

Initiative	Utilization	Prevention & Disease Management	Access	Overall Costs
Air Force (2009-2011) ⁱ	14% fewer emergency department (ED) and urgent care visits ⁱⁱ	Hill Air Force Base (Utah) saved \$300,000 annually through improved diabetes care management 77% of diabetic patients had improved		
		glycemic control at Hill Air Force Base		
Alaska:	50% reduction in urgent care and ER			
Alaska Native Medical Center ⁱⁱⁱ	utilization			
	53% reduction in hospital admissions			
	65% reduction in specialist utilization			
California: BCBS of California ACO Pilot ^{iv}	15% fewer hospital readmissions 15% fewer inpatient hospital stays 50% fewer inpatient stays of 20 days or more			Overall health care cost savings of \$15.5 million
Colorado Colorado Medicaid and SCHIP ^v			Increased provider participation in CHIP program from 20% to 96%	\$215 lower per member per year for children
			Increased well-care visits for children from 54% in 2007 to 73% in 2009	
Florida Capital Health Plan ^{vi}	40% lower inpatient hospital days 37% lower ED visits		250% increase in primary care visits	18% lower health care claims costs
<i>Idaho:</i> BCBS of Idaho Health Service ^{iv}		ROI of 4:1 for disease management programs		\$1 million reduction in single year medical claims
Maryland: CareFirst BCBS ^{vii} BCBS industry report				4.2% average reduction in expected patient's overall health care costs among 60% of practices participating for six or more months Nearly \$40 million savings in 2011
Michigan: BCBS of Michigan	13.5% fewer ED visits among children in PCMH (vs. 9% non-PCMH) 10% fewer ED visits among adults in PCMH (vs. 6.5% non-PCMH) ^{viii} 7.5% lower use of high-tech radiology ^{ix} 17% lower ambulatory-care sensitive inpatient admissions 6% lower 30-day readmission rates ^{iv}			60% better access to care for participating practices that provide 24/7 access (as compared to 25% in non-participating sites) ^{IV}
<i>Minnesota</i> HealthPartners ^x	39% lower ER visits 24% fewer hospital admissions 40% lower readmission rates		Reduced appointment wait time by 350% from 26 days to 1 day. 129% increase in optimal diabetes care	Overall costs decreased to 92% of state average in 2008 ^{xi} Reduced outpatient costs of \$1,282

Nebraska: BCBS of Nebraska (2012) ^{xiii} New Jersey: BCBS of New Jersey (Horizon BCBSNJ) 2012 ^{xiv,xv}	30% lower length of stay 20% lower inpatient costs due to outpatient case management program for behavioral health 10% decrease in diagnostic imaging scans in first year 10% fewer hospitalizations 27% fewer emergency visits 10% lower per member per month (PMPM) costs 26% fewer ED visits 25% fewer hospital readmissions 21% fewer inpatient admissions	8% improvement in HbA1c levels 31% increase in ability to effectively self- manage blood sugar 24% increase in LDL screening 6% increase in breast and cervical cancer	48% increase in optimal heart disease care.	for patients using 11 or more medications ^{xii}
New York Capital District Physicians' Health Plan (Albany, N.Y.) 2008-2010	5% increase in use of generic prescriptions 24% lower hospital admissions 9% lower overall medical cost	screening		Savings of \$32 PMPM
New York Priority Community Healthcare Center Medicaid Program (Chemung County, N.Y.) 2010 - 2011xvii	Reduced hospital spending by 27% and ER spending by 35%			Cost savings of 11% overall in first 9 months of approximately \$150,000
North Carolina Blue Quality Physician's Program (BCBSNC) 2011***	52% fewer visits to specialists 70% fewer visits to the ER			
North Carolina Community Care of North Carolina (Medicaid) ^{XIX}	23% lower ED utilization and costs 25% lower outpatient care costs 11% lower pharmacy costs Estimated cost savings of: \$60 million in 2003 \$161 million in 2006 \$103 million in 2007 \$204 million in 2008 \$295 million in 2009 \$382 million 2010 ^{xx}	Improvements in asthma care 21% increase in asthma staging		112% increase in influenza inoculations
North Dakota BCBS of North Dakota – MediQHome Quality Program 2012**	6% lower hospital admissions 24% fewer ED visits 18% lower inpatient hospital admission rates compared to general N.D. population	30% lower ED use among patients with chronic disease 6.7% improvement in BP control 10.3% improvement in cholesterol control 64.3% improvement in optimal diabetes care. Better coronary artery disease management 8.6% improvement in BP control 9.4% improvement in cholesterol control 53.8% improvement in optimal diabetes control Better care for hypertension 8% improvement in blood pressure control		

Ohio:	34% decrease in ER visits	22% decrease in patients with uncontrolled		
		blood pressure		
Humana				
Queen City Physicians ^{xxi} Oklahoma Oklahoma Medicaid ^{xxii}			Reduction from 1,670 to 13 patient inquiries related to same-day/next-day appointment availability 8% increase in patients "always getting treatment quickly."	Reduced per capita member costs by \$29 per year
Oregon Bend Memorial Clinic & Clear One Medicare Advantage ^{xxiii}	Lower hospital admission rates 231.5 per 1000 beneficiaries (compared to state/national averages of 257 and 351 per 1000, respectively). Lower ER visit rates 242 per 1000 beneficiaries (compared to state/national averages of 490 and 530 per 1000, respectively).			
Oregon CareOregon Medicaid		Better disease management among diabetics in one clinic 65% had controlled HbA1c levels vs. 45% pre-PCMH ^{xxiv}		9% lower PMPM costs by \$89 ^{xxvi} Reduced PMPM costs by \$89 ^{xxvi}
Pennsylvania Geisinger Health System ^{xxvii,xxviii}	Reduced hospital length of stay by half a day 25% lower hospital admissions 50% lower readmissions following discharge 18% reduced inpatient admissions	Improved quality of care 74% for preventive care 22% for coronary artery care 34.5% for diabetes care: ^{xxix}		Longer exposure to medical homes resulted in lower health care costs: 7.1% lower cumulative cost savings (from 2006 to 2010) with an ROI of 1.7 ^{oox} 7% lower cumulative total spending (from 2005 to 2008) ^{ooxi}
Pennsylvania UPMC ^{xxxii} (Pittsburgh, PA) 2011	13% fewer hospitalizations by 2009 Medical costs nearly 4% lower	Improved patient outcomes for diabetics: Increases in eye exams from 50% to 90% 20% long-term improvement in control of blood sugar 37% long-term improvement of cholesterol control		
Pennsylvania: Independence Blue Cross— Pennsylvania Chronic Care Initiative (Southeast Pennsylvania) 2012 ^{xv}		49% improvement in HbA1c levels 25% increase in blood pressure control 27% increase in cholesterol control 56% increase in patients with self- management goals Increased diabetes screenings from 40% to 92%		
Pennsylvania PinnacleHealth (2012) ^{xxxiii}	0% 30-day hospital readmission rate for PCMH patients vs. 10-20% for non-PCMH patients			
Rhode Island BCBS of Rhode Island (2012)**	17-33% lower health care costs among PCMH patients	Improved quality of care measures 44% for family & children's health 35% for women's care 24% for internal medicine		
South Carolina BCBS of South Carolina 2012**	14.7% lower inpatient hospital days 25.9% fewer ED visits			6.5% lower total PMPM medical and pharmacy costs

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Tennessee		3% for diabetes exams		
BCBS of Tennessee (2012) ^{xv}		7% for diabetes retinal exams 14% for diabetes nephropathy exams		
_	200/1	4% for lipid exams		
Texas	23% lower readmission rates			
7000 ST (2010)	\$1.2 million estimated health care cost			
BCBS of Texas (2012) ^{iv}	savings			
Texas		Increased control of HbA1C levels from		1
- www.		81% to 93% of diabetes patients		
WellMed Inc.xxxiv		Increased LDL levels under control, from		
(San Antonio, Tex.)		51% to 95%, for heart disease patients		
		Increased control of BP levels from 67% to		
		90%		
		ncreased screening rates for		
		mammography from 19% to 40%		
		Increased screening rates for colon cancer		
		from 11% to 50%		
		Improved diabetes HbA1c testing from 55%		
		to 71%		
		LDL screenings for all patients increased		
		from 47% to 70%		
		LDL screenings for diabetic patients		
		increased from 53% to 78%		
		LDL screenings for ischemic heart disease		
		patients increased from 53 to 76%.		
		BP screening rates for all patients increased		
		from 38 to 76%		
		BP screenings for high BP patients		
		increased from 46 to 88%.		
Vermont	27% reduction in projected cost avoidance			
	across its commercial insurer population			
Vermont Blueprint for Health				
(2012) ^{xxxv}				
Vermont	21% decreased inpatient utilization			
	22% lower PMPM inpatient costs			
Vermont Medicaid ^{xxxvi}	31% lower ED use			
	36% lower PMPM ED costs			
2008-2010				
Veterans Health Administration	8% lower urgent care visits	27% lower hospitalizations and ED		
and VA Midwest Healthcare	4% lower acute admission rates by 4% xxxxvii	visits among chronic disease patients		
Network (VISN 23)		\$593 per chronic disease patient cost		
2012		savings ^{xxxviii}		
Washington		14.8% improved patient-reported		20% lower health care costs
g-0		physical function and mental function		2070 10 1701 11001011 0010 00000
Regence Blue Shield (Intensive		65% reduced patient reported missed		
Outpatient Care Program with		workdays		
Boeing) 2012 ^{iv}				
Washington	29% fewer ED visits	18% reduction in use of high-risk	83% of patient calls resolved on the first	Cost savings of \$17 PMPMxliii
•		medications among elderly	call compared to 0% pre-PCMH ^{xlii}	\$4 million in transcription cost savings
Group Health of Washington ^{xxxix,xl,xli}	11% fewer hospitalizations for ambulatory care-sensitive conditions	36% increase in use of cholesterol-lowering	can compared to 0% pre-PCIVIT	
2009, 2010 ⁷	care-sensitive conditions			through the use of EHRs
2009, 2010		drugs		\$2.5 million in cost savings through
		65% increase in use of generic statin drug		medical records management
		Improved quality of care:		\$3.4 million in cost savings through
		Composite measures increased by 3.7% to		medication use management

	4.4% Improved provider satisfaction: Less emotional exhaustion reported by staff (10% PCMH vs. 30% controls)	program 40% cost reduction through use of generic statin drug
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Green, C. B. (2011, May 11). FY 2012 Medical Programs. Statement of Lieutenant General (Dr.) Charles B. Green. Testimony Before the House Appropriations Committee, Subcommittee on Defense. United States Air Force.

http://www.ihi.org/knowledge/Pages/ImprovementStories/ReportfromTallahasseeMemorialHospitalonEnhancingContinuityofCare.aspx

xviii Chemung County Government. (2011, April 18). Medicaid Medical Home Realizing Positive Results in First Year. Retrieved April 16, 2012, from Chemung County News: http://www.chemungcounty.com/index.asp?pageid=105&nid=650

http://www.commonwealthfund.org/~/media/Files/Publications/Case percent20Study/2010/Jul/Triple percent20Aim percent20V2/1423 McCarthy CareOregon triple aim case study v2.pdf

xxvi Ibid.

ii Arvantes, J.: U.S. Military Focuses on Patient Care by Implementing PCMH Model.

Asinof, R. (2012, May 28). A new model of health care. Retrieved June 14, 2012 from Providence Business News: http://www.pbn.com/A-new-model-of-health-care,67796

iv Blue Cross Blue Shield Association. (2012) Building Tomorrow's Healthcare System.

^v Takach: Reinventing Medicaid.

vi Institute for Healthcare Improvement. (2012). Report from Tallahassee Memorial HealthCare on Enhancing Continuity of Care. Retrieved April 12, 2012, from IHI Knowledge Center:

vii Sun, L.: CareFirst says experimental program improves primary care.

Sammer, J. (2011, December 1). Medical homes move from pilots to real-world implementation. Retrieved April 30, 2012, from Managed Healthcare Executive: http://managedhealthcareexecutive.modernmedicine.com/mhe/News+Analysis/Medical-homes-move-to-real-world-implementation/ArticleStandard/Article/detail/750641

 $^{^{\}mbox{\scriptsize ix}}$ BCBS of Michigan: Patient-Centered Medical Home Fact Sheet.

^{*} HealthPartners. (2009). HealthPartners BestCare: How to Deliver \$2 Trillion in Medicare Cost Savings, and Improve Care in the Process. Retrieved April 16, 2012, from HealthPartners: http://www.healthpartners.com/files/47979.pdf

xi Grumbach, K., Bodenheimer, T., & Grundy, P. (2009, August). The Outcomes of Implementing Patient-Centered Medical Home Interventions: A Review of the Evidence on Quality, Access and Cost from Recent Prospective Evaluation Studies. Retrieved April 16, 2012, from Patient Centered Primary Care Collaborative: http://www.pcpcc.net/files/Grumbach_et-al_Evidence-of-Quality_percent20101609_0.pdf

xii Flottemesch, T., Fontaine, P., Asche, S., Solberg, L. (2011). Relationship of Clinic Medical Home Scores to Health Care Costs. Journal of Ambulatory Care Management. 34(1): 78-79.

xiii Reutter, H. (2012, April 2). Medical Home: Better Health at Same or Reduced Cost? Retrieved April 16, 2012, from Lexington Clipper-Herald: http://lexch.com/news/statewide/article_33fc4628-7cca-11e1-ae83-001a4bcf887a.html

xiv Horizon Healthcare Innovations. (2012, April 10). Early Results Show Patient-Centered Medical Homes Drive Quality and Cost Improvements. Retrieved April 16, 2012, from News & Media: http://www.horizonhealthcareinnovations.com/news-media/press-releases/20120410-early-results-show-patient-centered-medical-homes-drive-quality-a?utm_source=Patient+Centered+Primary+Care+Collaborative+List&utm_campaign=3629b33e8b-Thursday+Call+March+1&utm_

xv BCBSA: Patient-Centered Medical Home Snapshots.

xvi CDPHP. (2011, March 22). CDPHP Medical Home Pilot Results in Substantial Quality Improvements and Cost Savings. Pilot Practices Cost Growth Reduced to 2/3 That of Other Regional Providers. Retrieved April 12, 2012, from Vocus/PRWEB: http://www.prweb.com/releases/CDPHP/medical home pilot/prweb8224444.htm

wiii Blue Cross and Blue Shield Association. (2012, June 4). Blue Cross and Blue Shield Companies' Patient-Centered Medical Home Programs Are Improving The Practice and Delivery of Primary Care in Communities Nationwide. Retrieved June 14, 2012, from PRNewswire: http://www.marketwatch.com/story/blue-cross-and-blue-shield-companies-patient-centered-medical-home-programs-are-improving-the-practice-and-delivery-of-primary-care-in-communities-nationwide-2012-06-04

xix Steiner, B. D., Denham, A. C., Ashkin, E., Newton, W. P., Wroth, T., & Dobson, L. A. (2008, July/August). Community Care of North Carolina: Improving Care Through Community Health Networks. Annals of Family Medicine, 6(4), 361-367.

xx Mahoney, P. (2011, December 21). Our Results: Making headway on cost and quality. Retrieved April 30, 2012, from Community Care of North Carolina: http://www.communitycarenc.com/our-results/

xxii Carey, M.A. (2012, May 17). Senate Panel Looks at Innovative Health Care Strategies. Retrieved June 14, 2012 from Kaiser Health News: http://capsules.kaiserhealthnews.org/index.php/2012/05/senate-panel-looks-at-some-innovative-health-care-strategies/

Takach, Mary. (2011, July 7). Reinventing Medicaid: State Innovations to Qualify and Pay for Patient-Centered Medical Homes Show Promising Results. Health Affairs, 30(7):1325-34.

will Bend Memorial Clinic. (2012, January 4). Bend Memorial Clinic Reduces Hospital Admissions and Emergency Visits. Retrieved April 30, 2012, from Bend Memorial Clinic: http://www.bendmemorialclinic.com/aboutus/bmc_in_the_news/newsblog/12-01-04/BMC_reduces_hospital_admissions_and_emergency_room_visits_through_Medical_Home_Pilot.aspx

willer, J. (2009, May 1). Unlocking Primary Care: CareOregon's Medical Home Model. Retrieved April 12, 2012, from Managed Healthcare Executive: http://managedhealthcareexecutive.modernmedicine.com/mhe/article/articleDetail.jsp?id=595822 xiv Klein, S., & McCarthy, D. (2010, July). CareOregon: Transforming the Role of a Medicaid Health Plan from Payer to Partner. Retrieved April 16, 2012, from The Commonwealth Fund:

xxviii Steele, G. D. (2009). Reforming the Healthcare Delivery System. Committee on Finance: United States Senate (pp. 1-7). Washington, D.C.: Geisinger Health System

xxxviii Grumbach, et al: The Outcomes of Implementing Patient-Centered Medical Home Interventions: A Review of the Evidence on Quality, Access and Cost from Recent Prospective Evaluation Studies.

xxix Geisinger Health System. (2009). Advanced Models of Primary Care. White Roundtable. Washington, D.C.: Geisinger Health System.

xxx Maeng, et al.: Reducing Long-Term Costs.

xxxii Gilfillan, R., Tomcavage, J., Rosenthal, M., Davis, D., Graham, J., & Roy, J. e. (2010). Value and the Medical Home: Effects of Transformed Primary Care. American Journal of Managed Care, 16(8), 607-614.

xxxiii Mamula, K. B. (2011, May 20). UPMC expands medical home model. Retrieved April 30, 2012, from Pittsburgh Business Times: http://www.bizjournals.com/pittsburgh/print-edition/2011/05/20/upmc-expands-medical-home-model.html?page=all xxxiii Pinnacle Health Hospitals. (2012, June 1). PinnacleHealth Expands Patient-Centered Medical Home Model. Retrieved June 14, 2012 from PinnacleHealth News: http://www.pinnaclehealth.org/General/About-Us/News/PinnacleHealth-News-Releases/PinnacleHealth-Expands-Patient-Centered-Medical-Ho.asox

Non-Work Phillis, R. L., Bronnikov, S., Petterson, S., Cifuentes, M., Teevan, B., Dodoo, M., . . . West, D. R. (2010, Jan-Mar). Case Study of a Primary Care-Based Accountable Care System Approach to Medical Home Transformation. Journal of Ambulatory Care Management, 34(1), 67-77.

XXXV Ibid

xxxxii Takach, Mary. (2011, July 7). Reinventing Medicaid: State Innovations to Qualify and Pay for Patient-Centered Medical Homes Show Promising Results. Health Affairs, 30(7):1325-34.

xxxviii Arvantes, J.: U.S. Military Focuses on Patient Care by Implementing PCMH Model.

xxxxiii Grumbach and Grundy: Outcomes of Implementing Patient Centered Medical Home Interventions: A Review of the Evidence from Prospective Evaluation Studies in the United States.

XXXIX Reid, R. J., et al.: A patient-centered medical home demonstration.

xl McCarthy, D., Mueller, K., & Tillmann, I. (2009, July). Group Health Cooperative: Reinventing Primary Care by Connecting Patients with a Medical Home. Retrieved April 16, 2012, from The Commonwealth Fund: http://www.commonwealthfund.org/~/media/Files/Publications/Case percent20Study/2009/Jul/1283_McCarthy_Group percent20Health_case_study_72_rev.pdf

^{xli} Reid, R. J., et al.: A patient-centered medical home demonstration.

xilii Meyer, H. (2010, May/June). Group Health's Move to the Medical Home: For Doctors, it's Often a Hard Journey. *Health Affairs*, 29(5), 844-51.

xiiii Grumbach, et al: The Outcomes of Implementing Patient-Centered Medical Home Interventions: A Review of the Evidence on Quality, Access and Cost from Recent Prospective Evaluation Studies.