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Identity Formation and Role Expansion for Nurse Practitioner Residency Preceptors: A Qualitative Thematic Analysis

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Identity Formation and Role Expansion for Nurse Practitioner Residency Preceptors: A Qualitative Thematic Analysis

A Dissertation Presented
to
The Faculty of the School of Education
Department of Leadership Studies
Organization and Leadership Program

In Partial Fulfillment
of the Requirements for the Degree
Doctor of Education

by
Angel Chen Kuo
San Francisco
May 10, 2023

THE UNIVERSITY OF SAN FRANCISCO

ABSTRACT

Identity Formation and Role Expansion for Nurse Practitioner Residency Preceptors: A Qualitative Thematic Analysis

Employer-based nurse practitioner residency programs have been implemented to address the significant shortage of primary care providers in the community clinic settings. However, there continues to be a shortage of clinicians who serve as preceptors to nurse practitioner residents and students. Preceptors, also referred to as clinician educators, are essential in the training of learners and their socialization into the profession. Just as there is a shortage of clinicians of diverse backgrounds to reflect the population served in the community, there is also a significant shortage of preceptors of color to train learners from diverse backgrounds.

The purpose of this descriptive qualitative reflexive thematic analysis study is to examine the needs and lived experience of community-based clinicians who precept NP residents in four Federally Qualified Health Centers (FQHCs). The study explored the preceptors' identity formation and role expansion process, as well as how communities of practice may have shaped their experience. Additionally, the intersectionality of race and gender in these processes were explored. Twelve participants each completed a one-hour semi-structured interview via Zoom.

Key findings from the study revealed that the culture and leadership within each FQHC sets the stage for clinician educator identity formation and engagement. Clinician educators held multiple identities and the strength of the identities determined the support

of their role expansion and engagement within the communities of practice. Four themes emerged from their role expansion experience: 1) benefits of role expansion, 2) expectations and preparation, 3) tension in balancing all their roles, and 4) compensation for the added role. Facilitating factors in expanding existing community of practice for clinicians to communities of practice for clinician educators were identified. The intersectionality of race and gender discussions were limited, and recommendations for practice and future research are presented.

Results from this study set the stage for further exploration of how best to support clinicians in their expansion to clinician educators as well as benefit preceptors across all levels of learners. Confident and skillful clinician educators can prepare and retain the next generation of clinicians to care for the most vulnerable and underserved populations.

This dissertation, written under the direction of the candidate's dissertation committee and approved by the members of the committee, has been presented to and accepted by the Faculty of the School of Education in partial fulfillment of the requirements for the degree of Doctor of Education. The content and research methodologies presented in this work represent the work of the candidate alone.

Angel Chen Kuo — May 10, 2023
Candidate — Date

Dissertation Committee

Dr. Walter Gmelch — May 10, 2023
Chairperson

Dr. Susan Prion — May 10, 2023

Dr. Seenae Chong — May 10, 2023

Dr. Patricia O'Sullivan — May 10, 2023

DEDICATION

I dedicate this to my Mom, who suddenly passed away almost a year ago and our lives have not been the same. I know she would be the first in line to attend graduation and to enjoy all the festivities. I also dedicate this to my family – my Dad and my children: Maddy, Nicholas, Isabella and William. You are (literally) the reason I wake up every day, and I am so proud of each and every one of you. I love you! And to my community of friends ~ you have kept me afloat throughout this rollercoaster ride called life – thank you from the bottom of my heart!

In addition, I dedicate this to PNP Karen Fond and Dr. John Fricker – my preceptors from University of California Los Angeles in the Pediatric Nurse Practitioner program (and all my preceptors). Thank you both for that initial introduction to the power of preceptorship. Thank you for also showing me the art of interprofessional education and collaborative practice right at the start of my PNP journey, which has shaped my career significantly.

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I would like to first acknowledge and thank Dr. Pat O'Sullivan, who welcomed and introduced me to the world of "education" more than 12 years ago, in the University of California San Francisco Teaching Scholars Program. She has mentored me every step of the way and has completely solidified my identity as a clinician educator. Pat has built a clinician educator community of practice, and she is the leader whom we all trust, and the ultimate mentor to us all – no matter what part of health professions education sphere we practice in. I could not have completed this program without her guidance and support. Thank you, Pat!

I am also grateful to my University of San Francisco community. Huge thanks to Dr. Walt Gmelch who served as my advisor and dissertation chair. Your words of wisdom and support was invaluable during this amazing and challenging time. Another thanks go to Dr. Susan Prion, who contributed to the nursing perspective on my committee. I value our conversations about advancing nursing education. Thank you to Dr. Seenae Chong, whom I had the honor of taking a class from and being able to share my ideas and thoughts for my dissertation. You offered another unique perspective that was critical in this dissertation process as I learn about intersectionality of race and gender. To all my faculty and peers at USF School of Education, you all made a huge impact to my journey here. You opened my eyes to concepts and ideas that were new to me, and I am so impressed with and proud of your accomplishments.

Thank you to all the preceptors out there who have dedicated their time and energy into fostering the next generation of clinicians. We thank you for the sacrifices you have made. Our professions cannot continue to grow without your contribution.

Lastly, a big shout out and thanks to all the preceptors who took time out of their busy day to participate in this research – your insight has made a difference! Thank you for your candid discussions of your experience and for your bravery in sharing some difficult reflections. I look forward in making a difference in how you can continue to precept and share your knowledge and skillset with the next generation of health care providers.

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Chapter One: INTRODUCTION

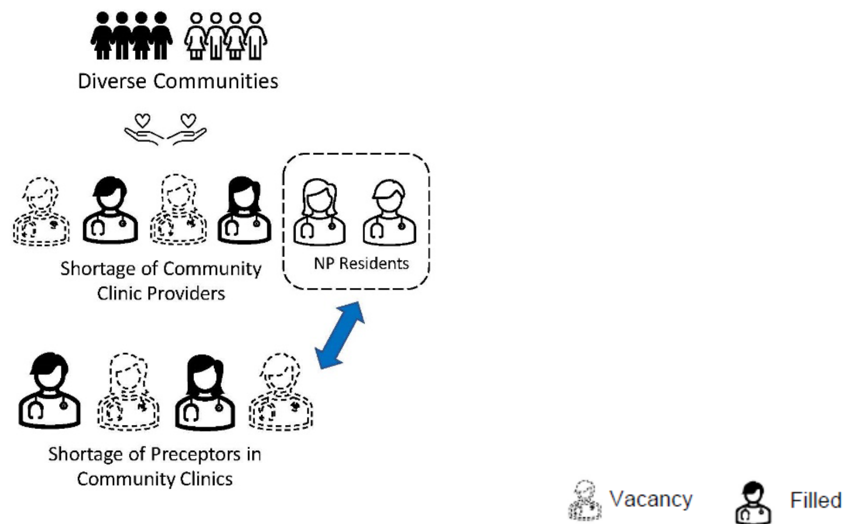
Statement of the Problem

Nurse practitioners (NPs) are well positioned to fill the gap of primary care provider shortage in Health Professions Shortage Areas (HPSA) (Buerhaus, 2019; Medicine & National Academies of Sciences, Engineering, and Medicine [MNASEM], 2021), however, only a small percentage of NPs work in Federally Qualified Health Centers (FQHCs) which are community clinics located in HPSA dedicated to serving the underserved population (MNASEM, 2021). (Please refer to Definition of Terms for all abbreviations). Retention of new NPs continues to be an issue due to the complexity of their role and role transition. In fact, new NP turnover rate in HPSA is almost twice the physicians' turnover rate (Barnes, 2015; Brown & Olshansky, 1997; Mounayar & Cox, 2021). Employer-based post-graduate NP Residency programs have been established to better prepare new graduate NPs for their transition to the complex demands of primary care with underserved communities (Kesten & El-Banna, 2021; Mounayar & Cox, 2021). Unlike medicine's residency programs, post-graduate NP Residency programs are not required nor standardized; only 1/3 out of the 156 programs are nationally accredited (Commission on Collegiate Nursing Education [CCNE], 2022; National Nurse Practitioner Residency & Fellowship Training Consortium [NNPRFTC], 2022). The success of the NP residency programs depends on a robust pool of preceptors (Kesten & El-Banna, 2021). Preceptors, also referred as clinician educators (CEs) in this study, are defined as practicing clinicians who serve as a mentor and role model for health professions trainees in the clinical setting, to supervise their clinical care as well as socialize them into the profession (Bartlett et al., 2020). Preceptors for NP residents can

include clinicians from across professions, including NPs, medical doctors (MD), physician's assistants (PAs), or clinical nurse midwives (CNM). However, there continues to be a shortage of preceptors and a shortage of those who volunteer to train health professions trainees, including NP residents (Copeland, 2020; Drowos et al., 2017; Kesten & El-Banna, 2021; McInnis et al., 2021). Figure 1 shows the shortage in primary care providers in community clinics that serve diverse populations, with the addition of NP residents as a solution to fill gap of providers, but also the related shortage of preceptors for NP residents.

Figure 1

Shortage of Preceptors



Preceptor preparation, identity formation, and role expansion

One of the challenges in finding sufficient preceptors is the lack of training for preceptors to learn to become preceptors (Barker & Pittman, 2010; Bazzell & Dains,

2017; Delver et al., 2014; Graziano et al., 2018; Kesten & El-Banna, 2021). Clinicians are not formally trained on how to precept, especially in precepting trainees from other professions, so health professions educators have developed and implemented various types of training programs (Barker & Pittman, 2010; Bazzell & Dains, 2017; Delver et al., 2014; Graziano et al., 2018; Kesten & El-Banna, 2021). These programs differ in content to modality, ranging from formal training coursework to online modules, or simply informal exchanges. However, trainings alone do not ensure preceptors have developed their CE identity nor fully adopt the skills and meet the competencies as part of their role expansion to CE (Cantillon et al., 2019; Sabel et al., 2014; Sklar, 2016). To fully adopt and expand their role to a CE, one must engage in active clinical practice, educational scholarship, application of theory into educational practice, and consultation on educational issues (Sherbino et al., 2010). Without taking on the identity as a CE, preceptors may simply view teaching as an additional task (Cantillon et al., 2019; Sabel et al., 2014; Sklar, 2016).

Needs of community preceptors

Clinicians who practice in community settings face additional challenges in adding the teaching role compared to their counterparts in large academic centers (Drowos et al., 2017; Graziano et al., 2018; Starr et al., 2003). Community clinicians report barriers to precepting such as meeting increased clinical productivity demands, lacking time to precept or to participate in preceptor development activities, especially since these are unpaid volunteer roles (Drowos et al., 2017). Additionally, community clinicians are often geographically separated from academic medical centers and

therefore unable to receive support and resources to help with their role transition to CEs (Drowos et al., 2017; Graziano et al., 2018; Starr et al., 2003).

Clinicians and preceptors of color

Within the critical shortage of primary care providers, there is also a shortage of providers from diverse backgrounds (Association of American Medical Colleges, 2021). The Future of Nursing 2020-2030 Report (2021) calls for clinicians to represent the demographics of the population, be prepared to address social determinants of health, and improve health and health care equity for vulnerable populations. Equally there is shortage of clinicians of color who can serve as preceptors, especially for learners from diverse backgrounds. Little is known about the experience of community preceptors of color and their role transition to CE experience. The isolation from the network of preceptors tends to add to the attrition of preceptors, and potentially the overall attrition of clinicians in the community (Vassie et al., 2020). This continues the problem around continued cycle of provider shortage in HPSA.

Community of practice

Studies have found engaging in a community of practice (CoP) where CEs have the opportunity to network with other CEs can increase their CE identity development and is effective in creating a sense of belonging and social learning for CEs (Buckley & Nimmon, 2020; Sabel et al., 2014; Sherbino et al., 2010; Sheu et al., 2020; Sklar, 2016; Starr et al., 2003; van Lankveld et al., 2017). However, many community-based preceptors may be the only ones at their sites serving in this role, separated by distance from other community-based preceptors and cannot engage in the CoP (Drowos et al.,

2017). Medical education has shown that virtual CoP, such as use of social media like Twitter, have improved engagement of CEs and their professional learning networking (Dzara et al., 2021; Luo et al., 2020).

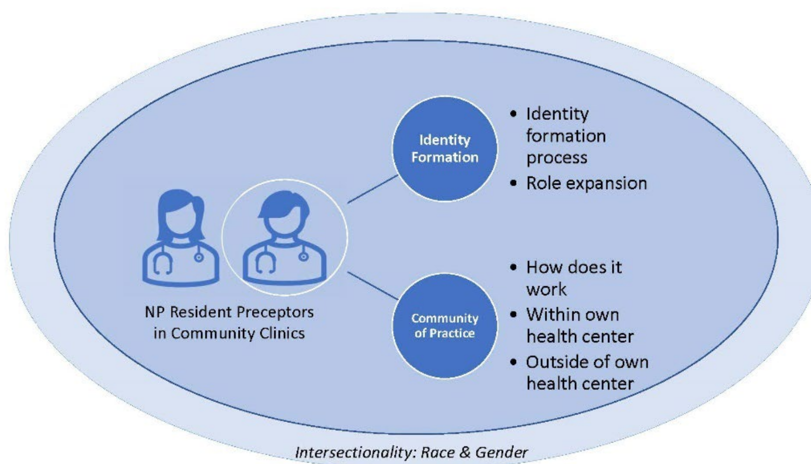
Intersectionality

To further understand the experience of community-based clinicians in becoming preceptors, including the experiences of the preceptors of color, one must also acknowledge and examine the intersectionality of race and gender of the clinicians who serve as preceptors. Intersectionality provides an understanding of how people are shaped by different social location interactions within a context of connected systems and structures of power, with the orientation towards "transformation, building coalitions among different groups, and working towards social justice" (Hankivsky, 2014). The literature has limited description of the differences in the experience of preceptors in their CE identity formation and engagement with community of practice based on their race and gender. How does the experience of a white male preceptor differ from that of a female preceptor of color?

Figure 2 outlines this study's considerations for NP resident preceptors in community clinics, how they form their identity as a preceptor, how they expand their role from being clinician to CE, and how they form and/or access a community of practice. Lastly, we seek to understand how their experience may be shaped by their race and gender.

Figure 2

Nurse Practitioner Resident Preceptor Considerations



Background and Need

The issue with lack of primary care providers to serve the most vulnerable populations in the US is quite complex, from a workforce perspective as well as health professions training perspective. This study aims to better understand the experience of preceptors in community clinics who train newly graduated nurse practitioners in NP residency programs, to support the residents' development to be practice-ready by the end of their one-year residency program.

Nurse practitioners are prepared to practice as primary care providers to the most vulnerable populations (Buerhaus, 2019; MNASEM, 2021), with almost 90% of the 355,000 NPs in the US trained in primary care, among which majority the NPs are providing primary care to uninsured and publicly insured patients (American Academy of Nurse Practitioners, 2022). However, most of the NPs (51.9%) work in ambulatory care

or clinic settings, and only 8.4% work in public clinics such as FQHCs that serve the most underserved populations faced with most health inequity (MNASEM, 2021). The *Future of Nursing 2020-2030* Report (2021) urges nurses to work in under-resourced areas to meet the needs of the population, including going directly into the community setting.

As newly graduated NPs are encouraged to work in the community, specifically in primary care, they struggle with transition to practice due to the complexity of the setting, as well as anxiety, stress, role confusion, self-doubt, and/or isolation (Barnes, 2015; Mounayar & Cox, 2021; Poronsky, 2013). Primary care clinics in HPSAs manage highly complex and vulnerable populations who are generally marginalized, thus making the role of primary care providers even more demanding. As a result, robust support for new graduate NPs is needed to help with their transition and retention of providers in the community. The following sections discuss solutions to this problem, which require clinicians to serve as preceptors to train and mentor the new NPs. Figure 2 outlines the aspects for deeper understanding of preceptors in this study.

Nurse practitioner residency

Employer-based post-graduate NP Residency programs were first created in 2007 to provide a year of support to new graduate NPs through their transition to practice (Kesten & El-Banna, 2021; Mounayar & Cox, 2021). Unlike residency training in graduate medical education, post-graduate NP residency programs are not required for clinical practice and vary from site to site in length of the program and the types of support provided. In general, the NP residency programs involve a structured curriculum

of didactics along with increasing clinical productivity under the guidance and mentorship of clinical preceptors (Kesten & El-Banna, 2021; Mounayar & Cox, 2021). There are now an estimated 156 NP residency programs in the United States, majority of the programs for primary care providers, and 53 programs accredited through Commission on Collegiate Nursing Education (CCNE) or National Nurse Practitioner Residency & Fellowship Training Consortium (NNPRFTC) (Commission on Collegiate Nursing Education, 2022; National Nurse Practitioner Residency & Fellowship Training Consortium, 2022). Funding for the employer-based NP residency programs may be through Health Resources and Services Administration (HRSA) (National Nurse Practitioner Residency & Fellowship Training Consortium, 2022) or from directly from the clinic organization.

Preceptor availability and development

Health professions training, including NP Residency training, depends heavily on clinicians to serve as clinical preceptors to train and mentor learners in real life clinical settings (Bazzell & Dains, 2017). Clinicians report that they precept for intrinsic satisfaction, to give back to the profession, to keep up with their skills, and due to the sense of responsibility to teach the next generation of providers (Amirehsani et al., 2019; Barker & Pittman, 2010; Starr et al., 2003). While preceptors are well positioned to help new graduates transition to practice, they fail to volunteer as preceptors due to a variety of barriers to precepting (Barker & Pittman, 2010; Copeland, 2020; Drowos et al., 2017; Graziano et al., 2018). The most significant barrier is lack of time, including lack of time to teach due to competing clinical productivity demands, and lack of time to attend preceptor development training as most preceptors have not had previous training on how

to teach (Barker & Pittman, 2010; Bazzell & Dains, 2017; Burt et al., 2021; Graziano et al., 2018; Kesten & El-Banna, 2021). This aligns with the call for more pedagogical preparation for nurse educators to they can be prepared to teach (Booth et al., 2016). Additional barriers include lack of incentive to precept, lack of resources to support clinical teaching, lack of opportunities to share with colleagues, and lack of faculty assistance to support learner challenges (Barker & Pittman, 2010; Bazzell & Dains, 2017; Burt et al., 2021; Graziano et al., 2018; Kesten & El-Banna, 2021). In addition, there is no standard preceptor preparation nor required qualification across sites and programs, although there has been some attempt to create and measure preceptor competencies (Bartlett et al., 2020). Preceptors want free resources, including continuing education credits and/or mentoring topics (Burt et al., 2021). Moreover, they also appreciate feeling valued and supported, as well as having defined role (Bazzell & Dains, 2017; Burt et al., 2021). Lastly, the COVID pandemic has impacted primary care providers and their clinical practice – some have been laid off or furloughed, had moved practice location or changed their practice to telehealth; all of which impacted the availability of preceptorship for learners (McInnis et al., 2021).

Preceptor development programs have been designed and implemented to meet the needs of preceptors in both nursing and medicine training programs, including web-based and in-person trainings to improve their clinical teaching skills (Bazzell & Dains, 2017; Delver et al., 2014; Drowos et al., 2017; Graziano et al., 2018; Hallas et al., 2021). However, the trainings are not standardized, and as a standalone resource, the trainings do not support clinicians' expansion of their own identity from clinician to CE; many

proceed with precepting as a task rather than as a part of their professional identity (Cantillon et al., 2019; Sklar, 2016; Starr et al., 2003; van Lankveld et al., 2017).

Community-based preceptors

As mentioned earlier, community-based preceptors face additional challenges to precepting, as compared to preceptors from academic centers (Drowos et al., 2017; Graziano et al., 2018; Starr et al., 2003). In addition to facing increasing clinical productivity demands while volunteering their time to precept, they have variable background in teaching and they often are geographically separated from academic medical centers to receive support and resources from a robust preceptor development program to help with their role expansion from clinician to CE (Delver et al., 2014; Drowos et al., 2017; Graziano et al., 2018; Starr et al., 2003). The isolation from the robust network of preceptors tend to add to the attrition of preceptors in the training programs, and even attrition of clinicians in the community (Drowos et al., 2017; Vassie et al., 2020).

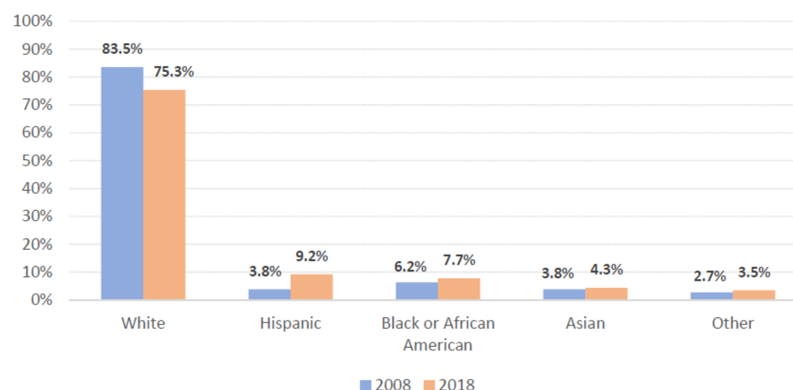
Preceptors of color

While there has been a slight improvement of the racial diversity within the NP profession between 2008-2018 (See Figure 3), most the NP workforce tends to be White (83.5% to 75.3%). The largest increase in diversity of NPs during this 10-year period was with Hispanic NPs (from 3.8% to 9.2%), followed by Black/African American NPs (6.2% to 7.7%), and Asian NPs (3.8% to 4.3%); however, this is not reflective of the increasingly diverse population within the US from 2020 Census where 18.7% of the US are Hispanic, 14.2% black/African American, and 7.2% Asians (Jones et al., 2021). The

Future of Nursing 2020-2030 Report (2021) continues to call for diversifying the nursing workforce, to reflect the people and communities served especially in HPSA where there is a higher proportion of underrepresented minorities, to ensure people receive culturally competent and equitable health care services. Equally, NP residents benefit from having preceptors from diverse backgrounds who can serve as their mentors during this transition to practice. However, little is known how the needs of preceptors of color who serve in FQHCs and mentor the NP Residents may vary from other preceptors. Previous faculty development programs in academic medicine have not specifically addressed the needs of the faculty of color, even though novice faculty of color have reported feeling alone (Palermo et al., 2008). Once implemented, faculty development and mentoring programs for faculty of color in Schools of Medicine and/or Nursing have improved retention rates, productivity, and promotion rates (Beech et al., 2013; Mokel et al., 2021; Rodriguez et al., 2014). Little is known about the support that community-based preceptors of color need, their sense of belonging and feeling valued, as well as their experience as preceptors.

Figure 3

Nurse Practitioners by Race and Ethnicity in 2008 and 2018. Future of Nursing 2020-2030



Purpose of the Study

Much of the literature around preceptor identity formation and role expansion are from medicine or NP education, rather than from the employer-based post-graduate NP Residency programs. Additionally, majority of the CE literature focuses on those in the academic settings rather than clinicians in the community. NP residency preceptors have the task of preparing newly licensed NPs, hired by the clinics, to become practice-ready in highly complex FQHCs in a short period of time (average 6-12 months), with the anticipation that the NP residents would become the preceptors' peers at the end of the residency. This makes precepting NP residents different than precepting the traditional medical or NP students. While preceptors in medical education found CoPs to be useful in establishing a support network, not much is known about creating a CoP for interprofessional preceptors of NP Residency programs nor among clinicians across different community clinics. Furthermore, there is limited data on the use of CoP for NP residency preceptors to meet the needs of community-based clinicians. Lastly, not much is known about the lived experience of the subgroup of preceptors of color, including how the intersectionality of their race and gender may impact their identity formation and role expansion from clinician to preceptor, as well as their experience in the CoP. However, before we can understand how to create the best CoP to support NP residency preceptors, we must first better understand their experience. The purpose of this qualitative thematic analysis study is to examine the needs and lived experience of community-based clinicians who precept NP residents.

Research Questions

The questions of this qualitative study focus on NP residency preceptors in FQHCs:

1) How do preceptors perceive their preceptor identity formation process? How do race and gender shape this process?
2) How do preceptors perceive their role expansion process? How do race and gender shape this process?
3) How do communities of practice shape preceptors' identity and role expansion process? What role do race and gender play in communities of practice?

Theoretical Framework

The research questions are examined through the social identity theory which offers insight to how preceptors develop their identity and role expansion, along with CoP framework to understand how they access support and provide support to one another. Lastly, intersectionality theory brings in the lens of how race and gender impact their experience as preceptors in the community.

Social identity theory

Social identity theory informs how we can better understand how clinicians adopt and expand their identity as preceptors. Social identity theory was proposed in social psychology by Tajfel and his colleagues (Tajfel, 1978; Tajfel & Turner, 1979). Social identity refers to the ways that people's self-concepts are based on their membership in social groups. Social identity theory addresses the ways that social identities affect

people's attitudes and behaviors regarding their "in-group" and the "out-group". Social identities are most influential when individuals consider membership in a particular group to be central to their self-concept and they feel strong emotional ties to the group. Social identity theory brings up issues around the structure of the social identities, motivations behind being identified as a specific group, the impact of belonging on the individual, organization, or larger context, as well as how once chooses which identity to identify with, and perhaps a hierarchy or even conflict among the different identities (Tajfel &Turner, 1979; Islam, 2014). Those with multiple group identities face social identity complexity in which there are 4 different degrees of overlap between the different groups, from 1) an *intersection* of the multiple identities, to 2) a *dominance* of one primary identity over the other(s), or 3) *compartmentalization* of each individual identity (then activated within on different context), or 4) *merger* of social group identities where all identities are included (Roccas & Brewer, 2002). Social identity complexity is influenced by one's personal value priorities and tolerance of the "out-group" members, as well as one's stress level (Roccas & Brewer, 2002). CEs face this as they juggle between their identities. Faculty's identity as teachers makes them more likely to engage in faculty development (Steinert et al., 2019). However, when teaching was less valued in the organization, clinicians adapted their teacher identities and practices to suit institutional norms (Cantillon et al., 2016). For this study, social identity theory helps explore preceptors' identity as clinicians, preceptors, and CoP members.

Community of practice framework

The CoP framework was first introduced by Lave and Wenger (1991) and defined as "a persistent, sustaining social network of individuals who share and develop an overlapping knowledge base, set of beliefs, values, history and experiences focused on a common practice and/or mutual enterprise." (Barab et al., 2002, p. 495). Three components are needed in CoP: 1) domain of common ground and/or identity, 2) community with a clear leadership and mutual trust, and 3) the practice of specific knowledge and skills that is shared among the members (Cruess et al., 2018). CoP members interact with one another in formal and informal settings, share knowledge with each other, collaborate with each other to create new knowledge, and foster the development of a shared-identity together (Li et al., 2009). While the role of a leader or facilitator is central to the formation of CoP, there lacks clarity of the role of the CoP leader and/or facilitator (Li et al., 2009; Wenger et al., 2002). Due to geographical barriers and differences in time zones, virtual CoP has been designed to support collaboration among the members and broadened the scope of CoP (Johnson, 2001). For health professions educators, CoP has proven to be effective in providing a social network for their professional learning and sense of belonging as a CE. However, the tension between the a person's need for growth versus the organization's priorities remains to be a challenge for application of CoP (Li et al., 2009). This study applies the CoP framework to how community preceptors access this network, if at all, and their experience.

Intersectionality

The preceptors' experience is examined through intersectionality theory. Intersectionality was originally introduced by Kimberle Crenshaw in 1989 to describe what happens when multiple discriminations occur to Black women, such as the combination of both race and gender, as a product of racism and sexism (Crenshaw, 1989). Crenshaw (1989) urged taking into account people's multiple types of identities when examining the multiple dimensions within one's lived experiences. Ultimately, intersectionality aims to provide an understanding of how people are shaped by different social location interactions within a context of connected systems and structures of power, with the orientation towards "transformation, building coalitions among different groups, and working towards social justice" (Hankivsky, 2014). Hankivsky (2014) also highlights that the social categories or structures must be discovered during the process of investigation, along with the importance of the categories. Additional hierarchy, such as professional hierarchy between medicine and nursing, may add to the inequity and/or power differential between clinicians. Thus, for NP resident preceptors, their lived experience and process of becoming clinicians and preceptors are examined through the lens of both race and gender.

Educational Significance

This study is important to the preparation of nurse practitioners, and in fact, preparation of all health care professionals trained by community preceptors to provide care to patients and families with complex care needs. The results from this study can better prepare educators to support recruitment and retention of preceptors in the

community through understanding of their needs and perspectives and creating better preceptor development and support. This study examines the lived experience of NP resident preceptors, including factors that impact their identity formation, role expansion, and building of community of practice. Additionally, a sub-analysis from this study also examines the lived experience of preceptors of color. By connecting preceptors from within and across FQHC organizations through CoP network, it can encourage social learning, and eliminate the barriers in networking caused by physical distance between preceptors from community sites, and even make up for the limitation of lack of time to connect with each other. Successful creation and formation of CoP can be developed based on the findings from the study. Results from this study can support future research and programs to support the pipeline of clinicians, including clinicians of color, as well as CEs, to serve the diverse patient population in HPSA.

Definition of Terms/Abbreviations

BACH: Bay Area Community Health https://bach.health/

CE: Clinician educator

CNM: Clinical Nurse Midwife

CoP: Community of Practice - defined as "a persistent, sustaining social network of individuals who share and develop an overlapping knowledge base, set of beliefs, values, history and experiences focused on a common practice and/or mutual enterprise." (Barab et al., 2002, p. 495).

FNP: Family Nurse Practitioner

FQHC: Federally Qualified Health Centers; also referred to as community health centers or community clinics

HPSA: Health Professions Shortage Area

LMC: LifeLong Medical Care https://lifelongmedical.org/

MD: Medical Doctor

NP: Nurse Practitioner

Nurse Practitioner Residency: Employer-based post-graduate NP Residency programs first introduced in 2007 to provide support to new graduate NPs through their transition to practice. Not standardized nor required for practice.

PA: Physician's Assistant

PI: Principal investigator

PNP: Pediatric Nurse Practitioner

Preceptor: also referred as clinician educators (CEs) in this study - practicing clinicians who serve as a mentor and role model for health professions trainees in the clinical setting, to supervise their clinical care as well as socialize them into the profession (Bartlett et al., 2020).

RN: Registered Nurse

TVHC: Tiburcio Vasquez Health Center https://tvhc.org/

UCSF: University of California San Francisco https://www.ucsf.edu/

URM: Underrepresented minority

Chapter Two: LITERATURE REVIEW

Much of the research around preceptor identity formation is from medicine or nurse practitioner (NP) education, rather than NP residency programs. Additionally, most of the clinician educator (CE) literature focuses on those in the academic settings rather than for those clinicians in the community. Furthermore, not much is known about the lived experience of preceptors of color in the community, regarding their social identity and their role expansion from clinician to preceptor, also known as clinician educator. While community of practice (CoP) for preceptors in medical education has been found to be useful in establishing a support network, not much is known about creating a CoP for interprofessional preceptors of NP Residency programs in the community, nor among clinicians across different community clinic organizations.

This literature review is organized by the following sections: 1) identity formation and role expansion for preceptors, 2) support for preceptors of color, and 3) use of community of practice (CoP) for preceptors.

1) Identity Formation for Preceptors

Preceptors are practicing clinicians who serve as a mentor and role model for health professions trainees in the clinical setting, to supervise their clinical care as well as socialize them into the profession (Bartlett et al., 2020). Clinicians who take on the preceptor or clinical educator role, generally are expert clinicians who may or may not have been trained as an educator. Cantillon et al (2019) conducted a scoping review to evaluate the research on the development of CE identity in relation to features of social context of the clinical environment where they practice. This study included research

from ___. Some 9 countries, and 5 professions with 17 (50%) articles from the field of medicine and 12 (35%) articles from the field of nursing. The themes from the individual include *identity juggling*, *identity mutuality*, and *identity integration*. Identity juggling involves how CEs manage their multiple identities, from invisible, merged, compartmentalized, or hierarchical. Those with merged identity seem to value their educator role and thus engage the most with other CEs. Those with invisible CE identity were least likely to prioritize their CE professional development. Identity mutuality describes how each of the identity supports the other. Lastly, identity integration describes how CEs construct their own identity based on role models, feedback, and self-reflection. Meanwhile the themes from the social context include identity as contingent, as negotiated, as organizationally informed, and as communicated. Successful professional identity formation requires the person to develop attitudes, beliefs, and behaviors as well as learn the knowledge and skills needed for that professional role (Owens, 2018). Cantillon et al (2019) conclude that CEs have agency in constructing their identities, however, how the workplace culture, hierarchy, and interpersonal politics impact their identity are still to be explored. Monrouxe (2010) also calls for further research in examining how identity is constructed for learners in medical education, including how persons of color develop their professional identity.

Clinician educator role transition

The transition from clinician to CE requires the formation of a CE identity. Lee et al (2022) performed a systematic review on identities and roles through the clinician educator transitions and identified four themes: multiple ways for identities and roles to be conceptualized (multiple identity, identity as role, and role congruence), recognize the

complex nature of clinician transition to CE, facilitators and barriers to the transition, and consequences of the transition. The review included for both CEs (i.e. preceptors) as well as educators who no longer practice clinically. Personal factors such as passion, ability to adapt to change and manage multiple expectations, open to opportunities, interpersonal skills, and agency facilitated their transition; however, lack of confidence in performing their new role seemed to impact their transition (Lee et al., 2022; Owens, 2018). Interpersonal facilitators include mentoring and development of a network of CEs, while negative feedback, negative relationships, lack of support and cultural differences hindered their transition (Lee et al., 2022; Owens, 2018). Lastly, organizational facilitators include formal orientation and training, shadowing of other preceptors, and mentoring programs. Benefits to the CE transition include having joy in watching learners grow and develop as well as contributing to the development of the future generation, while the negative consequences of the transition include the risk of stress, tension, anxiety, fear, and uncertainty (Lee et al., 2022).

Master teacher role comparison to NP resident preceptor role

While there lacks literature around identity formation for preceptors who mentor NP residents (who are no longer trainees but licensed practitioners), this parallels the master teacher/mentor role in the teaching profession. The mentor teacher mentors newly certified teachers and helps them to transition to the profession (Andreasen et al., 2019; Kwan & Lopez-Real, 2010). Andreasen et al (2019) suggest that school climate, mentor teachers' personal dispositions and beliefs, as well as perception of the university collaboration can all impact teacher educator identity among mentor teachers. By belonging to a group of mentor teachers, it can positively impact their development of

teacher educator identity (Andreasen et al., 2019). Hogg & Terry (2000) also state that developing a new collective identity often involves the possibility of simultaneously having dual identity, of both being a teacher and a teacher educator. This can be the case for clinicians who serve as CE/preceptors for NP residents.

Clinician educator competencies

Furthermore, studies in medical education have attributed lack of a formal definition and defined competencies for CEs being a barrier for their identity formation and role expansion (Lee et al., 2022; Sherbino et al., 2014; Sklar, 2016). Sherbino et al (2014) conducted a study in Canada through focus groups and surveys of deans, chairs, and residency directors from Schools of Medicine to establish a definition of clinic-educator and related domains of competence. The four key roles of CE included actively participates in clinical practice, engages in educational scholarship, applies theory to education practice, and consults on education issues. The domains of competence include: assessment, communication, curriculum development, education theory, leadership, scholarship, and teaching. Bartlett et al (2020) provided a systematic review examining measurement and assessment of preceptor competencies that included 11 competencies with performance indicators (effective communication skills, role model practitioner, adapts to learning needs of students, commitment to excellence in teaching, respect for the learner, reflective practice, effective feedback, facilitate critical thinking and problem solving and decision making development, encourage self-directed learning, and leadership and management skills), and 6 important attributes but are not easily measured (organized and ability to prioritize, empathetic, ethical, approachable and flexible, enthusiasm for teaching, and open to feedback).

Tension with multiple identities

Clinicians also feel the tension between their multiple professional identities, as clinician, educator, research, and personal roles such as being a parent (Buckley & Nimmon, 2020; Cantillon et al., 2019; Sabel et al., 2014). They noted that since they have multiple identities, the hierarchy of the identities impacted how the roles are recognized either as an "add-on" versus being incorporated within their identity (Sabel et al., 2014). Many junior faculty even feel that medical education is seen as inferior to clinical and/or research work, as it seems to be less valued and recognized in the profession (Cantillon et al., 2019; Lee et al., 2022; Sabel et al., 2014; van Lankveld et al., 2017). Sabel et al (2014) conducted a study in United Kingdom with 34 early career medical educators of clinicians and scientists, who participated in focus groups and interviews to discuss their challenges with their identity as medical educators. They did not have a structured professional career pathway as a medical educator and did not have emotional attachment to being a medical educator. Instead, they saw their role as operational rather than a formal professional identity (Sabel et al., 2014). They felt being a medical educator was inferior to their role as a clinician or researcher, as it was less valued and recognized; they referred medical educators as the "ugly duckling" in medicine (Sabel et al., 2014). And without identifying as a CE, clinicians simply teach as part of their task, rather than integrating teaching as part of their professional identity with an emotional attachment (Sabel et al., 2014).

van Lankveld et al (2017) found that while some teachers experienced tension, others showed resilience in fighting back the negative associations. The participants

shared their identity narratives which showed that they combined, adopted, or rejected their teaching role in diverse ways (van Lankveld et al., 2017).

Clinician educators in the community

While most of the identity formation studies are from academic medical institutions with academic faculty who have medical education as part of their role, Starr et al. (2003) examined the community preceptors' experience with a qualitative study that included 35 experienced community preceptors who participated in focus groups to discuss their teacher identity. The most common theme that emerged was their sense of intrinsic satisfaction from being in the teacher role, as well as simply being able to talk belong to a group of teachers and talk about teaching, helped to validate their identity as a teacher (Starr et al., 2003). Some report by simply being a physician means their identity is that of a teacher (to patients) (Starr et al., 2003).

Identity dissonance for preceptors of color

Identity dissonance may occur for preceptors of color, where their new identity (as a CE) may not be in alignment with their personal identity (gender, ethnicity, or social class). While this is described for students of color, of women gender, or lower socio-demographic class in professional (law and social welfare) schools rather than for preceptors (Costello, 2005), this can be applied to preceptors of color. Costello (2005) notes that gender, racial, and class inequality are unintentionally reproduced in professional schools through their professional identity formation. Students who were white, heterosexual, male, and from middle or upper-middle class backgrounds tended to do well in professional schools developing their professional identity. However, those

whose self-identity did not fit the professional school norms (such as women with families or African American women and Latinas), or those who were not socially privileged (racial or gender minorities) experienced identity dissonance. They may experience low self-confidence, doubts about their values and abilities, and even unsure of their self-worth (Costello, 2005; Monrouxe, 2010).

Faculty development

Many studies point to faculty development as a key component in helping clinicians form their identity to CE. Sklar (2016) emphasized the importance of placing identity at the center of faculty development, to support their career advancement. Two recent studies show how the teaching identities for health professions educators can be strengthened through faculty development (O'Sullivan & Irby, 2021; Steinert et al., 2019). Steinert et al (2019) highlights the importance of professional identity for faculty in medical education and provides strategies to incorporate identity and identity formation into existing faculty development offerings. Authors suggest that for faculty to achieve excellence in teaching and learning, they must embrace their CE identities and be supported by their institutions and through faculty development. The authors also emphasize the importance of mentoring programs especially for junior faculty who are starting their teaching career. O'Sullivan & Irby (2021) share an interprofessional faculty development workshop series that foster educator identity formation, through direct instruction and self-reflection exercises to align participants' professional identities and roles with resources for further development.

Another example of faculty development to support identity formation is a longitudinal program from five academic health centers in the US focused on enhancing interprofessional clinicians' interprofessional self-knowledge, communication, teamwork and leadership skills (Rider et al., 2023). While clinicians developed intrapersonal (within oneself), interpersonal (with others), and systems (with organization) level growth, they also expanded their interprofessional identity through this longitudinal faculty development program. They had shared objectives and produced shared knowledge with each other, through this community of practice (Rider et al., 2023).

Tips for clinician educator identity development

Understanding that having the CE identity is central to how one functions in that role, O'Sullivan (2012) provides 10 helpful recommendations for clinicians to develop their identity as medical educators, which allows them to practice with confidence, and for others to have confidence in their skills. Medical educators are defined as those who teach learners about medicine, through clinical medicine, basic science and behavioral and social sciences. For CEs, these tips translate to practice evidence-based teaching approaches, collaborate with others, stay up to date on educational tools, build a network of CEs and across multiple identities, identify funding for professional development, and share your work and knowledge widely.

2) Support for Preceptors of Color

Adequate support for preceptors of color is needed to recruit and retain them in the teaching role. However, not much is known about their experience, their needs, and best types of support for them as community-based preceptors of color. Thus, existing

literature around faculty development for faculty of color within academic settings is reviewed first. The first article addresses factors that impact recruitment and retention of underrepresented faculty in academic teaching pathways (Vassie et al., 2020). The rest of the articles are scoping reviews on faculty development or mentoring programs for underrepresented faculty, with majority of the literature from medicine and from academic medical center perspective (Beech et al., 2013; Palermo et al., 2008; Rodríguez et al., 2014), and one article by Mokel et al. (2021) from nursing education. Mentoring and networking remain as one of the factors enabling their success. While preceptors are not formal faculty members, much of the same concepts in faculty development and mentoring programs can be applied to the preceptors of color in the community setting.

Vassie et al (2020) provided a scoping review and analysis evaluating factors that impact recruitment, retention, participation and progression within clinical education pathway for faculty with protected characteristics, including gender, ethnicity and sexual orientation. Thirteen discrete themes of factors impacting on equitable participation were identified including societal attitudes and expectations; national and organizational policies, priorities and resourcing; academic and clinical workplace cultures; supportive, discriminatory and compensatory interpersonal behaviors and personal factors related to social capital, finances, competing priorities, confidence and ambition, and orientation to clinical, academic and leadership roles. One of the findings include that advancement in clinical education career was competitive, with participants who possess higher social capital are more likely to be included within formal and informal academic networking.

Faculty development and mentoring programs for underrepresented faculty

Palermo et al (2008) provided an overview of successful faculty development programs for underrepresented minority (URM) medical faculty, including basic principles and goals, a conceptual framework for technical skill development, mentoring/coaching, and a brief description of successful institutional models. Beech et al (2013) provided a systematic review examining outcomes of mentoring programs designed for URM faculty in academic health centers. While there is acknowledgement that mentoring is important for faculty, URM faculty receive less mentoring than their non-minority peers. The authors found various mentoring programs though most focused on number of grant applications and manuscripts produced, or participant satisfaction with the program. Barriers to the mentoring programs include time commitment from the mentors, time-restricted funding, inadequate evaluations, and difficulty in addressing institutional challenges faced by the URM faculty. Program sustainability was a concern due to the lack of permanent funding from the institutions. The authors suggested ways to increase and sustain diversity in academic health centers.

Rodriguez et al (2014) shared a systematic review that was conducted to evaluate mentoring programs for underrepresented minority faculty in Schools of Medicine. The authors found that there is not enough faculty development designed for URM faculty. Factors that contribute to successful faculty development programs include: effective and frequent mentoring; focused instruction on clinical, teaching, and research skills; providing networking opportunities; reducing clinical/administrative expectations to facilitate scholarly activities that lead to promotion, as well as providing institutional seed money for pilot projects all seem to have a positive effect on minority faculty retention.

Mokel et al (2021) provided a systematic review looking at best practices in mentoring underrepresented nursing faculty (in terms of gender, sexual minority, race, ethnicity, and geographic location). The authors noted having communities and networks for mentors and mentees of color help build the infrastructure for mentees in having similar experiences and having multiple mentors or group mentoring can facilitate their faculty development. Additionally, mentees need adequate mentoring to address the social isolation that may be felt by the underrepresented faculty and help build their sense of belonging in the academic community. The authors report a lack of research on online mentoring as well as mentoring for faculty in rural regions. The authors found successful mentoring programs required honest communication, having all stakeholders in forming the mentoring program, mentee-centered goals and activities, and guaranteed resources/funding.

3) Use of Community of Practice for Preceptors

One aspect of preceptor development is the sense of belonging to a community of CEs, which supports the clinicians' role expansion from clinician to CE, as well as sense of collective identity and shared purpose (Buckley & Nimmon, 2020; Jippes et al., 2013; Lee et al., 2022; Li et al., 2009; Sheu et al., 2020; Starr et al., 2003). Lee et al (2022) noted that the initial transition can be quite isolating, thus CEs benefit from a support network such as a community of practice. The use of community of practice (CoP) has been described in the literature for medical education, including the use of virtual platform and social media to bring together preceptors for their identity formation and create a social network for learning and faculty development. A CoP is defined as "a persistent, sustaining social network of individuals who share and develop an overlapping

knowledge base, set of beliefs, values, history and experiences focused on a common practice and/or mutual enterprise." (Barab et al., 2002, p. 495). CoP was first described by Lave and Wenger (1991) as a way for groups of individuals with shared identity to come together informally to share their knowledge and skills on specific topics, while forming supportive relationships with each other. CoP involves three key components: 1) the domain of common identity, 2) a community with clear leadership and mutual trust, and 3) the practice of specific skills and knowledge that is shared among the members (Cruess et al., 2018). CoP members interact with one another in formal and informal settings, share knowledge with each other, collaborate with each other to create new knowledge, and foster the development of a shared-identity together (Li et al., 2009). While the role of a leader or facilitator is central to the formation of CoP, there lacks clarity of the role of the CoP leader and/or facilitator (Li et al., 2009; Wenger et al., 2002). Another set of characteristics that set CoP apart from other learning communities include that the members hold different levels of expertise, while becoming novice to an expert, and they have authentic tasks and communications related to the particular CoP (Johnson, 2001). Wenger et al (2002) also note the distinction that CoP is self-selected with voluntary participation by the members.

Community-based preceptors have the common identity as preceptors and have the shared practice of clinical teaching. They also benefit from using CoP for their faculty development series and ongoing education and networking. Clinicians constructed their CE identities through both a CoP of clinical teams and CoP of new clinicians (Cantillon et al., 2016). There are many models of CoP between different stakeholders, and most of the literature describes CoP for medical educators with medical learners and not much is

known about CoP for NP resident preceptors nor across organizations such as different FQHCs.

Studies suggest that having social networks, such as CoP, and mentoring, can significantly enhance preceptors' growth and learning, as well as identity, development, and recognition as a medical educator (Buckley & Nimmon, 2020; Lee et al., 2022, 2022; Sabel et al., 2014; Sherbino et al., 2010; Sheu et al., 2020; Sklar, 2016; Starr et al., 2003; van Lankveld et al., 2017). For health professions educators, this CoP can provide a framework that brings together the social nature of learning, as well as identity formation, to guide the development of interventions to make health professions education more effective. CoP can also help both learners and clinicians better cope with the complexity of health professions education.

Benefits of community of practice

Multiple studies have described the benefits of CoP for CEs, including enhanced engagement, networking, growth and learning (from each other and own professional growth), sense of community, and professional identity as CEs, which all contributes to retention of CEs as well as other benefits to the organization and even outside the organization (Buckley & Nimmon, 2020; Sherbino et al., 2010; Sheu et al., 2020; Sklar, 2016).

Buckley & Nimmon (2020) identified that social networks influenced participants' learning about teaching through four dimensions: *enabling and mobilizing knowledge acquisition, shaping identity formation, expressing vulnerability, and scaffolding learning*. This is significant for faculty who are not located within the main

campus and have multiple professional identities. The authors recommend faculty developers to take in account the faculty's degree of "social embeddedness in their professional social networks" which can influence their learning from the teaching workshops (Buckley & Nimmon, 2020).

Cantillon et al (2016) described their qualitative study examining how clinicians become teachers in relation to clinical communities and organizations. The authors described two types of CoP within the professional plane such as clinical teams and communities of junior doctors, which allowed participants to reproduce their teacher identities as it aligns with those particular CoP, in order to gain recognition and legitimacy. In addition, participants also engaged in CoP on the managerial plane in their organization. The organizations that valued teaching supported the participants' development as teachers. Another study of hospital clinicians found that their participation in social networks were a much greater predictor of embracing changes in teaching practice than attendance at faculty development events (Jippes et al., 2013).

Furthermore, for underrepresented groups such as underrepresented minorities, women, and junior faculty, these social networks along with targeted mentoring can help with their empowerment and career advancement (Buckley & Nimmon, 2020; Sabel et al., 2014; Sklar, 2016).

Starr et al (2003) found that community preceptors also valued the opportunity to talk about teaching with other colleagues to validate their identity as a teacher, similar to that of a community of practice.

There are parallel findings in the novice teachers' literature around benefits of a learning community. Meyer (2002) reported on novice teacher learning communities as an alternative to one-on-one mentoring, which depends solely on the availability and goodwill of the mentor, and instead, provide new teachers with opportunities to think with others who have shared values and norms, around dilemmas to their practice and reflect on their teaching. They can offer each other moral support, intellectual help, and solid friendship. Most importantly, the participation in this learning community served as "an antidote to the isolation participants reported feeling in their schools" (Meyer, 2002). Participants reported that having a collective authority as well as privacy and distances from their own schools make this learning community work (Meyer, 2002), which can be easily applied to the community-based preceptors at individual FQHCs.

Challenges in community of practice for preceptors

There are also some challenges in creating CoP for preceptors. The tension between the a person's need for growth versus the organization's priorities remains to be a challenge for application of CoP (Li et al., 2009). Sherbino et al (2010) reported the challenges in needing to set aside time for in-person meetings to build the culture for CoP, as well as facilitation of communication for virtual CoP (email, electronic portal, conference calls). Cantillon et al (2016) found that while participants in organizations that valued teaching gained support and legitimacy in their teacher role, those participants in organizations that did not value teaching ended up adapting to the institutional norms of their teaching identity.

Use of virtual community of practice

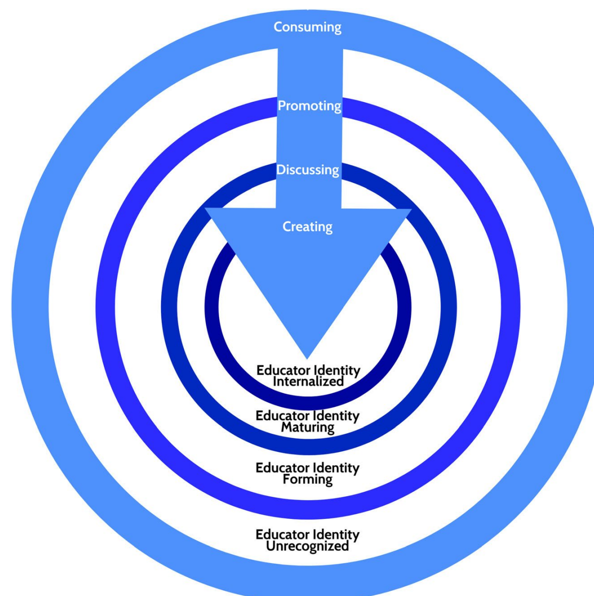
Time is reported as the limiting factor for all preceptors, so efforts to make CoP more efficient and accessible to all preceptors may include exploring virtual platforms for their CoP (Burt et al., 2021; Choo et al., 2015; Delver et al., 2014; Johnson, 2001; Luo et al., 2020). Virtual CoP supports groups who may be separated by geographical location or time zone, and utilizes network technologies to support members to collaborate and communicate with one another (Johnson, 2001). To properly set up virtual CoP, one must scaffold technical support and use of technology with the members, and consider use of multiple modalities such as email, asynchronous and synchronous discussions. While the benefits of virtual CoP solves the issue of separation by location and time, virtual CoP may bring up other issues such as lack of urgency in responses by the members, cultural differences, or even withdrawing from participation (Johnson, 2001). The lack of face-to-face interactions may be an advantage in removing traditional group norm behavior such as voice, tone, visible reactions or disapprovals, but some propose that an initial face-to-face meeting between members is still essential to develop the rapport before they engage in asynchronous virtual interactions with one another (Johnson, 2001).

Virtual CoP platforms, including use of social media, has been tried as a solution for busy CEs who may be separated geographically to building educator identities and networking opportunities (Dzara et al., 2021; Luo et al., 2020; Zournazis & Marlow, 2015). Preceptors have reported preference for Twitter as the platform of choice to share scientific information and build CoP for educators in the academic medical setting (Choo et al., 2015), and use of smartphone apps and/or social media as their way to receive information (Burt et al., 2021; Luo et al., 2020).

Dzara et al (2021) provides an intersection model of virtual CoP and educator identity framework. The authors argue that while CoP is integral to professional identity formation for educators, it can be challenging to engage with such communities. With the use of social media, virtual CoP can be created and implemented with health professions educators. Twitter is the platform of choice to share scientific information and build CoP as well as increase engagement. Forty-eight educators participated in six focus groups and completed questionnaires about frequency of and comfort in social media use. Qualitative analysis revealed three themes: 1) challenges to engagement, including juggling commitments and feeling overwhelmed, 2) benefits to joining a community, including staying informed and sharing scholarship, and 3) strategies to encourage inclusion, including tailored training and institutional champions. The authors offered the intersection of virtual CoP and educator identity model (see Figure 4), where the more the preceptors consumed, promoted, discussed, and created social media with other preceptors within the virtual media, the stronger their educator identities formulated and become internalized. They have more opportunities for collaboration, mentoring, and networking. The authors offered five recommendations to make social media more engaging for health care professionals: 1) encourage preceptors of all levels to engage with others about precepting skills, 2) champion social media initiatives to share information and training, 3) form CoP for preceptors with shared interests, 4) encourage novice preceptors to engage with social media, and 5) assist novice social media users through editing their post prior to sharing publicly.

Figure 4

Intersection of Virtual Communities of Practice and Educator Identity: a Proposed Model (Dzara et al., 2021)



Others have explored the use of social media, with Luo et al (2020) providing a systematic review evaluated research around use of social media for professional development across professions. Five of the 23 studies involved medicine, and Twitter remains to be the most utilized platform (11 out of 23 studies). The authors found the use of social media-supported professional learning networks and CoP to have the potential for contributing to professional learning, but maintaining faculty participation and engagement, as well as having ability to navigate within the social media space remain to be a challenge.

Lastly, Zournazis & Marlow (2015) performed a pilot project regarding the implementation of video conferencing forums for registered nurse (RN) preceptors in rural and non-traditional setting in Tasmania. There continues to be a tension between the need to balance service delivery versus the learning, assessment, and supervision of

students. The purpose of the evaluation was to establish whether video conferencing met the requirements of preceptors' understanding of learning and teaching requirements during students' professional experience placement. While social software such as Twitter enhanced the development of CoP for nurse preceptors who can network with others who are precepting, the authors found that the main barriers to participation included preceptors' workload pressures and the need for organizational support.

Tips for implementing a CoP for faculty development

Li et al (2009) suggests identifying a facilitator to promote CoP networking and activities, to enhance formal and informal interactions among the members who are both novices and experts, use technology to facilitate communication across members at all locations, and establish organizational infrastructures to promote knowledge uptake for members. Carvalho-Filho et al (2020) add that communities of practice (CoP) for faculty development are an effective and sustainable approach for knowledge sharing and management, as well as implementation of best practices for health professions education. The authors offer 12 tips for implementing a community of practice for faculty development based on a comprehensive literature review and the authors’ experiences: 1) gather a core group to launch the process, 2) articulate the goals and value of the CoP, 3) start with a specific problem-oriented task or project, 4) keep the CoP open, 5) intentionally invite members with expertise and fresh ideas, 6) choose a facilitator, 7) make it worthwhile for members and the institution, 8) work to ensure institutional support, 9) promote sustainability, 10) communicate success, 11) go online, and 12) evaluate the CoP (de Carvalho-Filho et al., 2020).

Summary of the Literature

Majority of the literature around preceptor identity formation is from medicine or nurse practitioner education, rather than post-graduate NP residency programs. Additionally, most of the literature is based off of academic settings rather than from the community clinic setting. The literature sets the stage for how clinician educators form and manage their multiple identities, and the impact of their experience based on their CE identity; however, there is limited knowledge regarding how outside factors such as workplace culture, hierarchy, and interpersonal politics impact their CE identity formation. There is a wide variety of literature discussing the tension with multiple identities and the challenges faced by the clinician educators. Additionally, role transition is reported to be influenced both positively and negatively by various intrinsic personal factors and organizational factors. Faculty development and preceptor competencies has mostly been provided for those in academia, with a need for those in the community settings.

Literature around preceptors of color highlights the importance of learning more about the needs and experiences of preceptors of color, as there has been limited resources provided and they tend to feel isolated. Some of the inequity starts during their professional training, with gender and racial inequality reproduced in professional schools. Creating a community and providing mentorship has shown to have beneficial effects for faculty of color in academic institutions. Not much is known about support for preceptors of color in the community.

Community of practice (CoP) literature shows benefits in supporting a sense of belonging for CEs as well as sense of collective identity and shared purpose. However, CoP for community NP resident preceptors has not been reported. Challenges in creating and sustaining CoP were also reported. Virtual CoP has been explored to overcome the challenges, but more is to be learned especially for use across organizations.

The results from the literature review helped to inform the methodology for this qualitative thematic analysis study, with areas to explore further with the NP resident preceptors from the community clinics, compare their experience of CE identity formation, role expansion, and community of practice with what is reported in the literature, as well as explore new areas of understanding of their experience. Additionally, given the inequity between experiences of preceptors, it is important to explore the intersectionality of race and gender for preceptors in these experiences, to continue to diversify the preceptor pool.

Chapter Three: METHODOLOGY

Restatement of Purpose

The purpose of this descriptive qualitative reflexive thematic analysis study is to examine the needs and lived experience of community-based clinicians who precept NP residents.

Research Questions

The questions of this qualitative study are focused on NP residency preceptors in Federally Qualified Health Centers (FQHCs).

1) How do preceptors perceive their preceptor identity formation process? How do race and gender shape this process?
2) How do preceptors perceive their role expansion process? How do race and gender shape this process?
3) How do communities of practice shape preceptors' identity and role expansion process? What role do race and gender play in communities of practice?

These questions matter because there continues to be a need for community-based preceptors who can mentor post-graduate NP residents to guide their transition to practice as new providers in FQHCs to serve the population with complex health care needs. But preceptors do not generally receive training nor have adequate support especially in community-based settings (Bazzell & Dains, 2017; Copeland, 2020; Drowos et al., 2017; Graziano et al., 2018; Kesten & El-Banna, 2021; Starr et al., 2003). Preceptors report

limited time to teach and lack of time to attend preceptor development trainings (Drowos et al., 2017; Graziano et al., 2018; Kesten & El-Banna, 2021). Preceptor trainings alone also do not contribute to preceptor identity formation and role expansion (Cantillon et al., 2019; Sabel et al., 2014; Sklar, 2016). Thus understanding the preceptors' lived experience can contribute to better design of preceptor support and development. Community of practice (CoP) has shown benefits in creating support for members who share same interests, and virtual CoPs have the potential of bringing together clinicians across different community-based clinics to offer the support and development needed for clinicians to expansion to effective CEs (Cantillon et al., 2016; Cruess et al., 2018). CoP may be a feasible model to bring together preceptors for their identity formation and create a social network for learning. Lastly, preceptors may experience impact from intersectionality of race and gender, which may influence their role identity and role expansion, as well as overall engagement with other preceptors in CoP. Both CoP and intersectionality can help inform the creation of the interview guide and theme formation from the data. See Figure 2 for the areas to explore with preceptors in this study.

Research Design

Qualitative descriptive study using reflexive thematic analysis

This qualitative study incorporated a descriptive design with reflexive thematic analysis to understand the community preceptor's lived experience in becoming a preceptor, with understanding of factors that impact their forming of the CE identity and their role expansion from clinician to CE, including the impact of intersectionality of race and gender to their experience. A theme is defined as a "patterned of shared meaning

organized around a central concept" (Braun & Clarke, 2022, p. 77) and reflexive thematic analysis allows the researcher to develop organizational and classification labels to describe the data collected, as well as further interpret the meaning of the data, while incorporating a critical reflection of the researcher's role and research practice and process (Braun & Clarke, 2022; Kiger & Varpio, 2020). In another words, thematic analysis can be "an essentialist or realist method, which reports experiences, meanings and the reality of participants, or it can be a constructionist method, which examines the ways in which events, realities, meanings, experiences and so on are the effects of a range of discourses operating within society" (Braun & Clarke, 2006, p. 81). Additionally, thematic analysis can also be in between essentialist and constructionist, as a "contextualist" method, to "acknowledge the ways individuals make meaning of their experience, and in turn, the ways the broader social context impinges on those meanings…" (Braun & Clarke, 2006, p. 81). Given not much is known about the experience of preceptors who mentor post-graduate NP residents as well as factors that impact the preceptors' lived experience, thematic analysis allows the researcher to identify themes from the interviews, irrespective of the number of times the particular idea or theme emerges in the data set (Braun & Clarke, 2006).

Affordances and critiques

Reflexive thematic analysis has many benefits, including being flexible for the type of research questions to be answered (ranging from personal experiences to broader constructs), the type and volume of data and documents examined, the frameworks used, and even the choice of inductive (data-driven) or deductive (theory-driven) analysis (Braun & Clarke, 2022; Clarke & Braun, 2013). The different analysis approaches "are

not mutually exclusive, and often they reflect points on a spectrum…rather than binary choices" (Braun & Clarke, 2022, p. 9), including between inductive versus deductive analysis. Thematic analysis is particularly good for examining the perspectives of different research participants, searching for common and/or shared meanings and differences, and generating unanticipated insights (Braun & Clarke, 2006, 2022; Clarke & Braun, 2013). However, with the great flexibility in multiple aspects of the research comes the challenge for researchers to focus in particular themes and/or theoretical frameworks for analysis, and having inconsistency or lack of coherence while developing themes (Clarke & Braun, 2013; Holloway & Todres, 2003). In reflexive thematic analysis, the researcher's subjectivity is essential to the process, thus researchers must maintain consistency in their decision making throughout the study, including keeping a clear audit trail and reflexive journal showing their subjectivity and rationale for the decisions made and their thoughts, to show coherently the study's empirical claims (Braun & Clarke, 2022; Holloway & Todres, 2003; Nowell et al., 2017).

Study Setting/Context

The study took place within the East Bay Community Health Center Workforce Expansion Project Consortium, aka East Bay Consortium NP Residency Program, across four Federally Qualified Health Centers (FQHCs) in Alameda County: LifeLong Medical Care, Tiburcio Vasquez Health Center, Bay Area Community Health, and La Clinica de la Raza. The Consortium is funded by a four-year Health Resources and Services Administration (HRSA) Advanced Nursing Education-Nurse Practitioner Residency training grant, to train a total of 48 Family Nurse Practitioner (FNP) Residents over the course of the grant (12 residents per year for 4 years). The Program is led by a director

which in 2021 transitioned to two Co-Directors, with clinic site leads from each of the participating FQHCs. The Co-Directors are responsible for the overall program implementation, NP residency curriculum, and preceptor recruitment and training in partnership with University of California San Francisco (UCSF) School of Nursing faculty. Site leads are employed by the specific FQHC and serve as a liaison between the Co-Directors and the preceptors. Site leads have a dual role in serving as a preceptor for NP residents and assist in management of the NP residents and preceptors at their own site.

The NP Residency program is a year-long post-graduate training program for new graduate NPs, to prepare them for transition to practice in underserved communities providing care that reduces health disparity and improves community health. NP residents receive didactic and clinical training across over 60 primary care clinics within the FHQCs, under the mentorship of interprofessional clinicians who serve as preceptors. These FQHCs are ideal for the study as they employ over 120 primary care providers who are recruited to be preceptors for the NP Residents for the training program. The FQHCs, described in more detail in Table 1 below, are dedicated to serving low-income ethnically and racially diverse communities with primary care, specialty, and dental care services, and serve as training grounds for future primary care providers to meet the needs of diverse, underserved communities.

Table 1

East Bay Consortium NP Residency Program FQHC and Characteristics (LifeLong Medical Care, 2021; Tiburcio Vasquez Health Center, n.d.; Bay Area Community Health, 2020; La Clinica, 2020).

FQHC Name and Website	Characteristics
LifeLong Medical Care https://lifelongmedical.org/	• Serves as the primary FQHC overseeing the NP Residency Grant

FQHC Name and Website	Characteristics
	• Serves over 52,000 underserved individuals with complex health care needs per year • Has education mission with a new Family Practice Residency Program (for physicians).
Tiburcio Vasquez Health Center https://tvhc.org/	• Serves over 28,000 individuals per year • Majority of patients served (74%) are Latino
Bay Area Community Health https://bach.health/	• Served over 75,000 individuals in 2020 • Majority of patients served (53%) identified as Latinx/Hispanic
La Clinica de la Raza https://laclinica.org/	• Served over 79,000 individuals in 2020 • Majority of patients served (64%) identified as Latino/Hispanic • Educational mission • *Joined in year 3 of the NP Residency program and therefore not included in all of the historical data from the first 2 years of the NP Residency Program*

Preceptors at East Bay Consortium NP Residency Program

As part of the NP Residency program, interprofessional clinicians (NP, clinical nurse midwives, physicians, or physician's assistants) from within four FQHCs are recruited to serve as preceptors for the NP residents over the course of their 1-year residency program. Preceptors are expected to provide clinical supervision for 2 NP residents per clinic shift, by overseeing their clinical care along with assisting with their clinical reasoning and treatment planning for the patients seen. They are expected to observe their clinical skills and review the documentation in the electronic medical record system. Preceptors are also expected to provide both verbal and written feedback evaluations to the NP residents. For skills training, preceptors receive an orientation at the start of each Residency year, as well as on-going preceptor development workshops with topics related to clinical teaching skills. Preceptors receive monthly e-newsletters and are invited to participate in the monthly synchronous "Preceptor Corner" via Zoom to discuss precepting topics and challenges. Lastly, preceptors are evaluated by NP residents

three times per year on their teaching skills, based on established community preceptor competencies. All preceptors have access to the UCSF Teaching Observation Program where they receive feedback from a trained observer regarding their clinical teaching skills.

Current or past preceptors for the East Bay Consortium NP Residency Program at the four FQHCs were recruited for the study. They represent multiple professional backgrounds including NP, clinical nurse midwife (CNM), physician (MD), and/or physician's assistant (PA). Historical data show that almost half of the preceptors are non-White. At the preceptor orientation in September 2021, preceptors report having mostly been in practice for 2-5 years, with an even distribution of those new to precepting as compared to those who have precepted for 2-5 years and those for more than 6 years.

The community-based preceptors do not yet mirror the demographics of the population they serve; however, they are experts in providing care to remove health inequity and meet the needs of their patients and communities. They are generally under high pressure for clinical productivity, and have multiple competing demands for their time, whether it is with patient care, patient care coordination, patient advocacy, charting with electronic medical recording system, and/or ongoing continuing education. Majority of the preceptors report they have not received training on how to teach, nor have they been given time in the past to attend preceptor development workshops. They still may or may not receive additional administrative time off to engage in their own development as a CE. Baseline data in 2021 showed over 50 preceptors have engaged in preceptor development workshops offered through the UCSF Center for Faculty Educators, with majority of the preceptors having completed 1-2 workshops. Topics within the Clinical

Teaching workshops address the clinical teaching competencies and are listed in Appendix A.

The East Bay Consortium NP Residency Program FQHC sites are ideal for this study given that they are home to interprofessional community-based clinicians who are expanding to CE roles, serving as preceptors for NP residents caring for diverse, underserved communities. The preceptors are not affiliated with academic institutions and can provide insight to the experience of community-based preceptors. The advantage is that all the preceptors have accepted the role of CE to the NP residents. The limitation, however, is that the clinicians are employees of each individual FQHC, who then can determine how the precepting takes place, including amount of protected time (away from patient care time) for precepting, as well as time to attend preceptor development workshops or time to engage in virtual CoP. There is not a standardization on how the clinical teaching takes place across sites. In general, each of the FQHCs functions separately and there is a lack of communication between the FQHCs, and occasionally even lack of standardization between the sites within the same FHQCs. Sites are also separated geographically making collaboration even more challenging. The sites used Microsoft Teams as their shared communication platform for the virtual CoP in addition to (or in lieu of) the standard email communications.

Participants

Twelve preceptors consented to the 1-hour interview via Zoom. See Table 2 for their demographics. There is a mix of professions with majority of the preceptors being nurse practitioners (NP), and one nurse-midwife (CNM) and one physician (MD).

Majority of the preceptors are females with two male preceptors. There is a mix of racial backgrounds with more preceptors of color than Whites. There is also essentially equal representation from all four Federally Qualified Health Center (FQHC) organizations, with five preceptors holding a leadership role within the NP residency program either as a site lead or program co-director. Majority of the preceptors have 5-9 years of experience as a clinician, and majority have precepted in the NP residency program for 1-4 years. One-third of the preceptors also had additional years of experience precepting other levels of learners. For this study, NP residents are also referred to as NP fellows as the program updated their name during year 3 of the grant.

Table 2

Preceptor Demographics

ID	**Profession**	**Gender** (self-identified)	**Race** (self-identified)	**Site**	**Leadership Role**	**Years as Clinician**	**Years as NP Residency Preceptor**	**Years as Preceptor for any learners**
0002	NP	F	Multiracial	A	Y	1-4	1-4	1-4
0007	NP	F	White	B	N	5-9	1-4	1-4
0680	NP	F	Multiracial	C	Y	5-9	1-4	1-4
1115	NP	M	White	D	N	1-4	<1	5-9
2323	NP	F	Asian	A	N	5-9	1-4	1-4
2407	NP	F	Hispanic	B	N	5-9	1-4	1-4
4389	NP	F	White	B	N	>15	1-4	>15
4775	NP	M	Asian	A	N	5-9	1-4	1-4
6555	NP	F	Multiracial	C	Y	10-14	1-4	5-9
7911	NP	F	White	D	Y	5-9	1-4	5-9
8546	CNM	F	White	C	N	>15	5-9	5-9
8646	MD	F	Multiracial	C	Y	5-9	5-9	5-9

NP: Nurse Practitioner; CNM: Clinical Nurse Midwife; MD: Medical Doctor; F: Female; M: Male

Data Collection

This study utilized semi-structured interviews to answer the research questions for community-based preceptors. Qualitative methodology utilizes interviews of participants

who are assumed to have common information, and allows for flexibility for rephrasing of questions as it applies to each participant as well as follow up or probing questions (Creswell & Poth, 2018). Interviews also allow the researcher and participant to construct knowledge together through their interaction (Creswell & Poth, 2018).

Recruitment was done in two steps via email. A generic email invitation was sent via Microsoft Outlook and Microsoft Teams to all past and current NP residency preceptors (approximately 50) from all four FQHCs to invite them to participate in the study. The researcher also sent a targeted personalized follow up email invitation to preceptors who were trained at the most recent preceptor orientation held in November and December 2022, as well as those who are preceptors of color, preceptors from outside of the NP profession, and those who are male, for purposeful stratified sampling across all 4 FQHCs, with varied race and gender for representation in the study (Creswell & Poth, 2018). The researcher anticipated about 8-10 preceptors across the FQHCs to consent to the interview. However, the last 2 preceptors who responded were the only male preceptors of the group and the researcher felt it was important to include their voices in the study, so sample size was expanded to 12 participants. Preceptors responded promptly after the personalized invite and all 12 interviews were scheduled and completed via Zoom within 2 weeks. Data saturation is met when "new data tend to be redundant of data already collected. In interviews, when the researcher begins to hear the same comments again and again, data saturation is being reached… It is then time to stop collecting information and to start analyzing what has been collected" (Grady, 1998). However, in reflexive thematic analysis, the focus is also on "the richness of the dataset

and how that meshes with the aims and requirements of the study" (Braun & Clarke, 2022, p. 28).

Instrumentation

The self-designed interview guide was guided by initial broad themes to answer the research questions, based on existing knowledge from the literature review regarding preceptor identity formation, role expansion, and sense of community (see Appendix B). The interview guide consists of baseline demographic questions along with 6 additional open-ended questions designed to learn more about preceptors' perception of identity formation and role expansion, as well as their experience as NP resident preceptor. Follow up prompts are included as well as general "tell me more about that" to stimulate participants to further expand their responses. Interview questions as they correspond to Research Questions are listed on Table 3. Interview questions was given to a content expert for field test prior to implementing with preceptors.

Table 3

Research Questions and Interview Questions Corresponding Matrix

Research Question	Interview Question
Demographic information: profession, organization, years in practice, years as preceptor for learners and NP residents, race and gender	Section A
Question #1: *How do preceptors perceive their preceptor identity formation process? How do race and gender shape this process?*	1, 3, 4
Question #2: *How do preceptors perceive their role expansion process? How do race and gender shape this process?*	2, 3
Question #3: *How do communities of practice shape preceptors' identity and role expansion process? What role do race and gender play in communities of practice?*	4, 5
Closure	6

Answers from the interview provided insight to the preceptors' experience in role expansion and identity formation, as well as sense of community, and any additional support needed. Participants used the last 4 digits of their cell phone as their unique participant number. The interviews were offered to be conducted in-person or via Zoom based on participant availability and preference and lasted for approximately one hour. All participants chose to be interviewed via Zoom. The interviews were recorded and transcribed via Zoom. Transcription was offered to be reviewed and shared with the preceptor for member checking of any corrections, and themes were shared with participants.

Data Analysis

The researcher conducted the thematic analysis in six phases, as recommended by Braun & Clarke (2022). Phase 1 included reviewing transcripts from the interviews to be familiar with the data. Phase 2 proceeded to coding, which is done solely by the researcher. The researcher anonymized the data then identified "segments of the data that seemed interesting, relevant, or meaningful for the research questions" (Braun & Clarke, 2022, p. 35). Dedoose software was utilized primarily for applying codes and exporting of a codebook. Code labels were generated to provide meaningful descriptions to the codes, organized as semantic or latent (Braun & Clarke, 2022). While semantic themes address issues on the surface, or more explicit meanings from the data, latent themes can address underlying meanings, assumptions, or ideologies (Braun & Clarke, 2022). The researcher is a person who is immersed in clinical education and preceptor development, including for NP residency programs, thus very interested in the lived experience and perspectives of the NP residency preceptors. The researcher analyzed the data through

coding, as someone with expertise in the program and one who designed the preceptor development program in this NP residency program. Phase 3 generated initial themes without a prior hypothesis (inductive) as clusters of codes share "a core idea or concept, which might provide a meaningful answer" (Braun & Clarke, 2022, p. 35) to the research questions. Themes describe "broader, shared meanings" (Braun & Clarke, 2022) generated based on the study data and questions, as well as the researcher's knowledge and insights. Phase 4 included reviewing the themes in relation to the codes extracted as well as across the entire data set. A thematic map of the analysis was generated in Jamboard to tell the story of the pattern of shared meanings related to the dataset (See Figure 5). The inductive analysis allows the data to drive the understanding of the themes that emerge from the study and for constant comparison (Creswell & Poth, 2018; Young et al., 2020). The analysis steps involved going back and forth between phases as needed as a iterative and reflective process, and develops over time (Braun & Clarke, 2006; Nowell et al., 2017). The researcher also considered the relationship between the themes, existing knowledge, and/or practice in the field, and the wider context of the research Analysis memos were recorded along the way. Phase 5 involved ongoing analysis to refine the specifics of each theme, generating clear definition and names for each theme. Significant compelling sentences and/or quotes were highlighted, context or setting were described, and the essence of the phenomenon was described (Braun & Clarke, 2022; Creswell & Poth, 2018). The final Phase 6 included a scholarly report of the analysis to address the research questions and literature (Braun & Clarke, 2022). While participants addressed many aspects related to their precepting of learners, both within and outside of

the NP residency program, as well as what they do during clinical teaching, the analysis portion was limited to the scope of the three research questions.

Figure 5

Thematic Analysis – Sample Jamboard Images for (A) "Preceptor Identity Formation" and (B) "Community of Practice"

(A)

(B)

Key to the squares: Green: facilitating factors; Yellow: limiting factors; Blue: context; Orange: participant quotes; Pink: researcher reflection and analysis

Human Subject Protection

Approval from both University of San Francisco Institutional Review Board for Protection of Human Subjects and University of California San Francisco Institutional Review Board were obtained prior to the start of the study. Written and verbal consents were obtained from the participants. Participation in the study was optional and all participants had the right to withdraw from the study at any time. Participants were not compensated. All electronic data, including recordings of the interviews, transcripts, and researcher memos were stored in encrypted folder on Box.

Positionality of the Researcher

This study combined my experiences and perspectives as a former Pediatric Nurse Practitioner (PNP) student, a PNP clinician of 24 years, a preceptor of 18 years, a nursing faculty of 16 years, an administrator of 10 years, and an interprofessional preceptor training developer of 8 years. I am also a preceptor of color having worked with a multitude of interprofessional colleagues and learners from different backgrounds, within a rather white-dominant health professions culture. I have served as the faculty recruiting and coaching interprofessional preceptors on how to achieve balance in their teaching and clinical practice. In the last 7 years, I have strengthened our academic clinical partnerships by working with multiple FQHC consortiums in Northern California to support their education mission and preceptor development in the community setting.

I am serving as PI through a sub-contract with this HRSA Nurse Practitioner Residency grant, where our team designed and implemented the preceptor program with the four FQHC for four years. I worked with the NP Residency director(s) to implement the virtual CoP within these FQHCs. While this may help in that the participants were familiar with my name and role, I am still an "outsider" to the FQHC organizations. While I can understand preceptors' perspectives, I may not understand the institutional culture from each of the four FQHCs. Preceptors may have held back on what they are willing to share with me in fear of being judged or rated poorly by their own institution or colleagues. I hope that through our longitudinal work together that I am seen less as an outsider, and preceptors are more willing to collaborate due to the established trusting relationships. On the other hand, preceptors may also have felt extremely comfortable in sharing details that may not be appropriate for the study reporting, and I need to consider how to manage those data sets.

As a Chinese American PNP who lives a bicultural life, I embrace the two cultures that I grew up with, and I provide clinical care in English, Spanish, and Chinese to my patients at the safety net hospital in San Francisco. I am committed to making sure immigrants have access to the same high-quality care that the native English-speaking patients have. There is a current shortage of clinicians and preceptors of color, and students of color also recognize this gap which negatively impacts their experience in the graduate program. I am often the only Chinese NP in the room, or even the only person of color. Thus to address this, we need more preceptors of color who are well trained to precept students of color who then become clinicians of color to serve the communities they come from. Through active listening during interviews and/or focus groups, I hope

to bring out the voices of other preceptors of color in the community, and critically analyze our findings from this study to recognize their contribution as well as better support their role and development.

Chapter Four: FINDINGS

The purpose of this qualitative thematic analysis study is to examine the needs and lived experience of community-based clinicians who precept nurse practitioner (NP) residents. This chapter shares summaries and direct quotes of participant responses to the three research questions, with a separate summary at the end related to the intersectionality of race and gender:

1) How do preceptors perceive their preceptor identity formation process?
2) How do preceptors perceive their role expansion process?
3) How do communities of practice shape preceptors' identity and role expansion process?

Finally, participant responses regarding intersectionality of race and gender to their identity formation, role expansion, and experience in communities of practice (CoP) are summarized and supported with direct quotes.

Culture within the FQHC Setting

Preceptors discussed the unique nature of the FQHC setting, where they are serving underserved patients with high medical and social needs and are faced with limited resources and significant clinician and staff shortages. They have huge pressures regarding their clinical productivity. It is an environment that is often filled with high stress with a high clinician attrition rate. Preceptor 4389 describes the isolation they feel due to the high demands of the workload: “We just don't really see each other or don't build those relationships like you're talking about in medical care. We are just managing to hold it together…”. Preceptor 0680 also shares what it takes to make it in FQHC as: “…you have to come in so passionate because the long hours (and) the challenging work

are not what cultivate passion… we never are at max capacity of providers…”. Despite the challenging nature of the work, each of the clinicians are committed to their work in FQHCs.

More importantly, the culture at each FQHC sets the tone for expectations to precept, although expectations vary from site to site even within the same FQHC organization. Some sites are known as teaching sites, and clinicians who have an affinity to teach are naturally drawn to those sites. They are expected to precept at those teaching sites. Preceptor 8646 shares how they self-selected the clinic because of the teaching mission:

> I ended up at my clinic because it was kind of billed as a place where there's always teaching happening, and it feels okay to ask questions there…the fact that everybody at our clinic is part of this... it's just ingrained in our clinic…

By being in a site that has other preceptors, some clinicians may be more likely to start precepting. For example, preceptor 0007 shares: “They (my colleagues) were precepting, and so we would just talk…they were probably the ones that encouraged me to go ahead and start with UCSF students...”. Thus the teaching-focused culture of the site may facilitate the pipeline of preceptors at that site.

Other sites, however, may only have a single preceptor who precepts in isolation. And often preceptors do not communicate across sites (this is discussed in more detail under Question 3: Community of Practice). Preceptor 4389 shares the mixed feelings regarding being the only one who precepts: “I feel more like I'm providing this experience in isolation more than anything else, which is not a terrible thing, either…”.

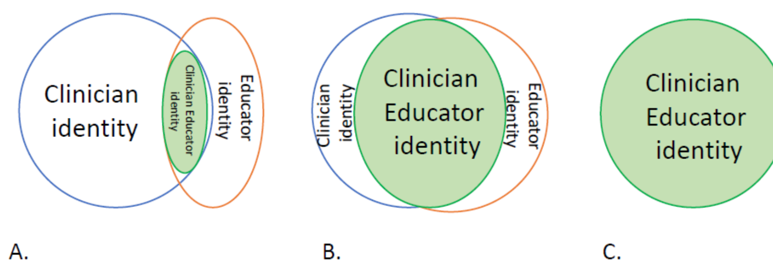
Research Question #1: How do preceptors perceive their preceptor identity formation process?

Multiple identities: clinician, educator, and clinician educator

The first area to explore is the clinicians' sense of identity as a clinician educator (CE), which influences their behavior, motivation, and sense of belonging within the group of CEs/preceptors. All the participants have a strong clinician identity and are committed in providing excellent quality care to their patient population. There are some preceptors who had previous roles as educators, thus they have some pre-existing educator identity formed that can be overlapped to their clinician identity. See Figure 6 of the different degrees of clinician and educator identity overlap. For most, the overlap is quite small; their primary identity and accountability remains that of a clinician, and they prioritize clinical care over teaching (See Figure 6A). There are some preceptors who never even considered themselves as teachers, and thus do not have a clinician educator identity. Preceptor 8546 specifically states: "My first responsibility is to my patients…". Preceptor 2407 also feels that they don't have time to do extra things like precepting: "…primary care is hard to do...our systems at our work of employment are not always designed for us to be able to accommodate extra things…". Preceptors say they sometimes miss being in the provider role without a learner with their patients; there is a sense of lack of satisfaction if they are simply guiding the learner rather than doing direct care as a provider.

Figure 6

Overlap of Clinician and Educator Identities



As participants became preceptors, some have adopted more of the CE identity (See Figure 6B), and in fact, are proud to be known as the expert within their organization. They feel competent with their teaching skills and are proud of their ability to teach unique knowledge and skills to their trainees. They feel the teaching identity brings them joy, provides job satisfaction, and adds variety to their job. Preceptor 0007 truly embraces the CE role and shares: “There's a lot of joy that comes from it, and I think that the richness is the return. And the satisfaction with your job. That kind of seeing someone else grow is a really wonderful experience.”. When asked if they would continue to precept, Preceptor 0680 even adds: “I love it. It's the highlight of my week.”

Despite the satisfaction from teaching, many preceptors still see their CE role compartmentalized to just four hours per week. Some also only see themselves as “mostly just doing back-up” (Preceptor 4775) and does not identify themselves as a CE. Preceptor 4775 further explains his perspective:

…I never really imagine myself kind of in this position. I'm always willing to help out. But I still feel that you know there's other people with better teaching skills…Well, a

lot of it is just a self-confidence issue, you know, not wanting to take that on more in a more formal role...

Those who are part-time clinicians have an even harder time embracing the CE role as they are often trying to get their clinical tasks done and do not have time to engage with the development of the preceptor role.

Interestingly, one preceptor sees their role as merged, as teaching has always been expected in their profession (medicine) and training (See Figure 6C). Preceptor 8646 shares: “It's funny that you refer to it as that dual identity, because... I think it just seems like that's all one thing…”.

Research Question #2: How do preceptors perceive their preceptor identity formation process?

Another aspect to explore is the preceptors’ experience in expanding their role from clinician to that of CE, for example how clinicians got started in precepting, what was the expectation of them in this new role, how did it differ from their usual role, and what they needed to do to prepare to function in this new role. By expanding their role to CE, they are functioning like a mentor, and have dedicated time to precept NP residents during clinic time, without a patient schedule of their own. They are responsible to help the NP resident complete chart review prep, navigate through differential diagnosis, physical exam skills, and treatment planning. They also assist NP residents in accessing other consultations when needed and guide them in documentation. They are also responsible for completing NP resident evaluations to assess their progress in meeting the competencies within the program. Those who expand to leadership roles add on the

responsibility of recruiting and developing preceptors, establishing NP resident schedules, as well as ensuring the quality of the NP residency training. Majority of the preceptors first started precepting learners simply when they were asked, either by students, faculty, colleagues, or supervisors. One preceptor mentioned they were "just thrown in" (Preceptor 0002) into the role, and a few began as a "back-up" (Preceptor 8646, Preceptor 7911, Preceptor 0680, Preceptor 4775) preceptor when the main assigned preceptor was unavailable. Four themes emerged from the data: 1) benefits of role expansion to CE, 2) expectations and preparation to become CE, 3) tension in balancing all of their roles, and 4) compensation for the added role. All the preceptors express an interest and commitment to continue precepting NP residents and to contribute to the future of the profession. Preceptor 0007 shares the following:

> I would continue just more for the joy of teaching and for the joy of knowing that I'm training up another great provider, and they able to share my knowledge and skills that I've gained over the years.

Benefits of role expansion to clinician educator

Clinicians who expand their role to CE express a sense of pride being recognized and valued as an expert clinician and teacher within their organization. Preceptors appreciate having the varied tasks to their job beyond just patient care and feel a new sense of energy. In fact, they feel that there is even a decrease in their workload as they have dedicated time to simply precept NP residents, without the pressure of their own patient care productivity. They also appreciate that precepting helps them to stay current with practice guidelines and best practices as they learn from and with their learners. A

few preceptors have expanded further into their CE role by taking on leadership role within the NP residency program or within the organization as a preceptor to new NPs (who are not in the NP residency program). Those who took on leadership roles express a significant growth and confidence in their ability as an educator and are committed to learning more about how to develop other preceptors. Preceptor 8546 shares the following:

> I don't have any productivity expectations when I'm precepting and overall I think that precepting has…increase the perception that I am a valuable contributor to the organization, not just on my own also is the preceptor, so I think overall it has benefited me in the organization…It's a valued role here, right?

Expectations and preparation

To fully expand their role into that of a CE, preceptors need to know the expectations associated with the role, and how to prepare for the new role. Many express that the NP residency program provided clear expectations with a clear structure within the program, and the program leadership is available to support them or to answer their questions. However, there was a difference in opinion about the adequacy of communication from the program – some feel the communication was lacking while others say they do not have time to open another email in their inbox. A few of the preceptors completed a NP residency program themselves, so they feel prepared in knowing the role of the preceptor. They mention that the NP residency's clear structure is in contrast with their experience in precepting NP students where often there lacked clear objectives and expectations of them as preceptors.

While preceptors say the NP residency program has a better structure than their experience in precepting NP students, there remains much confusion about expectations of the NP residents, such as number of patients they should be seeing, or their ability to ramp up their independence and productivity. NP residents come from many different backgrounds and programs; thus, it is challenging for preceptors to fully know what they already know and what they need to learn in their rotation. Preceptors carry the sense of responsibility for the learners' education, and without clear expectations, preceptors do not know if the learners are developing appropriately during the rotation. Some sites do have regular meetings with the site leads to discuss learner progression and challenges.

Another set of expectations is related to the scope of the preceptor's role. Most of the preceptors describe their role with learners to include both support of their knowledge and skillset development, and equally important is to provide emotional support during this transformative time. There are preceptors who feel that the expectation to provide emotional support to learners is beyond their scope and should not be expected of them.

Preceptors also took some specific actions to prepare for their role expansion. All preceptors said they never had any formal training when they first started to precept learners, other than the orientation or clinical teaching workshops offered by UCSF as part of the NP residency program. Training for teaching skills is a big part of the preparation and is described under Question 3: Community of Practice section below. Many preceptors shadowed their colleagues who were already precepting learners, to see how precepting is done. Others built from their prior experience with their own preceptors while in training to adopt best practices and avoid ineffective behaviors as preceptors. Some preceptors do not feel they needed additional training beyond what they

already know prior to precepting. For those who are expanding to a leadership role, they also do not have access to leadership training to fully support their development into this expanded role, with skills to see the big picture across multiple sites, build relationships, negotiate multiple needs among various stakeholders, and troubleshoot problems that arise.

Lastly, some preceptors describe their hesitancy to expand further into the preceptor role due to uncertainty and lack of self-confidence about their teaching ability, especially since they rarely receive feedback about their teaching. While another reports that if they are no longer proficient at certain procedures themselves, they lose the confidence to teach it to a learner. Preceptor 4389 shares: "I probably have that kind of lack of self-confidence that I'm doing it the right way - my intent is to do a good job."

Balance and tension between multiple roles

The biggest challenge for preceptors as they expand their CE role is the tension in balancing between their 3 roles – as a clinician, as a preceptor, and as a family member. Due to the intensity of their clinical practice, and the variable workload related to precepting NP residents, as well as their own personal needs, they are often having to prioritize certain tasks while delaying other tasks. They find that precepting and the tasks related to precepting compete with their patient care tasks and/or personal time with their family. This may include needing time to develop into the role of a preceptor – such as time to access preceptor development opportunities (or even remember to sign up), time to fully work with learners using the teaching strategies learned, or time to engage with

other preceptors in the program to discuss concerns or teaching strategies. Preceptor 2407 further explains:

> The balance of being able to do your work, being able to have life outside of work, and then what do we do to be able to continue to feed that hunger for learning without feeling like this is something else I have to do, another burden…

Some are not willing to keep giving up more personal time to fit precepting tasks into their day, while others see it as an investment to the learner and to the next generation of providers. Preceptor 0007 finds value in making the commitment to invest in the training of the next generation of clinicians:

> I'm going to invest a little extra time here, and I'm going to stay until 7 0'clock until all their charts are finished and we're gonna leave together, and we're gonna debrief…It's an investment not just in the practice itself, but in having another student… another well trained clinician, and that for me is very valuable especially…

Similarly, for those in leadership roles, they have yet another role to balance. The risk of not maintaining clear boundaries between the different roles results in the likelihood of burn out, and therefore not able to serve as a good preceptor to the learners. On the other hand, preceptors who see themselves as just “back up” (Preceptor 4775) do not feel there has been a change in their role and thus report a lack of the tension in balancing these roles. Most importantly, preceptors appreciate the dedicated time set aside for them to precept, and to attend preceptor meetings and trainings for this NP

residency program. Without that protected time from clinical care, many express the precepting role would be unsustainable.

Compensation

Lastly, while preceptors express a commitment to continue precepting learners, they feel strongly that preceptors should receive additional compensation and recognition by the schools and/or the organizations for their overall added workload and responsibilities, otherwise clinicians will not want to continue precept learners. As mentioned earlier, preceptors in this NP residency program have dedicated time to precept, or to attend meetings and trainings in their role as CEs, in place of seeing patients directly in a clinic session. They do not receive additional compensation for this work as it is part of their paid position to precept NP residents as NP resident preceptors. Recognition as NP resident preceptor can be seen as a form of compensation as well. This is unique to the NP residency program, as majority of the time when preceptors precept learners, such as NP students, they do not have dedicated time to precept and are expected to see the same volume of patients within their clinics, and almost never receive dedicated time for meetings or trainings as preceptors. The precepting that occurs with NP students are on a voluntary basis and preceptors do not receive any additional compensation.

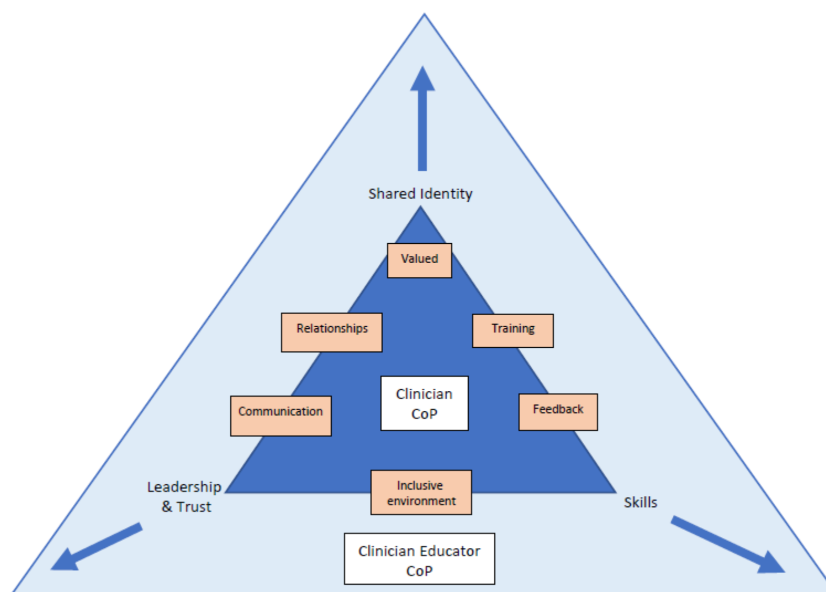
Research Question #3: How do communities of practice shape preceptors' identity and role expansion process

The third question explores preceptors’ formation of a community of practice (CoP) with other CEs, and how CoP shapes their identity formation and role expansion.

The three pillars of CoP are: 1) having a domain of common ground and/or identity, 2) community with a clear leadership and mutual trust, and 3) the practice of specific knowledge and skills that is shared among the members (Cruess et al., 2018). This study elaborated each of these CoP components within the NP residency preceptor community as preceptors expanded their role from clinicians to that of CEs. Preceptors show a strong CoP as a group of clinicians. Six factors emerged that impact the expansion from the clinician CoP to that of CEs: valued, relationships, communication, training, feedback, and inclusive environment**.** Figure 7 shows the factors to building of the CE CoP.

Figure 7

Community of Practice Model for Clinician Educators



Clinician CoP

As mentioned earlier, the clinician CoP seems to be in place as preceptors all hold a very strong clinician identity; they identify themselves as expert clinicians with clear goals and responsibilities within that role, and even new clinicians formed a network of their own. They immediately identify colleagues who are within their clinician CoP and identify an existing clear leader or leadership structure. Preceptors express a sense of trust among their clinician colleagues and especially know who to go to if they have questions and need clinical consult or support. Similarly, they have a very clear sense of their expectation as clinicians, including the knowledge and skills they share with one another. There is a clear structure on how they communicate with one another to share information, such as daily team huddles, or monthly provider meetings.

Clinician educator CoP

Clinician educator CoP, on the other hand, is not as strongly formed as the clinician CoP, if at all. Preceptors tend to default to the clinician identity and CoP when answering the interview questions and needed redirection to specifically talk about their role as preceptors. Preceptors tend to lack a shared identity with other preceptors. Preceptors identify the NP residency program co-directors and site leads as their leader related to NP residency program. They feel that they are well supported by the leaders of the NP residency program and has a degree of trust. Majority of the preceptors still identify their clinical skills as what they needed to know and what they needed to teach their learners. Some preceptors do acknowledge the specific teaching skills with a desire to learn more and practice more specific teaching skills with their learners.

Facilitating factors to expand to clinician educator CoP

Several themes emerged as facilitating factors to create, expand, or impact the CE CoP: valued, relationships, communication, training, feedback, and inclusive environment. Table 4 shows the facilitating factors in CE CoP.

Table 4

Facilitating Factors in Clinician Educator Community of Practice

Facilitating factor	Definition
Valued	CEs being valued by their organization and peers for being in the CE role with CE identity, and for their CE expertise; there is value placed in education and in CE CoP.
Relationships	The relationships CEs have developed with other CEs – may be from their past precepting relationship with preceptors or preceptees, and relationships with current preceptors and leaders within and across organizations. Opportunities available to foster and strengthen those relationships.
Communication	Frequent and routine communication between CoP leaders and members, or between members only, via synchronous and/or asynchronous methods, with a variety of platforms for communication. May be in-person or virtual. Supports communication across organizations.
Training	Available structured training for CEs to access professional development, improve teaching skillset and overall role development. May be in-person or remote, and synchronous or asynchronous.
Feedback	CEs to receive feedback from learners and colleagues regarding their clinical teaching skills. Provides validation of their skillset and offers opportunities to improve.
Inclusive environment	The CoP is welcoming and inclusive of members from diverse backgrounds, including different race, gender, and profession. Provides opportunities for CEs to engage within their comfort zone.

Valued

Preceptors who feel that they are valued within their site or organization for their teaching contribution were more likely to identify with the CE identity and engage with

the activities within a CE CoP. Preceptor 7911 shares how they also gained more confidence as CE once being recognized as a leader: "…being the lead has helped me become a developer of other preceptors…having confidence in my precepting skills and letting other preceptors know that I'm around as a resource…". Without having the CE identity, preceptors are least likely to have formed or engage in the CE CoP.

Relationships

Relationships with colleagues seem to be a strong facilitator of the CoP, whether it is within the clinician or the CE CoP. Preceptors report having strong, long lasting, and impactful relationships with their colleagues, though again, primarily in their role as clinicians rather than as CEs. Preceptor 0680 provides their experience in developing relationship with colleagues, including those who are also preceptors:

> ...such a wonderful place to work. I really love my colleagues. It's the thing that keeps us doing this challenging work... a lot of the preceptors are friends of mine at the clinic, so we go on walks. We talk, we share concerns...

The relationships go beyond geographical and organizational boundaries as preceptors identify strong lasting relationship with their own preceptors or preceptees, primarily to discuss clinical issues, but occasionally related to precepting. Preceptor 6555 shares "I still keep in touch with the 2 residents that I precepted when I was a clinic lead… they still ask for career advice and vice versa…". Similarly, Preceptor 1115 describes the lasting impact of having professional and personal relationship with their own preceptors:

> I have a lot of mentors who were preceptors, reflect on my experience connecting on that professional but also personal level and sharing in the experience the preceptors who I felt most connected to and have stayed with me…

Preceptors rarely have opportunity to develop relationships with preceptors from other FQHCs as they only have one-time exposure to each other at the online preceptor trainings which are limiting for meaningful relationship building. The site leads and co-directors of the program also develop relationships with the preceptors, though they are also challenged by the geographical separation and/or schedule conflicts to fully develop those relationships. Almost all preceptors are not able to identify a mentor for their CE role, nor know how to go about to develop a mentoring relationship. Positive relationships among the members of the CoP facilitated their engagement with one another within the CoP.

Communication

One of the facilitating factors to establishing trust and relationships within the CoP is communication with one another. As mentioned earlier, some preceptors feel they have adequate amount of communication with the leadership of the program, while others feel that they can use more communication especially around expectations of preceptors and NP residents. Preceptors rarely use the existing clinic huddles and/or routine provider meetings to discuss precepting issues. COVID has also impacted their ability to have informal communication with one another. Those in leadership also desire more direct communication with preceptors – currently they only have routine communication with site leads and rarely with preceptors directly unless there is an issue with the resident.

The co-directors are employees of the lead FQHC thus are not directly involved within the other 3 FHQC organizations, and do not have existing relationships with all members within the other FQHCs.

Preceptors agree that it would be nice to be able to talk to one another about common issues with NP residents (beyond just their own learner) and ask the "*what would you do*" scenarios as well as to share best practices for teaching. Despite having strong relationships with their colleagues in the same FQHC, preceptors resort to either only engaging with those who are conveniently on the same clinic schedule as them, or they may not interact at all with any other preceptors in the same FQHC due to their busy schedules. When they do interact with other preceptors, they rarely talk about precepting issues, and instead talk more about clinical issues with one another. Many report they precept in silo from other preceptors. A few preceptors do not feel the need to communicate with other preceptors since they precept different learners at different sites. Preceptor 0002 shares the following: "We all are fulfilling a different rotation for them so there isn't really much that we need to talk about…".

Another challenge is simply the lack of a practical platform for them to hold asynchronous communication with one another (instead of adding yet another meeting). Unlike the clinician CoP where providers communicate via email, text, and even in-person on casual walks, preceptors rarely go beyond face-to-face communication when they happen to see each other. None of the preceptors mention the existing ways that the NP residency program facilitate information sharing: the *SON Preceptor Portal* which in a website that contains resources for preceptors, the *Preceptor Newsletter* emails which some do not have time to open to read, nor *Microsoft Teams* for resource sharing and

messaging among the preceptors. One preceptor remembers the "*Preceptor Corner*" which was set up as a way for preceptors to come together once per month during lunch time via Zoom to have a time and a place to talk about precepting, creating their CE CoP across sites. The challenge remains the competition of time between their multiple roles.

Training

As mentioned earlier, none of the preceptors received any formal training on how to teach prior to the start of their precepting journey; rather they learn by shadowing others or developed their own skills and style as they went along. Preceptors who may not have formed the CE identity tend to say they do not need any additional training to be a preceptor, or a once-per-year orientation is sufficient. A few preceptors found trainings on their own on Youtube or other podcasts. Many preceptors access the clinical teaching workshops offered through the NP residency program, with preceptor orientation and the Teach for UCSF workshops with a range of topics from the Clinical Teaching Track (Appendix A). Preceptors feel the workshops were extremely helpful in teaching them step-by-step of the clinical teaching skills (such as the One Minute Preceptor to help with clinical reasoning, "SNAPPS" to help with for presentations, or delivering feedback conversations), and allowing them to practice through role play (though mixed feelings among preceptors about use of role play). Preceptors appreciate the dedicated time for them to develop their teaching skills to enhance their role as CE and want more structured training opportunities with other preceptors. Preceptor 7911 specifically describes the benefit of the training sessions: "I've enjoyed the trainings where we do get to engage with preceptors from the other sites and bring up common issues and kind of

share our experiences”. Preceptor 8646 further expands on what they discussed with other preceptors about at the trainings:

> …it was really nice to actually meet with other preceptors to help develop our skills as a whole, especially when there were individuals who are struggling, or just to get a sense of what it is like to truly struggle versus maybe my preceptor style isn't working for this particular resident, and I need tips and help from other people, or to understand how other people are experiencing things. We very rarely get the chance to do that…if we had the time and space to do that more regularly, I think that would help me as a preceptor…it would give us the reminder and that boost of energy I need as a preceptor…

Lastly, Preceptor 2407 suggests a more robust and structured training for preceptors: “I think it would be highly beneficial to have a much more structured learning process for how to be an effective preceptor…sort of standardized”.

Feedback

Another reoccurring theme from preceptors is around feedback as CE. Preceptors who have received positive feedback around their teaching are much more confident with their teaching skills and their identity as a CE. One preceptor completed the UCSF Teaching Observation Program to receive peer feedback on their teaching skills. Those who never received feedback about their teaching are hesitant to identify themselves as educators. Overall, preceptors agree they would really like to have evaluations of themselves as preceptors. Preceptor 0680 shares the reason why feedback is helpful: “People really want some sort of evaluation of their own skills. We do these workshops

and trainings, but then it's hard to know am I truly developing if I don't get measured in some way...”.

Inclusive environment

In order for clinicians to fully engage in the CoP (in-person or virtually), the environment has to be inclusive to support all types of preceptors. Inclusivity refers to inclusion of those from different backgrounds and experiences, as well as gender and race. This also bridges the discussion into the intersectionality of race and gender in the next section. Preceptor 2407 shares how the inclusive nature of their site has been a positive impact to their experience:

> I think that my site and the people that I work with have created a space in which I feel safe being vulnerable…if you already carry some inhibition, or some insecurity about how you present, and who you are in the world of medicine, based on the color of your skin, or how you present, either in your sexual identity or your gender identification that will absolutely hinder your ability to…be able to access resources, and who you can ask for help...it comes from what norms are said at your department, and then how you identify and how comfortable you are navigating that within your department and within your clinic or within an institution…

Intersectionality of Race and Gender for Clinician Educators

With limited understanding of the experience of preceptors of color, this study explored the intersectionality of race and gender in preceptors’ experience through CE identity formation, role expansion, and experience in communities of practice. There is

limited responses as majority of the preceptors report never thought about the impact of race or gender on these issues. Majority of the preceptors are female and they state that majority of the providers in FQHCs are also female, so generally they do not feel gender played a role in their identity formation, role expansion, nor participation in CoP. The male preceptors acknowledge their privilege and know that they don't share the same nor have to face similar challenges. Mostly they report they have not thought about this. However, race does seem to have an impact for preceptors and are discussed in the following sections.

Identity formation

As mentioned, majority of the preceptors never quite thought about the impact of race on their preceptor identity. One preceptor of color shares that while they have racial congruence with diverse learners, they do not always have the same experience as them, and sometimes learners have higher expectations of the preceptor's ability to identify with them than the preceptor feels they can, and this negatively impacts their preceptor identity. Other preceptors simply say there is not an impact based on their race.

Role expansion

Role expansion for preceptors also has racial implications. Despite the participant pool representing more diverse preceptors than White preceptors, the overall preceptor pool in the NP residency program is still predominantly White. Preceptors of color, including those who have expanded their role to leadership roles, feel proud that they are recognized and valued within the organization and with their colleagues. Preceptor 6555 shares "I take pride that I'm in a leadership position when there aren't too many

other…non-white faces”. However, they identify challenges in finding a mentor of color to guide them in this journey. Even when offered to them as a mentor, they don’t necessarily feel safe nor comfortable engaging in that relationship with a mentor who is not of the same background.

Community of practice

Furthermore, preceptors’ race may also impact their engagement within the CoP. While both the NP residency program and the clinical environment are seen as supportive to most preceptors given the diversity of the preceptor pool, there are preceptors of color who still feel out of place being “the only” within certain spaces. One preceptor shares how being “the only” impacts how they function in the clinic:

> In terms of race, I think that I am someone who carries a lot of insecurity regarding how I present and my race in the world of primary care and clinicians…I know I'm under represented, and one of the things that I noticed when I first began working at my current place of employment is I looked at the majority of the clinician makeup body, and the majority were white, and I was a minority within that group of people... I carry this imposter syndrome, even knowing that I'm working in a community clinic where I live and work... I'm still a minority with the people that I work with…

Most notably, preceptors of color do recognize when they are “the only” and have to speak up for their “entire community” (Preceptor 8646; Preceptor 2323), even if they don’t exactly identify with that community or share the same experience, which feels rather unfair.

In addition, by being “the only” it may limit their participation within the group and they tend to defer to others to express their opinions, in particular, defer to the white male physician to speak as they feel he has a higher status than them. Preceptor 6555 shares candidly of the impact of being “the only” on their participation in the group:

> If I perceive myself as the only person of color in the room that definitely impacts my participation and how I engage with others, how often I speak up... it becomes hard to participate, and sometimes it's hard to listen…because often there's a lot more going on in my head…

Both White preceptors and male preceptors are aware and acknowledge their privilege within the group and consciously take a step back and encourage others to take on leadership roles. Preceptor 4389, a White preceptor, shares their commitment: “There's a big responsibility as a white person in society to take a step back and allow and encourage and celebrate other cultures really taking leadership positions…”.

Summary of Findings

Overall, all the participants were quite candid in their interviews and provided insight to the unique perspective of precepting NP residents within FQHCs, and their experience in becoming CEs. Participants addressed the three research questions: their CE identity formation process, role expansion to CEs, and engagement in community of practice. They also addressed whether race and gender have an impact in that experience. While participants also addressed many additional aspects such as their precepting style with learners, both within and outside of the NP residency program, as well as what they

do during clinical teaching, the analysis portion for this study is limited to the scope of the three research questions.

Chapter Five: DISCUSSIONS, IMPLICATIONS AND RECOMMENDATIONS

This qualitative reflexive thematic analysis study examined the needs and lived experience of community-based clinicians who precept NP residents, and explored their identity formation, role transition, and experience in community of practice, as well as the impact of race and gender on that experience. This chapter discusses findings from each of the research questions, followed by the intersectionality of race and gender, and implications, limitations, and recommendations for practice and future research.

Research Question #1: How do preceptors perceive their preceptor identity formation process?

Participants demonstrated the range and spectrum of multiple identity described in the literature, with invisible, intersectional, compartmentalized, dominant/hierarchical, and merged clinician educator (CE) identities (Tajfel &Turner, 1979; Islam, 2014; Cantillon et al., 2016; Roccas & Brewer, 2002; Sabel et al., 2014; Sklar, 2016). Majority of the preceptors juggled their identity and showed dominance towards their strong clinician identity over their CE identity, as they prioritized patient care over clinical teaching. Others could manage through compartmentalization of their clinician educator identity and role to 4 hours per week (only when they precept). Those who had invisible CE identity did not consider themselves a teacher and did not fully embrace the role, leading to feeling less satisfied and missing being in the provider role while mentoring their NP residents, similar to what is described in the literature (O'Sullivan, 2012). Figure 6 shows the degree of overlap of their clinician and CE identity. Only one preceptor, who is a physician, described their merged identity as a clinician educator (Figure 6C), consistent with the literature that physicians are expected to incorporate clinical teaching

role from the very start of their post-graduate training (Starr et al., 2003). Clinicians are often praised and valued for their excellence in clinical care, thus commit to the identity of a clinician. Preceptors from the nursing profession did not have the expectation of incorporating clinician educator as part of their identity, which may have contributed to the significant shortage of preceptors for the nursing profession. This aligned with the call for more pedagogical preparation for nurse educators to they can be prepared to teach (Booth et al., 2016).

Many factors impact how one decides to develop and adopt the CE identity (Cantillon et al., 2016). Successful professional identity formation requires the person to develop attitudes, beliefs, and behaviors as well as learn the knowledge and skills needed for that professional role (Owens, 2018). Preceptors described being fueled by intrinsic motivation, such as to give back to the profession, and/or that they always wanted to be a teacher, while others described extrinsic motivation such as being recognized and valued by their organization, profession, learners, faculty, or peers for being an expert clinician educator. They valued how they see themselves as well as how others see them. This aligned with previous literature that shows having a solid CE identity contributes to more motivation and pride in being a CE, as well as better sense of belonging (Amirehsani et al., 2019; Barker & Pittman, 2010; Starr et al., 2003; Tajfel &Turner, 1979; Islam, 2014). According to the social identity theory, however, if preceptors only receive affirmation for their clinical role instead of their teaching contribution, it will only solidify their clinician identity and inhibit their formation of the clinician educator identity. Fortunately, all the preceptors in the study reported a desire to keep precepting.

Research Question #2: How do preceptors perceive their role expansion process?

Clinicians' role transition to clinician educator has been described in the literature, with successful transition defined as engaging in active clinical practice, educational scholarship, application of theory into educational practice, and consultation on educational issues (Sherbino et al., 2014). Four themes emerged from this study: benefits of role transition, expectations, tension in balance of multiple roles, and compensation. As mentioned above, participants described many personal and professional benefits in becoming a clinician educator.

Interestingly a few of the preceptors discussed their lack of confidence in teaching role, consistent with the literature (Lee et al., 2022; Owens, 2018), which hindered their role transition to CE. A contributor of this lack of confidence could be due to lack of mentoring, faculty development, community of practice, or feedback – all yet to be explored further with preceptors.

Another theme around role transition is having clear expectations of the role (Vassie et al., 2020). Roles are negotiated within each organization (Cantillon et al., 2019), and in the cases of these FQHCs, each site negotiated whether certain preceptors serve as a regular preceptor, back up preceptor, or even hold leadership positions within the NP residency program such as Co Director or site leads. Clear description of the roles and expectations were needed for preceptors to know how to function within that role. Preceptors appreciated the overall clear structure of the NP residency program, and some felt they have a clear idea of the expectations, especially as compared to their experience in precepting NP students. However, many still expressed lack of clear expectations and

competencies, which is reported to impair the preceptors' ability to form their identity or expand their role (Sherbino et al., 2014; Sklar, 2016).

Preceptors mentioned loud and clear the tension they have in balancing all their roles: clinician, CE, and personal. In particular, the pressure of keeping up with clinical demands and productivity in FQHCs took time away from preceptors in having time to precept learners, access trainings and meetings, as well as engage in networking with other preceptors (Buckley & Nimmon, 2020; Cantillon et al., 2016; Drowos et al., 2017; Sabel et al., 2014), despite the fact that they had dedicated time to do these activities in this NP residency program. Surprisingly some preceptors said precepting NP residents has reduced their workload because of the dedicated time available to precept NP residents without having a schedule of their own. Many preceptors also discussed the choice to invest more time with the NP residents to support their growth, while sacrificing their personal time to be with their family. This model is not sustainable, however, as many preceptors were no longer willing to keep taking time away from their personal lives. Interestingly, preceptors who did not develop a CE identity (invisible CE identity) did not report a change in their roles even when they added precepting learners, and thus did not report the tension in balancing their roles.

This is an area where leadership in the FQHCs can set the tone and culture of the organization, by showing the value they place on each of these roles, especially that of clinical teaching. As social identity is relational between organization and profession, if the organization values education, and values the development of their clinicians, then preceptors can justifiably choose to spend time to function and develop in that role, decreasing the tension; however, if an organization does not value teaching, and

preceptors are the only ones precepting at their site, then it is much easier to choose the clinical role over teaching role to be in alignment with the organization's priorities. The FHQCs varied in their commitment to teaching with some sites being known as a teaching site where every provider precepted, while others had only a few individuals engaged in clinical teaching. Those precepting in silo were at risk of not nurturing their CE identity and role development.

Lastly, the issue of compensation remained for the expanded teaching role. This study is unique in that the preceptors were assigned by the employer to precept NP residents, who are newly licensed providers formally hired as employees of the FQHC, and the preceptors were paid to precept without needing to also see their own patients at the same time (as long as they precept 2 residents at the same time). The billing for the visits was generated from the residents' productivity rather than relying on the preceptor's as well. There was also dedicated time to hold preceptor meetings and trainings (they are paid to participate in these activities in lieu of seeing patients in clinic). However, many preceptors compared this model to precepting of NP students, where preceptors volunteered their time to precept while still responsible for a full clinic volume, without any dedicated time to precept nor for preceptor meetings and trainings. The inequity is one that, as the preceptors alluded to, makes precepting quite unsustainable outside of the NP residency program structure. Preceptor compensation remains to be a big and complex topic which is outside the scope of this study but needs to be explored for the sake of health professions training. Nurse practitioner training demands upwards of 750 supervised direct patient care clinical hours per student for licensure and certification (National Task Force, 2022), yet these training experiences are

dependent upon availability of clinicians to serve as clinician educators on a volunteer basis. The lack of compensation may be seen as a lack of value and recognition for the significant contribution of the clinician educators.

The gaps noted from this study include any mention of preceptors' involvement in educational scholarship, application of theory into educational practice, and consultation on educational issues as part of their CE role transition (Sherbino et al., 2014). This may have been meant to describe clinician educators in academic settings, thus further exploration of the expectation of community clinician educators is warranted. The support network for preceptors seemed to be minimal or missing all together, which may have hindered their CE identity formation and role expansion.

Research Question #3: Community of Practice

The use of community of practice (CoP) model for clinician educators has been reported to foster CE identity formation and role expansion (Buckley & Nimmon, 2020; Jippes et al., 2013; Lee et al., 2022; Li et al., 2009; Sheu et al., 2020; Starr et al., 2003). Three essential components of CoP are: 1) domain of common ground and/or identity, 2) community with a clear leadership and mutual trust, and 3) the practice of specific knowledge and skills that is shared among the members (Cruess et al., 2018). Since all participants had a strong clinician identity, they also had a strong CoP as clinicians. They were able to identify elements from the clinician CoP, which can serve as a foundation for the CE CoP. Figure 7 illustrates the model for CoP to be built out for CEs, from an existing central CoP for clinicians. Facilitators that support the creation of the CE CoP

include: valued, relationships, communication, training, feedback, and inclusive environment (See Table 4).

One of the primary pillars of CoP involves the **shared identity** among the members, making the importance of creating and fostering CE identity as a starting point. Those who are **valued** as being a CE were more motivated to develop their skills, including accessing more faculty development and to engaging in a CoP with other preceptors, consistent with prior literature (Steinert et al., 2019). In organizations that did not value CE identity, clinicians would not foster that CE identity nor engage in the CE CoP for trainings and/or networking. Instead, they chose to stay in the clinician role and be recognized for their clinical expertise and productivity. Without the shared identity it would be like having a broken link in the CoP chain.

The next important facilitator is the **relationships** created among members of the CE CoP. This study was unique in that it brought together preceptors from across 4 different FHQCs. Yet, preceptors described their relationship with other CEs as those who were conveniently located at their site and who shared their same clinical shifts. Beyond that, preceptors did not feel they have the bandwidth to engage with any other preceptors who they do not conveniently have access to. Many discussed they do not have time to go out of their way to create relationships with others who are not on the same schedule or at their same clinical site. This reflected their challenges in balancing their multiple roles. COVID has also changed those dynamics further, taking away informal opportunities for clinicians to build relationships with one another.

Interestingly, participants discussed strong relationships they have created with their previous preceptors, their past preceptees, and even personal friends who serve as

preceptors at other institutions. While majority of the time they still revert to their clinician identity and talk about clinical issues, occasionally they do discuss teaching topics. These past relationships from preceptors also shaped how the current preceptors developed their precepting style. This shows the relationships go beyond physical location and time. This area appears to be underexplored in the literature.

The other pillar in the CoP involves having an identified **leader** who the group trusts. In this study, participants all pointed to the Co-Directors and site leads as their leader for the NP residency program; however, they didn't all have a relationship beyond the logistics of the program; they didn't engage in communication regarding specifics of teaching skills. Rather, they may have engaged with their site lead to discuss learner concerns if it comes up. They depended on the leaders to share **communication** regarding program expectations and timelines. Other literature has pointed to having a leader emerge among the group members, rather an appointed leader (Li et al., 2009). It seemed that for the NP residency program, the leadership supported preceptors in their role, but not necessarily the specifics of teaching skills. Instead, UCSF faculty and the researcher were contracted to provide the teaching skills workshops for preceptors. However, as outsiders without opportunities to develop deeper relationships with the preceptors, and a variety of other factors such as lack of shared CE identity or value placed on teaching, the CE CoP has been slow to develop under this structure. The program's attempt to build the virtual CoP included electronic communication methods though emails, Microsoft Teams, digital newsletters with helpful tips, monthly "Preceptor Corner" virtual sessions for synchronous discussions, and clinical teaching workshops via Zoom. Yet participants in this study had variable knowledge of the availability of the

virtual CoP at this stage, or some felt they do not need such a platform to exchange pearls or information, possibly related to their minimal CE identity. Many did suggest ways to incorporate a virtual CoP, some of which had already been implemented. This may be related to the various gaps to the facilitators that support a thriving CoP (i.e. shared identity, valued placed on teaching, relationships, leadership).

To properly expand the clinicians' role to that of CE, preceptors needed additional **trainings** to develop the shared skills among CEs. Community-based preceptors report not having trainings as community preceptors tend to be separated from academic medical centers, therefore have more of a gap in getting the support needed to develop the role (Drowos et al., 2017; Graziano et al., 2018; Starr et al., 2003). The NP residency program took that into consideration and incorporated preceptor orientation and access to the Teach for UCSF teaching workshops that are virtual with free CME. Despite having access to the workshops and having dedicated time to participate in the workshops via Zoom, preceptors still reported significant challenges in accessing the workshops – typically due to the tension in balancing their multiple roles and responsibilities. This may go back to the value placed on development teaching skills vs. value placed on clinical productivity and clinical skills. As noted in the background section, there was a robust Clinical Teaching Certificate (Appendix A) made available to preceptors in the FQHCs, and even offered via Zoom to remove the challenges for commute, however, not all preceptors made the effort to attend. Surprisingly, once again, some preceptors did not feel they need any additional training, which may be a symptom of the disconnect with their CE identity. To apply Dzara et al (2021)'s model in Figure 4 (see Chapter 2) where the preceptors' engagement in CoP aligns with their CE identity formation, preceptors

who engaged with the trainings and other preceptors within the NP residency program were essentially at the level of consumers of CoP and have not yet formed their CE identity. For many preceptors, these trainings were the only times they have engagement with other preceptors in the program. Literature suggests that those who have a chance to talk with other teachers and belong in a group of teachers helps validate their identity as a teacher (Starr et al., 2003). On the other hand, site leads who are promoting the trainings are forming their CE identity as they expand their role to the leadership position in the program (Dzara et al., 2021). None of the preceptors reached the final level of internalizing their CE identity through discussing and designing CoP, described by Dzara et al's model (2021).

Another component to help CEs grow their skills is to provide **feedback** to them of how they are performing. Preceptors described that since they do not receive feedback about their teaching, they did not know if they are meeting the needs of the learners and program. The NP residency program provides aggregate summaries of resident feedback to preceptors as a group but not individual preceptor feedback. Many have expressed the desire to receive routine feedback about their teaching skills, and whether the skills they picked up at trainings are effective. Without feedback, they lacked the positive reinforcement to motivate them to keep developing their clinician educator identity and skills with learners and to have confidence and pride in their skills (Cantillon et al., 2019; Lee et al., 2022; Owens, 2018). The NP residency offered Teaching Observation Program which provided peer feedback to preceptors by trained observers; once again, the uptake was minimal as preceptors may not identify that as an area of need due to their primary identity or lack of CE identity.

Lastly, the environment of the CE CoP, whether in-person or virtual, must be inclusive for preceptors of all backgrounds. Clinicians in FHQCs have made great commitment to deliver culturally appropriate care to their diverse patients; it is equally vital that the CoP space is inclusive of preceptors regardless of their gender, race, or cultural background. It is through this safe space that preceptors can thrive in their growth as a clinician educator. Participants reported that their site is inclusive which made them feel safe. Additional aspects of the impact of race and gender are discussed next.

Intersectionality of Race and Gender

The intersectionality of race and gender were specifically sought out in this study as part of each research question, to better understand their experience particularly in the FQHCs. Intersectionality provides an understanding of how people are shaped by different social location interactions within a context of connected systems and structures of power, with the orientation towards "transformation, building coalitions among different groups, and working towards social justice" (Hankivsky, 2014). Interestingly, majority of the participants, regardless of their own race and gender, did not feel that there was any impact to their identity formation, role development, nor engagement in the CoP. It is not known whether this is because 1) they do not contribute to any impact, or 2) identity formation and role expansions occurs in a color-blind and gender-blind fashion, or 3) no one has asked them this before and they are not used to talking about race and gender in this context. Lastly, the interview questions may not have conveyed the intent of the query.

Intersectionality has historically been looked at through populations, and this study applied it to individuals in the study. A few participants did voice that they are proud to represent the preceptors of color in a predominantly white environment, and even to hold leadership roles within the NP residency program. The recognition for their excellence is a driving force to continue to develop the CE role further. However, many have voiced their challenges in being “the only”, where they are expected to speak up for their community, regardless of their actual shared experience with the larger community. This extended to when learners expect a shared understanding but in fact, there was less shared than assumed. Alternatively, how the preceptors of color engaged with CoP may be impacted by who else is in the space, what has been said, and whether they feel they have things to contribute or if they simply defer to those they feel have more authority on the matter, and often times it may be to the white male physicians. Participants did not express a space where they can share these thoughts and experiences, nor even a person can they speak freely to about these challenges. So while participants felt that they did not think about impact of race and gender in their identity formation, role expansion, and engagement in community of practice experience, their shared experience show that race and gender do matter.

The FHQCs are excellent in trying to provide culturally sensitive care to a diverse population in the community. However, the de-emphasis on race for the clinicians and/or CE is problematic as that may carry out in their patient interactions. The minimization of race and gender deserves further exploration.

Implications

This study provides insights to preceptors in the community who precept NP residents, across 4 FQHCs. The insight on their identity formation as clinician educators as well as their experience in their role expansion directly impacts how one can design a CE CoP to support their growth and learning, including for preceptors of color. This will benefit preceptors across all levels of learners, including students, post-graduate residents or fellows, or new providers. Successful CE CoP can also address the current preceptor shortage through improved preceptor recruitment, retention, and development.

While the FQHCs current priorities and metrics are around patient care, this study can help make the case that clinical teaching is equally important for the sustainability of the organization and for the workforce. This study informs FQHC leadership to consider investing in their clinicians by putting more value and support for their professional development in teaching, so that expert clinicians are motivated to develop their CE identity and role transition to support new clinicians in the organization, which increases their job satisfaction, and for the site to decrease clinician attrition from both new and experienced clinicians, which in the end saves the organization a significant amount of money. Organizations with a strong teaching culture can develop a robust group of CEs who can provide quality teaching to new providers who then can continue to deliver high quality care to their patient population. This extends to having a robust pool of preceptors of color to support trainees and/or new clinicians of color to increase the diversity of the workforce, as well as support other preceptors of color in the CoP.

Limitations

This study involved preceptors from a single NP residency program with 4 FQHCs in this geographical region, thus the results may not be transferrable to other types of programs in other regions or with other levels of learners. However, findings are relevant to other NP residency programs in FQHCs and potentially even for those who precept non-NP residency learners such as NP students, medical students, or medical residents. Despite the small sample size as consistent with qualitative studies, all four of the FQHCs were represented in the study and thematic sufficiency was reached.

Furthermore, all the participants were self-selected, and results may reflect only those who had positive experience with precepting, or other relationship with the researcher or UCSF (i.e. interacted at the workshops, or colleague teaching in the SON, or prior past graduate of the SON program). The researcher is the principal investigator (PI) on the NP residency grant subcontract as part of the team that presented the preceptor orientation and training workshops, which may have influenced how participants discuss the effectiveness of the trainings. As an outsider to the FQHCs, the researcher may not have been familiar with the culture within each FQHC and participants may have held back some of their feedback; on the other hand, preceptors may have been more willing to share to someone outside of the organization for an objective view. Preceptors of color may have been hesitant to share their experience; however, the researcher attempted to set a supportive environment during the interview. The researcher is also a person of color so it may have allowed for more candid sharing. The researcher discussed the confidentiality nature of the study to reassure the participants.

Another limitation is that all but one participant was from the nursing profession with a single physician participant which may limit the interprofessional precepting perspective. While this was not the purpose of the study, it would be beneficial to have further research to examine the interprofessional precepting experience. The study was also limited in gender diversity with all but 2 participants being male; however, this is not uncommon in the FQHC setting as stated by the participants. Lastly, there were limited responses related to the intersectionality of race and gender in their identity formation, role expansion, and engagement with CoP. This will need to be explored further and potentially also refine the interview questions or change the methodology to focus groups.

Recommendation for Practice

Based on the literature review and participants' interview, recommendations for practice are provided across 3 levels: 1) institution, 2) program, and 3) within the CoP.

1. As mentioned earlier, organizations must be explicit with their value for faculty development into clinical education, and thus encourage clinicians to become CEs. They can develop and acknowledge expert clinician educators, as well as support the expansion of CoP for CE through existing infrastructures (see recommendation #3 CoP). Organizations need to invest in the time it takes for clinicians to expand their role into CE roles, by providing dedicated time given for CEs to attend trainings and attend meetings, as well as dedicated time to precept learners with an adjusted clinic volume. This leads to the exploration of compensation models for CEs who take on the additional expanded role.

2. At the program level, there needs to be clear description of the role of CE with clear expectations, as well as frequent check-ins to see how the preceptors are doing as educators and how their learners are progressing. Routine feedback needs to be collected and provided to preceptors so they can continue to develop their teaching skills which will increase their confidence as CEs.
3. Finally, CE CoP must have the 3 pillars of shared identity, leadership, and shared skills. CE CoP can be built out from existing clinician CoP structures, such as utilizing huddles, clinician meetings, and/or routine emails. A leader can emerge from the group who can facilitate the relationship building opportunities and set the infrastructure for the group, including communication frequency, method, and topics. Shared accountability can be built for all members. For the preceptor orientation and trainings, there should be intentional development of their CE identity, structured curriculum, as well as routine feedback of their skills. Those with expertise can be acknowledged within the group and serve as mentors for the novice CEs.

Recommendation for Future Research

The results of the study lead to the need for future research in several areas involving 1) preceptor confidence, 2) preceptors of color, 3) mentorship, 4) differences across sites, 5) differences across professions, and 6) transferability of precepting model to other levels of learners.

1. Participants reported a lack of confidence in serving as CE, thus further research is needed to explore preceptor's sense of confidence as it relates to their identity formation and role expansion.
2. Additional research is needed to better understand the intersectionality and impact of race and gender on preceptor of color's identity formation and role expansion. The minimization of gender and race in this context deserves a more in-depth exploration, particularly as we noted some impact from a few preceptors of color but the rest of the preceptors have not quite thought about it. This may clarify why more clinicians of color are not precepting learners.
3. Mentorship has been found to be an important element in CE identity formation and role development, especially for preceptors of color. Further research is also needed to explore opportunities to mentor clinicians in educational scholarship, application of theory into educational practice, and consultation on educational issues as part of the CE role development. Lastly, research is needed to explore mentorship among CEs to strengthen their identity formation as participants in this study did not feel that they have a mentor nor know how to go about to seek one.
4. This study examined preceptors from all 4 FQHCs; however, the differences between each FQHC has not yet been explored. Future research can assess similarities and differences of the culture and CE perspectives across different FQHCs and even different sites among the same FQHCs to identify site-specific factors that impact one's identity formation, role expansion, and engagement with CoP.

5. This study primarily involved nursing preceptors with a single physician clinician educator. The biggest difference noted was the merged CE identity in the physician training which was not evident in the nursing training. More research can be explored to examine whether nursing can also infuse the teaching curriculum early on in their training to instill the development of a merged CE identity to continue the pipeline of preceptors. Additional professional differences can be studied, including the reason behind medicine having more merged CE identity early on. This is an important factor for the nursing profession that is reliant on CEs to train future clinicians.
6. Lastly, this study involved the unique funded NP residency program therefore can provide dedicated time for precepting and meetings and trainings. Additional research is needed to assess how to bring the precepting model to other levels of learners, especially for nursing education with NP students for sustainability of clinical teaching within the profession. The nursing profession has to explore how to continue the pipeline of preceptorship given the expectation that each NP student needs upwards of 750 supervised direct patient care clinical hours for licensure and certification. The profession must explore policies to implement a model to have every NP provider become an effective CE in addition to being an expert clinician, and also explore a model to compensate preceptors rather than solely depend on a volunteer model.

Concluding Remarks

As the US faces the provider shortage in primary care, all efforts are made to prepare more providers to practice in the community setting, which means trainees (post-

licensure residents and students) must be mentored and socialized by experienced clinicians, who can apply evidence-based teaching strategies to prepare the next generation of clinicians. Leaders in health care organizations must make it sustainable for clinician educators in the community to develop their identity, expand their role, and engage in CoP for continued support and development. And as more clinicians of color are recruited to reflect the patient population served, factors that facilitate their growth, presence, and inclusiveness must be taken in consideration. New clinicians benefit from preceptors who reflect their background, and thus the same commitment that organizations have in providing diverse patients with equitable care needs to be made towards diverse clinician educators. This includes how the preceptors of color can develop their identity, expand their role, and engage in the CoP in a supportive fashion. By having confident and skillful clinician educators, we can best prepare and retain our next generation of clinicians to care for our most vulnerable and underserved populations.

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Appendix A – Teach for UCSF Clinical Teaching Certificate Workshop Topics

1. Time-Efficient Clinical Teaching
2. Challenges in Clinical Teaching
3. Setting Goals and Expectations
4. SOAP for Learner Professionalism
5. Clinical Reasoning
6. Feedback Fundamentals
7. Learning Climate
8. Teaching and Assessing in Competency-Based Education
9. Writing Narrative Evaluations

Appendix B – Interview Guide

- Date of interview
- Time of interview
- Location of interview
- Interviewer name
- Interviewee name (last 4 digit of phone # as study ID)

Thank you for taking the time to be interviewed by me today. I really appreciate your willingness to share your thoughts and experiences. If it is ok with you, I will record our interview and share the transcription with you for review.

The purpose of this study is to better understand your experience as a NP Resident preceptor, and any support you'd like as you continue to precept and develop as a clinician educator.

There are three main sections to the interview: general demographic information, your experience as a preceptor, and resources and support for preceptors. There are opportunities for further elaboration. At any time of the interview, you may ask to stop.

Your responses are confidential, and your name and other identifying data are de-identified on the transcript and will not be used during the analysis. Do you have any questions before I start recording? [start recording]

This is an interview by (interviewer) with (study ID). Today is (date).

A. General demographics questions:

a. Profession: CNM, MD, NP, PA, Other
b. Name of FQHC
c. Location
d. Years as provider
e. Years as preceptor (with any level of learner)
f. Years as NP Residency preceptor
g. Role within the NP Residency program: Preceptor, Site Lead, Co-Director
h. Race
i. Gender

B. **Experience in Precepting.** The first set of questions will focus on your experience as a preceptor.

1. How did you start as a preceptor? Q1
   a. Can you talk about what is expected of you as a NP resident preceptor - in terms of your role or skills? Is it what you thought it was?
   b. How have you developed over time? Any particular skills that you have gained? What did you do? What helped you develop?

   c. What skill(s) are you still trying to develop? And what hinders your development?

2. How has your role expanded since becoming a NP Residency preceptor? If so, how? Or in what way? Q2
   a. What factors contributed to this? What stopped you from expanding?
   b. How do you balance between being clinician and preceptor?
   c. Would you continue precept for NP residents? Why or why not? What would you do differently?
3. How does your race or gender play a role in your identity formation or role expansion as a preceptor? How have you approached this? Q1, Q2

C. **Resources and Support.** The next set of questions will focus on resources and support for preceptors.

4. Did you receive any training as a preceptor? If so, what was most helpful? What did it help you to be able to do? Q1
   a. Can you tell me about a training that was not helpful? How did it miss the mark?
   b. Do you have a mentor? If so, who is it and what do you typically discuss? How often do you communicate with them? [talk more about the relationship] Q3
   c. How has your organization supported you as a NP resident preceptor? What did it do?
   d. How do you see your race and gender play a role in how you have access to trainings or how you engage with trainings?

5. Are there any NP resident preceptors you interact with from within your FQHC or across the other FQHCs? If so, how do you engage with them? Q3
   a. What are the things you would connect with other NP resident preceptors about?
   b. What are some benefits or challenges in connecting with them as a community?
   c. What facilitates your relationship with them? Any barriers?
   d. How do you see your race and gender play a role in how you interact with other preceptors?

6. Is there anything else you'd like to include that I did not ask you yet?

Thank you for taking the time to meet with me. Your insights are really helpful for us to better understand how to support preceptors and build the community of practice of clinician educators. I will share the transcript with you once available. [End recording]