

Maximizing the Contributions of *All* Health Care Professionals

*The Healthcare Imperative: Lowering Costs,
Improving Outcomes*

Roundtable on Evidence-Based Medicine

Institute of Medicine

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“...the needs and preferences of every patient should be met by the health care professional with the most appropriate skills and training to provide the necessary care.”

American College of Physicians, 2009

Key Questions

- What literature substantiates the use of health care professionals (other than physicians) in achieving high value health care?
- What evidence-based models serve as exemplars?
- What barriers to optimizing the contributions of licensed independent practitioners and physicians' assistants have been identified?
- What policy options will maximize their contributions?

Licensed Independent Practitioners (LIPs)

“...Any practitioner permitted *by law and by the organization* to provide care and services, without direction or supervision, within the scope of the practitioner’s license and consistent with individually assigned clinical responsibilities.” (JCAHO, 2005)

Examples of LIPs

- Advanced practice registered nurses (APRNs)
[nurse practitioners, clinical nurse specialists,
nurse midwives, nurse anesthetists]
- Allied Health Professionals [physical therapists,
occupational therapists]
- Pharmacists
- Clinical Social Workers

Nature of the Evidence

- Substantial body of evidence reveals that LIPs and PAs deliver high value health care
- Evidence-base supporting the equivalency and cost effectiveness of NPs and PAs well developed
- Fewer studies on other practitioners' economic impact
- Study of APRNs cost and quality outcomes (Newhouse et al.) under review:
 - review of > 27,000 individual studies
 - summary of 30 outcomes
 - meets standards for systematic review

High Value Demonstrated by NPs Across Multiple Studies

- When compared to physician practices, NP practices reveal equivalent or better ...
 - health status, patient adherence, symptom relief
 - care management
 - patient satisfaction
- Multiple studies comparing NP or physician/NP teams to physician only practices demonstrate decreased health care utilization and costs

Horrocks, S., et al. (2002). Systematic review of whether nurse practitioners working in primary care can provide equivalent care to doctors. *BMJ*; 324:819-23.

American Academy of Nurse Practitioners. Nurse Practitioner Cost-Effectiveness, 2007.

High Value Demonstrated by Nurse Midwives Across Multiple Studies

- Less use of some interventions (e.g., antenatal hospitalization, episiotomy)
- Improved outcomes (e.g., spontaneous vaginal birth)
- No difference in c-section rates
- Infants experience reduced LOS
- Lower average costs

Cost Savings by Physician Assistants

- 12,000+ medical office visits among patients with four primary care diagnoses studied
- PA-managed office visit cost and total cost were less

	Bronchitis				Total cost
Physician	\$133.63*	\$96.42†	\$3.31	\$1.37	\$234.74
PA	\$92.23*	\$125.74†	\$4.65	\$1.50	\$224.13
	Tendinitis				
Physician	\$144.77*	\$30.14	\$7.50	\$0.93	\$183.33†
PA	\$98.77*	\$40.65	\$9.53	\$0.84	\$149.80†
	Otitis media				
Physician	\$140.07*	\$47.77	\$0.0	\$0.54	\$188.39*
PA	\$83.29*	\$52.99	\$0.0	\$0.32	\$136.60*
	Urinary tract infection				
Physician	\$142.73*	\$83.91	\$17.67*	\$17.86†	\$262.17*
PA	\$97.70*	\$91.50	\$5.80*	\$15.48†	\$210.50*
TOTAL NUMBER OF PROVIDERS 12,866					
	Medical office visit	Medication	Imaging	Laboratory	
*Significant at P<.001. †Significant at P<.01.					

Estimated Savings from Increased Use of NPs and PAs in Massachusetts – \$4.2 to \$8.4 Billion

Total Savings, Expand Scope-of-Practice for Nurse Practitioners and Physician Assistants
(in millions)

Category of Spending	Lower-Bound Estimates			Upper-Bound Estimates		
	2010	2010–2015	2010–2020	2010	2010–2015	2010–2020
Total	-\$66	-\$1,601	-\$4,246	-\$130	-\$3,151	-\$8,353
Individual	-\$9	-\$214	-\$567	-\$17	-\$421	-\$1,116
Medicare	-\$16	-\$378	-\$1,003	-\$31	-\$744	-\$1,974
Medicaid	-\$6	-\$145	-\$385	-\$12	-\$286	-\$758
Private	-\$30	-\$730	-\$1,935	-\$59	-\$1,436	-\$3,808
Other	-\$6	-\$134	-\$355	-\$11	-\$263	-\$698

Eibner, C.E., et al. (2009). *Controlling Health Care Spending in Massachusetts: An Analysis of Options*.
Santa Monica, CA: RAND Health.

A Few Exemplars



Advancing Better Living for Elders [ABLE] (OT and PT Home-based Intervention)

In RCT, ABLE resulted in...

- Reduced mortality rates among the older adults with functional difficulties
- Decreased ADL and IADL deficits
- Improved self sufficiency and use of adaptive strategies
- Decreased costs - incremental cost-effectiveness ratio = \$16,000 per QALYs

Gitlin, L.N., et al. (2006). A randomized trial of a multicomponent home intervention to reduce functional difficulties in older adults. *JAGS*;54:809-816.

Jutkowitz, E., et al. (2009, July). Cost-effectiveness of a functional program to increase quality of life in community-dwelling older adults. Poster session presented at the International Association of Gerontology and Geriatrics in Paris, France.

Pharmacist Intervention in Ambulatory Care

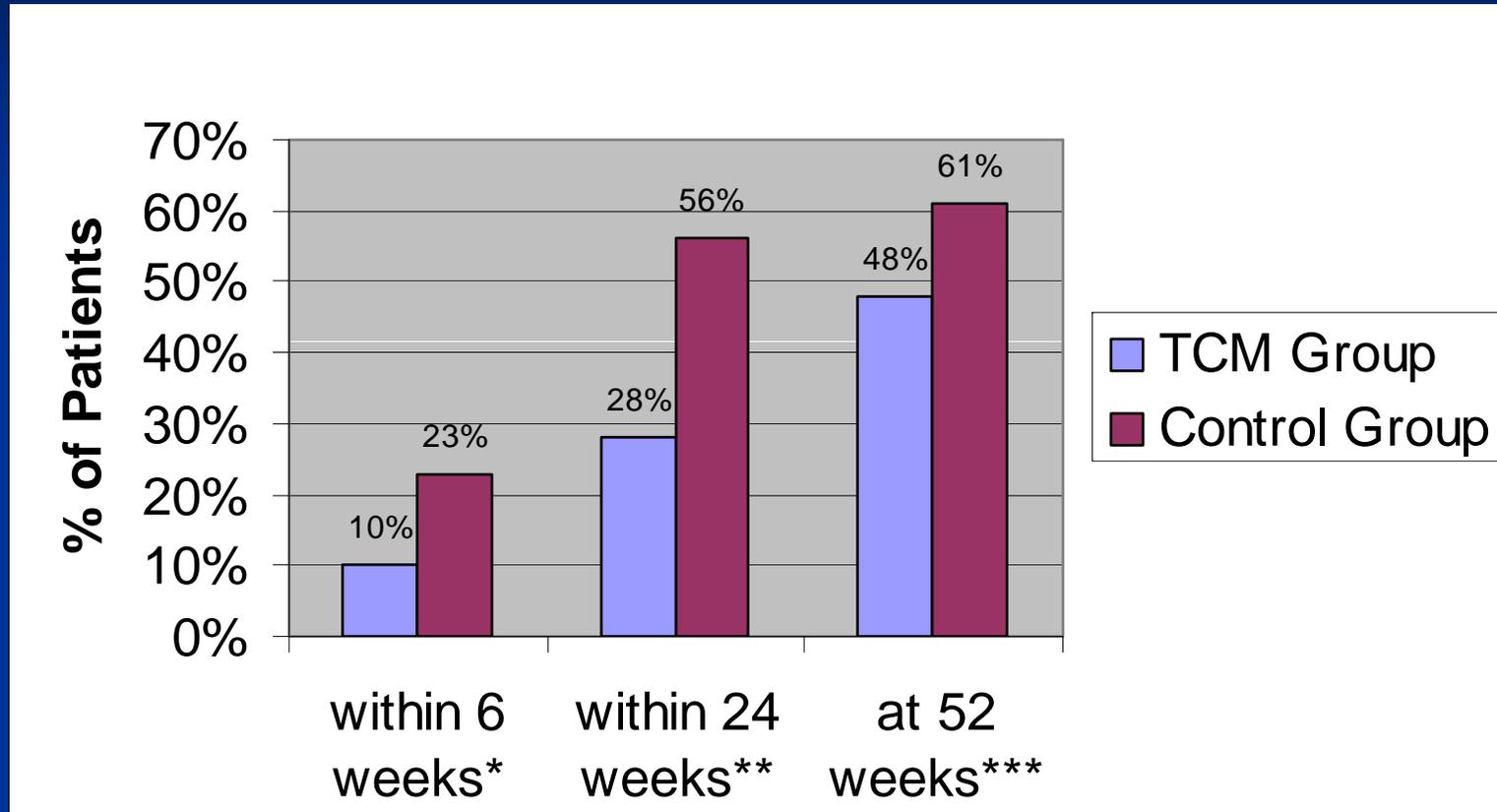
- RCT of adults with HF in university-affiliated, inner city ambulatory care practice
- Compared to usual care...
 - Significant improvements in medication adherence although effects dissipated in post-intervention 3-month follow up period.
 - Fewer ED visits and hospitalizations.
 - Lower annual direct health care costs by nearly \$3,000.

Transitional Care Model [TCM] for High Risk Elders

Across 3 RCTs, an APRN directed intervention has consistently demonstrated...

- Improved physical function and quality of life
- Enhanced patient satisfaction
- Increased time to first rehospitalization
- Decreased total all-cause rehospitalizations
- Decreased total health care costs

TCM Reduced Hospital Readmissions

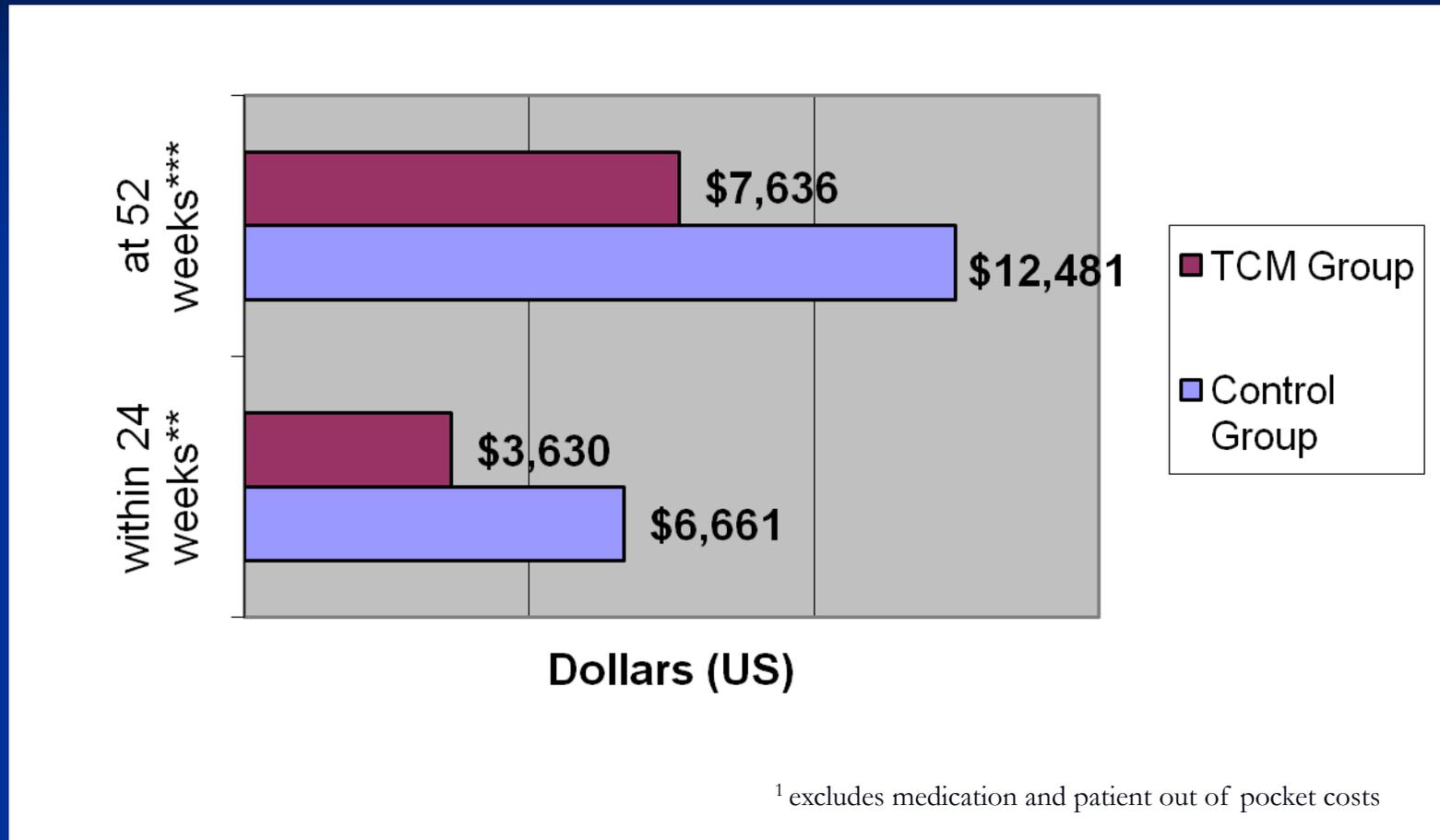


* Naylor, MD, et al. (1994). Comprehensive discharge planning for the hospitalized elderly. *Ann Intern Med*;120:999-1006.

** Naylor, M.D., et al. (1999). Comprehensive discharge planning and home follow-up of hospitalized elders: a randomized clinical trial. *JAMA*;281:613-620.

*** Naylor, M.D., et al. (2004). Transitional care of older adults hospitalized with heart failure: a randomized, controlled trial. *J Am Geriatr Soc*;52:675-684.

TCM Decreased Total Health Care Costs¹



** Naylor, M.D., et al. (1999). Comprehensive discharge planning and home follow-up of hospitalized elders: a randomized clinical trial. *JAMA*;281:613-620.

*** Naylor, M.D., et al. (2004). Transitional care of older adults hospitalized with heart failure: a randomized, controlled trial. *J Am Geriatr Soc*;52:675-684.

Barriers Limiting Appropriate Use of *All* Providers

- Federal and state laws and regulations
- Opposition from health care systems, professional medical groups and managed care organizations
- Reimbursement and other payment policies
- Exclusion from demonstrations proposed as part of health reform

Policy Options

- Promote policies that increase supply of *all* primary care providers and promote interprofessional education and team/collaborative practice
- Advance regulatory reform...
 - Revise state “scope of practice” laws where unnecessarily restrictive
 - Support federal initiatives to use licensed independent practitioners to full scope of practice
- Include *all* qualified providers in testing of proposed system redesign and payment reform demos (e.g., PCMH, ACOs, bundled payments)

Policy Options, cont.

- Support payment reform that...
 - emphasizes the team as the payment unit and reinforces the team's accountability for individual and population health;
 - promotes use of and fairly compensates LIPs by all payers;
 - reimburses high value, evidence-based care (e.g., transitional care).
- Implement and enforce “any willing provider” laws in all states.
- Promote AHRQ/NIH-funded research aimed at assessing the value and comparative effectiveness of innovative care and payment models that rely on LIPs.