Rural Sociology

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Rural Life, Rural Healthcare, and Telehealth: An Interpretive Phenomenology Study

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ABSTRACT

Telehealth may help ameliorate rural healthcare shortages and related negative health outcomes for rural populations in the United States. However, telehealth utilization has been lower among rural than urban populations. Patient experiences are an essential determinant of healthcare utilization and effectiveness. To inform efforts to address disparities in telehealth utilization, we sought a situated, contextual understanding of patient experiences with telehealth among rural-dwelling adults in California. We used Interpretive Phenomenology qualitative methods. In-depth semi-structured interviews explored rural life contexts, rural healthcare experiences, and valuations of telehealth among 16 rural-dwelling adults who used telehealth at a distant urban medical center. Themes of scarcity and fragmented care characterized participants' rural healthcare experiences. Participants placed high value on their rural settings, despite limitations imposed by rural living. Informed by these contexts, participants offered highly positive assessments of telehealth and its utility for rural patients. Telehealth emerged as a positive tool for participants to support healthcare access and a rural way of life. However, findings point to a need to explore whether telehealth may contribute to rural healthcare bypass behaviors. Ongoing research is also needed to understand the telehealth experiences and preferences of underserved and minoritized rural populations.

1 | Introduction

Inadequate healthcare access is a foremost concern for the health of rural populations in the United States (Barton et al. 2021; Henning-Smith 2021; Meit et al. 2014). Severe shortages of rural healthcare providers, particularly specialits (Meit et al. 2014; Larson et al. 2016, 2020, 2021) and the scaling down or closure of rural healthcare facilities (Meit et al. 2014; O'Hanlon et al. 2019) are important access barriers. Limited healthcare access contributes to poor health outcomes for rural populations, who fare worse than their urban counterparts on several measures of mortality (Garcia et al. 2019; Curtin and Spencer 2021; Yaemsiri et al. 2019). Such rural health disparities undermine the well-being of rural communities and social systems (Henning-Smith 2021).

These statements, while representative of real and pressing concerns for the health of rural people, are also typical of a deficits discourse characteristic of rural health research in the United States (Afifi et al. 2022; Brown and Schafft 2011; Malatzky and Bourke 2016; Sosin and Carpenter-Song 2024). This narrative is constructed in juxtaposition to an idealized urban center and implicitly conceives of the problem as the absence of signifiers of urbanity: people, resources, proximity, institutions, diversity, worldliness, and, by association, perhaps value or relevance. These conceptualizations of rurality and rural populations tend to minimize or overlook differences within and between rural contexts.

Rural health solutions in a deficits-based discourse have included techno-material interventions to address shortages of

rural healthcare resources. Telehealth has long been considered one such solution, potentially improving rural health outcomes by using technology to circumvent geographic barriers and increase rural healthcare availability (Dorsey and Topol 2016; Lin et al. 2018; Tuckson et al. 2017). Telehealth is effective, provides comparable clinical outcomes to in-person care, and supports patient satisfaction with care (Kruse et al. 2017; Orlando et al. 2019; Totten et al. 2019; Rowe Ferrara and Chapman 2024). However, research also shows that telehealth utilization in the United States was unequal across population groups following the rapid expansion that accompanied the COVID-19 pandemic (Demeke et al. 2021; Samson et al. 2021; Cantor et al. 2021). Telehealth use was found to be lower among patients who were lower income (Cantor et al. 2021; Lucas and Villarroel 2021), uninsured (Karimi et al. 2022), belonged to certain racial or ethnic groups (Samson et al. 2021; Lucas and Villarroel 2021), and who lived in rural areas (Demeke et al. 2021; Samson et al. 2021; Cantor et al. 2021; Lucas and Villarroel 2021). Additionally, telehealth faces ongoing access limitations (Ko et al. 2023), and connectivity barriers particularly impact rural areas (Zahnd et al. 2022; Acharya et al. 2022).

These findings raise concerns that rather than improving healthcare access, telehealth may reinforce existing disparities for rural populations (Hirko et al. 2020; Kichloo et al. 2020; Zhai 2020), highlighting the inadequacy of a deficit discourse to fully address rural health challenges. Attempts to counter shortcomings of this narrative include efforts to identify rural strengths and center rural perspectives (Afifi et al. 2022; Brown and Schafft 2011; Malatzky and Bourke 2016; Sosin and Carpenter-Song 2024; Richman et al. 2019), in order to portray the complexity and diversity of rural contexts and populations and to inform effective interventions.

Evidence supports the importance of patient perspectives in healthcare services. Patient experiences are an essential determinant of healthcare utilization and effectiveness (Frank et al. 2014; Doyle et al. 2013). Telehealth patient-centered outcomes research has shown that patient-centeredness strongly supports the effectiveness of telehealth interventions to address healthcare disparities (Bailey et al. 2021). Furthermore, rural populations are heterogenous (Henning-Smith 2021; Kozhimannil and Henning-Smith 2018), necessitating attention to specific rural settings. For these reasons, situated, contextual understandings of rural patient experiences with telehealth are a necessary component of telehealth utilization research and should inform efforts to address rural telehealth disparities.

This study explored experiences with telehealth services among a population of rural-dwelling adults in California. Using Interpretive Phenomenology qualitative methods, we sought to frame participants' telehealth experiences within their rural life contexts. Our objectives were to understand participants' rural contexts, including rural healthcare; to understand how these contexts shaped participants' experiences with telehealth; and to explore patient-perceived telehealth barriers, drawbacks, and benefits. Ultimately, we aimed to ascertain the meaning that participants attributed to telehealth in the context of living rurally. In light of study findings, we offer a novel perspective on the potential interplay of telehealth and rural healthcare bypass behaviors.

2 | Interpretive Phenomenology

The design and conduct of this study were guided by Interpretive Phenomenology (IP) methodology, as developed and popularized by Patricia Benner (Brykczynski and Benner 2010; Benner 2000). IP seeks situated understandings of people, their behaviors, and the meanings they assign to their lives, creating richly descriptive accounts of participants' lived experiences (Benner 1985, 1994; Benner et al. 2009; Mackey 2005). This approach to IP is premised on a philosophy developed by Martin Heidegger in *Being and Time* (1927/1962). This philosophy is ontological, in its focus on the nature of human being, and hermeneutic, in that it asserts that human being presupposes self-interpretation. Several core concepts from Heidegger's phenomenology set up the focus and methods of IP.

The first is *Dasein*, or "the human *way of being*" (Dreyfus 1991, 14; original emphasis), which is that it is uniquely self-interpreting. According to Heidegger, self-interpretation is not a possession of self, but rather is constitutive of self (Heidegger 1962). Interpretation is formed through *world*, the entirety of the context that individuals are born into and live out their lives in. Heidegger called human beings' situatedness in a constitutive, a priori world *being-in-the-world* and used the term *thrownness* to describe being always already in world (Benner 1985; Dreyfus 1991; Heidegger 1962; Leonard 1994). Taken together, being-in-the-world and thrownness provide a prereflexive understanding (preunderstanding or forestructure) that makes interpretation possible.

Several important ideas follow. First, because of its pervasiveness and givenness, the world typically exists as background and taken-for-granted (Benner et al. 2009). Heidegger held that individuals can never fully explicate our world or be entirely free of its interpreting influence (Benner 1985). Heidegger detailed three modes of engagement with the world: ready-to-hand, that is, unreflexive engagement through practical activity; unready-to-hand, characterized by disruption of engaged practical activity, which reveals taken-for-granted aspects of the world; and present-to-hand mode, removed from practical activity and engaged in reflexive awareness of the world (Benner et al. 2009; Plager 1994).

Second, human beings negotiate being-in-the-world in part via *sorge*, or care or concern (Dreyfus 1991). Care is how "things show up as mattering to us" (Dreyfus 1994, ix), illuminating certain aspects of situations and therefore revealing what is meaningful to individuals. Finally, being-in-the-world delineates not only individuals' possibilities and cares or concerns, but also the interpretations that are available to them. Thus interpretation and meaning are inherently bounded by being-in-the-world, or in other words, by situatedness.

Implications of this hermeneutic phenomenology are evident throughout IP methodology, perhaps foremost in its overarching intention to articulate experiential, situated meaning. As Benner says, IP "seeks to study the person in the situation" (Benner 1985, 6). If interpretation and therefore meaning are products of situatedness, then meaning or interpretation cannot be comprehended apart from context. IP methodology and the associated philosophy discussed here support a fully contextual

TABLE 1 | Participant codes and brief demographics.

Participant code	Sex	Age (years)	Specialty services	Participant code	Sex	Age (years)	Specialty services
P1	M	80	Urology	P9	M	49	Oncology
P2	F	83	Neurology	P10	F	62	Oncology
P3	F	73	Oncology	P11	F	65	Pulmonology
P4	F	83	Cardiology	P12	M	71	Hepatology
P5	F	71	Neurology	P13	F	49	Oncology
P6	F	75	Oncology	P14	F	43	Neurology
P7	F	54	Neurology	P15	M	67	Hepatology
P8	M	74	Oncology	P16	M	58	Orthopedics

examination of human phenomena, guiding our study of rural patients' telehealth experiences, situated within the contexts of their rural worlds.

3 | Author Positionality

MRF is a life-long rural resident. This position informs her interest in this study, as part of her broader goals of centering rural perspectives in health research and supporting rural populations to attain health. MRF has been a resident of the rural region studied for 15 years and shared an emic, "insider" perspective with participants. This likely influenced what participants shared and how they shared it. Throughout the study, MRF practiced memoing to make this emic perspective explicit; to adopt a questioning, etic stance; and to allow participants' emic perspectives to emerge in the foreground. SAC is a health policy workforce researcher, with years of experience on healthcare workforce distribution and access to care, whose interest in this topic stems from that work. Both authors are registered nurses and health policy researchers, positions that inform their worldview with attention to a holistic view of patients and to the structures that enable or constrain their actions.

4 | Methods

4.1 | Study Design

This study employed in-depth, semi-structured interviews and Interpretive Phenomenology methods. The university's institutional review board approved this study.

4.2 | Setting

Participants were recruited from among patients at a health system associated with an academic medical center in a major urban center. This health system provides diverse specialty care and draws patients from a geographically dispersed area across California and beyond.

4.3 | Recruitment

All adult patients (≥18 years) living in rural California ZIP codes who had a video telehealth encounter with the health system within the past 6 months were eligible. ZIP codes were categorized as rural using Rural–Urban Commuting Area Codes (USDA Economic Research Service 2023; and see Appendix S1). Recruitment was conducted from November 2022 to March 2023, using the university's electronic health record (EHR) recruitment service. A search of the health system's EHR identified over 6000 eligible patients. Of these, 100 patients without active online patient portal accounts were contacted via mailed letter, which described study procedures and asked interested patients to contact the study team by telephone or email. Four patients responded to mailed letters, but did not respond to follow-up.

Additionally, 10 patients with active online patient portals were randomly selected every 5 days and contacted via patient portal secure message, using the same study description as mailed letters. Patients could respond within the message by clicking "I'm interested" or "No, Thank You" buttons. If a patient indicated interest in participating, the recruitment management system notified the lead author, who contacted the patient via patient portal secure message.

A total of 203 patients were contacted in patient portal recruitment: 177 did not respond, five declined participation, and 21 indicated interest. Of the 21 interested patients, five did not respond to follow-up; the remaining ($N = 16$) were eligible to participate and comprised the final sample.

4.4 | Sample

The average age of participants was 66.1 years (median = 69, range 43–83 years; Table 1). Ten participants were female (62.5%). Four were employed, three were unable to work for health reasons, and nine were retired. The average monthly income of the 15 participants who provided it was $3940 (median = $1700, range $600–$16,000). Two participants had completed high school, four had some college or an associate degree, five had bachelor's degrees, four had master's degrees, and one

had a doctoral degree. One participant identified as Chicano, and the rest as White ($n = 15$, 93.8%). Participants obtained care at the health system for a variety of conditions, the most common being cancer ($n = 6$). All participants had at least one video telehealth encounter with the health system.

4.5 | Data Collection

Interviews were conducted remotely (four on Zoom and 12 by telephone) from December 2022 to April 2023. Interviews were audio recorded and transcribed verbatim by a HIPAA-compliant service. A semi-structured interview guide (Appendix S2) addressed participants' rural contexts, experiences with rural living and rural healthcare, and experiences with telehealth. Narrative questions were designed to elicit detailed narratives of experience, for example "Can you tell me about a time you experienced challenges with telehealth?" while reflexive questions prompted participants to share reflections or interpretations, such as "How is telehealth different from in-person care?" Verbal consent was obtained at the outset of interviews, as well as demographic information and communication technology access and utilization. All participants were provided $20 gift cards.

4.6 | Data Analysis and Interpretation

Data analysis in interpretive phenomenology is an iterative, hermeneutic process of reading and interpretation of textual data (Benner et al. 2009; Smith et al. 2009; van Manen 2016). Hermeneutic analysis involves interpreting text through repeated close readings, then re-examining the data through emergent interpretations (Mackey 2005; Leonard 1994; Smith et al. 2009). Interpretation in this study was conducted concurrently with data collection. Analysis began once a transcript was completed, with writing of interpretive summaries for each participant, followed by manual naming or "coding" of texts (Benner et al. 2009; Crist and Tanner 2003).

Naming developed closeness with the data and supported identification of narratives and exemplars (Benner et al. 2009; Crist and Tanner 2003; Benner and Benner 1994). Narratives are portions of text that demonstrate participants' experience of the research phenomena. Exemplars typify certain findings and also showcase variation in participants' experiences (Benner 1985; Benner and Benner 1994). Finally, through iterative analysis between cases and comparison of narratives and exemplars, patterns of meaning and experience emerged. These patterns were analyzed to develop themes related to rural patients' experiences with rural living and telehealth. The lead author was primarily responsible for data collection, analysis, and interpretation. Interpretive decisions related to development of names, naming of texts, and identification of themes were discussed in author meetings throughout data collection and analysis.

5 | Findings

Several themes were identified that characterize rural patients' experiences with telehealth at an urban medical center, and which help uncover the meaning participants ascribe to telehealth in the context of living rurally. Themes are presented under three organizing concept areas: Rural Healthcare, Rural Contexts, and Telehealth Experiences (Table 2). Details of participants' health conditions have been omitted to protect anonymity.

5.1 | Rural Healthcare

To contextualize participants' telehealth experiences, we first sought to understand their healthcare access and utilization. The picture of rural healthcare that emerged was one of shortages, limited access, and quality concerns. The result of this healthcare landscape for participants was experiences of fragmented care and increased demands for patient self-advocacy.

5.1.1 | Scarcity

Participants' characterizations of rural healthcare centered around the inadequacy of available services. P11 (female, 65 years) summarized the state of local care, "There's just a lack of providers, generally, to choose from. Scarcity is a real problem here." The concept of scarcity—of being insufficient for the demand—captures participants' experiences of limited rural healthcare. Nearly all participants had experienced challenges in obtaining care, such as new patient waitlists, long waits for appointments, and difficulty scheduling procedures. In a remote rural region, P7 (female, 54 years) had faced particular challenges: "Doctors, they don't have enough room in their schedules to take new clients. So I have been trying for about eight months to get just a regular general practitioner that will take my insurance." P3 (female, 73 years) voiced another perspective on the same issue:

> I'm an established patient in the practices that I go to ... And that is really lucky. It's a situation where, once you get into a practice, you do *not* leave it, or you're going to be passed to the four winds.

Several participants stated that there simply were not specialist providers, saying for example, "the type of specialists I need, they don't exist here" (P11) or "there's not access to doctors who know a whole lot about my [condition] up here" (P7) and "they don't have a lot of specialists down here, so ... they're sending me all over the place" (P5; female, 71 years). Although specialty care shortages were most severe in more rural areas, they were experienced across rural settings. P10 (female, 62 years), who lived in a large town near a major tourist destination, described the local hospital as "full service," but qualified that with "no oncology services, no full-time cardiology, no pulmonology, no nephrology." Specialist healthcare shortages were particularly evident among the sample related to oncology care. Several participants were currently or recently in cancer treatment, and all of them had to drive at least 1 h to obtain that treatment.

Notably, not all participants identified challenges with obtaining healthcare in their rural area. Whether healthcare was perceived as adequate appeared to be a function of the specific rural setting and patients' healthcare needs. P15 (male, 67 years) lived nearest to an urban center in a more populated

TABLE 2 | Themes and representative quotes or descriptions.

Rural healthcare	
Scarcity	"There're not specialists around here—the type of specialists I need, they don't exist here." (P11) "You're not going to get good care. If you see the hospitals, you're going to run." (P14)
Navigating Fragmented Care	"It's sometimes frustrating and it takes persistence." (P1)
Rural contexts	
Rurality as taken-for-granted background	"They're mountain roads and county roads. We're at a high elevation and we have winter conditions. … A lot of people up here are off the grid because the power lines follow the county road, basically. We're off the grid, our neighbors are off the grid, you just get used to it." (P4) "I live in a house that's on an acre that's next to a house that's on six acres that's next to a house that's on probably 10 acres." (P6) "Where I live is on a county road, we do have utility, meaning PG&E and telephone. It's 2400 ft in elevation. We're one mountain range from the coast. I live in a stand of Douglas fir and oak and madrone." (P12)
Rurality made conspicuous	During data collection, many participants experienced impacts from a series of severe winter storms in the region, which uncovered some taken-for-granted elements of their rural contexts. "And we had a big storm and it knocked down a bunch of trees, so I wasn't able to get out of my driveway. I had to wait two more weeks to get the carcinoma removed."(P6)
Telehealth experiences	
Telehealth barriers: rural connectivity and patient workarounds	"In bad weather, if I'm not in a right location, then I do have [connectivity] issues. But if I know that there's bad weather coming, then I ask my neurologist or my doctor if he can call me instead of doing the telehealth visit." (P13)
Assessments of telehealth: drawbacks versus benefits	"It's [telehealth] not what I prefer, because I like building a relationship. It's harder to do that when it's not in-person. … I just feel like you can't get the same rapport when you're on a video screen." (P7) "Where I'm at, this is a lifeline." (P16) "Oh, you mean drive eight hours instead of sitting in my dining room? No." (P6)
Defining a role for telehealth within rural contexts	"I'm kind of into this being in the woods and not having to leave kind of situation. I've got a whole system all planned out up here. So the telehealth is just part of those systems." (P9) "[Telehealth] makes it easier for me to be able to live where I live and still get the care that I want to get, where I want to get it." (P13)

Note: Quotes included in table may not be included in article text, or may not be included in full.

rural region, and although he had relatively high healthcare needs, he did not experience issues with local healthcare. By contrast, P9 (male, 49 years) lived in a remote area with relatively few services but had low healthcare needs and was satisfied with his local care.

Another dimension of scarcity was a perceived dearth of quality care. Participants consistently voiced concerns with the quality of care available locally. When asked if she experienced any challenges with local healthcare, P11 said,

> Can I say lack of competence? [laughs] … I drove [my friend] to three pulmonary visits, locally. And *not once* did the guy take the stethoscope off his neck to listen to his lung fields … there's something wrong with the picture when a pulmonologist doesn't listen to your lungs!

P11's expectations for healthcare were informed by her professional knowledge, and she brought that insight to this issue. However, participants with varying levels of health literacy and healthcare utilization perceived their local care to be of low quality. Concerns with quality were exemplified by participants seeking second opinions outside of their local area. In this way, patients were not just accessing care that was unavailable locally, but care that they perceived to be of higher quality. P14 (female, 43 years) epitomized quality concerns with an emphatic response when asked to clarify why she chose not to see local providers: "Because you're not going to get good care. If you see the hospitals, you're going to run. It's very rundown. Yeah, the quality of care here—…

It's just a very bad healthcare system." The choice to go beyond the nearest available healthcare to access more distant services is known as rural healthcare bypass, which has important implications for rural healthcare availability (Sanders et al. 2015; CMS Office of Minority Health 2020, 2021).

Participants were discerning and nuanced in their assessments of rural healthcare quality, demonstrating insight gained from direct healthcare experiences. P12 (male, 71 years) was very satisfied with the care provided by his local primary care provider and cardiologist, but described how a lesion on his liver was miscategorized as non-cancerous by a local radiologist, an error that delayed his cancer diagnosis by several months. P8 (male, 74 years) had also identified gradients in healthcare quality in his area:

> The healthcare I get [in a nearby town] is good. [That hospital] does not have [certain services], so I've never been checked in. But I find the ER is excellent. I would say that the best doctors in [this county] are all in the ER, they're not in private practice. Private practices are a little iffy. You take what you get—or what you *can* get.

5.1.2 | Navigating Fragmented Care

In the context of scarcity, many participants' rural healthcare experiences were characterized by fragmented care. Fragmented care has been defined as "limited, noncontinuous, episodic, and disorganized care across multiple healthcare practitioners and settings" (Joo 2023, 3461). Most participants had complex health needs and described seeing multiple providers and accessing care at multiple health systems locally, as well traveling to adjacent regions for care.

An important dimension of the experience of fragmented care among participants was increased demands for care navigation or coordination. P1 (male, 80 years) described his experience of fragmented care when trying to obtain an ultrasound and navigating convoluted communication between two local health systems, adding that "it takes a lot of patient advocacy to make it work." P1's experience highlights how navigating fragmented care requires high patient involvement in care coordination, and in turn, patient self-advocacy.

These demands were exemplified by P3's journey with cancer treatment, beginning with her self-advocacy for a referral to the study health system after her local radiologist did not plan to biopsy a tumor. After tumor biopsy and genetic analysis, oncologists at the study health system recommended P3 undergo chemotherapy:

> When I saw the very much overworked general oncologist up here, he thought I didn't even need chemotherapy, even though I had already been told by my [Health System] oncologist that I did. So I asked him to call the [Health System] guy, and he did, then he called me back and said, 'You're right, I understand now. So let's get you set up'.

Although successful, it was clear that these efforts were just another burden in P3's management of cancer care and survivorship. P1 also characterized the level of self-advocacy required to navigate fragmented care as a burden, saying "It's sometimes frustrating and it takes persistence. … You just have to not give up and continually contact them when you need something." P1 further noted that the demands of self-advocacy may be a barrier for those with fewer resources.

Applying concepts from Interpretive Phenomenology, rural healthcare scarcity and the challenges of fragmented care caused a shift in participants' mode of engagement with healthcare, from ready-to-hand to unready-to-hand. In ready-to-hand mode, an individual is unreflexively engaged with the world, as action proceeds smoothly and the world and equipment go unnoticed (Benner et al. 2009; Plager 1994). By contrast, unready-to-hand mode is characterized by a breakdown or disturbance in engaged practical activity, illuminating previously taken-for-granted aspects of the world. Experiences of unready-to-hand healthcare interactions, with perceived breakdown of function and flow, had prompted many participants to engage in a present-to-hand mode, reflecting on local healthcare and its significance for their lived realities.

With narratives of scarcity and fragmented care, participants implicitly endorsed a deficits-based perspective of rural healthcare. However, participants placed the locus of deficits they identified within healthcare structures and systems, rather than in their rural environments. Instead, participants' shared nuanced valuations of the balance of challenges against strengths or resources represented in their experiences of rural contexts. In doing so, they developed interpretations that formed part of their contexts for telehealth use, as discussed below.

6 | Rural Contexts

Details of participants' rural contexts were sought to situate their experiences with and perceptions of telehealth. Participants lived in locales across California: isolated coastal villages and the Coastal Mountains, remote far Northern California, the Sierra Foothills, and the renowned Wine Country region. These settings embody widely divergent degrees of rurality, characterized by distinct geographies, economies, access, and remoteness. Despite these differences, participants shared common experiences and conceptualizations of rurality, which were uncovered in part through narratives on accessing rural healthcare.

6.1 | Rurality as Taken-For-Granted Background

In the context of rural healthcare, the most prominent features of rurality for participants were distance and travel. It was common for participants to travel an hour or more to access their basic, local healthcare services. They emphasized that the roads they used were "shoddy" (P9), "winding country roads" (P6) with "curves, a lot of curves" (P8), which added to travel time: "It's only 50 miles, but the roads are not very good, so it takes an hour and a half one way" (P3). As with P3, many participants

immediately knew the number of miles they had to drive for services, demonstrating the significance of distance and travel to their everyday realities.

Distance and travel demands were most extreme to reach the study health center. Fourteen of the 16 participants had used in-person services there, with all but one driving at least two-and-a-half hours and up to 6 h one way to reach the health center. This entailed a substantial economic burden, which P7 summarized:

> The cost [for gas] of driving down is probably at least $100 one way. Then I have to stay at a hotel, which is at least $200 a night. And maybe $50 for parking. And then food. So for one trip, it's what? $500, *plus* wear and tear on my car. Between $500 and $1,000 I guess, depending on where I can stay.

Common to all participants' descriptions of managing travel to the health system was the specter of traffic. Traffic is notoriously congested in the urban area of the medical center, and this figured in all participants' travel planning. Participants experienced notable nonmaterial burden related to travel and especially traffic, as exemplified by P11 saying, "It's very stressful. So just from the gate, it taints the visit because once your visit is over in person, you know, gotta get back in your car and you gotta fight the traffic going home." Besides the stress of driving in traffic, patients also experienced stress from anticipating travel disruptions and the need to be on time, finding parking, and booking accommodations.

Rural distances were experienced not only in terms of travel time to services, however, but also as space. In describing where they lived, several participants mentioned the size of the parcels of land they lived on and of those surrounding them to convey a sense of the space inherent to rural living. As P6 (female, 75 years) explained, "I live in a house that's on an acre that's next to a house that's on six acres that's next to a house that's on probably 10 acres." With these descriptions, participants also communicated the centrality of lived space to their experiences of rurality. In this regard, distance was unequivocally experienced as a positive attribute of rural living. Participants evoked other elements of the natural setting as positive attributes, such as wild animals, quiet, low light pollution, forests, and geography. Narratives of participants' rural environments revealed what showed up as meaningful to them, with space and natural setting figuring prominently as valued characteristics.

Although distance and travel were sometimes experienced as inconveniences, participants' depictions also construed these elements as quotidian or routine: accepted realities of a rural way of life. This implicit acceptance was also evident in the attention that several participants, when asked to describe their environment, gave to specifying whether or not they were "off-grid", that is, whether they were connected to the PG&E power grid (Table 2). As P9 put it in describing the impact of his rural environment, "Everything up here is, you know ... you get it as good as you can and then you learn how to deal with." Rurality was therefore most often experienced as background for participants, part of their taken-for-granted world.

6.2 | Rurality Made Conspicuous

The full extent of potential inconveniences attendant to rural living became apparent during the course of data collection, when a series of severe winter weather systems impacted the region (Pitofsky and Rice, n.d.), bringing record-breaking rainfall, snow at unusually low elevations, and high winds. Flooding, infrastructure damage, and days-long power outages affected thousands in California. Many participants referred to these circumstances in their interviews, describing varying degrees of impact in relation to rural living and rural healthcare. P9 described supporting his neighbors during the snow:

> I was up there starting her generator because she doesn't have the arm strength... So I got to walk four miles through the forest ... to get that thing started. And there's so much snow on the road I was the guy pulling the fire department back onto the road a couple nights ago.

It was P6, however, who experienced the most direct healthcare impact as a result of these weather events, with delayed cancer treatment:

> My appointment was early in the morning. And we had a big storm and it knocked down a bunch of trees, so I wasn't able to get out of my driveway. I had to wait two more weeks to get the [tumor] removed.

For participants who did not experience healthcare impacts from the storms, these circumstances nevertheless provoked them to reflect on potential challenges, as with P13 (female, 49 years):

> I've got an all-wheel drive car that works well, but if someone didn't have that and the amount of snow that we had, I could see how somebody would've not been able to make it to a physical visit. But given that the power was on, you'd be able to make it to a virtual visit.

For several participants, in-person healthcare access was cut off during those periods due to road closures, and for some, power outages would have made telehealth unavailable. These weather events had made conspicuous participants' rural worlds by disrupting their usual way of being. Their taken-for-granted routines of healthcare utilization were exposed, and assumptions of healthcare access were problematized, revealing the full value of telehealth for rural patients.

7 | Telehealth Experiences

Participants' rural contexts and healthcare experiences formed the background of their telehealth utilization and clearly shaped their valuations of telehealth. We found that the ultimate meaning that they assigned to telehealth in the

wider context of their lives related fundamentally to its role in supporting rural living.

7.1 | Telehealth Barriers: Rural Connectivity and Patient Workarounds

The only rural telehealth barrier that participants identified was limited connectivity. However, in this study most participants did not personally experience connectivity issues. Those few who did had developed a wide range of workarounds to enable telehealth use. At one extreme, P9 had recently invested nearly $1500 in an intensive system to enable connectivity. Three other participants had experienced limitations in video connectivity and employed what they considered to be a minor workaround of resorting to telephone visits. P14 had used this workaround related to weather disruptions:

> In bad weather, if I'm not in a right location, then I do have [connectivity] issues. But if I know that there's bad weather coming, then I ask my neurologist or my doctor if he can call me instead of doing the telehealth visit. Sometimes I'm not able to do a video chat because the service is so bad. Then I can do a phone chat.

P2 (female, 83 years) had also resorted to telephone encounters more than once, saying "To Zoom—it's a crapshoot." The other workaround described was obtaining connectivity support from others. About one-third of participants had help from family or a friend to set up the video conference application on their device, or to access internet: "I wouldn't know how to get access to the internet at the level that I currently have it if it wasn't for other people" (P1).

Even participants who did not personally experience these challenges speculated that connectivity could be a telehealth barrier for rural patients, highlighting the prominence of this issue in narratives of rural telehealth. P6's work with an organization providing support to low-income residents in her rural area lent concrete understanding of another dimension of connectivity barriers, namely affordability:

> Technology depends on people being wealthy enough to be able to afford the technology. And it's not just the computer. It's where you live and where you get your internet and how much you pay for it. ... I think about my clients, and there's no way [they could access telehealth]. They have to take a bus and go to the doctor because they can't do it.

7.2 | Assessments of Telehealth: Drawbacks Versus Benefits

There was a range in participant-perceived drawbacks to telehealth, with some participants stating a clear preference for in-person care, while others stated that they identified no downsides to telehealth. Among the latter group was P8, who said "I usually have video conferences, so I see my providers and it basically is like sitting across the desk from them. ... It's like I'm meeting them in person. I could see them and they could see me." Like this participant, P14, P15, and P16 did not identify that interpersonal elements of care differed appreciably between telehealth and in-person.

On the other hand, P7 stated the clearest preference for in-person: "I like building a relationship. It's harder to do that when it's not in-person. ... I just feel like you can't get the same rapport when you're on a video screen as you can when you're in person." The loss of in-person interaction elements in telehealth encounters was identified by about half of these rural patients. More than body language and eye contact, they referred to the intangible aspects of being in-person, "the things that you can't even put your finger on" (P12). P4 (female, 83 years) referred to "an energy that moves between people" in person that is lost over video, which this perceptive quote from P13 captures:

> There's definitely an element that's missing. Because one of the things I really like about [my oncologist] is she comes into the space and then she relaxes and sits with me for a minute and just chats about something. And with the telehealth, you can tell she's still thinking of that, but the space doesn't allow for that as much.

With telehealth, P13 still perceived her provider's efforts to develop connection, but distinctly experienced less effect from those efforts. This aligns with P3's assessment that "there's more impact of the interpersonal interaction" when in-person. Participants also characterized video as "just a little bit removed" (P12) from in-person and as "easier to distance somebody. It's easier to be kind of uninterested" on video (P6).

Increased access to specialist providers was the primary telehealth benefit for this rural patient population, with most participants explicitly defining the value of telehealth in relation to the dearth of specialist care in their area. Until recently a life-long urban resident, P16's (male, 58) view of the specialist deficit in rural areas was formed in contrast to his experience living in the health center's urban area. He required ongoing specialty care for a complex health condition and said of telehealth, "where I'm at, this is a lifeline." The high value rural residents placed on increased specialist access was revealed by P7, who indicated a strong preference for establishing in-person care with a provider before using telehealth. Despite this preference, P7 also stated that she would use telehealth with a new provider, "if it meant that I had access to a specialist and didn't have to drive six hours." Furthermore, several participants viewed telehealth or had used telehealth as an avenue to gain entry to care with a specialist provider, as with P5: "They offered me telehealth first as a way to get in the door, which I'm glad I did because I might've waited another couple months."

Not surprisingly, all participants identified less travel as a benefit of telehealth. However, regarding accessing services at the study health center, reduced need to travel to this urban area was a standout benefit. Without telehealth, participants would

travel 5–12 h round-trip for a 15-min consultation. P6 offered a pithy summation of the value of telehealth in this context when asked if she would ever choose an in-person visit if telehealth was an option: "Oh, you mean drive eight hours instead of sitting in my dining room? No." The benefits of reduced travel to the study health center went beyond saved time and material resources, to reduced emotional, energetic, and mental strain.

A corollary benefit of reduced travel was increased flexibility in scheduling. Rural patients, particularly the most remote, were limited in the timing of appointments they could take by their need to plan travel. For example,

> You can take those appointments nobody wants to drive to, like 8:00 a.m. who wants to drive there at 8:00 AM? If you're asking me to drive, it needs to be between 11:00 a.m. and 3:00 p.m. So you can take those late hour appointments or early morning appointments.

The distance and time that P11 had to travel left her with a small window of in-person visit times that were feasible without an overnight stay near the health center. However, this was a benefit as well for those who were closer to the health center, like P15:

> It's easier to pick the time, too, for the appointment, if you're doing telehealth. Because so often I have to go in to the clinic on Friday, because [my doctor is] only there Friday afternoons. Well, that puts me coming home in traffic, and it takes me two hours [double the normal time] to get home.

7.3 | Defining a Role for Telehealth Within Rural Contexts

Participants articulated the role of telehealth by weighing the value of in-person care relative to the burdens of in-person access in rural contexts. While telehealth was viewed as a welcome, high-value, and even essential service in their rural life contexts, participants still situated it as a complement or supplement—rather than a replacement—to in-person care. They used words like *alternative*, *option*, and *choice* when weighing how they saw telehealth fitting into rural healthcare and expressed a desire for flexibility between in-person and telehealth modalities. These rural patients all appreciated the need for in-person assessment and physical exam. However, the majority had chronic conditions necessitating routine follow-up care. As many traveled an hour or more to reach even local providers, telehealth visits were seen as ideal for almost all instances of routine care. P9 offered a succinct calculation of this balance: "Ninety percent of the stuff is all fine and dandy over the phone. The other ten percent? Now I got to see my doctor in the office."

Participants' valuations and perceptions of telehealth were directly shaped by their rural contexts. Telehealth was seen as a means to circumvent rural inconveniences that create challenges for healthcare access, such as remoteness, travel, and weather, thereby enabling more frequent and more reliable healthcare utilization. Furthermore, against the backdrop of rural healthcare scarcity and inadequacy, telehealth was seen as a means to broaden the care that was available to rural patients, particularly specialist care that was unavailable locally or care that was perceived as higher quality.

The full meaning that participants ascribed to telehealth was therefore found in understanding their rural contexts, which situated the value of telehealth as more than mere convenience. Ultimately, telehealth allowed participants to remain in their familiar, supportive rural contexts while obtaining more reliable and more flexible access to care. In this way, telehealth emerged as a resource to support rural living and participants' valued rural ways of life. The central importance of rural living to participants was disclosed through their positive descriptions of rural space and natural setting, as well as their implicit acceptance of rural inconveniences—both routine and out of the ordinary. P9 epitomized this aspect of participants' identification with a rural way of life:

> I'm kind of into this being in the woods and not having to leave kind of situation. I've got a whole system all planned out up here. So the telehealth is just part of those systems. I need to be able to call out when it's all smoke and fire and [everything's] gone to damnation up here.

The decisive value and meaning of telehealth for these patients was revealed relative to the value they placed on rural living. As P13 put it, telehealth "makes it easier for me to be able to live where I live and still get the care that I want to get, where I want to get it."

8 | Discussion

In this Interpretive Phenomenology study, we sought to portray rural patients' experiences with telehealth, embedded in the contexts of their rural lives. Participants' telehealth experiences and assessments were integrally informed by their rural life contexts, and telehealth was experienced as supporting participants' valued rural ways of life. Study participants all experienced telehealth as a tremendously positive healthcare service and were unanimously in support of its ongoing utilization in their rural healthcare. Participants' limited reservations about telehealth were expressly outweighed by its perceived benefits. Our findings overall align with a 2024 scoping review on rural patients' experiences with telehealth in a variety of settings (Rowe Ferrara and Chapman 2024).

We also sought to identify the benefits or drawbacks and barriers of telehealth for rural patients. The primary benefits were reduced travel and increased access to healthcare and specialist providers. Rural patients in a variety of settings commonly name reduced travel time and costs as central telehealth benefits (Batsis et al. 2020; Ferucci et al. 2022; Finley et al. 2021; Fletcher et al. 2022; Jordan et al. 2021; Schlittenhardt 2016; Silvestrini et al. 2021); study findings here add detail regarding the added impact of navigating congested urban traffic for rural patients. Improved provider communication has been identified

as a telehealth benefit by rural participants in other qualitative studies (Batsis et al. 2020; Ferucci et al. 2022; Jordan et al. 2021) but only one participant in this study noted this benefit in relation to patient portal messaging with his providers. The convenience of telehealth was another primary benefit among our participants, a finding that also figured prominently in other studies (Batsis et al. 2020; Finley et al. 2021; Fletcher et al. 2022; Schlittenhardt 2016; Silvestrini et al. 2021; Day et al. 2021; Demirci et al. 2019).

Several participants noted the loss of some beneficial elements of interpersonal interaction in telehealth; the degree to which participants experienced this as a drawback varied. Specific elements of this loss that participants named were common to findings from other qualitative studies with rural telehealth patients, such as stilted communication, loss of eye contact, and missed physical conversational cues (Batsis et al. 2019, 2020; Demirci et al. 2019; Goldstein et al. 2022). However participants in our study also emphasized more intangible interpersonal elements, such as energy flow and felt impact, that may be best captured by the phenomenological concept of lived human relation (van Manen 2016; Tuohy et al. 2013).

Issues such as technical challenges and poor connectivity are common qualitative findings on rural patient-identified telehealth barriers (Ferucci et al. 2022; Jordan et al. 2021; Demirci et al. 2019; Holtz et al. 2022). Findings from this study contribute new detail on the workarounds that rural residents employ to overcome minor connectivity challenges, and furthermore cast this potential barrier as less than prohibitive. Privacy concerns did not factor in our participants' evaluations of telehealth services, as Pullyblank (Pullyblank 2023) reported in a scoping review of rural attitudes toward telehealth use. This may be partly attributed to our interview timing, in early 2023, well after the new standard of telehealth was established. Notably, none of the participants in our study identified challenges or drawbacks related to rural–urban patient-provider cultural disconnect, which other studies have identified as a potential issue (Golembiewski et al. 2022; Cheesmond et al. 2019). However, we did not address the question of rural–urban concordance, and this should be explored in future qualitative study.

9 | Study Implications

Rural patients in this study presented overwhelmingly positive assessments of telehealth and its ability to increase healthcare access. Despite this, we caution against viewing telehealth as a panacea for rural healthcare access challenges, related to two aspects of our findings.

First, our sample differed substantively compared to the rest of rural California: 94% of participants identified as White, versus 74% in rural California counties overall (United States Census Bureau, n.d.; United States Federal Office of Rural Health Policy 2021), and 63% were aged 65 years and over (versus 25%). The sample was more highly educated, as 63% had a bachelor's degree or higher compared to 23% of California rural county residents. Participants also exhibited high cultural health capital (Shim 2010), and many described high social support and community engagement. Study participants may have been better resourced than many rural California residents, as exemplified by their ability to travel to the study health center despite substantial burden and their successful navigation of local care to obtain specialty referrals to the study health center. Finally, our sample was also drawn from only one rural region. For these reasons, we have attempted to exercise caution in generalizing our findings beyond this population.

The second concern was the finding that rural patients perceived telehealth as a means to access higher quality care than what they perceived to be available in their local communities. In this way, we propose that telehealth may contribute to rural healthcare bypass. To our knowledge, this perspective has not been addressed in the literature to date. Rural healthcare bypass is a complex consumer behavior. Dissatisfaction with local healthcare and living in an area with a low density of primary care providers are positively associated with rural bypass (Sanders et al. 2015; CMS Office of Minority Health 2021; Liu et al. 2008), but the strength of community ties has been shown to moderate the effect of healthcare dissatisfaction on bypass (Sanders et al. 2015). Additionally, research shows mixed impacts of factors such as patients' education level and age on rural bypass (Sanders et al. 2015; Liu et al. 2008; Jackson et al. 2021), and these relationships have been shown to vary by area social vulnerability level (Jackson et al. 2021). Level of rurality, proximity to non-rural areas, distance to other hospitals, and commuting flows also impact bypass behaviors (Sanders et al. 2015; CMS Office of Minority Health 2020, 2021; Liu et al. 2008; Jackson et al. 2021). Similar to rural telehealth patients in this study, rural patients who chose to use non-local primary care have reported bypassing to access better care quality, more selection, and specialty care (Liu et al. 2008; Jackson et al. 2021).

Potential implications for rural healthcare are complex. Although telehealth may benefit some patients by supporting access to distant, more specialized care, telehealth as a bypass behavior may also decrease revenue for rural healthcare services, undermining their economic viability and increasing the risk of closure (Sanders et al. 2015; Malone and Holmes 2020). This is particularly concerning amid an already fraught picture of under-resourced rural healthcare. Insufficient availability of local healthcare services is a chronic, ongoing issue in the rural United States. This issue is the result of various long-term structural factors, including the restructuring of rural economies, trends in healthcare organization, increasing health system affiliation, and maldistribution of the healthcare workforce (Barton et al. 2021; Henning-Smith 2021; Meit et al. 2014; Larson et al. 2016, 2020, 2021; O'Hanlon et al. 2019). These forces have contributed the to reduction of services or closure for hundreds of rural healthcare facilities nationwide in the past decade (Barton et al. 2021). Specific attention is therefore needed to explore whether telehealth may contribute to rural healthcare bypass behaviors and a related redistribution of healthcare resources.

Furthermore, as demonstrated in our findings, accessing care at distant, elite health centers often requires resources and know-how (i.e., cultural health capital), which are not equally possessed by all rural patients. While telehealth can increase the availability and diversity of healthcare options that exist for rural populations, not all rural patients will be well equipped

to access those options. Our participants' mobilization of flexible resources to utilize telehealth to go beyond local healthcare options substantiates concerns that marginalized and under-resourced rural populations may be further left behind by increased reliance on telehealth.

Telehealth will therefore not function to ameliorate rural healthcare shortages or disparities without attention to equitable access (Lyles et al. 2022). Important barriers remain to realizing equitable rural telehealth access. Further study is needed to explore telehealth patient experiences and identify access barriers among rural populations at risk of access disparities, such as those of lower socioeconomic status and rural minoritized populations. While this may take the form of formal academic research, patient advisory boards can also play an important role in identifying telehealth needs and barriers (Lyles et al. 2022). Collaboration with rural American Indian/Native American populations and populations of color is of particular importance, as these patients experience specific healthcare barriers as a consequence of historical and ongoing discrimination (Kozhimannil and Henning-Smith 2018; Henning-Smith et al. 2019).

Policy should seek to address patient-level telehealth access barriers by supporting measures such as healthcare navigation resources, telehealth-related patient outreach, patient digital access assessment, and patient digital education. While formal governmental policy is needed, health system and organizational leaders can also commit to addressing disparities and take action in these areas (Lyles et al. 2022). System-level barriers can be addressed in part with continued support for telehealth in rural safety net providers, such as Critical Access Hospitals and Federally Qualified Health Centers, to increase telehealth availability for underserved rural populations. Finally, telehealth payment parity, or equal reimbursement for services provided via telehealth and in-person, is another essential component to supporting telehealth access overall and telehealth equity for underserved populations in particular (Bailey et al. 2021; Ellimoottil 2021; Lee and Singh 2023).

10 | Limitations

This was a situated study among a population within a specific rural region. Our sample did not reflect the diversity of educational attainment or race and ethnicity of rural populations in the study region. These factors limit the generalizability and transferability of the findings to other patient groups or rural regions. Additionally, participants were all recruited through an online patient portal. Patient portal use is associated with patient demographic characteristics, and an inactive patient portal may indicate patients at risk of digital access disparities (Rodriguez et al. 2020; Chagpar 2022; Pullyblank et al. 2023). However, our recruitment strategy sampled from a widely dispersed population, overcoming geographic limitations associated with traditional recruitment methods in rural areas (e.g., flyers, clinic partnerships). Finally, the sample included only patients who had completed a video telehealth visit. Connectivity barriers may be more substantial among patients who have not used video telehealth, and our findings on rural patients' telehealth perspectives may not be generalizable to telehealth non-users. Future research could employ partnerships with Federally Qualified Health Centers, Tribal Health organizations, and other community organizations, as well as targeted recruitment methods, to support access to the diversity of rural populations.

11 | Conclusion

Rural patients in this study utilized telehealth to access specialty care at a distant urban medical center and offered highly positive assessments of the value of telehealth. Their perceptions of telehealth were informed by experiences of rural healthcare scarcity and their rural environments. The explicit value participants placed on their rural contexts challenges a monolithic deficits-based conception of rurality and its associated constructions of elements such as distance, geography, and space in the field of rural healthcare. In these contexts, telehealth emerged as an impactful and positive tool to support both rural healthcare access and a valued rural way of life. However, ongoing research is needed to understand the telehealth experiences of rural low-income patients and rural populations of color. Future studies should employ purposive sampling to recruit samples that reflect the changing racial and ethnic diversity of rural populations. Further research is also needed to understand a potential role of telehealth in rural healthcare bypass.

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Ethics Statement

This study was reviewed and approved by the Institutional Review Board at University of California, San Francisco.

Consent

Verbal consent was obtained from all participants at the outset of interviews.

Conflicts of Interest

The authors declare no conflicts of interest.

Data Availability Statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

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Supporting Information

Additional supporting information can be found online in the Supporting Information section. **Data S1:** ruso70016-sup-0001-AppendixA.docx. **Data S2:** ruso70016-sup-0002-AppendixB.docx.