Supplementary Online Content

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This supplementary material has been provided by the authors to give readers additional information about their work.

eAppendix 1. Systematic Literature Review – Methods and Results

We conducted a systematic literature review of the medical and social sciences literature to identify evidence-based interpersonal interventions that could form the basis for presence practices. The review is registered at Prospero: CRD42019120160.

METHODS

Data Sources and Search Criteria. We searched PubMed, EMBASE, and PsycInfo (January 1997 to August 2017) for randomized controlled trials and controlled observational studies that examined the association between provider-patient interpersonal interventions and at least one outcome measure of the quadruple aim (i.e., patient health outcomes, patient experience, provider experience, or cost).[34] A full list of search terms is presented in Table 1.1. In order to be eligible, a study needed to focus on an interpersonal intervention (see Concept 1 search terms) and needed to include at least one quadruple aim outcome (i.e., an outcome pertaining to population health [operationalized as outcomes related to health or healthcare], patient experience, provider experience, or direct or indirect measures of cost) (see Concept 2 search terms). We excluded non-English studies, animal research, and research with participants younger than 18 years of age. Two or more authors independently reviewed each title/abstract and the selected full-text articles.

Table 1.1. Systematic Literature Review Search Terms by Database

PubMed	
Concept 1	((((((((((("Trust"[Mesh]) OR "Ceremonial Behavior"[Mesh]) OR "Empathy"[Mesh]) OR "Humanism"[Mesh]) OR "Social Skills"[Mesh]) OR "Professionalism"[Mesh]) OR "Physician-Patient Relations"[Mesh]) OR "Professional-Patient Relations"[Mesh:NoExp]) OR "Interpersonal Relations"[Mesh]) OR "Nonverbal Communication"[Mesh])))) OR ((((((((((provider patient relations*[tw] OR ("provider-patient"[tw] AND relations*[tw]))) OR (hospital patient relations*[tw] OR ("hospital-patient"[tw] AND relations*[tw]))) OR (nurse-patient relations*[tw] OR ("nurse-patient"[tw] AND relations*[tw]))) OR (provider presence[tw] OR doctor presence[tw]))) OR ((((((empathy[tw] OR trust[tw] OR humanism[tw] OR professionalism[tw] OR social skill*[tw])) OR (interpersonal skill*[tw] OR interpersonal relations*[tw] OR doctor patient relations*[tw] OR ("doctor-patient"[tw] AND relations*[tw]))) OR (physician patient relations*[tw] OR ("physician-patient"[tw] AND relations*[tw]))) OR (nonverbal communication[tw] OR ("non-verbal"[tw] AND communication[tw])))))))) OR ceremonial behaviour[tw])
Concept 2a	health cost*[tw] OR health care cost*[tw] OR ((("Health Care Costs"[Mesh] NOT ("Drug Costs"[Mesh])))) OR (("Cost-Benefit Analysis"[Mesh]) OR "Health Expenditures"[Mesh])
Concept 2b	((("Treatment Outcome"[Mesh]) OR "Chronic Disease"[Mesh] OR "Health Services Accessibility"[Mesh])) OR ((access*[tw] AND (health[tw])) OR health outcome*[tw] OR treatment outcome*[tw] OR chronic disease[tw])
Concept 2c	(((((("Patient Acceptance of Health Care"[Mesh]) OR "Culturally Competent Care"[Mesh]) OR "Health Priorities"[Mesh]) OR "Patient Satisfaction"[Mesh])) OR ((physician communication*[tw]) OR (health care utilization[tw]) OR (cultural* competent care[tw] OR patient satisfaction[tw]))
Concept 2d	(((((("Practice Patterns, Physicians'"[Mesh]) OR "Alert Fatigue, Health Personnel"[Mesh]) OR "Burnout, Professional"[Mesh]) OR "Physicians/psychology"[Mesh])))) OR ((((((physician burnout[tw]) OR doctor burnout[tw]) OR (doctor fatigue[tw] OR physician fatigue[tw])))) OR occupational stress[tw] OR (joy[tiab] AND practice[tiab]))
Filter	Cochrane Sensitivity PLUS Observational Study ((((((((((observational study[pt]) OR observational[tiab] OR systematic[tiab]) OR randomized controlled trial[pt]) OR controlled clinical trial[pt]) OR randomized[tiab]) OR drug therapy[sh]) OR randomly[tiab]) OR trial[tiab]) OR groups[tiab]) OR placebo[tiab])) NOT (animals[mh] NOT humans[mh])
Limits	Publication Date: 1997-2017 Language: English

Embase	
Concept 1	('trust'/exp OR 'trust' OR 'doctor patient relation'/exp OR 'doctor patient relation' OR 'symbolism'/exp OR 'symbolism' OR 'empathy'/exp OR 'empathy' OR 'nurse patient relationship'/exp OR 'nurse patient relationship' OR 'humanism'/exp OR 'humanism' OR 'social competence'/exp OR 'social competence' OR 'professionalism'/exp OR 'professionalism' OR 'professional-patient relationship'/exp OR 'professional-patient relationship' OR 'interpersonal communication'/exp OR 'interpersonal communication') OR ('trust':ti,ab,kw OR 'doctor patient relation*':ti,ab,kw OR 'empathy':ti,ab,kw OR 'nurse patient relation*':ti,ab,kw OR 'symbolism':ti,ab,kw OR 'humanism':ti,ab,kw OR 'social competence':ti,ab,kw OR 'social skill*':ti,ab,kw OR 'professionalism':ti,ab,kw OR 'professional-patient relation*':ti,ab,kw OR 'interpersonal communication':ti,ab,kw OR 'ceremonial behavior':ti,ab,kw OR 'ceremonial behaviour':ti,ab,kw OR 'physician-patient relations*':ti,ab,kw OR 'interpersonal relation*':ti,ab,kw OR 'nonverbal communication':ti,ab,kw)
Concept 2a	('hospital cost'/exp OR 'cost benefit analysis'/exp) OR ('health care cost*':ti,ab,kw OR 'cost benefit analysis':ti,ab,kw OR 'health expenditure*':ti,ab,kw OR 'hospital cost*':ti,ab,kw OR 'health cost*':ti,ab,kw)
Concept 2b	('clinical outcome'/exp OR 'chronic disease'/exp OR 'hospital care'/exp) OR ('treatment outcome*':ti,ab,kw OR 'chronic disease':ti,ab,kw OR 'chronic illness':ti,ab,kw OR 'health services access*':ti,ab,kw OR 'clinical outcome*':ti,ab,kw OR 'hospital care':ti,ab,kw)
Concept 2c	('cultural safety'/exp OR 'patient assessment'/exp OR 'patient care planning'/exp OR 'patient comfort'/exp OR 'patient decision making'/exp OR 'patient attitude'/exp) OR ('patient acceptance health care':ti,ab,kw OR 'culturally competent care':ti,ab,kw OR 'health prioriti*':ti,ab,kw OR 'cultural safety':ti,ab,kw OR 'patient assessment':ti,ab,kw OR 'patient care planning':ti,ab,kw OR 'patient comfort':ti,ab,kw OR 'patient decision making':ti,ab,kw OR 'patient attitude*':ti,ab,kw)
Concept 2d	('clinical practice'/exp OR 'alert fatigue (health care)'/exp OR 'burnout'/exp) OR ('physician practice pattern*':ti,ab,kw OR 'health personnel fatigue':ti,ab,kw OR 'professional fatigue':ti,ab,kw OR 'physician fatigue':ti,ab,kw OR 'clinician fatigue':ti,ab,kw OR 'professional burnout':ti,ab,kw OR 'physician burnout':ti,ab,kw OR 'clinician burnout':ti,ab,kw OR 'physician psychology':ti,ab,kw OR 'clinician psychology':ti,ab,kw OR 'clinical practice':ti,ab,kw OR 'burnout':ti,ab,kw OR 'occupational stress':ti,ab,kw OR ('joy':ti,ab,kw AND 'practice':ti,ab,kw))
Filter & Limits	Publication Date: 1997-2017 Evidence Based Medicine: Systematic Review, Meta analysis, Cochrane Review, or Randomized Controlled Trial Publication Types: Article, Article in Press, or Review Language: English
Search Filters Syntax	[1997-2017]/py AND ([article]/lim OR [article in press]/lim OR [review]/lim) AND [English]/lim AND ([cochrane review]/lim OR [systematic review]/lim OR [meta analysis]/lim OR [randomized controlled trial]/lim)
PsycINFO	
Concept 1	(SU.EXACT.EXPLODE("Therapeutic Processes") OR SU.EXACT.EXPLODE("Hospital Environment") OR (SU.EXACT.EXPLODE("Social Skills") OR SU.EXACT.EXPLODE("Interpersonal Communication") OR SU.EXACT.EXPLODE("Professionalism") OR SU.EXACT.EXPLODE("Faith") OR SU.EXACT.EXPLODE("Nonverbal Communication") OR SU.EXACT.EXPLODE("Hope") OR SU.EXACT.EXPLODE("Humanism") OR SU.EXACT.EXPLODE("Interpersonal Relationships"))) OR (SU.EXACT.EXPLODE("Professionalism") OR SU.EXACT.EXPLODE("Empathy") OR SU.EXACT.EXPLODE("Trust (Social Behavior)") OR SU.EXACT("Humanism")) OR (ti(empathy OR trust OR social skill* OR professionalism OR humanism OR interpersonal relations* OR nonverbal communication OR interpersonal communication OR ceremonial behavior OR ceremonial behaviour) OR ab(empathy OR trust OR social skill* OR professionalism OR humanism OR interpersonal relations* OR nonverbal communication OR interpersonal communication OR ceremonial behavior OR ceremonial behaviour))

Concept 2a	ab(health care cost* OR health care utilization OR treatment OR health care delivery OR disease management OR cost OR cost analysis OR health care economics) OR ti(health care cost* OR health care utilization OR treatment OR health care delivery OR disease management OR cost OR cost analysis OR health care economics) OR if(health care cost* OR health care utilization OR treatment OR health care delivery OR disease management OR cost OR cost analysis OR health care economics) OR (SU.EXACT("Health Care Services") OR SU.EXACT("Health Care Utilization") OR SU.EXACT("Treatment") OR SU.EXACT("Health Care Delivery") OR SU.EXACT("Disease Management") OR SU.EXACT("Costs and Cost Analysis") OR SU.EXACT("Health Care Economics"))
Concept 2b	(SU.EXACT("Treatment Effectiveness Evaluation") OR SU.EXACT("Chronic Illness") OR SU.EXACT("Health Service Needs") OR SU.EXACT("Treatment Outcomes")) OR (ab(chronic illness OR chronic disease OR treatment outcome* OR health service need* OR health services access* OR health service accessibilit*) OR ti(chronic illness OR chronic disease OR treatment outcome* OR health service need* OR health services access* OR health service access*))
Concept 2c	(ab(Client Participation OR Client Satisfaction OR Client Attitude* OR Treatment Compliance OR Cultural Sensitivit* OR Needs Assessment OR Needs) OR ti(Client Participation OR Client Satisfaction OR Client Attitude* OR Treatment Compliance OR Cultural Sensitivit* OR Needs Assessment OR Needs)) OR (SU.EXACT("Client Participation") OR SU.EXACT("Client Satisfaction") OR SU.EXACT("Client Attitudes") OR SU.EXACT("Treatment Compliance") OR SU.EXACT("Cultural Sensitivity") OR SU.EXACT("Needs Assessment") OR SU.EXACT("Needs")) OR (ti(patient acceptance of health care OR culturally competent care OR culturally competent patient care OR health priorit*) OR ab(patient acceptance of health care OR culturally competent care OR culturally competent patient care OR health priorit*))
Concept 2d	(SU.EXACT("Professional Standards") OR SU.EXACT("Best Practices") OR SU.EXACT("Occupational Stress")) OR (ab(Professional Standard* OR Best Practices OR Occupational Stress) OR ti(Professional Standard* OR Best Practices OR Occupational Stress)) OR (ab(physician practice pattern* OR health personnel fatigue OR professional burnout OR doctor burnout OR physician burnout OR doctor fatigue OR physician fatigue) OR ti(physician practice pattern* OR health personnel fatigue OR professional burnout OR doctor burnout OR physician burnout OR doctor fatigue OR physician fatigue)) OR (ti(joy AND practice) OR ab(joy AND practice))
Filter & Limits	Filters for 1 AND (2a OR 2b OR 2c OR 2d) • Peer Review • 1997-2017 • Methodology types: Systematic Review OR Metanalysis OR Clinical Trials Filters for 1 AND (2a OR 2b OR 2c OR 2d) AND Observational Study/Trial • Peer Review • 1997-2017 • NO Methodology types • Observational Study/Trial Concept (to filter for observational studies, as a separate search with C1 AND C2a OR C2b OR C2c OR C2d) ab(observational study OR observational trial) OR ti(observational study OR observational trial)

*To meet eligibility criteria, articles must include search terms from Concept 1 AND at least one term from Concept 2(a or b or c or d).

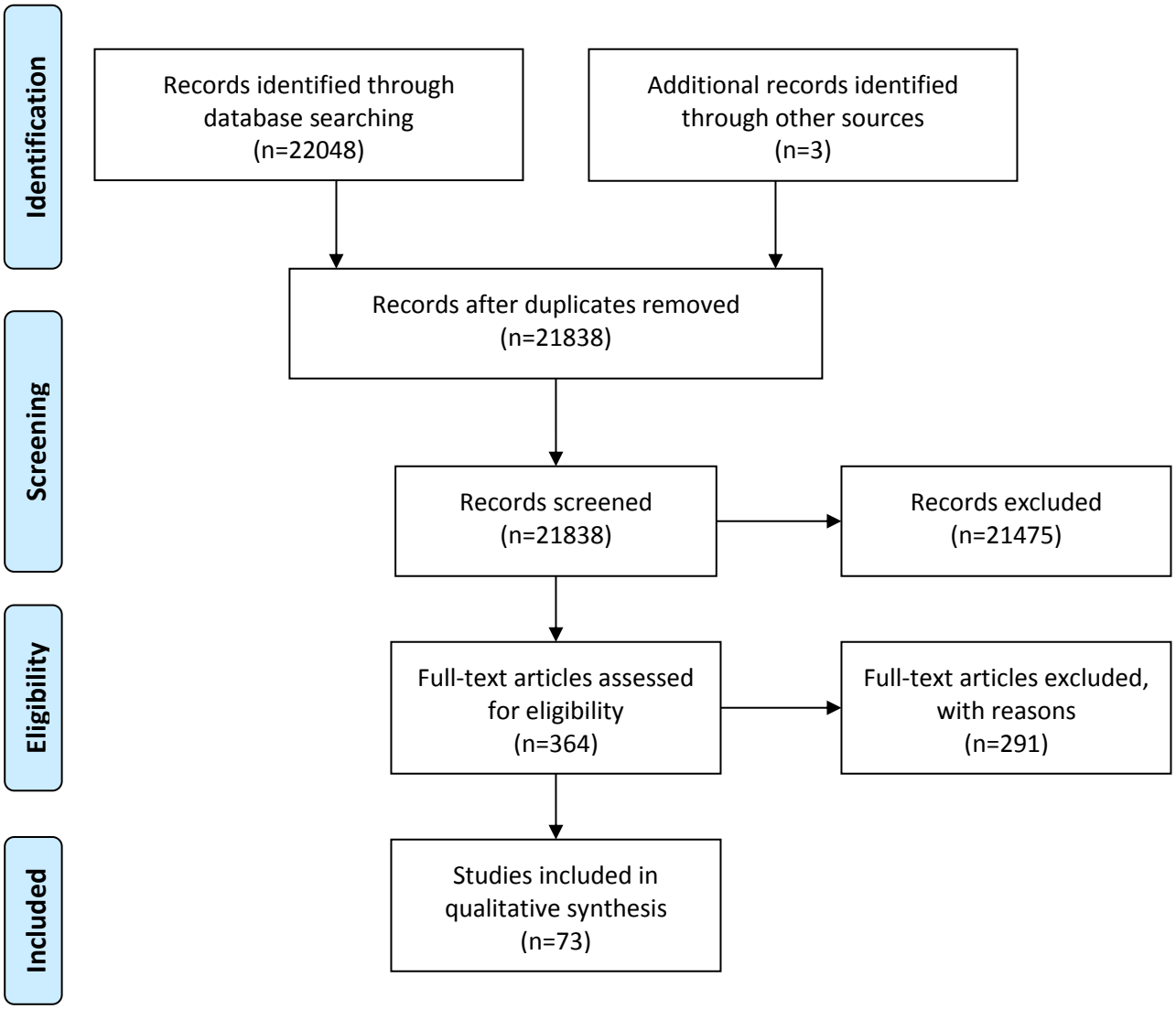
Data Abstraction. Using the Covidence (Veritas Health Innovation Ltd, Melbourne, 2018) online systematic review tool, two trained independent investigators abstracted content and methods information from each article and graded the study design quality. A designated third investigator reviewed and adjusted any discrepancies in abstracted data and assessments of study design quality. To assess methodological quality, investigators applied the Cochrane criteria for grading randomized controlled trials and the Effective Practice and Organisation of Care (EPOC) for controlled observational studies.[47,48] As a second step, investigators assessed level of evidence according to the Oxford Centre for Evidence-based Medicine criteria.[49] A multidisciplinary team made up of physicians and researchers with expertise in linguistics, health communication, and public health synthesized findings to identify potential presence practices. Synthesis of

data consisted of characterizing intervention focus (e.g., motivational interviewing, communication skills, shared decision-making), intervention training structure (i.e., workshop, practice, general instruction, and/or tool), intervention demand on participants (using an intensity rating that incorporates training time and duration of training period)[50], and target of intervention (i.e., provider only or provider-patient dyad) across all included studies. Synthesis of study outcomes followed a similar characterization by mapping onto the quadruple aim of patient health, costs of care, patient and provider experience.

FINDINGS

From 21,838 references initially identified, 73 studies met inclusion criteria. A majority (92%) of the studies were Level 1 according to the Oxford Levels of Evidence, indicating the highest-quality research; 29 (40%) were from the United States and 44 (60%) were international; 67 (92%) were randomized controlled trials and 6 (8%) were controlled observational studies. More than half of the studies (52%) measured at least one health outcome, 19 (26%) a cost-related outcome, 54 (74%) at least one outcome related to patient experience, and 27 (37%) at least one outcome related to provider experience. The most common focus areas of the interventions were interpersonal communication skills (29%) and specific communication techniques (22%). Fewer interventions focused on patient-centered care (19%), motivational interviewing (8%), shared decision making (7%), health literacy (4%), patient-physician relationship (4%), psychological/therapeutic interviewing (3%), and mindfulness (4%). Specific studies that offer support for the final recommended practices are described in eAppendix 6.

Figure 1.1. PRISMA Flow Diagram with Article Selection



Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009). *P*referred *R*eporting *I*tems for *S*ystematic Reviews and *M*eta-*A*nalyses: The PRISMA Statement. *PLoS Med* 6(7): e1000097. doi:10.1371/journal.pmed1000097

BRIDGE REVIEW

A bridge search was completed in September, 2019, to identify additional articles that met eligibility criteria from the original systematic review. The bridge search focused on articles published between August, 2017, and September, 2019, and used the same search terms and eligibility criteria that were applied to the original review. Two investigators independently reviewed the eligible studies and followed the same data abstraction procedure used in the original systematic review.

Findings

There were 3061 articles that met initial search criteria. After screening titles and abstracts, 27 studies were reviewed in full for eligibility; of these, 16 met inclusion criteria after full-text review. Figure 1.2 provides a brief analysis of significant improved quadruple aim outcomes and the content of the intervention. Intervention content varied; communication skills (n=6; 38%) and shared decision-making (n=4; 25%) were the most common, followed by patient-clinician relationship (n=2; 13%) and patient-centered care (n=2; 13%). The majority of the studies reported at least one statistically significant result that indicated a positive improvement in either patient (n=10; 63%) or provider (n=7; 44%) experience. Only one study reported a significant health outcome; there were no studies that reported significant findings related to cost.

Figure 1.2. Overview of findings from bridge search, performed September 2019

Article	Significant improved quad aim outcomes				Intervention content								
	Health	Cost	Patient	Provider	Motivational Interviewing	Health Literacy	Relationship	Patient Centered Care	Communication Skills	Shared Decision Making	Specific Communication Technique	Psychological/ Therapeutic Interview	Mindfulness
TOTALS	**1**	**0**	**10**	**7**	**1**	**0**	**2**	**1**	**6**	**4**	**1**	**0**	**1**
Alegria 2018[51]			Y							Y			
Beach 2018[52]			Y		Y								
Curtis 2018[53]			Y						Y				
Dillon 2017[54]			Y*							Y			
Ditton-Phare 2017[55]**			Y	Y					Y				
Downar 2017[56]									Y				
Geiger 2017[57]			Y	Y						Y			
Gould 2018[58]							Y						
Henselmans 2019[59]				Y						Y			
Mueller 2018[60]			Y	Y									Y
Niglio de Figueiredo 2018[61]			Y	Y					Y				
Pace 2017[62]			Y				Y						
Pettit 2018[63]			Y								Y		
Sterkenburg 2018[64]								Y					
Tavakoly Sany 2018[65]	Y		Y	Y					Y				
Yang 2018[66]				Y					Y				

*75% CI **Systematic review, included 2 RCTs with "improvement in clinician empathy and psychotherapeutic interviewing skills due to specific training protocols focused on those areas"

eAppendix 2. Clinical Observations and Interviews – Methods and Results

In order to supplement literature-based findings about practices that foster physician presence and connection with patients, we observed physician-patient interactions during primary care encounters. Clinical observations took place in three diverse primary care settings: an academic medical center, a Veterans Affairs (VA) facility, and a federally-qualified health center serving primarily Spanish-speaking immigrants. We observed clinical encounters between internal medicine and family medicine physicians (n=10) and patients (n=27). The observations were supplemented by interviews and surveys with physicians and patients.

METHODS

Physician Recruitment. At each site, we selected 2-5 internal medicine or family medicine physicians who were identified by leadership or peers as having exceptional interpersonal skills. We used convenience sampling to include diverse representation in terms of clinician gender, years in practice, and race/ethnicity.

Patient Recruitment. We used convenience sampling to recruit English- and Spanish-speaking adult patients who had appointments with the participating physicians during pre-specified observation days. Patient recruitment procedures varied based on clinic location. At the academic primary care clinic, a member of the local clinic team (front desk staff, admin support, etc.) distributed flyers and described the opportunity to eligible patients upon arrival. Interested patients were then screened by research staff in the waiting room and asked to complete a consent form and pre-visit questionnaire with demographic information. VA patients were identified prior to the visit (using the VA's electronic health record) and contacted by mail with information about the study. Patients who did not opt out were contacted and consented by phone or in person after they checked in for their appointment. Patients at the federally-qualified health center were recruited by clinic staff during pre-visit reminder calls and were directed to find a designated research team member in the clinic waiting room.

Clinical Observation and Interview Procedures.
Researchers trained in qualitative methods observed the clinical encounters (CBJ, RS, AT, MCH, DLZ, and NS). Patients who consented to the study were accompanied by a research team member to their clinic visit room. Upon entering the room, the research team member turned on the video and audio recording device and remained in the room to take notes. Research staff left the room and turned off recorders during physical examinations. At the end of the visit, patients were directed to a separate room to meet with a designated member of the research team and complete a brief post-visit interview. Interviews included questions about clinician attention and listening/comprehension in visits, clinician treatment of patients during the visit, clinician computer use, and patient behaviors and habits for best case scenario visits. Patients also completed a brief survey with information about demographics, health and quality of life status, visit satisfaction, and clinician behavior and communication. Upon completion of the interview, patients received a $20 gift card and were thanked for their participation.

Clinician interviews explored the concept of "presence" with questions about creating connection, being more present, building trust, adjusting strategies for different people, and navigating the environment during interactions with clients and patients. Clinicians also completed a brief survey with information about their perception of the rapport established during each patient encounter. These questions included assessment of the degree to which clinicians felt patients understood their explanations, whether clinicians understood and accounted for patients' socioeconomic status, whether the clinician felt fully present, if it was a very satisfying visit, if the clinician found it difficult to connect with the patient, and an overall rating of the clinicians' perception of their patient's health status.

Interview recordings and transcripts were stored in PHI and HIPAA-compliant secure files, and were only available to research staff. Files were anonymous in the case of non-medical professionals, and de-identified for physicians, retaining only role and system indicators. Clinic observations were approved by Stanford IRB (IRB-42397). Clinicians and patients provided written informed consent for the shadowing, interviews, surveys, video and/or audio recording.

Data Synthesis

Data were synthesized using a rapid ethnography approach.[67] Steps in observation and rapid ethnography included the following: 1) the research team built early consensus capabilities through team training in rapid ethnography, including group practice sessions observing and debriefing using short videos as dummy "data"; 2) as often as resources allowed, multiple researchers observed patient clinic visits to support reliability and validity of rapid ethnography data and subsequent analysis; 3) observing researchers recorded verbal debriefs of observations as soon as possible after clinic visits, or at least within 48 hours.

A matrix table (e.g., patient x domains of interest) with rapid ethnography findings was generated and reviewed by team members (AT, RS, CBJ, MCH, NS, JGS) during six meetings over the course of three months. Discussions addressed questions emerging from the data (video and/or audio of clinic visits, patient surveys, interview transcripts with patients and clinicians, rapid ethnography research notes from observations). In tandem with regular meetings, the rapid ethnography team conducted the following analytic procedures:

- Team members were assigned to assess clinic visits that they did not observe, to ensure multiple perspectives and leverage conflicting views. Consensus coding in qualitative data that actively solicits minority opinions and incorporates divergent interpretations into decision-making has been shown to produce higher quality analysis.[68]
- Analysis included reviewing multiple related sources of data for each clinic visit (e.g., transcriptions of original debriefs, as well as video and/or audio of clinic visits).
- Team members categorized their own observations of the video/audio as well as observations originating from debrief transcripts and notes into the following broad areas of interest: clinician ritual, verbal interpersonal interactions, non-verbal interpersonal interactions, use of silence, timing, individual identity features, resources, environmental factors, friends and family, care team, power dynamics, technology, other tools, touch, transitions, wrap-up, clinician uncertainty, and other notes. Specifically, observations pertaining to these areas of interest were entered in an excel spreadsheet where each row represented a single patient clinic visit, per qualitative matrix analysis approaches.[69]
- Once each team member had individually categorized their observations, two researchers (NS and CBJ) performed a second level of synthesis to generate a list of clinician actions or behaviors that appeared to support patient-clinician connection.

RESULTS

Clinicians (5 male, 5 female) identified as Asian (50%), White (30%), Hispanic/Latino (10%), and African American/Black (10%). Of the 27 patients that participated, the mean (SD) age was 58 (17), range 20-90; 16 identified as male, 11 as female; and they self-identified as White (33%), Hispanic/Latino (30%), Asian (22%), and African American/Black (15%). Approximately half (48%) of patients reported that they understood and spoke English "very well;" 19% reported speaking a second language at home (Hindu, Arabic, Tamil, Ilocano), and an additional 26% were exclusively/primarily Spanish-speaking. Most visits (67%) were for "routine check-up," 19% of patients stated that they were not feeling well, and a minority reported having a question or problem related to a medical condition (4%) or "other" (7%). Nearly half (44%) of the patients had had more than 10 previous visits with the clinician they were seeing; fewer (7% and 33%) reported having 6-10 or 1-5 visits, respectively. Common and notable practices observed during the study are presented in Table 2.1.

Table 2.1. Common interpersonal practices observed among primary care physicians nominated by leadership or peers for their interpersonal skills

Observed Behaviors	Examples of Specific Actions and Statements	Relevant Practices (from list of 13 preliminary practices)
Checking in	"How are things going?" "Do you hear me?" "Does that make sense?"	Collaborative agenda-setting "What's important to you?"
Empathetic statements/clinician vulnerability	"This is confusing to me too" "I know man, it's so true."	Keep an open mind Engage in emotion
Partnership approach/asking permission	"Let's look at this together." "Shake on it." "Can we make an agreement?" "What if I call you in 3 months?" "Are you open to it?"	Emphasize joint responsibility Focus on progress
Validation that clinician is listening and wants to understand	Backchanneling, e.g. responding with affirmative "I want to understand." "Sounds like…" Repeat key ideas/statements shared by the patient or agreed upon by both patient/provider	Stop and listen Engage in emotion
Narrating behaviors and steps through visit (including technology use)	"Can you lay down over here? I'm just going to look at your stomach." "So, let me just update your chart here."	Collaborative agenda-setting Share the screen
Reality check regarding health goals, treatment plans	Setting realistic goals (aim to lose 5 lbs vs. 15 lbs) "Let's not jump to pulmonary embolism."	Engage in emotion
Complimenting/praising patient effort/ideas	"Keep on doing what you're doing!" "[Your exercise] three times [per week] at 45 minutes each time is really great!"	Focus on progress
Using questions to explore patients' concerns/experiences, and solve problems together	Clinician asks "what else?" to establish patient (and caregiver) agenda	Emphasize joint responsibility "What's important to you?"
Normalizing health behaviors and behavior change	"Everyone will eat fast food every so often." "It's hard to break old habits."	Keep an open mind
Nonverbal body language and touch	Observation Notes: Physician turned swivel chair to face patient while listening. Patient interview: "I think eye contact is super important…From a doctor and just like the body language, to turn towards you is really important." Observation notes: Sphygmomanometer and stethoscope as only times of touch	Position yourself Recognize the power of touch

eAppendix 3. Interviews With Non-Medical Professionals – Methods and Results

Guided by human-centered design theory,[70,71] the research team conducted interviews with 30 professionals outside the field of medicine whose jobs involve relational care and intense interpersonal interactions. The objectives of these interviews, described previously,[72] were to learn from analogous experiences, and identify cross-disciplinary practices that foster human connection and might have applications in medicine.

METHODS

Participant Recruitment. We used convenience sampling to identify 3-5 individuals from each of seven categories of profession:[73] Management; Business/Finance; Community and Social Service; Educational Instruction; Arts, Design, Entertainment, and Media; Protective Services; Personal Care; and Service Occupations. A purposive sampling technique was used to identify 38 professionals (3 to 5 from each professional domain), prioritizing equal representation from men and women, and racial and ethnic diversity. Eight individuals out of the 38 contacted (21%) declined to participate (four prospective interviewees did not respond, three agreed to participate but had scheduling conflicts, and one declined). Recruitment continued until we achieved data saturation and created a sample stratified by profession category.

Interview Procedures. We developed an interview guide with the goal of using a design thinking approach to identify novel strategies for doctor-patient interactions. Questions focused on how non-medical professions foster interpersonal connection in their work, with an emphasis on strategies for managing intense interactions, often in high-pressure settings. The interview guide has been published previously.[72] Research team members trained in qualitative methods (RS, MCH, AT, CBJ, DLZ, JGS) conducted one-on-one interviews in-person (n=22) or by telephone (n=8). Interviews ranged from 20 minutes to slightly over an hour and were audio recorded. Data saturation determined the appropriate sample size and was achieved. Interviews were anonymous and coded by professional role; this component of the study received an exemption from the Stanford University IRB (IRB-43314).

Data Analysis. We used an inductive thematic analysis approach to identify latent themes,[74] reviewing and coding transcripts as a group and individually to confirm the existence of the most salient themes. Dedoose software, version 8.0.35, was used for coding. Six coders iteratively developed an initial codebook, coded 16 transcripts, then refined the codebook and applied revised codes to the remaining 14 interviews.

RESULTS

Participants represented diversity in terms of gender (53% male, 47% female) and race/ethnicity (5 Asian, 2 Latino, 2 Middle Eastern, 1 Pacific Islander). Representation across professional domain and specific roles are presented in Table 3.1. Cross-professional themes included practices that build trust and partnership, purposeful use of nonverbal communication and silence, and personal adoption of self-care practices, mindfulness, and mantras. Additional themes and exemplary practices and quotes are presented in Table 3.2.

Table 3.1. Professional Domains and Roles of Participants

Professional Domain	Participant Roles
Management	CEO of a Technology Company
	Hospice Program Director
	School Principal
	Restaurateur
	Software Company Manager
Business/Finance	Television Sales and Marketing Manager
	Startup Sales
	Specialty Beverage Imports
	Realtor
Community/Social Service	Chaplain
	Licensed Clinical Social Worker
	Health Promoter
Education	High School Teacher
	Music Teacher
	Health Teacher
	Psychology Professor
	Special Education Teacher
Arts/Design/Entertainment/Media	Documentary Filmmaker
	Design Researcher
	Professional Musician
	Creative Design Tech
	Journalist
Protective Service	Fire Captain
	Lawyer
	Police Officer
	EPA Enforcement Agent
Personal Care/Service	Hospice Volunteer
	Massage Therapist
	Recreational Therapist
	Yoga Instructor

Table 3.2. Practices Among Non-Medical Professionals That Foster Presence and Human Connection

Theme	Examples of Specific Actions and Statements	Relevant Practices
Trust-building	Emphasize reliability and flexibility to adjust as partnership progresses. ▪ "Being clear on what's possible and what we need to do to work together to make it happen." Lawyer ▪ "Returning calls quickly, being responsive in many different ways to need." Licensed Clinical Social Worker ▪ "It comes through the building of relationships and the building of your credibility, your social capital, you do those things through actions, through words." School Principal ▪ "It's just being really clear with people about their power in the situation…that we can cut things out if they want us to… The sense of trust is somewhat deliberate in that sense, because we make people feel like they're empowered." Documentary Filmmaker	Focus on progress "What's important to you?"
Non-Verbal Communication and Silence	Strategic use of eye contact, slower speech rate, physical space, and silence. ▪ "I use a lot of silence**…** Sometimes I back away physically from people if I see they can't make eye contact with me." Chaplain ▪ "There's a space between people; you want to fill the space. Sometimes the space is smaller, and sometimes it's larger. It's elastic, but you're feeling that space." Television Sales and Marketing Manager ▪ "I do try to change pace, either in my tone, or how I'm talking to someone, or if I can hear myself being too aggressive, or too stern, or my body language. If I'm standing, is it better if I sit down and talk to this person? Do I give this person more control in the conversation? Do I ask questions, or do I give them options?" Police Officer	Stop and listen Position yourself
Mindfulness and Mantras	Mindfulness strategies help with emotional presence during a crisis or time-pressured situation. ▪ "Sometimes I'll just physically brush myself off to not internalize what I've heard… Focusing on breathing and saying the mantras helps." Lawyer ▪ "[I remind myself] 'Why are you here? Why did you sign on the dotted line?'...At the end of the day, it's about the people I'm serving." Fire Captain ▪ "Aware[ness] of your thoughts, so therefore your reaction… [can] be different in the moment." Recreational Therapist	Take a moment
Connect at an emotional level	Emphasize authenticity, self-disclosure, and use humor strategically; empower the client/student. ▪ "If I really want them to react**…**I have to make a sacrifice. I have to be vulnerable for them. I have to show them I'm capable of doing those things. I can cry and I can smile and I can act like an idiot on my violin, and it's all good. And then it becomes easier." Music Teacher ▪ "I think another thing about staying present is also being able to hold when things get painful...being like, 'Yes, I can have a lot of empathy, and at the same time how do I make sure I can hold the empathy without having this get too much?'" Design Researcher ▪ "Usually if I let myself be carried along by someone's story, I find that it pushes them to say more." Documentary Filmmaker	Engage in emotion Walk in the patient's shoes "What's important to you?"
Preparation	Prepare for crises, set boundaries, and set expectations early ▪ "It's prep before, in terms of your own self-care to be able to be present." Recreational Therapist ▪ "I think a lot of it is the intention setting, the motivation. Really letting them know in the first two, three minutes that I know something about their story." Chaplain ▪ "My emotional preparation is to ... think or to feel my way into what I think our connection point is going to be." Documentary Filmmaker	Collaborative agenda-setting Prepare for the person

eAppendix 4. Evidence Synthesis

Through the literature review and complementary qualitative research activities, the research team generated a list of 31 potential practices that contribute to clinician presence and connections with patients. During a 2-month period of evidence synthesis, the team met weekly and held two half-day workshops to review the evidence for each practice and narrow the list to practices with substantial supporting evidence from multiple sources.

METHODS

During the evidence synthesis process, the research team: 1) reviewed the supporting and contradictory evidence from the systematic review and examined the strength, volume, and existence of evidence across multiple quadruple aim outcomes (n=31 practices), 2) categorized practices by emerging domains and compared the strength of the evidence for practices within each domain (n=18 remaining practices), 3) identified supplementary literature including established physician-patient communication interventions, qualitative studies, and research from non-medical fields such as business, education, and sociology, 4) reviewed findings with clinical and research advisors (see Acknowledgments), 5) combined practices with substantial overlap, and 6) eliminated practices with inadequate evidence or support from qualitative research or advisors (Steps 3-6: n=13 remaining practices).

From the list of 31 potential practices, we identified five overarching domains composed of 18 total supporting practices: 1) Practices that involve clinician introspection and mindfulness, 2) Practices that focus on clinician preparation and personalization, 3) Practices that involve non-verbal communication, 4) Practices that focus on understanding the patient's perspective, and 5) Practices that focus on the partnership process.

1) **The clinician introspection and mindfulness** domain included mindfulness activities and the use of guiding principles to facilitate clinician presence and engagement in the moment.
   - Engage your superpower (e.g. mantras, self-efficacy)
   - Hand on the doorknob/handwashing ritual
   - Manage emotions: what are my triggers and what frustrates me?

2) **The prepare and personalize** domain comprised activities that involve concrete preparation for the visit and psychological preparation to help the clinician focus the visit time on their agenda and connect with patients.
   - Set goals before entering the exam room: what would make this visit meaningful?
   - Pre-chart to develop an agenda for the patient
   - Strengthen "automatic positive attitudes" towards patients (interrogate and reframe biases)

3) **The nonverbal connection** domain included physical positioning and nonverbal communication that facilitates clinician presence, perception of quality time, and connection with the patient
   - Thoughtful body positioning (e.g. sit down, lean in)
   - Use of expressive touch
   - Chart/monitor sharing (in-the-moment sharing of tangible information)
   - Eye contact

4) **The patient perspective** domain comprised clinician actions to build empathy in order to understand the patient's perspective and priorities.

- Active consideration and integration of patient perspectives (e.g. walk in the patient's shoes)
- Positive language shifts using one-word changes ("something" vs. "anything")
- Elicit patient priorities and preferences
- Empowerment

5) **The partnership process** domain included strategies to establish and maintain a partnership with the patient.
   - Share expectations (bi-directional discussion of clinician and patient expectations for the visit)
   - Highlight the positive
   - Communicate a partnership ("let's work together")
   - Pause and listen

RESULTS

After synthesis activities, the research team identified 13 practices with promising support from the original systematic literature review, qualitative research findings, and supplementary review of supporting literature. Figure 1 in the main paper illustrates how the original 31 practices map to the 13 practices that were reviewed by the Delphi panel (described in detail in eAppendix 5).

eAppendix 5. Delphi Panel – Methods and Results

A modified Delphi approach—a validated method for quantifying expert opinion—was used to revise and finalize the list of presence practices drawn from the systematic review and other formative research activities described above. The Delphi technique utilizes multiple rounds of independent ratings, typically with the goal of understanding where there is consensus around clinical guidelines or quality indicators.[75,76] While this process allows for a large panel (minimizing the influence of individual panelists and maximizing reliability), there is no opportunity for interactive discussion. The modified approach incorporates anonymous ratings followed by an in-person meeting during which comments are not anonymous, after which panelists again rate the indicators independently and anonymously. This approach is based on the RAND appropriateness method[77,78] and has been widely used in quality indicator development.[79-82]

METHODS

Panel meetings were held from August to October, 2018 and comprised an introductory conference call on 8/27/18, independent ratings by panelists (pdf survey), an in-person meeting on 9/21/18 followed by a second set of ratings (paper survey), and a conference call on 10/17/18 followed by a third set of ratings (pdf survey).

Selection and Inclusion of Participants. For the Delphi panel, we sought representation of physicians and health system leaders of national prominence, patient and caregiver advocates, and researchers with expertise in physician communication, empathy, non-verbal behavior, innovation and implementation of doctor-patient interpersonal interventions, and medical education. Panels from 5 to 60 participants have shown equal validity and reliability.[83] We invited 19 individuals, aiming for diversity across role, content expertise, gender, and race/ethnicity; 14 agreed to participate (74% response rate).

Rating Criteria and Qualitative Feedback. During three rounds, panelists were asked to rate each practice using three criteria: 1) potential impact on patient experience (defined as overall satisfaction, experience with communication, perceived respect and empathy); 2) potential impact on clinician experience (defined as the perception that clinical encounters are meaningful, productive, and contribute to general well-being and job satisfaction); and 3) implementation feasibility (defined as ease of integrating into diverse outpatient clinical settings, considering practice complexity, time demands, and training requirements). Criteria were rated using a 9-point Likert scale (-4 = highly unlikely to meaningfully affect outcome/likely infeasible, 0 = uncertain/neutral, +4 = highly likely to meaningfully affect outcome/likely feasible). We facilitated/encouraged discussion of additional considerations, such as the impact on health outcomes and cost considerations; however, in most cases, the evidence for these outcomes was limited and therefore not included as formal rating criteria. Consistent with prior applications of the modified Delphi method, we asked the panelists to weigh the presented evidence judiciously, but fill in any gaps with their extensive expert judgment and professional experience in health care and analogous fields.

Panel Procedures. Panel meetings were held from August to October, 2018. After an introductory conference call on 8/27/18, panelists reviewed the evidence about each practice and rated the 13 preliminary practices. The panel was convened for an in-person meeting on 9/21/18. At the meeting, each practice was presented along with anonymized group ratings[84] and qualitative feedback. Experts reviewed their initial responses in view of group-wide choices,[85] and there was a moderated discussion about the strengths and weaknesses of each practice across the domains of patient experience, clinician experience, and implementation feasibility. At the end of the meeting, experts submitted a second set of ratings and qualitative written feedback. The research team revised the practices in response to the feedback and presented the revised practices (n=8) to the experts

during a second conference call on 10/17/18. There was a brief discussion about five practices that had been modified, and the experts then submitted final ratings for these practices.

At the conclusion of the panel, participants were asked to indicate which of the 8 practices they would include in a "top 5" list. Since implementation and dissemination were always goals of this project, we intentionally asked the panelists to consider their top 5 practices in hopes of identifying a brief list of recommendations that would be easy to adopt and remember. While there are data demonstrating different absolute numbers of items that can be kept in working memory, 5 elements is a minimal number (the seminal study on this topic suggests 7+/- 2;[86] a more recent study posits 4[87]) and yet large enough to incorporate the different types of practices that were highly rated by the group.

Analysis. For each round of the Delphi, we calculated the median and standard deviation ratings for each of the three criteria. We determined *a priori* that we would prioritize practices that received median ratings ≥ +2 (on a -4 to +4 scale) for all three criteria. Between each round, at least two researchers independently reviewed qualitative feedback from Delphi discussion for each practice, using content analysis to identify overarching themes along with illustrative quotes. Practices were then revised by the research team to incorporate feedback and additional evidence raised by experts. After the second round, we eliminated 2 practices with median ratings <+2 for all three criteria, and combined 3 other sets of overlapping practices to create a total of 8 practices; only the 5 practices that were modified were rated in the third round. Although 4 panelists were absent during the third round, all panelists rated all of the practices during the three rounds and submitted their "top 5" practices. The research team used the final ratings and practices most frequently listed in the "top 5" to generate a final set of five practices.

Delphi activities and ratings were not overseen by IRB; panelists received a stipend of $500 and travel cost reimbursements.

RESULTS

Delphi panelist characteristics and professional expertise are presented in Table 5.1. An overview of Delphi panel ratings is presented in Table 5.2. Below, we summarize the quantitative and qualitative feedback, and changes that were made to the practices during each round of the panel.

Table 5.1. Self-Reported Characteristics of Delphi Panel Participants

	n
Gender	
Female	6
Male	8
Race/Ethnicity*	
Asian/Pacific Islander	3
African American/Black	2
Hispanic/Latino	2
White	9
Geographic representation	
Bay Area	6
California	3
Other U.S.	5
Professional category*	
Physician	8
Patient Advocate	1
Caregiver Advocate	1
Health System Leader	2
Researcher (MD or PhD)	7
Content expertise*	
Medical Education/Bedside Medicine	7
Health Care Delivery Innovation	7
Implementation of Interventions in the Clinical Setting	3
Healthcare and Clinical Communication	9
Diversity/Health Disparities	4
Psychology/Behavior Change	4

* Panelists could identify with more than one category

Table 5.2. Delphi Panel Ratings

Preliminary Practices	1st Rating			2nd Rating			Revised Practices	3rd Rating			Top 5 (%)*	Final Practices
	Patient	Prov.	Impl.	Patient	Prov.	Impl.		Patient	Prov.	Impl.		
1. Prepare for the person	2.5	2.0	0.0	3.0	2.5	-0.5	**Come prepared**	3.0	3.0	2.0	86	**Prepare with intention**
2. Take a moment	1.5	2.0	3.0	1.5	2.0	2.5	**Take a moment**	2.5	2.5	3.0	43	
3. Position yourself	3.0	2.0	3.0	4.0	2.5	2.5	**Position yourself**	NR	NR	NR	43	**Listen intently and completely**
4. Stop and listen	4.0	3.0	2.0	4.0	2.5	2.0	**Listen without interrupting**	NR	NR	NR	86	
5. Share the screen	2.0	1.0	-1.0	2.0	2.0	1.0	*Combined with #3 in "Position yourself"*					
6. Collaborative agenda-setting	2.5	2.0	1.5	3.0	3.0	2.0	**Elicit and address patient priorities**	4.0	3.0	2.0	79	**Agree on what matters most**
7. "What's important to you?"	4.0	2.5	2.5	4.0	2.0	2.0	*Combined with #6 in "Elicit and address patient priorities"*					
8. Emphasize joint responsibility	1.5	1.5	0.5	1.5	1.5	0.0	*Eliminated*					
9. Walk in the patient's shoes	3.0	2.0	1.0	3.5	2.5	1.0	**Walk in the patient's shoes**	2.0	2.0	2.0	29	**Connect with the patient's story**
10. Keep an open mind	2.0	1.0	-2.0	2.0	2.0	-2.0	*Combined with #9 in "Walk in the Patient's Shoes"*					
11. Focus on progress	3.0	3.0	1.5	3.0	3.0	2.5	**Focus on the positive**	NR	NR	NR	36	
12. Engage in emotion	3.0	2.5	1.0	4.0	3.0	1.5	**Honor emotions**	4.0	3.5	2.0	100	**Explore emotional cues**
13. Recognize the power of touch	1.0	1.0	1.0	1.0	0.5	-1.5	*Eliminated*					

Ratings reflect median panelist ratings for each practice using 9-point Likert scales (-4 to +4) that reflected the potential effect on patient experience (Patient), the potential effect on provider experience (Prov.), and implementation feasibility (Impl.). NR = practice was not rated (prior rating stands).

* Top 5% reflects the percentage of experts (N=14) that rated the practice in the "top 5" at the conclusion of the Delphi panel

ROUND 1 (13 Practices)

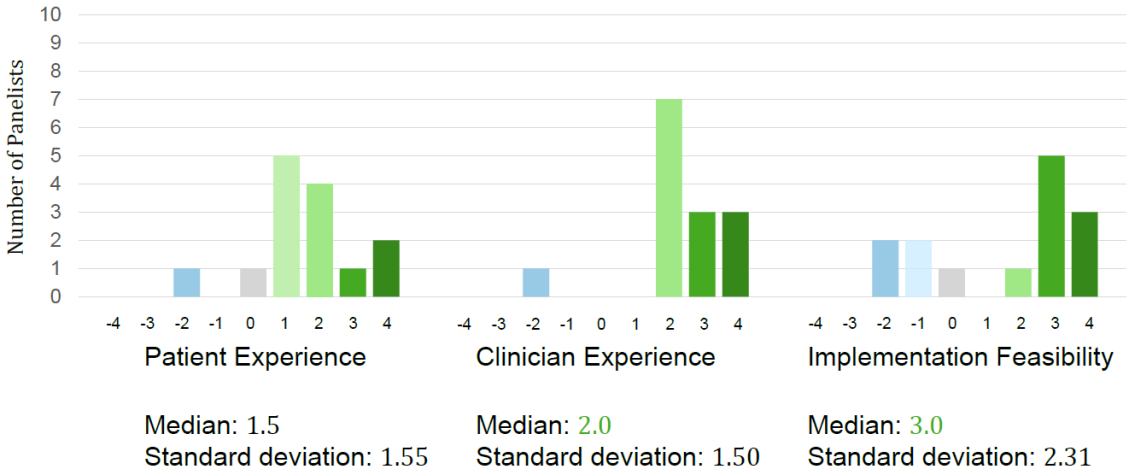
Practice 1. Take a moment

Definition: Incorporate a ritual (e.g. mini-meditation, meditative breathing, or mantra repetition) into clinical practice. The ritual or mantra should be short, practical, and easy to integrate into the clinic day.

Practice examples:

- **Use mantra repetition** to focus on your strengths
- **Take three deep breaths** before walking into the exam room
- **Take mini-meditative breaks:** e.g. hand-washing: paying full attention to washing your hands
- **Make a list of "what went right"** during the visit

Panel Ratings



Qualitative Feedback

- **Patient:** May benefit from calm provider, but little evidence about patient impact.

- **Provider:** Practice may help provider leave distractions behind, and have positive impact on clinical team relationships. Unclear whether this is the best use of pre-visit time.

- **Implementation:** Some mentioned this is easy to teach, as simple as reflecting "how can I help this patient?" outside the exam door, and seems to "stick" with physicians who decide to practice with intention. Others voiced concerns about sustainability/maintenance, time barriers, competing priorities, and acceptability (including cross-culturally).

- **Other Insight:**
  "Could mindfulness practice relate to presence?" (i.e., a reminder to be present and connect, or a reflection on the other recommended practices).
  Research needed about the impact of this practice and its relative value compared to other pre-visit activities.

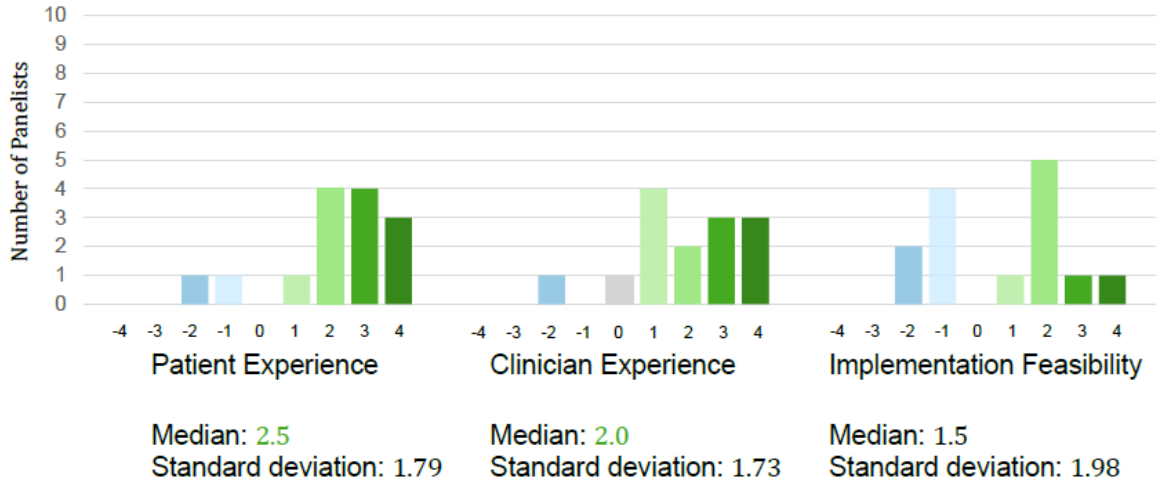
Practice 2. Collaborative agenda setting

Definition: Provider and patient exchange expectations and health goals and develop an agenda for the visit that is aligned with priorities of all parties.

Practice examples:

- **Offer patients a pre-visit questionnaire** in the waiting room to prepare them for the visit
- **Ask the patient to prioritize his or her top goals** for the visit
- **Negotiate a visit agenda** if patient and physician priorities differ

Panel Ratings



Qualitative Feedback

- **Patient:** Acknowledges patient's concerns, reassures patient that provider has relevant facts and cares, helps patient feel empowered and prioritize their own concerns. However, may be perceived by some (especially those with hardships) as provider trying to avoid meeting all healthcare needs in that visit.

- **Provider:** Most will buy into the logic of shared agenda-setting ("In my extensive teaching, this is one of the most important tools that physicians at all levels use"), but since it is intuitive for many providers, forcing this practice in an overly prescriptive way may be unacceptable to some.

- **Implementation:** May add time to visit, or add visits. Mixed comments re: ease of training: Some commented that minimal training would be required; others said this practice requires mastery of communication skills to be effective (e.g., if done like a transaction without empathy, could be negative; structured protocol for collaborative agenda could take away from fluidity of conversation).

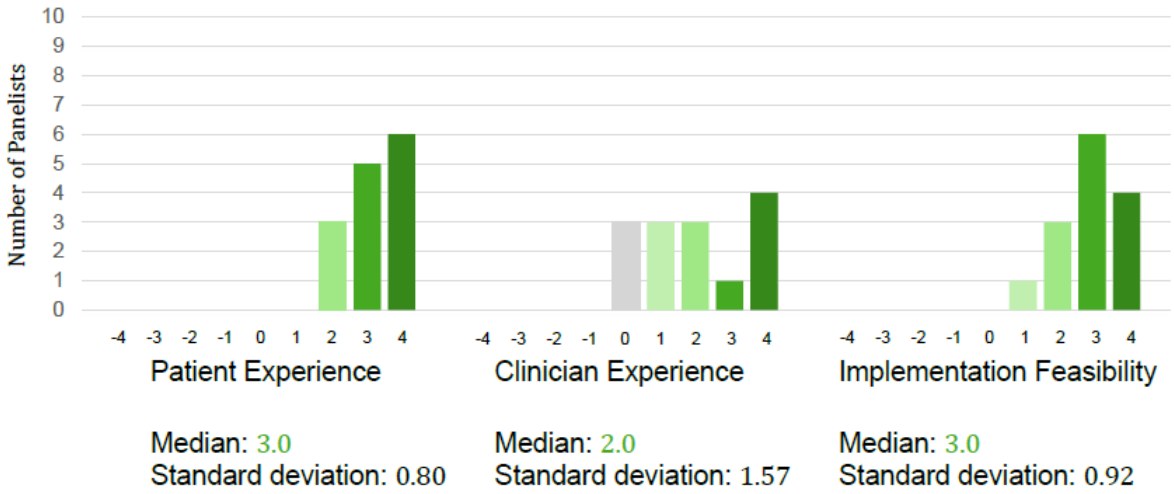
- **Other Insight:**
  Simple form of this practice may be helpful: "Can you tell me one or two things that are critical that we address here today?" or "How are you doing? How's life?" (exposing health and non-health issues that may influence health/health care).
  Deployment of ancillary staff can ease time demands and training requirements.

Practice 3. Position yourself

Definition: Use positive, open body language when interacting with the patient during the visit.

Practice examples:
- **Sit down** when talking to the patient
- **Lean in** toward the patient
- **Maintain an open body position,** keep legs and arms uncrossed

Panel Ratings



Qualitative Feedback

- **Patient:** Sitting/eye contact appreciated by most patients and may increase perceived time with provider, but for certain patients or situations some nonverbal behaviors may still cause discomfort.

- **Provider:** Nonverbal behavior is highly reciprocal, so practice may produce a more rewarding atmosphere. Body positioning influences one's own openness, focuses attention, shapes awareness. Others thought nonverbal behaviors would have minimal impact on provider experience.

- **Implementation:** Some behaviors are simple/intuitive and easy to teach/sustain, but can't be too prescriptive (depends on individual style, patient, context, culture, gender-practice and feedback are helpful in training). Practice is required to make new nonverbal behavior feel authentic. Room configuration (chair, EHR position) may influence feasibility.

- **Other Insight:** Single actions may not be sufficient. Full array of nonverbal behaviors (psychological immediacy) include smiling, gazing, nodding, using "mm" and "uh-huh," leaning forward, direct facing, arm positions, and facial and vocal expressiveness and positivity. Interpersonal perceptiveness (decoding emotional and other cues) is also important.

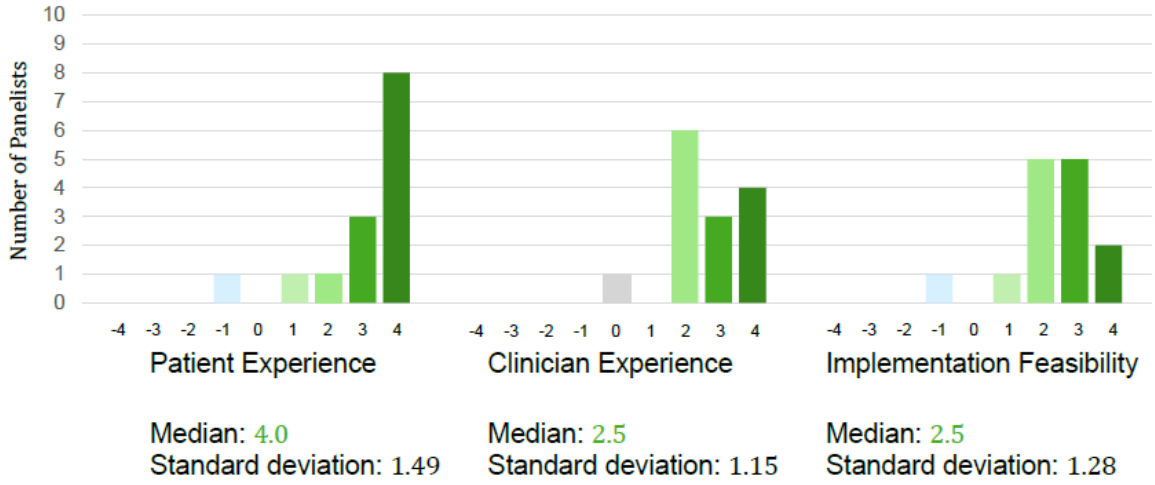
Practice 4. "What's important to you?"

Definition: Elicit patient concerns, priorities, and perspectives at the beginning of the encounter and throughout the visit.

Practice examples:

- **Begin clinical encounters with an open-ended question:** "What can I do for you today?" for new patients; "How are you feeling today?" for follow-up patients
- **Use continuers while patients are speaking:** "I see; go on; mhm; okay"
- **Invite unaddressed concerns before visit concludes:** "Is there something else you want to address in the visit today?"

Panel Ratings



Qualitative Feedback

- **Patient:** Increases perception that concerns have been heard (including life events that may influence health), which is central to satisfaction.

- **Provider:** Clinicians will be more satisfied and feel more impactful if they know what patients seek to get from the visit. In some cases eliciting patient perspective can be difficult and time consuming, but a skillful provider can sensitively keep patient's narrative on track.

- **Implementation:** Easy to teach, major obstacle is time. Giving up control of conversational floor may be challenging for some providers. Single question may be overly simplistic (see variations below) and prescriptive language may be problematic for non-English speakers.

- **Other Insight:** Timing is important-most valuable at beginning or end of visit. Variations: "What issues do you want to make sure we address today?" (for new patient), "What is your major concern for today?" (rather than "What can I do for you today" - implies physician is only active agent). "Is there anything else you want to talk about today?" or "What questions do you have?" may be easier for patients to understand.

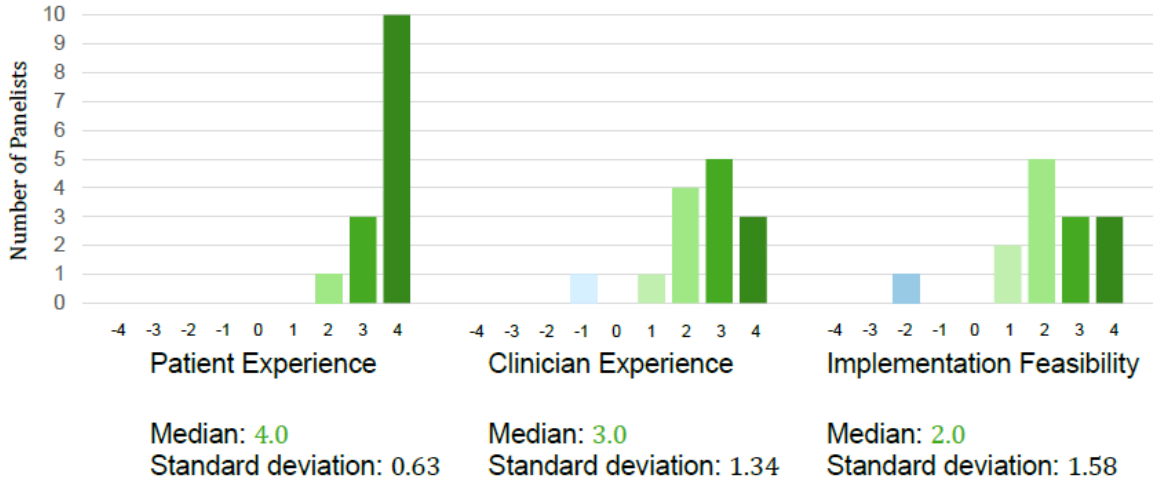
Practice 5. Stop and listen

Definition: The provider pauses and creates silence to facilitate listening, signify reflection, and encourage patient contribution.

Practice examples:

- **Add a pause** after an empathetic statement to allow patients to acknowledge and respond
- **Avoid interrupting a patient** during his/her opening description of active health issues; pocket guide can be used as a helpful reminder to physicians to avoid interruption
- **Give the patient space** to tell their story and let them lead the visit by using silence

Panel Ratings



Qualitative Feedback

- **Patient:** Patients appreciate being allowed to talk and voice their concerns. Critical to patient-centered care. Demonstrates respect.

- **Provider:** This is central to picking up a signal (just as silence is critical to pick up physical exam signals from the lungs, heart, and other internal organs). Providers may learn that listening (and patience) gives them more useful information and reduces last-minute concerns.

- **Implementation:** Allowing patients to speak at the start of a visit without an interruption seems easy enough. Can place doctors in a passive role so that they are less likely to achieve their own agenda. Listening attentively is relatively easy to teach, but using silence may be hard to teach. Provider adherence may be a challenge. May extend visit time which creates strain for clinic/staff and anxiety for providers who already have time management challenges.

- **Other Insight:** For patients with limited English proficiency or limited education, language challenges may impede effectiveness of this practice.

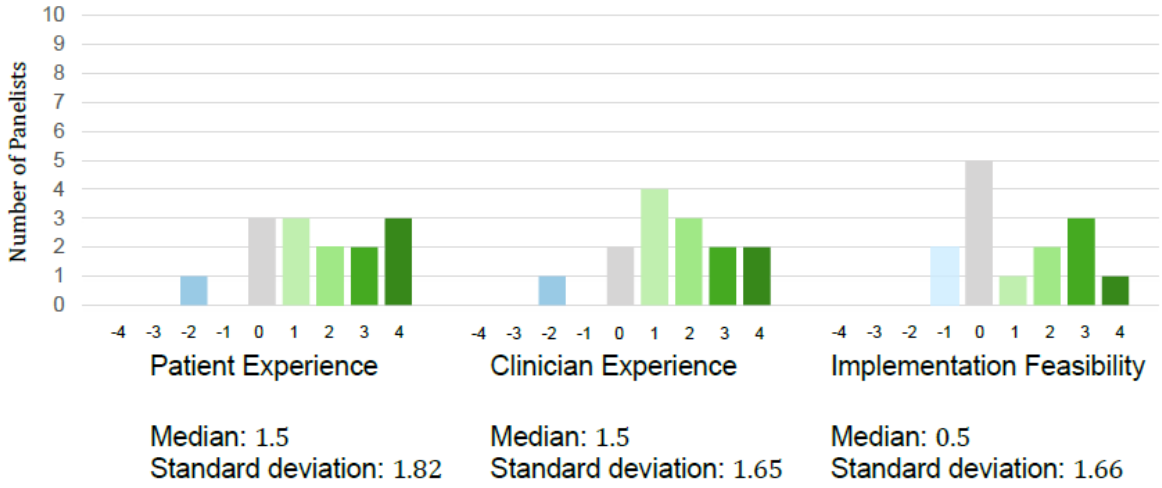
Practice 6. Emphasize joint responsibility

Definition: Emphasize joint responsibility with collaborative statements ("let's work together") and first-person plural statements ("we," "us")

Practice examples:

- **Use supportive, collaborative phrases** such as "let's work together" or "you and I"
- **Use first person plural pronouns** like "we" and "us"

Panel Ratings



Qualitative Feedback

- **Patient:** Helps elicit barriers and problem solve. May enhance satisfaction for some patients but not all desire partnership or the responsibility; some prefer that physician makes decisions. "We" statements can be seen as patronizing and/or condescending.

- **Provider:** Some may resist (not all providers want to engage in status-leveling behaviors). At odds with the fact that patients and clinicians have distinct roles and responsibilities (i.e., patient is responsible for self-management, clinician is responsible for knowledge about medications/tests).

- **Implementation:** Simply saying "we" may help if done well but is probably overly simplistic, not enough for skillful shared decision making, and undermined if there isn't follow-up that makes patient feel the team is there for them.

- **Other Insight:** Critical for chronic conditions (self-management constitutes over 99.9% of experience). There is cultural variation in patient expectations for their provider vs. themselves.

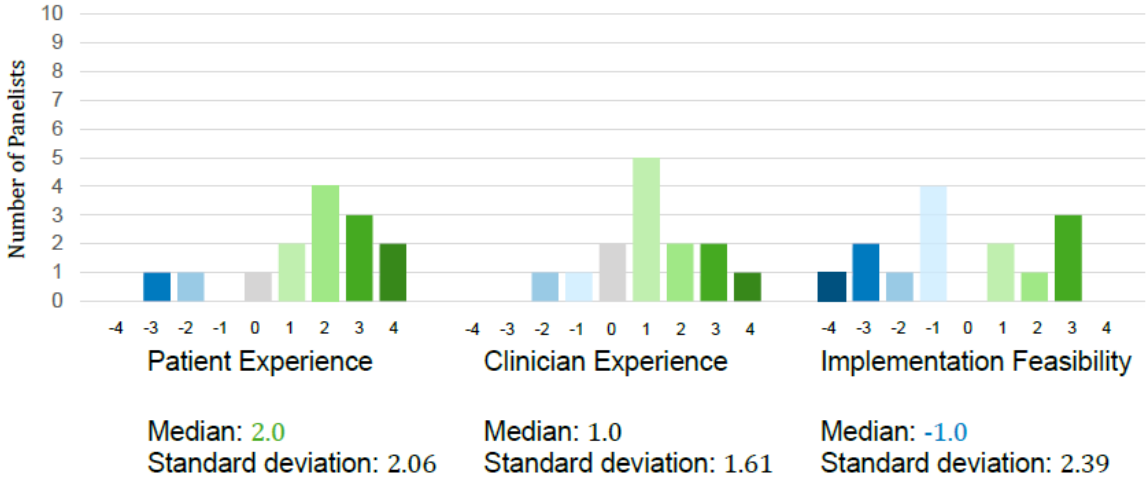
Practice 7. Share the screen

Definition: Balance interpersonal patient interactions with the digitization of medicine by appropriately integrating the computer and electronic health record (EHR) into the visit.

Practice examples:

- **Share screen information:** point to the screen, invite patients to sit next to you and view the screen, give patients time to read, check for understanding/questions
- **Separate computer usage from patient interaction:** ask permission to use computer, signal transitions to computer, interact with EHR in short, brief sessions
- **Orient body towards the patient:** point legs and knees toward patient while using computer, maintain eye contact while typing
- **Read aloud** when entering information on the computer: "Let me tell you what I'm typing"

Panel Ratings



Qualitative Feedback

- **Patient:** For some patients, sharing EHR may communicate respect and consideration. May be off-putting for those with limited English proficiency, numeracy problems, vision problems.

- **Provider:** Some providers might find this difficult, stressful, or distracting; others may enjoy it.

- **Implementation:** Might call for rearranging the exam room, which is time consuming and/or difficult/impossible to do. Training, changing Dr/Pt positioning, explaining data may all be more work than it initially seems and there may be adverse consequences (e.g., making patient change position could be uncomfortable, some patients may not want to see screen or may have negative experiences with it).

- **Other Insight:**
  First ask patients if they want to look at the screen. Consider selective sharing (e.g., labs).

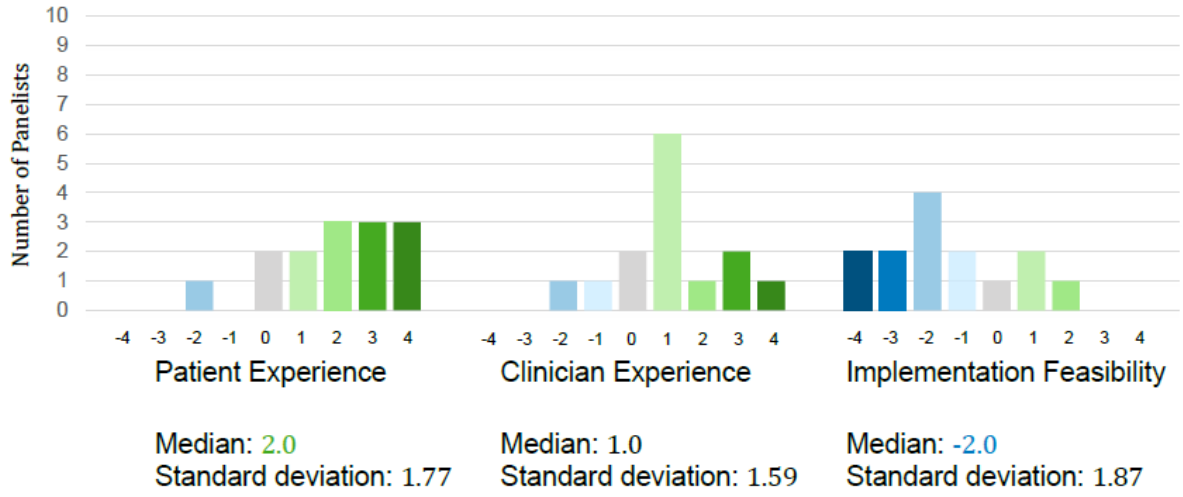
Practice 8. Keep an open mind

Definition: Consider and address implicit biases before and during interactions with a patient.

Practice examples:

- **List 1-2 biases that could influence the encounter** before seeing the patient
- **Consider possible reasons (sociocultural, biological, psychological, etc,) why** a patient may be coming into clinic

Panel Ratings



Qualitative Feedback

- **Patient:** Beneficial if providers can engage in fewer stereotypes and assumptions, particularly when patient/provider backgrounds differ.

- **Provider:** If successful can lead to more meaningful connection and improve provider experience. However, practice is challenging because of required self-awareness and vigilance.

- **Implementation:** "This exercise is like trying to cover the sun with your finger." Does not address unconscious bias. Implicit bias training may be time-intensive and met with resistance, has mixed success, and can make providers feel overwhelmed if not done well.

- **Other Insight:** Important issue but limited high-quality evidence about impact of practice, and unclear what concrete practice would be most effective. Consider exploring the field of job interviewing - lots of experience with this topic.

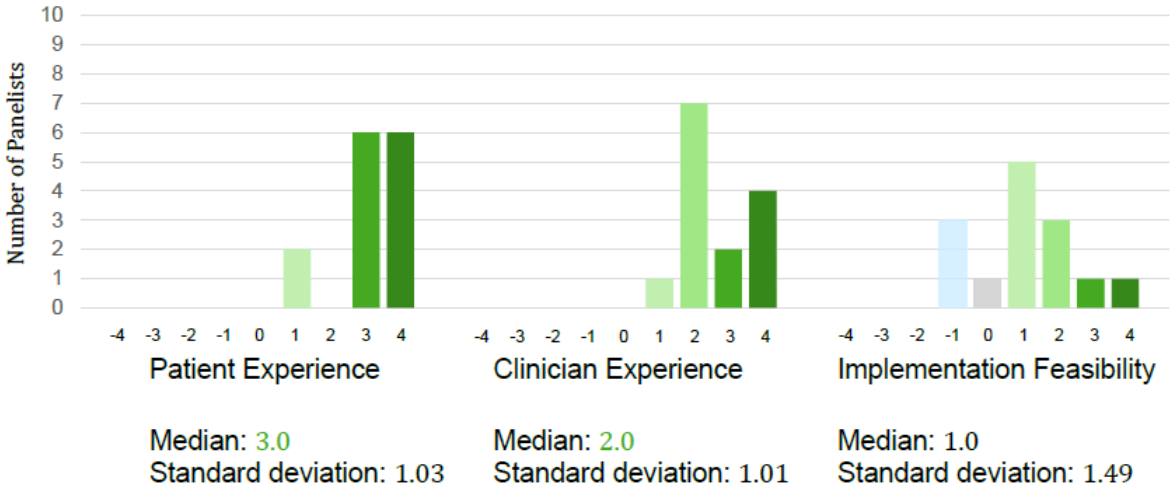
Practice 9. Walk in the patient's shoes

Definition: Physicians consider the patient's perspective and address this perspective in clinical care and decision making.

Practice examples:

- Remind physician to **"look at the world through the patient's eyes and walk through the world in the patient's shoes"**
- **Positively reflect a patient's experience** with his/her health concern: "Yes, a cold can really sap your energy"
- **Incorporate a patient's contribution** when discussing health plan: "I have carefully considered what you told me about what brought you here"

Panel Ratings



Qualitative Feedback

- **Patient:** Understanding patient context is critical to improving outcomes. May enhance physician empathy and therefore patient satisfaction, but could seem artificial if not genuine/spontaneous.

- **Provider:** May result in more meaningful interactions.

- **Implementation:** Hard to do, requires genuine curiosity to get it right. Needs to be coupled with other practices to build trust through language/gestures. Important but difficult habit for busy clinician. Requires practice to be sustained.

- **Other Insight:** Providers might make assumptions that are inaccurate and do patient a disservice. Important to reflect the patient's experience back to patient to communicate this understanding.

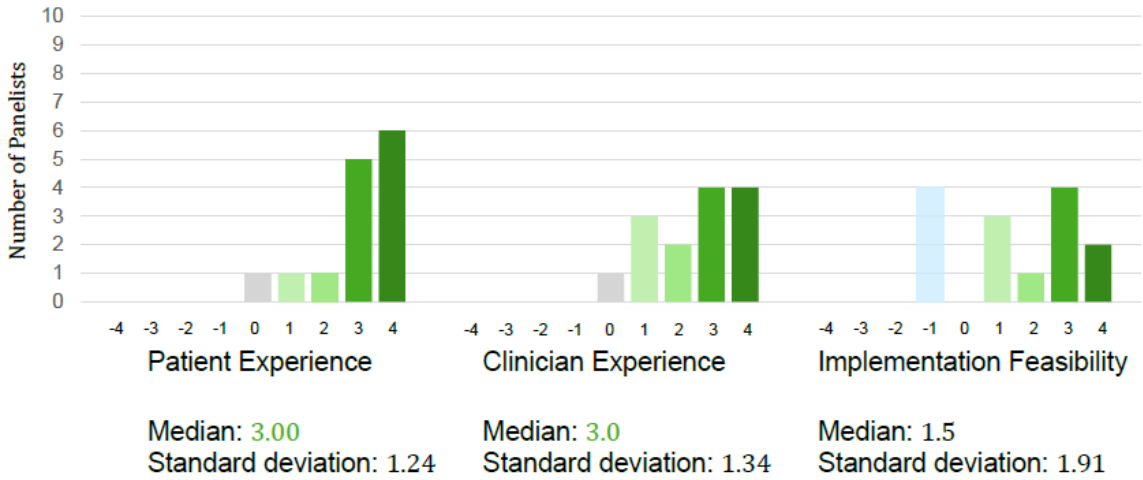
Practice 10: Focus on progress

Definition: Acknowledge specific patient efforts in order to highlight progress, commend adherence to treatment recommendations, and encourage patient as an active partner in care.

Practice examples:

- **Use positive language,** e.g. statements of approval, empathy/reassurance, and partnership (ask for patient opinions, check for understanding). Avoid negative language, e.g. scolding or criticism
- **Compliment the patient** for making an effort, acknowledge small successes
- **Reassure and praise** to encourage patient questions and acknowledge patient health progress

Panel Ratings



Qualitative Feedback

- **Patient:** Patients may appreciate this and feel motivated, but focusing on "progress" may feel prescriptive and is problematic in situations where patient has no control.

- **Provider:** Focusing on strengths/positive can be rewarding for provider.

- **Implementation:** Nuanced and genuine positive feedback/encouragement with empathy requires substantial training and practice (timing, choice of words, tone of voice, perceptiveness). Hard to re-train physicians who were trained to focus on problems (not strengths).

- **Other Insight:** Ask patient, "What do you really enjoy?" Other phrases: "I see the work you've put in since our last visit," "I applaud the commitment you've made to your health." "Celebrating" (instead of praising) is a more visceral, emotional, mutual, shared experience. Avoid the word "progress" as this might not be possible for some conditions (also suggests 'You are doing what I say').

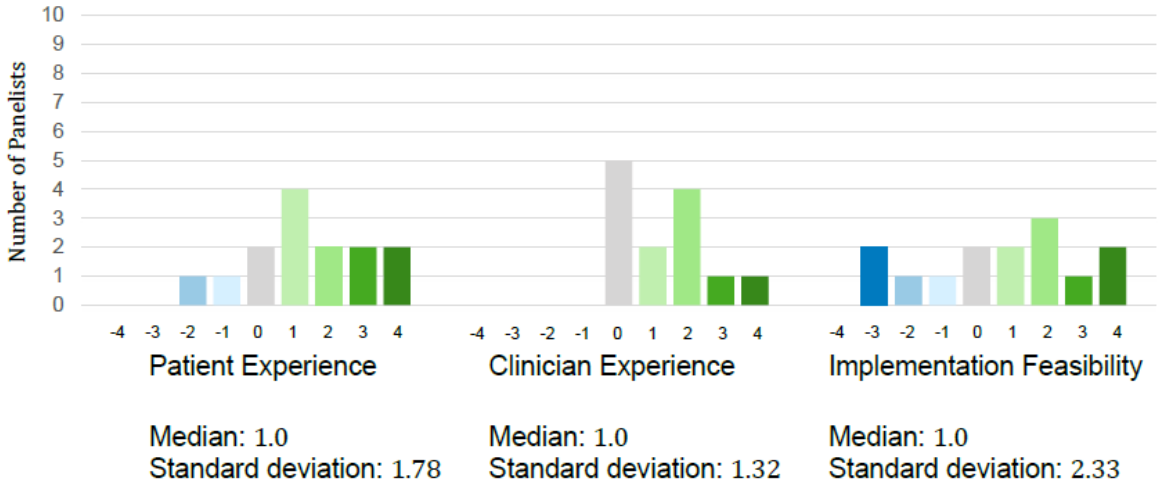
Practice 11. Recognize the power of touch

Definition: Employ expressive touch with patients, when appropriate.

Practice examples:

- **Use touch sparingly and with intention**
- **Lightly touch your patient on the arm or hand** when giving a recommendation
- **Hold your patient's hand or pat them on the shoulder,** if the patient seems comfortable

Panel Ratings



Qualitative Feedback

- **Patient:** Variable, can communicate empathy/warmth and build relationship, but also may be misinterpreted or unappreciated.
- **Provider:** May communicate caring, thoroughness, confidence, comforting, and respect without adding to time or burden of visit, but can make some providers uncomfortable.
- **Implementation:** Teachable by skilled clinicians, but teaching providers who don't have intuition for this is complex and risky - requires cultural sensitivity, attention to age/gender/patient preferences.
- **Other Insight:** Central to clinical medicine, so understanding when/how is important; asking for permission is important (critical not to touch inappropriately).

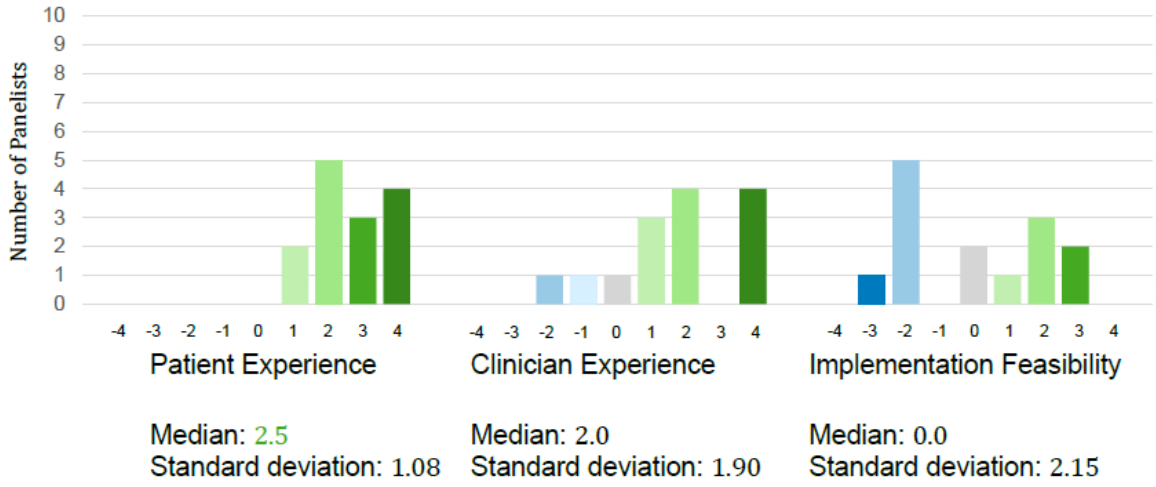
Practice 12. Prepare for the person

Definition: Review, assemble, and organize information about a patient before the encounter.

Practice examples:

- **Ask the MA/nurse to report any important information** obtained while rooming the patient
- **Administer a pre-appointment questionnaire during patient check-in,** review patient's concerns and formulate a tentative plan
- **Review patient's medical history** before the visit and note high-yield details

Panel Ratings



Qualitative Feedback

- **Patient:** May increase satisfaction when clinician recalls their clinical/social history. In many situations, patients expect clinician to be familiar with recent events.

- **Provider:** Enhances quality of interaction, readiness, and visit efficiency (although requires time outside of clinical encounter). Clinician panelist: "pre-charting is one of the most important things I do."

- **Implementation:** Requires minimal training, but preparing for clinical encounter is challenging in a time-pressured environment. Implementation may not be under clinician's control, however brief chart review might be feasible. Pre-visit questionnaires may help if they yield useful info (chief concern).

- **Other Insight:** Explicitly saying "I reviewed your record prior to our visit" may improve patient satisfaction. In some settings, chart review has shifted from outside to inside the room (problematic as being unprepared in professional encounter can have negative consequences). Care team (MA, RN) may be able to report information obtained while rooming patient.

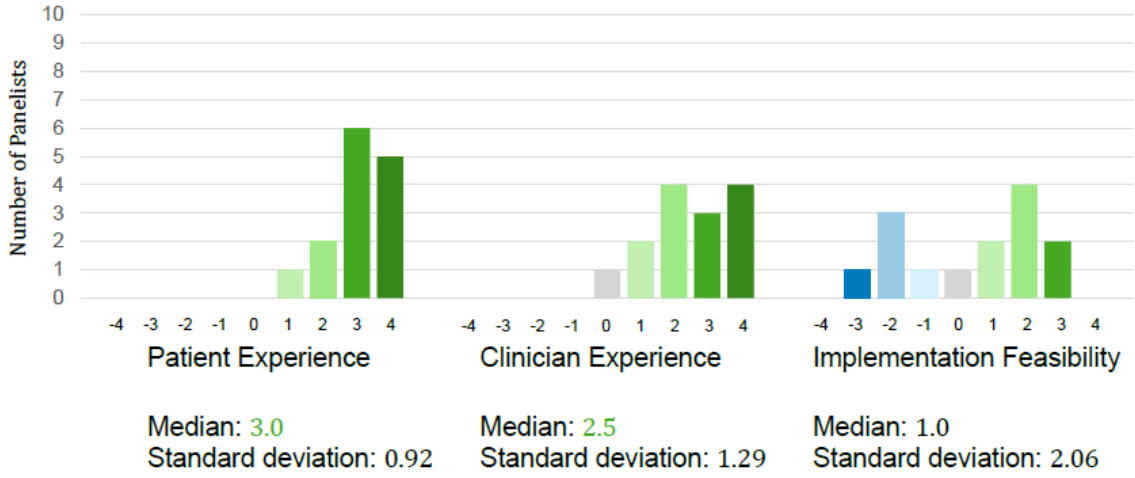
Practice 13. Engage in emotion

Definition: Acknowledge patient and provider emotions

Practice examples:

- **Talk to patients in a warm, reassuring manner** with caring facial expressions
- **Pay attention** to the patient's facial expressions
- **Talk to patients** about the emotional experience of illness

Panel Ratings



Qualitative Feedback

- **Patient:** Addressing patient emotions with support and legitimation is rewarding for patient (and clinician). Unaddressed emotions are frequently the reason for patient dissatisfaction.

- **Provider:** Provider ability/interest in acquiring these skills varies, but this practice can improve relationships with patients. Self-awareness about emotions is important for providers.

- **Implementation:** Topic is central to care and caring, but practice covers broad territory. Requires training, practice, and reinforcement. Brief training may be helpful but benefits may not be sustained. To do this well, need to be able to read patient emotions across cultural/socioeconomic contexts.

- **Other Insight:** Depending on practice setting and type of conditions, this "emotion work" may be front and center and essential for care.

ROUND 2

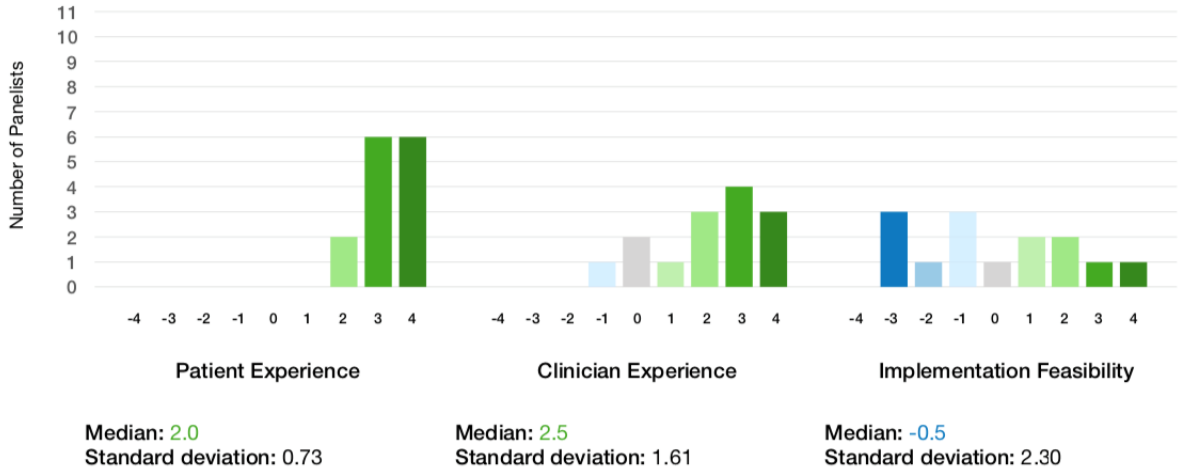
Practice 1. "Come prepared" (Formerly "Prepare for the person")

Definition: Review patient information before the encounter in order to be focused and present in the visit.

Practice examples

- Ask the MA/nurse to report any important information obtained while rooming the patient (Sinsky, 2016)
- Perform a "1-minute chart review" of the medical and/or social history before the visit and note high-yield details (Joos et al., 1996)

Panel ratings



Panel comments

- Doctors knowing their patients is an important aspect of relationship building.
- Demonstrating preparation improves patient satisfaction and conveys professionalism.
- There are huge implementation barriers in getting systems to allow for doctor preparation - this may be outside of the clinician's control.
- Reframe as "1-minute review" to set expectations for small change.

Quotes

- "This is more about building a relationship than anything medical. Makes the patient feel good that you know them."
- "Preparation is essential, but…complicated to implement and requires buy-in and culture change…the infrastructure required to set up a practice that way is difficult."

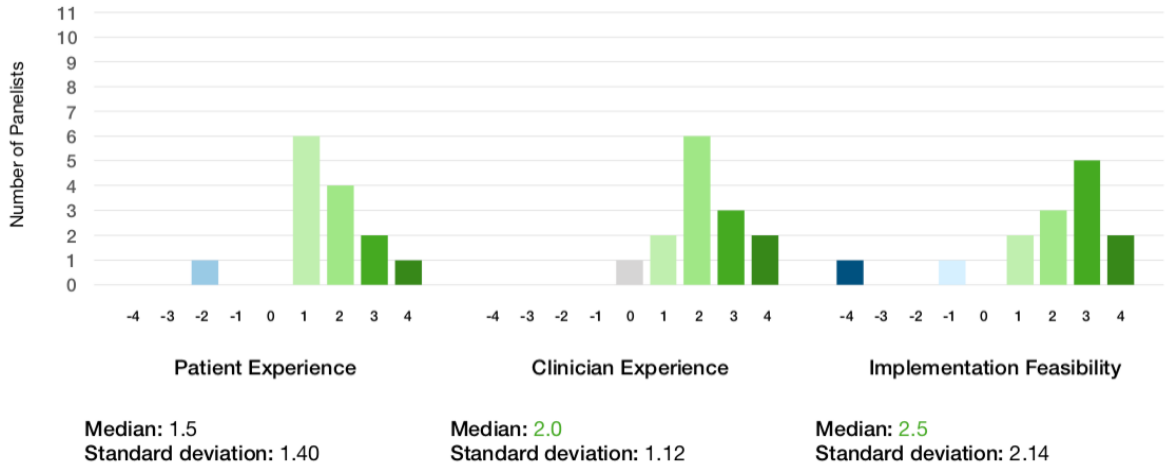
Practice 2. "Take a moment"

Definition: Incorporate a brief ritual into clinician practice to focus your attention on the patient you are about to see.

Practice examples

- Take three deep breaths before walking into the exam room (Edgoose et al., 2015)
- Create a brief ritual out of a routine practice eg. Hand-washing: paying full attention to washing your hands (Gauthier et al., 2015 & Provider interviews)

Panel ratings



Panel comments

- Simplicity is a strength for this practice, especially in implementation
- Might be better framed as cognitive load or something else for the purposes of acceptability among physicians; avoid "mindfulness" or "mantra"
- May not be as effective in isolation - could pair this with reflecting on other presence practices
- Easy to teach, may be hard to maintain

Quotes

- "Would you rather interact with someone who is running and not being in the moment or would you rather interact with someone who is mindful and focused?"
- "This is fundamental but will have minimal impact in isolation."

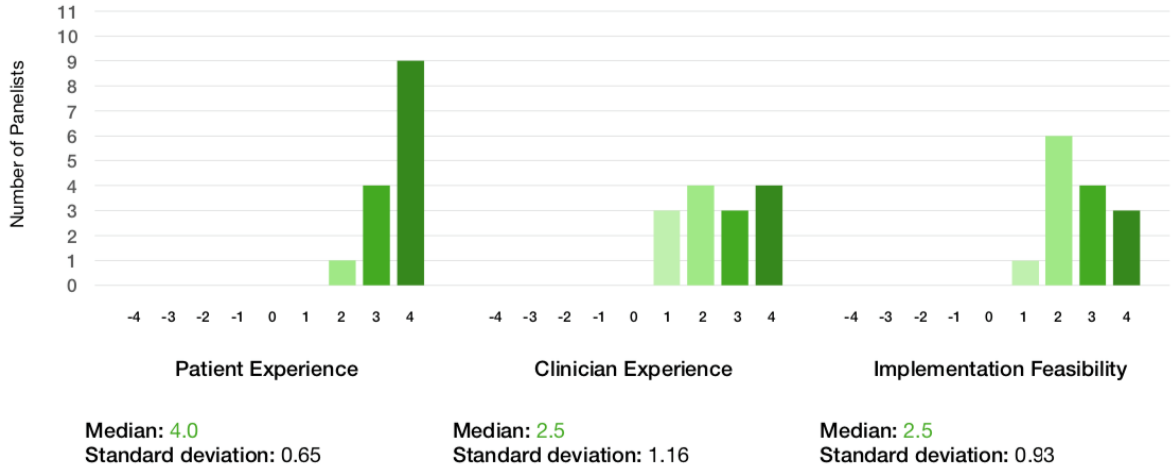
Practice 3. "Position yourself"

Definition: Use positive, open body language when interacting with the patient during the visit.

Practice examples

- Sit down when talking to the patient (Johnson et al., 2008; Swayden et al., 2012; Riess et al., 2012; Riess et al., 2014; Merel et al., 2016)
- Lean in toward the patient (Beck et al., 2002; Little et al., 2015)
- Maintain an open body position, keep legs and arms uncrossed (Beck et al., 2002; Riess et al., 2012; Riess et al., 2014; Little et al., 2015)
- Orient toward the patient, pointing legs and knees toward the patient while on the computer and maintaining eye contact while typing (Alkureishi et al., 2016; Crampton et al., 2016; Patel et al., 2017; Duke et al., 2013)

Practice ratings



Panel comments

- Practice is well-supported by the evidence and very intuitive; many have already implemented these skills in their practice.
- There are multiple nonverbal skills that express empathy; physicians can choose the behaviors that are the best fit for them.
- Potential barriers to implementation include placement of computer and time required to teach nonverbal skills.

Quotes

- "This is the most important [practice] for patient experience."
- "This is also customizable within the individual repertoire of the provider. It can be done, and what feels fake and inauthentic initially feels comfortable after a while."

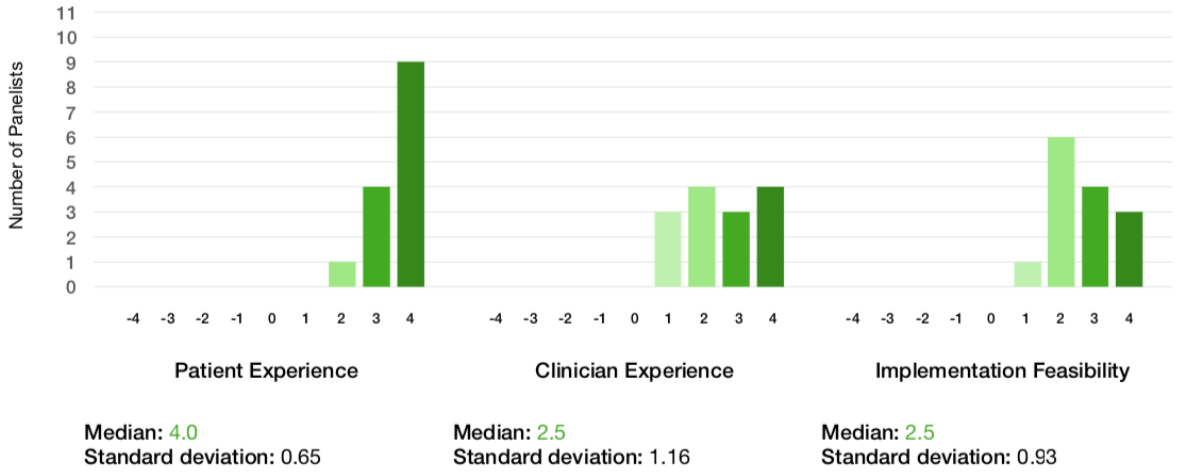
Practice 4. "Listen without interrupting" (Formerly "Stop and Listen")

Definition: Avoid interrupting during a patient's opening description of health issues.

Practice examples

- Avoid interrupting a patient during his/her opening description of active health issues; pocket guide can be used as a helpful reminder to physicians to avoid interruption (Langewitz et al., 2002; Alamo et al., 2002; Rabinowitz et al., 2004)
- Give the patient space to tell their story and let them lead the visit by using silence (Robertson, 2005)

Practice ratings



Panel comments

- The practice "stop and listen" received positive ratings, but several commented on implementation challenges:
    - Use of silence is a higher-level skill, hard to teach its use, may be hard to maintain.
    - In clinic, interrupting a patient can be necessary.
    - Men tend to interrupt more than women, so training men to not interrupt and to return to the previous topic if they do is extremely important.
    - Some patients with language/literacy barriers may be uncomfortable with a long monologue.
- Because of these comments, we have narrowed the focus of the practice to avoid interrupting (particularly during opening monologue).

Quotes

- "Low literacy patients…may not be comfortable with the expectation that they need to report. So need to shift/adapt in these situations."
- "Some interruptions are necessary… 'interrupt judiciously' may be more appropriate."
- [On the need to clarify "don't interrupt" vs. "listen silently"] "…purposefully waiting with silence is a much more high-level skill for people to master."

Practice 5. "Elicit and address patient priorities" (Formerly "Elicit patient priorities" & "Collaborative Agenda Setting")

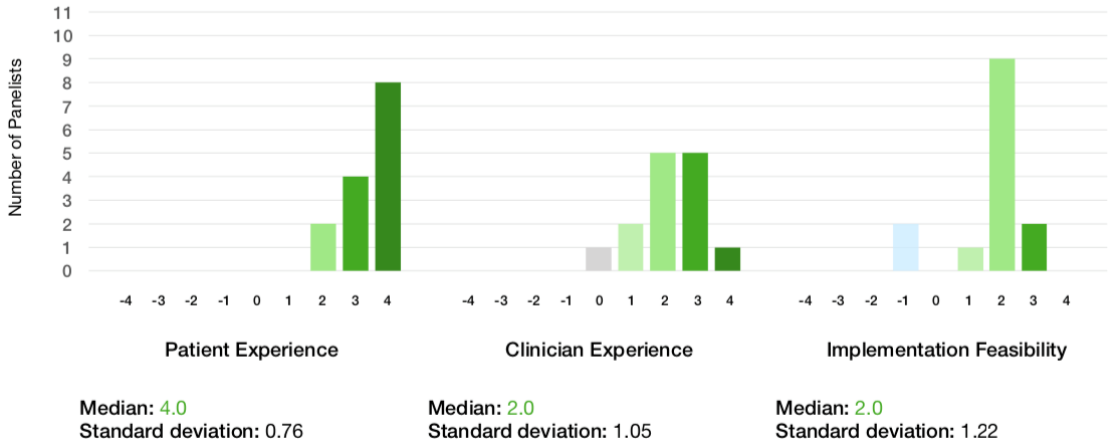
Definition: The provider elicits patient priorities and incorporates these priorities into the agenda for the visit.

Practice examples

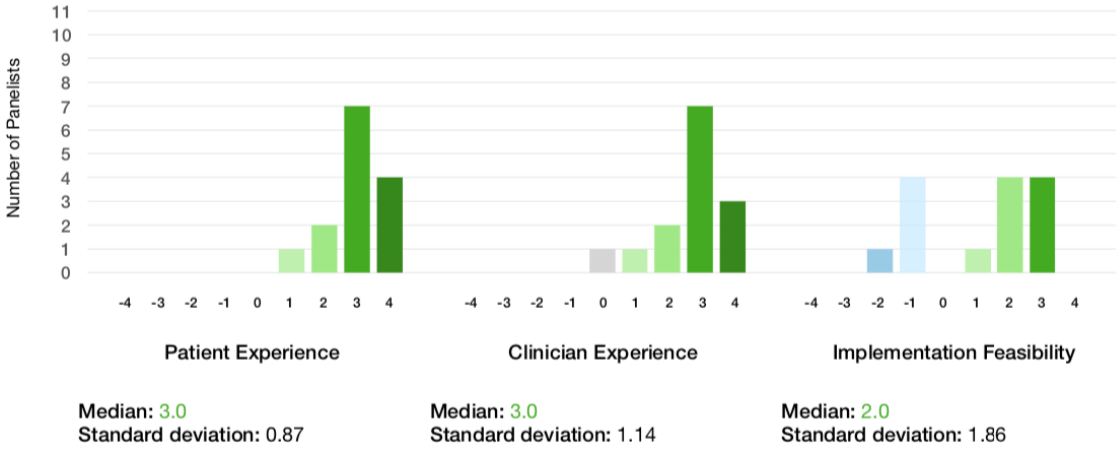
- Using an open-ended question, ask the patient to describe in their own words why they are here: "What can I do for your today?", "I want to make sure to hear in your own words what it is that is important to you that we cover today" (Eyal et al., 2018; Heritage, 2009; Robinson et al., 2006; Riegels et al., 2018; Roter & Hall, 1987; Takemura et al., 2005)
- Develop an agenda that incorporates the patient's priorities: "I want to make sure we are on the same page about what you want to cover today" (Tallman et al., 2007; Frankel et al., 2013; Leydon et al., 2018; Alamo et al., 2002)
- Review agenda and elicit any unaddressed priorities, e.g. "Is there something else you wanted to discuss today?" (Heritage et al., 2007; Leydon et al., 2018)

Practice Ratings

Elicit patient priorities



Collaborative agenda setting



Panel comments

Elicit patient priorities

- Leads to better patient histories and relationship.
- Easy to teach basics but not nuances. Important that physician actually listens vs. just giving the impression of listening; requires emotional intelligence.
- Critical to link to other skills and follow up.
- Time may be an obstacle to implementation. Some physicians also may be unwilling to give up control, making it harder to implement.
- This was preferred over the "perspective taking" practice (#9), because it is more likely to lead to "perspective getting."

Collaborative agenda setting

- Collaboration is the most important part of this practice. It's about "how" the agenda-setting is taking place.
- Implementation may be difficult as it requires a lot of training and nuance.
- Collaborative agenda setting can go wrong, e.g. if provider ignores the pre-visit questionnaire or forces their own agenda onto a patient. Also, not appropriate for patients with cognitive impairment.
- Lengthy collaborative agenda setting may not be acceptable to providers.

Quotes

Elicit patient priorities

- "Really helps the clinician to build a mutually rewarding relationship. It's easy to teach the basics, but much harder to teach all the nuances which are important."
- "To do this well, beyond the appearance of asking, requires a keen sense of interpersonal dynamics, emotional intelligence, etc."

Collaborative agenda setting

- "This is important but requires a lot of training and reinforcement for the physician and everyone in the clinic."
- "Patients travel and overcome many obstacles to get [to clinic] so pre-visit agenda setting may seem like avoidance of trying to hear the patient's perspective."

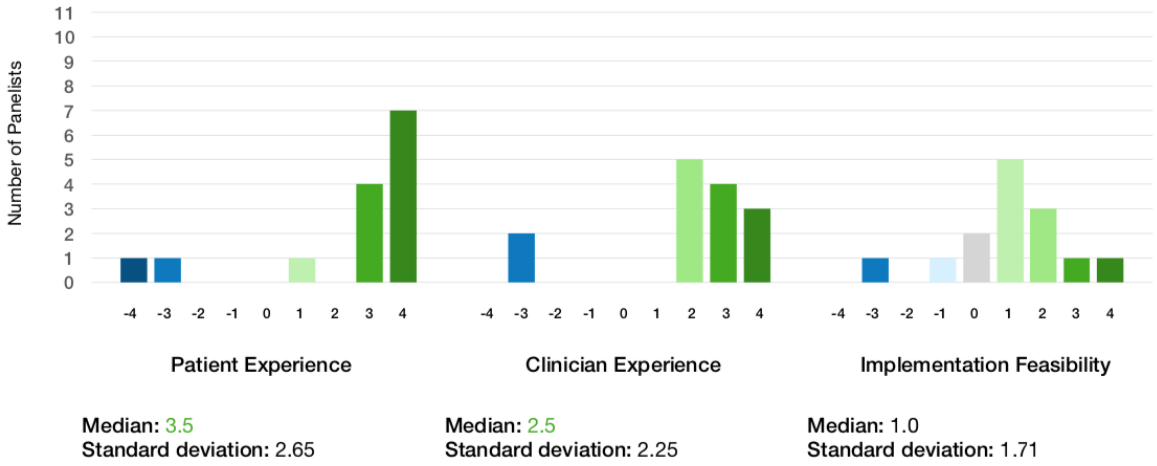
Practice 6. "Make a non-medical connection" (Formerly "Walk in the patient's shoes")

Definition: Identify and reflect on non-medical details about the patient to shift focus toward empathy during the visit.

Practice examples

- Consider possible reasons (sociocultural, biological, psychological, etc.) why a patient may be coming into clinic (Bellón et al., 2008; Harmsen et al., 2005)
- Identify a non-medical characteristic that helps you empathize and connect with a patient (Shapiro, 2002)

Practice ratings



Median: 3.5
Standard deviation: 2.65

Median: 2.5
Standard deviation: 2.25

Median: 1.0
Standard deviation: 1.71

Panel comments

- Perspective taking is essential for empathy.
- Empathy can be taught and employed electively.
- Assumptions may be incorrect if not confirmed by patient.
- It may be difficult for physicians to relate to their patients due to SES and racial differences.
- "Perspective getting" can be taught, e.g., ask "What is it like for you at home now that...," or "What do you think might help you?"
- Not impossible to implement, but need to get through burnout and resistance before embracing this.

Quotes

- "Most clinicians are highly educated and upper middle class so there's a significant disparity between patient and doctor...Only 12% of doctors are Latino, Black, American Indian – that influences whether you can do any of this."
- "Perspective taking is an activity where you imagine what it's like at home. Perspective getting is actually asking them about it."

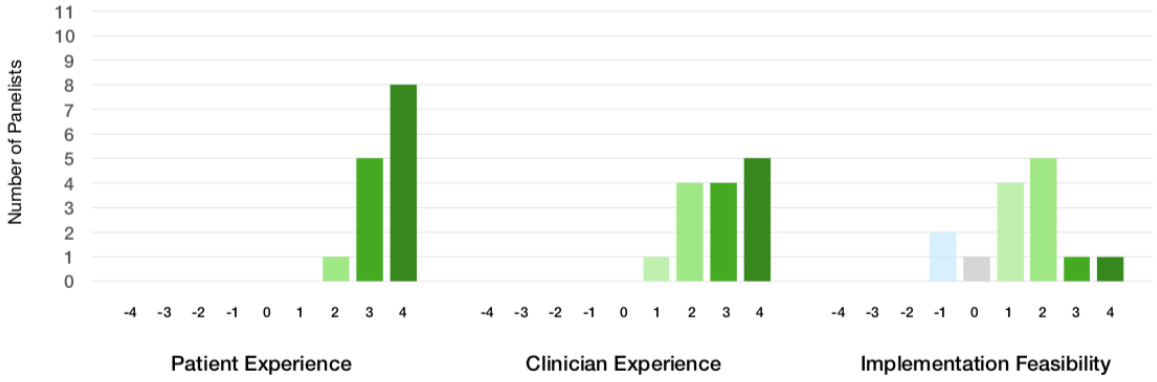
Practice 7. "Attend to patient emotions" (Formerly "Engage in Emotion")

Definition: Assess and acknowledge the patient's emotions.

Practice examples

- Read a patient's facial expressions for emotional cues (Riess et al., 2012)
- Elicit patient emotions through questions (i.e., "How are you doing?" or "How are you feeling about this?" (Zimmerman et al., 2011; Coulehan et al., 2001)

Practice ratings



Median: 4.0
Standard deviation: 0.65

Median: 3.0
Standard deviation: 1.00

Median: 1.5
Standard deviation: 1.39

Panel comments

- Highly important and needs to be done, but may be hard to identify brief, effective practice. "It's a reach goal."
- Disagreement about how easy it is to teach this: "Very trainable" vs. "Involves intuition, difficult to teach."
- To learn to express empathy in all its dimensions requires training and practice, e.g. communications training program with reinforcement at various times.
- To do this well in a diverse setting requires reading patient emotions across cultural and socio-economic contexts.

Quotes

- "One of the biggest threats to physician patient engagement is that we no longer look at our patients' faces. This is something we can do something about; our faces are a roadmap of emotion."
- "Takes a lot of time, emotion, and practice to be able to do it. It's an amazing outcome if you can do it right. It's worthwhile, but not easy."

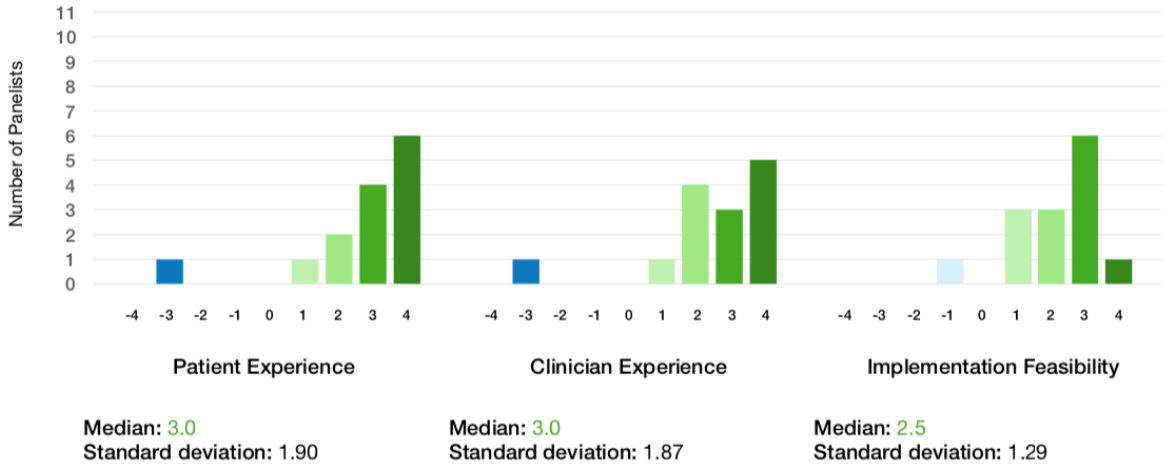
Practice 8. "Focus on the positive" (Formerly "Focus on progress")

Definition: Acknowledge specific patient efforts *in a genuine and positive manner* to highlight progress, commend adherence, and encourage patient as an active partner in care.

Practice examples

- Use positive language, e.g. statements of approval, empathy/reassurance, and partnership (ask for patient opinions, check for understanding). Avoid negative language, e.g. scolding or criticism (Brown et al., 2000; Hart et al., 2006)
- Compliment the patient for making an effort, acknowledge small successes (Epstein et al., 2017; Levensky et al., 2007)
- Offer genuine and honest reassurance and praise to encourage patient questions and acknowledge patient health progress (Bonvicini et al., 2009)

Practice ratings



Panel comments

- Honest/genuine praise is really important.
- Could be misinterpreted as never criticize - but constructive criticism can be beneficial.
- Contrary opinions re: feasibility: ("there is nothing difficult about reinforcing positive behavior" vs. "physicians receive little praise or empathy in training, which may make it difficult for them to adopt this practice").
- The word 'progress' may be problematic, especially if treating patients with chronic conditions (Note: title has been changed to remove this word).

Quotes

- "Finding what gives a patient joy is part of 'perspective getting'."
- "I like the question, 'What do you really enjoy?' Understanding a person's passion is revealing and helps align recommendations with what is important."
- Criticism is actually ok, it's dynamic, and a relationship doesn't have to be Pollyanna-ish all the time."

eAppendix 6. Evidence Booklet for Final Presence Practices

Presence 5

Fostering Humanism in the Clinical Encounter

Delphi Panel Evidence Packet
Updated, October 2019*

**A preliminary version of this evidence packet was distributed to Delphi panelists in August, 2018. The current version was updated to reflect the final five practices that emerged from the Delphi panel.*

presence.
The Art & Science of Human Connection.

Stanford MEDICINE | Department of Medicine

Research Team

Principal Investigators
Donna Zulman, MD, MS and Abraham Verghese, MD

Co-Investigators
Cati Brown-Johnson, PhD; Marie Haverfield, PhD; Rachel Schwartz, PhD; Jonathan Shaw, MD, MS

Project Managers
Nadia Safaeinili, MPH and Dani Zionts, MScPH

Research Support Staff
Aaron Tierney, Meredith Fischer, Ally Hinson, Muzzammil Muhammad Shittu, Derek Chen, Shreyas Bharadwaj, MS, Isabella Romero, Gabriella Piccininni, Theodore Miclau, MS

Presence Center Executive Director
Sonoo Thadaney, MBA

Advisors and Other Contributors

Project Advisors
Chaplain Bruce Feldstein, MD, BCC (Stanford University School of Medicine)
Alan Glaseroff, MD (Stanford University School of Medicine)
John Kugler, MD (Stanford University School of Medicine)
Sheila Lahijani, MD (Stanford University School of Medicine)
Karl Lorenz, MD, MSHS (Stanford University School of Medicine, VA Palo Alto Health Care System)
Amrapali Maitra, MD, PhD (Brigham and Women's Hospital, Harvard Medical School)
Kelley Skeff, MD, PhD (Stanford University School of Medicine)
Andrew Elder, MD (University of Edinburgh)

Partner Clinic Liaisons
Megan Mahoney, MD (Stanford University School of Medicine)
Marcie Levine, MD (Stanford University School of Medicine)
Lars Osterberg, MD, MPH (Stanford University School of Medicine, VA Palo Alto Health Care System)
Christophe Gimmler, MD, LMFT (Stanford University School of Medicine, VA Palo Alto Health Care System)
Jaime Chavarria, MD (Ravenswood Family Health Center)

Design Consultants
Farzad Azimpour, MD (Stanford University School of Medicine)
Lucie Richter, MA (Future Medical Systems)
Svava Atladóttir, MS (Future Medical Systems)

Additional Research Contributors
Marcy Winget, PhD (Director, Evaluation Sciences Unit, Stanford University School of Medicine)
Michelle Bass, PhD, MSI (Research Librarian, Stanford University School of Medicine)
Laura Jacobson, MPH (OHSU-PSU School of Public Health)
Jaime Dice Moore, PhD, MSc (Dice Writing, LLC; Ethnography Consultant)

Delphi Panel

Steven Asch, MD, MPH (Chair, Modified Delphi Panel)
Director, Center for Innovation to Implementation, VA Palo Alto Health Care System
Professor, Division of Primary Care and Population Health, Stanford University School of Medicine

William Branch Jr., MD
Professor of Medicine, Division of General Internal Medicine and Geriatrics, Emory University School of Medicine

Arleen Brown, MD, PhD
Professor of Medicine, Division of General Internal Medicine and Health Services Research, University of California, Los Angeles Chief of General Internal Medicine and Health Services Research. Olive View - UCLA Medical Center

Calvin Chou, MD, PhD
Professor of Clinical Medicine, University of California, San Francisco
Staff Physician, San Francisco Veterans Affairs Health Care System

Richard M. Frankel, PhD
Professor of Medicine and Geriatrics, Regenstrief Institute, Indiana University School of Medicine
Senior Scientist, Center for Healthcare Information and Communication, Richard L. Roudebush Veterans Affairs Medical Center

Judith Hall, PhD
University Distinguished Professor, Department of Psychology, Northeastern University

Manny Hernandez, M.Eng
Patient Representative
Diabetes Hands Foundation, American Association of Diabetes Educators, International Diabetes Federation, American Diabetes Association

Rumana Hussain, MBA, MPH
Practice Administrator, Alameda Health System

Lucy Kalanithi, MD
Caregiver Representative
Clinical Assistant Professor, Stanford University School of Medicine

Eliseo J. Pérez-Stable, MD
Director, National Institute on Minority Health and Health Disparities, National Institutes of Health

William Polonsky, PhD, CDE
Associate Clinical Professor in Psychiatry, University of California, SanDiego President and Founder, Behavioral Diabetes Institute

Helen Riess, MD
Associate Professor of Psychiatry, Harvard Medical School
Director, Empathy and Relational Science Program, Department of Psychiatry, Massachusetts General Hospital

David Sobel, MD, MPH
Former Medical Director, Patient Education and Health Promotion
The Permanente Medical Group and Kaiser Permanente Northern California
Adjunct Lecturer, Department of Medicine, Stanford University School of Medicine

Ian Tong, MD
Chief Medical Officer, Doctor On Demand
Clinical Assistant Professor (Affiliated), Stanford University School of Medicine

Elaine Wittenberg, PhD
Associate Professor, Department of Communication Studies at California State University, Los Angeles

Project Background

Scientific and technological advances in recent years have greatly improved how we treat disease, but these same advances often distract and detract from the patient. The precision health movement, through which breakthrough therapies are being developed and tailored to individuals, has yielded promising results. Still, paradoxically, modern medicine is plagued by dissatisfied patients and disenchanted physicians, and everyday practice is replete with diagnostic error and inefficiencies. In our attempts to personalize healthcare, the care itself has become more impersonal.

> "Even though medicine changes, the fundamental role of the physician, the need for their ***presence***, does not change, and the importance of that presence is greater than ever. Cure is laudable but not always something we achieve, but comforting and healing is something we can do."
> - *Dr. Abraham Verghese*

The challenge of personalizing care is especially acute for individuals with complex medical, social, and behavioral needs. Patients in the U.S. increasingly face multiple health issues, a circumstance that is associated with higher rates of functional decline and hospitalization, increased mortality, and disproportionately high healthcare costs. Despite the technology and information available to clinicians, inadequate assessments and exams in complex patients can generate erroneous diagnoses, inappropriate treatment recommendations, and complications that pose serious safety risks.

WHAT IS PRESENCE?

The word *presence* refers to a purposeful practice of awareness, focus, and attention with the intent to understand and connect with patients. The ritual of clinical care, listening with empathy, and allowing patients to be heard, gives physicians insight that cannot be garnered from technology alone, and yet has the ability to greatly enhance the way we utilize technology. Gathering nuanced, personal data (e.g., what is important to patients; how their symptoms affect their lives and their goals; and preferences for treatment) fosters a sense of respect and trust between the patient and physician that can be crucial in delivering care around sensitive subjects such as end-of-life conversations, and can also reduce the miscommunication and oversight that leads to medical error.

A **practice** is a specific, practical action, communication strategy, or tool that clinicians can employ. The following pages provide detailed descriptions of a preliminary list of practices and the evidence that supports or refutes them.

PROJECT GOALS

The Presence 5 project, funded by the Gordon and Betty Moore Foundation, aims to develop and evaluate a novel, scalable, evidence-based intervention that fosters physician humanism and connection with patients through interpersonal actions and communication strategies. The objective is to design an intervention with core practices: discrete actions, communication strategies, or tools that clinicians can employ to foster their engagement and connection with patients.

The specific goal of this national, expert panel was to provide structured feedback on the usefulness and feasibility of the preliminary list of evidence-based practices to aid the Presence 5 team in identifying the final set of practices.

HOW IS PRESENCE 5 DIFFERENT?

In developing the evidence for the Presence 5, we reviewed several related interventions in primary care and medicine to facilitate better connections between providers and their patients, including the following:

- The Three Function Approach to the Medical Interview (Cole & Bird, 1990)[88] focuses on three functions of the patient visit: to gather data to understand the patient's problems, to develop patient-doctor rapport and appropriate physician response to emotions, and to educate the patient about their illness and motivate them to adhere to treatment.
- The 4 Habits Model (Frankel & Stein, 2001)[89] seeks to improve the medical interview and medical care/outcomes by instilling four habits in care providers. The four habits are: invest in the beginning, elicit the patient's perspective, demonstrate empathy, and invest in the end. Each habit includes 3-4 skills and multiple techniques and examples within those skills.
- Narrative Medicine (Charon, 2001)[90] emphasizes the use of narrative skills to improve patient care, physician health and fulfillment, and care of peers. Narrative Medicine is predominantly deployed in medical schools and focuses on increasing engagement and authenticity during care, and promoting healing.
- Oncotalk (Back et al., 2007)[91] fosters communication skills and expressions of empathy by learning through observation. This two-day training communication course for oncologists leverages conversations with standardized patients.
- E.M.P.A.T.H.Y. ® (Riess & Kraft-Todd, 2014)[3] focuses on helping clinicians perceive and respond to non-verbal cues that comprise E: eye contact; M: muscles of facial expression; P: posture; A: affect; T: tone of voice; H: hearing the whole patient; and Y: your response.
- Humanism Pocket Multi-tool (Soh, 2018)[92] offers providers techniques to counteract dehumanizing responses and maintain humanism while providing care to homeless veterans. Includes tools to use with patients and with peers to improve care and enhance safety and partnership.
- COMFORT (Goldsmith & Wittenberg-Lyles, 2013)[93] includes a handout with a communication curriculum containing holistic principles for palliative care communication rather than a traditional checklist. It focuses on comfort, orientation/opportunity, mindful presence, family needs and communication, openings, relating, and team collaboration/cohesion.
- Thriving in a Busy Practice (Stein & Kwan, 1999)[94] is a 1-day workshop focused on improving communication in the medical interview, including difficult interactions. It includes guidelines on setting expectations and agenda, as well as specifics of communication such as asking if there is "anything else" and using open ended questions.

We also reviewed literature showcasing novel quality improvement initiatives in health systems (e.g., Riegels et al., 2018, "Listening beyond auscultating: A quality initiative to improve communication scores in the hospital consumer assessment of health care practitioners and systems survey").[12]

Presence 5 aims to develop an intervention that builds on these and other innovations, emphasizing some practical goals. First, advances in technology and the central role of the EHR in modern medicine have changed the dynamics of clinical practice, requiring that we revisit the highest-yield strategies for engaging and communicating with patients. Second, we hope to identify a concise set of verbal and/or non-verbal tools and strategies that can be

adopted with minimal training, thereby facilitating adoption and dissemination. Third, our goal is to develop an intervention that is applicable to a broad range of outpatient settings and patient interactions, with attention to population accessibility and diversity, design, and implementation. Finally, the evaluation of the Presence 5 intervention considers both patient and clinician experience, as well as opportunities to influence population health and cost outcomes, so we drew on evidence for each of these outcomes during this formative research period.

HOW WERE THE PRELIMINARY PRESENCE PRACTICES IDENTIFIED?

Step 1: Systematic Literature Review

We searched PubMed, EMBASE, and PsycInfo (January 1997 to August 2017) for randomized controlled trials and controlled observational studies that examined the association between provider-patient interpersonal interventions and at least one outcome measure of the quadruple aim (i.e., health outcomes, patient experience, provider experience, or cost). From 21,838 references in our initial search, we identified 73 studies that met inclusion criteria and covered a wide range of interventions (Table 6.1).

Table 6.1. Focus of Interpersonal Interventions Identified in Systematic Literature Review

Intervention Focus	Number of Studies
Motivational Interviewing	6
Health Literacy	3
Physician-Patient Relationship	3
Patient-Centered Care	14
Interpersonal Communication Skills	21
Shared Decision Making	5
Specific Communication Technique	16
Therapeutic/Psychotherapeutic Interview	2
Mindfulness	3

Two independent investigators abstracted information about the content and methods of each article and graded the study design quality. Our team synthesized findings, considering the quality of the research, the focus of the study, method of interpersonal intervention, and effects on outcomes associated with the quadruple aim. The evidence from these studies forms the basis for many of the preliminary presence practices; we supplemented these studies with additional literature, including quality improvement, medical education, and qualitative studies, and research from a wide range of fields such as business, education, and sociology. Once we identified preliminary practices, our team returned to the literature to identify additional supporting and contradictory studies for each practice.

Step 2: Clinical Observations and Interviews with Physicians and Patients

Project staff shadowed 10 primary care physicians at three diverse partner sites: Stanford Primary Care and Stanford Family Medicine, Veterans Affairs Palo Alto, and Ravenswood Family Health Center in East Palo Alto. At each site, we shadowed 2-5 physicians identified by leadership/peers as having exceptional interpersonal skills with patients to learn about best-practice clinician behaviors and communication techniques that facilitate presence with patients. Visits with 27 English- and Spanish-speaking adult patients were video- and/or audio-recorded per patient consent and were supplemented with patient interviews about the encounter and surveys to collect demographics, health information, and patient experience measures. Providers were also interviewed about their personal practices to achieve presence. Data were synthesized using a “rapid ethnography” approach to enable early identification of potential practices for Presence 5.

Step 3: Interviews with Non-Medical "Analogous" Professionals

Guided by human-centered design theory,[70,71] the research team conducted interviews with 30 professionals outside the field of medicine whose jobs involve relational care and intense interpersonal interactions (see **Figure 6.1**). The objectives of these interviews, described previously,[72] were to learn from analogous experiences and identify cross-disciplinary practices that foster human connection and might have applications in medicine.

Figure 6.1: **Fields represented by non-medical professionals interviewed**

Step 4: Evidence Synthesis to Identify Preliminary Practice Elements

Through the literature review and complementary qualitative research activities, the research team generated a list of 31 potential practices that contribute to clinician presence and connections with patients. During a 2-month period of evidence synthesis, the team met weekly and held two half-day workshops to review the evidence for each practice and narrow the list to practices with substantial supporting evidence from multiple sources.

Step 5: Expert Panel Review

Together with clinical advisors, the research team identified 14 national experts in patient care, communication, medicine, systems administration, diversity, design, and implementation. This group included physicians, a patient, a caregiver, system leaders, and content experts. Individually, experts reviewed the evidence compiled for each practice element and rated the potential of each practice to achieve desirable outcomes for patient and clinician experience. Experts then convened in person in September 2018 to review collective ratings from the group during structured discussion. The research team incorporated feedback generated during this discussion and presented a refined list of practices by conference call; after brief discussion, experts submitted final ratings and also voted for their "top 5" practices.

Rating Criteria and Process

The expert panel was tasked with rating each presence practice using definitions from a standardized rating scale (Table 6.2) and three criteria (Table 6.3): 1) potential impact on patient experience, 2) potential impact on clinician experience, and 3) implementation feasibility. While comments about the potential health and cost implications of each practice were welcome, we recognized that in most cases the evidence for these outcomes is limited. In some cases, a practice reflected a novel or widely-accepted communication strategy or action for which there was limited evidence regarding outcomes of interest. In these cases, panelists were asked to draw on expert opinion and judgment, as well as their personal and professional experiences with health care and analogous fields.

Ratings were completed using the following 9-point scale for each outcome of interest.

Table 6.2. Rating scale definitions

Rating	Definition
-4	This practice is highly unlikely to meaningfully impact [outcome of interest]
-3, -2	This practice is somewhat unlikely to meaningfully impact [outcome of interest]
-1, 0, 1	This practice is uncertain or unreliable in its impact on [outcome of interest]
2, 3	This practice is somewhat likely to meaningfully impact [outcome of interest]
4	This practice is highly likely to meaningfully impact [outcome of interest]

Rating sheets included text boxes in which experts could expand on their ratings and provide any additional comments, such as health or cost implications, preferences for specific practice examples, or additional relevant references or resources.

Table 6.3. Rating Criteria for Presence Practices

Rating Criteria	Action	When should a practice receive a high rating?
1. Impact on patient experience	Rank the practice in terms of its potential impact on patient experience with the clinical encounter (i.e., overall satisfaction, experience with communication, perceived respect and empathy)	A practice is rated highly if it is likely to improve patient experience with clinical encounters, including the patient's perceptions that the clinician is engaged and providing high-quality, compassionate care. Measures of patient experience include overall satisfaction, experience with communication, and perceived respect and empathy. This judgment should be made based on a combination of: • Scientific evidence (see Sections A, B, and C for each practice) • Expert opinion drawn from clinical and/or professional experience as provider, patient, caregiver, administrator, researcher • Insight drawn from non-medical fields
2. Impact on clinician experience	Rank the practice in terms of its potential impact on clinician experience (i.e., perception that clinical encounters are meaningful, productive, and contribute to general wellbeing and job satisfaction)	A practice is rated highly if it is likely to improve clinician experience (i.e., perception that clinical encounters are meaningful, productive, and contribute to general well-being and job satisfaction). This judgment should be made based on a combination of: • Scientific evidence (see Sections A, B, and C for each practice) • Expert opinion drawn from clinical and/or professional experience • Insight drawn from non-medical fields
3. Implementation feasibility	Rank the practice in terms of implementation feasibility (i.e., ease of integrating into diverse outpatient clinical settings, considering practice complexity, time demands, and training requirements).	A practice is rated highly if the practice is easy to integrate into a busy clinical practice, can be implemented with minimal training requirements/resource investment, and is appealing and acceptable to clinicians and health system leadership across diverse outpatient clinical settings (practice types, length of visit, clinical resources, patient demographics) with minimal modification. This judgment should be made based on a combination of: • Implementation feasibility considerations raised in scientific evidence (see Section E. Implementation Feasibility for each Practice Element) • Expert opinion drawn from clinical and/or professional experience

Presence 5 Practices

Practice 1. Prepare with intention

Definition
Familiarize yourself with the patient you are about to meet. Create a ritual to focus your attention before a visit.

Are you prepared for a meaningful interaction?

Practice Examples

Ask the medical assistant/nurse to report any important information obtained while rooming the patient *(Sinsky, 2016)*[27]

Perform a "1-minute chart review" of the medical or social history before the visit and note high-yield details (*Joos et al.*, *1996)*[37]

Take three deep breaths before walking into the exam room (*Edgoose et al., 2015; Krasner et al., 2009)*[38,39]

Create a brief ritual out of a routine practice (e.g. during hand washing, take a moment to focus your attention) (*Gauthier et al., 2015; Provider interviews; Krasner et al., 2009)*[38,43]

"It is much more important to know what sort of patient has a disease than what sort of a disease a patient has." - *William Osler*

A. Literature Review

This practice includes two components that comprise physical and psychological preparation for a clinical encounter: 1) preparation for the visit, and 2) taking a moment to pause and focus. The first component involves the physician familiarizing themselves with the person they are about to see, facilitating a more immediate connection with the patient. The American Medical Association encourages patient chart review prior to the start of the clinic day in order to enhance the patient experience, increase patient engagement, and improve practice efficiency.[27] However, there is very little empirical evidence examining the effectiveness of pre-visit planning. One randomized trial showed positive correlations between physicians reviewing patient questionnaires and medical records before an appointment and patients' perception that all of their concerns were elicited.[37] Despite the scarcity of empirical evidence, notable perspective pieces and provider interviews suggest that pre-visit planning can help clinicians personalize their care and effectively engage with patients during the visit.

The second component of preparation involves a ritual pause before or at the beginning of the visit during which a physician clears their mind of distractions and sets their intention for the upcoming encounter. Elements of mindfulness-based stress reduction have been evaluated as strategies to approach the challenge of physician burnout, and a recent systematic review found that mindfulness interventions were associated with improvements in anxiety, depression, and stress among healthcare professionals.[95] A daily 5-minute meditation intervention may significantly reduce stress.[43] Complex interventions that incorporate a breathing exercise have also been shown to improve clinician experience with difficult visits.[39] Using a program consisting of mindfulness exercises, self-awareness exercises, discussions of meaningful clinical experiences, and appreciative interviews was associated with both short-term and continued improvements in physician well-being.[38]

B. Exemplary Literature

Joos et al., *J Gen Intern Med*, 1996 (randomized controlled trial)[37]

Physicians (n=42) were randomized to 4.5 hours of training on eliciting/responding to patient concerns and review of a pre-visit survey completed by patients in the waiting room, vs. 4.5 hours of training in medical decision-making. The intervention was associated with a significant increase in the frequency with which physicians elicited all patient concerns ($p < 0.05$). There were no measures of provider outcomes such as acceptance of the practice or time needed to review the information.

Krasner et al., *JAMA,* 2009 (pre-post study)[38]

A pre-post study of primary care physicians (n=70) completing a continuing medical education course with mindfulness exercises and self-awareness interviews in an 8-week intensive phase (2.5 hr/week, 7-hour retreat) followed by a 10-month maintenance phase (2.5 hr/month). Participant mindfulness scores improved (95% CI 7.0-10.8). Improvement in mindfulness was correlated with improvement in total mood disturbance ($p<0.001$), perspective taking ($p<0.001$), burnout (emotional exhaustion and personal accomplishment, $p<0.001$), and personality factors (conscientiousness and emotional stability $p<0.001$).

Edgoose et al., *J Am Board Fam Med,* 2015 (RCT)[39]

A 5-week RCT evaluating the "BREATHE OUT" intervention in 57 Wisconsin doctors (31 experimental, 26 control). Compared to physicians in the control group, physicians in the intervention group reported higher satisfaction (measured using the Physician Satisfaction Scale) at the end of the study (36.6 ± 7.6 vs. 42.8 ± 8.6 points; $p < 0.001$).

Gauthier et al., *J Ped Nurs,* 2015 (pre-post study)[43]

In a pre-post evaluation of a month-long 5-minute daily meditation intervention among 45 nurses, 89% of nurses came to at least one session, and 42% attended 8 sessions. There was a significant decline in stress from baseline to post-intervention (78.92 ± 13.71 to 74.03 ± 10.46 points), which was maintained one month following the intervention (74.10 ± 12.01 points).

Insight from Physician Interview
"When I wash my hands, I think about, 'Let me help this person be as healthy as possible.'"

Insight from Non-Physician Interview
"[I have] a few minutes at least before each interview where I'm not talking to anybody, and just…sort of prepare yourself. Like clear yourself, clear your heart and your mind, and be ready for things to come in and out." *Filmmaker*

Insight from Expert Panel
"[Writing something personal about the patient in the notes] is more about building a relationship than anything medical. Makes the patient feel good that you know them."

FROM MEDICINE

Improving office practice: Working smarter, not harder.[96]

"I find it useful to know the purpose of the visit and the scope of the patient's concerns and to review the data before the appointment. This allows me to formulate a tentative plan before I enter the exam room and makes it less likely that some aspect of care will fall through the cracks…"

FROM HEALTH CARE

Mindfulness interventions are linked to improvements to well-being among healthcare professionals.[95]

A 2018 review of 81 articles investigating the impact of mindfulness initiatives among healthcare professionals found associations between these initiatives and positive outcomes in relation to mindfulness (d: 0.36), anxiety (d: -0.51), depression (d: -0.53), and stress (d: -0.42). Equivocal results were seen for burnout (d: -0.33).

C. Evidence Gaps and Limitations

- Only one empirical study was identified, and the impact of pre-visit planning was modest. Nevertheless, interviews with clinicians revealed that many find that pre-visit planning helps them engage more effectively with patients during the visit.
- Many experts commented on the need for systems-level changes to properly implement pre-visit planning practices.
- Few experimental studies have examined the impact of brief mindfulness interventions on health care workers. Limited evidence links these practices to patient health outcomes, and there is mixed evidence of impact on provider well-being.
- Mindfulness practices are easy to teach, but difficult to maintain and are not as effective in isolation. Additionally, reported outcomes are largely reliant on self-report surveys.

D. Impact on Quadruple Aim

	Impact	Notes
Population health	No evidence	
Patient experience	No evidence	
Provider experience	↑	Clinical observations, literature review[38,39,43], additional evidence[95,96]
Health care utilization/cost	↓	Literature review[37]

Key: ↑ positive or desirable impact; ↓ negative or undesirable impact

E. Feasibility of Implementation

Time	Complexity of integrating into clinical practice	Training burden	Requirement for staffing changes or system- or clinic-level support
Required at beginning of appointment for pre-visit planning. Low time commitment for ritual pause.	Minimal, but pre-visit prep can disrupt clinic flow. Low complexity for mindfulness.	Minimal	Yes

Practice 2. Listen intently and completely

Definition
Sit down, lean forward, position yourself to listen. Don't interrupt. Your patient is your most valuable source of information.

What does your patient say when uninterrupted?

Practice Examples

Sit down when talking to the patient (*Johnson et al., 2008; Swayden et al., 2012*; *Riess et al., 2014; Merel et al., 2016)*[1-4]

Lean in toward the patient (*Beck et al., 2002; Little et al., 2015)*[8,9]

Maintain an open body position, keep legs and arms uncrossed, and focus your gaze towards the patient (*Beck et al., 2002; Riess et al., 2012; Riess et al., 2014; Little et al., 2015; Bensing et al., 1995)*[3,8,9,17,18]

Orient toward the patient, pointing legs and knees toward the patient while on the computer and maintaining eye contact while typing (*Alkureishi et al., 2016; Crampton et al., 2016; Patel et al., 2017; Duke et al., 2013)*[23-26]

Avoid interrupting the patient during their opening description of active health issues (*Langewitz et al., 2002; Alamo et al., 2002; Rabinowitz et al., 2004)*[22,32,33]

Throughout the appointment, give the patient space to tell their story and lead the visit by using both silence and 'infrequent, timely, and considered questions' when active-listening *(Robertson, 2005)*[46]

"It is the province of knowledge to speak. And it is the privilege of wisdom to listen."

- Oliver Wendell Holmes

A. Literature Review

This practice incorporates two components critical to listening: 1) use open and receptive body language, and 2) avoid interruptions. Thoughtful physician body positioning can support relationship building, trust, and patient satisfaction with treatment.[97] Behaviors such as head nodding, forward lean, direct body orientation, uncrossed legs and arms, arm symmetry, and less mutual gaze are associated with positive outcomes, including increased rapport and increased patient understanding and satisfaction. In contrast, behaviors such as body orientation away from the patient, backward lean, and crossed arms are associated with lower satisfaction and trust.[8,9,17] Physician posture can influence a patient's perception of time and quality of care. Multiple randomized trials have shown that sitting increases patient estimates of visit length[1,2] and perception that their physician is listening.[4] Physician posture can also influence patient perceptions of physician empathy,[17] and communication trainings exist to teach these nonverbal skills to medical professionals and students.[3] When used improperly, EHRs can alienate the patient and make them feel ignored and secondary to the data. If physicians stay physically oriented towards the patient while using the computer, the visit can stay patient-centered with improved physician-patient communication, information sharing, trust, and patient satisfaction.[23-26]

The second key component of this practice is to avoid interrupting the patient, particularly during their opening description of active health issues. Research shows that, on average, physicians interrupt their patients within 11 seconds.[98] Listening without interruption has been linked to positive health outcomes—including reductions in pain and anxiety[22]—and does not substantially extend visit time.[32,33] When physicians listen attentively and avoid interruptions during opening monologues, patients communicate more, provide more medical information, and report greater satisfaction ratings.[28] Physicians reported that when they used silence, patients no longer raised additional concerns at the very end of the visit ("doorknob syndrome").[99] Physicians listening to just 3-5 uninterrupted patient sentences, which took about 30 seconds, was correlated with higher patient satisfaction scores ($r=0.48$, $p<0.01$).[19]

B. Exemplary Evidence

Alamo et al., *Patient Educ Couns,* 2002 (cluster randomized controlled trial, single blind)[22]

General practitioners (n=20) were randomly assigned to an 18-hour communication-training course that emphasized listening to the patient (n=110) without interrupting vs. control. Afterwards, patients with benign chronic musculoskeletal pain and fibromyalgia reported statistically fewer tender points ($p<0.05$) and reduced clinical anxiety ($p<0.05$) when seeing trained vs. control physicians. Note: silence was not examined independently from the rest of the communication skills.

Brown et al., *Int J Qual Health Care*, 2000 (pre-post design, experimental and control groups)[28]

Thirty-two providers completed a 3 half-day interpersonal communication training that addressed listening skills vs. no training. Analysis of audio-recorded pre- and post-intervention training was conducted using the Roter Interaction Analysis System (RIAS) coding system. The intervention resulted in more communication by trained providers ($p<0.0001$), more positive talk ($p<0.001$), less negative talk ($P=0.05$), and more medical counseling ($p<0.05$). Patients responded by communicating more ($p<0.05$) and disclosing more medical information ($p<0.005$). Patients reported higher satisfaction ratings of experimental physicians in two categories: global satisfaction ($p<0.01$) and informative behaviors ($p<0.05$).

Beck et al., *J Am Board of Fam Pract*, 2002 (systematic review)[8]

A systematic review of articles published between 1975 and 2000 (14 on verbal communication, 8 on non-verbal communication) found several behaviors associated with patient satisfaction, trust, rapport, and comprehension. Behaviors associated with positive outcomes included head nodding, forward lean, direct body orientation, uncrossed legs and arms, arm symmetry, and less mutual gaze. Behaviors associated with negative outcomes included more patient gaze, body orientation 45-90° away from patient, backward lean, and crossed arms.

Rabinowitz et al., *BMJ,* 2004 (observational intervention)[33]

Consecutive encounters between family physicians (n=8) and their patients (n=107) were video recorded. Before the second encounter with a patient, doctors were handed a written note instructing them to not interrupt the patient. When doctors were told not to interrupt, patients were more likely to complete their monologues (90/112 [80%] encounters, $p<0.001$), and monologues were marginally longer (28 vs. 26 seconds).

Riess et al., *J Gen Intern Med*, 2012 (RCT)[17]

The E.M.P.A.T.H.Y. ® framework was developed as a tool for teaching nonverbal detection and expression of empathy, and was the cornerstone of a randomized controlled trial of neuroscience-informed empathy training for physicians. One month before and 1-2 months after randomly-assigned physicians completed three 60-minute modules, patients (n=99) rated residents and fellows (n=99) using the Consultation and Relational Empathy (CARE) measure. The intervention group had greater improvements in patient-rated CARE scores than the control ($p=0.04$) and showed greater ability to decode facial expressions of emotion ($p<0.001$).

Patel et al., *J Am Med Inform Assoc*, 2017 (systematic review)[25]

A systematic review of 52 articles published through July 2015 identified eight best practices for computer use during clinic visits: 1) Use the computer to facilitate the conversation (22 supporting studies), 2) Change the room design (17 studies), 3) Maintain eye contact while typing (16 studies), 4) Separate patient and computer interactions (15 studies), 5) Talk while working on the computer (12 studies), 6) Orient body towards the patient (12 studies), 7) Invite the patient to look at the screen before they ask (11 studies), and 8) Inform the patient about the function and role of the computer (11 studies).

Little et al., *Br J Gen Pract*, 2015 (RCT)[9]

This RCT evaluated training based on KEPe Warm (predominantly non-verbal communication guidelines that include Knowledge of the patient; Encouraging communication; Physically engaging [touch, gestures, slight lean]; Warm-up: cool/professional initially, warming up, avoiding distancing or non-verbal cut-offs at the end of the consultation). GPs (n=16) were assigned to training vs. no training. Patients (n=190) filled out and completed post-visit Medical Interview Satisfaction Scale (MISS) surveys. The brief training improved patient satisfaction, perceptions of distress, a partnership approach, and health promotion.

Insight from Physician Interview
"I've learned to just sit and listen and be present for when patients share their story…what's of interest to them, and really just giving them the space to talk about that and overcoming the urge to interrupt or direct the conversation."

Insight from Non-Physician Interview
"Sometimes I back away physically from people if I see they can't make eye contact with me. That gives them a sense of reassurance that…I really am there to listen deeply and allow them their experience." *Chaplain*

Insight from Expert Panel
"Non-verbal behavior doesn't take place outside of verbal behavior. Tone of voice is important. Timing is important. Walk into the room, sit down, face the patient, and then greet the patient. Don't address the door." *Researcher*

FROM MEDICINE

Culture matters.[100]

A systematic review of 16 studies showed that preferences for nonverbal behaviors, like certain facial expressions and eye contact, can differ depending on race, nationality, and cultural identity. An open body position correlates with higher patient ratings of physician warmth and overall care across different physician and patient backgrounds.

FROM MEDICINE

Gender matters.[101]

Patient preferences regarding nonverbal behavior may differ when the physician is female vs. male. In one study of analogous patients (n=163) observing 11 videorecorded clinical encounters, the observers expressed more satisfaction with female physicians than male physicians who made more eye contact, leaned forward, and used a softer voice. Behaviors where male physicians received positive satisfaction marks and females received negative satisfaction marks included looking at the patient chart, talking while doing something else, creating distance from the patient, speaking loudly, gesturing, and using expansive body postures.

FROM PHYSICAL THERAPY

Therapist body language can influence patient physical and cognitive outcomes.[102]

In a multi-part observational study of physical therapists working with geriatric patients, nonverbal behaviors indicating opening (i.e., eye contact, smiling, facial expressiveness) were associated with short- and long-term functioning improvements, while distancing behaviors (i.e., averting gaze, not smiling) were strongly associated with short- and long-term declines in physical and cognitive functioning.

FROM MEDICINE

Some gaze is good.[18]

Coding random samples of video-recorded consultations (n=337) of general practitioners (n=15) found that patient-directed gaze, defined as time the general practitioner spends looking directly at the patient's face, was associated with many psychosocial outcomes. Higher degrees of gaze were associated with more patient sharing about health problems (especially in relation to psychological and social health) as well as higher practitioner awareness of patients' psychosocial history and identification of patients in mental distress.

FROM MEDICINE

Avoiding interrupting patients is feasible in a time-constrained clinical setting.[32]

Physicians (n=14) in an outpatient clinic completed one hour of active listening training and were instructed not to ask questions during the initial phase of a consultation. The mean spontaneous talking time of patients was 92 seconds, and 78% (256) of patients finished their initial statement within two minutes. Findings suggest that it is feasible to avoid interruption in a time-constrained clinical setting with most patients.

FROM MEDICINE

Interruptions and physician gender.[103]

A seminal article on communication cited a study by Candace West ("When the Doctor is a Lady") that examined interruptions during family medicine visits. Male family physicians initiated more than two thirds of observed interruptions and were more likely to interrupt their patients than to be interrupted by their patients. Female doctors interrupted their patients at lower rates, and when female physicians saw male patients, the patient interrupted more. However, when both patient and doctor were female, the interruptions were almost equal.

C. Evidence Gaps and Limitations

- While nonverbal communication (sitting, leaning in, mirroring body language, openness) is associated with improved patient experience, there is minimal empirical evidence linking these behaviors to concrete health outcomes.[8]
- One meta-analysis[25] suggested that leaning in, direct body orientation, and uncrossing arms did not influence building rapport in "formal helping" interactions. However, building rapport is just one outcome of successful physician-patient interactions.
- Interventions frequently incorporate multiple nonverbal behaviors and do not test specific nonverbal behaviors in isolation.
- Provider silence while using technology (e.g., the EHR) could be viewed by the patient as provider disengagement. Other types of silence, including disengaged silence that indicates distraction, can be awkward and distance the patient.[104]
- There is little evidence about pausing and silence in non-English speaking patients, and interpretations of silence may vary across cultures.
- In select circumstances, interruptions may be necessary to keep the patient and visit on track.

D. Impact on Quadruple Aim

	Impact	Notes
Population health	↑	Open, non-verbal behaviors associated with short and long-term physical and cognitive improvements[22]
Patient experience	↑	Literature review[1-4,8,9,17,23-26]
Provider experience	↑	Literature review[28]
Health care utilization/cost	—	Listening without interrupting shows no effect on visit length[99,105]

Key: ↑ positive or desirable impact; ↓ negative or undesirable impact

E. Feasibility of Implementation

Time	Complexity of integrating into clinical practice	Training burden	Requirement for staffing changes or system- or clinic-level support
Very low time burden	Low complexity	Time required to teach non-verbal skills may be a barrier to implementation. Active listening is a high-level skill that takes training and practice to master.	Placement of computer and chairs in practice may be a barrier to implementation.

Practice 3. Agree on what matters most

Definition
Find out what your patient cares about and incorporate these priorities into the visit agenda.

What are your patient's health goals, now and in the future?

Practice Examples

Using an open-ended question to ask the patient to describe in their own words why they are here: "How can I help you today?", "I want to make sure to hear in your own words what it is that is important to you that we cover today." (*Heritage, 2009; Robinson et al., 2006; Riegels et al., 2018; Roter & Hall, 1987; Takemura et al., 2005; Eyal et al., 2018; Heritage et al., 2006)*[10-16]

Develop an agenda that incorporates the patient's priorities "I want to make sure we are on the same page about what you want to cover today." *(Tallman et al., 2007; Frankel et al., 2013; Brock et al., 2011; Alamo et al., 2002)*[19-22]

Address patient concerns from pre-visit questionnaire if already utilized in clinic. (*Middleton et al.*, *2006*)[42]

Review agenda and elicit any unaddressed priorities, e.g. "Is there something else you wanted to discuss today?" (*Heritage et al.*, *2007; Robinson, 2001*)[44,45]

If you want to go fast, go alone. If you want to go far, go together. - *African Proverb*

A. Literature Review

This practice focuses on learning about what is most important to the patient, and developing shared priorities for a visit. As one of the main functions of the medical interview is to gather relevant information for the provision of quality health care,[106,107] physicians should elicit their patient's priorities to set the stage for meaningful encounters early in the visit.[108] Evidence suggests that strategies physicians use to elicit patient concerns influence the amount of patient information physicians receive[10,13,14,44,109,110] and affect patients' perceptions of their clinical visits.[11,12,16] Effective tactics include beginning the visit with an open-ended question, avoiding yes/no questions, and using affirmative "continuers" to facilitate dialogue. Before clinical encounters conclude, physicians should also invite patients to voice final concerns e.g. by asking "Is there something else you want to address in the visit today?".[44,45] Another way to elicit patient concerns early in the visit is through collaborative agenda setting, a process in which the patient lists their concerns or goals, the clinician raises subjects that they consider important, and the two parties develop shared priorities and an agenda for the clinic visit.[111] Implementation of this practice may vary by context; for example, in clinics that conduct pre-visit questionnaires, a patient's responses can form the basis for a discussion about visit priorities.[42] Physicians who use collaborative agenda setting may surface more concern from their patients, complete agenda setting earlier in the encounter, have fewer last-minute concerns raised by patients, reduce clinical anxiety and pain amongst their patients, and receive higher patient ratings.[19,21,22]

B. Exemplary Evidence

Robinson & Heritage, *Patient Educ Couns*, 2006 (clinical observation study)[11]

In video-recorded encounters with primary-care physicians (n=28) and adult patients (n=142), when physicians utilized open-ended questions, patients reported more positive evaluations of physicians' listening behavior ($p<.05$) and higher satisfaction with physicians' affective/ relational communication ($p<.05$).

Middleton et al., *BMJ*, 2006 (RCT)[42]

General practitioners (n=46) were randomized to receive either a one-day educational workshop (focusing on identifying the patient's agenda, reflecting on their own agenda, and negotiating action with the patient), or no training. Patients of trained physicians (n=496) and patients of control physicians (n=479) were randomized to receive a pre-visit agenda form or not. Compared to patients in the no agenda/no training, the number of elicited concerns increased slightly for patients in the agenda but no training group, (0.1 to 0.4; $p<0.01$), slightly more for patients in the training but no agenda group (0.1 to 0.6; $p<0.005$), and the most for patients in the agenda and training group (0.3 to 0.7; $p<0.001$). Visit duration increased by an average of 0.9 minutes with the agenda only group and 1.9 minutes with the combined agenda and education intervention. There were no statistically significant changes in patient satisfaction.

Brock et al., *J Gen Intern Med*, 2011 (RCT)[21]

Primary care physicians (n=48) from 12 clinics were randomized to receive either 10 hours of training in collaborative upfront agenda setting via the Establishing Focus Protocol (EF) or no training. EF emphasizes physicians' and patients' mutual determination of important goals of the visit and prioritization of problems to be addressed. In subsequent visits with 1460 patients, intervention physicians surfaced more concerns from their patients ($p<0.01$), completed agenda setting earlier in the encounter, and experienced fewer last-minute concerns from their patients ($p<0.01$). There were no significant differences in visit length.

Roter & Hall, *J Gen Intern Med*, 1987 (clinical observation study)[13]

Patient transcripts and audio recordings from primary-care physicians (n=43) were evaluated using expert-generated criterion. Physicians who asked open-ended questions obtained significantly more condition-related information ($r=0.72$; $p<0.001$) than physicians who used closed-ended questions.

Heritage et al., *J Gen Intern Med*, 2007 (RCT)[44]

Family practice physicians (n=20) were randomized to elicit "final concerns" (Robinson, 2001) from patients (n=224) using the question: "Is there anything else you want to address in the visit today?" (ANY intervention) vs. "Is there something else you want to address in the visit today?" (SOME intervention). The "SOME" intervention reduced unmet concerns by 78% ($p<0.001$) and did not meaningfully increase visitation length. A feasibility study determined that this intervention could be easily implemented, and that the only barrier was finding an appropriate computer to view the 5-minute video about the intervention.[19]

Riegels et al., *Perm J*, 2018 (quality improvement, pre-post study)[12]

In a quality improvement (QI) project, medical students at a Kaiser hospital used a rapid improvement model to evaluate different potential interventions to enhance patient perception of physician listening. They ultimately piloted a standardized EHR template in the hospitalist daily progress note (ScOAP) that reminded hospitalists and residents to open clinical encounters with one standardized question: "What is your greatest concern today?" Patients reported improved communication with providers over the period of the QI intervention. Hospitalists stated that the intervention was highly feasible, and that residents brought up patient concerns more frequently during rounds. Physician listening scores increased over the study period, from an average of 73.6% to 77%. The ScOAP template was subsequently adopted by the facility's hospitalists.

Alamo et al., *Patient Educ Couns,* 2002 (cluster RCT)[22]

Twenty primary care physicians were randomly assigned to participate in an 18-hour communication training course that included negotiation of agenda setting vs. treatment of patients as usual. Patients (n=63) with benign chronic musculoskeletal pain and fibromyalgia who saw trained physicians reported statistically fewer tender points ($p<0.05$) and reduced clinical anxiety ($p<0.05$) compared to control patients (n=47). Note: Agenda-setting was part of a broader communication skills training; the individual components of the intervention were not assessed independently

Tallman et al., *Perm J,* 2007 (clinical observation study)[19]

Medical encounters (n=92) from primary-care physicians (n=55) were recorded. Physicians were stratified into three groups (high, medium, low) based on patient satisfaction ratings obtained from their respective patient panels. The most common communication practice identified amongst top-rated physicians was focusing on the patient's agenda (vs. clinical or time management matters) ($r=0.65$; $p \leq .01$).

Insight from Physician Interview
"I start from day one with a new patient. I'll just ask them, 'Whatever you have, tell me about it.' And most of the time, they'll tell me everything that I was going to ask. And then I'll say, 'Okay, what do you want to do next?' So, I acknowledge [their updates], and I just start from there. I don't start from scratch."

Insight from Non-Physician Interview
"We put together a statement of work. Once we agree on this program, it's…a recipe we follow. We have an agenda… It's all about setting expectations and shared decision-making." *Design Researcher*

Insight from Expert Panel
"At first [agenda setting] seems so obvious, making sure you're using your time and you're getting to everything, but you need to have buy-in. Making agenda setting collaborative is the important part of this practice." *Physician*

FROM PSYCHIATRY
Early collaborative agenda setting sets the tone for the rest of an appointment.[20]

A study of observations of psychiatrists and nurse practitioners and their agenda setting practice with their patients concluded that collaborative agenda setting early in an appointment can positively influence the patient-centeredness of the rest of an appointment.

FROM MEDICINE
Effects from different types of open-ended questions.[16]

Open-ended questions should be tailored to visit type. For new patients, physicians should use a general question, e.g. “What can I do for you today?” For follow-up patients, physicians should ask questions that imply prior knowledge of patients’ medical history, e.g. “How are you feeling today?” Asking the wrong form of an open-ended question could adversely affect patient satisfaction.

FROM MEDICINE
Open-ended questioning elicits more information from patients.[14]

A study of medical students in Japan conducting medical interviews with standardized patients found that the use of open-ended questions was positively correlated with the amount of information elicited from the patients.

FROM PSYCHOLOGY
Perspective-getting versus perspective-taking.[15]

25 experiments showed no consistent evidence that telling someone to adopt another’s perspective (‘perspective taking’) increased interpersonal accuracy. A final experiment showed that ‘perspective getting’ directly through conversation increased interpersonal accuracy.

C. Evidence Gaps and Limitations

- While the “any” vs. “some” intervention was effective in Heritage et al.’s study, a study in the UK found no differences in response to these questions.[112] This suggests that results might not be generalizable across different contexts. Note that these questions have only been studied among English-speaking patients.
- Reported outcomes are largely reliant on self-report surveys.
- Limited evidence for impact on patient health outcomes.

D. Impact on Quadruple Aim

	Impact	Notes
Population health	↑	Increase in meaningful patient responses, reduction of unmet concerns, reduction in tender points and clinical anxiety[12,19,110]
Patient experience	↑	Literature review[11,44]
Provider experience	↑	Analogous interviews
Health care utilization/cost	↑/ no evidence	Modest increases in visit length; results not significant[19,110,111]

Key: ↑ positive or desirable impact; ↓ negative or undesirable impact

E. Feasibility of Implementation

Time	Complexity of integrating into clinical practice	Training burden	Requirement for staffing changes or system- or clinic-level support
Low time burden	Low complexity	May need extensive training	No changes required

Practice 4. Connect with the patient's story

Definition
Consider the circumstances that influence your patient's health. Acknowledge your patient's efforts, be positive, and celebrate successes.

How can you contribute positively to your patient's journey?

Examples

Consider possible reasons (sociocultural, biological, psychological, etc.) for what's behind patients' beliefs and actions *(Bellón et al., 2008; Harmsen et al., 2005; Shapiro, 2002)*[5-7]

Be curious about the patient's life and circumstances when identifying personal, historical, or contextual details without making negative assumptions about race, ethnicity, gender, culture, or socioeconomic status *(Eyal et al., 2018; Shapiro, 2002)*[7,15]

Use positive language, e.g. statements of approval, empathy/reassurance, and partnership (ask for patient opinions, check for understanding). Avoid negative language, e.g. scolding or criticism (*Brown et al., 2000; Hart et al., 2006)*[28,29]

Offer genuine and honest praise towards the patient for making an effort and acknowledge small successes when appropriate *(Epstein et al., 2017; Levensky et al., 2007)*[30,31]

"We must see in every person a universe with its own secrets, with its own treasures, with its own sources of anguish, and with some measure of triumph." - *Elie Wiesel*

A. Literature Review

This practice comprises two components: 1) Consider the personal circumstances that influence a patient's health, and 2) Focus on the positive, acknowledging a patient's efforts and celebrating successes. The first component involves being curious and forging a connection by asking a patient about his or her sociocultural background and life circumstances. When physicians show active consideration of a patient's perspective, it demonstrates that they want to understand the patient and creates an atmosphere of shared presence.[108] Recent research in psychology and medical education support perspective-getting rather than perspective-taking, where one asks a person about their thoughts, beliefs or attitudes (rather than making assumptions).[7,15,113] These actions have been associated with improved patient satisfaction and patient outcomes,[5,114] as well as reductions in physician racial biases.[6,115]

The second component of the practice involves acknowledging specific patient efforts in a genuine and positive manner. A physician's positivity has long been associated with positive patient health outcomes.[116] Acknowledging patient efforts and progress through affirmation statements encourages adherence to treatment and behavior change[31] and encourages patients to participate in their own care.[117] Physicians who used encouraging statements when discussing a diabetes diagnosis with their patients were perceived as having better patient-perceived communication, which was significantly associated with greater well-being, less diabetes-related emotional burden, less regimen-related distress, and better current self-care.[118] When physicians receive training in interpersonal communication skills such as increased positive talk (approval), empathy (reassure, legitimize), and decreased negative talk, physician-patient communication scores increase and patients provide more medical information, report greater satisfaction with the medical encounter, and have decreased distress.[28-30]

B. Exemplary Evidence

Epstein et al., *JAMA Oncol*, 2017 (RCT)[30]

Oncologists (n=38) were randomly assigned to complete a patient-centered communication training that involved engaging patients (n=265) with supportive talk (empathy, reassurance, praise) vs. no training. The intervention resulted in improvement in the composite physician-patient communication score ($p<0.05$). Researchers also saw a 44% increase in "engaging" statements (such as praise), 71% increase in responses to emotion, and 38% increase in informative statements regarding prognosis and treatment choices. However, there were no significant differences in the secondary measures of quality of life and health care utilization.

Blatt et al., *Acad Med*, 2010 (RCT)[114]

Third-year medical and PA students (n=608) were randomly assigned to an intervention to either receive perspective-taking instruction, or to receive neutral instruction in the control group. In the perspective-taking group, prior to seeing a standardized patient, they received the following instructions: "When you see your patient, imagine what the patient is experiencing as if you were that person, looking at the world through the patient's eyes and walking through the world in the patient's shoes." Students in the intervention group received higher satisfaction ratings from the standardized patients. Results were consistent across three studies (Study 1: 3rd year medical students; $p<0.01$; Study 2: physician assistant students with African American standardized patients; $p<0.001$; Study 3: 3rd year medical students with high vs. low baseline perspective-taking tendencies; $p<0.01$).

Brown et al., *Int J Qual Health Care*, 2000 (pre-post design, control & experimental groups)[28]

Analysis of audio recordings from general practitioners and pediatricians who completed an in-service training program on interpersonal communication (n=24) and control physicians (n=8) found that trained providers used more effective communication ($p=0.0001$) such as more positive talk (e.g., statements of agreement or approval) ($p<0.001$), less negative talk ($p<0.05$), and more emotional talk ($p<0.05$). Patients responded to provider-enhanced communication with more communication ($p<0.05$), greater disclosure of medical information ($p<0.005$), higher global satisfaction ($p<0.01$), and higher ratings for informative behavior such as clarity, engagement, and support ($p<0.05$). Note: the study did not examine the independent effect of affirmation.

Harmsen et al., *Br J Gen Pract,* 2005 (RCT)[6]

Primary care providers (n=38) were randomized to receive intercultural communication training vs. no training. The 2.5 days of training emphasized the use of intercultural communication based on Pinto's three step method: 1) Recognize culture-based values, and the rules that influence thinking, actions, and communication, 2) Learn about culturally-determined differences in views and behavior, and 3) Think about how to handle various situations considering the differences in standards and values. Patients of intervention providers received video instruction on how to communicate with their physician in a direct way. During 986 patient consultations, the intervention was associated with an 11% improvement (95% CI = 0.002 - 0.422) in mutual understanding and 7% improvement in perceived quality of care (95% CI = -0.005 - 1.494) between non-Western patients and Western providers measured six months post-intervention. There was no significant change in patient satisfaction with the visit.

Drwecki et al., *Pain,* 2011 (RCT)[115]

Nurses pursuing advanced degrees (n=40) were presented with a video depicting white and black patients in pain; participants were randomly assigned to a control condition or to a perspective-taking intervention. While all RNs were told to make the best treatment decision, only RNs from the intervention group were given the following instructions: “Attempt to imagine how each of your patients feels while you are examining them.” Control RNs exhibited strong racial pain treatment biases toward whites; these RNs prescribed better quality pain treatments to white patients than to black patients. However, the perspective-taking technique mitigated this racial disparity by 55% (p=0.07).

Hart et al,, *Patient Educ Couns*, 2006 (within-subjects, repeated measures)[29]

Pediatricians (n=28) received a 1- to 1.5-hour interpersonal communication training. Pre-post audio recordings of clinic visits (n=3) revealed more effective interpersonal communication skills following the intervention ($p<0.05$) and an increase in combined interpersonal communication utterances (i.e. positive affect (approval), empathy/reassurance, and partnership (asking for opinion, checking for understanding)) ($p<0.05$). Parent (n=92) satisfaction also increased ($p<0.01$), with parents reporting greater distress relief ($p<0.01$) and increased satisfaction with communication ($p<0.05$) after the intervention. Note: the study did not examine the independent effect of affirmation.

Bellón et al., *Br J G Pract,* 2008 (RCT)[5]

In an RCT, General Practitioners (GP: n=3) in the intervention group received 15 hours of training on biopsychosocial, organizational, and relational approaches to caring for frequent-attender patients. GPs in the intervention group were also encouraged to select one of 7 possible reasons (e.g., psychological, social, family, and cultural) for why the patient is a frequent attender and discuss the reason with peers along with a plan for addressing the frequent-attender’s circumstances. Frequent-attender patients (n=209) were assigned to one of three groups. Frequent-attender patients of the GPs in the intervention group (n=137) were randomly assigned to receive the intervention (n=66; IG) or usual care (n=71; CG2). A separate group of GPs (n=3) that did not receive the intervention provided usual care to the remaining group of frequent-attenders (n=72; CG1). The study compared attendance outcomes at 1 year across the three groups. There was a significant decrease in the average number of consultations among the intervention patients (IG=13.1) as compared to the two control groups (CG2=16.7, CG1=19.4).

Insight from Physician Interview
“I really support them in the right things they're doing, which often people don't recognize, and really try to help them help themselves. Finger wagging doesn’t really work.”

Insight from Non-Physician Interview
“On the first day of school I always [ask students to] write me a letter of something you want me to know about you. And some students say things like, ‘I have four brothers and sisters’…and some students will write ‘I have dyslexia so please don’t call on me’” *Teacher*

Insight from Expert Panel
“If we aren’t thinking about the context of a patient’s life, we’re missing a key piece. This is central to combating prejudice, because it helps people understand people as human beings.” *Researcher*

FROM MEDICAL EDUCATION
Different strategies for demonstrating empathy to patients.[7]

In a qualitative study, 12 Primary Care Physicians reflected on how they view empathy, how they demonstrate empathy to patients, and how they teach empathy to trainees. The authors concluded that both skill-based and attitudinal-based tools can be used to teach empathy and take a patient-centered approach. Physicians often told trainees to "get to know each patient as a person," stressed the importance of having personal knowledge about patients, and cautioned against making assumptions about patients based on race, ethnicity, gender, culture, or SES. Faculty also encouraged paying close attention to a patient's nonverbal cues and subsequently using these to help the patient express emotion.

FROM PSYCHOLOGY
Perspective-getting versus perspective-taking.[15]

25 experiments showed no consistent evidence that telling someone to adopt another's perspective ('perspective taking') increased interpersonal accuracy. A final experiment showed that 'perspective getting' directly through conversation increased interpersonal accuracy.

FROM ATHLETICS
Coaching behaviors are significantly associated with athletes' intrinsic motivation.[119,120]

Positive feedback increases athletes' feelings of relatedness, which influences intrinsic motivation and perceived competence.[17] Positive, encouraging, and information-based feedback strengthens athletes' perceptions of competence and their self-determination, thereby increasing intrinsic motivation.[119] However, positive feedback—if given randomly and inappropriately—can lead to low perceived competence.[120]

C. Evidence Gaps and Limitations

- Perspective-getting is a relatively new theory and has not been tested extensively outside of psychology.
- Though more extensively studied, perspective-taking may reduce transparency, encourage the provider to make assumptions about their patient, and lead the provider to overestimate the accuracy of the assumptions they are making.[113,121]
- The outcomes of the articles on positivity largely rely on self-reporting, and these findings may not apply across languages, ethnic groups and cultures.
- Most studies integrate interventions around positive talk into more general communication interventions; few studies have isolated the independent effect of affirmation.[28,29]

D. Impact on Quadruple Aim

	Impact	Notes
Population health	No evidence	
Patient experience	↑	Literature review,[5,115] clinical observations
Provider experience	↑	Literature review[5]
Health care utilization/cost	↓/No impact	No effect on use of aggressive treatments in the last 30 days of life or hospice utilization[114]

Key: ↑ positive or desirable impact; ↓ negative or undesirable impact

E. Feasibility of Implementation

Time	Complexity of integrating into clinical practice	Training burden	Requirement for staffing changes or system- or clinic-level support
Low time burden	Low complexity	Empathy via perspective-taking can be taught but may require extensive training	None

Practice 5. Explore emotional cues

Definition
Tune in. Notice, name, and validate your patient's emotions to become a trusted partner.

What can you learn from your patient's emotions?

Practice Examples

Read a patient's verbal and non-verbal emotional cues, e.g. changes in patient tone of voice, facial expressions, and body language
(Riess et al,, 2012)[17]

Elicit patient emotions through questions (i.e. "How are you doing?" Or "How are you feeling about this?")
(Zimmerman et al., 2011; Coulehan et al., 2001)[35,36]

Reflect, validate, and confirm your perceptions of a patient's emotions (i.e. "That sounds very difficult" or "I can see that this is affecting you deeply")
(Rakel et al., 2011; Bonvicini et al., 2009; Coulehan et al., 2001)[36,40,41]

People will forget what you did, but people will never forget how you made them feel.

- Maya Angelou

A. Literature Review

Patients express emotions through cues (verbal or non-verbal hints that suggest an underlying emotion) and concerns (verbalized expression of an emotion).[35] A large body of evidence suggests that clinician interpersonal sensitivity, including the ability to perceive patient emotions, is associated with positive patient outcomes, including patient satisfaction, appointment adherence, and learning of conveyed information.[122,123] Patients appreciate physician attempts to elicit and identify their emotional cues, even when physicians are mistaken.[124] Systematic reviews and meta-analyses have examined the effectiveness of training clinicians to accurately perceive patient emotions.[124-126] Brief training, which can sometimes be self-administered,[127] can introduce the skills for reading facial and other non-verbal cues.[17,41,128] Enhanced empathy may also influence clinical outcomes; common cold patients who saw providers who received an enhanced provider empathy intervention displayed shorter and less severe illness.[40]

B. Exemplary Evidence

Bonvicini et al., *Patient Education and Counseling*, 2009 (RCT)[41]

Primary care physicians (n=160) were randomly assigned to a communication training focusing on acknowledging patient statements, or no training. Based on a random sample (n=232) of audio-recorded physician-patient interactions, global empathy (GRS) scores ($p < 0.01$) and empathetic response (ECCS) scores ($p<0.01$) were higher in physicians who completed the training intervention. Trained physicians were more likely to acknowledge the patient's expressed emotion, physical or psychosocial challenges, or positive development in physical health, and more likely to invite further discussion. Note: Patients' perceptions of empathy were not addressed in this study.

Riess et al., *J Gen Intern Med*, 2012 (RCT)[17]

Massachusetts physicians (residents and fellows) were randomly assigned to an empathy training intervention (n=54) or control group (n=45). The intervention consisted of three 60-minute modules delivered over four weeks that covered neurobiology of empathy, emotional awareness, skills for decoding facial expressions, and self-regulation skills, such as breathing exercises and mindfulness practices. The training group demonstrated greater improvements in patient-rated Consultation and Relational Empathy (CARE) scores (d: 0.31, $p<0.04$), a reliable and validated measure of empathy (Mercer, 2004).12 The training group also displayed an improved ability to decode emotional facial expressions (effect size: 1.9, $p<0.001$).

Rakel et al., *Patient Educ Couns*, 2011 (RCT)[40]

Family physicians (n=5) and 1 NP were trained in the PEECE intervention, emphasizing the usage of statements that positively reflect patients' concerns. They were also instructed to adopt a "make a connection" mindset. Patients with new cold onsets (n=719) were randomized to either: 1) no visit, 2) a standard visit, or 3) an enhanced visit (using PEECE) with these providers. Patients receiving enhanced interactions rated their clinicians higher on the CARE measure (38% vs. 9% of patients receiving standard interactions). Encounters that were given perfect CARE scores had reduced cold severity (perfect: 223, sub-perfect: 271, p=0.04) and cold duration (perfect: 5.89 days, sub-perfect: 7.00 days, p=0.003). Higher CARE scores were also associated with a more significant change in IL-8 and neutrophil count, which indicates a more robust immune response. Note: All encounters took place with trained providers, but providers were instructed to provide a "standard" or "enhanced" interaction before the visit. The enhanced interactions took more time, which might influence feasibility of the empathy intervention in certain settings.

Hall, *Patient Educ Couns*, 2011 (review)[122]

This review outlines a summary of research on clinician interpersonal sensitivity, which includes the ability to accurately perceive a patient's feelings, desires, needs, and values. High clinician sensitivity was correlated with positive patient outcomes such as patient satisfaction, appointment adherence, and learning of conveyed information. High clinician sensitivity was also associated with positive clinician outcomes like awareness of patient cues for anxiety or distress, commitment to patient-centered values, and increased self-awareness surrounding the clinician's own emotions.

Insight from Physician Interview
"Usually if they're very ill they're 1) scared, but 2) they're more focused on their own bodily feelings. What they want from me is reassurance that things are going to be okay. They don't necessarily need me to make a big connection with them."

Insight from Non-Physician Interview
"A lot of times you can see the stress leave a person when they start to tell you something that you know is going on."
Police Officer

Insight from Expert Panel
"One of the biggest threats to physician-patient engagement is that we no longer look at our patients' faces. This is something we can do something about; our faces are a roadmap of emotion." *Physician Researcher*

FROM MEDICAL EDUCATION
Patient nonverbal cues can help physicians clue into patient emotion.[7]

In a qualitative study, 12 PCPs reflected on how they view empathy, how they demonstrate empathy to patients, and how they teach empathy to trainees. The authors concluded that both skill-based and attitudinal-based tools can be used to teach empathy and take a patient-centered approach. Physicians often told trainees to "get to know each patient as a person," stressed the importance of having personal knowledge about patients, and cautioned against making assumptions about patients based on race, ethnicity, gender, culture, or SES. Faculty also encouraged paying close attention to a patient's nonverbal cues and subsequently using these to help the patient express emotion.

FROM MEDICINE
Physician expressions in emotional situations can impact the patient-physician relationship.[129]

In a survey administered to 127 Portuguese physicians about emotional situations in clinical settings, physicians reported the perception that crying, touching, smiling, and providing support is associated with an immediate positive impact on patient-physician relationships. Conversely, they reported that withdrawal, imposition, and defensiveness are associated with immediate negative impacts on the patient-physician relationship.

FROM MEDICINE
Emotional work is a crucial component of successful communication with families of patients facing life-threatening illness.[130]

An evaluation of 24 recorded family conferences identified "emotion work" as a crucial gatekeeper to positive communication within end-of-life care. Emotion work is defined as "health care providers' emotional engagement with themselves, the participants, and the content of the family conference." It includes actions such as "asking about emotions, empathically noting the difficulty of illness, or engaging in self-awareness about one's own emotions."

FROM MEDICINE
Specific words can help build empathy.[36]

A qualitative review of physician-patient relationships identified phrases, words, and behavior that can help facilitate empathy during a clinical encounter. Empathetic communication with regards to patient emotion includes identifying the patient's emotion ("You sound like you're…"), reflecting the nature and intensity of that emotion, and requesting and accepting correction of that identification and reflection ("Is that right? Did I miss something?")

FROM MEDICINE
Emotional intelligence might improve the patient-physician relationship.[123]

A survey of 50 physicians and 549 outpatients found a positive association between emotional intelligence in surgeons and patient-rated patient-surgeon relationships ($r=0.45$; $p<0.001$).

C. Evidence Gaps and Limitations

- While these articles link physician emotional regulation to the patient-physician relationship, patient satisfaction, and diagnostic accuracy, there is limited evidence linking these behaviors to concrete health outcomes.
- The outcomes of the articles presented were largely reliant on self-reports.
  Eliciting emotion without having a plan of what to do with it may risk leaving the patient feeling vulnerable and uncared for. However, if an empathic response misses the mark, conversational repair can help rectify the situation—misstatements, misinterpretations, and mishearings are okay if you take a step back, apologize, and ask the patient to help you better understand.[124]
- Reassurance is not as effective as empathy.[131]
- Nonverbal sensitivity is higher in female than male medical students.[132]

D. Impact on Quadruple Aim

	Impact	Notes
Population health	↑	Reduction of duration and severity of common cold[40]
Patient experience	↑	Literature review[17,40,41,122,123,129]
Provider experience	No evidence	
Health care utilization/cost	↓	May increase visitation length[40]

Key: ↑ positive or desirable impact; ↓ negative or undesirable impact

E. Feasibility of Implementation

Time	Complexity of integrating into clinical practice	Training burden	Requirement for staffing changes or system- or clinic-level support
May increase visit length	Low complexity	Moderate training burden	No changes required

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