The Medical Home and Population Health Improvement: Common Ground

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The Care Continuum Alliance

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Executive Summary

The Patient-Centered Medical Home (PCMH) and population-based disease management (population health improvement) strategies share many common features. Further, as both approaches to chronic illness have matured, the areas of overlap have increased. DMAA: The Care Continuum Alliance believes that this overlap and the relative strengths of these two care strategies can lead to pilot programs and other initiatives that *combine* the PCMH and population health improvement. The merits of a combined approach become apparent when the elements of the National Committee for Quality Assurance's (NCQA) Physician Practice Connections® — Patient-Centered Medical Home (PPC-PCMH™) recognition are compared side by side with the criteria used by NCQA Disease Management Accreditation.

The NCQA PPC-PCMH recognition program scoring process is very dependent on information technology (IT) resources in a physician office. Pending future modification of the PPC-PCMH program, this emphasis on IT may place it out of reach of the large number of smaller primary care practices that have not invested in electronic records. In contrast, disease management organizations offer primary care practices considerable IT-based resources, which the PPC-PCMH recognition program does not explicitly recognize. This analysis suggests that adoption of a typical disease management organization's IT process could theoretically fulfill more than half the points necessary to achieve PPC-PCMH recognition.

Outside of IT, the NCQA PPC-PCMH recognition program has many other areas of overlap with NCQA Disease Management Accreditation. An attached table and commentary compares each of the mutual elements and standards, illustrating the considerable similarities. Because of this common ground, DMAA believes that a physician practice that fully integrates an NCQA-accredited disease management program in its clinical operations also meets a significant number of the standards set forth in the NCQA PPC-PCMH recognition process. This not only points to many of the complementary similarities between population health improvement strategies and the PCMH, it also represents an important opportunity to further evaluate the merits of combined population health improvement-PCMH approaches to the care of populations with chronic illness.

DMAA believes these commonalities and complementary strengths demonstrate the convergence, rather than competition, of these approaches to care coordination and management. DMAA is conducting additional research to further underscore these strengths and to identify additional important resources for the physician and health care practitioner communities.

History of the Chronic Care Model, the Medical Home and the Patient-Centered Medical Home

Approximately 10 years ago, physicians at Group Health Cooperative of Puget Sound described a novel model of health care for people with chronic illness grounded in active patient-physician collaboration.[1] This model included: 1) collaborative provider-patient agreement on the active medical problems, 2) mutually agreed-upon goal setting and planning, 3) provision of patient self-management training and support services, and 4) active and sustained follow-up. This model formed the basis for the development of the Chronic Care Model (CCM), which consists of six mutually supportive features: 1) patient self-management support, usually relying on non-physician personnel and theories of adult learning; 2) use of computerized systems with patient databases, reminders and data feedback; 3) office system re-design with reliance on teaming and appropriate division of labor; 4) decision support through the use of guidelines; 5) health care organization support, including appropriate reimbursement; and 6) active linkages to community resources.[2, 3] Many studies that evaluate the impact of interventions incorporating one or more features of the CCM have shown improvements in clinical outcomes and lower cost.[4]

In retrospect, many of the principles developed at Puget Sound had been previously endorsed by the American Academy of Pediatrics (AAP) in 1967, when policy was adopted stating all information and care for children with chronic illness should be focused in one clinical setting.[5] This was clarified in 2002, when the AAP described the ''Medical Home'' (MH) that, among many things, should be physically and financially accessible, ensure effective communication and address children's educational, developmental and psychosocial needs.[6] That same year, seven organizations representing family practice physicians launched the Future of Family Medicine Project that combined many of the principles in the CCM and espoused by the AAP.[7] In 2006, the American College of Physicians (ACP) released a policy statement supporting a broadened concept of an ''Advanced'' or ''Patient-Centered Medical Home'' (PCMH).[8] Many of these principles were subsequently adopted by other primary care physician groups in a joint consensus statement.[9] A health care purchaser-led coalition of employers, insurers, physician groups and others soon followed, advocating use of the PCMH as a means of promoting quality for people with chronic illness and revitalizing primary care practice.[10]

The ACP's PCMH incorporates the elements of the medical home and underlying chronic care model in its seven guiding principles: 1) quality and safety with evidence-based practice and patient participation in decisionmaking; 2) care coordination and integration through information technology support, registries and health information exchanges, as well as inclusion of the health care system and community; 3) physician-directed medical practice with teaming and delegation of responsibilities; 4) appropriate payment; 5) the provision of relationship with a personal physician; 6) enhanced access with expanded hours, open scheduling and remote communication; and 7) the expansion of the MH model in a whole person orientation that includes not only chronic illness, but also prevention, acute or episodic illness and end of life care.

Interested in demonstrating the value of the PCMH, the AAFP has launched the TransforMED initiative, which is piloting versions in practice settings nationwide.[11] Many commercial insurers, managed care organizations and employers have followed suit.[12, 13, 14, 15, 16] This momentum has been aided by the support of the highly respected Robert Wood Johnson Foundation (through ''Improving Chronic Illness Care''), the Institute for Healthcare Improvement and The Commonwealth Fund.[17, 18, 19] Also, in December 2007, Congress approved a Medicare demonstration based on a version of the PCMH; the federal Centers for Medicare and Medicaid Services is expected to launch this demonstration in 2010.[20]

History of Disease Management and NCQA Accreditation

At about the same time as the emergence of the medical home, peer-reviewed publications about disease management were launched.[21] Often provided by for-profit companies contracting with managed care organizations, the disease management or population health improvement care approach uses direct outreach to patients who are typically identified by an insurance claims profile consistent with past treatment for a chronic disease, such as diabetes, chronic heart failure or asthma. These disease management providers, as well as health insurers, pharmaceutical companies and other entities involved in the provision of these services, founded the Disease Management Association of America (now DMAA: The Care Continuum Alliance) in 1999. At that time, DMAA created a definition of disease management with six features: 1) identifying a population with a chronic illness; 2) promoting the use of evidence-based practice guidelines; 3) achieving collaborative practice with other providers caring for the patient; 4) enabling patients to self-manage their condition; 5) supporting process and outcomes measurement, evaluation, and management; and 6) routine reporting/feedback loop.[22] This definition required that all six features be present to constitute a fully functional disease management program. Like the medical home, studies demonstrated a positive impact of disease management on the quality and cost of health care.[23,24,25]

The DMAA definition formed much of the basis for the NCQA accreditation program for organizations offering disease management programs. Most commercial- and managed care-sponsored disease management programs have now attained accreditation under the program, which NCQA launched in 2003. In addition to accreditation, certification also is offered for organizations that provide specific disease management functions but not comprehensive programs.[26,27] Accreditation can be "patient-oriented," "practitioner-oriented" or "both," the latter involving 32 standards. These standards fall into six categories: 1) Program Content, 2) Patient Service, 3) Practitioner Service, 4) Clinical Systems, 5) Measurement and Quality Improvement, and 6) Program Operations.[28] In addition to the NCQA, URAC and The Joint Commission sponsor similar accreditation programs in disease management.

These programs have continued to evolve and expand since 1999, and the term "disease management" no longer encompasses all the elements of total population-based care, such as wellness and health prevention efforts. As such, in December of 2007, DMAA adopted the "Population Health Improvement Model," consisting of:

- population identification strategies and processes;

- comprehensive needs assessments that assess physical, psychological, economic, and environmental needs;

- proactive health promotion programs that increase awareness of the health risks associated with certain personal behaviors and lifestyles;

- patient-centric health management goals and education which may include primary prevention, behavior modification programs, and support for concordance between the patient and the primary care provider;

- self-management interventions aimed at influencing the targeted population to make behavioral changes;

- routine reporting and feedback loops which may include communications with patient, physicians, health plan and ancillary providers; and

- evaluation of clinical, humanistic, and economic outcomes on an ongoing basis with the goal of improving overall population health.[29]

While DMAA has broadened its focus to one of population health, the NCQA accreditation program has, for now, retained its focus (and nomenclature) on "disease management."

The Advent of the NCQA Certification Program in the Patient-Centered Medical Home and the Emphasis on IT

In 2007, in response to growing interest in the PCMH, the NCQA released the Physician Practice Connections® — Patient-Centered Medical Home (PPC-PCMH) Recognition Evaluation Process.[30] The PPC-PCMH program is designed to assess physician practice efforts to function as medical homes. It relies on a self-scoring methodology using a Web-based survey tool and requires additional supporting documentation. There are 30 elements of evaluation, with weighting that varies from one to seven points within a total of nine Standard clusters that total 100 points (see Figure 1). Ten of the 30 elements are considered "must pass." NCQA also plans to conduct additional onsite audits for at least 5 percent of practices submitting, including a review of the original documentation and medical records. Practices that do not pass with at least 25 points or at least five "must pass" elements are not publicly reported. Depending on the total number of points and how many of the "must pass" elements are achieved, physician practices may achieve a Level 1 status (25-49 points with at least five of the 10 "must pass" elements), Level 2 (50-74 points with all 10 "must pass" elements) or Level 3 (75-100 points with all 10 "must pass" elements).[31]

Review of the evaluation process reveals a significant emphasis on information technology (Fig. 1). For example, within Standard 2, "Patient Tracking and Registry Functions," there is an explicit reliance on extracting and assembling data, clinical information and lists with 21 points, accounting for more than 20 percent of the total possible score. There are also eight points devoted to "electronic prescribing" within Standard 5, six points in Standard 6 contingent on using "electronic systems" to manage testing, one point for electronically transmitting reports to external entities in Standard 8 and four points devoted to all the Standard 9 "advanced electronic communications." This accounts for 40 out of 100 possible points. Other elements are heavily dependent on IT, including meeting standards for patient access and communication in Standard 1 (five points) and generating reminders in Standard 3 (four points), which brings to just under half the PPC-PCMH scoring dependent on the presence of a physician practice-owned electronic record.

Figure 1: NCQA Physician Practice Connections® – Patient-Centered Medical Home™ Content and Scoring

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
TOTAL	9	C. Has electronic prescription writer with cost checks	2
Standard 2: Patient Tracking and Registry Functions	Pts.	TOTAL	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	TOTAL	13
E. Uses data to identify important diagnoses and conditions in practice*	4	**Standard 7: Referral Tracking**	Pts.
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
TOTAL	21	TOTAL	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
TOTAL	20	F. Transmits reports with standardized measures electronically to external entities	1
Standard 4: Patient Self-Management Support	Pts.	TOTAL	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 Web site	1
TOTAL	6	B. Electronic patient identification	2
		C. Electronic care management support	1
		TOTAL	4

*Must Pass Elements

Source: Building Patient-Centered Medical Homes, Phyllis Torda, Senior Executive, Strategic Initiatives, NCQA, July 2008.

The Role of IT-Based Patient Records in the Patient-Centered Medical Home and Disease Management

The California HealthCare Foundation issued a 2006 report outlining the special dependence on IT in both the PCMH and disease management and population health programs.[32] Contrasting electronic medical records and physician practice-owned "chronic disease management systems" (CDMS), the Foundation concluded that the latter had lower install and maintenance costs, yet offered advanced, built-in modifiable care plans and protocols and provided sophisticated reporting and ability to view patient information across multiple diseases. CDMS also possess patient self-management functions, point of care functions, decision support, guidelines and protocols.

In addition to the option of locally implemented CDMS, most commercial disease management and population health program vendors offer turnkey, online Web portals through which physician practices can view registry information, including claims-based and patient-reported clinical data, care plans, survey data and risk scores. This information is also frequently used to create decision support for physicians that address lapses in care. For example, LifeMasters Supported SelfCare Inc., maintains a Web-based "computerized participant record" with physician "health alerts" paired with patient outreach.[33] ActiveHealth Management maintains the CareEngine System, which compiles member clinical and pharmacy data, lab results and information from the patient.[34] McKesson Health Solutions provides guidelines-based outcomes tracking and reports delivered via a secure Web portal.[35]

Finally, according to its advocates, electronic personal health records (ePHRs), which the patient controls and maintains external to any particular health care setting, have the potential to revolutionize health care.[36] Options for the consumer include Google Health and Microsoft's HealthVault.

How well physician practice integration would perform with commercially available CDMSs, disease management and population health company remote Web-based patient records or ePHRs in meeting the PPC-PCMH elements is unknown. What is known is that traditional physician practice-located electronic health records have been adopted by less than 20 percent of physicians nationwide and most of the adoption has occurred in large or group physician practices.[37] As a result, the ability of smaller primary care sites to achieve a sufficient number of points in the IT-heavy PPC-PCMH certification to date is limited. Yet, physician practices without in-house IT support may be able to use CDMSs, integrate remote disease management IT systems or turn to ePHRs in a way that provides many of the advantages of IT support envisioned by the NCQA PPC-PCMH recognition program. Smaller clinical practices that outsource IT support — all Patient Tracking and Registry Functions (Standard 2), Test Tracking (Standard 6) and Performance Reporting and Improvement (Standard 8) along with creating standards and processes supporting this approach (Standard 1) — to a commercial disease management organization could not only significantly enhance patient care but warrant well over 50 points necessary toward PPC-PCMH recognition.

The Overlap of the Patient-Centered Medical Home and Disease Management Outside of IT

In addition to IT, the PCMH and disease management share many other features in the care of the chronically ill. Both emphasize a population-based approach, accept responsibility for clinical and economic outcomes, rely on evidence-based clinical guidelines, embrace the value of non-physician health care providers, such as case managers, and promote patient self-management.

While the standards used to evaluate physician practices for PPC-PCMH recognition and the standards used to accredit disease management organizations are well-aligned, there are enough similarities to suggest the overlap between disease management and the Patient-Centered Medical Home is significant (see Table 1 comparing PPC-PCMH Content and the 2006/2007 Disease Management Standards and Guidelines). In fact, if based on the underlying principles used to create each of the standard sets, it can be argued that the integration of an NCQA-accredited disease management organization in a physician practice supports *every one* of the elements in the PPC-PCMH.

Conclusion

The history of the PCMH and population-based disease management reveal many similarities. Further, the recognition and accreditation standards used by the NCQA amply reinforce the potential for combined approaches that capitalize on the strengths of both approaches to the care of populations with chronic illness. The PPC-PCMH program, as currently configured, emphasizes considerable IT resources, which are out of the reach of smaller primary care practice settings. The IT support offered by current disease management programs not only offers an important option immediately available for these practices, but also appears to fulfill many of the criteria used in the PPC-PCMH. In addition, clinical practices that participate in the full suites of services already provided in NCQA-accredited disease management programs practically fulfill many of the PPC-PCMH criteria. DMAA: The Care Continuum Alliance recommends that this under-recognized overlap in accreditation and recognition be further examined to determine a) if "cross-recognition" or accreditation is possible, and b) if the overlapping elements can be further used to evaluate the merits of combined care approaches to the cost and quality challenges of chronic illness.

Table 1: Comparison of PPC-PCMH Content and the 2006/2007 Disease Management Standards and Guidelines

PPC-PCMH Content	Points	Usual Clinical Practice with Patient-Centered Medical Home (PCMH) Capability	Usual Clinical Practice with Outside Disease Management Organizations (DMO) Collaboration	2006/2007 Disease Management Standards & Guidelines
Access and Communication	**(9)**			
Has written standards for patient access and patient communication*	4	Formal and documented communication standards are unlikely in smaller practices	DMOs commonly maintain written standards for patient communication and expediting patient access	Patient Service Standard: Enlisting the participation of eligible patients; acting as a patient advocate
Uses data to show it meets its standards for patient access and communication*	5	Requires practices to extract and assemble access and communication data	DMOs can assemble physician-practice specific access and communication data	Patient Service Standard: Measuring the participation of eligible patients
Patient Tracking & Registry Functions	**(21)**			
Uses data system for basic patient information	2	Relies on electronic databases. Uses practice-based data with possible ability to import payer demographic and eligibility data	DMOs use payer-specific data with possible ability to electronically import practice-specific data; non-clinical data sets are probably richer in payer databases	Clinical Systems Standard: Coordinating information from all parts of the system, including sponsoring organizations to promote better self-management
Has clinical data system with clinical data in searchable data fields	3	Relies on electronic databases. Uses practice-based and patient self-report data with possible ability to import clinical data from other clinical settings, DMOs and payers	DMOs use payer data and patient self-report data with possible ability to import clinical data from all clinical settings, other DMOs and payers	Clinical Systems Standard: Using available clinical data from the sponsoring organization or from eligible participants to identify potential participants and stratify them for assignment to different levels of service intensity
Uses the clinical data system	3	Relies on an electronic database; assumes there is an organized clinical data system	DMOs routinely assemble clinical data in reports to their clients and customers	Measurement & Quality Improvement Standard: Using evaluative patient and practitioner data to assess experience with the disease management program for quality improvement
Uses paper or electronic-based charting tools to organize clinical information*	6	Unclear if criteria are met if the clinic uses a problem list on the paper record	DMOs routinely organize clinical information in electronic registries	Measurement & Quality Improvement Standard: Analyzing performance data and taking action for quality improvement
Uses data to identify important diagnoses and conditions in practice*	4	Relies on an electronic database; assumes there is an organized clinical data system	DMOs routinely use predictive modeling to identify important and impactable conditions	Clinical Systems Standard: Stratify patients for assignment to different levels of service intensity
Generates lists of patients and reminds patients and clinicians of services needed (population management)	3	Requires the practice to extract and assemble patient data in organized lists	DMOs routinely provide lists of possible candidates for needed interventions	Practitioner Service Standard: Providing practitioner feedback on the condition and progress of their patients

*Must Pass Elements

Table 1: Comparison of PPC-PCMH Content and the 2006/2007 Disease Management Standards and Guidelines (continued)

PPC-PCMH Content	Points	Usual Clinical Practice with Patient-Centered Medical Home (PCMH) Capability	Usual Clinical Practice with Outside Disease Management Organizations (DMO) Collaboration	2006/2007 Disease Management Standards & Guidelines
Care Management	**(20)**			
Adopts and implements evidence-based guidelines for three conditions*	3	Formal and documented policies pertaining to evidence-based guidelines is unlikely in smaller practices	Maintained by DMOs under NCQA certification	Program Content Standard: Using evidence-based guidelines or standards of care in developing program content for patients and practitioners
Generates reminders about preventive services for clinicians	4	Paper "tickler" files are common in non-electronic record environments. Otherwise relies on an electronic database; assumes there is an organized clinical data system	DMOs routinely provide lists of possible candidates for needed interventions	Practitioner Service Standard: Supporting practitioner decisions with evidence-based recommendations on care of chronic conditions and reminders and feedback to patients about their progress
Uses non-physician staff to manage patient care	3	Requires reassignment of existing personnel or hiring of new personnel	DMOs rely on nurses, pharmacists, case managers, respiratory therapists, social workers, dietitians, health educators for patient care activities	Program Operations Standard: Employing qualified personnel, giving them the necessary training and specifying the qualifications of personnel who give clinical information to patients
Conducts care management, including care plans, assessing progress, addressing barriers	5	Requires a creation of a formal nursing infrastructure	Care plans, progress notes, updates and barrier assessments are a standard part of DMO activities	Patient Service Standard: Providing feedback to patients about their progress toward treatment goals
Coordinates care/follow-up for patients who receive care in inpatient and outpatient facilities	5	Requires a paper or electronic tickler function and outbound follow-up to ensure that arranged care was obtained	Ability to coordinate follow-up with other providers or facilities depends on patient self-report or updated claims data	Clinical Systems Standard: Coordinating information for all parts of the system (from patients, sponsoring organizations, the DMO and practitioners) to promote better self-management
Patient Self-Management Support	**(6)**			
Assesses language preference and other communication barriers	2	Status of systematic assessment of communication preferences in primary care sites unknown	Commercial DMOs and MCOs routinely have access to a telephonic "language line"	Program Operations Standard: Providing for patients with special needs
Actively supports patient self-management*	4	Typically lacking in usual care	Fundamental basis of disease management	Program Content Standard: Developing patient information that assists with self-management
Electronic Prescribing	**(8)**			
Has electronic system to write prescriptions	3	Typically requires an electronic medical or health record	DMOs, MCOs and Pharmacy Benefit Managers typically track medication use with monitoring for drug-drug interactions	Medication management is not specifically identified in the Standards
Has electronic prescription writer with safety checks	3	Typically requires an electronic medical or health record	DMOs, MCOs and Pharmacy Benefit Managers typically track medication use with monitoring for drug-drug, drug condition and drug food interactions	Clinical Systems Standard: Using organization information to address patient safety issues
Has electronic prescription writer with cost checks	2	Typically requires an electronic medical or health record	DMOs, MCOs and Pharmacy Benefit Managers typically track medication use that can include out of pocket expense data and formulary status	Medication management is not specifically identified in the Standards

*Must Pass Elements

Table 1: Comparison of PPC-PCMH Content and the 2006/2007 Disease Management Standards and Guidelines (continued)

PPC-PCMH Content	Points	Usual Clinical Practice with Patient-Centered Medical Home (PCMH) Capability	Usual Clinical Practice with Outside Disease Management Organizations (DMO) Collaboration	2006/2007 Disease Management Standards & Guidelines
Test Tracking	**(13)**			
Tracks tests and identifies abnormal results systematically*	7	Absent a paper-based tickler system, requires an electronic or personal health record	Relies on patient self-report, outbound physician reporting, MCO paper chart review or access to an electronic record	Tracking or identifying abnormal tests is not specifically identified in the standards
Uses electronic systems to order and retrieve tests and flag duplicate results	6	Typically requires an electronic medical or health record	Relies on patient self report, outbound physician reporting, MCO paper chart review or access to an electronic record	Tracking or identifying duplicative tests is not specifically identified in the standards
Referral Tracking	**(4)**			
Tracks referrals using paper-based or electronic system*	4	Absent a paper-based tickler system, requires an electronic or personal health record	Relies on patient self report, outbound physician reporting, MCO paper chart review or access to an electronic record	Patient Service Standard: Supporting patient self-management with consumer-tested information, coaching, reminders and referrals
Performance Reporting and Improvement	**(15)**			
Measures clinical and/or service performance by physician or across the practice*	3	Clinic-sponsored quality or service performance activities are unusual in smaller primary care settings	Many MCOs using DMOs measure quality performance at practice or physician level, report these data publicly and/or use in pay for performance programs (P4P)	Measurement and Quality Improvement: While not spelled out at the provider or clinic level, measures quality across the organization
Survey of patients' care experience	3	Clinic-sponsored surveys of patients' care experience are unusual in smaller primary care settings	Many MCOs measure patients' care experience at practice or physician level, report these data publicly and/or use in pay for performance programs (P4P)	Measurement and Quality Improvement: Using evaluative patient and practitioner data to assess experience with the disease management program for quality improvement
Reports performance across the practice or by physician*	3	Clinic-sponsored reports of physician performance are unusual in smaller primary care settings	Many MCOs report performance practice or physician level, report these data publicly and/or use in pay for performance programs (P4P)	Measurement and Quality Improvement: While not spelled out at the provider or clinic level, measuring quality across the organization and for each condition managed
Sets goals and takes action to improve performance	3	Clinic-sponsored goal setting and action plans are unusual in smaller primary care settings	Many MCOs recommend areas of focus at practice or physician level	Measurement and Quality Improvement: While not spelled out at the provider or clinic level, measuring quality across the organization and for each condition managed
Produces reports using standardized measures	2	Clinic-sponsored reports are unusual in smaller primary care settings	Many MCOs measure quality performance at practice or physician level using standardized measures	Measurement and Quality Improvement: While not spelled out at the provider or clinic level, measuring quality across the organization and for each condition managed
Transmits reports with standardized measures electronically to external entities	1	Clinic-sponsored reports are unusual in small primary care settings	Many MCOs measure quality performance at practice or physician level and report these data publicly	Measurement and Quality Improvement: While not spelled out at the provider or clinic level, measuring quality across the organization and for each condition managed

*Must Pass Elements

Table 1: Comparison of PPC-PCMH Content and the 2006/2007 Disease Management Standards and Guidelines (continued)

PPC-PCMH Content	Points	Usual Clinical Practice with Patient-Centered Medical Home (PCMH) Capability	Usual Clinical Practice with Outside Disease Management Organizations (DMO) Collaboration	2006/2007 Disease Management Standards & Guidelines
Advanced Electronic Communications	**(4)**			
Availability of interactive Web site	1	Many primary care sites maintain Web sites to provide consumers information (e.g., hours of operation) with little interactivity	DMOs typically provide Web portals through which patients or practitioners can view or manage data	Availability of an interactive Web site is not specifically identified in the standards
Electronic patient identification	2	Typically requires an electronic medical or health record	DMOs and MCOs adhere to HIPAA standards in identifying and communicating with enrollees	Electronic patient identification is not specifically identified in the standards
Electronic care management support	1	Typically requires an electronic medical or health record	DMO information technology systems typically provide care management support to its coaches	Electronic care management support is not specifically identified in the standards

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