

A. SPECIFIC AIMS

One goal of the Healthy People 2010 initiative is to reduce or eliminate health disparities in vulnerable populations, including rural populations and those from minority ethnic backgrounds. Approximately 25% of Americans currently live in rural communities with fewer than 2,500 residents. In general, rural populations experience higher rates of heart disease, cancer, injury-related deaths, diabetes, and depression than do urban populations. Furthermore, rural communities are characterized by lower rates of personal income, educational attainment, health-insurance coverage, access to emergency and specialty care services, and reported health status of adults than are urban communities (Gamm, Hutchison, Dabney, & Dorsey, ; Magilvy, Congdon, Martinez, Davis & Averill, 2000; U.S. Department of Health and Human Services, 2000; Weinert, 2002). A recent companion document to Healthy People 2010 was developed for rural populations, in which access to quality health services was identified by both health care providers and residents in rural areas as the overriding health care issue (Gamm, et al.,).

As a social group with special concerns, rural elderly populations in the United States are likely to fall out of the societal mainstream, intensifying the need for goods and services to which access is already compromised. The lived health care experiences and health care issues for rural elders often include inadequate access to health care resources, marginal ability to understand the workings of the managed care system, and barriers related to history, culture, language, geographic isolation, and traditional norms (Hamman et al., 1999; Kienzle, 2001; Magilvy, et al., 2000).). Such barriers and inequities are best understood in the context of culture-specific and community-specific health care perceptions of rural elders. The perceptions are important to overall health and health outcomes because they influence the likelihood for planning and delivering health care congruent with the values and priorities of the population, and in partnership with community-based organizations (Bushy, 2000; Sen, 2001). Data are scarce regarding the perceptions of rural elders in New Mexico, a state known to be culturally diverse, with the nation's highest poverty levels (U.S. Bureau of the Census, 2002). Even less is known about the health care perceptions, experiences, and contextual issues for rural elders in southwestern New Mexico, which comprises part of the U.S.-Mexican border, is severely affected by the demise of the copper mining industry, and is currently struggling to meet the needs of a growing elderly population. The population of interest to this study, therefore, represents health disparities along the lines of rurality, aging, geographic location, economic status, and culture. A need exists to identify and address the health care needs of this population and to contextualize the findings in the national rural health environment (Weinert, 2002).

The overall research purpose is to identify, critically analyze, and collectively resolve key health care issues for rural elders. Research is expected to proceed through sequential investigations, gradually involving greater numbers of researchers, participants/stakeholders, and graduate students. The proposed study is just the first step of this program of research. The broad objectives of this study are to identify and analyze major health care issues and disparities for a group of rural elders, in the context of their sociocultural environments and from their perspective; and to examine the policy and practice implications of the elders' perceptions of their health, health care, and health needs. The specific aims of the study are the following:

1. To analyze definitive indicators of health care disparities for rural elders, such as affordability of prescription medications, access to basic and specialty care services, and effectiveness of interactions between elders and health care providers, particularly in southwestern New Mexico.
2. To construct preliminary explanatory models based on definitions of health, indicators of disparities, cultural variations, and health care issues identified by rural elders.

B. BACKGROUND AND SIGNIFICANCE

Theoretical Framework

Emerging from the social sciences, the theoretical framework for the proposed study is community-based action research, particularly as described by Stringer (1999). The point of this approach is to design practice strategies to reduce or eliminate health disparities, based on true partnership between research and practice/actions (Minkler & Wallerstein,). Specifically, this framework involves collaboration between the researcher (as facilitator) and the participants to collectively identify, describe, analyze, and resolve specific problems. The key to this democratizing research strategy is the recognition that participants are the contextual and cultural experts in their own environments, capable of cocreating a more constructive, equitable, beneficial quality of life. The conceptual foundation of this approach is critical social theory, which analyzes and attempts to ameliorate disparities or conflicts in socioeconomic, cultural, and health-related domains (Kincheloe & McLaren, 2000). A key assumption is that lasting improvements in health and health care must originate from within the rural communities and their social contexts (Wallerstein & Duran,).

The focus of community-based action research is to bring understanding and meaning to the issues of interest--in this case, health care issues and disparities for rural elders. The ability to describe, analyze, and resolve key health care

issues rests on obtaining adequate and accurate information about what is currently occurring and what is not working as it should. While some of that information may derive from measurable indexes, the perceptions and social interpretations of the insiders--in this case, community-dwelling rural elders and other key informants--are essential to the goal of operationalizing and reducing health disparities (Agar, 2004; Sen, 2001).

Stringer's (1999) community-based action research routine consists of three simple steps, described as *Looking*, *Thinking*, and *Acting*. The Look-Think-Act research routine is best conceptualized as a blueprint or roadmap that provides guidance to the researcher. In the context of this routine, and in support of this study's overall objective and purposes, the proposed study will focus on *Looking*. *Looking* consists of recognizing, gathering, defining, and describing the situation, and it will address the Specific Aims. The purpose of *Looking* is to develop a collective description of how the health care experiences of rural elders occur, what the relevant contextual details are, and ultimately what insights can contribute to resolving the identified disparities and problems. The collective description arises from the perceptions of both the researcher and the participants, especially a core group of key community participants who will serve as contextual consultants throughout the inquiry.

The procedures attached to *Looking* include (1) collecting, recording, and analyzing information; (2) constructing reports that capture key elements and situational factors; and (3) validating and disseminating the findings among participants and stakeholders in the community. These processes are congruent with the two Specific Aims of the proposed study. In this research model, *Looking* must not be construed passively. Rather, looking implies responsibility and commitment of the researcher to situate the findings of the study in the broader context of previous research. In this way, the overall knowledge and theoretical understanding of rural elders' health care can be expanded and enriched for the purpose of reducing health disparities in this population. Future research may lead to testing specific interventions suggested by this study. Based on the results of *Looking*, depicted in the findings of the proposed study, the next phases of the research program will involve Stringer's (1999) steps of *Thinking* and *Acting*, to extend and clarify collective understanding of key health care issues for rural elders and to build a supportive coalition to identify priorities for community-based action and interventions in southwestern New Mexico.

This investigation is based on nursing and social science propositions that the processes of defining and explaining health care perceptions, issues, disparities, and experiences involve complex interactions among rural elders, the economic and political realities of local communities, and the contexts of rurality, poverty, ethnicity, and culture. The intent to generate preliminary explanatory models for identified issues rests on social engagement, dialogue, deliberate actions, epidemiological considerations, documentation, and policy analysis (Agar, 1999; Bushy, 2000; Kincheloe & McLaren, 2000). At this early stage, a qualitative, inductive research approach is appropriate. Specifically, critical ethnography will facilitate the *Looking* necessary to identify and analyze the definitive issues within situational contexts. Design and methodological aspects of critical ethnography will be developed in the Research Design and Methods section of this proposal.

Epidemiology of an Aging Population

A steady increase in the numbers of elderly people will challenge global, national, and local resources in the years ahead. Epidemiologically, a transition is under way worldwide from primarily acute and communicable diseases to chronic, non-communicable conditions in human populations. By the year 2050, an estimated 1.5 billion people over the age of 65 will live in the world, compared with 400 million today. High birth rates in the early 1900s, high immigration rates to the United States, improved public health interventions, and reduced risk for acute disease will likely result in greater numbers of octogenarians than ever before. The World Bank projects that by 2050, the world's developed nations will spend at least 25% of their public funding on health care and pensions, with a genuine funding crisis looming for developing countries (Marks & McQueen, 2001; Steel, 2001; Valanis, 1999). By the time the baby boomers enter old age, in 2030, approximately 20% of the U.S. population will be at least 65 years old. While the implications of these demographics are compelling, our health care system has yet to address them in depth (Institute of Medicine, 2001).

Within the United States, 35 million of approximately 281 million residents are older than 65 years of age. Of the total population, over 4 million are 85 or older, and 68,000 are centenarians (U.S. Bureau of the Census, 2001). Since the 1990 census, the median age of New Mexico residents has increased from 31.3 to 34.6 years. Approximately 12% of New Mexico's residents are now over the age of 65. In southwestern New Mexico, the population over 65 years of age has also increased substantially in all but two counties during the last census decade. The median age in the three southwestern counties of interest to this study increased from approximately 37 years in 1990 to 40 years in 2000, reflecting the aging cohort of baby boomers and the influx of retirees from elsewhere. Of special note is that the number of people over the age of 85 has increased in the three southwestern counties between 1990 and 2000 (U.S. Bureau of the Census, 2001), suggesting an increased need for formal health care services.

A brief examination of poverty levels and minority status for the three counties of interest strongly supports the need for research aimed at reducing or eliminating health disparities in southwestern New Mexico. Table 1 contains the poverty rates and percentages of Hispanic and elderly residents in the counties, the state of New Mexico, and the United States (Black/African Americans and Asian/Pacific Islanders comprise less than 1% of the populations of the three counties in this study [U.S. Bureau of the Census, 2002]).

Table 1. Census Data for Study Area (SW-NM), New Mexico, & U.S.

County	Total Population	% Change 1990-2000	% 65+	% White (non-Hispanic)	% Hispanic	% American Indian	% Poor*	People per square mile
Grant	31,002	12.0	16.5	48.5	48.8	1.4	18.7	7.8
Luna	25,016	38.1	18.2	39.7	57.7	1.1	32.9	8.4
Socorro	18,078	22.4	10.9	37.6	48.7	10.9	31.7	2.7
NM	1,829,146	20.1	11.7	44.7	44.7	9.5	18.4	15.0
U.S.	284,796,887	13.1	12.4	69.1	12.5	0.9	12.4	79.6

* Poor is defined as household income <\$20,000/yr.

Reference: <http://quickfacts.census.gov/qfd/states/35/35053.html> (3 January 2004)

Rural Context

Approximately 61 million U.S. residents live in rural areas, and about 15% of that population is at least 65 years of age. While all elderly populations experience increasing challenges to well-being, rural groups suffer disproportionate deficiencies in health care access, social services, and other goods and services. Of special concern is the lack of a coordinated system of formalized attention to the needs of rural elders. Such a fragmented approach to provision of basic health care and services is predictive of future health status and need for services (Magilvy, et al., 2000; Quandt, Arcury, & Bell, 1998; Rosenthal & Fox, 2000). Availability of all health care services fluctuates according to urban/rural status. Patterns of risky behavior (e.g., smoking, and alcohol consumption) are higher in rural areas, especially the western United States. A recent Centers for Disease Control and Prevention report strongly supports the need for research on health care disparities in rural America to favorably impact policy (Morgan, 2002).

In the context of extant literature/research in health care and social science, and based on interdisciplinary consensus, the following national research priorities have been identified for aging populations in underserved and rural areas. The first five priorities originated in the rural health literature (Bushy, 2000; Higgs, Bayne, & Murphy, 2001; Morgan, 2002; National Rural Health Association, 1999), and the remainder in the larger body of literature on elders' health care issues. All of the following priorities support the need for the proposed study:

- 1) Accurate documentation of rural communities' specific demographic trends, health service needs, and patterns of care provision.
- 2) Systems of care delivery that will adequately address the needs of rural elders while remaining efficient in the use of resources.
- 3) Evaluation studies of current and future systems of service delivery, including tracking of outcomes for both populations and systems. This includes evaluation of the Rural Health Clinics program.
- 4) Needs of families and caregivers for rural elders.
- 5) Perceptions of rural elders themselves regarding explicit needs, access to care, and the efficacy of health and service programs.
- 6) Research describing and analyzing patterns of health care access and usage for rural elders to maximize efficient use of diminishing resources for health care (Gulzar, 1999; Nemet & Bailey, 2000).

7) Research focused on elder Americans' (including those in rural areas) social contexts of aging in a coordinated effort to reduce frailty and disability in late life (Albert, Im, & Raveis, 2002).

8) Research analyzing ethnic differences in perceptions of rural elders to health care barriers and benefits attached to specific behaviors (Bell, Quandt, Arcury, McDonald, & Vitolins, 2000; Weinert, 2002).

9) Research activities that highlight the impact of particular policies and unequal distribution of health care resources on daily life and health care outcomes; concurrently, research supporting the idea of social justice by public health nurses working to make basic health care available to all, including rural elders (Drevdahl, Kneipp, Canales, & Dorry, 2001).

The Specific Aims of the proposed investigation will address all of the priorities except #3, thereby contributing to the knowledge base and understanding of rural elders' health care perceptions and issues, in general. By adding to the understanding of health care issues and disparities for multicultural rural elders, from their perspective, the proposed study can inform future intervention-focused research aimed at reducing or eliminating health disparities.

Relationship of Study Aims to Core Public Health Functions

Potential solutions to the growing problems of disparity, ineffectiveness, and access to necessary services are complex, requiring innovative strategies and interdisciplinary cooperation. With its focus on eliciting the local perspective and involving a core community group in the process of making change, the proposed study directly applies collaborative research and problem-solving. The health of human populations everywhere has long been linked to the ability of communities to provide preventive and primary care services (Higgs, Bayne, & Murphy, 2001; Magilvy, et al., 2000). The Specific Aims are congruent with the established core functions of public health and support healthy communities in all settings, including those in southwestern New Mexico. The core functions include:

1) assessment, quality assurance, and policy development for care planning and delivery;

2) interdisciplinary collaboration to meet a broad array of needs;

3) organizational climates that favor participatory/partnership arrangements with clients; and

4) strong commitment to meeting the needs of underserved and unserved populations, including rural elders (Westbrook & Schultz, 2000; Zerwekh, 2000). The overall objective and Specific Aims of this study were designed in the context of the core functions, as well as in consideration of the above research priorities.

Significance

This study will be significant for three reasons. First, New Mexico needs ethnographic data on the perceptions of its rural elders to maximize planning and efficiency in the reduction of health disparities (Bodeker & Kronenberg, 2002). In the context of the aforementioned core public health functions, it will directly address national priorities identified by interdisciplinary experts in public and rural health (e.g., specific needs and issues for rural elders, systems-related problems, needs of family members and caregivers of rural elders, and elders' perceptions regarding access, gaps in service, and efficacy of health-related programs).

Second, perceptions of the elders in the proposed study can be compared with those from other populations of rural elders in the United States, can expand the overall knowledge of health care disparities in multicultural elderly rural populations, and can pinpoint specific issues in southwestern New Mexico. This population representing Mexican and Spanish roots would reflect existent health-related problems throughout the southwestern border area, as well as other regions of the western United States, since Mexican/Spanish laborers have traditionally migrated northward and westward to support the agricultural industries (Averill, 1997). In this way, a more complete, culturally congruent knowledge base for all rural elders can inform effective intervention studies to follow.

Third, at a time of turmoil and rapid change in health care systems, especially for underserved and unserved populations, and as a matter of social justice, it is critical to include the elders' perceptions and concerns as directly as possible in the shaping of health care policies that affect them personally (Drevdahl et al., 2001; MacDougall & Fudge, 2001). Information emerging directly from priorities identified by the participants will be useful to community planners, health care policy makers, and health care providers in rural communities throughout the United States. In addition, it will support future research aimed at developing and extending self-care knowledge among rural elders (Sennott-Miller, May, & Miller, 1998; Magilvy, et al., 2000), and at establishing acceptable criteria for health equity based on the combined efforts of health experts and community residents (Sen, 2001).

Innovation

Innovative aspects of the proposed study include its focus on a poorly understood, multicultural, socially isolated population of rural elders near an international border, and the use of an appropriate research design not widely used in current investigations. As such, the study will help bridge the gap existing in the literature about meeting the needs of rural elders in the southwestern U.S. Furthermore, literature supports the need for innovative research to examine the perceptions of adequacy and effectiveness in health care held by a growing vulnerable population. Understanding the issues of this group from their unique perspective could advance nursing science by enhancing the development of empirically grounded practices, priorities, and policies. Overall, these critical ethnographic data can contribute to a national public health research framework, including priorities for action (Bodeker & Kronenberg, 2002). The preliminary explanatory models generated in this study can offer conceptual and operational foundations from which to address specific indicators for health disparities in future research.

Part of the innovation centers on the use of community-based action research and critical ethnography. By generating discussion and analysis between participants/stakeholders and the researcher, the study will provide a basis for the subsequent phases of community-based action. The essential approach involves two things: (1) an inductive, evocative exploration and analysis of key issues from the participants' perspective, in the context of history, culture, socioeconomics, and current sociopolitical realities in the rural communities, and (2) an active partnership between the researcher and the participants throughout the research process, strengthening the likelihood of developing effective, lasting, efficient community-based strategies for reducing health care disparities among rural elders (Agar, 1996; Stringer, 1999; Wallerstein & Duran,).

Proposed Contribution

The project will make an empirical contribution to the conceptualization of health in rural settings, especially as it concerns elders. Clients' definitions of health impact the social context and character of health care services and health education offered by providers. Findings will be compared with published attributes of health in underserved/unserved and rural populations to determine whether those attributes are relevant to specific or general rural populations. This study will augment the current discussion in the literature about providing efficient yet effective health care to rural elders. The investigator will ask specifically about how rural elders maintain and promote their health in settings characterized by social isolation, limited economic resources, and inadequate health care resources. Finally, this research will add to a national understanding of what rural elders consider the most critical issues and challenges in accessing needed health care and other essential services from their perspective and in their own words.

This study will make a practical contribution to our understanding of the factors that influence the ability of rural elders to participate in their own health care. For example, the importance of access to basic primary care services, affordable prescription drugs for chronic health problems, and ethical, effective interactions with health care providers are key to understanding the social context for rural elders. The research will address the current gap of knowledge about multicultural rural elders in the southwestern United States and border region, and it will offer insight into the nature and impact of health care disparities in rural communities, particularly, but not limited to, those in southwestern New Mexico.

The study will make a theoretical contribution to the understanding of health care issues for rural elders. Dialogue with the elders about their beliefs, values, priorities, and definitions of health will inform interdisciplinary knowledge of rural health issues and support social justice in health care. The holistic focus of the study will make a substantial contribution to interdisciplinary discussion of evidence-based practice in health care.

C. PRELIMINARY STUDIES

The Principal Investigator's (PI) program of research to date consists of two previous studies focusing on health care experiences and health care perceptions of culturally diverse rural elders. In addition, a third funded effort involved a consortium agreement between the University of Texas (UT) at Austin and the University of New Mexico Health Sciences Center (UNMHSC) for the purpose of providing expert mentorship in qualitative research methods. This body of research establishes preliminary understanding of major health issues for two groups of rural elders. These studies suggest questions about the meaning of health, disparities in access to health care and prescription medications, efficacy of interactions between providers and elders, and the implications for practice and policy arising from the findings. As such, the preliminary studies strengthen support for the proposed research.

1. Health Care Experiences of Elderly Rural Latinos (F31NR07037). PhD Dissertation in Nursing, 1997. University of Colorado Health Sciences Center, Denver, Colorado. Publications: Magilvy et al., 2000; Averill, 2002a, 2002c.

The first study was a critical ethnography designed to explore the meaning of health, health care perceptions, and health care experiences of a group of rural Hispanic elders in northeastern Colorado. Research methods included ethnographic interviews, participant observation in daily life, photography, and critical analysis. Critical analysis consisted of conceptually linking the various data, key ideas, and contextual phenomena (e.g., history of exploitation of migrant farm workers) in thematic analysis and derivation of meaning (Kincheloe & McLaren, 2000). The research elicited responses from 23 elder participants and 20 family members and acquaintances of the elders. All of the elders shared a history of migrant farm work in northeastern Colorado, with an average of 4 to 6 years of public education and little involvement in mainstream community activities. Conceptually, the most significant definition of health in this population was the ability to get out of bed each day and engage in family activities, work, and chores. Many Hispanic families in the region routinely experienced economic, linguistic, or ethnic discrimination from the mainstream community, complicating their interactions with health care providers. Based on the findings, the researcher recommended the use of community outreach, family inclusive strategies, recruitment/retention of more bilingual and culturally competent health care providers, and the establishment of dialogue involving Hispanic residents (including elders), health care providers, and employers in the region, in an effort to clarify and resolve problems (Averill, 2002a, 2002c). The PI developed an innovative complimentary strategy (matrix analysis) for the display, analysis, and dissemination of the data. Matrix analysis involved the cross-matching of research findings with different groups of participants (Averill, 2002a).

2. Health Care Perceptions of Rural Elders in Southwestern New Mexico: A Pilot Study. PI: J. Averill. Funded by the University of New Mexico College of Nursing. Publications: Averill, 2002c; Averill, 2003.

Building on the initial investigation, the purpose of the recent pilot study was to examine the meaning of health, health care perceptions, and health care issues for rural elders in Grant County, New Mexico, in the southwestern corner of the state. A total of 22 individual interviews with rural elders, family members, and health care providers in the community contributed valuable knowledge about significant problems. Participants identified the following issues as most concerning to them:

- 1) the escalating cost of prescription medications, in a setting where most elders live on low, fixed incomes;
- 2) limited access to basic primary care, home health care, specialty care, and hospice care;
- 3) social isolation and loneliness;
- 3) limited public transportation in the towns and no public transportation for outlying areas;
- 4) depressed local economy secondary to the decline of the copper mining industry;
- 5) fragmented service network for health and social services; severe deficiency of assisted living options in the region; and
- 6) barriers related to language, difficulty understanding managed care, turnover of care providers, and inefficacious interactions with care providers.

The definition of health for this culturally diverse population of rural elders encompassed the ability to be active in the family and/or home, the stamina to avoid contact with the health care infrastructure, the inclusion of mild exercise and social interaction in daily life, eating favorite foods, and maintaining a spiritual connection to either a church or other fundamental beliefs. Health status was often linked to the ability or inability to obtain an ongoing supply of prescribed medications to manage chronic conditions such as heart disease, hypertension, diabetes, or lung disease. Findings compare with those in other rural elderly populations (Averill, 2001c; Magilvy, et al., 2000; National Rural Health Association, 1999). However, the demise of copper mining and its impact on local economies and health care needs additional exploration. The proposed study can determine whether a more extensive sample of regional elders shares these concerns.

During the study, the investigator found that two distinct groups of elders live in Grant County. One group comprised lifelong or long-time (40 to 60 years) residents, most of whom were retired miners or miners' widows. For the most part, this group of elders had lower incomes, less or no private health insurance, and higher rates of geographic and social isolation than the other group. The second group consisted of retirees from various regions of the United States, many of whom arrived in the county in the last 1 to 12 years. This group generally had more disposable income, a higher likelihood of having health insurance, and fewer problems participating in community activities and recreational opportunities.

The pilot study was developed as a result of the doctoral research, and it expanded the identification, explanation, and implications of key health care issues for a group of rural elders. Based on the six important issues identified above, the proposed study will broaden the inquiry to additional counties in the region. Findings for the preliminary research in Grant County can be compared with findings in the other counties, as well as in more remote areas of Grant County. In addition, the meaning of health across the two identified groups of elders can be further explored for differences and similarities, enriching the eventual discussion of strategies for change to improve health care programs for all of the elders.

Data are nonexistent regarding the perceptions, experiences, and concerns for rural elders in the counties of extreme southwestern New Mexico, many of which are designated as "frontier counties," with fewer than six persons per square mile. The proposed research will establish essential information about the actual health care needs, health status, health disparities, and health care perceptions of this vulnerable population. The information can be compared/contrasted with previous findings (Averill, 2001c), as well as with research involving other rural elder populations in the United States. Only then can the extent and impact of the disparities be articulated in both regional and national contexts, and solutions be advanced for positive change.

3. Subaward UTA 02-020. PI at UT-Austin: A.M. Stuifbergen; PI at UNMHSC: J. Averill. Funded by Consortium Agreement #UTA02-020 between The University of Texas at Austin and The Regents of the University of New Mexico. This partnership resulted from The University of Texas at Austin receiving Grant #1-P30-NR05051(CFDA#93.361) from NIH/NINR.

The partnership agreement for this research was based on a joint research proposal (UT-Austin, UNMHSC) entitled "Partnership for Nursing Research in Health Disparities." The pilot study (previously described), implemented by J. Averill, constituted the investigation for the partnership agreement. Findings of the pilot study will be shared with the PI at UT-Austin. The intent of this agreement was to provide J. Averill with advanced, intensive mentorship in qualitative methods from a renowned consultant in the field to deepen her expertise for research and teaching in the qualitative tradition. Michael Agar, a noted ethnographic researcher, writer, and educator, came to UNMHSC for a period of concentrated collaboration with the PI. His own extensive ethnographic research with underserved/unserved populations provided a context for mentorship about health disparities and methodologic approaches. His efforts benefited and enriched the data analytic phase of the pilot study, as well as the preparation of the proposed investigation.

This series of studies and mentorship experiences has provided the PI with comprehensive preparation in the specific qualitative methods applied in the proposed study. The PI's doctoral research was the foundation for the pilot study in southwestern New Mexico, and the proposed study will expand the scope and focus of previous investigations. The PI has interviewed Hispanic, American Indian, and White individuals in field settings, using both semistructured and open-ended questioning techniques. The PI has collected data in ethnographic interviews, participant observation experiences, photography, community assessments, field notes, and a reflective journal. She has performed all of her own data analysis, using open coding, thematic analysis, domain analysis, matrix analysis, and critical reflection. All of the research has occurred in ethnically diverse settings, an excellent preparation for studies in southwestern New Mexico, where non-Anglo ethnic groups are in the majority. The PI has significant clinical experience in acute care and community settings, including multicultural and rural areas. She also has considerable teaching experience at both the undergraduate and graduate levels of nursing, including the supervision of scholarly projects, independent studies, research projects, and theses for students.

D. RESEARCH DESIGN AND METHODS

The proposed study arises from a critical ethnographic paradigm, in the traditions of ethnographic inquiry, critical social theory (Agar, 1996; Kincheloe & McLaren, 2000), and community-based action research (LeCompte, Schensul, Weeks, & Singer, 1999; Minkler & Wallerstein, ; Stringer, 1999;). The focus is on the discovery, interpretation, and application of local knowledge to practice, rather than on testing hypotheses. Common elements in these traditions include partnership between investigators and participants with respect to planning and interpreting research and subsequently partnering in the development, implementation, and evaluation of any interventions.

The purpose of scientific research in this tradition is to uncover not only sociocultural knowledge about an unfamiliar or little-known group, but also patterns suggesting exclusion and social injustice. For example, limited or no access for a group to basic health and social services, prescription drugs, and opportunities for social interaction reflects a social and economic hierarchy. Analysis of health care disparities must be based on evidence extracted from an examination of the sociocultural contexts for rural elders (Agar, 1996, 1999; Albert et al., 2002). In examining multiple contexts, one encounters a variety of data—interviews/narratives, memos, newspaper accounts, library and historical accounts, casual conversations, group discussions, photographs, an assortment of statistics about usage patterns, etc. A critical ethnographic way of thinking and organizing this rich array of data is instrumental in making sense of it all, especially in

terms of the Specific Aims (Agar, 2004). The proposed research is a critical ethnography, incorporating ethnographic interviews and dialectical partnership, ethnographic participant observation, photography, review of pertinent local archives, and community-based action research aimed at reducing health disparities. Ethnographic interviews, dialectic, participant observation, photography, archival review, and participatory action research are discussed more fully in subsequent paragraphs. The fundamental idea behind these strategies is to involve participants in the research process, securing their active role in identifying research priorities, and empirically grounding the researcher's conclusions in situations and contexts relevant to participants' expressed concerns. In the context of this design, use of a survey is inappropriate and premature, since numerous and complex rural variables cannot be assumed to follow findings from other geographic locations. In order to strengthen the overall knowledge base of rural health, collaborative research such as this is needed to establish reliable health status indicators across cultural groups (Weinert, 2002). The overall objective, Specific Aims, and recognized research priorities previously presented are all addressed in the design of this investigation.

In this study, the distinction between traditional ethnography and critical ethnography can be described in terms of theoretical orientation and ultimate purpose of the inquiry. Traditional ethnography would seek to observe, interpret, and describe events in the daily lives of the rural elders, particularly in reference to health care encounters and experiences. The researcher would hold no preconceived notions about the quality, merit, or efficacy of health care access or health care encounters for the elders (Singer & Baer, 1995). Critical ethnography, however, has evaluative overtones from the outset, arising from the conviction that something or some part of the health care system for rural elders is in need of repair or positive change. Established research priorities and literature previously cited support the use of critical ethnography in this study. Cultural and ideological critique involving participants and the researcher is central to the critical ethnographic design (Wolcott, 1999).

The critique should lead to improved practice for reducing health disparities. Therefore, a valuable adjunct to critical ethnography is the incorporation of community-based action research. Based on a partnership between the researcher and community members/participants, community-based action research is a strategy to ensure that system or institutional change in health care for rural elders is planned, contextually congruent, and proactive (not reactive) in nature. This strategy teams the researcher and community members (e.g., health care planners, managers, and providers; rural elders; other key citizens) in a kind of team ethnography, the intent of which is to identify, analyze, and resolve important health or social problems (Agar, 2004; LeCompte, et al., 1999; Stringer, 1999). Underlying assumptions for community-based action research include:

- 1) the idea that changes in the health care system for rural elders are based on accurate data, rigorously obtained and situated in contexts deemed most salient by participants;
- 2) the conviction that people traditionally regarded only as research subjects should instead be active participants in the research process; and
- 3) the belief that research should lead to a practical and beneficial outcome (e.g., reduction or elimination of health disparities; positive change in health care practices and policies) related to the needs and daily lives of the rural elders (Albert, et al., 2002; Austin, 2001; Stringer, 1999).

Processes fundamental to community-based action research are compatible with ethnographic interviews and participant observation. The overall processes, introduced in the Theoretical Framework, are summarized as follows, with the understanding that *Looking* will be the focus of this study.

- 1) *Looking*, or collecting accurate data, then describing the data in the appropriate context;
- 2) Thinking, or analyzing what is occurring in terms of social critique, contextual interpretation, and theory-building; and
- 3) Acting, or devising options, intervention strategies, and evaluation procedures (Stringer, 1999).

The combination of critical ethnography and community-based action research will strengthen the likelihood that the Specific Aims of the investigation will be met. It ensures the relevance of the research questions, consensus among partners as to key issues and priorities, and the long-term involvement of rural community members in identifying and reducing health care disparities and providing effective, socially/culturally appropriate, equitable health care services to rural elders (Drevdahl et al., 2001; Morgan, 2002; Wallerstein & Duran,).

Data Collection

Data collection strategies will provide the basis for addressing the Specific Aims of the study. In the traditions of critical ethnography and community-based action research, the researcher herself will collect all data using the following methods, each of which is detailed later in Research Design and Methods:

- 1) ethnographic interviews and dialectic (reflexive discourse) with rural elders, family members/caregivers of rural elders, and local health care providers in three southwestern New Mexico counties;
- 2) a demographic questionnaire to document age, ethnic identity, length of residency in the area, educational background, etc.;
- 3) participant observation in the daily activities and health care encounters for rural elders, in an effort to understand the context of their stories;
- 4) review of pertinent local documents and materials reflecting the organization, priorities, eligibility requirements, official positions, and practices of health/social service providers;
- 5) congruent with community-based action research, creation of a core group of community-based participants/stakeholders (e.g., elder advocates, health care providers/planners) to serve as partners and contextual consultants to the research process;
- 6) field notes and reflective journal, to chronicle research events and the researcher's thinking, reflections, and decision-making;
- 7) selected photographs of rural elders, community settings, and landscape, to convey visual knowledge and important insight that strengthens contextual understanding, but is not apparent in verbal or numerical data.

Research Setting and Source of Sample

The setting for this study will be three rural counties (Grant, Luna, and Socorro) in the southwestern corner of New Mexico, a region characterized by combined desert and arid mountain terrain, isolation from large urban centers, traditions of copper mining and ranching as economic bases, and sparsely populated communities. Grant County was the site of the researcher's pilot study, although all of the informants lived within 45 minutes of the largest city in the county; with key informants already in place, the extension of the inquiry to more isolated regions of the county seems logical. Luna County was selected because it has the highest poverty rate of any New Mexico County and its location on an international border will offer an especially culturally diverse population. Socorro County is the closest of the southwestern counties to the state's largest city, although it still contains very sparsely populated communities. Situated 80 miles from the nearest major medical center, the residents of Socorro County will offer meaningful comparison data to that obtained from more distant or border locations. It is not known exactly how many counties are needed to characterize the rural elderly population in New Mexico; in such a sparsely populated, economically challenged, multicultural state, the selection of these three counties represents an attempt to capture sufficient diversity of ideas and issues.

The majority of residents live in communities of several hundred or fewer. The largest cities in the three-county region are Deming (in Luna County), with 14,116 residents; Silver City (in Grant County), with 10,545 residents; and Socorro (in Socorro County), with 8,877 residents (U.S. Bureau of the Census, 2002). According to informants in the researcher's pilot study, a number of rural elders live alone in the desert or in the mountains, in small homes, ranch houses, or trailers, not in a town.

The regional climate is generally hot and dry in the summer months, with cooler or cold temperatures in other months. Copper mining, cattle ranching, and logging have long been economically significant, but in recent years all have declined severely, resulting in significant economic hardship for local communities and residents. Cities and towns in the region are attempting to develop tourism and recreational industries as alternatives to mining and agriculture, but economic constraints, geographic isolation, and established norms pose major challenges (McNamee, 1994; Russell, 1991). The inclusion of this information is important because the dominance of the natural ecology, weather, and geographic isolation affect the ability of rural elders to access needed health and social services. Such concerns are significant contextual factors in the analysis of health care issues and potential barriers to care.

The Gila Regional Medical Center in Silver City (Grant County) serves several counties, offering a limited array of acute, emergency, home care, and hospice care services. Many of the communities in the surrounding area lack any primary care, home care, or emergency care services, necessitating transport of patients to distant cities or dependant on scarce services from visiting nurses or nursing care assistants. Very few skilled nursing facilities and even fewer assisted living

facilities exist in this vast region of the state to serve a growing population of rural elders (Averill, 2002b). Such limited services constitute potential disparities in the network available rural elders.

Based on contacts with health care providers, community administrators, and rural elders themselves (currently maintained with periodic written updates and telephone calls from the researcher) established during the pilot study, the researcher already has access to additional rural elders in the three counties through the Gila Regional Medical Center, including its home health and hospice services; through neighboring health care centers in Luna and Socorro Counties; local health departments; and the Office of Senior Services, administered by the New Mexico Agency on Aging. The researcher's own background as a rural resident, community health nurse in multicultural rural areas, and rural health researcher in New Mexico and Colorado will be an asset in this effort.

Sampling

Congruent with critical ethnography, the researcher will use purposive sampling. Purposive sampling is a strategy aimed at obtaining research participants who are in some sense representative of the diverse population from which they originate (Lincoln & Guba, 2000). In this sampling strategy, the researcher's purpose is to describe the phenomenon of interest in as rich and full a manner as possible, rather than to focus on generalizability (Streubert & Carpenter, 1995). Participants are not selected randomly, but instead for their expert knowledge of experiences, events, and incidents germane to the research. They represent possible variations and interpretations of research phenomena (Sandelowski, 1999). Human responses, documents, events, and scenes are all part of purposive sampling to promote a deeper understanding of the research focus (Agar, 1996; Charmaz, 2000).

As a result of this sampling method, the researcher is able to identify, define, and clarify conceptual categories emerging from the data; comparatively analyze multiple sources of information; and search for evidence that contradicts the flow of ideas. Consistent with the second Specific Aim, preliminary explanatory models for rural health phenomena emerge from the researcher's analysis and critical reflection.

Prior to the start of data collection, the researcher will meet with key informants and explain the scope and process of the investigation. Following that initial contact, information flyers about the study will be given to local health departments, senior centers, meal sites, primary care sites, home health and hospice staff (see Appendices A & B). Interested potential participants will voluntarily decide if they are willing to be contacted by the researcher for interviews and follow-up information. This strategy, complemented by word-of-mouth explanations from key informants to potential participants, worked very effectively in the researcher's pilot study (Averill, 2002c; Averill, 2003), as well as in other ethnographic studies of rural elders (Magilvy, et al., 2000). Actual participants will receive a complementary \$20.00 gift card from Wal-Mart in appreciation for their cooperation.

The study population for this proposed project will be ethnically diverse and include both men and women. Research participants will include the following groups: a) a purposive sample of primary participants, rural elders, approximately 45 in number, at least 60 years of age, and residing in Grant, Luna, and Socorro Counties in southwestern New Mexico; b) a purposive sample of secondary participants, approximately 15 in number, who are adult family members of rural elders, health care providers, community planners, or senior service coordinators in any or all of the three named counties. It is expected that the subject sample for this study will reflect broader sociodemographic characteristics of the population of the three counties in southwestern New Mexico. According to the U.S. Bureau of the Census (2000), the total population of rural elders 65 years of age or older in the three named counties included approximately 11,566 people, with women outnumbering men. The rest of the Census data for the study area are shown in Table 1. Consent forms and recruitment flyers for the research will be available in both English and Spanish versions to accommodate participants (see Appendices A & B).

Throughout the southwestern U.S., a significant number of Native American residents live on reservations. One such reservation exists in Socorro County, the population density of which is 2.7 persons per square mile. The reservation is a part of the Navajo Nation. It is reasonable to assume that the population of the reservation, estimated to be 1,971, accounts for the majority of the 10.9% of Native Americans in the total county population of 18,078. It is not known exactly what percentage of the reservation population is over the age of 60, since the Navajo Agency on Aging maintains its own records of the population distribution. The reservations have their own governing bodies and policies, including policies regarding access for research studies. The process involved in obtaining permission to conduct research within the Native American communities is extremely lengthy and complex, and it certainly constitutes a focus area for future research planned by the PI. However, it is beyond the scope of this R15 application to pursue that goal. Estimates have been obtained (personal communications with established key informants) for the number of Native Americans accessing both private and public health care agencies within Socorro County, exclusive of the reservation. Those agencies include a regional public health office, a home health care/hospice service affiliated with the regional hospital, and two senior meal sites. The following current usage statistics were provided for the health office and home health/hospice services:

Hispanic residents.....40%
Anglo residents.....32%
Native American residents...25%
"Other"..... 3%

No age distribution for these percentages was available at this time, but the informants report clients across the lifespan. Both senior meal sites reported two or fewer Native Americans in the last year using the meal site facilities; the seniors using the meal sites were described as approximately 50% Hispanic and 50% Anglo. Based on the usage figures provided about the health care facilities, it is reasonable to plan to recruit potential Native American participants through the public health office and the home health/hospice facilities, just as other cultural groups will be recruited. Since the Native Americans using these facilities are living off of the reservation, within the rural communities, accessing them as valuable sample participants in this study should be entirely plausible, and will be a priority of the Research Plan.

No reservations exist in the other two counties targeted for this study. The PI will make every effort to include any/every cultural group in sample recruitment, including Native Americans. No cultural group will be excluded for any reason.

The focus of this study is on health care issues, disparities, and access for rural elders. The perspective of the elders themselves is the primary target of all sampling efforts. However, important insight may be obtained by family members and care providers who live with or assist rural elders in their daily activities and health care experiences.

Special issues of parental consent/child assent accompany research targeting young children; it is beyond the stated goals and scope of this study to include young children in this particular study. It is entirely possible that future studies may target younger family members to obtain their perspective on health care issues for the rural elders. It is probable, based on established norms of childhood growth and development, that young children may perceive the health care issues of their grandparents or great grandparents through a lens that directly impacts their own daily lives; thus, the focus would be shifted away from the elders to the needs of the children. This is extremely valuable, but it is not within the stated scope of the current study.

The PI will make an effort to include any/all family members of the elders who are at least 18 years of age. In this way, the perspectives of younger family members may contribute knowledge and understanding of the elders' health care access issues, particularly in terms of impact on the families themselves. The level of intellectual and psychological maturity of people 18 years and older is more appropriate to the aims and purpose of this study.

Because qualitative research investigates selected issues in detail, depth, and context, sample sizes are smaller than they would be in a quantitative design (Patton, 2002). The point is understanding the meaning of key phenomena in people's lives and experiences, from their perspective, and the exact sample size depends on the point at which redundancy or saturation occurs in the data. The point of this criterion is that no new data emerge outside of existing conceptual categories (Flick, 1998). Interpretation of findings and preliminary construction of explanatory models rest on finding the maximum variation possible in participant responses (Lincoln & Guba, 2000; Meadows & Morse, 2001). In previous critical ethnographic studies by the researcher (Averill, 1997; Averill, 2002c; Averill, 2003), saturation occurred after 43 and 22 participants, respectively. Based on this information, it is reasonable to assume that the sample size for the proposed study would be 40 to 50 individuals.

To accomplish purposive sampling, participants will be interviewed in all three counties of interest. An effort will be made by the researcher to select a sample representative of the ethnic distribution in each county. The sample will consist of both primary participants (rural elders at least 60 years of age) and secondary participants (adult family members, caregivers, local health care providers, and community planners). The primary participants will comprise approximately 75% of the sample because they are the focus of the research. The remaining secondary participants will enrich and deepen the overall understanding and analysis of health care issues for rural elders. Congruent with the framework for this study, purposive sampling will increase the likelihood of authentically addressing the Specific Aims.

Schedule of Research

The study is proposed to take 2 years, and it will unfold in five phases. Within the first month of funding, recruitment of study participants will begin in Grant County, the county used during the researcher's pilot investigation. Starting within the second month of funding, interviews and other data collection in that county will begin, and will continue approximately six months. The PI will conduct all of the interviews and data collection, assisted by a graduate student.

During months 6 through 8, recruitment of participants from the remaining counties will begin. Between months 12 and 18, the data collection will take place in the two remaining counties. The last 6 months of funding will be spent in completion

of data analysis, dissemination of results, including article preparation and conference presentations, and preparation for future grant applications. A diagram of the proposed research schedule appears in Figure 1.

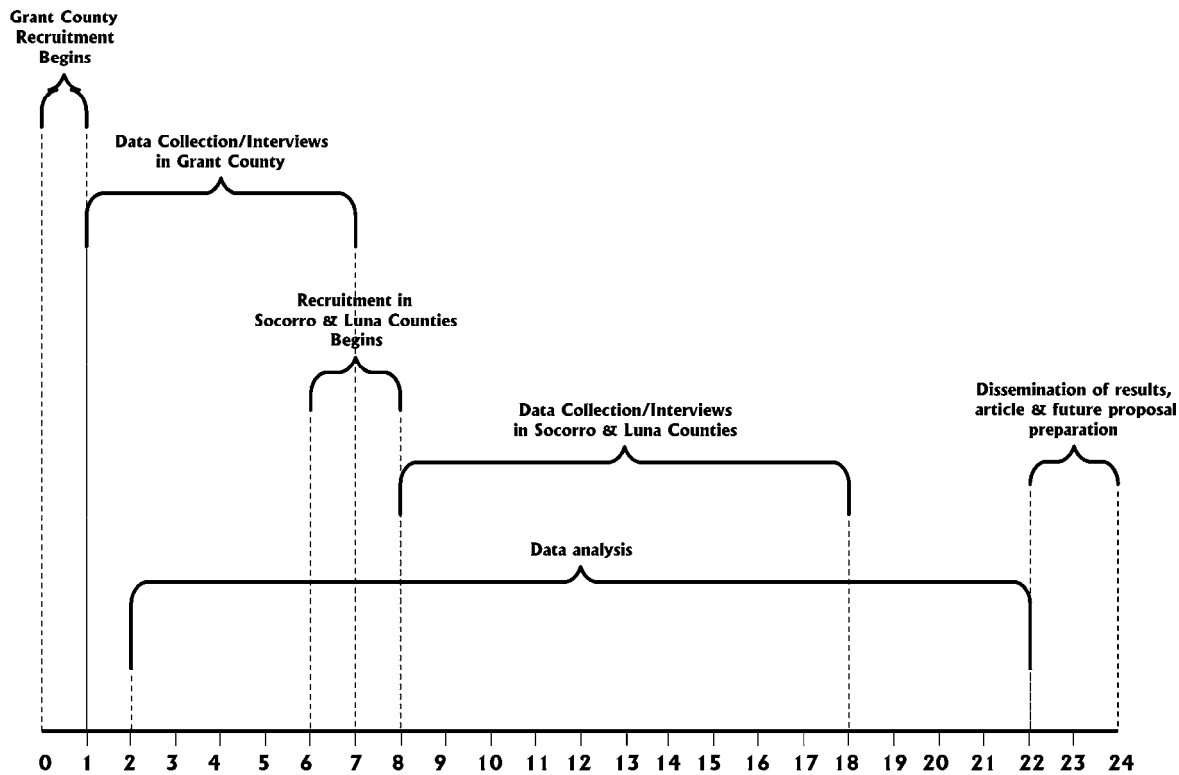


Figure 1. Project Timeline--Months

Interviews

Ethnographic interviews are the centerpiece of this research, and they comprise the principal approach to the Specific Aims. Semistructured interviewing will focus on the overall research objective, simultaneously allowing follow-up opportunities unique to the individual informants. A combination of descriptive, structural, and contrast questions from the PI will encourage participants to clarify and differentiate special interests, events, and situations in their world (Flick, 1998).

A feature of critical ethnographic interviews is the practice of dialectic, or the artful exchange of ideas and argument, between the researcher and the participants. In addressing the research questions, dialogue proceeds bidirectionally in an effort to clarify, challenge, and interpret major ideas. The fundamental principle of dialectic as an interview strategy is that explanatory discussions of essential issues are the basis of theory generation (Morrow & Brown, 1994).

The exact number of interviews is difficult to predict in qualitative inquiry, but they proceed to the point of data saturation (previously projected to be 40 to 50 interviews), the point at which no new categories of information emerge from the interactions involving the participants and the researcher (Bauer & Aarts, 2000). It is anticipated that in reaching participants, some of the interviews will be individual, between the PI and the informant, while other interviews may be with groups of participants (e.g., at local senior centers where small groups of elders gather and socialize). Interviews will take place in a variety of settings, including health care facilities, homes of participants, senior centers, meal sites, rural clinics, and community gatherings or meetings. The PI will remain sufficiently flexible to accommodate unexpected opportunities to talk with rural elders and others whenever and wherever an opportunity presents itself (Agar, 1996, 2004).

Individual interviews will allow the researcher to explore in depth the experiences, perceptions, and personal perspectives of a particular informant. Group interviews can focus on the range of attitudes, special concerns, opinions, and behaviors in a sample of participants. Both types of interviews contribute insight to the research questions (Gaskell, 2000), and both

contribute to the triangulation of data collection methods, thereby strengthening the credibility of eventual conclusion drawing (Fontana & Frey, 2000).

Whenever possible, the interviews will be conducted in English. The PI knows Spanish moderately well, will continue to study Spanish, and will pay a qualified translator in situations where the participants are Spanish-speaking only, or speak a language unique to a particular tribe. For consistency and accuracy, the PI previously used qualified community-dwelling translators to ensure that all interviews were successfully translated and recorded in English at the time of the encounter (Averill, 2002b; Averill, 2003). If it is possible to recruit a Hispanic, Spanish-speaking graduate nursing student, s/he can assist with the translations.

Research questions are congruent with the Specific Aims of this study, and they will be directed to participants in the language and style appropriate to the informants. The ethnographic interviews will empirically generate data from rural elders, their adult family members, caregivers, health care providers, and community planners about:

- 1) their definitions of health, being healthy, and staying healthy;
- 2) their perceptions about health care experiences they have had with providers, services, facilities, etc;
- 3) the specific issues or problems that concern them about health care for rural elders;
- 4) their reasons for being concerned about specific issues;
- 5) their prioritization of identified issues in terms of importance for rural elders;
- 6) their strategies for managing current health care dilemmas and challenges;
- 7) the strengths, resources, and barriers existing in the present health care system for rural elders; and
- 8) their ideas on how best to resolve identified problems and issues.

Interview guides have been developed by the researcher to address the overall objective and Specific Aims of the study, topics 1 through 8 above, and the gaps in the literature identified in Background and Significance. Interview guides for both primary and secondary participants appear in Appendixes C and D.

Interviews will be tape-recorded with permission of the participants, then transcribed verbatim in English afterwards. If informants object to tape-recording the interviews, the PI will record important points from the interview in field notes immediately following the interview. In the PI's experience (Averill, 2002b; Averill, 2000c; Averill, 2003), key information in group interviews may be recorded successfully on a large artist's pad during the encounter, where major points or answers to questions are written in sizable script before the participants, allowing them the opportunity to correct any inaccuracy at the time of the comments. Although field notes and note-taking are less detailed than tape-recorded data, significant ideas, themes, events, or concerns can still be captured for analysis (Averill, 2002c; Averill, 2003; LeCompte & Schensul, 1999).

Individual interviews are expected to take approximately 30 to 50 minutes each (Gaskell, 2000), although occasional sessions may last 60 to 90 minutes, depending on the interest, energy, and available time for participants. Group interviews with several participants may last 30 to 90 minutes each. The PI will conduct the interviews, with the graduate student/research assistant either listening to the process or taking part along with the PI. The graduate nursing student selected will have an interest in rural health and will be prepared by the PI using role modeling and formal discussions. Consistent with the demographics of the sample, the PI will attempt to recruit a Hispanic, Spanish-speaking graduate nursing student for this position. The PI and graduate nursing student will review the first several interviews together, analyzing the process and content of data generation. Thereafter, the graduate student will assist the PI to analyze the various data for trends, themes, and patterns. The PI and graduate student will meet every 1 to 2 weeks throughout the study, to debrief about the critical ethnographic process, the emerging findings, and any challenges arising in the conduct of the study.

Supplementary/Demographic Data

Each participant who agrees to an ethnographic interview, whether individually or in a group, will be asked to complete a brief demographic form including questions on age, gender, length of residency in the area, place of birth, perceived health status, educational level, employment background, and ethnic identity. Such information can be used to explore reasons why and how problems occur, noting specific areas of convergence and divergence in frequency, characteristics,

and distribution of findings. The supplementary or demographic data will be entered into a database with the software package Epi Info (Centers for Disease Control, 2001), to generate a preliminary descriptive epidemiological record of rural elders in southwestern New Mexico. These data, primarily numerical, will supplement the ethnography by documenting problems and patterns in terms of person, place, and time. This supplementary epidemiological information can benefit and strengthen the generation of assumptions and theoretical propositions in the explanatory models, eventually leading to effective interventions and changes (Harkness, 1995; Valanis, 1999; Weinert, 2002). It will also serve as the seed for future rural studies in different parts of New Mexico, so that both qualitative and epidemiological comparisons can be made across various rural regions. Adding epidemiological information supports the theoretical framework, especially the step of *Looking* (Stringer, 1999). The demographic questionnaire appears in Appendix E.

Participant Observation

Long a vital strategy in ethnographic research, participant observation will involve the PI becoming an active part of the observed field setting with participants in an effort to understand the lived experiences of daily life (Flick, 1998). The notion underlying this approach is that interpretive ethnographic research, including action-sensitive responses and theorizing, cannot be separated from actual human experiences and socially constructed reality (Denzin & Lincoln, 2000; van Manen, 1997). For instance, the PI may accompany an elder to a health care appointment, may share available public transportation with participants, or may volunteer to take blood pressures for elders in the local senior centers, allowing for a relaxed environment in which to initiate informal conversations, building rapport. Observations augment the alternative forms of data collection to more accurately represent and operationalize local voices in the crafting of findings (Agar, 1996 & 2004).

Review of Archival Data and Materials

Throughout the data collection, the PI will take advantage of opportunities to examine local libraries, health care facilities, senior centers, and community centers for archival evidence about health care issues and disparities for rural elders. Histories of local communities and prominent citizens appear in libraries and can offer insights about how the present situation evolved, including the impact of culture, economics, and politics over time. Newspapers chronicle the significant trends in community actions, problems, politics, mishaps, and milestones. Patient education literature, brochures, and policy documents shed light on operational aspects of interactions between the elders and care/service providers. All of these data sources contribute to the overall understanding of local knowledge, values, and concerns (Agar, 1996; Marshall & Rossman, 1999; Flick, 1998), and they support the Specific Aims.

Creation of a Community-Based Consultant Group

As participants emerge from among the rural elders, health care providers/planners, and other key informants in the rural communities, a core group of these stakeholders will be identified to serve as ongoing situational consultants to the researcher. This is pivotal to the framework of community-based action research, and the community group will represent the local perspective in contextualizing/operationalizing the research questions, identifying major issues and disparities, and suggesting workable solutions to the identified problems and disparities (Minkler & Wallerstein, ; Stringer, 1999). This strategy supports and strengthens the Specific Aims.

The partnership between the researcher and this core group rests on the recognition of the roles each brings to the process. The roles of the researcher are initiator/leader, collaborator/community organizer, popular educator, participatory researcher, and co-disseminator of findings. The researcher enters the communities with a general set of research questions and objectives. However, the researcher knows that in the community-based action framework, research also serves as a method to improve practice and reduce/eliminate health care disparities (Stoecker,).

The role of the core community group is to help shape the research process to the specific characteristics and needs of the rural communities. For instance, in the effort to discover what the elders perceive as major health care issues and/or disparities, the core group can suggest best strategies for how and where to reach the elders, and what choice/level of language is appropriate for particular multicultural elders. They might also suggest alternative sample sites (e.g., local community centers, churches, or restaurants), so that a wider array of perceptions and other data can be obtained for analysis. The local stakeholders know the history, culture, and other relevant background information about the rural communities that no outsider could hope to grasp. Involving their expert voices in the planning, process, and conclusion-drawing of critical ethnography will strengthen the likelihood that the findings are valid, relevant, and foundational to the subsequent phases of the Look-Think-Act process (Stringer, 1999).

Field Notes and Reflective Journal

Congruent with *Looking* and with the Specific Aims, ethnographic field notes will comprise the recorded path of data collection, briefly noting dates, each participant or group of participants, location and type of information sharing, a description of artifacts (e.g., pillboxes, family scrapbooks, assistive devices), and any noteworthy events at the times of data collection. Of equal importance is the PI's reflective journal or diary, focused more on the researcher's responses to the unfolding research process, problems encountered along the way, perceptions of detachment/involvement with participants, and meaningful insights into understanding the field setting (Agar, 1996). Another function of the reflective journal will be to focus and clarify relevant ideas that can later serve as the basis for community-based action research, aimed at implementing change in partnership with participants (Stringer, 1996). Based on previous experience, the PI prefers to combine the field notes and reflective journal into a common document, with most entries separated into "essential activities" and "researcher reflections" (Averill, 2002b).

Photography

The majority of participants, settings, communities, and facilities in rural health research will never be seen by academic colleagues and readers of research findings. Yet the nature of rural life, the significance and dominance of local ecology, the isolation from urban environments, and the unique features of challenges to health care can be captured in photographs to convey a deeper understanding of the situation to those at a distance. This is extremely valuable as an adjunctive strategy when the aim is to inform planners, policy-makers, health care providers, and interested others about what matters to rural elders. Both empirical and aesthetic evidence emerge in the faces and photographs of people and places, enriching the literature and empowering explanatory models for health disparities among rural elders (Magilvy, Congdon, Craig, & Nelson, 1992; Marshall & Rossman, 1999).

Photographic images capture levels and views of social life, such as how the shape and furnishings of a home or the design of a facility affect patterns of movement, barriers, disparities, or assets for rural elders in their environments. Photographs elicit subjective responses from viewers that might not occur with narrative or numeric information alone. They define and clarify identities, institutional relationships, and histories in an effort to integrate seeing into the process of knowing about the rural elders. Photographs are therefore valuable as adjunctive data generation strategies (Harper, 2000; Congdon & Magilvy, 2001), and they enhance the Specific Aims.

For rural elders in this study, photographs of their environments, both ecological and personal, such as a steep driveway, the arrangement of furniture in a room or the proximity of stairs, can persuasively depict evidence of potential health risks, patterns of physical appearance, and living conditions (Loizos, 2000). Such visual evidence strengthens narrative descriptions of health care challenges and enriches the dissemination of findings, such as to policy-makers or planners (Magilvy, et al., 2000).

Data Management

Data gathered during the course of this study will be maintained in locked file cabinets in the PI's office. Transcripts of interviews and observational records, including photographs, will be numbered and coded, and no actual names, addresses, or other personally identifiable information will be stored with demographic data. Demographic forms will be stored in a separate locked file, which is only accessible to the PI. Field and journal notes will be filed with the textual data. Two undergraduate nursing students will assist the PI with data management activities.

Interviews and other textual data will be entered into a database with a qualitative research software package/program. The researcher is currently reviewing software packages and will select one that fits her needs and skill background. Once entered, the software will facilitate the processes of coding, memo writing, text retrieval into categories, and analysis. In this way, the eventual synthesis of theoretical propositions and explanatory models will be expedited.

Data Analysis

The focus of data analysis in a qualitative study is to accurately interpret data based on narrative accounts, dialectic, observations, photography, and critical reflection (Flick, 1998; Morrow & Brown, 1994). The point is less to generate testable hypotheses than to generate explanatory statements about relationships linking categories of data (Marshall & Rossman, 1999) or to transform raw data into usable findings (Patton, 2002). In this study, the process of interpretation is done in the context of rural culture, including history, geographic location, economics, politics, and current local society. The interpretation and extraction of meaning proceed concurrently during data collection and data analysis, imposing some sense of order and structure to a mass of information. Data analysis moves in concert with other phases of the process, and the point is to identify major patterns, suggest statements about relationships among data categories, and eventually generate theory or explanatory models (Marshall & Rossman, 1999) in accord with the Specific Aims.

The fundamental process for analysis of the interview data will be coding of transcripts and field notes/journal with an open, line-by-line extraction of meaning. The result of this process is data-grounded descriptive codes, which can then be selectively clustered, recoded, and further synthesized to identify distinct themes and patterns (Flick, 1998). Brief researcher reflections on the data, or memos, may accompany the codes. Although qualitative data analysis is not a linear process, its general scheme may be summarized as follows (Polkinghorne, 1983; Swanson, 2001; Silverman, 2001):

- Detailed reflexive reading of the textual data
- Open coding of the transcripts, in which each line of data is analyzed for meaning, and text is reduced to concise, named segments
- Resorting of the identified segments into distinct conceptual categories for additional analysis
- Rereading, interpretation, and extraction of recurring ideas, patterns of meaning, or language from the coded categories
- Synthesis and integration of the recurrent patterns, emergent across all of the data, into distinct themes, each conceptually unique, yet internally consistent with regard to the research questions.

An example of open coding appears in this sample interview text from the researcher's pilot/preliminary study. The text was read, then assigned a succinct category of meaning (a code)(Patton, 2002):

P: Now, so far as what is needed in this	63	
community, a great deal. I think that,	64	
uh, senior health care here is inadequate	65	senior health
and sometimes done very	66	care "poor &
poorly. I'm speaking from personal	67	inadequate"
experience, so I think I'll start	68	
with that.	69	

Y: And to feel comfortable calling and	337	lack of knowing
knowing who to call. Um, there's a lot	338	whom to call
of clients who feel that if they call,	339	
they're gonna be ignored. Or, you know,	340	insensitive
you're already 85, ma'am, so why are	341	providers
you calling?'	342	

The codes will then be analyzed for patterns of ideas/concepts linked by propositional statements. This data analytic process resembles the preliminary work done in factor analysis, in which the researcher aims to summarize and distinguish empirical relationships between specific variables or phenomena (Gorsuch, 1983). Factors are groups of distinct ideas or units of meaning that belong together conceptually, and which may enrich the eventual development of an explanatory model or theory (Munro & Page, 1993; Tabachnick & Fidell, 1996). The process becomes thematic analysis, a creative, iterative synthesis of participants' key phrases, terms, and ideas into patterns of thought, often expressed as explanatory statements. Such themes or statements constitute the findings of the ethnographic inquiry (Patton, 2002; Ryan & Bernard, 2000), and they comprise the foundation for the explanatory modeling described in the second Specific Aim.

Congruent with the Specific Aims, and consistent with previous research of the investigator, the PI will use matrix analysis as a complementary, pragmatic strategy for the display, reduction, interpretation, evaluation, and dissemination of data and findings. A matrix depicts the intersection between dimensions of phenomena in the research, such as between the emergent themes and specific categories of informants, to pinpoint differences and similarities in viewpoints (Averill, 2002a; Morse & Field, 1995). Matrices may be descriptive, representing existing conditions or situations; process-oriented regarding the dynamics of change; or outcome-oriented with regard to health care practices, access to resources, or health status. Matrix analysis is also a useful way to preserve the researcher's accumulating findings across studies, developing accessible layers of evidence in a program of qualitative inquiry, such as for rural elders (Morse, 2001). A matrix for the proposed study might resemble this downsized example (Table 2) previously used by the researcher to compare domain content (part of thematic analysis) across participant groups (Averill, 2002a):

For the first Specific Aim, analysis of specific health disparity indicators will involve a comparison of information and data from three different sources: the professional literature, the preliminary/pilot study in Grant County, and the proposed study in three counties of southwestern New Mexico. The professional literature identified specific indicators (e.g., access to care, transportation limitations, and low rates of health insurance coverage) of health disparity for rural elders across the United States--a kind of macroscopic view. The pilot study in Grant County found that high costs of prescription drugs, access-to-care issues, transportation problems, social isolation, and perceived ineffective health care encounters were key disparity indicators for a small sample of rural elders in New Mexico--a microscopic view specific to one location. The proposed study will compare data from interviews, participant observation, and other data generation strategies across three counties to gain a wider knowledge of what indicators actually exist in southwestern New Mexico, how the indicators impact the health status and well-being of rural elders, and how the findings contrast to the pilot study and the body of professional literature.

Consistent with critical ethnography, data analysis for the second Specific Aim will entail thematic extraction of important points and meaning from the textual data, followed by a sharing of that information with participants. Engaging mixed groups of informants (e.g., community residents, rural elders, health care providers, community planners, educators, and researcher) in dialogue, collective self-study, and self-reflection, and dialectic regarding emergent issues are key to data analysis in this framework. Such an approach offers the possibility of complementarity and consensus among community members on focus points for future interventions and planned change, all aimed at reducing health disparities for rural elders (Kemmis & McTaggart, 2000).

Table 2. Example of Descriptive Matrix for Two Domains and Two Informant Groups.

Domains ► Participants ▼	Sacred Family	Meaning of Health
Primary participants: ≥60-y.o. Hispanic/Latino not in other Studies	<ul style="list-style-type: none"> ● Most sacred, valued institution ● Arbiter for decision-making, problem-solving, socialization ● Critical in times of crisis, hospitalization, Need ● Refuge from problems ● Values pride, ability to care for own 	<ul style="list-style-type: none"> ● Getting out of bed every day to work, do chores, care for others, whatever needs to be done ● Eating variety of favorite foods ● Participating in family activities ● Avoiding care providers & hospitals
Secondary informants <60-y.o. non-Latino health care provider	<ul style="list-style-type: none"> ● Many acknowledge importance of family to Hispanics ● Some deeply touched by Hispanic families, reaching out to them when they visit ● Some consider large families problematic in care delivery 	<ul style="list-style-type: none"> ● Getting out of bed every day to work, do chores, care for others, whatever needs to be done ● Learning more about wellness, illness prevention, health education (nutrition, exercise, no smoking, etc. ● Want Hispanics to value health education

Based on key points identified in the collective self-reflection, elders' definitions of health, and contextual issues emerging from the data collection, data analysis for the second Specific Aim will also involve construction of explanatory models. Specifically, the researcher will link the following components semantically and conceptually:

- 1) the various perspectives and key points identified during the looking phase of research (e.g., the perceptions of elders, health care planners, providers, and managers about particular disparities or inequities);
- 2) the major orientation/emphasis or focus of each particular group (e.g., the individual well-being vs. the common, social good);
- 3) the knowledge-related interests of each group (e.g., what is practical, what is desirable, what is empowering); and
- 4) the major contextual considerations in southwestern New Mexico (e.g., the demise of the copper mining industry, impact on local economies, international border issues).

Explaining key concepts and ideas, suggesting preliminary relationships among the concepts/ideas, and proposing early explanatory models for the health care issues of rural elders is foundational to future research that will explore options for collective change in the planning and delivery of health care to this population (Kemmis & McTaggart, 2000). As part of the data analysis, this introductory modeling will contribute to the findings and conclusions of the study, can be tested and refined in later investigations, and can be analyzed for its impact on the national rural health agenda (Weinert, 2002).

Observational data, such as how an encounter proceeds between an elder and a health care provider, will be analyzed as part of the researcher's reflective journal, as well as in the photographs of participants, objects, places, and facilities. Evidence arising from observational data will be compared with interview data and review of documents to assess linkages or gaps in the preliminary explanatory models of rural elders' health care issues. Photographs will be used to illustrate the nonverbal significance and impact of emergent themes, and to support the first Specific Aim.

Criteria for Methodologic Rigor

Just as quantitative investigations depend on the reliability and validity of particular measurements and instruments, qualitative studies operationalize methodologic rigor in terms of trustworthiness, reflecting the fit between the philosophical perspective and the Specific Aims of the intended research (Leininger, 1994; Lincoln & Guba, 1985). Qualitative research, including critical ethnography and community-based action research, asks whether the explanations in the findings are credible, trustworthy, and authentic (Janesik, 2000). One accepts the constructed nature of knowledge between the researcher and the participants, as well as the situatedness of findings within sociopolitical contexts present at the time of the study (Ceci, Limacher, & McLeod, 2002).

Criteria for methodologic rigor or credibility in the proposed ethnographic inquiry depend on efforts between the researcher and the participants to establish an authentic, mutually acceptable, credible account of participants' experiences. Inclusion of multiple perspectives/voices is essential in the generation of knowledge because outcomes eventually lead to organized, sociopolitical action for change in communities. An argument in support of such criteria is that they represent attempts to check the findings against contradictory evidence and explore for variations (Patton, 2002; Agar, 1999). The following strategies, based on commonly accepted qualitative traditions, will establish trustworthiness, study integrity, and credibility (Leininger, 1994; Lincoln & Guba, 2000; Patton, 2002):

1) The qualitative analogue to reliability is dependability or consistency (Lincoln & Guba, 1985). Contextualization of ideas, issues, and experiences within the rural communities is key to establishing a foundation for explanatory models and eventual solutions to problems. Grounded within the particular situations, life events, and activities of the rural elders and their family members, recurrent responses to research questions lend saturation and completeness to the search for meaning and understanding of phenomena. In this way, study dependability and consistency are established (Lincoln & Guba, 2000). Contextualization is insured by the researcher's partnership with participants in all settings and data collection efforts to obtain explanations and interpretations of phenomena from the rural elders' point of view in the current sociocultural milieu. In addition, the researcher will seek alternative or contradictory viewpoints to emergent themes in an effort to situate the data accurately in context.

2) The qualitative analogue to internal validity is credibility (Lincoln & Guba, 1985). Prolonged engagement with participants and repeated observations of daily life remain pivotal to the process of attaining credibility or trustworthiness of findings (Lincoln & Guba, 2000). Taking the time to get to know participants, sharing certain daily activities with them (e.g., accompanying them to a medical appointment; visiting them in their homes to see first hand the living environment, both physical and ecological, and accustomed routines), and asking questions about key issues and concerns establish a rich understanding of their lived experience and health care concerns.

3) The qualitative analogue to external validity is confirmability (Lincoln & Guba, 1985). Multiple sources of data and multiple methods of data generation will enhance and authenticate the study findings, thereby enhancing confirmability of the work (Lincoln & Guba, 2000). Ethnographic interviews, participant observation, consultation with a core community group, archival data review, photography, and contextual analysis in three rural counties will constitute multiple data sources and multiple methods. Direct and frequently repeated explanations of health care issues, the meaning of health, and perceptions of effectiveness in health care encounters, across informants, will generate confirmable, incremental evidence about the experiences of rural elders, thus enriching theory-building and explanatory modeling (Meadows & Morse, 2001). In addition, for the core community group serving as partners/expert consultants, the researcher will meet with them on a periodic basis, perhaps in a focus group format, for the purpose of creating a negotiated/joint interpretation of the emergent findings and their significance for the rural communities (Bradbury & Reason,). These strategies speak to the second Specific Aim of the study, and the *Looking* phase of the theoretical framework.

4) The qualitative analogue to objectivity, while not precisely equivalent because of contextual phenomena and researcher-participant dialectic, is neutrality (Lincoln & Guba, 1985). Member-checking, or researcher validation of

findings with participants, will support neutrality by encouraging the sharing of opinions, clarifications, and reactions to results. It will also help minimize the biases and interests of the researcher. Scrutiny of the process and outcome of research involving rural elders in the three counties will solidify the partnership for change suggested in critical ethnography and action research (LeCompte, Schensul, Weeks, & Singer, 1999; Meadows & Morse, 2001; Stringer, 1999).

5) A thorough audit trail, documenting the researcher's approach, procedures, insights, reflections, possible conflicts/challenges, and decision-making in the field notes and journal, will enhance study rigor and facilitate subsequent research design for future inquiry, comparison studies, or meta-analyses of rural health research (Meadows & Morse, 2001). In addition, an audit trail will enhance the mentorship of graduate students by providing a recorded path through the challenges of fieldwork and ethnographic inquiry.

6) Transferability of the findings in this study to similar contexts or situations is predicated on in-depth understanding of the major issues in the three counties. Similarities and/or differences to findings in another similar field setting can extend and deepen understanding of health care issues for all rural elders in the United States, while still preserving particular results from the region of interest. Responsibility for this transferability rests with the researchers involved because contextual variations occur in every setting (Magilvy et al., 2000).

Participation of Students

Although the PI will perform all data collection and data analysis, a graduate student and an undergraduate student will participate with the PI in this study. The graduate student will serve as an organizational assistant in the early phases of the research, as participants are recruited and contacted for interviews. The graduate student can facilitate the logistical arrangements for fieldwork, such as where and when interviews should take place. The graduate student will be prepared by the PI to keep a research log of all relevant communications and preliminary field notes and will take part in all phases of the research process with the PI. Whenever possible, the graduate student will travel with the PI to rural sites in the study to learn the process and dynamics of ethnographic fieldwork and to become familiar with the rural health care environment.

An undergraduate student will be hired to help manage and coordinate data as they become available for analysis. For instance, the student can schedule and organize transcription, enter completed transcripts and demographic information into the computer software programs, maintain the locked filing system, track participants and community activities in research sites, log field notes, and perform other administrative functions. Undergraduates may also participate in data analysis by writing case summaries of site-specific activities and findings and joining the PI and graduate student in data analysis meetings.

Both the graduate and undergraduate students will be encouraged to develop and pursue secondary research questions related to the study, if they desire. Students will also take part in the dissemination of study findings by helping to develop oral presentations, posters, and manuscripts. The PI has extensive experience mentoring both undergraduate and graduate students in scholarly activities, including research projects, poster presentations, comprehensive exams, program grant applications, community assessments, and theses.

E. HUMAN SUBJECTS

1) Subject Population

The study population for this proposed project will be ethnically diverse and include both men and women. Research participants will include the following groups: a) a purposive sample of primary participants, rural elders, approximately 45 in number, at least 60 years of age, and residing in Grant, Luna, and Socorro Counties in southwestern New Mexico; b) a purposive sample of secondary participants, approximately 15 in number, who are adult family members of rural elders, health care providers, community planners, or senior service coordinators in any or all of the three named counties. It is expected that the subject sample for this study will reflect broader sociodemographic characteristics of the population of the three counties in southwestern New Mexico. According to the U.S. Bureau of the Census (2000), the total population of rural elders 65 years of age or older in the three named counties included approximately 11,566 people, with women outnumbering men. The rest of the Census data for the study area are shown in Table 1. Consent forms and recruitment flyers for the research will be available in both English and Spanish versions to accommodate participants (see Appendices A & B).

Throughout the southwestern U.S., a significant number of Native American residents live on reservations. One such reservation exists in Socorro County, the population density of which is 2.7 persons per square mile. The reservation is a part of the Navajo Nation. It is reasonable to assume that the population of the reservation, estimated to be 1,971,

accounts for the majority of the 10.9% of Native Americans in the total county population of 18,078. It is not known exactly what percentage of the reservation population is over the age of 60, since the Navajo Agency on Aging maintains its own records of the population distribution. The reservations have their own governing bodies and policies, including policies regarding access for research studies. The process involved in obtaining permission to conduct research within the Native American communities is extremely lengthy and complex, and it certainly constitutes a focus area for future research planned by the PI. However, it is beyond the scope of this R15 application to pursue that goal. Estimates have been obtained (personal communications with established key informants) for the number of Native Americans accessing both private and public health care agencies within Socorro County, exclusive of the reservation. Those agencies include a regional public health office, a home health care/hospice service affiliated with the regional hospital, and two senior meal sites. The following current usage statistics were provided for the health office and home health/hospice services:

Hispanic residents.....	40%
Anglo residents.....	32%
Native American residents...	25%
"Other"	3%

No age distribution for these percentages was available at this time, but the informants report clients across the lifespan. Both senior meal sites reported two or fewer Native Americans in the last year using the meal site facilities; the seniors using the meal sites were described as approximately 50% Hispanic and 50% Anglo. Based on the usage figures provided about the health care facilities, it is reasonable to plan to recruit potential Native American participants through the public health office and the home health/hospice facilities, just as other cultural groups will be recruited. Since the Native Americans using these facilities are living off of the reservation, within the rural communities, accessing them as valuable sample participants in this study should be entirely plausible, and will be a priority of the Research Plan.

No reservations exist in the other two counties targeted for this study. The PI will make every effort to include any/every cultural group in sample recruitment, including Native Americans. No cultural group will be excluded for any reason.

The focus of this study is on health care issues, disparities, and access for rural elders. The perspective of the elders themselves is the primary target of all sampling efforts. However, important insight may be obtained by family members and care providers who live with or assist rural elders in their daily activities and health care experiences.

Special issues of parental consent/child assent accompany research targeting young children; it is beyond the stated goals and scope of this study to include young children in this particular study. It is entirely possible that future studies may target younger family members to obtain their perspective on health care issues for the rural elders. It is probable, based on established norms of childhood growth and development, that young children may perceive the health care issues of their grandparents or great grandparents through a lens that directly impacts their own daily lives; thus, the focus would be shifted away from the elders to the needs of the children. This is extremely valuable, but it is not within the stated scope of the current study.

The PI will make an effort to include any/all family members of the elders who are at least 18 years of age. In this way, the perspectives of younger family members may contribute knowledge and understanding of the elders' health care access issues, particularly in terms of impact on the families themselves. The level of intellectual and psychological maturity of people 18 years and older is more appropriate to the aims and purpose of this study.

2) Research Resources

No specimens or medical records will be obtained for use in this study. Data collection methods will include ethnographic interviews; ethnographic participant observation in the daily activities of subjects; photographs of selected (consenting) subjects and community settings; and review of community documents such as newspapers, library resources, pamphlets, and health education brochures prepared by health care providers for rural elders.

3) Subject Recruitment and Informed Consent Procedures

The University of New Mexico Human Research and Review Committee (HRRC) has approved of this proposed study. The HRRC Approval Number is 02-044. The researcher will distribute recruitment flyers in both English and Spanish to established contacts (e.g., health care managers, nurse managers, senior advocates) within the counties and communities of interest. The contacts represent the Gila Regional Medical Center Home Health and Hospice Programs, the Grant County Community Health Council (local citizens group), the Area Citizens Council for Services to Senior Citizens, Socorro General Hospital (Home Health), and the local health departments of Grant, Luna, and Socorro Counties. The key contacts will make the flyers available to interested rural elders, who will voluntarily decide if they are willing to be contacted by the researcher for interviews. In this way, all contacts between the researcher and participants

is voluntary and initiated through existing community resources and key informants. Each participant will be asked to sign an informed consent form, which will be available in either English or Spanish.

4) Potential Risks

The risks of participation in this proposed study are minimal, but may involve loss of privacy if people are photographed or if they are interviewed in a group setting, such as a senior center, and loss of personal time to complete interviews.

5) Procedures to Minimize Risk

The following procedures will be instituted to minimize risks in the proposed project. Participants will be informed that participation in the study is entirely voluntary, response to any and all interview questions is voluntary, and they may decline to answer any or all questions. Precautions will be taken to protect their confidentiality: all tapes, transcripts, field notes, photographs, and data files will be assigned an identifying number, and these materials will be kept under lock and key in the PI's office, accessible only to the investigator. People's names will not be shared or published at any time. These procedures will likely be very effective at insuring confidentiality. In addition, no actual names of persons, counties, or places will appear in publications or presentations that follow this study.

Individuals expressing an interest in the research will have the study explained to them in detail by either the PI or RA. Opportunity will be provided for prospective subjects to ask questions. Individuals indicating a willingness to participate in the study will be given the consent form to review on either that occasion or take the consent form with them to discuss with others. The name of a human subjects representative (not associated with the grant) will be provided who can answer questions and address concerns. The consent will provide details of the study, the telephone number of the respective site contact investigator and emergency number. Upon reviewing the contents of the consent and answering any questions, the individual will be asked to sign the consent form. Two copies of the form will be made. A copy of the consent will be given to the subject, and one will be kept by the PI. The original will be retained by the PI at the site of enrollment.

6) Potential Benefits

Participants will receive little or no direct benefit from this proposed project. Previous research suggests, however, that some participants report emotional benefits from the opportunity to discuss what they see as key issues in the planning and delivery of their health care. The purpose of this study is to advance knowledge about health care issues for rural elders, based on a partnership between the PI and the participants, and to identify focus points for future intervention aimed at reducing health disparities. Knowledge gained from this study may enrich our understanding of health care issues and disparities for rural elders and influence the development of policies and practices to benefit all rural elders. The potential benefits to nursing science and for rural health outweigh the minimal risks.

F. VERTEBRATE ANIMALS

Not Applicable.

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H. CONSORTIUM/CONTRACTUAL AGREEMENTS

None

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