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Title of Initiative: Patient-Clinician Communication and Relationship: An Opportunity to Affect Health Outcomes in Health Disparity Populations

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Objectives: This initiative will support research to (1) gain an understanding of how the Patient-Clinician Communication and/or Relationship (PCC/R) in the primary care and chronic disease care settings affects health outcomes in health disparity (HD) populations, and (2) identify best practices and interventions such as approaches, skills, and tools that build and improve PCC/R leading to better health outcomes.

Background: Medical care has changed over the past fifty years with technological developments and managed health care systems bringing both advances and challenges. While the transformation of medical care was recognized early on, the full impact on patient-clinician interactions in the setting of more technology, less face-to-face time, increased administrative tasks, and fragmented delivery of care, were not fully appreciated until after implementation. A significant body of research examining the evolution of PCC/R dating back to the 1980s exists as a result of ongoing recalibration efforts to determine the optimal balance of technology, efficiency and human connection within health care systems.

The 2003 Institute of Medicine (IOM) report on Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care brought to light health care disparities in the United States. Examination of over 100 studies assessing the quality of health care for racial and ethnic minority groups documented that minorities are less likely than whites to receive clinical services even when controlling for potential confounders such as income, insurance status, and health-care access. This was observed across disease and procedure types.

Communication is a key component in positive health care interaction. Communication skill training is effective in improving PCC. It is associated with higher quality health care as assessed by better medical outcomes, safety, patient adherence, patient satisfaction, and provider satisfaction and efficiency. Unfortunately, PCC differs and is of lesser quality (communication gaps, misunderstandings) for some HD populations per subjective self-report and objective coded audio/visual tapes of clinical encounters. Distinctions start early, with even the initial phone call placed to book an appointment. Other skills including competence, respect, trust building, and shared decision-making help build and improve PCC/R. Concordance (race, gender, language, culture) between patient and clinician can facilitate connection and influence health outcomes. Poor communication between providers and racial and ethnic minority patients, characterized by implicit physician bias, less patient-centered communication, less discussion of treatment goals and options, and less positive and more disengaged
non-verbal behavior, is associated with lower satisfaction with care and poorer outcomes for chronic
diseases and pain management.

Positive relationships that develop between patients and their clinicians as part of routine medical care
have long been viewed as having therapeutic benefit. One systematic review of the literature
documents a modest but positive association between interventions to improve the patient-clinician
relationship and objective (e.g. blood pressure) or validated subjective (e.g. pain score) health
outcomes. A more recent systematic review examined the association of patient-clinician interpersonal
interventions (n=73; 92% randomized clinical trials; 8% observational studies; moderate to high quality)
with health care quality measures of a) patient outcome; b) patient experience; c) cost; and d) provider
experience. The most common interventions to improve PCC/R were: general communication skills and
techniques (29% & 22% respectively; e.g., verbal and nonverbal skills), and patient-centered care
strategy (19%). Less frequent were motivational interviewing (8%), shared decision making (8%),
mindfulness (4%), health literacy (4%), and therapeutic technique (3%). Interventions most commonly
focused on the clinician (70%). Studies predominantly took place in the outpatient setting (86%) and
outside of the USA (60%). Most studies (74%, 49 RCTs and 5 controlled observational studies)
evaluated patient experience as an outcome whereas 38 studies (53%) included a health outcome.
Both categories had positive findings, but a meta-analysis was unable to be performed due to study
heterogeneity. A companion mixed-method study and Delphi method were performed identifying best
practices in fostering clinician presence, focus and attention. HD populations were not discussed. This
systematic review highlights the limited clinical trials that have been performed on patient-clinician
interventions with objective health outcome in the USA and as well as a lack of research in HD
populations.

Barriers involved in generating and promoting PCC are different and include factors such as
unconscious bias, LHL, LEP, digital literacy, socioeconomic status (SES), rural geography, empathy,
and cultural competence. Systematic reviews such as the ones referenced above show the variety of
ongoing research. More mechanistic knowledge is needed about which factors affect objective health
outcomes in HD populations and can be intervened upon to decrease the generation and propagation
of health disparities.

PCC/R involves interactions between the patient, and the clinician as well as factors each person faces
on an individual and system level. Examples of some relevant factors within the clinical encounter are
listed below. Factors highlighted by thought leaders as priorities for intervention are indicated with an
asterisk.

- At the clinician level there are both individual factors (communication skills*, unconscious bias*,
cultural proficiency*, personal/cultural beliefs) and system level factors (health insurance
policies, health care system policies, expertise and medical referrals, health care coordination
and organization, recommended guidelines of care, other factors mediating decision making)
that affect PCC/R.
• Similarly, at the patient level there are individual factors (limited English proficiency (LEP)*, limited health literacy (LHL)*, digital literacy* and personal/cultural beliefs) and system level factors (communication with health care system, health insurance policy/coverage, family/employment responsibilities, ability to provide co-pay, transportation, built-environment, other policies) that affect PCC/R.

• In addition, there are shared patient-clinician factors such as racial/gender/language/cultural concordance.

• These factors act on multiple levels. For example, racial and ethnic discrimination itself may be an important contributor to health disparities, not merely through the historic and persistent disadvantages it creates for minorities in the American social structure, but also specifically through health provider bias- conscious or unconscious, individual or institutional. Social determinants of health (economic stability; neighborhood and physical environment; education; food; community and social cost; health care system) should also be considered.

**Description of Initiative:** This initiative will support innovative multi-disciplinary and multi-level research designed to understand how optimizing PCC/R affects health care outcomes for patients from HD populations. Do interventions facilitating key drivers and removing barriers improve health care? What are the benefits of these interventions? How do they benefit HD populations and why? Projects should complement the NIMHD Research Framework and portfolio focusing on areas ready for further study and that are high yield targets for intervention. One example would be a study testing the effect of patient-clinician concordance and optimal communication within the context of other multi-level factors on health care quality indicators.

**Current NIH efforts in this area:** The NIMHD has 17 grants that are relevant. These are primarily focused on the barriers such as communication skills, provider implicit bias, and clinical decision making. They are not focused on the primary care setting with chronic disease patients or on health care outcomes.

The NIH has funded additional 35 R01-equivalent grants that address PCC/R interventions and objectively or subjectively validated health outcomes in the primary care or chronic disease care setting. The institutes include NCI, NIA, NIAAA, NIDA, NIDDK, NHLBI, NICHD, NINR, NIAMS, NCCIH, NIDCD, and NIMH.

**Areas of Interest to the NIMHD include:**

Proposed projects are expected to test interventions such as approaches, skills, and tools to improve PCC/R. It is expected that lessons learned from these studies will lead to mechanistic understanding of key drivers and barriers of PCC/R. Lessons learned will also include best practices, sustainability and cost effectiveness.

The research types anticipated include formative, retrospective-prospective analyses, and intervention studies. The anticipated settings are primary care and other chronic disease care such as oncology,
nephrology/dialysis, geriatrics, palliative care, and end-of-life care. Both in-person and telemedicine encounters are appropriate.