

Online Supplementary Material

McNellis RJ, Genevro JL, Meyers DS. Lessons learned from the study of primary care transformation. *Ann Fam Med.* 2013;11(Suppl 1):S1-S5.

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Supplemental Table 1. Characteristics of the 14 Projects							
Authors	Study Design	Practice Type	Practices, No.	Location	Timeframe	Transformational Elements	Project Title, Principal Investigator, and Affiliation
Alexander et al ¹	Validation of self-assessment tool	Primary care (60% solo practices)	2,494 Participating in program, 820 site visited	Michigan	First year of data collection was 2008, site visits done between 2009 and 2012	Practice facilitation, validation of capability reporting	Multi-Method Evaluation of Physician Group Incentive Programs for PCMH Transition; Christopher G. Wise, PhD, MHA; University of Michigan at Ann Arbor
Berry et al ²	Administrative data and practice assessment survey	Small, independent primary care practices, two-thirds were solo practices	94 Practices	New York City	Initiative rollout in 2005, survey administered in summer 2012	Larger program provided direct assistance in implementing EHR, quality improvement coaching and support in applying for NCQA recognition	Health Care Transformation Among Small Urban Practices Serving the Underserved; Carolyn A. Berry, PhD, MA; Center for Healthcare Strategies, Inc

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Authors	Study Design	Practice Type	Practices, No.	Location	Timeframe	Transformational Elements	Project Title, Principal Investigator, and Affiliation
Calman et al ³	Natural experiment, pre-post design	Community health center network	8 Practices	New York	2003-2009; PCMH implementation in 2007	EHR; teams; registries/population health; patient visit summaries; diabetes educators; targeted outreach; group visits	A Study of the Patient-Centered Medical Home: Lessons From a New York State Community Health Center Network; Neil S. Calman, MD, MA; Institute for Urban Family Health
Day et al ⁴	Correlational study with mixed methods; medical record audits, administrative reports, direct observation, clinical quality measures, patient and clinician satisfaction, operational data	University-owned primary care clinics, family medicine and pediatrics, in urban, suburban, and rural settings	10 Clinics	Utah	Initiative in place since 2003, assessments were conducted between 2008 and 2011	Focus on improved access for patients, expanded use of teams, and enhanced continuity and integration of care; EHR	Transformed Primary Care by Design; Michael K. Magill, MD; University of Utah Community Clinics
Dohan et al ⁵	Mixed methods case study, semistructured interviews with staff and administrators	Large nonprofit multispecialty group practice	17 Primary care practices, 10 of which were NCQA certified	Northern California	NCQA recognition achieved between 2007 and 2010, data collection post-2010	Focus on patient-centeredness and process improvement; invested in EHRs, institutionalized quality reporting, same-day access, shared medical appointments, and personal health records	Primary Care Transformation in a NCQA Certified Patient-Centered Home; Ming Tai-Seale, PhD, MPH; Palo Alto Medical Foundation Research Institute
Donahue et al ⁶	Mixed methods, using quality improvement data and focus groups	Primary care practices participating in the program	76 For quantitative data collection, 12 for focus groups	North Carolina	Initiative started in 2005, baseline data collection beginning in February 2008, focus groups in April 2011-May 2012	Reporting of population-level quality measures, documentation of changes in care delivery, quarterly collaborative dinners, and community-based practice coaches	Transforming Primary Care Practices in North Carolina; Katrina E. Donahue, MD, MPH; University of North Carolina Chapel Hill

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Driscoll et al ⁷	Mixed methods: basic time series analysis; aggregate medical record data—service use; semistructured interviews	Tribally owned and managed primary care system, family and pediatric practices	Not reported	Southcentral Alaska	Initiative rollout in 1999, NCQA recognition in 2010, trend analysis 1996-2009	Implementation of Nuka System of Care: empanelment, open access, team-based care	Transforming Primary Care Practice; David L. Driscoll, PhD, MPH, MA; University of Alaska Anchorage
Gabbay et al ⁸	Mixed methods: clinical performance measures, survey of structural capabilities, survey of burnout and adaptive reserve, and semistructured interviews	Adult primary care, diverse in size, population served, payer mix, staffing and governance	25 NCQA-recognized PMCHs	Pennsylvania	Initiative rollout in May 2008, baseline measures from June 2008 to February 2009, structural survey August through October 2010 and May through July 2011, staff survey December 2010 and May 2011, interviews conducted January through June 2011	Multidisciplinary improvement teams, quarterly learning collaborative meetings, care management for high-risk patients, practice facilitation support, monthly registry-based reporting, lump-sum payments, NCQA recognition	A Multi-Payer Patient Centered Medical Home Initiative in Pennsylvania; Robert A. Gabbay, MD, PhD; Hershey Medical Center, Pennsylvania State University
McAllister et al ⁹	Mixed methods: Medical Home Index; adaptive reserve survey; semistructured interviews	Pediatric primary care practices, varied in size, ownership, and setting	12 High-performing medical home learning collaborative practices	Connecticut, Pennsylvania, Ohio, Michigan, Minnesota, North Carolina, Utah, Texas, Illinois	Medical Home Learning Collaboratives 2003-2004; study of practices 2010-2011	Ongoing quality improvement; family-centered care with families as improvement partners, teamwork and development of care coordination capacity	Medical Home Transformation in Pediatric Primary Care – What Drives Change? William C. Cooley, MD; Crotched Mountain Foundation, Inc
McMullen et al ¹⁰	Ethnographic case study; in-depth interviews with organizational leaders, direct observation of practices	Metropolitan, safety net clinics, mostly FQHCS	6 Practices	Oregon	Initiative rollout in 2006, interviews conducted 2010-2012	Learning collaborative; payor-incentivized PCMH implementation; Lean approach	Transformation to Patient-Centered Medical Home in CareOregon Clinics; Richard T. Meenan, PhD, MPH, MBA; Kaiser Foundation Research Institute

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Reid et al ¹¹	Interrupted time series analysis with nonequivalent comparison group	Nonprofit integrated consumer-governed health insurance plan and care delivery system	26 Owned and operated practices, all with NCQA recognition	Washington and northern Idaho	January 2008-December 2011: 1-year baseline, 1- year implementation; 2- year stabilization follow-up period	Lean approach, multidisciplinary teams, Integrated EHR, evidence-based practice guidelines and a quality team, consulting nurse service-after hours care, complex case management program, increased use of virtual visits, reduced panel sizes, longer face-to-face visit times	Transforming Primary Care: Evaluating the Spread of Group Health's Medical Home; Robert J. Reid, MD, PhD, MPH; Group Health Cooperative
Rittenhouse et al ¹²	Integrated mixed method comparative study; semiannual interviews with clinical leaders, individual and group interviews with staff, Medical Home Index score	Adult and pediatric primary care, diverse ownership and affiliation, serving mostly minority and uninsured patients	5 NCQA-recognized PCMHs	New Orleans, LA	NCQA recognition in 2008, leader interviews 2008-2010, staff interviews 2010-2012, process measures 2008-2010	Expanded patient access and NCQA recognition, variation between clinics	Transforming Primary Care Practice: Lessons From the New Orleans Safety-Net; Diane R. Rittenhouse, MD, MPH; University of California San Francisco
Scholle et al ¹³	Survey of lead physicians	Small primary care practices (with <5 physicians)	249 NCQA-recognized Level 1 and 3 practices	23 States	2011	Varied, most participated in demonstration or pilot programs, received financial rewards, received staff training, and practice consultations	Understanding the Transformation Experiences of Small Practices With NCQA's Medical Home Recognition; Sarah H. Scholle, DrPH, MPH; NCQA
Solberg et al ¹⁴	Quasi-experimental precertification and postcertification as well as cross-sectional analysis postcertification	Adult primary clinics certified as health care homes, and noncertified primary care clinics	120 Health care homes (728 total primary care practices)	Minnesota	Certification process began in January 2010, study enrollment in October 2011, performance measurement in 2008-2010	Certification standards included continuous access and communication, use of an electronic registry, care coordination, care plans, and continuous improvement	Evaluating Statewide Transformation of Primary Care to Medical Homes; Leif I. Solberg, MD; Health Partners Research Foundation

NCQA = National Committee for Quality Assurance; PCMH = patient-centered medical home; EHR = electronic health record.

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