

# PCDH Project, Phase 3: Practice-Level Measure Concepts Survey, Results and Modifications

## Background

Phase 1 of the Patient-Centered Dental Home (PCDH) project resulted in the following, consensus-built definition of a PCDH: *The patient-centered dental home is a model of care that is accessible, comprehensive, continuous, coordinated, patient- and family-centered, and focused on quality and safety as an integrated part of a health home for people throughout the life span.*

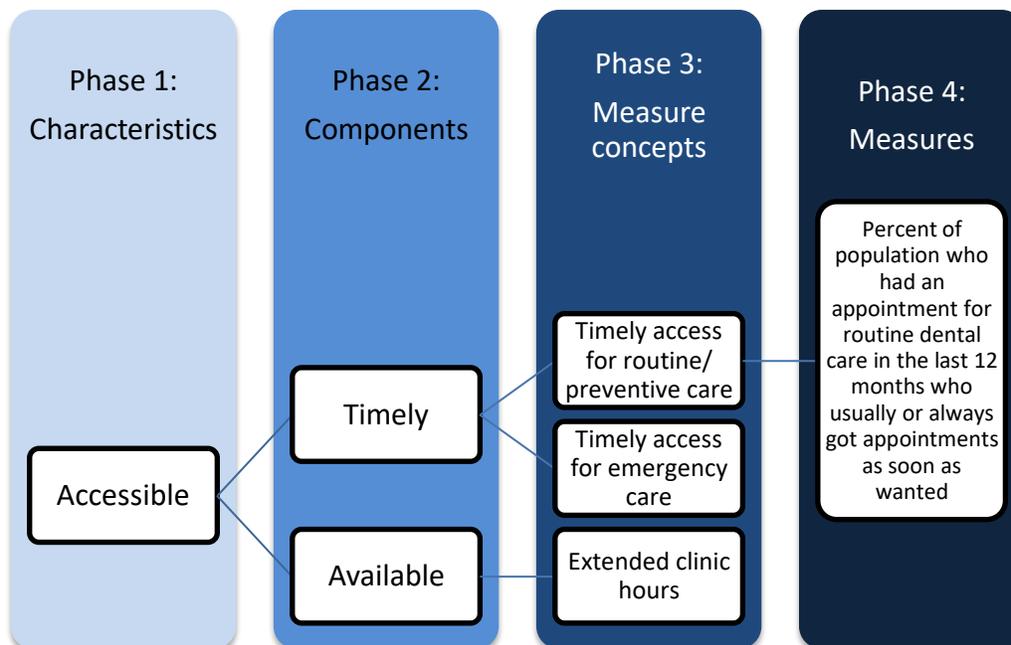
In Phase 2, the National Advisory Committee (NAC) identified the components that fit within each PCDH characteristic.

In Phase 3, the NAC reviewed a list of measure concepts that reflect the potential measures that would be nested under each of the components

**This report presents the results of these ratings for measure concepts applicable at the *practice/clinic level*, including both quantitative results and modifications made based on participant comments.**

Figure 1 below demonstrates how the proposed overall PCDH framework links conceptual characteristics with specified measures, using the accessible characteristic as an example.

**Figure 1.** PCDH 4-level framework with an example of the accessible characteristic.



## Survey Methods

To prepare for conducting the survey with NAC members about the measure concepts, the research team went through the following process:

- 1) Compiled a list of over 500 measures and standards through an environmental scan of:
  - Measures derived from the Dental Quality Alliance (DQA) and National Quality Forum (NQF) environmental scans and websites
  - Standards from major accrediting organizations (e.g., AAAHC and NCQA)
  - A review of literature published after 2012 (e.g., PubMed, online search of grey literature)
  - Online search of measures used by organizations known to be involved in dental quality measurement (e.g., ACOs, Medicaid programs, practices, third-party payers)
- 2) All identified measures and standards were then evaluated by the research team to identify a preliminary list for NAC review. Criteria used for the internal evaluation included: importance, feasibility, validity, reporting burden, duplication/overlap, and measures vs. standards (measures given higher priority due to reporting consistency and ability to monitor improvement over time)

A summary of the existing measures, measures concepts, and standards associated with each PCDH concept is provided in Appendix 2.

Participants were asked to rate how important each of 62 proposed measure concepts were to the PCDH model on a scale of 1-9. *A priori*, it was determined that concepts 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).<sup>1</sup> A rating is classified as “with disagreement” if  $IPR > IPRAS$ .

Additionally, participants were asked to provide open-ended comments related to the concepts, as well as suggest additional concepts for consideration. Comments generally (1) provided rationale for numerical rating, (2) identified a concern or suggested a change to the concept, or (3) suggested new concepts.

## Survey Results

A total of 46 out of 51 (90%) members participated, with many providing open-ended comments. These comments were taken into consideration and resulted in modifications to the proposed measure concepts.

### Quantitative results

**All 62 measure concepts met the quantitative criteria for inclusion in the PCDH model (Appendix 1).**

### Qualitative results

After discussing all NAC members’ concerns and suggested changes, in combination with reviewing the approximately 500 measures, measure concepts and standards identified during the scan, the research team made modifications to the PCDH measure concepts to improve clarity, address identified gaps, and reduce redundancy (Table 2). In general, measure concepts were either added, edited, or recategorized within the PCDH framework. The detailed set of NAC comments are contained in Appendix 3.

---

<sup>1</sup> 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>

**Figure 2** provides the complete framework to date, reflecting the PCDH characteristics, components, and measure concepts.

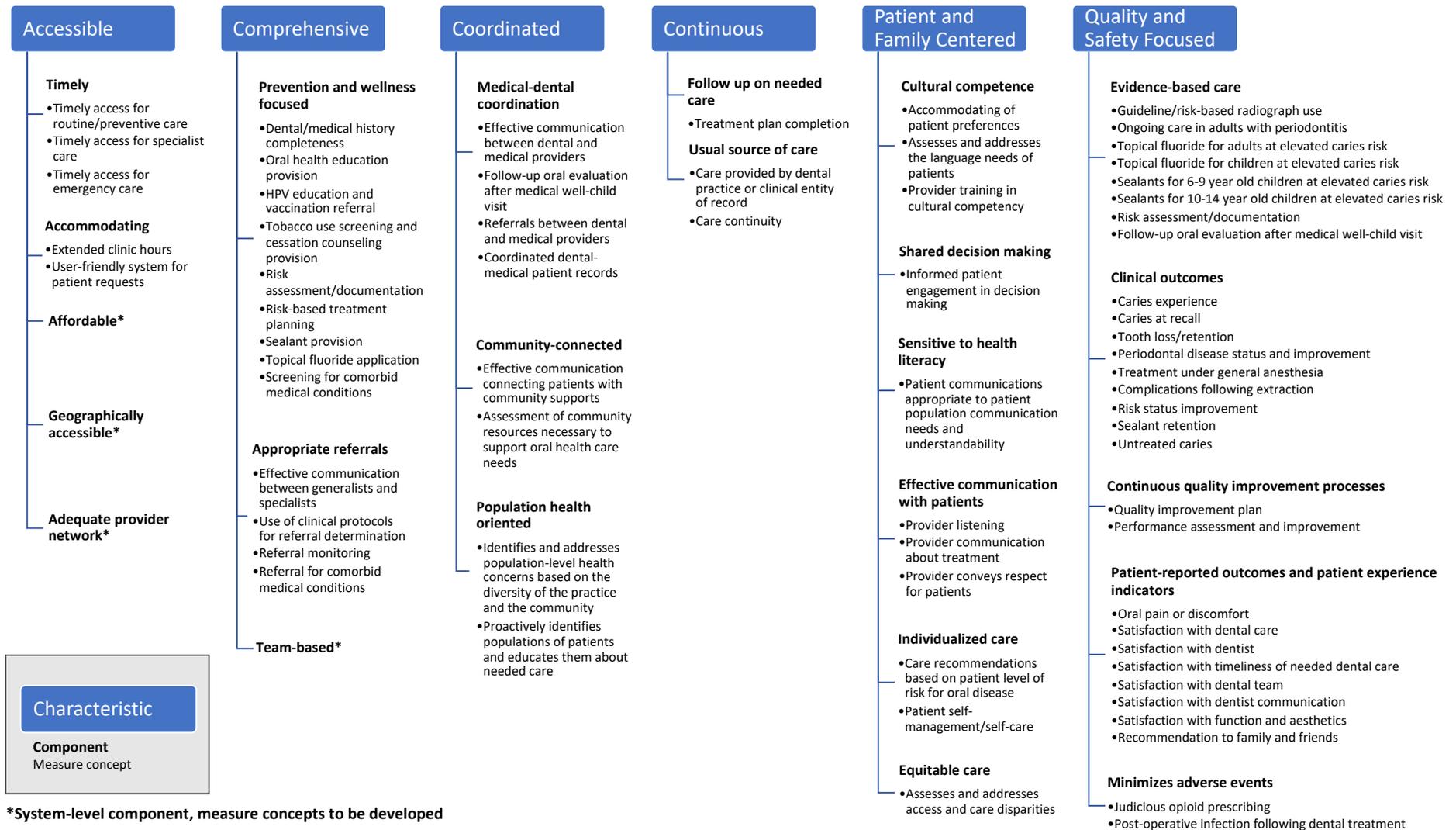
## **Next Steps**

In the next steps of this project, we will first identify measure concepts that are relevant at the systems level via a Delphi Survey with the NAC, as well as solicit feedback on new practice level measure concepts proposed by NAC from previous survey.

From the PCDH measurement framework, we will distill the hundreds of existing quality measures into smaller core measure sets, both at the practice and the system level. We will gather input from stakeholders regarding pilot testing and implementation of measure sets, and will identify priority measures and measurement sets feasible for near-term implementation at the practice and system levels.

Finally, we will collaborate with dental quality measurement stakeholders to develop a roadmap for PCDH implementation.

**Figure 2.** PCDH framework with characteristics, components, and measure concepts



**Table 1.** Modifications to measure concepts (modifications based on comment and database review are indicated in red)

CHARACTERISTIC/COMPONENT/MEASURE CONCEPT	CHANGES BASED ON DELPHI SURVEY COMMENTS AND MEASURES DATABASE REVIEW
<b>ACCESSIBLE</b>	
<b>Timely</b>	
Timely access for routine/preventive care	<b>NEW</b> – replaced “appointment availability” with routine/preventive care
Timely access for specialist care	<b>NEW</b> – distinguish timely specialty care from routine care
Timely access for emergency care	No change
<del>Appointment availability for routine care</del>	<b>DELETED</b> - Encompassed within timely access for various types of care
<b>Accommodating</b>	
Extended clinic hours	No change
User-friendly system for patient requests (e.g., appointment making, prescription refills)	No change
<b>COMPREHENSIVE</b>	
<b>Team-based</b>	<b>Recategorized overall component to system-level only</b> because the main focus is on engaging providers outside of a practice (e.g., social workers, behavioral health providers, physicians) as part of the care team
<b>Prevention and wellness focused</b>	
Dental/medical history completeness	No change
Oral health education provision	No change
HPV education and vaccination referral	<b>NEW</b> – recommendation from NAC member and ADA Policy on HPV Vaccination
Tobacco use screening and cessation <b>counseling</b> provision	<b>EDITED</b>
Risk assessment/ <b>documentation</b>	<b>EDITED</b>
Risk-based treatment planning	No change
Sealant provision	No change
Topical fluoride application	No change
<b>Screening for comorbid medical conditions (e.g., hypertension, diabetes, obesity)</b>	<b>NEW</b> – collectively capture NAC members’ recommendations for medical condition screenings
<b>Appropriate referrals</b>	
Effective communication between generalists and specialists	No change
Use of clinical protocols for referral determination	No change
Referral monitoring	No change
<b>Referral for comorbid medical conditions (e.g., hypertension, diabetes, obesity)</b>	<b>NEW</b> – collectively capture NAC members’ recommendations for referrals for comorbid conditions
<b>COORDINATED</b>	
<b>Dental-medical coordination</b>	<b>Edited overall component</b> – changed from “communication across dental and medical care systems” to “dental-medical coordination” to be more comprehensive
Effective communication between dental and medical providers	No change
<b>Follow-up oral evaluation after medical well-child visit</b>	<b>Recategorized</b> from Continuous/Follow up on needed care
<b>Referrals between dental and medical providers</b>	<b>NEW</b> – NAC members’ recommendations
<b>Coordinated dental-medical patient records</b>	<b>NEW</b> – NAC members’ recommendations

CHARACTERISTIC/COMPONENT/MEASURE CONCEPT	CHANGES BASED ON DELPHI SURVEY COMMENTS AND MEASURES DATABASE REVIEW
<b>Community-connected</b>	
Effective communication connecting patients with community supports	No change
Assessment of community resources necessary to support oral health care needs	<b>NEW</b> – NAC member recommendation
<b>Population health oriented</b>	
Identifies and addresses population-level health concerns based on the diversity of the practice and the community	No change
Proactively identifies populations of patients and <b>educates</b> them about needed care	<b>EDITED</b>
<b>CONTINUOUS</b>	
<b>Follow up on needed care</b>	
Treatment plan completion	No change
<b>Follow-up care after ED dental visit</b>	<b>Recategorized concept to system-level only</b> because it requires collaboration with other system participants to identify and address dental-related ED use
<b>Follow-up oral evaluation after medical visit for pregnant women</b>	<b>Recategorized concepts to system-level only</b> because they require establishing referral relationships and processes with other system participants; will also add concept of “Follow-up oral evaluation after medical visit for high-risk populations” to capture other high-risk populations that were not included in the original Delphi (e.g., patients who use tobacco products and HIV-infected patients)
<b>Follow-up oral evaluation after medical visit for patients with diabetes</b>	
<b>Follow-up oral evaluation after medical visit for patients in long-term care</b>	
<b>Usual source of care</b>	
Care provided by <b>dental practice or clinical entity</b> of record	<b>EDITED</b> to address concerns about emphasis on individual provider rather than practice overall or clinic that may serve as the patient’s dental home
Care continuity (e.g., recall exam completion in consecutive years)	No change
<b>PATIENT- AND FAMILY-CENTERED</b>	
<b>Cultural competence</b>	
Accommodating of patient preferences (e.g., cultural, patient comfort)	No change
Assesses and addresses the language needs of patients	No change
<b>Provider training in cultural competency</b>	<b>NEW</b> – NAC member recommendation
<b>Shared decision making</b>	
<b>Informed</b> patient engagement in decision making	<b>EDITED</b>
<b>Sensitive to health literacy</b>	
Patient <b>communications</b> appropriate to patient population communication needs and understandability	<b>EDITED</b>
<b>Effective communication with patients</b>	
Provider listening	No change
Provider communication about treatment	No change
Provider conveys respect for patients	No change
<b>Individualized care</b>	
Care recommendations based on patient level of risk for oral disease	No change
<b>Patient self-management/self-care</b>	<b>NEW</b> – NAC members’ recommendations; database review
<b>Equitable care</b>	

CHARACTERISTIC/COMPONENT/MEASURE CONCEPT	CHANGES BASED ON DELPHI SURVEY COMMENTS AND MEASURES DATABASE REVIEW
Assesses and addresses access and care disparities	No change
<b>QUALITY- AND SAFETY-FOCUSED</b>	
<b>Evidence-based care</b>	
<b>Guideline/risk-based</b> radiograph use	<b>EDITED</b>
Ongoing care in adults with periodontitis	No change
Topical fluoride for adults at elevated caries risk	No change
Topical fluoride for children at elevated caries risk	No change
Sealants for 6-9 year old children at elevated caries risk	No change
Sealants for 10-14 year old children at elevated caries risk	No change
<b>Risk assessment/documentation</b>	<b>EDITED</b> to reflect risk assessment and documentation more broadly than caries (e.g., also encompasses periodontal risk assessment)
Follow-up <b>oral evaluation</b> after medical well-child visit	<b>EDITED</b>
<b>Clinical outcomes</b>	
Caries experience	No change
<b>Caries at recall</b>	<b>EDITED</b>
<b>Tooth loss/retention</b>	<b>EDITED</b>
<b>Periodontal disease status and improvement</b>	<b>NEW</b> – NAC members’ recommendations
<b>Treatment under general anesthesia</b>	<b>NEW</b> – NAC member recommendation and database review
Complications following extraction	No change
Risk status improvement	No change
Sealant retention	No change
Untreated caries	No change
<b>Continuous quality improvement processes</b>	
Quality improvement plan	No change
<b>Performance assessment and improvement</b>	<b>EDITED</b> – Made category broader and not focused on a quality improvement plan
<b>Patient-reported outcomes and patient experience indicators</b>	
Oral pain or discomfort	No change
Satisfaction with dental care	No change
Satisfaction with dentist	No change
Satisfaction with timeliness of needed dental care	No change
Satisfaction with dental team	No change
Satisfaction with dentist communication	No change
<b>Satisfaction with function and aesthetics</b>	<b>NEW</b> – NAC member recommendation; aligned with increasing emphasis on patient-reported outcomes
Recommendation to family and friends	No change
<b>Minimizes adverse events</b>	
<b>Judicious opioid prescribing</b>	<b>EDITED</b> – Made category broader; aligned with focus on opioid prescribing as a broad population health issue
Post-operative infection following dental treatment	No change

## Appendix 1 – Quantitative Results

CHARACTERISTIC/COMPONENT/MEASURE CONCEPT	MEDIAN	AGREEMENT	% RATING 7-9
<b>ACCESSIBLE</b>			
Timely			
Appointment availability for routine care	8.0	YES	89%
Timely access for emergency care	9.0	YES	98%
Accommodating			
Extended clinic hours	7.0	YES	63%
User-friendly system for patient requests (e.g., appointment making, prescription refills)	7.0	YES	76%
<b>COMPREHENSIVE</b>			
Prevention and wellness focused			
Oral health education provision	7.0	YES	63%
Dental/medical history completeness	8.0	YES	83%
Tobacco use screening and cessation provision	7.0	YES	65%
Risk assessment completion	8.0	YES	83%
Risk-based treatment planning	8.0	YES	87%
Sealant provision	8.0	YES	89%
Topical fluoride application	8.0	YES	85%
Appropriate referrals			
Effective communication between generalists and specialists	8.0	YES	85%
Use of clinical protocols for referral determination	8.0	YES	76%
Referral monitoring	8.0	YES	85%
Team-based			
Use of diverse provider types for needed care and maintenance support	7.0	YES	57%
<b>COORDINATED</b>			
Communication across dental and medical care systems			
Effective communication between dental and medical providers	8.0	YES	91%
Community-connected			
Effective communication connecting patients with community supports	7.0	YES	65%
Population health oriented			
Identifies and addresses population-level health concerns based on the diversity of the practice and the community	7.0	YES	70%
Proactively identifies populations of patients and reminds them about needed care	8.0	YES	80%
<b>CONTINUOUS</b>			
Follow up on needed care			
Treatment plan completion	8.0	YES	76%
Follow-up care after ED dental visit	8.0	YES	87%
Follow-up oral evaluation after medical well-child visit	7.0	YES	76%
Follow-up oral evaluation after medical visit for pregnant women	8.0	YES	83%
Follow-up oral evaluation after medical visit for patients with diabetes	8.0	YES	80%

CHARACTERISTIC/COMPONENT/MEASURE CONCEPT	MEDIAN	AGREEMENT	% RATING 7-9
Follow-up oral evaluation after medical visit for patients in long-term care	7.0	YES	76%
Usual source of care			
Care provided by dentist of record	7.0	YES	59%
Care continuity (e.g., recall exam completion in consecutive years)	8.0	YES	89%
<b>PATIENT- AND FAMILY-CENTERED</b>			
Cultural competence			
Accommodating of patient preferences (e.g., cultural, patient comfort)	8.0	YES	82%
Assesses and addresses the language needs of patients	9.0	YES	87%
Shared decision making			
Patient engagement in decision making	9.0	YES	93%
Sensitive to health literacy			
Patient materials appropriate to patient population communication needs and understandability	8.0	YES	85%
Effective communication with patients			
Provider listening	9.0	YES	93%
Provider communication about treatment	9.0	YES	96%
Provider conveys respect for patients	9.0	YES	98%
Individualized care			
Care recommendations based on patient level of risk for oral disease	9.0	YES	96%
Equitable care			
Assesses and addresses access and care disparities	8.0	YES	80%
<b>QUALITY- AND SAFETY-FOCUSED</b>			
Evidence-based care			
Frequency of dental radiograph use	8.0	YES	73%
Ongoing care in adults with periodontitis	8.0	YES	93%
Topical fluoride for adults at elevated caries risk	8.0	YES	89%
Topical fluoride for children at elevated caries risk	9.0	YES	98%
Sealants for 6-9 year old children at elevated caries risk	9.0	YES	100%
Sealants for 10-14 year old children at elevated caries risk	9.0	YES	96%
Caries risk assessment documentation	8.0	YES	86%
Follow up after medical well-child visit	7.0	YES	71%
Clinical outcomes			
Caries experience	8.0	YES	84%
Patients with new caries at recall	8.0	YES	91%
Tooth loss	8.0	YES	89%
Complications following extraction	8.0	YES	71%
Risk status improvement	8.0	YES	91%
Sealant retention	7.0	YES	64%
Untreated caries	9.0	YES	89%
Continuous quality improvement processes			
Quality improvement plan	8.0	YES	84%
Assessment of performance on quality improvement plan	8.0	YES	91%

CHARACTERISTIC/COMPONENT/MEASURE CONCEPT	MEDIAN	AGREEMENT	% RATING 7-9
Patient-reported outcomes and patient experience indicators			
Patients with oral pain or discomfort	8.0	YES	80%
Patient satisfaction with dental care	8.0	YES	76%
Patient satisfaction with dentist	7.0	YES	74%
Patient satisfaction with timeliness of needed dental care	8.0	YES	87%
Patient satisfaction with dental team	8.0	YES	74%
Patient satisfaction with dentist communication	8.0	YES	85%
Patient recommendation to family and friends	7.5	YES	67%
Minimizes adverse events			
Reviews controlled substance database when prescribing relevant medications	9.0	YES	96%
Post-operative infection following dental treatment	8.0	YES	80%

## Appendix 2 – Number of Existing Measures, Measure Concepts and Standards Associated with each PCDH Concept

Appendix 2 notes:

1. Items indicated in purple font are proposed system-level components and concepts to be rated by the NAC.
2. There were 462 unduplicated measures, measure concepts, and standards included in the database at the time this summary was prepared.
3. This summary reflects the database as of February 15, 2019. As new measures, concept and standards are identified, the database may be updated.

Characteristic/Component/Measure concept	Rated by NAC?	Number of Measures or Measure Concepts in Database	Number of Standards	Total
<b>ACCESSIBLE</b>				
Timely				
Timely access for emergency care	YES	3	1	4
Timely access for routine/preventive care	No; new based on NAC feedback; related to rated concept of appointment availability	8	4	12
Timely access for specialist care	No; new based on NAC feedback; related to rated concept of appointment availability	2		2
Accommodating				
Extended clinic hours	YES		1	1
User-friendly system for patient requests (e.g., appointment making, prescription refills)	YES		4	4
Adequate provider network				
Dentist availability	No – proposed system level	10		10
Dentist turnover/retention	No – proposed system level	2		2
Geographic accessibility	No – proposed system level	0		0
Affordability				
Population insured	No – proposed system level	2		2
Out-of-pocket costs	No – proposed system level	1		1
<b>COMPREHENSIVE</b>				
Prevention and wellness focused				
Dental/medical history completeness	YES	5	3	8
Oral health education provision	YES	5	1	6
HPV education and vaccination referral	No; new	0	0	0
Tobacco use screening and cessation counseling provision	YES	3		3

Risk assessment/documentation	YES	11		11
Risk-based treatment planning	YES	8		8
Sealant provision	YES	38		38
Topical fluoride application	YES	22		22
Screening for comorbid medical conditions (e.g., hypertension, diabetes)	No; new based on NAC feedback			0
Appropriate referrals				
Effective communication between generalists and specialists	YES	2	2	4
Use of clinical protocols for referral determination	YES		1	1
Referral monitoring	YES		4	4
Referral for comorbid medical conditions (e.g., HTN, diabetes, HPV vaccination)	No - new			0
Team-based				
Use of diverse provider types for needed care and maintenance support	YES	7	1	8
<b>COORDINATED</b>				
Dental-medical coordination	Changed Component			
Effective communication between dental and medical providers	YES	3	2	5
Referrals between dental and medical providers	No - new	2		2
Coordinated dental-medical patient records	No - new	2	1	3
Follow-up after ED dental visit	YES	2		2
Follow-up oral evaluation after medical well-child visit	YES	2		2
Follow-up oral evaluation after medical visit for pregnant women	YES	2		2
Follow-up oral evaluation after medical visit for patients with diabetes	YES	3		3
Follow-up oral evaluation after medical visit for patients in long-term care	YES	3		3
Follow-up Oral Evaluation after Medical Visit for High-Risk Populations	No – proposed system level	2		2
Community-connected				
Effective communication connecting patients with community supports	YES		3	3
Assessment of community resources necessary to support oral health care needs	No - new		3	3
Population health oriented				
Identifies and addresses population-level health concerns based on the diversity of the practice and the community	YES	1	4	5

Proactively identifies populations of patients and educates them about needed care	YES		1	1
<b>CONTINUOUS</b>				
Follow up on needed care				
Treatment plan completion	YES	17		17
Follow-up after ED dental visit	YES	2	1	3
Usual source of care				
Care provided by dental practice or clinical entity of record	YES	9	2	11
Care continuity (e.g., recall exam completion in consecutive years)	YES	5		5
<b>PATIENT- AND FAMILY-CENTERED</b>				
Cultural competence				
Accommodating of patient preferences (e.g., cultural, patient comfort)	YES	2	1	3
Assesses and addresses the language needs of patients	YES		1	1
Provider training in cultural competency	No - new	1	1	2
Shared decision making				
Informed patient engagement in decision making	YES	3	5	8
Sensitive to health literacy				
Patient communications appropriate to patient population communication needs and understandability	YES		5	5
Effective communication with patients				
Provider listening	YES	1		1
Provider communication about treatment	YES	6	2	8
Provider conveys respect for patients	YES	1		1
Individualized care				
Care recommendations based on patient level of risk for oral disease	YES	5	3	8
Patient self-management/self-care	No - new	6	2	8
Equitable care				
Assesses and addresses access and care disparities	YES		7	7
<b>QUALITY- AND SAFETY-FOCUSED</b>				
Evidence-based care				
Guideline/risk-based radiograph use	YES		1	1
Ongoing care in adults with periodontitis	YES	1		1
Topical fluoride for adults at elevated caries risk	YES	3		3
Topical fluoride for children at elevated caries risk	YES	6		6

Sealants for 6-9 year old children at elevated caries risk	YES	6		6
Sealants for 10-14 year old children at elevated caries risk	YES	3		3
Risk assessment/documentation	YES	11		11
Follow-up oral evaluation after medical well-child visit	YES	1		1
Clinical outcomes				
Caries experience	YES	13		13
Caries at recall	YES	10		10
Tooth loss/retention	YES	12		12
Periodontal disease status and improvement	No - new	1		1
Treatment under general anesthesia	No - new	2		2
Complications following extraction	YES	4		4
Risk status improvement	YES	3		3
Sealant retention	YES	2		2
Untreated caries	YES	5		5
Continuous quality improvement processes				
Quality improvement plan	YES	0	0	0
Performance assessment and improvement	No - new		21	21
Patient-reported outcomes and patient experience indicators				
Oral pain or discomfort	YES	3		3
Satisfaction with dental care	YES	5		5
Satisfaction with dentist	YES	4		4
Satisfaction with timeliness of needed dental care	YES	12	1	13
Satisfaction with dental team	YES	9		9
Satisfaction with dentist communication	YES	6		6
Satisfaction with function and aesthetics	No - new			0
Recommendation to family and friends	YES	1		1
Minimizes adverse events				
Judicious opioid prescribing	YES		1	1
Post-operative infection following dental treatment	YES	4		4
<b>NOT IN FRAMEWORK</b>	N/A	137	4	141
<b>TOTAL</b>		<b>473</b>	<b>94</b>	<b>567</b>

## Appendix 3 – National Advisory Committee Comments

ACCESSIBLE
<p><b>Timely</b></p> <ul style="list-style-type: none"> <li>• <b>Appointment availability for routine care</b></li> <li>• <b>Timely access for emergency care</b></li> </ul> <ul style="list-style-type: none"> <li>• <i>Within 2-3 weeks, no more than one month of initial time of complaint</i></li> <li>• <i>What is definition of timely? ER care within 24 hours? 48 hours? Routine care? 2 weeks? 3 weeks?</i></li> <li>• <i>Routine care should be within 2 weeks.</i> <i>Emergency triage immediately and w/o appointment</i></li> <li>• <i>Timely delivery of services that prevent or reduce disease</i></li> <li>• <i>What about a patient centered measure, which would be "were patient needs addressed in a timely matter" (vs appointment time or in addition to) collected from the patients themselves?</i></li> <li>• <i>Access to early preventive and early intervention services</i></li> <li>• <i>Accessibility is very important, but it would be unreasonable to use this as a metric given the nationwide problems with access to care for underserved patients. For practices that do not see public program or uninsured patients, accessibility is not an issue.</i></li> <li>• <i>Timeliness is an important characteristic of any service; the concept is an inextricable aim for healthcare improvement amongst all others. Please give careful consideration to the close association of timeliness and safety (ex. Barriers to information delivery(e.g. biopsy, screening reports, notifications- referral delays and response to patient requests</i></li> <li>• <i>It will be important to consider a measure that includes patient needs related to appointment availability. Maybe add "appointment availability that is convenient to the patient". My dentist has a lot of openings, but for me to access them, I have to take my kids out of school and leave work. They are frequently closed when school is closed.</i></li> <li>• <i>Prefer actual rather than perception (satisfied is not the same as % seen (or at least offered) in appropriate timeframe.</i></li> <li>• <i>Appropriately timed delivery of preventive health education - consistent with anticipated need and stage of development.</i></li> <li>• <i>Suggest specifying the timely in both questions: Appointment within XX weeks; Access to Emergency care with in 1-2 days.</i></li> <li>• <i>Timely appointment availability for specialists: if a person needs to see a specialist, all the more reason for timely availability</i></li> <li>• <i>In another project I worked on that is very similar to this one we discussed transportation as a part of being able to get and provide timely care. Whether it be transportation to an appointment or a mobile clinic transporting care to the person in their home or neighborhood.</i></li> <li>• <i>Time (days or weeks) to third available 60 minute slot in schedules (prospective).</i> <i>Time from call to appointment (days/weeks) retrospective</i></li> <li>• <i>Appointment availability following referral for dental specialty care</i></li> </ul>
<p><b>Accommodating</b></p> <ul style="list-style-type: none"> <li>• <b>Extended clinic hours</b></li> <li>• <b>User-friendly system for patient requests (e.g., appointment making, prescription refills)</b></li> </ul> <ul style="list-style-type: none"> <li>• <i>Accessible in person or electronically twenty four hours a day</i></li> <li>• <i>How about location? Within 10 miles? 15 miles? Driving time?</i></li> <li>• <i>Ability to access care (accessibility to public transportation, adherent to ADA [Americans with Disabilities Act] guidelines, physically available for patients with disabilities [stairs/elevator, wheelchair accessible)</i></li> <li>• <i>services delivered at times and places that are convenient, accessible for people.</i></li> <li>• <i>Clinic location in close proximity to public transportation or parking. Availability of sufficient clinic hours (I don't think extended clinic hours are necessary).</i></li> <li>• <i>Again these are important, but an unfair metric for practices that see disproportionate numbers of patients on public programs or uninsured</i></li> <li>• <i>I don't think the issue is "extended clinic hours" - the last thing I want to do is go to the dentist on Saturday. Is there any research that demonstrates that extended hours increases access to dental care? We are learning in our virtual dental home pilots in CO that providing care in schools is the most important factor for kids to get care. Creating a dental home in an easily accessible system is more important than scheduling infrastructure. Scheduling is extra work, and is not value-added. These measures need input from the community/patients for what they want and need.</i></li> <li>• <i>Phone is answered or answerable by a human being, not just a machine</i></li> <li>• <i>Availability of "provider" for consultation</i></li> <li>• <i>Transportation could be here as well. The ADA health policy center has done some work looking at transportation times to a place of care so it seems like it could be something that can be measured.</i></li> </ul>

- *Patient-friendly filing of third party payer claims for reimbursement. Patients may select dental offices that offer to file claims for patients and consider these practices to be more accommodating*
- *Call list for earlier appointments if appointments become available due to schedule changes.*

## COMPREHENSIVE

### Prevention and wellness focused

- **Oral health education provision**
- **Dental/medical history completeness**
- **Tobacco use screening and cessation provision**
- **Risk assessment completion**
- **Risk-based treatment planning**
- **Sealant provision**
- **Topical fluoride application**

- *Arresting decay (SDF) on initial dental or regular preventive visits*
- *Assessment and consideration of health literacy level*
- *Oral Cancer Screening and promotion of HPV vaccination, Assessment of oral-systemic linkages (diabetes/periodontal disease) and counseling*
- *Assist patients in setting self-management goals*
- *oral health education, sealant and fluoride application would very under a risk-based preventive and treatment plan, so I rated those lower as stand alone measures.*
- *Combine prevention science with behavior change integrated in community sites and organizations*
- *Screening for risk behaviors (beyond tobacco) and referral to care if needed (e.g. alcohol, opioid use disorders - consider substance use disorders in general rather than limiting to tobacco?). Screening for medical conditions and referral to care if needed (e.g. hypertension, diabetes, obesity).*
- *Risk assessment should be both periodontal and caries, and address social determinants and risk related to medical diagnosis (e.g. ability to care for self, multiple meds that cause xerostomia...)*
- *Comprehensive: "Comprehensive care address any health problem at any give stage of the patient's life cycle"*
- *Blood pressure, a1c*
- *What does the evidence tell us about "oral health education" does it improve outcomes? I would make it an evidence-based patient engagement measure, instead*
- *Oral health literacy assessment*
- *Evidence based care protocols - should be adopted and embedded in work flow.*
- *vaccinations; BP, weight assessment*
- *Routine or regular risk assessment*
- *The other two pillars of prevention that I don't see reflected here are water fluoridation and diet and nutrition (including consumption of sugary sweetened beverages) - is there a way for these to be included as measure concepts or do you see them as folded in to oral health education - how will that be defined?*
- *% of patients without preventive 'care gaps' (ex: immunizations)*
- *Use of topical caries arresting medicaments*
- *Dietary guidance, in particular got high caries risk*
- *This suggestion isn't specific to Prevention and wellness focused, but does apply to measure concepts related to Comprehensiveness. I think it's essential for PCDH measure concepts related to Comprehensiveness to include a concept related to whether the PCDH provides a sufficient range/scope of services necessary to address common dental conditions (e.g., restoration of carious teeth, basic periodontal treatment and maintenance, treatment for trauma, etc. One possible frame to help add definition to this concept is the scope of services that a general dentist (dentistry's equivalent to a primary care provider) should be expected to provide. I realize that general dentists provide a wide range of services, with some practitioners offering services that are not commonly provided by others; but I'm referring to services commonly considered to be 'primary care dentistry'. HRSA started to define this concept for community health centers, but never followed through (to the best of my knowledge) to actually specify the types of services that FQHCs with dental clinics should provide.*

### Appropriate referrals

- **Effective communication between generalists and specialists**
- **Use of clinical protocols for referral determination**
- **Referral monitoring**

- *Requiring treatment beyond the skills or licensing restrictions of the diagnosing provider*
- *Effective communication between oral health, behavioral health, and primary health providers*

- *not sure how you measure "effective" communication as the concept of this could widely vary. I might add if there is an interoperable EHR for this communication in place*
- *Linkages between community delivered services and office delivered services when needed*
- *Effective communication with the patient about the importance of the referral. Effective discussion with the patient about characteristics of the referral provider that would contribute to following through with the referral (e.g. location, accepts patient's insurance). Appropriate referrals to medical professionals for conditions/risk behaviors that need to be managed by medical colleagues.*
- *timeliness- referrals*
- *Referral between dental and primary care*
- *Consider a measure that reflects scope of primary provider site capability thus avoiding need for "referral" for anticipated care and reducing barriers. % provided in primary care site - higher is better. % referred to specialty site - lower is better. (Full scope vs limited scope primary care)*
- *referral type, e.g., vaccines, DM risk, high BP*
- *Monitoring referrals*  
*Follow up on referrals*
- *Is there a way to specifically measure referrals from medical to dental homes and vice versa here?*
- *An examination of effective (patient makes it to the office for care) referrals from primary care medical providers (pediatricians and family medicine docs) of young children to a dental home*
- *Maybe it's what you're trying to get at with clinical protocols for referral determination, but I think an important concept relates to not providing care beyond the established competencies of the 'primary care providers' -- e.g., use of sedation or providing services for which the providers have not been adequately trained. This concept address whether referrals are made appropriately (i.e., when indicated) when patients' treatment needs exceed the capabilities of the 'primary care providers'.*

#### **Team-based**

- **Use of diverse provider types for needed care and maintenance support**

- *Team-based should not be consider a location specific limitation or limited to one professional discipline e.g. dental, behavior, pharmacy, or medical provider*
- *This may be a non-starter; better approach is to make providers culturally competent. The critical mass for some groups is far from being realized.*
- *Is the diversity of providers the issue, or is using everyone to top of scope the issue? I think the second is more important - and some states/communities just will have fewer options. Also, is there an interprofessional issue here too? I just don't know that this language captures teamwork for me.*
- *Integration- diverse domains of care, service and in various and dissimilar settings*
- *I would re-word this to capture what the literature tells us, which is people who get care from providers who look like them have better outcomes - so maybe the measure is "providers are representative of the community they are serving?"*
- *Referral networks are developed between provider groups so that patients can move seamlessly to a different provider*
- *I'm not sure what maintenance support means? Are you talking about a team within the PCDH or a team that includes the PCDH as well as other providers? I'm not really clear on the intent of this concept.*
- *Preventive/restorative service competed by dentists of record*
- *comment: I'm not sure that the measure concept is clear as to whether referring to provider types in the clinic or interdisciplinary care (i.e. coordinated care with other types of health providers.) Either way, I'd think it should not just be care by different provider types, but good communication between the providers providing the care for the patient.*
- *Regular or routine ( quantifiable %) use of allied dental personnel for tasks that can be delegated*
- *Delegation that allows for a variety of team members to 'practice to the top of their license/certification'.*

#### **COORDINATED**

##### **Communication across dental and medical care systems**

- **Effective communication between dental and medical providers**

- *Shared record systems; common professional language and descriptions.*
- *Incorporation of oral health care records into the general medical record*
- *This should be via health record not necessarily by people to people although that is ideal*
- *again, how do you measure this? what about presence of EHR transfer of data/info?*
- *coordination between oral health, social service, educational, and general health systems*
- *Ease of access to the specific provider and/or system required for consultation.*  
*Better yet --an INTEGRATED system whereby access is seamless for all providers.*
- *Not sure how you would propose to measure "effective" here.*

- see last area - perhaps that should go here? *[Referral networks are developed between provider groups so that patients can move seamlessly to a different provider]*
- There it is - strike my earlier comment!! *[Is there a way to specifically measure referrals from medical to dental homes and vice versa here? ?]*
- data sharing, and ideally EHR / EDR merged systems for dentist access to medical data and MD access to dental data.
- Risk assessment by primary care medical providers and its effect on referral to a dental home. Again, this is more important with infants and toddlers.
- ( quantifiable level of) Coordination of care ( medical and dental) for patients with systemic chronic diseases
- Systems for monitoring and facilitating coordination of care provided by different providers, including providers offering services in different settings.

### Community-connected

- **Effective communication connecting patients with community supports**

- Community systems of care, education, information, home support, and long-term care. This can also include regular places of community resources such as drug stores, shopping plazas, health foods, supermarkets, schools, daycare, where ever communities of people gather.
- Care coordination? Cultural and linguistic appropriate care?
- Assessment of community resources necessary to support oral health care needs
- again, is communication or outcomes the key?
- effective integration with community delivered services and office delivered services
- Seems less relevant in dental care vs the primary care medical home.
- % of population receiving specific oral health education and messaging through non-clinic based, community based communication channels.
- maybe too much to ask if already focusing on medical care connections
- I would think that any measure that attempts to ascertain the effectiveness of connecting patients to community resources may be prone to feasibility problems.
- ( quantifiable level) of patients that know of other resources in their community  
Note: therefore rather than effective communication between providers, more mainstream education of patients about other community resources and how to access them
- Linkages that allow for some services to be provided in community settings other than clinics or traditional practices

### Population health oriented

- **Identifies and addresses population-level health concerns based on the diversity of the practice and the community**
- **Proactively identifies populations of patients and reminds them about needed care**

- cultural, racial, ethnic, social classes, sexual orientation, language, each can be a separate population of focus with differing concerns and measurable goals.
- Proactively works to educate identified patient populations about needed care, rather than just reminding them.
- Consider adding the word "practices" to #1 above to read "Identifies and addresses population-level health concerns and practices based on the diversity of the practice and community". The idea is to promote community-based prevention practices (community water fluoridation, school-based prevention programs)
- Actively seeks ways to increase care delivery to underserved population groups
- instead of "reminds them" - delivers care in locations, and using methods optimized to produce population health
- Need to consider health disparities as well as diversity.
- The dental home should partner with public health, and take accountability for population health. So maybe the measure is "Partners with state and local public health organizations to identify population-level health concerns." The issue I have with the way this measure is written is I live near a dentist who serves a white patient base. That doesn't mean that as a health care provider she isn't responsible for the black families who live in the apartment complex right next to her office. But the black families don't get care in her office for a lot of reasons....so if her population health metric is related to the rich, white people she serves, she has done nothing to improve the health of the families who live right next to her practice. Could public health partner with her to help make her office more welcoming, hire staff from the community, address her own implicit bias to care for her neighbors?
- Use of surveillance data at all levels (national to local), with emphasis on local data if available, in planning and implementation of services provided by practices/clinics. This might be included in concepts listed above, but the details of the concepts aren't clear.

### CONTINUOUS

#### Follow up on needed care

- **Treatment plan completion**
- **Follow-up care after ED dental visit**

- **Follow-up oral evaluation after medical well-child visit**
- **Follow-up oral evaluation after medical visit for pregnant women**
- **Follow-up oral evaluation after medical visit for patients with diabetes**
- **Follow-up oral evaluation after medical visit for patients in long-term care**

- *Timely, appropriate based on a protocol with higher patient outcomes.*
- *Understand that oral disease is a chronic disease that needs to be managed throughout life*
- *If the follow ups are based on an identified need then my ratings would be higher but as written just to do this after any medical visit doesn't make sense.*
- *Treatment plan completion- is often more about patient follow-up rather than the dental home. Homeless, transient patients less likely to FU. Follow up visits after primary care, Diabetes or OB visits- appropriate metric for an organization that has both medical and dental services.*
- *Continuous- "Care over time by an individual and or team- also to effective and timely communication."*
- *Is there any evidence that "follow up evaluation", which I interpret to mean a dental visit, improves outcomes? If not, let's not make people sit in a dentist's chair for no value-added reason. Maybe its a follow up phone call? Or a follow up letter from physician who is caring for the diabetic patients. I don't think every child needs to see a dentist after every well child visit. The follow up care should be based on patient risk, not an arbitrary measure that costs the system a lot of resources.*
- *Not sure where it fits but should address over prescribing of opioids. Should have specific measures on days supplied, dosing, avoidance or minimizing any use, assessment of addiction risk before prescribing. I continue to hear horror stories. I marked a number of the items above as not important because I don't believe a dental visit is appropriate as a specific follow up to every medical visit. But yes there should be appropriate visit frequency and if there is a referral from a medical provider for dental care it should be followed up on in a timely manner.*
- *% with oral evaluation as part of well-child or other appropriate medical visit.*
- *For many of these concepts the reason for the visit should be specific to the need for follow-up care.*
- *behavioral health change program participation.*
- *Follow up visit after a referral*
- *Monitoring and follow up should be continuous and built into system. Measure concept-general IT capacity to monitor and follow up after referrals and other care.*
- *Children >1 year that have a oral evaluation*
- *comment: it's unclear to me on the last 3 concepts whether a follow-up visit is necessary after all appointments for pregnant women, people with diabetes, and people in long-term care if notable proportions of these groups are already receiving regular oral health care. Though many (most?) young children having a well-child visit have not yet had a dental visit, the same could be said for those that already have and are already on a regular schedule for dental visits.*
- *Follow-up oral evaluation after dental specialty referral. Follow-up oral evaluation after medical visit for any patient deemed to have special health care needs*
- *Comment: I might have rated some of these higher, but the term 'follow-up care' was problematic. Continuity of care generally refers to receipt of a series of services (generally services related to 'wellness visits' in a regular ongoing manner, often with the additional consideration of whether those services were obtained at the same site or from the same provider. The measure concepts listed here seem to be more related to comprehensiveness of care (in a broad sense) or coordination of care (particularly across different types of service providers or settings). In that regard, I don't think they're a very appropriate set of concepts for continuous care or continuity of care.*

#### **Usual source of care**

- **Care provided by dentist of record**
- **Care continuity (e.g., recall exam completion in consecutive years)**

- *While important, the current variation of 6 month intervals isn't clinically specific.*
- *care provided in locations and by personnel in a system optimized to produce the best health at the lowest cost (does not need to be focused on the role of dentists*
- *Variation of above - Patient retention to either facility and/or specific provider over course of predetermined time frame*
- *Again need to talk into account the transient nature of some patients, and their hierarchy of needs*
- *Care continuity for high-risk patients based on risk assessment score*
- *does the literature tell us anything about whether or not continuity of care has any impact on patient outcomes? We know it works in medical. I haven't seen any literature that it works in dental. AND we often hear about dentists diagnosing differently, so maybe its actually good for patients to see different people to improve dental outcomes?*
- *You might consider adapting "care provided by dentist of record" to "care provided by dental practice of record", to align with the "team-based" concept.*

- Continuity of the dental record is more important than the actual person seen except for individuals with dental health issues.
- possibly simply if people can name a specific dentist or clinic that they go to when needed.
- Practice facilitates transitions between different health insurance carriers or packages --to secure continuity of care for patients who have to change insurance source while being a patient in a practice

## **PATIENT- AND FAMILY-CENTERED**

### **Cultural competence**

- **Accommodating of patient preferences (e.g., cultural, patient comfort)**
- **Assesses and addresses the language needs of patients**

- may include sexual orientation and country of origin ( for genetic considerations)
- Assesses and addresses cultural preferences of patients
- Cultural routine and traditions are not always the same in a uniform ethnic/ social group. Beliefs and traits from a seemingly like ethnic/social group may differ in a "local world"-as a result of difference in meaning from an age cohort, gender, class , religion and other associated affiliations. A technical approach (ie. generalized check list) to addressing the matter of cultural competency may devolve into unfounded assumptions, stereotyping and or bias. Understanding, feelings and perceptions from the patients spector- gauging response- and then adapting to the needs, preferences and most important values of the patient- over time- is most important.
- Should address anxiety as well - many people have dental phobias and end up avoiding care if the dental office is not sufficiently attuned to that anxiety.
- Assessment of the training that dental staff have received for cultural sensitivity and competence.

### **Shared decision making**

- **Patient engagement in decision making**
- Information presented at a low literacy level or with approved translation and patient acknowledgement recorded and witnessed. Indications of questions answered or time to reflect on decision based on risks.
- Develops self-management goals, working in partnership with the patient
- Need some focus on informed decision making. There needs to be clear evidence-based data shared about the issue and treatment options. I know many who are unclear whether the dentist is being too aggressive and just trying to bill more for things like replacing fillings and such.
- An evaluation of whether patients understand informed consent
- Patient well informed ( quantifiable levels ) of treatment options and treatment options pros and cons

### **Sensitive to health literacy**

- **Patient materials appropriate to patient population communication needs and understandability**
- Lowest possible literacy level appropriate for the social-economic - educational class of the patient.
- Assessment of oral health literacy
- Provider understands that health literacy is a two-way street (both patient and provider have roles) and employs strategies to improve health literacy
- this seems reasonable and measurable. But do we know anything about whether or not it actually makes a difference in improving outcomes or patient satisfaction?
- signage available in multiple languages (at least if regular attendance by people of other languages)
- providers communicate with patients at appropriate level of individual patient health literacy.

### **Effective communication with patients**

- **Provider listening**
- **Provider communication about treatment**
- **Provider conveys respect for patients**
- Sufficient time to hear and address patient questions in a culturally, literally appropriate manner.
- Assessment of patient's understanding of oral health care needs and treatment plan.  
Patient involvement in treatment plan and goals
- I suggest a measure about provider has assessed their own implicit bias
- Sound like these will need to be survey measures.
- Provider listening and understanding. % reporting that the provider both listened and understood my situation (etc.).
- Provider arranges communication in language needed
- Care teams concern for overall health
- Evaluation of whether Informed consent is understood fits in here as well.

### **Individualized care**

- **Care recommendations based on patient level of risk for oral disease**

- Multiple factors beyond the disease presentation itself included in the diagnosis with implications for treatment outcomes
- Consider the term- personalized care
- We need a measure of oral health that is meaningful and relevant for the patients.
- Home care, lifestyle and preventive advice based on level of risk for oral disease.
- also based on patient's preferences, means of payment and patient ability to pay, etc. Probably other important factors given more thought, but there are definitely important factors in addition to risk.
- Treatment options offered take into consideration patient's systemic health, age, potential allergies or sensitivity and other patients' special circumstances
- Care recommendations based on patient preferences or circumstances (e.g., affordability, time required to complete various treatments. Another important concept relates to providing multiple treatment options for various conditions that allow patients' to choose what they feel is best for them.

#### Equitable care

- **Assesses and addresses access and care disparities**
- All social-economic and cultural, racial, ethnic, special populations having equal access to disease-based and preventive care
- This doesn't make a lot of sense at the individual patient level, but at a clinic level you could I guess do this. more a system concept.
- Perhaps more specific - how soon does patient get access. Do they get in same day or does it takes weeks?
- I don't think this is the domain of the dental home... we absolutely need to address this. But is there anything actionable a dental office can do? Maybe the measure is more about assesses patient satisfaction, including patient engagement, understanding of treatment plan, and taking into account the patient preferences in their care.
- System measure- ability of system to identify patients or populations at higher risk
- slightly lower priority only because I'm not sure how it can be measured effectively.
- In my opinion, a survey of patient concerns would be important to determining whether access and care disparities are addressed.
- I think this might be a challenge from a measurement perspective. I suppose one criterion might be whether the practice participates in publicly financed benefit programs (e.g., Medicaid) or offers discounts based on patients' SES, etc.

#### QUALITY- AND SAFETY-FOCUSED

##### Evidence-based care

- **Frequency of dental radiograph use**
- **Ongoing care in adults with periodontitis**
- **Topical fluoride for adults at elevated caries risk**
- **Topical fluoride for children at elevated caries risk**
- **Sealants for 6-9 year old children at elevated caries risk**
- **Sealants for 10-14 year old children at elevated caries risk**
- **Caries risk assessment documentation**
- **Follow up after medical well-child visit**
- Following guidelines for radiography use should be the issue, not frequency.  
Am not following why measuring a follow up after well child is a useful tool, unless there is a referral for acute needs inferred
- prevention oriented care based on best, latest most cost-effective interventions (the list above is a very incomplete list and does not consider the latest science let alone evolving concepts)
- Use of dental diagnostic codes, Avoiding inappropriate care (crown and bridge work on a periodontally involved patient, SRP on patients with gingivitis, drilling on incipient lesions)
- Radiographs should be based on risk assessment. High risk more frequent.  
Ongoing care with perio is evidence based but unfortunately it is non covered service for many adult patients on public programs - another metric that would need to consider health disparities.
- Frequency of radiograph use, based on evidence-based guidelines. I would delete the last one - don't make someone sit in a dentist chair just because they had well-child care - it must be value-added for the patient.
- % with documented risk reduction plan  
% with documented remineralization plan for caries related lesions affecting enamel.
- Follow up after medical well-child visit is in two places. Is that purposeful?
- Well child visit schedules do not always align with dental periodicity.

- *comment: again for follow-up visit after well-child visit, only if child has not yet seen dentist or is not on a regular visit schedule with a dentist. And the provision of some of the concept treatments may in part be determined by risk assessment, so all patients may be determined to not need the preventive treatments. In this respect, clinics with healthier lower risk patients would look worse on these concepts.*
- *Perio risk assessment for patients with chronic medical conditions like diabetes and heart disease*
- *2) Perio risk assessment of pregnant women*
- *See previous comments regarding the term "follow-up care". [Comment: I might have rated some of these higher, but the term 'follow-up care' was problematic. Continuity of care generally refers to receipt of a series of services (generally services related to 'wellness visits' in a regular ongoing manner, often with the additional consideration of whether those services were obtained at the same site or from the same provider. The measure concepts listed here seem to be more related to comprehensiveness of care (in a broad sense) or coordination of care (particularly across different types of service providers or settings). In that regard, I don't think they're a very appropriate set of concepts for continuous care or continuity of care.]*

#### **Clinical outcomes**

- **Caries experience**
- **Patients with new caries at recall**
- **Tooth loss**
- **Complications following extraction**
- **Risk status improvement**
- **Sealant retention**
- **Untreated caries**

- *Soft tissue status, cancer check, dietary review, smoking, alcohol, drug usage, HIV, HPV, periodontal, atypical tooth or tissue formatons, implications of systemic illness of oral health*
- *Caries experience over time; dependent on having diagnosis codes. You want to be able to track over time the reduction in disease and take appropriate actions to achieve the intended health improvement. This needs to be a dashboard in the electronic health record or maybe even clinical decision support that identifies potential actions.*
- *Periodontal disease status*
- *Risk status improvement, Caries Increment, are key .*
- *disease severity, signs of pain and infection,*
- *2nd item above - patient with new caries on prior treated same tooth, at recall*
- *Treatment under general anesthesia*
- *Do not feel expert on this area to respond.*
- *% with untreated caries related lesions affecting dentin.*
- *% with untreated caries. (The disease, not the resulting lesions)*
- *Should there be a tooth pain measure?*
- *Risk status improvement is partially tool driven so recommend eliminating socioeconomic questions when evaluating movement in status. They can skew risk of an otherwise healthy child based on external factors that may not change.*
- *New evidence suggests outcome of interest for sealants should be caries incidence (Y/N) not retention*
- *Caries-related treatment of sealed teeth*
- *'- preservation of tooth integrity whenever possible*  
  - *longevity of sound restorations*
  - *less invasive treatment options implemented*
- *I think caries incidence is a better concept from an accountability standpoint than caries experience.*

#### **Continuous quality improvement processes**

- **Quality improvement plan**
- **Assessment of performance on quality improvement plan**
- *Adherence to CDC infection control and other standardized checklists of patient, workforce, equipment, materials that impact patient and practice outcomes; regular updating new science into the protocols as new findings occur.*
- *I would like to see provider payment align with improving health over time using some of these measures.*
- *These are very important, however assessment of performance between practices, must take into consideration social determinants of health and not penalize practices that see the most high risk patients. This is even more important in dentistry since many private practices will not see high risk, or noncompliant patients.*
- *Quality improvement plan, which includes implementation strategies (not a plan that sits on the shelf). Maybe the measure is: Care team actively engages in quality improvement measurement, testing, and implementation.*
- *% with formal proactive peer review / quality assurance plan.*

- *I think these are important, but exceedingly rare in current practice. Most practitioners don't even know QI concepts and terminology, let alone have a plan in place or actually conduct real QI processes.*

**Patient-reported outcomes and patient experience indicators**

- **Patients with oral pain or discomfort**
- **Patient satisfaction with dental care**
- **Patient satisfaction with dentist**
- **Patient satisfaction with timeliness of needed dental care**
- **Patient satisfaction with dental team**
- **Patient satisfaction with dentist communication**
- **Patient recommendation to family and friends**

- *Patients who like their care provider do worse medically!*
- *is the pain what drove them to dentist, or after the care?*
- *I think we could get rid of most of these measures, and just measure "recommendation to family and friends"*
- *Patient satisfaction doesn't vary much, since dissatisfied patients tend to leave a practice.*
- *Patient satisfaction with the state of their own oral health, function, esthetics etc. Basically how happy are they with their teeth and mouth.*

**Minimizes adverse events**

- **Reviews controlled substance database when prescribing relevant medications**
- **Post-operative infection following dental treatment**

- *Review of treatment - restorations for failure frequency*
- *There research looking at the more common adverse events and developing/testing measures that could be applied. These are potential future measures to put on the parking lot of ideas.*
- *1st item above likely to become automated in every State.*
- *Manage acute pain expectations following dental procedures.*
- *Query of PDMP is ideal, systems need to develop to that point that the program is easier to access.*
- *Reviews controlled substance data baser - minimal standard of performance rather than quality measure. Presence of appropriate clinical provider credentialing process.*
- *How about sedation related adverse events?*
- *Evaluation of possible complications from dental treatment--allergic response to latex, issues with local anesthetics, syncope, etc.*
- *Other injuries caused by dental treatment ( more pain, cuts, etc)*

**ADDITIONAL COMMENTS**

- *PCHD and the PCMH may be best promoted as PCHH with appropriate sub-divisions of essential services. It seems the two as separate models do not communicate the system of care surrounding the population we are attempting to create. It maintains in a sense, the separate status quo divided care model.*
  - *Great progress! Thanks*
  - *This is very complete. Some measures will vary with the population served.*
  - *Most of the concepts are deeply rooted in the notion that dental health happens at the hand of dentists in dental offices. That is the current system that fails to reach most people in the country and is too expensive to feasibly expand or to be effective in an accountable care system that any hope of achieving the Triple (Quadruple) Aim.*
- Little orientation toward a system of care with community-delivered, prevention and early intervention services, performed by allied and non-dental personnel and linked through telehealth-connected teams to dental offices and dentists with treatment in dental offices for advances services only when needed.*
- *Maybe this is in next round but would like to see measure concepts tied to broader clinical outcomes. Restorative failure rates, remakes to most often treated categories (fillings, crowns), recurrent decay or more severe treatment tied to specific teeth within reasonable time frames (filling needs root canal within same year), solutions rates for extracted and/or missing teeth (extract #4 and gets implant), etc.*
  - *Dentistry needs to be very cautious about recommending metrics that do not consider social determinants of health. Learn this lesson from medicine. Safety net clinics treat patients that are more likely to have multiple medical and psychosocial complexities that complicate treatment, and compliance. They will not perform well with these metrics in comparison to a private practices. Dentistry does not have diagnosis codes, and without this information we cannot accurately define quality, or collect data for evidence based practice..*
- Factor in these issues, or the metrics will be useless.*

- *These are all very thoughtful measures. It seems like too much in the current care delivery system. I suggest a narrow list, not more than 6-8 measures at a time. Maybe a menu that practices could choose from and work on over time.*
- *Excellent compilation of concepts*
- *Looks great - I'm excited to see this out there for providers to use after the final Phase!*
- *No, I think that the measure concept piece of the PCDH model was very thoroughly addressed in this first round of the Phase 3 Dental Home Delphi Survey.*
- *Lots of important concepts that could lead to even more actual measures. It will be important to balance 'measurement burden' with measure completeness in developing a measure set for PCDH.*