July 2017

PCDH Project: Components Survey, Results and Modifications

Survey Results

Participation

A total of 47 out of 51 (92%) members completed the survey, with many providing open-ended comments. These comments resulted in several *post hoc* modifications to the PCDH model as shown below.

Quantitative results

Participants were asked to rate how essential, on a scale of 1-9, each of 34 proposed components were to the PCDH model. These proposed components had been identified from an environmental scan of the medical and dental home literature followed by discussion among the research team.

Descriptions of each component could be accessed by NAC members while they were completing the survey by hovering the cursor over the component text. As with the modified Delphi process that determined the PCDH definition, it was determined *a priori* that components with median ratings of 7-9 "without disagreement" would be included in the final PCDH model. Agreement was determined using a measure of dispersion described in the RAND Appropriateness Method, which compares Interpercentile Range (IPR) with IPR Adjusted for Symmetry (IPRAS).[1] A rating is classified as "with disagreement" if IPR>IPRAS.

All 34 components met the quantitative criteria for inclusion in the PCDH model (Appendix 1).

Qualitative results

In addition to a numerical rating, participants had the opportunity to provide open-ended comments related to each component, and to suggest additional components for consideration. In the comments, participants generally either: (1) provided the rationale for their numerical rating of a particular component, or (2) identified a concern or suggested a change to the component or the description of the component.

After the research team discussed all NAC members' concerns and suggested changes, modifications were made to the PCDH components to improve clarity and address identified gaps (Table 1). Appendix 2 shows the actual comments made by NAC members that were considered by the research team.

Next Steps

The next phase will identify the measurable elements (called *measure concepts*) of each PCDH component. We will use a similar Delphi survey approach; however, instead of rating how essential each measure concept is, ratings will focus on importance, validity, and feasibility of measurement.

[1] Fitch et al. *The RAND/UCLA Appropriateness Method User's Manual*. 2001. Rand Corporation. Santa Monica, CA. http://www.dtic.mil/cgi-bin/GetTRDoc?Location=U2&doc=GetTRDoc.pdf&AD=ADA393235

Table 1. Updated components and descriptions (modifications highlighted)
[Note: Appendix 2 provides the rationale for the modifications.]

Characteristic/Component	Description
ACCESSIBLE	
Affordable	Examples: out of pocket costs; insurance coverage; difficulty paying dental bills
Timely	Examples: short wait times for routine and specialty care; available same-day appointments for emergency care
Accommodating	Examples: appointment availability; extended clinic hours; user-friendly appointment-making; provides services in community-based settings for individuals with barriers to receiving care in a traditional health clinic
Geographically accessible	Examples: travel time; travel distance; transportation resources
Adequate provider network (formerly "Available")	Examples: adequacy of the supply of clinicians, clinical facilities, providers who are accepting new patients
COMPREHENSIVE	
Prevention and wellness focused	Examples: oral health diagnostic and prevention services; risk assessment; systemic health screenings
Provides primary dental treatment services (formerly "Accountable for providing or referring for acute and chronic care needs")	Includes acute treatment for emergencies and injuries; treatment that restores, rehabilitates, and maintains oral health
Appropriate referrals (formerly "Accountable for providing or referring for acute and chronic care needs")	Uses clinical protocols to determine when a referral to a specialist is necessary
Team-based	Uses a team of providers for needed care and maintenance support, as well as to address potential barriers to oral health; care team members could include dental providers, physicians, nutritionists, behavioral health providers, social workers
COORDINATED	
Communication across dental and medical care systems (formerly "Communication among patients and care team")	Examples: effective transitions to other care team members; communication between care team members; communication between health care system components
Engaged in care management	Assists patients and their support systems in managing dental conditions and comorbid medical conditions; coordinates needed care effectively
Population health oriented	Identifies patients who would benefit from care but have not yet sought care (e.g., patients with diabetes, smokers)
Community-connected	Links patients to needed community and social services (e.g., schools, transportation, program eligibility)
Effective use of health information technology	Examples: electronic health records; patient/provider portals; electronic information exchange
CONTINUOUS	
Facilitates care transitions	Examples: patient transitions to new providers or plans; transitions from pediatric to adult care
Follows up on needed care	Examples: treatment plan completion; recall reminders; referral outcomes
Serves as usual source of care	Having a regular dental provider of record
PATIENT- AND FAMILY-CENTERED (combined as a characteristic)	
Culturally competent	Demonstrates respect and accommodations for patients' unique values, preferences, and expressed needs, including language
Promotes shared decision making	Provides education, support, and resources to facilitate shared decision making between patient, family, and provider
Sensitive to health literacy	Example: materials developed at recommended literacy levels; materials provided in different formats
Effectively communicates with patients	Example: provider listening; confirming patient understanding; showing respect
Provides individualized care	Provides risk-based prevention and disease management
Provides equitable care	Care quality does not vary based on personal characteristics (e.g., age, gender, ethnicity, geographic location, social class)
Promotes and supports patient self-management	Education and tools provided to aid patients in management of oral disease

(formerly “Engages patients in self-management”)	
QUALITY- AND SAFETY-FOCUSED (combined as a characteristic)	
Effective	Services are provided to those who would benefit from them and not provided to those who would not benefit; uses evidence-based practice to provide appropriate care (minimizing underuse and overuse); also termed “right care”
Efficient	Appropriate use of resources; demonstrates value by working to maximize quality for a given level of resource use
Provides evidence-based care	Follows evidence-based clinical guidelines; performance on process of care indicators
Continuous quality improvement processes	Examples: conducts quality assessments; uses performance improvement plans and other quality improvement efforts to improve care delivery
Clinical outcomes	Monitors performance on clinical and care-related outcomes (e.g., preventable ED visits, tooth loss, functional status)
Patient-reported outcomes and patient experience indicators	Monitors performance on patient experience and satisfaction indicators, including on components within other characteristics such as accessibility, coordination, etc.
Minimizes adverse events (formerly “Minimizes avoidable treatment errors”)	Proactively monitors frequency of adverse events (e.g., wrong site or procedure, infection, nerve injury) and takes action to improve care safety

Appendix 1 – Quantitative Results

Characteristic/Component	Median	Agreement
ACCESSIBLE		
Affordable	9	Y
Timely	8	Y
Accommodating	7	Y
Geographically accessible	7	Y
Available	8	Y
COMPREHENSIVE		
Prevention and wellness focused	9	Y
Accountable for providing or referring for acute and chronic care needs	9	Y
Team-based	8	Y
COORDINATED		
Communication among patients and care team	9	Y
Engaged in care management	8	Y
Population health oriented	7	Y
Community-connected	7	Y
Effective use of health information technology	8	Y
CONTINUOUS		
Facilitates care transitions	7	Y
Follows up on needed care	9	Y
Serves as usual source of care	8	Y
PATIENT-CENTERED		
Culturally competent	8	Y
Promotes shared decision making	8	Y
Oral health literacy sensitive	8	Y
Effectively communicates with patients	9	Y
Provides individualized care	9	Y
Provides equitable care	8	Y
Engages patients in self-management	8	Y
FAMILY-CENTERED		
Promotes shared decision making	8	Y
Effectively communicates with patients	9	Y
QUALITY-FOCUSED		
Effective	9	Y
Efficient	8	Y
Provides evidence-based care	9	Y
Continuous quality improvement processes	8	Y
Clinical care outcomes	8	Y
Patient experience and satisfaction outcomes	8	Y
SAFETY-FOCUSED		
Avoids overuse of potentially harmful services	9	Y
Minimizes avoidable treatment errors	9	Y
Infection control	9	Y

Appendix 2 – Qualitative Results: Suggested Changes and Modifications

Characteristic/Component	Suggested Change	Example Comments	Modification Made
ACCESSIBLE			
Available	Conceptual overlap between availability and accommodating, and availability and timeliness	"Available should be a sub-component of 'Accommodating.'" "I think this is covered in timely"	The intent is that this component reflects provider availability (eg., adequacy of clinician supply). Therefore, the component title was changed to *Adequate provider network*.
Characteristic overall	Needs to be accessible to those with particular barriers to care, including those not able to receive care in a traditional in a dental clinic setting	"Accessible, and all the items above are ambiguous. Not sure how to word it, but this needs to be in reference to the person or population trying to access it. One "home" may be accessible to someone with a car and not to someone without a car, to name only one of many factors that determine if some can actually take advantage of what is being offered." "This feels like a definition that fits the current system of care, which does not serve a majority of people. The definition of a dental home needs to expand the oral health system to reach people in community settings where they cannot, or do not, access dental care within the traditional system"	This concept fits within the component *Accommodating*. Revised description accordingly, and will include at the measure concept level.
COMPREHENSIVE			
Prevention and wellness focused	Need to address all types of services provided, not only preventive	"Consider expanding this component. To be truly comprehensive, shouldn't it go beyond prevention and wellness? Consider something like "focused on prevention and wellness, as well as restoration and maintenance of oral health."' "Still can`t overlook treatment of disease if present. However, yes the focus needs to be on the Health and Wellness model."	Kept *Prevention and wellness* focused as is; divided *Accountable for providing or referring for acute and chronic care needs* into 2 components: - *Provides primary dental treatment services*, defined as "acute treatment for emergencies and injuries; treatment that restores, rehabilitates, and maintains oral health" - *Appropriate referrals*, defined by NCQA's PCMH as "Uses clinical protocols to determine when a referral to a specialist is necessary."
Accountable for providing or referring for acute and chronic care needs	Need to differentiate between care provided and care referred, as well as what types of services are consistently offered	"I'm opposed to "providing" and "referring" being lumped into one criterion or component. Is someone or a program that only does diagnostic and/or preventive services, but refers all other care to others a dental home? (I hope not!). Also, we'll have to wrestle with the question of what constitutes a legitimate referral? Is just telling a patient that he/she needs additional care a referral? (I hope not!) If we're addressing	

		comprehensiveness, then I think an extra consideration/level of definition is necessary -- i.e., what constitutes "primary dental care" -- that is, the core scope of services that someone should expect to be able to obtain from a "dental home".” “The 3 characteristics are all important in a care system. However, they don't seem to relate to "comprehensive". Comprehensive seems more related to the total amount/kinds of services that can be obtained from the system. The first characteristic is a kind of service, but not "full service" dental care. The other 2 characteristics are related to interconnections between components, but not related to what kinds of services are offered. There could be a system that focuses on prevention and wellness, makes referrals, and uses teams that provides only very limited kinds of services or addresses limited needs of the population.”	
COORDINATED			
Communication among patients and care team	Need to highlight integration between the PCDH and the broader care system	“It may be helpful to more strongly call out the relationship with the broader health care system. the PCDH could seek to facilitate the delivery of care and advice related to oral health disease risk reduction and disease management within the traditional medical care delivery system. - Coordination of disease management activities with efforts that may be undertaken by or supported by dental plans, administrators and funders of care.” “should be integrated with medicine” “What does not make itself clear in this section is whether coordination is solely within the dental sphere and the relationship between dental and community or if there is also a coordination piece that connects it to other parts of the overall health and health care systems. For instance, community connected can mean something like having health fairs, and participating I. Give kids a smile or it can mean having connections to health and health care resources in the community that the dental home can refer patients to when needed. That latter piece doesn't	Rephrased component to *Communication across dental & medical care systems* for clarification

		come out as clearly in any of this. Similarly, but more specifically, the coordination with the medical home and medical care system is not explicitly stated but should be an important part of the dental home. Otherwise, an island is built that propagates the mouth separate from the body state we have currently."	
PATIENT-CENTERED			
Engages patients in self-management	Critical concept; need to highlight further	"Because this component is so critical, consider using slightly stronger language, such as 'promotes and continually supports patient self-management'"	Rephrased component to *Promotes and supports patient self-management*
FAMILY-CENTERED			
Both components: Promotes shared decision making and Effectively communicates with patients	Too much overlap with patient-centered components; can be combined into 1 characteristic	"I am not clear why this is in both sections? How is shared decision-making different for patient-centered than family-centered?" "I think these components can be combined with the previous characteristic (patient-centered)" "This is in both patient and family centered, but it is not clear what is different about them. I'd suggest removing or making more clear the distinction."	Combined Patient-centered and Family-centered into 1 characteristic, *Patient- and Family-centered*
QUALITY-FOCUSED			
Effective	Conceptual overlap between effectiveness and efficiency; need to incorporate concept of value	"This seems the same as efficient, maybe this should just be called appropriate treatment?"	Efficiency is distinguished from effectiveness by the incorporation of cost for a given level of quality of care. Clarified these terms by revising descriptions, which will drive how measure concepts are selected. Incorporated concept of value in description of efficiency.
Efficient		"This seems the same as effective, maybe this should just be called appropriate treatment?" "Would like some clarification on the difference in definition between "effective" and "efficient" - they seem like they might both be about overtreatment/under treatment." "Here is where value needs to be introduced. We are moving past quality to value. Quality is good, value is better." "Somewhere in this model, there ought to be mention of consideration of, awareness of, and conversation about cost of care. In addition, I did not see mentioned in this model the word value, and since that is where health care is moving, I wonder if this is not looking towards the	

		future of health care delivery, but at the present of delivery."	
SAFETY-FOCUSED			
Avoids overuse of potentially harmful services	Need to clarify; Overuse/underuse overlaps with appropriateness of care	"Why "overuse"? Isn't 1 use of a potentially harmful service too many? Important consideration, but I think this component needs to be rephrased and expanded" "This goes hand-in-hand with quality improvement. A large number of QI measures have been developed to ensure that treatment errors are minimized--e.g.--hospital readmission measures."	Eliminated this component because overuse concept is covered in appropriateness of care concept within E*ffectiveness*, and potential harm is covered in M*inimizes adverse events*
Minimizes avoidable treatment errors	Need to clarify & include adverse events	"I think this section needs additional work. Suggestions for additional components to consider: Adherence to applicable protocols or guidelines (e.g., when administering sedation or anesthesia, when using radiation for diagnostic procedures), Scope of practice consistent with/appropriate for level of training, Judicious use of pharmacologic agents (pain meds, antibiotics), Radiation protection, Safe storage and use of chemicals, Air quality, Accident prevention, Protocols for handling adverse events (e..g, needle sticks, chemical spills, etc.O), CPR training/Emergency care management protocols."	Rephrased component to *Minimizes adverse events*; revised description to include actions taken to monitor/reduce adverse events as part of quality measurement
Infection control	No need to duplicate existing regulatory compliance standards	"essential but: should be standard procedure" "Standard for all health systems." "This is one component of "regulatory compliance" which all dentists are legally bound. Again, do you need to state this? Seems obvious."	Eliminated this component assuming that all clinics must abide by infection control guidelines as part of standard practice; intent to avoid duplication of existing practice requirements.
Characteristic overall			Due to the fact that safety measures are included in quality measurement and improvement processes, combined Quality-focused and Safety-focused into one characteristic, Quality- and Safety-focused