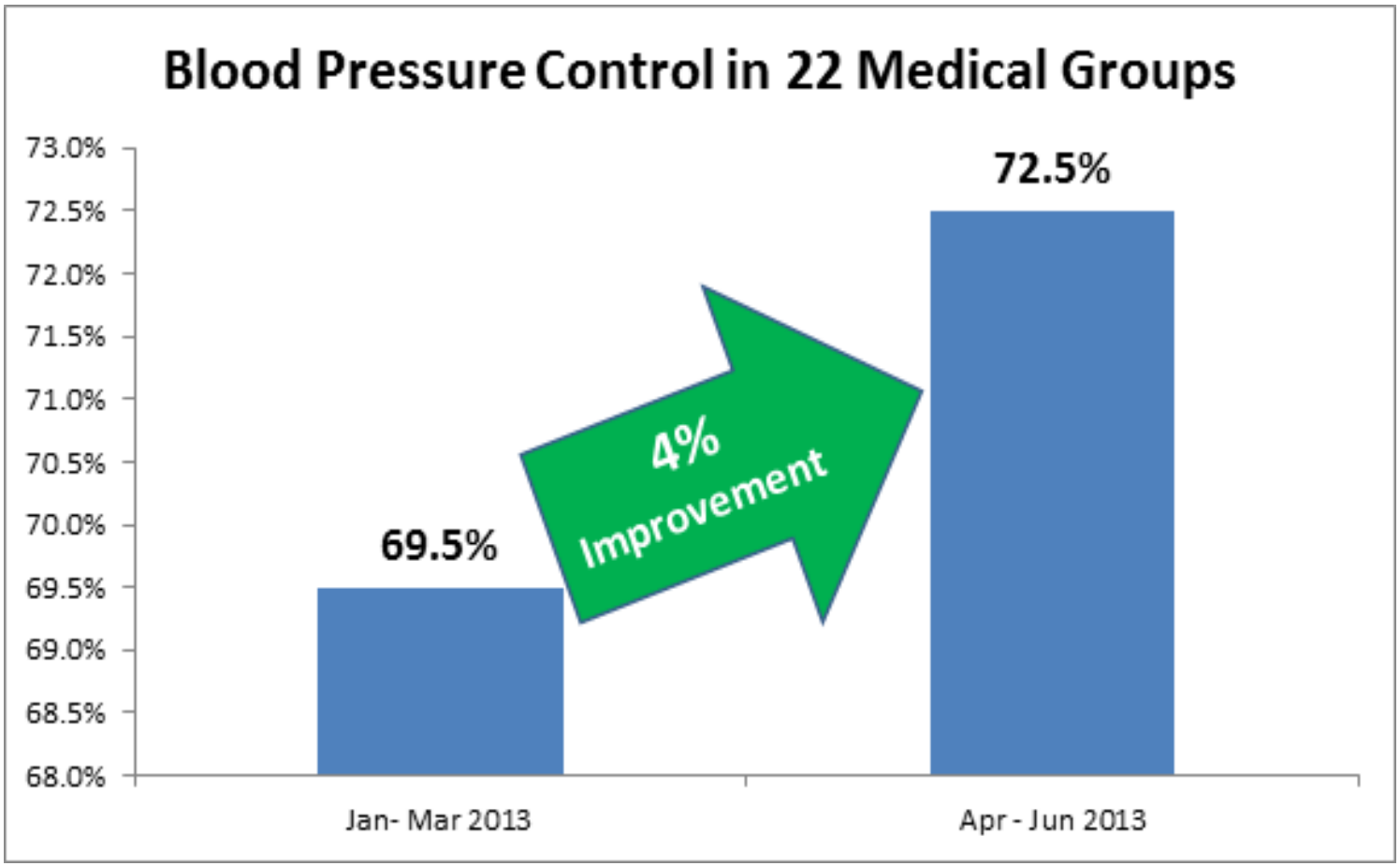
Condition Hypertension

	Number of Patients	55,290
	Average Risk Score	0.81
●	Blood Pressure Tested	99.4%
●	Blood Pressure at Goal	77.1%
●	Influenza Vaccination	71.0%
●	Pneumococcal Vaccination	89.9%
●	Tobacco Asked	99.1%
	Tobacco Free	86.2%
●	Tobacco Counseling	74.2%
●	HTN-DM ACE ARB Therapy	81.8%
●	Advanced Directives	34.8%
	Hospitalizations	39.5%

Hypertension Quality Measures - Blood Pressure at Goal <140/90



Early Results



Measure Up Pressure Down
American Medical Group Foundation

AMGA
American Medical Group Association®

Team-based Care

Partnering: Physicians and ---

What's happening already

Any benefits?

Impact on Clinical outcomes

Team-based Medical Practice
Expectations: Barriers and Pitfalls

- Changing attitudes of population
  - "Live forever" (deny death as a reality)
  - Not supposed to die of anything but old age
  - Autonomy
  - Family, friends, religious, ethical, social/cultural issues
  - Education
  - Socio-economic status
  - Smart phones --- doesn't always = 'smarter patient' !
  - Health literacy

Team-based Medical Practice
Patient Autonomy and the Physician

- Today's environment: Role and perception of physician in physician-patient relationship undergoing changes.***
- "Beneficence" model (out of ancient Hippocratic concepts) no longer as applicable ("Doc knows best")
- "Automony" model (Patient with adequate info --capable of making informed decisions consistent with his/her sense of well-being: An autonomous choice, free from controlling interference—deserving of respect as such—even when it conflicts with physician's recommendation).

- *** References: Sox, Will and Cerminar
  - CHEST: 2007;131;1532-1540
  - CHEST: 2011;139; 669-673 and 1491-1497
  - CHEST: 2011; 140;(3):775-780

Team-based Care

- Key parts to team-based care
  - Prerequisite components*
    - Relationships
    - Reputation
    - Requirements
    - Rewards
    - Reciprocity
    - Resolution
    - Respect
  - Compassion and caring

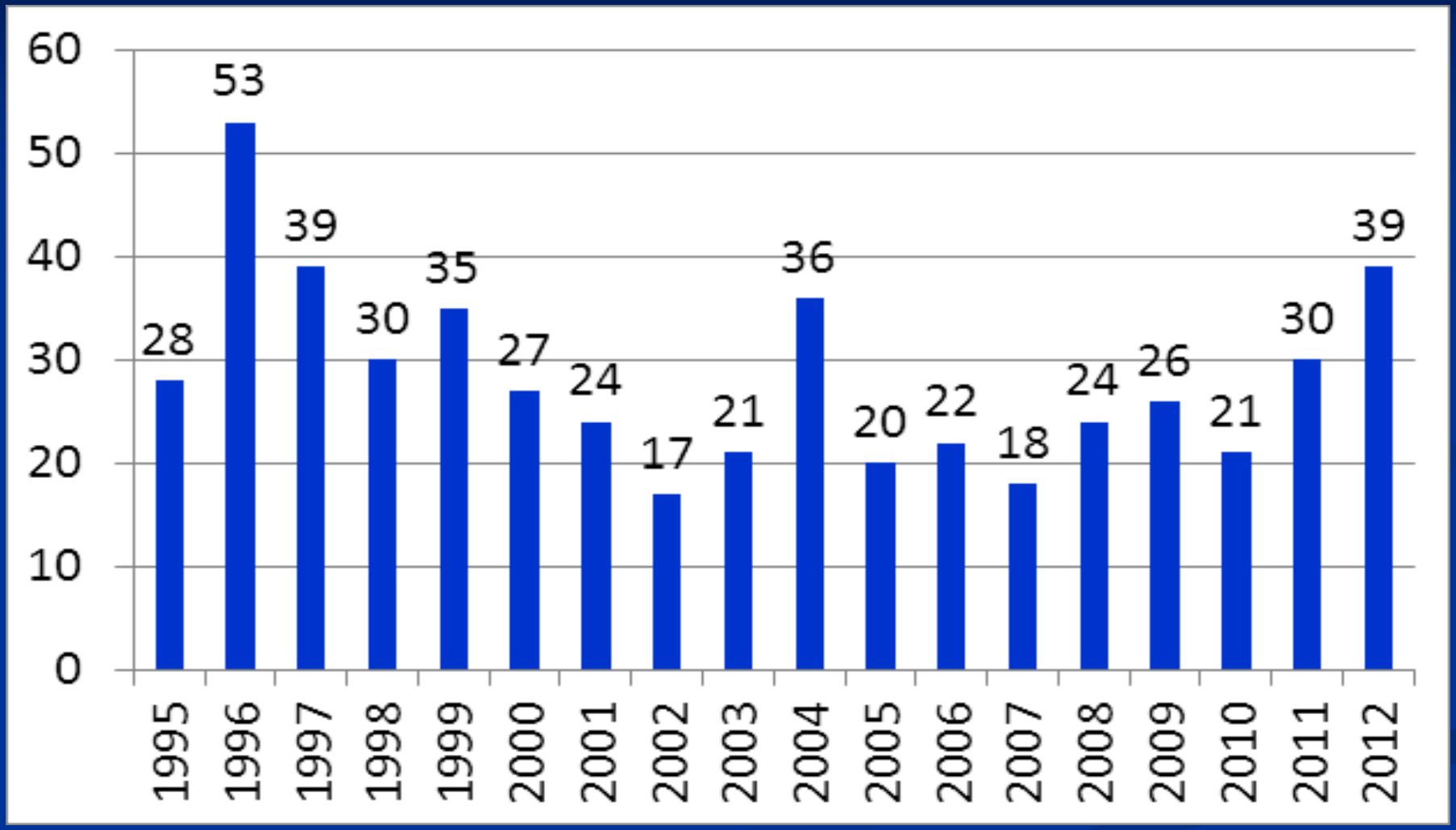
* L. Solberg, Implementation Science 26 Oct 2006 1:25;1-7

2011 Surgeon General Report

- *"One of the most evidence-based decisions to improve the health system is to <u>maximize the expertise and scope of pharmacists</u> and minimize expansion barriers of an already existing and successful health care delivery model."*
- Number of new meds put on the market 1995-2012*:*

<u>510!</u>

FDA Approved New Drugs



The Pharmacist-Physician Team Model

- In 298 studies involving pharmacists in care:
  - Improved patient outcomes (reduced systolic BP 4-10 mm Hg)
  - Increased patient engagement
  - Increased cost efficiency
  - Reduced demand on the health care system (impact on burnout????)

Surgeon General Report 2011

Patients Pharmacists Partnerships (P^3)

- Began in 2006; now involves 6 employers and ~450 employees (diabetes focused)
- Support from state health department and Maryland legislature
- Patients engaged in **self-management**
- Employers provide benefits and waive co-pays
- Pharmacists deliver care and **coordinate** with providers

P3 Program

- Pharmacist's role
- Have 5 to 7 in-person meetings with patient
- Counsel on Rx adherence and self-management (goal-setting)
- Education patients on Rx, drug interactions
- Coordinate referrals for lab tests or specialists
- Data capture in QARx system
- Benefit and pharmacy benefits administrators provided data on Rx, hospitalization and Rx costs

P3 Results

- Long-term follow-up showed each 1% reduction in A1c was associated with
  - 21% reduction of diabetes-related deaths
  - 14% reduction in MI
  - 37% reduction in microvascular complications
- On average, employers saved $900 per employee per year ($495-$3,281)
- Next: HTN-pilot for Medicaid/Medicare population

Pharmacy TEAM Trial: Improve HTN Among African Americans

- Background

  Pharmacists as a strategy for improving patient adherence and blood pressure control.

- Methods/Results

  Randomized controlled trial step intervention for improving adherence monitoring and intervention.
  28 corporately owned community pharmacies
  576 hypertensive African Americans

- Conclusions

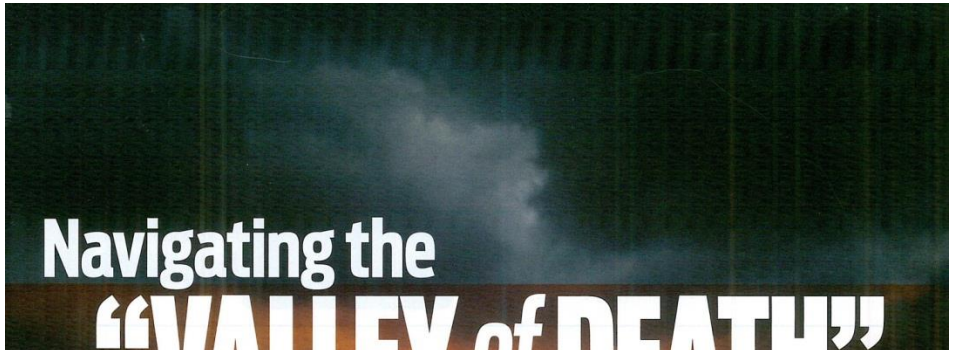
  Pharmacists are an additional means of improving BP control in African Americans.

CAPTION: Collaborative Among Pharmacists - Physicians to Improve Outcomes Now

- 5-year, multi-center, multi-state trial
- Clinical pharmacists review medical records, perform structured interviews, provide wallet card and develop care plan
- In-person patient visits at 1, 2, 4, 6 & 8 months; additional visits if BP remains uncontrolled
- Record activities in web-based database

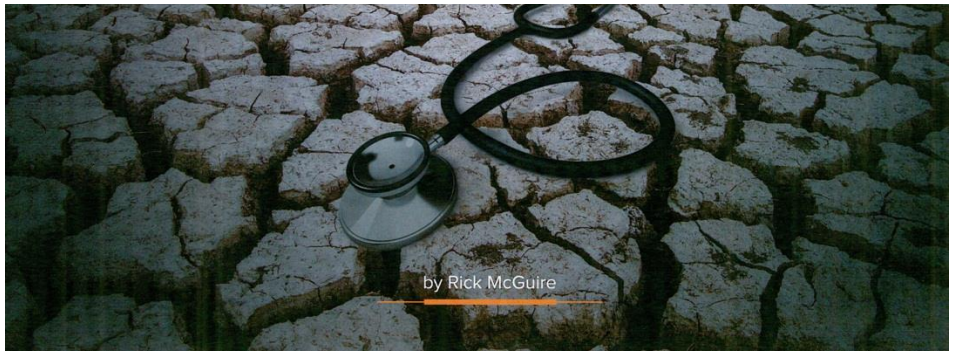
Team-based Practice
Other examples Patient Centered Care

- RN's
- PCP—Cardiologist CHF management
- Work by AMA, ACP and others for PCMH and PCMH-N



Physician's Watch List for 2013 Survey

1. Uncertainty about the ACA
2. Practice consolidation
3. Impact of 30M newly insured patients
4. Decline in physician autonomy
5. Rising administrative burdens



*Humanistic care is **indispensable** to the best therapeutic outcomes and patient experience.*

Team-based Practice

Closing thoughts

- Together we are stronger, potential of more ‘bang for the buck’ re: impact on desired outcomes.
- Achieving these goals has to truly incorporate the “Team” concept
  - Collaboration provides continuity and focus for the long haul Support and sustain
- The human and societal costs of not impacting on common medical problems: increase in more avoidable illness; some may go without chronic disease care completely. Likely poorer outcomes and more cost, morbidity and mortality.