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Hard-to-Reach Kansans: Mapping, Examining Access, and Identifying Successful Strategies

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Hard-to-Reach Kansans: Mapping, Examining Access, and Identifying Successful Outreach Strategies

Purpose

The overall purpose of this study is to examine the extent to which the current Kansas Department on Aging/Area Agencies on Aging (KDOA/AAA) service system is serving Kansans who are defined as “hard-to-reach” on the basis of low income, rural residence, minority status, limited English proficiency, or low level of literacy. This definition of “hard-to-reach” was developed based on language in the Older Americans Act, literature from the Centers for Medicare and Medicaid Services, as well as other relevant literature on populations identified as having difficulty accessing and utilizing community-based services.

Previous research conducted by the Office of Aging and Long Term Care found that community-based services administered by the KDOA/AAA service system are successful in supporting older adults’ preference to live in the community (Macmillan et al., 2005). Although state-funded services (i.e., Home and Community-Based Services/Frail Elderly Waiver, Older Americans Act, and Senior Care Act) were found to assist many older adults in maintaining community tenure, it was unknown to what extent community-based services were reaching certain marginalized, disadvantaged, and potentially hard-to-reach older adults. This study sought to investigate the extent to which older Kansans who meet certain hard-to-reach criteria are accessing and receiving KDOA/AAA services, the strategies of AAA staff in successfully providing services to hard-to-reach Kansans, and the obstacles that impede older adults’ knowledge and utilization of these community-based services.

The specific objectives of this study were:

1. To estimate the number and location of older Kansans who meet hard-to-reach criteria (i.e., low income, rural residence, minority status, limited English proficiency, and low level of literacy).

2. To determine the location and percentage of older Kansans meeting the hard-to-reach criteria who received services through KDOA/AAA (i.e., Home and Community-Based Services/Frail Elderly Waiver, Older Americans Act, and Senior Care Act) and the type of services they received.

3. To determine whether there are differences in the penetration rates of KDOA/AAA services to the hard-to-reach population.

4. To identify the successful strategies case managers and intake personnel employ to meet the service needs of hard-to-reach individuals and to explore what additional information and resources may be needed by AAA staff to increase their knowledge of culturally competent practices with hard-to-reach older adults.
5. To investigate how older adults who meet the hard-to-reach criteria are able to access services and to learn what outreach strategies—including print materials—might be effective in reaching a higher proportion of hard-to-reach older Kansans.

In order to meet these objectives, the staff of the KU Office of Aging and Long Term Care conducted a study comprised of three parts: a mapping component, a survey component, and an interview component. This report presents the findings from the mapping and survey components that were completed in Fiscal Year 2006 as well as the interview component that was completed in Fiscal Year 2007.

The mapping component of this study, which addressed Objectives 1, 2, and 3, compared Census population data and service data obtained from the Kansas Aging Management Information System (KAMIS) and the Medicaid Management Information System (MMIS). Using these three data sources, we compared the distribution of hard-to-reach older Kansans receiving services through the KDOA/AAA service system to the distribution of all hard-to-reach older Kansans. In addition, we analyzed the percentage of hard-to-reach Kansans receiving services in relation to all older Kansans receiving services to determine whether hard-to-reach Kansans were being served at a rate similar to or different than the general older adult population.

The survey component focused on Objective 4. Mail surveys of AAA case managers and phone surveys of AAA intake personnel were conducted to identify the successful strategies used by case managers and intake personnel when working with older adults meeting the hard-to-reach criteria. The surveys also explored perceived barriers to service utilization by older adults, and additional resources and knowledge that could be utilized by AAA staff to serve hard-to-reach older adults.

The interview component addressed Objective 5. For this component, we interviewed older adults who met the hard-to-reach criteria and were already receiving KDOA/AAA services to identify how they were able to learn about and access these services. These interviews also explored what hard-to-reach older adults recommend to help reach those who meet the same criteria but are not accessing or receiving services.

Components of the Report

There are five sections in this report. The first section provides a brief introduction to the purpose of the study, the definition of hard-to-reach older Kansans, and an overview of the relevant literature on barriers to service utilization. The second section presents the findings of the mapping component of the study, which provides a visual representation of the distribution
of hard-to-reach older adults in Kansas and service penetration rates by each hard-to-reach category. The third section presents the key findings from surveys of case managers and intake personnel at the Area Agencies on Aging in Kansas. The findings of the interviews with older adults are in the fourth component of this report. The fifth and final section of this report synthesizes the mapping, survey, and interview components and discusses implications.

**Defining the Hard-to-Reach Population**

For the purpose of this study, the hard-to-reach population in Kansas was defined as certain underrepresented or marginalized groups that have been identified as having difficulty accessing and utilizing community-based services. Hard-to-reach individuals are defined as individuals who are 60 years of age and older and who meet one or more of the following criteria: low income, rural residence, minority status, limited English proficiency, and/or low level of literacy. Although all older adults who meet the hard-to-reach criteria might not have difficulty accessing services, older adults with these characteristics often encounter unique barriers to service access and utilization.

The definitions of hard-to-reach used in this study were developed based on the language in the Older Americans Act, literature from the Centers for Medicare and Medicaid Services, and other relevant literature on hard-to-reach populations. These definitions are presented in Figure 1. Although Older Americans Act services are available to all older adults, the services are targeted “to older adults with the greatest economic need or individuals with greatest social need, with particular attention to and specific objectives for providing services to low income minority individuals and older individuals residing in rural areas” (Older Americans Act, 42 U.S.C. § 3012(a)(15)). Other specific targeted groups that are included in the definition of those with the greatest social needs include older adults with physical and mental disabilities, language barriers, and cultural, social, or geographic isolation.

The Centers for Medicare and Medicaid Services (CMS) acknowledges that language, literacy, location, and culture are some of the greatest barriers to obtaining health information and utilizing services. Individuals with these characteristics have been identified and specifically targeted for increased awareness through the CMS Health Outreach Initiative Zeroing In On Needs (HORIZONS) and Regional Education About Choices in Health (REACH) initiatives. Both of these initiatives address potential barriers to Medicare use in an effort to ensure that Medicare information is distributed effectively and older adults are able to make informed decisions (Gaumer & Korda, 2001).
## Figure 1: Definitions of the Hard-to-Reach Populations

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low income</td>
<td>An individual who has an income below the federal poverty line.</td>
</tr>
<tr>
<td>Rural residence</td>
<td>An individual who resides in a location where it may be more difficult to access information and/or receive community-based services. For the mapping component, we based this on the 12-point urban influence codes. Individuals who reside in counties with an Urban Influence Code of 9, 10, 11, or 12 have a rural residence.</td>
</tr>
<tr>
<td>Minority status</td>
<td>An individual who indicates a race other than White and/or an individual who indicates Hispanic ethnicity.</td>
</tr>
<tr>
<td>Limited English proficiency</td>
<td>An individual who does not speak English as their primary language and has difficulty in reading, speaking, or understanding English.</td>
</tr>
<tr>
<td>Low level of literacy</td>
<td>An individual who is unable to use reading and writing in everyday situations.</td>
</tr>
</tbody>
</table>

### Low Income

The definition of low income used in this study is “an individual who has an income below the federal poverty line.” This definition is consistent with the Older Americans Act that defined individuals with the “greatest economic need” as those with income levels at or below the poverty line (OAA, 42 U.S.C. § 3002(27)). The poverty line, or guideline, varies by family size and is updated each year by the Department of Health and Human Services. The poverty guidelines are a simplified version of the poverty thresholds, which are used by the U.S. Census Bureau to calculate poverty for statistical purposes. The determination of income accounts for all money income including Social Security, income from assets, public and private pensions, and earnings; but it does not include noncash benefits such as food stamps (Federal Interagency Forum on Aging Related Statistics, 2004).

### Rural Residence

For the purposes of this study, we were interested in individuals who reside in a rural location where it may be more difficult to access information and/or receive community-based services. For the mapping component of the study, we measured rural residence based on the county-level urban influence codes published by the Economic Research Service of the U.S.
Department of Agriculture. The 2003 urban influence codes measure rurality by assigning all U.S. counties to a 1 to 12 scale with 1 = the most metropolitan and 12 = the most rural (U.S. Department of Agriculture & Economic Research Service, 2003). Table 1 shows the breakdown of the 12 urban influence codes into three groups: Urban, Midsize, and Rural counties. Individuals residing in noncore counties that are not adjacent to a metropolitan county are defined as living in a rural residence for this study.¹

Table 1: Urban Influence Codes by Group and Description

<table>
<thead>
<tr>
<th>Group</th>
<th>County Description</th>
<th>Urban Influence Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>Metropolitan</td>
<td>1, 2</td>
</tr>
<tr>
<td>Midsize</td>
<td>Micropolitan and Noncore, Adjacent to Metro</td>
<td>3, 4, 5, 6, 7, 8</td>
</tr>
<tr>
<td>Rural</td>
<td>Noncore, Not Adjacent to Metro</td>
<td>9, 10, 11, 12</td>
</tr>
</tbody>
</table>

Minority Status

An individual who indicated a race other than White and/or an individual who indicated Hispanic ethnicity were defined in this study as having minority status. Race and ethnicity could be considered as separate criteria; however, we have combined both into one category consistent with the U.S. Census Bureau. Race refers to subdivisions of the population who are labeled and treated as similar based on assumed biological or physical differences between people (most notably skin color). Although race has no scientific basis in determining biological characteristics (e.g., DNA studies show that biological variability exists, but does not conform to our race categories), it is significant as a social construction of difference (Omi & Winant, 1998). Ethnicity, on the other hand, broadly refers to a shared national origin, language, region, culture, and religion.

Race is categorized differently by various surveys; however, the Office of Management and Budget (2000) established the following “guidance for agencies that collect or use aggregate data on race” (p. 1). The five minimum race categories include White, Black or African American, American Indian and Alaska Native, Asian, and Native Hawaiian or Other Pacific Islander. In order to recognize the increasing diversity of the population, there is also a category for “some other race” and individuals are able to mark two or more races. This provides a full range of categories for individuals to define their race. The 2000 Census was the

¹ It is important to note that some older adults in rural counties might be more geographically isolated than others, but the Urban Influence Codes do not account for this variation. The Urban Influence Codes also do not account for older adults in urban or midsize counties who are considered rural by either themselves or service providers. However, this definition of rural does allow for a broad overview of the service provision to older adults living in more rural areas of the state compared to those in more urban areas.
first nationwide survey that used this new categorization of race. The Census Bureau, in accordance with the Office of Management and Budget guidelines, determines a person’s ethnicity based solely on whether or not a person is of Hispanic or Latino origin.

This study identifies individuals who are Black or African American, American Indian and Alaska Native, Asian, Native Hawaiian and Other Pacific Islander and/or those with “some other race” or two or more races as having minority status. This study also identifies individuals who are of Hispanic or Latino origin as having minority status.

**Limited English Proficiency**

An individual with limited English proficiency is defined in this study as an individual who does not speak English as their primary language and who has difficulty in reading, speaking, or understanding English. This definition is consistent with the measurement of primary language by the U.S. Census Bureau. The U.S. Census Bureau permits the determination of whether an individual has limited English proficiency based on whether an individual speaks another language as their primary language and reports that they speak English “not well” or “not at all” (Administration on Aging, 2004).

**Low Level of Literacy**

The National Adult Literacy Survey conducted in 1992 defined literacy as “an individual’s ability to read, write, and speak in English, and compute and solve problems at levels of proficiency necessary to function on the job and in society, to achieve one’s goals, and develop one’s knowledge and potential” (Kutner, Greenberg, & Baer, 2005, p. 2). There are five levels of literacy (Level 1 to 5) and people who have skills at either Level 1 or Level 2 are generally regarded as having a low level of literacy. Similar to the definition used by the National Adult Literacy Survey, an individual who is unable to use reading and writing in everyday situations is defined by this study as having a low level of literacy.
Literature Review

Older adults who meet the hard-to-reach criteria have a variety of barriers to service access and utilization. Some barriers are consistent across the criteria, such as limited knowledge of services and access to transportation, whereas other barriers are specific to the criterion of interest. This section of the report provides an overview of the size of the hard-to-reach populations in Kansas. In addition, this literature review provides an overview of the barriers encountered by older adults who have low incomes, rural residences, minority status, limited English proficiency, and/or low levels of literacy. By examining the existing literature on barriers to community-based services for these populations, we gain a better understanding of whether what is happening in Kansas concurs with the findings from other parts of the country.

Low Income

Poverty rates among adults age 60 years and older are slightly lower in Kansas than nationally. In 2000, 8.0% of the population age 60 years and older was below the poverty line in Kansas compared to 9.9% nationally (U.S. Census Bureau, 2000a). Certain subgroups of the older adult population including the oldest old, women, those in rural areas, members of racial and ethnic minority groups, and those that live alone are more likely to have low incomes than the general older adult population (Biegel & Leibbrandt, 2006; McLaughlin & Jensen, 1995; Rowland & Lyons, 1996).

Another group that is vulnerable to poverty is the “near-poor” who have incomes between 100 percent and 150 percent of the poverty line (Biegel & Leibbrandt, 2006). In 2000, 9.1% of adults age 60 years and older in Kansas were near-poor and 9.8% of adults age 60 years and older nationally were near poor (U.S. Census Bureau, 2000a). Thus, there is a larger percentage of older adults who are near poor in Kansas than older adults who are low income. The near poor face a double dilemma because their income is too high to qualify for certain services and public assistance but too low to pay for basic needs including food, housing, transportation, and health care (Biegel & Leibbrandt, 2006; Bogdon, Katsura, & Mikelsons, 2000). Though the “near-poor” were not a central focus of this study, some older adults in other hard-to-reach groups experienced barriers associated with being “near-poor.”

Service Access and Delivery

Existing studies indicate that low income older adults are more likely to have poor health status including adverse health incidence and mortality (Gill, Taylor, & Pengelly, 2005; Koster et
al., 2005; Lantz et al., 1998; C. A. Schoenberg, Vickerie, & Powell-Griner, 2006). Older adults with low incomes are also more likely to have multiple chronic conditions and functional limitations (Koster et al., 2005; Rowland & Lyons, 1996).

Low income older adults face a variety of barriers to accessing medical and social services, though the primary barrier they encounter is related to their limited ability to pay for extra expenses beyond their basic needs (Rowland & Lyons, 1996). Studies indicate that approximately one-third to one-half of all older adults with incomes below the poverty level receive Medicaid (Pezzin & Kasper, 2002; Rowland & Lyons, 1996). Medicaid enrollment is more likely for those with the greatest health care needs, minority populations, and unmarried people (Pezzin & Kasper, 2002).

Financial barriers. Low income older adults are less able to afford basic care, which requires them to make hard choices between basic necessities and needed health care services (Rowland & Lyons, 1996). Low income older adults spend a greater proportion of their income on out-of-pocket medical expenses (Rowland & Lyons, 1996). In addition, many low income older adults are living in housing which is costly and not equipped for their physical frailty. Due to financial difficulties, many older adults cannot afford to repair these conditions (National Association of Area Agencies on Aging, n.d.-a).

According to Minear and Crose (1996), concern about extra expenditures is also an obstacle to community-based service utilization. Regardless of actual costs, older adults are concerned that many services require additional expenses paid by the recipients. Pressures to contribute a small amount of money when using a service can be an emotional as well as financial burden. For older adults with low incomes, any service requiring additional expenses might lower their motivation to access the services (Minear & Crose, 1996; N. E. Schoenberg, Coward, & Albrecht, 2001).

Lack of knowledge. Lack of knowledge about programs and eligibility criteria for existing services prevents many older adults from applying for services (Pezzin & Kasper, 2002). According to Long and her colleagues (2005), many low income older adults either decline or withdraw from home and community-based services (HCBS) due to a concern that they will not meet financial eligibility criteria. In particular, lack of knowledge and confusion about estate recovery often results in older adults not applying for home and community-based services because they do not want to lose their family home (Long et al., 2005).

Difficult application process. The complexity of the application process is another obstacle for low income older adults to utilize services. Application forms are often long and
require extensive amounts of information including financial information. Processing the application is sometimes hampered by older adults’ difficulty in obtaining all necessary financial documents. Another emerging concern in regard to applying for services is the feeling of discomfort about providing financial information. In the application process, older adults often rely on family caregivers to complete the forms (Long et al., 2005; Pezzin & Kasper, 2002).

**Rural Residence**

Older adults residing in rural counties are more likely to have location barriers to community-based services and be geographically isolated. In 2000, 17.5% of adults aged 60+ in Kansas lived in rural counties. The majority of adults age 60 years and older live in urban counties (53.8%) and the remaining older adults live in midsize counties, indicating that the counties are neither rural nor urban (28.7%). Though the majority of older adults live in urban counties, older adults comprise a larger percentage of the total population in rural counties than in urban counties. Older adults comprise 26.2% of the total population in rural counties versus 17.9% of the total population in urban counties. In addition, a larger percentage of rural older adults in Kansas have low incomes compared to urban older adults, 9.2% and 6.6% respectively (U.S. Census Bureau, 2000b).

**Service Access and Delivery**

Research consistently shows that there are some rural and urban differences in health among older adults. Rural older adults have a higher likelihood of having chronic conditions and lower self-reported health than their urban counterparts, however, rural and urban older adults report similar levels of impairment in activities of daily living and instrumental activities of daily living (Hutchison, Hawes, & Williams, 2005).

Rural older adults encounter a variety of structural barriers to community-based service utilization including fewer available services, transportation difficulties, and lack of service awareness. These barriers are often more pronounced in the most isolated rural areas. Due to these barriers, some research indicates that when compared to urban older adults, rural older adults access community-based services at a lower rate (Bellamy, Goins, & Ham, 2003; Coburn & Bolda, 1999; Kenney, 1993a, 1993b). Other studies have found that rural older adults’ utilization of community-based services is either similar to or greater than their urban counterparts (Coward, Duncan, & Freudenberger, 1994; Krout, 1994). Although the community-based service utilization of rural versus urban older adults is inconsistent, research generally
finds that rural older adults are more likely than urban older adults to utilize nursing facility care (Bellamy et al., 2003; Coburn, 2002; Coburn & Bolda, 1999; Coward, Horne, & Peek, 1995; Shaughnessy, 1994).

Limited service availability. Many studies have found that older adults residing in rural areas have less access to community-based services due to fewer alternatives to institutional long-term care (Coburn, 2002; Glasgow, 1993; Krout, 1998; Rasheed & Rasheed, 2003). In many rural areas, in-home social services such as adult day care, Meals on Wheels, and respite care are less available than in urban areas (Bull, 2003). Some services might be available in more populated rural areas, but not in isolated rural areas (Krout, 2001). In spite of progress in closing the rural-urban gap in terms of service provision over the past few decades, significant rural disadvantages still exist (Krout, 1998, 1994).

Rural areas are particularly vulnerable to a shortage of health and social service providers. According to the Kansas Rural Health Options Project (2003), there is a greater shortage of nurses, health professionals and physicians in rural areas as compared to urban areas of Kansas. The issue of insufficient staff is not limited to medical settings. Many rural human service organizations report insufficient staffing. Rural areas often face difficulties with recruitment and retention of qualified social workers, case workers, gerontologists, and program directors (The National Advisory Committee on Rural Health and Human Services, 2004).

Fewer available service providers, a shortage of trained staff, and the lack of finances available for organizations to provide services can impact the quality of services in rural areas (Krout, 2001). Service quality in rural areas is also influenced by difficulty getting accurate diagnoses due to limited diagnostic resources, difficulty scheduling an appointment, and long waiting times at such appointments (Goins, Williams, Carter, Spencer, & Solovieva, 2005).

Transportation barriers. Transportation is crucial for providing services to rural older adults and can be a real barrier to service utilization (Arcury, Quandt, Bell, McDonald, & Vitolins, 1998; Goins et al., 2005). Most services are located beyond walking distance from older adults’ residences (Arcury et al., 1998). Rural older adults as well as urban older adults rely on their own automobiles to help them maintain independence. However, as older adults age, declines in physical health including vision and hearing loss and mobility impairments can impact their functional ability to drive (Burkhardt, 2001; National Association of Area Agencies on Aging, n.d.-b). Older adults who are unable to drive on their own often turn to friends and family or public transportation (Glasgow & Blakely, 2000). Finding others who drive or asking them for a ride is not always an option for some older adults, which increases the demand for public transportation. Despite the vital need of transportation, public transportation in rural areas is
very limited (Arcury et al., 1998; Goins et al., 2005). There are many counties in which public transportation is either non-existent or very scarce. When it is available, it can be too costly for low income rural older adults to afford (Arcury et al., 1998; N. E. Schoenberg et al., 2001).

Travel distance also becomes a barrier for service providers because they have to be able to travel to the older adults' home to provide services. Fortney and his colleagues (2002) also emphasize that long travel distance between service providers and clients is a significant factor impacting service provision and utilization. Home health care agencies have a low propensity to provide services to residents living in remote rural areas because it is often not profitable. Fortney et al. (2002) found rural older adults living further than 30 minutes from a home health care agency are less likely to utilize home health services and receive less frequent visits when they do have home health services.

Lack of knowledge. Lack of awareness about services is found to be one of the most important factors influencing older adults' utilization of services (Cherry, 2002; Minear & Crose, 1996; Richardson, 1992; Starrett & Decker, 1984; Yeatts, Crow, & Folts, 1992). This was found to be true with low income older adults as well as rural older adults. According to The National Advisory Committee on Rural Health and Human Services (2004), fewer rural older adults are participating in Older Americans Act services nationally due to lack of awareness of these services in rural areas. This can be explained in part by their limited access to information resources such as the television, telephone, and internet. The lack of contact with service providers also reduces rural older adults' opportunities to be informed about services. In addition to not being aware of services, some older adults have inadequate or incorrect information about services. For example, some older adults misunderstand the cost involved in applying for services, which results in them not applying for services due to financial concerns (Sijuwade, 2002).

Declining informal support. Rural and urban older adults receive the majority of their caregiving from informal supports including nuclear and extended family, friends, neighbors, and local community churches. There is growing concern that rural older adults will no longer have the same informal supports available as urban older adults as adult children are moving to more urban areas. As the geographic distance of adult children from older adults becomes greater, adult children are less available to provide informal caregiving support for their older parents. This results in a weakening of the informal support network of rural older adults (Arcury et al., 1998; Lin & Rogerson, 1995).
Minority Status

In 2000, 7.3% of Kansas adults aged 60 years and older were members of racial and ethnic minority groups. Of Kansas adults 60+, 3.5% are Black/African American, 2.0% are Hispanic/Latino, 0.7% are Asian/Pacific Islander, and 0.4% are Alaska Native/American Indian. Less than one percent of the population reported their race as “other” (0.7%) or reported two or more races (0.7%). The percentage of the older adult population who are members of a racial or ethnic minority group increased from 4.7% in 1990 to 7.3% in 2000 (U.S. Census Bureau, 1990, 2000b), and the older adult population is projected to become even more diverse in the next twenty years. Poverty rates are higher among all racial and ethnic minority groups than they are for White non-Hispanics. Of White non-Hispanic older adults in Kansas, 7.2% are low income compared to 19.0% of Black/African Americans, 14.6% of Hispanics, 14.5% of American Indian/Alaska Natives, and 13.2% of Asian/Pacific Islanders (U.S. Census Bureau, 2000a).

Kansas has a small, but rapidly growing, immigrant population. The percentage of foreign-born older adults in Kansas was 2.4% in 2000 and an estimated 24.8% of the foreign-born older adults are Hispanic or Latino in origin, 28.0% are Asian in origin, and 38.0% are European in origin. The other 8.8% of foreign-born older adults in Kansas have origins from Africa, Oceania, or Northern America (U.S. Census Bureau, 2000a). The growth in the immigrant population for all age groups has resulted in an increase in the foreign-born population from 2.5% in 1990 to 5.0% in 2000 and an estimated 54.7% of the entire foreign-born population in Kansas are Hispanic or Latino in origin (Malone, Baluja, Costanzo, & Davis, 2003). A large proportion of this immigrant population growth has taken place in rural parts of the state due to the demand for low wage workers. For example in Garden City, a significant meat-packing town in southwestern Kansas, the percentage of foreign-born individuals grew from 9.8% of the city’s population in 1990 to 22.8% in 2000 (U.S. Census Bureau, 1990, 2000b).

Immigration history and national origin can impact older adults’ values, attitudes, socioeconomic status, and eligibility for public benefits. There are likely to be stark differences between those older adults who recently immigrated to the United States as compared to second or third generation immigrants that grew up in the United States. These differences might be reflected in educational background, attitudes toward family and governmental assistance, and importance of ethnic history and customs (Gelfand, 2003).

Service Access and Delivery

Many studies with older adults report that health disparities exist between racial and ethnic minority groups and White non-Hispanics (U.S. Department of Health and Human
Minority older adults are more likely to report poorer health, have a higher number of chronic medical illnesses, and higher mortality rates (Coward et al., 1997; Nickens, 1991). According to the U.S. Census Bureau (2000b), 40.9% of White non-Hispanic older adults reported having a disability compared to 44.0% of Hispanic/Latino older adults, and 42.4% of Asian/Pacific Islander older adults in Kansas.

Several studies report that African American and Hispanic older adults as well as other racial and ethnic minority groups are less likely to use nursing home care compared to White non-Hispanics (Baxter, Bryant, Scarbro, & Shetterly, 2001; Damron-Rodriguez, Wallace, & Kington, 1994; E. A. Miller & Weissert, 2000; Wallace, Levy-Storms, Kington, & Andersen, 1998), but there have been inconsistent findings about racial and ethnic minority groups use of community-based services (Cagney & Agree, 1999; Wallace et al., 1998). According to Luckey and Nathan (1989), White older adults were almost three times more likely than African American older adults to seek services. On the contrary, Wallace and his colleagues (1998) and Dunlop and her colleagues (2002) found that home health care use was higher among African American older adults than Whites. Some researchers have also reported differences in service utilization among and within racial and ethnic minority groups. Choi (2001) reported that Asian Americans and Hispanics are much less likely to participate in home-delivered meal programs as compared to African Americans. In addition, Starrett and Decker (1984) found that Cubans and Puerto Ricans are more likely than Mexican Americans to use a variety of social services.

Other studies report that there are no racial or ethnic differences in utilization of community-based services (Baxter et al., 2001; B. Miller et al., 1996; Peng, Navaie-Waliser, & Feldman, 2003). According to Miller and her colleagues (1996), their comparative analysis of three national databases found no race or ethnicity differences in older adults utilizing home health aid services or senior center services. In addition, Baxter et al. (2001) found that after adjusting for demographic characteristics such as education, the Hispanic and White non-Hispanic populations received similar levels of professional home nursing services and home care.

Based on these conflicting findings, researchers emphasized that service utilization by racial and ethnic minority groups should be interpreted in relation to other factors. Race or ethnicity alone might not yield variation in service utilization. However when race interacts with other factors including gender, income, educational attainment, health needs, and family structure, racial and ethnic differences in service use become distinct (Baxter et al., 2001; Cagney & Agree, 1999; Dunlop et al., 2002).
**Structural barriers.** Minority older adults may face structural, social, and cultural barriers to utilizing community-based long-term care services (Damron-Rodriguez et al., 1994). For example, Li (2004) found that Asian communities have limited access to and therefore limited use of adult day care and respite services. In addition, as was found with low income and rural older adults, racial and ethnic minority groups have limited knowledge of services available (Crist, 2002; Gelman, 2002; Luckey & Nahan, 1989). Starrett and Decker (1984) found that knowledge of services had a larger effect on service utilization than need for services.

Members of racial and ethnic minority groups that live in rural areas face even greater structural barriers to services because services in rural areas are more scarce (Averill, 2002; Rasheed & Rasheed, 2003; Wood & Wan, 1993). Averill (2002) found that Hispanic older adults residing in rural communities experience difficulty utilizing health care services due to the lack of affordable facilities, transportation, and isolation. Insufficient community services reduce opportunities to utilize services and result in racial and ethnic minority groups relying heavily on their families or neighbors (Carlton-Laney, 2006; Magilvy, Congdon, Martinez, Davis, & Averill, 2000; Rasheed & Rasheed, 2003).

Immigration status is another significant barrier to eligibility for public benefits. Immigrant populations have been strongly impacted by welfare and immigration reform policies passed as part of the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) of 1996. For example, the majority of cost savings from welfare reform passed through PRWORA were gained through restricting immigrants’ eligibility for federally funded means-tested programs (e.g., Medicaid, Food Stamps, Supplemental Security Income) (Borjas, 2002). Restrictions on immigrants, including the five-year bar for accessing federally supported public benefits, have led to a “chilling effect” where by even immigrants who are eligible have significantly decreased their participation in public programs. Fix and Passel (1999) have reported a decline among citizens and immigrants use of welfare since PRWORA was passed, with a greater decline for noncitizens. Fix and Passel (2002) also noted that these “chilling effects” may reflect confusion among immigrants over who is eligible and fears of legal consequences.

**Culturally insensitive services.** The lack of culturally sensitive services has been found to be another significant barrier for minority older adults’ service utilization. The lack of cultural sensitivity in service delivery often prevents minority status older adults from utilizing services (Averill, 2002; Damron-Rodriguez, 1998; Damron-Rodriguez et al., 1994; Pardasani, 2004). For example, Pardasani (2004) found that there is a positive correlation between the proportion of minority staff and participants in senior centers. Richardson (1992) also found that African
American participants would be more likely to utilize services if they were offered in a way that recognized their culture.

*Socio-cultural factors.* Many studies have identified the lack of service utilization as resulting from the tendency of racial and ethnic minority groups to rely on informal support instead of formal supports. Many older adults who are members of racial and ethnic minority groups have a helping tradition which is based on family, neighbors, and community churches; however, these helping traditions vary greatly for each racial and ethnic group (Carlton-Laney, 2006; Kitano & Daniels, 2001; Min, 2005). The tendency to utilize informal supports to meet care needs is the outcome of each groups’ cultural and historical experience (Carlton-Laney, 2006; Rasheed & Rasheed, 2003). The current cohort of older adults lived through pre- and post-civil rights era legal and social changes as well as took part in a segregated society. Therefore, older adults who are members of a racial or ethnic minority group have experienced many forms of racism that have changed through their life span and continue to impact their livelihood today. For instance, African Americans are known to have a long history of being discriminated against and exploited by formal care providers. These historical experiences have resulted in many African American older adults’ distrust of the government and the establishment of a support system within their community (Carlton-Laney, 2006; Damron-Rodriguez et al., 1994; Luckey & Nahan, 1989) which may correlate with poor health access and poor health outcomes. In addition, older adults’ willingness to receive services depends on the degree of privacy that is comfortable for them (Li, 2004). For older adults in many cultural groups, receiving formal services at home or in an institution raises concerns about independence (Crist, 2005; Young, McCormick, & Vitaliano, 2002).

**Limited English Proficiency**

The majority (95.4%) of Kansans aged 60 years and older speak only English with an additional 3.7% speaking English “very well” or “well.” Less than one percent (0.9%) of Kansans aged 60 years and older speak English “not well” or “not at all” (U.S. Census Bureau, 2000a). These older adults are said to have limited English proficiency or a language barrier, which often impacts their utilization of medical and social services. Throughout the United States, there are hundreds of languages spoken (Perkins, 1999). For the population 18 years and older in Kansas that speak English “not well” or “not at all”, the primary languages spoken are Spanish (77.8%), Vietnamese (7.3%), Chinese (2.5%), and German (2.5%). Other languages are spoken by 0.5% to 2% of the Kansas population 18+ are Laotian, Korean, French, Russian, and Arabic (U.S. Census Bureau, 2000c).
**Service Access and Delivery**

Ponce et al. (2006) found that those with limited English proficiency have poorer health than those whose primary language is English. The lack of English proficiency among Asian and Hispanic older adults is associated with a lower likelihood of using home-delivered meal programs (Choi, 2001). In addition, those with limited English proficiency are less likely to have a usual source of health care and to use preventative services (Ponce, Ku, Cunningham, & Brown, 2006; Woloshin, Schwartz, Katz, & Welch, 1997).

*Lack of knowledge.* Older adults with limited English proficiency often do not know how to obtain basic information on how to access services and what specific agencies provide (Office for Civil Rights, 2000). They also have less understanding of care received and directions provided to continue care at home (Jacobs et al., 2006). Differences in knowledge can vary by ability to understand English. For instance, patients that knew “no” English asked fewer questions than they wanted to in a medical setting as compared to those who knew “some” English despite both groups having interpreters (Green et al., 2005). An individual’s language capacity can vary greatly depending on context and setting. Therefore, although a person might be able to have a conversation in English outside a medical setting, they might not understand diagnosis and treatment options in a medical setting (Anderson et al., 2003, p. 73).

*Communication barriers.* “Accurate communication increases the likelihood of receiving appropriate care, both in terms of the best technical care for symptoms or conditions and in terms of client preferences” (Anderson et al., 2003, p. 73). Older adults with limited English proficiency are often receiving services based on inaccurate or incomplete information because they are unable to communicate with providers (Office for Civil Rights, 2000). In addition, older adults with limited English proficiency are at times turned away from or forced to wait for services due to their language (Office for Civil Rights, 2000).

Having an interpreter or translator does not ensure that adequate services will be provided, however, it does increase the likelihood of better communication. The use of an interpreter can increase a patients’ understanding of their diagnosis and treatment (Baker, Parker, Williams, Coates, & Pitkin, 1996) as well as increase office visits, prescription filling, and completion of recommended medical exams (Jacobs et al., 2001). The Office for Civil Rights (2000) outlines various language assistance options including bilingual staff, staff interpreters, contract interpreters, community volunteers, and telephone interpreter lines. The quality of the interpreters depends on the interpreter’s adequacy in the specific setting.

Commonly, ad hoc interpreters including family, friends, and strangers, are used by medical and social service agencies though use of ad hoc interpreters can be a barrier to
service utilization. The provision of confidential and personal details can interfere with the effectiveness of family and friends as interpreters as well as the degree of comfort among individuals in sharing information (Office for Civil Rights, 2000). Ngo-Metzger et al. (2003) found that Chinese and Vietnamese immigrants prefer trained professional interpreters to family because relying on children alters the power dynamic, family are not adequately trained in medical terminology, and family are not always available.

Low Level of Literacy

The findings of the National Adult Literacy Survey (NALS) in 1992 indicated that approximately 71% of U.S. adults aged 60 years and older have literacy skills at Level 1 or 2 (Brown, Prisuta, Jacobs, & Campbell, 1996). In contrast, 47% of the adult population aged 16 years and older who have literacy skills at Level 1 or 2 (Kirsch, Jungeblut, Jenkins, & Kolstad, 2002). Estimates of adult literacy proficiency in Kansas, which are based on demographic and social characteristics in the state, indicated that 39% of the adult population age 16 and older in Kansas has Level 1 or Level 2 literacy (Reder, 1996). Adults with the lowest level of literacy (Level 1) are generally able to locate easily identifiable information in written text, enter personal information on a form, or add numbers set up in a column format. Adults with low levels of literacy (Level 1 or 2) are able to read and understand simple prose and documents and are able to complete simple calculations of numbers found in printed materials (Kutner et al., 2005).

Low literacy is common in the general population, though it is often hidden (Ad Hoc Committee on Health Literacy for the Council on Scientific Affairs & American Medical Association, 1999; Kutner et al., 2005). The majority of people with low levels of literacy are native-born Caucasian English speakers. However, people with low incomes, members of racial or ethnic minority groups, immigrants, and those with limited English proficiency are more likely to have lower levels of literacy (Institute of Medicine, 2004; Kutner et al., 2005). Older adults are also more likely to have low levels of literacy. Additionally, those with lower levels of educational attainment tend to have lower levels of literacy; however, educational attainment alone is not a good proxy for literacy (Kutner et al., 2005; Roman, 2004; Williams, Davis, Parker, & Weiss, 2002).

Literacy barriers are often hidden and difficult for healthcare providers to identify (Roman, 2004; Weiss & Coyne, 1997). Older adults with low levels of literacy often hide their ability to read with such statements as “I forgot my reading glasses,” or “I’d like to discuss this with my family first; may I take the instructions home?” (Weiss & Coyne, 1997, p. 273). A well-cited study conducted by Parikh and colleagues (1996) found that 67% of patients with low
levels of literacy had not told their spouse, more than 50% had not told their children, and 19% of patients had not told anyone that they have difficulty reading (Parikh, Parker, Nursss, Baker, & Williams, 1996). Low literate individuals do not fit a stereotype that can be easily identified.

There are two short reading comprehension tests that have been shown to identify people with low literacy in three minutes or less. The Test of Functional Health Literacy in Adults-short version (S-TOFHLA) and the Rapid Estimate of Adult Literacy in Medicine (REALM) have been proven reliable and valid measures of literacy in medical settings. Williams et al. (2002) cautions that the use of these tests should be limited to those health care providers who are willing and able to tailor communication and health education to meet the needs of patients identified by testing. It is important to note that individuals who score poorly on literacy tests often perceive themselves as not needing assistance and not having difficulties accomplishing literacy tasks (Baker, Parker, Williams, Pitkin et al., 1996; Brown et al., 1996; The Lewin Group, 2005).

**Service Access and Delivery**

Individuals with low levels of literacy have poorer self-reported health (Baker, Parker, Williams, Clark, & Nurss, 1997; Kalichman & Rompa, 2000; Rudd, 2001), use fewer preventative health care services (Scott, Gazmarrarian, Williams, & Baker, 2002; Vastag, 2004), present for medical care at later disease stages (Bennett et al., 1998; Rudd, 2001), and are more likely to be hospitalized (Ad Hoc Committee on Health Literacy for the Council on Scientific Affairs & American Medical Association, 1999; Baker et al., 2002; Rudd, 2001) when compared to individuals with higher levels of literacy. However, little is known about the relationship between literacy and access to government-funded entitlement programs, such as Medicare and Medicaid, or about decision-making and action plans related to care of older adults with low levels of literacy (Rudd, 2001). What is known is that having low health literacy\(^2\) has been shown to be a barrier in accessing the overall health care system and insights from this might be applicable to the social service delivery system. Therefore, some of the barriers encountered by older adults with low health literacy are discussed next.

*Limited health knowledge.* Older adults with low levels of literacy are less likely to have knowledge of health conditions and how to handle or self manage the symptoms (Ad Hoc Committee on Health Literacy for the Council on Scientific Affairs & American Medical

\(^2\) Health literacy is defined by Healthy People 2010 as “the degree to which individuals have the capacity to obtain, process and understand basic health information and services needed to make appropriate health decisions” (U.S. Department of Health and Human Services, 2000, p. 11-20).
Association, 1999; Kim et al., 2001; Williams, Baker, Parker, & Nurss, 1998; Wilson, Racine, Tekieli, & Williams, 2003). Multiple studies have found that adults with lower literacy scores have less knowledge of chronic illnesses including hypertension, diabetes, asthma, and HIV/AIDS. In fact, Williams et al. (1998) found that individuals with inadequate functional health literacy have less knowledge of diabetes despite attending diabetes education programs. In addition to less knowledge of the illness, people with low literacy also have less knowledge about how to self-manage these conditions (Schillinger et al., 2002; Williams, Baker, Honig, Lee, & Nowlan, 1998; Williams, Baker, Parker et al., 1998).

**Difficulty of written materials.** It has been well-documented that written materials distributed to patients in medical settings are written at a higher grade level than the average recipient can read. For instance, Wilson and colleagues found that the information provided about anticoagulation medication and adverse food interactions was provided at the eleventh grade level although the average reading level of patients receiving the information was the seventh to eighth grade (Wilson et al., 2003). Since the mid-1990s, some progress has been made at presenting information at lower reading levels; however, the majority of health education materials and health websites are still written with wording too difficult to understand (Williams et al., 2002).

**Communication barriers.** Non-written communication methods have been proven effective in providing information to adults with low levels of literacy. Alternative methods of communication that have improved knowledge include audiotapes, videotapes, picture books or illustrations, and computer-based multimedia (Weiss & Coyne, 1997). However, it is important to note that literacy also impacts one-on-one communication with providers (Ad Hoc Committee on Health Literacy for the Council on Scientific Affairs & American Medical Association, 1999). Use of unfamiliar terminology or concepts can be a barrier to health care access whether written or oral. Individuals with low health literacy are less likely to challenge the person providing information or ask questions about words or concepts that are not understood and may cope with new, unfamiliar information by looking passive or appearing uninterested (Baker, Parker, Williams, Pitkin et al., 1996). Without effective communication, individuals with low literacy are often disadvantaged when it comes to making informed decisions about health care and long-term care options (Kim et al., 2001).

This review of the literature provided the conceptual basis for the development of the three components of our study. The mapping, survey, and interview components are presented in the following sections of this report. The implications and conclusions segment of this report integrates the review of the literature with the findings of our study.
Mapping Component

**Purpose and Background**

The mapping component of the Hard-to-Reach Kansans study was an epidemiological investigation of the distribution of older Kansans who met the hard-to-reach criteria in relation to the distribution of services delivered through KDOA/AAA to hard-to-reach individuals. Through a series of maps and tables, the proportion of adults 60 years and older who met the hard-to-reach criteria in Kansas counties and Planning Service Areas (PSAs) as well as the proportion of older adults with the same characteristics that are accessing and utilizing services provided through KDOA/AAA are illustrated. In addition, maps are provided to show variations in the penetration rates of services, or the proportion of the population receiving services, for hard-to-reach groups of older adults within the state in comparison to total population penetration rates. The specific objectives of the Mapping Component were:

- To estimate the number and location of older Kansans who meet hard-to-reach criteria (i.e., low income, rural residence, minority status, limited English proficiency, and low level of literacy).
- To determine the percentage of older Kansans meeting the hard-to-reach criteria who received services through KDOA/AAA and the type of services they received.
- To determine whether there are differences in the penetration rates of KDOA/AAA services to hard-to-reach populations by comparing the proportion of older Kansans receiving services who meet the hard-to-reach criteria in each county or PSA to the proportion of all older Kansans receiving services in each county or PSA.

In order to visualize and understand the geographic distribution of the population who meets the hard-to-reach criteria in Kansas, we have used Geographic Information Systems (GIS) technology. GIS are computerized database management systems used to capture, store, retrieve, analyze, and display spatial data (Huxhold, 1991). Spatial data are identified as manmade locations such as businesses, natural features on the earth’s surface, or other types of geographic information such as streets and zip codes. GIS use geographic or spatial characteristics to show relationships between data and provide a systematic way to collect, analyze, interpret, and manage location- and distribution-based information (Huxhold, 1991). Some capabilities of GIS include the depiction of population distributions, presentation of the
Multiple researchers have used GIS to analyze peoples’ access to health care services. Love and Lindquist (1995) used GIS to show the difference between the distance older adults travel to hospitals in rural and urban areas of Illinois. Based on the distance, the researchers found that urban older adults had more access to hospitals than rural older adults (Love & Lindquist, 1995). Similarly, Luo, Wang, and Douglass (2004) used GIS to identify the spatial distribution of the population in relation to physicians in northern Illinois and found that population groups with higher concentrations of socioeconomic disadvantage have experienced deteriorating access to physicians from 1990 to 2000 (Luo, Wang, & Douglass, 2004). In a different study, Ellis and Roe (1993) found that home-delivered meals programs in six counties of New York were concentrated in areas with the largest 65+ population densities; however, they were not concentrated in areas with high concentrations of 65+ poverty rates. This study showed that home-delivered meals programs were placed in sections of the state with a large population of older adults, but not in sections of the state with higher concentrations of poverty (Ellis & Roe, 1993).

Other researchers have used GIS technology in order to show variations in who received services, similar to the focus of the Hard-to-Reach Kansans study. Goins and Hobbs (2001) illustrated how GIS could be used to analyze the distribution of frail older adults’ utilization of different home and community-based long-term care programs in North Carolina. This study depicted the size of the older adult population served per county and the number of participant per program. The authors were able to visually show the variation in service distribution for all 100 counties in North Carolina, which revealed the need for improved service distribution to Medicaid eligible older adults (Goins & Hobbs, 2001).

Meyer, Lusky, and Wright (1991) examined the geographic variation in Title III service use in Connecticut and found that 9% of adults aged 65 years and older and 20% of adults aged 85 years and older in Connecticut received Title III services in 1986. Service usage occurred in every town, though there were variations in the utilization. For those aged 65 years and older, 26% of the towns had service utilization rates less than half of the state average, and 30% of towns utilized services at more than 1.5 times the state average. The remaining 44% of towns served the 65+ population at rates close to the state average (Meyer, Lusky, & Wright, 1991).

The review of current literature on GIS and its application in the social sciences demonstrates that it has been successfully, though sparsely, used for mapping various populations, their demographics, and service utilization patterns. The findings from the literature
formed the basis of using GIS in this study in order to track and visually depict the hard-to-reach older adult population in Kansas and the service utilization patterns of hard-to-reach older adults.

Methodology

Sample

The eligible hard-to-reach populations for services were identified using proxies from the 2000 Census. Individuals 60 years and older who met the hard-to-reach criteria (i.e., low income, rural residence, minority status, and limited English proficiency) were identified based on Census data in 2000. No proxy for low level of literacy was available in the 2000 Census. In 2000, there were 454,837 adults age 60 years and older in Kansas.

Older adults who met the hard-to-reach criteria and were receiving KDOA/AAA services were identified using proxies from the Kansas Aging Management Information System (KAMIS) data, managed by the Kansas Department on Aging. In 2004, 43,694 unduplicated individuals received one of three KDOA/AAA assessments: Uniform Assessment Instrument (UAI), Abbreviated Uniform Assessment Instrument, or Uniform Program Registration (UPR).

For the purposes of this study, we were only interested in the population aged 60 years and older at the time of the assessment. We excluded 196 individuals (0.4%) who had a missing date of birth and an additional 1522 individuals (3.5%) who had an assessment prior to the age of 60.\(^3\) We also excluded 796 individuals (1.1%) whose county was listed as ZZ, indicating that the person is out of state (Kansas Department on Aging, 2000), and one individual who did not have a PSA or county listed. Of those assessed, 41,179 unduplicated adults were aged 60 years and older and resided in Kansas at the time of the assessment. Of these, 9,711 or 23.6% were aged 85 years and older.

Data Sources

Census. At the onset of this study, the 2000 Census data were the most current population data available at the county level in Kansas. The Census 2000 data used in this section of the report come from two different sources: Summary File 1 (SF1) and the Special Tabulation on Aging (STP9). When available, we used data from Summary File 1 because it is comprehensive 100% count data, making it the most reliable data source from the 2000 Census. We used the SF1 data source for the following variables: rural residence and minority status.

\(^3\) The Home and Community-Based Services for the Frail Elderly (HCBS/FE) and Senior Care Act services are only available to adults aged 60 years and older. Older Americans Act services are provided to individuals younger than age 60.
status. When data were not available in the SF1, the Special Tabulation on Aging, which is based on sample information, was used. We used the STP9 data source for the low income and limited English proficiency variables. The specific proxies used to identify the hard-to-reach criteria in the Census data were as follows:

- Low income: Income below the poverty level.\(^4\)
- Rural: County.
- Minority status: Race and ethnicity variables in Census were combined. Individual not identified as “White alone, not Hispanic.”
- Limited English proficiency: If the individual speaks a language other than English and speaks English not well or not at all.
- Literacy: No proxy available.

Geographical locations with 15 or fewer individuals who met the hard-to-reach criteria were excluded from maps due to issues of confidentiality. When excluded, the counties are marked as “data suppressed” in the legend of the map.

**KAMIS.** Kansas Aging Management Information System (KAMIS) data, managed by the Kansas Department on Aging, were used to determine who was assessed and received KDOA/AAA services. KAMIS is used by the Area Agencies on Aging to enter data regarding customers’ assessments, plans of care, and services provided. Three assessments completed by the AAA staff are entered into KAMIS including the UAI, the Abbreviated UAI, and the UPR. The KAMIS data provides information about Home and Community-Based Services/Frail Elderly Waiver (HCBS/FE) services, Older Americans Act (OAA) services, and Senior Care Act (SCA) services. It does not, however, include all activities completed by the staff of the Area Agencies on Aging with older adults. In particular, KAMIS does not provide data about the people that call for Information and Referral Services. In addition, KAMIS does not capture services funded by Title VI of the Older Americans Act, Grants for Native Americans. Title VI services administered by Tribal governments on Native American reservations include similar services as those administered by Title III of the Older Americans Act.\(^5\) These services include nutrition services (both congregate and home delivered meals) and supportive services such as transportation,

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\(^4\) Determination of poverty level is only calculated for non-institutionalized individuals. Thus, the population universe for this variable is smaller than the general population because it excludes those that are in institutions, military group quarters, college dormitories, or unrelated individuals under 15 years of age.

\(^5\) Northeastern Kansas remains home to four Native American reservations inhabited by members of the Potawatomi, Kickapoo, Sac and Fox, and Iowa tribes. All four Native American reservations are located in PSA 9.
information and referral, and homemakers. This report does not capture the services provided through Title VI Grants for Native Americans (Administration on Aging, 2000).

We used Calendar Year 2004 KAMIS data, which was the most current full calendar year of data available at the start of Fiscal Year 2006, to identify older adults who met the hard-to-reach criteria and who utilized KDOA/AAA services. The proxies used for the hard-to-reach criteria in KAMIS include the following:

- Low income: Income below poverty level.
- Rural: County of residence.
- Minority status: Ethnic background. Individual indicated any ethnic background other than White or White, non-Hispanic.
- Limited English proficiency: If the individual did not have English marked in one of the following categories indicating their primary language: Speaks, reads, or understands orally.\(^6\)
- Literacy: No proxy available.

\textit{Literacy estimates}. Information on literacy was not available from KAMIS or the 2000 Census. The only county-level data on literacy in Kansas are provided by Stephen Reder of Portland State University as synthetic estimates of literacy based on the 1992 National Adult Literacy Survey and the 1990 Census. Estimates of literacy levels were calculated using a statistical model that accounted for variables such as demographic characteristics, level of education, and ability to speak English (Reder, 1996).

\textit{Data Measures}

Two measures were calculated in the development of the maps and tables for this section of the report: received services and index of service use. A brief overview of the data measures are provided here, followed by a more detailed explanation later in the report. The received services calculation represents the percentage of the total population that received either an assessment or a particular KDOA/AAA service. Figure 2 on page 37 further explains this calculation.

The index of service use compares the service use of each hard-to-reach population to the service use of the general older adult population. The index of service

\(^6\) There were 11,199 individuals (27.2\%) with responses missing for all three KAMIS variables capturing primary language. Those individuals with missing responses for all three primary language variables were excluded from the analysis of service use by older adults with limited English proficiency.
use is a calculation that divides the percentage of the hard-to-reach population who received services by the percentage of the total population who received services. An index of 1.0 would indicate that a hard-to-reach group was receiving services at the same rate of the general population. This index of service use calculation is similar to a calculation completed to look at Connecticut’s Title III service use by Meyer, Lusky, and Wright (1991). Meyer et al. (1991) assert that this calculation is valuable because it is based on the total eligible population for services, not a sample that excludes non-respondents. Figure 3 on page 45, further explains this calculation.

**Mapping Report Format**

We address the objectives of the study in the main report through a series of maps and tables that were based on the GIS technology previously discussed. The mapping section of the report is structured around the three research objectives with each objective presented as a research question followed by a bulleted summary of the main findings.

The first objective examines the location of older adults who meet the hard-to-reach criteria in Kansas. Maps of Census data at the PSA and county level were created to visually represent the proportion of the older adult population in Kansas who meet each hard-to-reach criterion. These maps are presented under the heading of *Location*. For the second objective, tables are presented to describe the proportion of the hard-to-reach population age 60 and over identified as having received a KDOA/AAA assessment and/or utilized services. The proportion of the hard-to-reach population that received an assessment and each particular KDOA/AAA service program (i.e., HCBS/FE, Older Americans Act, Senior Care Act) will be discussed under the heading of *Service Utilization*.

Finally, maps and tables of the index of service use are presented for both the age 60 and over and age 85 and over populations to visually communicate the areas of greatest service penetration for older adults who meet the hard-to-reach criteria. These maps look at the ratio of hard-to-reach older adults who are receiving an assessment and/or services to all older adults who are receiving an assessment and/or services. These maps, discussed under the heading of *Penetration Rates*, highlight the penetration rates of KDOA/AAA services to hard-to-reach older adults and graphically illustrate the differences across the state.

Map 1 provides a frame of reference for visualizing the PSAs and counties in Kansas.
Findings

How many older adults meet the hard-to-reach criteria and where are they located?

- In 2000, older adults who met the hard-to-reach criteria resided throughout the state of Kansas with higher proportions of each hard-to-reach group concentrated in different Planning Service Areas (PSAs). Therefore, the structure of the older adult population in each PSA is unique and should be examined closely to determine the population being served.

- Low Income: Statewide, 34,009 older adults were low income (8.0%).
  - Three PSAs have more than one in ten older adults who are low income: PSA 9 (11.7%), PSA 5 (11.3%) and PSA 1 (10.4%). These PSAs are located in the northeast and southeast sections of the state.
  - PSA 11 was the only PSA with less than five percent of the population who are low income (3.3%).

- Rural Residence: Statewide, 79,603 older adults lived in rural counties (17.5%).
  - Rural older adults are concentrated in the western half of the state. The majority of the older adult population residing in PSAs 3 and 6 are living in rural counties, 80.4% and 55.4% respectively.
  - There are five PSAs without rural counties: 1, 2, 4, 7, 11.

- Minority Status: Statewide, 33,427 older adults were members of a racial or ethnic minority group (7.3%).
  - Of the 60+ population, 3.5% were African Americans, 0.7% were Asian/Pacific Islanders, 2.0% were Hispanic, and 0.4% were American Indian/Alaskan Native.
  - PSAs with the highest percentage of minority older adults were PSA 1 (24.9%) and PSA 2 (10.3%).
PSAs with the smallest percentage of minority older adults were PSA 3 (1.5%) and PSA 7 (2.3%).

- Limited English Proficiency: Statewide, 3,910 older adults had limited English proficiency (0.9%).
  - Five PSAs had more than one percent of the population with limited English proficiency: PSA 6 (2.1%), PSA 1 (1.4%), PSA 2 (1.3%), and PSA 11 (1.2%).
  - Seven PSAs had less than one percent of the older adult population with limited English proficiency. The PSA with the smallest percentage of older adults who had limited English proficiency were PSA 9 (0.1%) and PSA 5 (0.2%).

- Literacy: An estimated 66-80% of older adults had low levels of literacy based on a 1992 national survey. Data specific to Kansas for the 60+ population are not available.

Location

In order to understand whether or not older adults who met the hard-to-reach criteria were accessing and utilizing KDOA/AAA services, it was first beneficial to understand where these hard-to-reach populations were located within the state. In this section, we examined the population distribution of hard-to-reach Kansans by dividing the number of older adults meeting the hard-to-reach criteria in each PSA or county by the total number of older adults in that PSA or county. In order to make this section user-friendly, PSA and county level maps for the 60+ population have been included in the main report. Comparable maps for the 85+ population are located in Appendix A-1. The specific data corresponding to the 60+ and 85+ maps are located in Appendices B-1 (by PSA) and B-2 (by county).

Total population. In 2000, 16.9% of the population in Kansas was 60 years and older. The difference between the percentage of the population aged 60 years and older in each PSA was important as it reflected the geographic variations of the older adult population across the state. In PSA 11, a smaller percentage of the population (13.2%) was 60 years and older compared to PSA 3 which has the highest percentage of the population aged 60+ (24.3%). Map 2 shows the variation in the percentage of the PSA population aged 60 years and older.
Within each PSA, there were variations in the percentage of the population aged 60 years and older in each county. For example, PSA 8 had two counties with disproportionately high percentages of adults aged 60+ (Republic, 31.5%; Jewell, 31.4%) and two counties with disproportionately low percentages of older adults (Riley, 9.6%; Geary, 12.5%). As can be seen in Map 3, the percentage of the population age 60 years and older ranged from less than one tenth of the population in Finney and Riley counties to one third of the population in Comanche and Smith counties.
Low income population. According to the 2000 Census, 8.0% of Kansas adults age 60 years and older were low income. The percentage of the population that was low income differs by PSA ranging from 3.3% of the older adult population in PSA 11 to 11.7% in PSA 9. The PSAs with the highest rates of poverty are located in the northeast and southeast sections of the state. Map 4 illustrates the proportion of the population 60 years and older who are low income. It seems that poverty rates increase with age, with 14.5% of the 85+ population having been low income in 2000 compared to 8.0% of the 60+ population. The overall distribution of the low income 85+ population is similar to the low income 60+ population when examined by PSA. (See Appendix A-1 for a map of the low income population 85+.)

Map 4: Low Income Adults Age 60+ as Percentage of the Population, by PSA

The counties with the lowest percentages of adults age 60 and over in poverty as well as the counties with the highest percentages of older adults in poverty were distributed throughout the state. The 60+ population in Johnson county had the lowest percentage of older adults who were low income (3.3%), whereas Atchison county had the largest percentage of older adults who were low income (16.5%). Map 5 presents these findings. Similar to Map 4, there were concentrated pockets of counties with a large percentage of older adults who were low income in the northeast and southeast sections of the state.
Rural residence population. Statewide, 57 counties (out of 105, 54%) are identified as rural (those counties with an Urban Influence Code of 9, 10, 11, or 12). All adults aged 60 years and older in rural counties are considered to be rural residents. Using this definition, 17.5% of Kansas adults 60 years and older were living in rural residences in 2000. The majority of rural counties were located in the western half of the state overlapping primarily with PSAs 3 and 6. In addition, half of the counties in PSA 8 are rural, and PSAs 5, 9, and 10 have at least one rural county. There are five PSAs without rural counties including PSAs 1, 2, 4, 7, and 11. Table 2 highlights the percentage of the older adult population who are living in rural counties by PSA. PSA 3 had the largest percentage (80.4%) of the population 60+ who are residing in rural counties.
Table 2: Percentage of the Population Age 60+ and 85+ in Each PSA who are Living in Rural Counties

<table>
<thead>
<tr>
<th>PSA</th>
<th>Percentage 60+ who are Rural</th>
<th>Percentage 85+ who are Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kansas</td>
<td>17.5%</td>
<td>21.0%</td>
</tr>
<tr>
<td>1</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>2</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>3</td>
<td>80.4%</td>
<td>82.5%</td>
</tr>
<tr>
<td>4</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>5</td>
<td>27.4%</td>
<td>26.3%</td>
</tr>
<tr>
<td>6</td>
<td>55.4%</td>
<td>58.2%</td>
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<td>7</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
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<td>8</td>
<td>35.0%</td>
<td>40.3%</td>
</tr>
<tr>
<td>9</td>
<td>27.4%</td>
<td>28.9%</td>
</tr>
<tr>
<td>10</td>
<td>8.9%</td>
<td>8.7%</td>
</tr>
<tr>
<td>11</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

Source: KAMIS data, 2004; U.S. Census Bureau, Census 2000, SF1.

Almost one in five (17.5%) adults 60+ in Kansas were living in rural counties whereas 53.8% of the adult population 60+ were living in urban counties. In addition, 28.7% of older adults lived in midsize counties. The percentage of the 85+ population living in rural counties was larger in comparison to the 60+ population, 21.0% and 17.5% respectively. Conversely, a smaller percentage of the population 85+ resided in urban counties compared to the population 60+, 46.9% and 53.8% respectively. Nearly one in three (32.1%) adults 85+ in Kansas were living in midsize counties.

Minority status population. In 2000, the U.S. Census Bureau reported that 7.3% of Kansas adults 60 years and older belong to a racial or ethnic minority group. This population (who belongs to a race other than White and/or who indicates a Hispanic ethnicity) ranged from 1.5% of the older adult population in PSA 3 to 24.9% in PSA 1. African Americans encompass the largest minority group in Kansas. Of the 60+ population, 3.5% were African Americans, 0.7% were Asian/Pacific Islanders, 2.0% were Hispanic, and 0.4% were American Indian/Alaskan Native. Map 6 visually depicts the percentage of the adult population (60+) who were members of racial or ethnic minority groups by PSA.
The 85+ population in Kansas is less diverse than the 60+ population. According to the 2000 Census, 4.6% of the population 85+ was from racial or ethnic minority groups. Of those 85+, approximately 2.8% were African Americans, 0.2% were Asian/Pacific Islanders, 1.0% were Hispanic, and 0.2% were American Indian/Alaskan Native. See Appendix A-1 for a map of the minority status population 85+.

There was wide variation between counties in the percentage of the population 60+ from racial or ethnic minority groups, with Wyandotte County being the highest (30.8%) and Smith County the lowest (0.3%). Map 7 is a graphic representation of counties which had higher percentages of minority older adults as well as those counties which had the lowest percentages. From this map, it is possible to see that although the Kansas population had a small percentage of the population who were members of a racial or ethnic minority group, there were county pockets with high percentages of minority older adults. This seems especially true in the southwest and northeast regions of the state.
Limited English proficiency population. Overall in 2000, the state of Kansas had 0.9% of adults 60+ with limited English proficiency, meaning that they speak a language other than English and speak English not well or not at all. This hard-to-reach population ranged from 0.1% of the older adult population in PSA 9 to 2.1% in PSA 6. According to the 2000 Census, 0.7% of the population 85+ in Kansas had limited English proficiency. Map 8 visually depicts the percentage of adults 60+ with limited English proficiency. See Appendix A-1 for a comparable map of the percentage of adults 85+ with limited English proficiency.
Map 9 is a graphic representation of counties which had higher percentages of older adults with limited English proficiency as well as those counties which had the lowest percentages. Similar to Map 8, it is possible to see the concentration of this population in the southwest region of the state. In addition, there were many counties throughout the state with a very small percentage of the population with limited English proficiency.

Map 9: Percentage of Population Age 60+ with Limited English Proficiency, by County

Low level of literacy population. The National Adult Literacy Study in 1992 found that approximately three-fourths (66-80%) of the population aged 60 years and older had low levels of literacy. Data specific to the Kansas population 60+ were not available; however, Reder (1996) estimated that 39% of the Kansas population aged 16 years and older had a low level of literacy. This estimate was based on the characteristics of the population in Kansas and the findings of the National Adult Literacy Study. Additional data collection would be necessary to identify the location of this hard-to-reach group in Kansas.

Summary. Overall, in 2000, 8.0% of the population aged 60 years and over had low incomes, 17.5% lived in rural residences, 7.3% belonged to a racial or ethnic minority group, and 0.9% had limited English proficiency. Finally, an estimated 66-80% of Kansans age 60 and over may have a low level of literacy based on findings from a national survey. Table 3 provides an overview of the hard-to-reach populations in Kansas.
Table 3: Numbers and Percentages of the Kansas Population Aged 60+ and 85+ who Met One of the Hard-to-Reach Criteria

<table>
<thead>
<tr>
<th>Criterion</th>
<th>60+</th>
<th>85+</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
</tr>
<tr>
<td>Low Income</td>
<td>34,009</td>
<td>8.0%</td>
</tr>
<tr>
<td>Rural Residence</td>
<td>79,603</td>
<td>17.5%</td>
</tr>
<tr>
<td>Minority Status</td>
<td>33,427</td>
<td>7.3%</td>
</tr>
<tr>
<td>Limited English Proficiency</td>
<td>3,910</td>
<td>0.9%</td>
</tr>
<tr>
<td>Low Level of Literacy</td>
<td>est. 66-80%</td>
<td></td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau, Census 2000, Summary File 1 and Special Tabulation on Aging.
Note: The population universe is different for certain criteria due to different data collection strategies of the U.S. Census Bureau.

Older adults who meet each of the hard-to-reach criteria are residing throughout the state of Kansas, though there are counties and PSAs with higher proportions of the population who are hard-to-reach. Each PSA has a different population of hard-to-reach groups and even within PSAs and counties, the distribution is diverse. For example, it seems older adults with low incomes are more concentrated in PSAs in the northeast and southeast sections of the state, and older adults residing in the most rural counties are located primarily in the western half of the state. By examining where the hard-to-reach populations are located throughout the state, we can understand further who is residing in each geographical location and this could yield itself to further understanding the unique needs of older adults in a particular location. In addition, it can provide AAAs with a greater understanding of who is residing in their area and how specific outreach efforts should be targeted. In the next section, we compare the eligible hard-to-reach population to those who were being served by the KDOA/AAA service system.

What percentage of the hard-to-reach populations aged 60 years and older are receiving services through KDOA/AAA? What services are they receiving?

- There are great variations in the percentage of the older adult population who were assessed and received services in each PSA and county. These geographic variations occur for each of the hard-to-reach groups.

- Statewide in 2004, 9.1% of all adults 60+ and 18.8% of all adults 85+ received an assessment from the Area Agency on Aging in 2004.
  - For the 60+ population: 1.5% received HCBS/FE services, 7.4% received OAA services, and 1.3% received SCA services.

- 30.0% of adults 60+ who were low income received an assessment.
  - 12.4% received HCBS/FE services, 20.6% received OAA services, and 4.8% received SCA services.
- 13.8% of adults 60+ living in a rural county received an assessment.
  - 1.4% received HCBS/FE services, 12.1% received OAA services, and 1.5% received SCA services.

- 10.5% of adults 60+ who were minorities received an assessment.
  - 3.6% received HCBS/FE services, 7.2% received OAA services, and 2.0% received SCA services.

- 12.5% of adults 60+ with limited English proficiency received an assessment.
  - 9.5% received HCBS/FE services, 3.5% received OAA services, and 2.1% received SCA services.
  - A larger percentage of older adults with limited English proficiency received HCBS/FE services than OAA services, whereas the opposite was true for all other hard-to-reach groups.

- Literacy: Without proxies for literacy in the Census or KAMIS data, we were unable to estimate the percentage of the population with low levels of literacy who utilized KDOA/AAA services.

**Service Utilization**

The second objective of this study was to examine the percentage of the hard-to-reach older adult population in Kansas who received an assessment from KDOA/AAA and utilized HCBS/FE, Older Americans Act, or Senior Care Act services. As described in Figure 2, the number of older adults who met the hard-to-reach criteria in the KAMIS data was divided by the number of older adults who met the hard-to-reach criteria in the Census data in each PSA (or county, as presented in Appendix B-2). Service utilization is examined for the population 60 years and older, even though HCBS/FE services are only available to those aged 65 years and older. This allows for the comparison of service utilization patterns for all older adults across services. Therefore, the percentage of adults 60+ receiving HCBS/FE services is a more conservative estimate than would be found if examined for the 65+ population.

In order to describe the service utilization of hard-to-reach populations, this section of the report focuses primarily on data tables for the population aged 60+ by PSA. Service utilization patterns for the 85+ by PSA are located in Appendix B-3. These tables provide a side-by-side comparison of the 60+ and 85+ populations. Data tables for the percentage of adults 60+ and 85+ who received an assessment by county are located in Appendix B-2; however, calculations of the percentage of older adults receiving specific services are not presented by county due to small numbers of recipients in many counties.
In order to determine the percentage of the hard-to-reach population receiving an assessment or receiving services, we first identified the total number of individuals in 2004 who had received an assessment (UAI, abbreviated UAI, or UPR) or who had received HCBS, SCA, or OAA services and who met the hard-to-reach criteria through the KAMIS data. We then divided the number of individuals who met each criteria and who received an assessment or a service by the number of individuals who met each criteria in the general population as reported in the Census data. The calculation of those that received an assessment is not an indication of who received services, but is only an indication of hard-to-reach older adults who access the Area Agency on Aging. The following calculation can be used for those who received an assessment or some service (i.e., HCBS/FE, OAA, SCA):

\[
\text{\% Received Assessment or Services} = \frac{\text{Hard-to-reach population assessed or served}}{\text{Total hard-to-reach population}}
\]

*Total Population.* In Kansas, 9.1% of the population age 60 years and older received an assessment from an Area Agency on Aging in 2004. Of those that received an assessment, the majority (96.0%) received KDOA/AAA services (i.e., HCBS/FE, OAA, and/or SCA services). It is important to note that some individuals received services from two or more funding sources during the year. Of those assessed, 8.5% received Older Americans Act and Senior Care Act services and 6.7% received HCBS/FE and Older Americans Act services. Only 1.4% of individuals assessed by the AAA in 2004 received all three services.

When examining the percentage of Kansans age 60 years and older receiving services, 7.4% received Older Americans Act services, 1.5% received HCBS/FE services, and 1.3% received Senior Care Act services. Table 4 provides an overview of the percentage of the population that received services by PSA. There were great variations in the percentage of people assessed in each PSA and county as well as variation in the type of services that older adults were receiving in each PSA. Older adults in certain areas of the state received an assessment and utilized the services provided by the AAAs at a rate higher than in other parts of the state. The percentage of the total population 60+ who were receiving any service ranged from 4.3% in PSA 11 to 13.3% in PSA 6.
Table 4: Percentage of the Total Population 60+ Receiving Services by Type, by PSA

<table>
<thead>
<tr>
<th>PSA</th>
<th>Assessment</th>
<th>Any Service</th>
<th>HCBS/FE</th>
<th>OAA</th>
<th>SCA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kansas</td>
<td>9.1%</td>
<td>8.7%</td>
<td>1.5%</td>
<td>7.4%</td>
<td>1.3%</td>
</tr>
<tr>
<td>1</td>
<td>6.3%</td>
<td>6.1%</td>
<td>1.5%</td>
<td>4.9%</td>
<td>0.9%</td>
</tr>
<tr>
<td>2</td>
<td>6.4%</td>
<td>6.2%</td>
<td>1.2%</td>
<td>5.1%</td>
<td>1.0%</td>
</tr>
<tr>
<td>3</td>
<td>9.3%</td>
<td>9.0%</td>
<td>0.9%</td>
<td>7.8%</td>
<td>1.2%</td>
</tr>
<tr>
<td>4</td>
<td>7.2%</td>
<td>6.9%</td>
<td>1.4%</td>
<td>5.4%</td>
<td>1.4%</td>
</tr>
<tr>
<td>5</td>
<td>10.2%</td>
<td>10.0%</td>
<td>3.2%</td>
<td>8.4%</td>
<td>1.5%</td>
</tr>
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<td>6</td>
<td>13.6%</td>
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<td>1.4%</td>
<td>12.1%</td>
<td>1.3%</td>
</tr>
<tr>
<td>7</td>
<td>13.4%</td>
<td>12.8%</td>
<td>1.9%</td>
<td>11.0%</td>
<td>2.4%</td>
</tr>
<tr>
<td>8</td>
<td>13.3%</td>
<td>12.4%</td>
<td>1.2%</td>
<td>11.4%</td>
<td>1.0%</td>
</tr>
<tr>
<td>9</td>
<td>13.3%</td>
<td>12.7%</td>
<td>2.2%</td>
<td>10.7%</td>
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</tr>
<tr>
<td>10</td>
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<td>1.6%</td>
<td>8.2%</td>
<td>1.7%</td>
</tr>
<tr>
<td>11</td>
<td>4.5%</td>
<td>4.3%</td>
<td>0.8%</td>
<td>3.4%</td>
<td>1.0%</td>
</tr>
</tbody>
</table>


Often, older adults do not need additional assistance until they have reached more advanced age. The population aged 85+ is more likely to have functional impairments that increase their need for community-based services (Knickman & Snell, 2002). As was expected, a larger percentage of the 85+ population received an assessment than the 60+ population. In fact, more than twice the percentage of older adults in Kansas age 85+ was assessed when compared to the 60+, 18.8% and 9.1% respectively. An increase in the percentage of the population receiving services was seen in each geographical location (PSA and county). For the population 85+, 3.3% received HCBS/FE services, 14.9% received Older Americans Act services, and 3.7% received Senior Care Act services.

Although it is beyond the scope of this study to determine why the percentage of people assessed and utilizing services varies so greatly by geographical location, it is important to note this variation in the general population as we examine the hard-to-reach populations. Since the HCBS/FE Waiver requires older adults to be low income, poverty rates are one factor that can influence assessment rates in each geographical location. PSAs with a larger number or larger percentage of older adults who are low income are likely going to have a larger percentage of the population seeking assistance from the HCBS/FE Waiver.

**Low income.** In 2004, 8.0% of the population aged 60 years and older had low incomes, and 14.5% of the population aged 85 years and older had low incomes. Of those 60+ with low incomes, nearly one in three (30.0%) received an assessment from the Area Agency on Aging and 28.8% received services. The percentage of low income older adults receiving an assessment ranged from 22.3% in PSA 3 to 36.8% in PSA 7. The most frequently accessed services by low income adults 60+ are those funded by the OAA, which is similar to the general
population. In Kansas, 20.6% of low income adults 60+ received services funded by the OAA, 12.4% received HCBS/FE services, and 4.8% received SCA services. Table 5 provides more detailed information about the percentage of low income older adults who are receiving services in each PSA. It is important to note that in each PSA, approximately one in three low income older adults age 60 years and older were receiving some type of service through the Area Agency on Aging, whether HCBS/FE, OAA, or SCA.

**Table 5: Percentage of the Low Income Population 60+ Receiving Services by Type, by PSA**

<table>
<thead>
<tr>
<th>PSA</th>
<th>Assessment</th>
<th>Any Service</th>
<th>HCBS/FE</th>
<th>OAA</th>
<th>SCA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kansas</td>
<td>30.0%</td>
<td>28.8%</td>
<td>12.4%</td>
<td>20.6%</td>
<td>4.8%</td>
</tr>
<tr>
<td>1</td>
<td>30.5%</td>
<td>29.1%</td>
<td>11.2%</td>
<td>21.6%</td>
<td>2.0%</td>
</tr>
<tr>
<td>2</td>
<td>32.4%</td>
<td>31.3%</td>
<td>11.1%</td>
<td>23.6%</td>
<td>4.5%</td>
</tr>
<tr>
<td>3</td>
<td>22.3%</td>
<td>21.8%</td>
<td>8.5%</td>
<td>15.2%</td>
<td>2.7%</td>
</tr>
<tr>
<td>4</td>
<td>31.9%</td>
<td>30.2%</td>
<td>12.4%</td>
<td>21.6%</td>
<td>6.1%</td>
</tr>
<tr>
<td>5</td>
<td>34.0%</td>
<td>33.1%</td>
<td>18.6%</td>
<td>24.6%</td>
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</tr>
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<td>6</td>
<td>22.8%</td>
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<td>30.9%</td>
<td>15.7%</td>
<td>18.0%</td>
<td>7.0%</td>
</tr>
</tbody>
</table>

Source: KAMIS data, 2004; U.S. Census Bureau, Census 2000, Special Tabulation on Aging (STP9).

Similar to the trend in the overall population receiving an assessment, a larger percentage of the 85+ population who are low income received an assessment from the AAA. However, the difference in service utilization between the 60+ and 85+ populations was not as large for the low income population. Approximately 44 percent of the low income population age 85 years and older in Kansas received an assessment in 2004. Only 31.3% of the low income population 85 years and older in PSA 3 received an assessment compared to 51.0% in PSA 11. In each PSA, the percentage of the 85+ low income population who received an assessment was higher than the percentage of the 60+ who received an assessment. For the low income population 85+, 18.0% were receiving HCBS/FE services, 28.6% were receiving OAA services, and 8.8% were receiving SCA services.

**Rural residence.** Statewide in 2004, 17.5% of adults 60+ and 21.0% of adults 85+ lived in a rural county. Of those 60+ who lived in a rural residence, 13.8% received an assessment, and 13.3% received a service from KDOA/AAA. The largest percentage of adults 60+ were receiving OAA services (12.1%) with nearly equal percentages receiving HCBS/FE and SCA.
services, 1.4% and 1.5% respectively. Table 6 provides an overview of the percentage of older adults who were assessed and are receiving services in rural counties by PSA.

### Table 6: Percentage of the Rural Population 60+ Assessed and Receiving Services by Type, by PSA

<table>
<thead>
<tr>
<th>PSA</th>
<th>Assessment</th>
<th>Any Service</th>
<th>HCBS/FE</th>
<th>OAA</th>
<th>SCA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kansas</td>
<td>13.8%</td>
<td>13.3%</td>
<td>1.4%</td>
<td>12.1%</td>
<td>1.5%</td>
</tr>
<tr>
<td>3</td>
<td>10.1%</td>
<td>9.4%</td>
<td>0.9%</td>
<td>8.3%</td>
<td>1.2%</td>
</tr>
<tr>
<td>5</td>
<td>10.8%</td>
<td>10.4%</td>
<td>2.6%</td>
<td>9.1%</td>
<td>1.7%</td>
</tr>
<tr>
<td>6</td>
<td>15.8%</td>
<td>15.4%</td>
<td>1.2%</td>
<td>14.5%</td>
<td>1.3%</td>
</tr>
<tr>
<td>8</td>
<td>16.9%</td>
<td>15.7%</td>
<td>1.3%</td>
<td>14.4%</td>
<td>1.7%</td>
</tr>
<tr>
<td>9</td>
<td>17.0%</td>
<td>16.9%</td>
<td>1.3%</td>
<td>15.8%</td>
<td>1.9%</td>
</tr>
<tr>
<td>10</td>
<td>11.7%</td>
<td>12.6%</td>
<td>1.8%</td>
<td>10.6%</td>
<td>3.1%</td>
</tr>
</tbody>
</table>

Note: PSAs 1, 2, 4, 7, and 11 do not have counties designated as rural by the Urban Influence Codes.

Nearly one in four older adults 85+ living in rural counties (24.2%) were receiving a service provided by the KDOA/AAA service system. There were 21.3% of the rural population 85+ receiving Older Americans Act services, 4.3% receiving Senior Care Act services, and 2.7% receiving HCBS/FE services.

**Minority status.** In 2004, 7.3% of Kansas adults 60 years and older and 4.6% of adults 85 years and older belonged to a racial or ethnic minority group. Statewide, 10.5% of minority adults 60+ received an assessment through the Area Agency on Aging in 2004. Approximately 13 percent of African Americans, 9.5% of Hispanics, 9.0% of American Indian/Alaskan Natives, and 8.1% of Asian/Pacific Islanders received an assessment. Overall, the percentage of minority older adults who received an assessment ranged from 5.7% in PSA 11 to 13.4% in PSA 2.

Approximately seven percent of minority adults 60+ received Older Americans Act services, 3.6% received HCBS/FE services, and 2.0% received Senior Care Act services in 2004. The percentage of minority older adults who received HCBS/FE services ranged from 1.6% in PSA 8 to 4.7% in PSA 5. The percentage receiving Senior Care Act services ranged from 1.0% in PSA 8 to 3.9% in PSA 9. In addition, the percentage receiving Older Americans Act services ranged from 3.7% in PSA 3 to 9.5% in PSA 2. Table 7 provides a detailed look at the percentage of minority older adults that received services provided through KDOA/AAA.
Table 7: Percentage of the Minority Population 60+ Receiving Services by Type, by PSA

<table>
<thead>
<tr>
<th>PSA</th>
<th>Assessment</th>
<th>Any Service</th>
<th>HCBS/FE</th>
<th>OAA</th>
<th>SCA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kansas</td>
<td>10.5%</td>
<td>10.0%</td>
<td>3.6%</td>
<td>7.2%</td>
<td>2.0%</td>
</tr>
<tr>
<td>1</td>
<td>10.9%</td>
<td>10.4%</td>
<td>4.0%</td>
<td>7.4%</td>
<td>1.7%</td>
</tr>
<tr>
<td>2</td>
<td>13.4%</td>
<td>13.0%</td>
<td>4.5%</td>
<td>9.5%</td>
<td>2.4%</td>
</tr>
<tr>
<td>3</td>
<td>7.4%</td>
<td>7.1%</td>
<td>2.4%</td>
<td>3.7%</td>
<td>1.8%</td>
</tr>
<tr>
<td>4</td>
<td>10.7%</td>
<td>10.1%</td>
<td>3.3%</td>
<td>7.4%</td>
<td>2.8%</td>
</tr>
<tr>
<td>5</td>
<td>9.5%</td>
<td>9.4%</td>
<td>4.7%</td>
<td>7.4%</td>
<td>1.3%</td>
</tr>
<tr>
<td>6</td>
<td>9.1%</td>
<td>8.9%</td>
<td>3.7%</td>
<td>5.8%</td>
<td>1.6%</td>
</tr>
<tr>
<td>7</td>
<td>11.8%</td>
<td>10.6%</td>
<td>2.6%</td>
<td>8.3%</td>
<td>3.1%</td>
</tr>
<tr>
<td>8</td>
<td>8.7%</td>
<td>8.0%</td>
<td>1.6%</td>
<td>6.7%</td>
<td>1.0%</td>
</tr>
<tr>
<td>9</td>
<td>9.9%</td>
<td>9.6%</td>
<td>3.3%</td>
<td>5.4%</td>
<td>3.9%</td>
</tr>
<tr>
<td>10</td>
<td>6.8%</td>
<td>6.6%</td>
<td>2.8%</td>
<td>3.9%</td>
<td>2.2%</td>
</tr>
<tr>
<td>11</td>
<td>5.7%</td>
<td>5.4%</td>
<td>2.3%</td>
<td>3.9%</td>
<td>1.3%</td>
</tr>
</tbody>
</table>


Approximately 1 in 4 (27.5%) older adults who belong to a racial or ethnic minority group and who are 85 years and older in Kansas received an assessment in 2004. About 34 percent of Asian/Pacific Islanders, 31.0% of African Americans, 27.6% of Hispanics, and 14.7% of American Indian/Alaskan Native adults who were 85+ received an assessment. It is interesting to note that Asian/Pacific Islanders move from having the smallest to the largest percentage of the population who received an assessment when comparing the 60+ to the 85+ age groups. In addition, it is noteworthy that although similar percentages of all minority groups in the 60+ age group were receiving services, the percentage of American Indian/Alaskan Natives 85+ receiving services was only half of the other minority groups. This could be due to the services provided to Native American/Alaskan Natives that are not captured by this report, which primarily affects PSA 9. A comparison across PSAs shows that only 14.8% of the minority population 85+ in PSA 9 received an assessment while nearly forty percent (36.7%) of the 85+ minority population in PSA 2 received an assessment.

Limited English proficiency. In 2004, 0.9% of Kansas adults 60+ had limited English proficiency, meaning that they spoke a language other than English and spoke English not well or not at all. Statewide, 12.5% of adults 60+ with limited English proficiency received an assessment through the Area Agency on Aging in 2004. Approximately one percent (1.1%) of older adults with limited English proficiency in PSA 3 received an assessment while 21.4% of older adults in PSA 11 received an assessment. Unlike the low income and minority status populations, a larger percentage of the limited English proficiency population utilized HCBS/FE services than OAA services. Nearly one in ten adults who have limited English proficiency were receiving HCBS/FE services with PSA 11 serving nearly one in five adults 60+ with limited
English proficiency. Table 8 provides an overview of the percentage of the population with limited English proficiency who are utilizing KDOA/AAA services.⁷

Table 8: Percentage of the Limited English Proficient Population 60+ Receiving Services by Type, by PSA

<table>
<thead>
<tr>
<th>PSA</th>
<th>Assessment</th>
<th>Any Service</th>
<th>HCBS/FE</th>
<th>OAA</th>
<th>SCA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kansas</td>
<td>12.5%</td>
<td>12.1%</td>
<td>9.5%</td>
<td>3.5%</td>
<td>2.1%</td>
</tr>
<tr>
<td>1</td>
<td>10.9%</td>
<td>10.5%</td>
<td>5.5%</td>
<td>4.8%</td>
<td>1.3%</td>
</tr>
<tr>
<td>2</td>
<td>13.2%</td>
<td>12.9%</td>
<td>11.7%</td>
<td>2.0%</td>
<td>2.3%</td>
</tr>
<tr>
<td>3</td>
<td>1.1%</td>
<td>1.1%</td>
<td>1.1%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>4</td>
<td>13.7%</td>
<td>13.3%</td>
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<td>3.3%</td>
</tr>
<tr>
<td>5</td>
<td>13.3%</td>
<td>13.3%</td>
<td>10.0%</td>
<td>5.0%</td>
<td>3.3%</td>
</tr>
<tr>
<td>6</td>
<td>5.9%</td>
<td>5.6%</td>
<td>4.1%</td>
<td>2.4%</td>
<td>1.0%</td>
</tr>
<tr>
<td>7</td>
<td>3.4%</td>
<td>3.4%</td>
<td>1.7%</td>
<td>1.7%</td>
<td>1.7%</td>
</tr>
<tr>
<td>8</td>
<td>12.5%</td>
<td>12.1%</td>
<td>6.0%</td>
<td>7.3%</td>
<td>0.0%</td>
</tr>
<tr>
<td>9</td>
<td>10.0%</td>
<td>10.0%</td>
<td>0.0%</td>
<td>10.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>10</td>
<td>12.5%</td>
<td>11.5%</td>
<td>7.8%</td>
<td>3.1%</td>
<td>4.2%</td>
</tr>
<tr>
<td>11</td>
<td>21.4%</td>
<td>21.1%</td>
<td>19.0%</td>
<td>4.3%</td>
<td>3.4%</td>
</tr>
</tbody>
</table>

Source: KAMIS data, 2004; U.S. Census Bureau, Census 2000, Special Tabulation on Aging.

Approximately twenty-eight percent (27.7%) of adults 85+ with limited English proficiency received an assessment in 2004. Fifty-six percent of adults 85+ in PSA 11 who belonged to this hard-to-reach criterion received an assessment while none of the adults with limited English proficiency in PSAs 3 and 7 received an assessment. Nearly twenty percent (19.7%) of adults 85+ with limited English proficiency were receiving HCBS/FE services, 8.8% were receiving Older Americans Act services, and 6.4% were receiving Senior Care Act services.

Low level of literacy. Determining the proportion of the older adult population with low levels of literacy who received an assessment and services was more complicated than identifying the other hard-to-reach populations and their rate of service utilization. There is no proxy for low level of literacy in either the Census or KAMIS data. However, we asked case managers and intake personnel at the Area Agencies on Aging to estimate the percentage of

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⁷ Due to missing responses in the primary language variables in KAMIS (See Footnote 6, page 24), findings about service utilization patterns of older adults with limited English proficiency should be interpreted with caution, especially those related to Older Americans Act services. Primary language for older adults receiving OAA services was only provided for 69.2% compared to 95.1% of those receiving Senior Care Act services and 98.9% of those receiving HCBS/FE services.

Without the inclusion of all individuals in the calculation of the percentage receiving services, the utilization of OAA services presented here is likely conservative and underestimates the actual percentage of older adults with limited English proficiency utilizing KDOA/AAA services. Further, variation in the amount of missing data in each PSA could explain some of the differences that are present between PSAs. Therefore, the UPR needs to be filled out more thoroughly on this key hard-to-reach criterion in order to determine a more accurate figure of service utilization.
their caseload with low levels of literacy. These estimates will be presented in the survey component of this report.

Summary. Overall, in 2004, 9.1% of the population 60+ received an assessment. Thirty percent of the low income population received an assessment as well as 13.8% of rural residents, 10.5% of older adults with minority status, and 12.5% of older adults with limited English proficiency. There are great variations in the percentage of older adults assessed in each PSA as well as variation in the type of services that older adults were receiving in each PSA. Table 9 provides the percentage of older adults in each of the hard-to-reach criteria (except low level of literacy) who received an assessment, HCBS/FE, OAA, and SCA services. It is important to note that the percentage of the population assessed and receiving services more than doubled for the 85+ population compared to the 60+ population.

Table 9: Percentage of the Kansas Population Aged 60+ and 85+ Receiving KDOA/AAA Services by Hard-to-Reach Criteria

<table>
<thead>
<tr>
<th>PSA</th>
<th>Assessment</th>
<th>Any Service</th>
<th>HCBS/FE</th>
<th>OAA</th>
<th>SCA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>60+</td>
<td>85+</td>
<td>60+</td>
<td>85+</td>
<td>60+</td>
</tr>
<tr>
<td>Total Population</td>
<td>9.1%</td>
<td>18.8%</td>
<td>8.7%</td>
<td>18.1%</td>
<td>1.5%</td>
</tr>
<tr>
<td>Low Income</td>
<td>30.0%</td>
<td>43.5%</td>
<td>28.8%</td>
<td>41.6%</td>
<td>12.4%</td>
</tr>
<tr>
<td>Rural Residence</td>
<td>13.8%</td>
<td>24.9%</td>
<td>13.3%</td>
<td>24.2%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Minority Status</td>
<td>10.5%</td>
<td>27.5%</td>
<td>10.0%</td>
<td>26.3%</td>
<td>3.6%</td>
</tr>
<tr>
<td>Limited English Proficiency</td>
<td>12.5%</td>
<td>27.7%</td>
<td>12.1%</td>
<td>26.1%</td>
<td>9.5%</td>
</tr>
</tbody>
</table>

Source: KAMIS data, 2004; U.S. Census Bureau, Census 2000, Summary File 1 and Special Tabulation on Aging.

Are there differences in the penetration rates of KDOA/AAA services to hard-to-reach populations compared to the general older adult population?

- When examining the state as a whole, KDOA/AAA services are being utilized by each hard-to-reach population at rates comparable to or higher than the general population.

- However, there are tremendous variations in the service utilization by hard-to-reach populations across PSAs with hard-to-reach populations in certain PSAs utilizing services at a lower rate than the general population.

- There are also variations in the penetration rates for specific services.
  - HCBS/FE services are utilized by all hard-to-reach groups at rates higher than the total older adult population except rural older adults who utilize HCBS/FE services at a slightly lower rate.
The penetration rates for Older Americans Act services by minority older adults and those with limited English proficiency are equal to or less than the general population statewide. Only a few PSAs have minority and limited English proficiency populations utilizing OAA services at rates higher than the general older adult population.

Senior Care Act services are utilized by all hard-to-reach groups at rates higher than the total older adult population.

- Low income older adults are utilizing KDOA/AAA services at rates much higher than the general population, which would be expected given that low income older adults are one of the primary targets of KDOA/AAA services, in particular the HCBS/FE Waiver services.
  - Statewide, low income older adults received an assessment at 3.1 times the rate of the total older adult population.

- Rural older adults received an assessment and received OAA and SCA services at rates higher than the general population; however, rural older adults utilized HCBS/FE services at rates slightly lower than the general population.
  - Statewide, rural older adults received an assessment at 1.5 times the rate of the total older adult population.
  - Older adults who are low income and rural residents have a higher service utilization rate than the rural older adults who are not low income.

- Older adults who are members of a racial or ethnic minority group received an assessment at rates slightly higher than the general population and utilized HCBS/FE and SCA services at higher rates than the general population. However, minority older adults utilize OAA services at rates similar to the general population.
  - Statewide, minority older adults received an assessment at 1.2 times the rate of the total older adult population.
  - Older adults who are low income and members of a racial or ethnic minority group utilize services at a higher rate than the low income and minority populations considered separately. Minority older adults who are also low income utilize services (i.e., HCBS/FE, OAA, and SCA) at the highest rate of all hard-to-reach groups.

- Older adults with limited English proficiency received an assessment and received HCBS/FE and SCA services at rates higher than the general population; however, this population utilized OAA services at rates much lower than the general population.
  - Statewide, older adults with limited English proficiency received an assessment at 1.4 times the rate of the total older adult population.
  - There are extreme variations in the service penetration rates of older adults with limited English proficiency in different PSAs when compared to the general population.

- Literacy: Without proxies for literacy in the Census or KAMIS data, we were unable to determine the penetration rates of services for the population with low levels of literacy.
Penetration Rates

Although it is beneficial to know the percentage of the population who are receiving an assessment or a particular KDOA/AAA service, the index of service use goes one step further by comparing the service use of hard-to-reach populations to that of the general population. From the index of service use measure, we are able to ascertain whether or not the hard-to-reach populations identified are being served at similar rates as the general population. Figure 3 explains how the index is calculated. This section of the report examines the index of service use for the population age 60+ and 85+ with PSA maps and tables portraying the indices of service use for the 60+ and 85+ populations. Appendix A-2 provides maps of the index of service use (assessment) for the 60+ and 85+ populations by county and Appendix B-2 provides the accompanying data tables for the maps. Calculation of the index of service use for specific services was not completed by county due to small numbers of recipients in many counties.

Figure 3: Calculating the Index of Service Use

We compared the service use of each hard-to-reach population to the service use of the general older adult population by calculating an index for each variable at the PSA and/or county level. An index of 1.0 indicates that the hard-to-reach population received services at similar rates as the general population. An index of less than 1.0 indicates that the hard-to-reach population was receiving services at a lower rate than the general population, and an index greater than 1.0 indicates that the hard-to-reach population was receiving services at a higher rate than the general population. The further from 1.0 either positive or negative, the better or worse the hard-to-reach population’s service utilization was compared to the general population. The index of service use is calculated as follows:

\[
\text{Index of service use} = \frac{\text{Hard-to-reach service users} / \text{Hard-to-reach population}}{\text{Total service users} / \text{Total older adult population}}
\]

In this study, we calculated an index of service use for five types of services: assessment, HCBS/FE, OAA, SCA, and any service (i.e., received HCBS/FE, OAA, or SCA).

Low income. Although approximately one-third of the low income population age 60 years and older received an assessment in 2004, it is important to compare this to the total population that received an assessment through the AAAs. Throughout Kansas, low income
older adults are assessed at 3.1 times the rate of the total older adult population. This indicates that KDOA/AAA services are reaching the low income population at a higher rate than the general population, which was expected given that low income older adults are one of the primary targets of KDOA/AAA services, in particular the HCBS/FE Waiver. Map 10 illustrates the index of service use for assessments for low income older adults 60+ in each PSA. Low income populations in each PSA were accessing the AAA at rates higher than the general population in their respective PSAs. Low income older adults in PSAs 6 and 9 were accessing AAA services at nearly two times their PSA rate for the total population, and low income older adults in PSA 11 were accessing services at nearly seven times their PSA rate for the total population. The remaining PSAs had an index of service use for assessments of the low income population between two and seven times their PSA rate for the total population.

**Map 10: Index of Service Use (Assessment) for Low Income Adults Age 60+, by PSA**

In Kansas, adults age 85+ with low incomes were being assessed through the AAAs at rates more than one and a half times that of the general population 85+. It is interesting to note that the assessment index of service use for the 85+ population (1.7) was much lower than the assessment index of service use for the 60+ population (3.1). This is likely an indication of the overall greater level of need of community-based services for the 85+ population regardless of income status. Map 11 highlights the index of service use for the 85+ population by PSA.
As would be expected, the largest index of service use for low income older adults was for the HCBS/FE Waiver services, which are only available to those who are low income. Low income older adults were receiving HCBS/FE services at almost eight times the rate of the general population. Whether an index of service use of 7.9 for the low income population is an adequate measure of the impact of HCBS/FE services cannot be determined by a cross-sectional look at the penetration rates. HCBS/FE services are only available to the low income population, so comparing it to the general population who might not be eligible based on their income status provides a skewed perception of adequacy. Instead the percent of the low income population receiving HCBS/FE services (12.4%) could provide a better understanding of the population being served. However, the index of service use of HCBS/FE services for the low income population provides a baseline for future examination of the trend in penetration rates for this population as well as for all hard-to-reach groups.

In addition to the HCBS/FE services, low income adults aged 60+ were receiving OAA and SCA services at rates higher than the general population, 2.6 and 3.4 respectively. In all but one instance, low income older adults in each PSA were receiving services at a higher rate than the general population, as shown in Table 10. Of particular note is the index of service use for the HCBS/FE services in PSA 11 at 18.1, which likely indicates that the majority of the clients served by PSA 11 are low income compared to all older adults located in this region of the state.
Table 10: Index of Service Use for Individual Services for Low Income Adults Age 60+ and 85+, by PSA

<table>
<thead>
<tr>
<th>PSA</th>
<th>Any Service</th>
<th>HCBS/FE</th>
<th>OAA</th>
<th>SCA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>60+</td>
<td>85+</td>
<td>60+</td>
<td>85+</td>
</tr>
<tr>
<td>State</td>
<td>3.1</td>
<td>1.6</td>
<td>7.9</td>
<td>3.9</td>
</tr>
<tr>
<td>1</td>
<td>4.5</td>
<td>2.1</td>
<td>7.0</td>
<td>3.9</td>
</tr>
<tr>
<td>2</td>
<td>4.8</td>
<td>2.0</td>
<td>8.7</td>
<td>4.0</td>
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<td>4.2</td>
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<td>8.7</td>
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</tr>
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<td>11</td>
<td>6.7</td>
<td>3.1</td>
<td>18.1</td>
<td>7.5</td>
</tr>
</tbody>
</table>

Source: KAMIS data, 2004; U.S. Census Bureau, Census 2000, Special Tabulation on Aging.

Overall, KDOA/AAAs are reaching the low income population at more than three times the rate of the general population. As could be expected for the low income population, the index of service use for HCBS/FE waiver services is 7.9 times the state average. In addition, the index of service use for the OAA and SCA services are 2.6 and 3.4 times the general population rate, respectively. Although KDOA/AAAs are assessing the 60+ and 85+ low income population at rates higher than the general population, the penetration rates are higher in the 60+ population compared to the 85+ population.

Rural residence. Overall in 2004, adults 60+ in rural counties were assessed at 1.5 times the state average. Map 12 shows the index of service use for assessments received by adults aged 60 years and older by county and geographic size. The shading of counties represents the county’s delineation of rural, urban, or midsize with rural counties indicated by the darkest shading. In addition, the counties with the largest circles represent counties with the largest index of service use (2 or higher). Therefore, it is possible to look at the number of darkly shaded counties (rural) with a large dot (index of service use of 2 or higher) as compared to the number of lightly shaded counties (urban) with a large dot in order to examine the trend in penetration rates. Most counties with a high index of service use were rural. Contrarily, the index of service use in most urban counties was less than one (as indicated by the smallest dot), meaning that older adults in these counties were assessed at a rate lower than the state average. This means that many rural counties were assessing older adults at particularly high rates.
The index of service use for assessment of the 85+ population (1.3) was similar to that of the 60+ population (1.5). Map 13 highlights the index of service use for assessment of the 85+ population in each county.

Adults 60+ in rural counties were utilizing OAA services at a rate 1.6 times higher than the state average and SCA services at a rate 1.2 times higher than the state average. Older adults in rural counties received HCBS/FE services at slightly lower rates when compared to the
state average. See Table 11 to examine the differences in the index of service use for adults 60+ and 85+ in different geographical areas by type of service. (See Appendix B-4 for details of the index of service use for individual services in each Urban Influence Code.)

Table 11: Index of Service Use for Individual Services for Adults Age 60+ and 85+, by Rural, Midsize, and Urban Counties

<table>
<thead>
<tr>
<th>County Group</th>
<th>Any Service</th>
<th>HCBS/FE</th>
<th>OAA</th>
<th>SCA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>60+</td>
<td>85+</td>
<td>60+</td>
<td>85+</td>
</tr>
<tr>
<td>Rural</td>
<td>1.5</td>
<td>1.3</td>
<td>0.9</td>
<td>0.8</td>
</tr>
<tr>
<td>Midsize</td>
<td>1.1</td>
<td>1.0</td>
<td>1.3</td>
<td>1.2</td>
</tr>
<tr>
<td>Urban</td>
<td>0.8</td>
<td>0.9</td>
<td>0.9</td>
<td>1.0</td>
</tr>
</tbody>
</table>


Overall, rural older adults were receiving services at 1.5 times the rate of the general population, which is an indication that KDOA/AAAs are serving this population. It is important to note that rural older adults had a higher index of service use for OAA services (1.6) and SCA services (1.2) compared to urban older adults, 0.7 and 0.9 respectively. However, older adults in rural and urban counties had a similar index of service use of 0.9 for HCBS/FE services. Comparatively, older adults in midsize counties had an index of service use of 1.3 for HCBS/FE services. Unlike the low income population, the rural index of service use (any service) did not vary greatly for those who are 60+ and those who are 85+. The index of service use decreased slightly for the HCBS/FE and OAA services in rural counties and remained stable for the Senior Care Act services for the 85+ population.

**Rural residence and low income.** In addition to examining the penetration rates of services for rural older adults, it is also important to examine the penetration rates of services for older adults who are rural and low income. An individual who is rural and low income is a member of two of the identified hard-to-reach groups, which might increase their barriers in accessing or utilizing services. Whereas 17.5% of the 60+ population was rural, 9.2% of the population was rural and low income.

Table 12 provides the index of service use for older adults 60+ and 85+ with low income and who lived in rural residences by type of service. Adults 60+ who were rural and low income received services at 1.9 times the rate of the general population in Kansas, and rural adults 85+ who are low income received services at similar rates as the general population (1.1). For this population, HCBS/FE services were utilized at a rate 7.1 times the general population, OAA services were utilized at 1.6 times the general population, and SCA services were utilized at 2.8 times the general population. However, rural and low income older adults are comparatively
underserved if compared to the urban and low income population as presented in Table 12.

**Table 12: Index of Service Use (Assessment) for Individual Services for Low Income Adults Age 60+ and 85+, by Rural, Midsize, and Urban Counties**

<table>
<thead>
<tr>
<th>County Group</th>
<th>Any Service 60+</th>
<th>HCBS/FE 60+</th>
<th>OAA 60+</th>
<th>SCA 60+</th>
<th>Any Service 85+</th>
<th>HCBS/FE 85+</th>
<th>OAA 85+</th>
<th>SCA 85+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>1.9</td>
<td>7.1</td>
<td>1.6</td>
<td>2.8</td>
<td>1.1</td>
<td>3.8</td>
<td>0.9</td>
<td>1.6</td>
</tr>
<tr>
<td>Midsize</td>
<td>2.6</td>
<td>6.6</td>
<td>2.0</td>
<td>3.0</td>
<td>1.6</td>
<td>3.8</td>
<td>1.3</td>
<td>1.7</td>
</tr>
<tr>
<td>Urban</td>
<td>4.4</td>
<td>9.2</td>
<td>3.9</td>
<td>4.0</td>
<td>2.0</td>
<td>4.1</td>
<td>1.8</td>
<td>1.8</td>
</tr>
</tbody>
</table>

Source: KAMIS data, 2004; U.S. Census Bureau, Census 2000, Special Tabulation on Aging.

The penetration rates of HCBS/FE Waiver services and Senior Care Act services for the rural, low income population was higher than the penetration rates for rural older adults, especially for the HCBS/FE Waiver. Older Americans Act services, however, did not change in terms of penetration rates for these two populations. Therefore, it is important to note that in all instances except for OAA services, the penetration rates of KDOA/AAA services were higher for the rural and low income population compared to the entire rural population. This is a valuable finding for older adults who are members of these two hard-to-reach groups, in that it shows that individuals are accessing and utilizing services from the KDOA/AAA at a higher rate.

**Minority status.** As has been reported, nearly 10.5% of the minority population 60 years and older received an assessment in 2004. Overall, this results in adults 60+ who were members of a racial or ethnic minority group being assessed at rates slightly higher than the general population (1.2). The index of service use for assessment of older adults by race was as follows: African Americans (1.5), Hispanics (1.1), American Indian/Alaskan Natives (1.0), and Asian/Pacific Islanders (0.9).

Statewide, minority older adults were accessing KDOA/AAA services at rates slightly higher than the rate for the total population. While four PSAs were reaching minority older adults at a rate higher than the general population, including PSA 2 which was assessing the minority population at 2.1 times the PSA rate for the total population, there were seven PSAs that were not assessing minority older adults at the same rate at which they assessed the general population. Map 14 presents the index of service use for assessment in each PSA.
Minority adults 85 years and older were being assessed at rates 1.5 times higher than the general population. The index of service use for the 85+ population was slightly higher than the index of service use for minority population 60+ (1.2). Map 15 illustrates the index of service use for assessment of the 85+ population by PSA. In Kansas, assessment rates for minority groups 85+ were as follows: Asian/Pacific Islanders (1.8), African Americans (1.7), Hispanics (1.5), and American Indian/Alaskan Natives (0.8). The lower rates for American Indian/Alaskan Natives could be due to OAA Title VI programs that are not included as part of this study.
Table 13 illustrates the index of service use for minority adults aged 60+ and 85+ in Kansas. For HCBS/FE services, minority older adults were served at 2.5 times the rate of the general population. Minority older adults in all PSAs were receiving more HCBS/FE services than the general population. In addition, minority older adults were utilizing Senior Care Act services at 1.5 times the rate of the general older adult population on a statewide basis. However, minority older adults were not using Older Americans Act services at rates higher than the general population across the state. Only in more urban PSAs such as PSAs 1, 2, and 4 were minority older adults utilizing Older Americans Act services at rates higher than the general population.

Table 13: Index of Service Use for Individual Services for Minority Adults Age 60+ and 85+, by PSA

<table>
<thead>
<tr>
<th>PSA</th>
<th>Any Service</th>
<th>HCBS/FE</th>
<th>OAA</th>
<th>SCA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>60+</td>
<td>85+</td>
<td>60+</td>
<td>85+</td>
</tr>
<tr>
<td>State</td>
<td>1.2</td>
<td>1.4</td>
<td>2.5</td>
<td>3.2</td>
</tr>
<tr>
<td>1</td>
<td>1.7</td>
<td>1.7</td>
<td>2.6</td>
<td>3.1</td>
</tr>
<tr>
<td>2</td>
<td>2.1</td>
<td>2.4</td>
<td>3.7</td>
<td>5.1</td>
</tr>
<tr>
<td>3</td>
<td>0.8</td>
<td>1.3</td>
<td>2.5</td>
<td>3.8</td>
</tr>
<tr>
<td>4</td>
<td>1.5</td>
<td>1.7</td>
<td>2.4</td>
<td>1.9</td>
</tr>
<tr>
<td>5</td>
<td>0.9</td>
<td>1.2</td>
<td>1.5</td>
<td>1.7</td>
</tr>
<tr>
<td>6</td>
<td>0.7</td>
<td>0.8</td>
<td>2.7</td>
<td>3.2</td>
</tr>
<tr>
<td>7</td>
<td>0.8</td>
<td>1.0</td>
<td>1.3</td>
<td>1.4</td>
</tr>
<tr>
<td>8</td>
<td>0.6</td>
<td>1.1</td>
<td>1.3</td>
<td>2.5</td>
</tr>
<tr>
<td>9</td>
<td>0.7</td>
<td>0.7</td>
<td>1.5</td>
<td>1.3</td>
</tr>
<tr>
<td>10</td>
<td>0.7</td>
<td>1.0</td>
<td>1.8</td>
<td>3.3</td>
</tr>
<tr>
<td>11</td>
<td>1.2</td>
<td>1.4</td>
<td>2.9</td>
<td>4.3</td>
</tr>
</tbody>
</table>


In combining all services, minority adults 60+ in the state of Kansas were accessing services at 1.2 times the rate of the older adult population and minority adults 85+ at 1.4 times the general rate. Thus, KDOA/AAA services were reaching the minority older adult population at rates which were slightly higher than the rate for the total population statewide. In terms of the specific services, minority adults 60+ were utilizing HCBS/FE and SCA services at higher rates than the general population; however, they were utilizing OAA services at the same rate as the general population. This is surprising, given the emphasis of the OAA on the low income minority population. Therefore, we have further examined the low income minority population in Kansas to determine whether that population was accessing services at higher rates than the general population.
**Minority status and low income.** In 2004, a small percentage of the population aged 60+ in Kansas were members of a racial and ethnic minority group and were low income (1.2%). However, this is a population who might encounter increased barriers for accessing services because they belong to at least two of the hard-to-reach groups. Thus, we wanted to focus briefly on this population in order to determine the rate at which they are accessing and utilizing KDOA/AAA services.

Table 14 illustrates the index of service use for minority, low income adults aged 60+ and 85+ in Kansas. Adults aged 60+ who were low income and members of a racial and ethnic minority group were receiving KDOA/AAA services at 3.8 times the rate of the general state population. The rate was much higher for those who were receiving HCBS/FE services (11.8). Low income minority older adults were receiving Older Americans Act services at 2.9 times the rate of older adults statewide, and Senior Care Act services were utilized at 3.6 times the rate of older adults statewide.

**Table 14: Index of Service Use for Individual Services for Minority and Low Income Adults Age 60+ and 85+, by PSA**

<table>
<thead>
<tr>
<th>PSA</th>
<th>Any Service</th>
<th>HCBS/FE</th>
<th>OAA</th>
<th>Senior Care Act</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>60+</td>
<td>85+</td>
<td>60+</td>
<td>85+</td>
</tr>
<tr>
<td>Statewide</td>
<td>3.8</td>
<td>2.4</td>
<td>11.8</td>
<td>8.0</td>
</tr>
<tr>
<td>1</td>
<td>5.6</td>
<td>2.8</td>
<td>11.1</td>
<td>8.0</td>
</tr>
<tr>
<td>2</td>
<td>7.7</td>
<td>3.8</td>
<td>18.6</td>
<td>11.6</td>
</tr>
<tr>
<td>3</td>
<td>2.2</td>
<td>2.8</td>
<td>13.5</td>
<td>25.4</td>
</tr>
<tr>
<td>4</td>
<td>5.2</td>
<td>2.0</td>
<td>12.9</td>
<td>3.1</td>
</tr>
<tr>
<td>5</td>
<td>2.9</td>
<td>1.7</td>
<td>6.0</td>
<td>3.8</td>
</tr>
<tr>
<td>6</td>
<td>1.6</td>
<td>2.7</td>
<td>11.2</td>
<td>18.0</td>
</tr>
<tr>
<td>7</td>
<td>1.3</td>
<td>0.8</td>
<td>4.5</td>
<td>2.7</td>
</tr>
<tr>
<td>8</td>
<td>1.4</td>
<td>2.4</td>
<td>6.1</td>
<td>9.7</td>
</tr>
<tr>
<td>9</td>
<td>0.8</td>
<td>0.4</td>
<td>3.6</td>
<td>2.1</td>
</tr>
<tr>
<td>10</td>
<td>2.2</td>
<td>1.0</td>
<td>8.3</td>
<td>4.1</td>
</tr>
<tr>
<td>11</td>
<td>6.5</td>
<td>9.9</td>
<td>24.3</td>
<td>36.5</td>
</tr>
</tbody>
</table>


Therefore, it is possible to see that KDOA/AAA services were being utilized by older adults in these two hard-to-reach categories. Adults who were low income and members of racial and ethnic minority groups were utilizing KDOA/AAA services at higher rates than the minority status population and at higher rates than the low income population when examined alone. This is promising given the potential barriers that could be faced by these groups.

**Limited English proficiency.** The index of service use for assessments of the population 60+ with limited English proficiency was 1.4 times the rate of the general population in the state.
of Kansas. PSA 11 was assessing the population at 4.7 times the rate they assess the general population while PSAs 3, 6, 7, 8 and 9 were assessing this population at a lower rate than the general population.\(^8\) Map 16 visually represents the index of service use for the 60+ population who had limited English proficiency by PSA.

**Map 16: Index of Service Use (Assessment) for Population Age 60 and Over with Limited English Proficiency in Kansas, by PSA**

For the 85+ population, the index of service use for assessment of the population with limited English proficiency in the state was also 1.4, ranging 0.0 in PSAs 3 and 7 to 4.7 in PSA 11. Map 17 depicts the index of service use for the 85+ population with limited English proficiency. (Due to small numbers of people in this category, the index of service use for the 85+ population in PSAs 3, 5, 7, and 9 should be interpreted with caution.)

\(^8\) As mentioned in Footnote 7 (Page 42), findings about service utilization patterns of older adults with limited English proficiency should be interpreted with caution due to the prevalence of missing data in the primary language variables in KAMIS. Without the inclusion of all individuals in the calculation of the index of service use, the utilization of OAA services presented here is likely conservative and underestimates the actual percentage of older adults with limited English proficiency utilizing KDOA/AAA services in each PSA.
The indices of service use for the population with limited English proficiency varies greatly by service and by PSA (see Table 15). Statewide, individuals with limited English proficiency were utilizing OAA services at half the rate of the general population. Only three PSAs (1, 4, and 11) had older adults with limited English proficiency utilizing OAA services at similar or higher rates than the general population. In contrast, individuals with limited English proficiency were receiving HCBS/FE services at 6.5 times the rate of the general population and were receiving SCA services at 1.6 times the rate of the general population.

**Table 15: Index of Service Use for Individual Services for Limited English Proficiency Adults Age 60+ and 85+, by PSA**

<table>
<thead>
<tr>
<th>PSA</th>
<th>Any Service</th>
<th>HCBS/FE</th>
<th>OAA</th>
<th>Senior Care Act</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>60+</td>
<td>85+</td>
<td>60+</td>
<td>85+</td>
</tr>
<tr>
<td>State</td>
<td>1.4</td>
<td>1.4</td>
<td>6.5</td>
<td>5.9</td>
</tr>
<tr>
<td>1</td>
<td>1.7</td>
<td>1.4</td>
<td>3.6</td>
<td>3.8</td>
</tr>
<tr>
<td>2</td>
<td>2.1</td>
<td>1.8</td>
<td>9.6</td>
<td>7.6</td>
</tr>
<tr>
<td>3</td>
<td>0.1</td>
<td>0.0</td>
<td>1.1</td>
<td>-</td>
</tr>
<tr>
<td>4</td>
<td>1.9</td>
<td>1.6</td>
<td>4.9</td>
<td>3.4</td>
</tr>
<tr>
<td>5</td>
<td>1.3</td>
<td>1.4</td>
<td>3.1</td>
<td>-</td>
</tr>
<tr>
<td>6</td>
<td>0.4</td>
<td>0.7</td>
<td>3.0</td>
<td>5.1</td>
</tr>
<tr>
<td>7</td>
<td>0.3</td>
<td>0.0</td>
<td>0.9</td>
<td>-</td>
</tr>
<tr>
<td>8</td>
<td>1.0</td>
<td>0.6</td>
<td>5.1</td>
<td>3.3</td>
</tr>
<tr>
<td>9</td>
<td>0.8</td>
<td>1.1</td>
<td>0.0</td>
<td>-</td>
</tr>
<tr>
<td>10</td>
<td>1.2</td>
<td>2.1</td>
<td>5.0</td>
<td>8.9</td>
</tr>
<tr>
<td>11</td>
<td>4.9</td>
<td>4.7</td>
<td>23.3</td>
<td>20.5</td>
</tr>
</tbody>
</table>


NOTE: The percentage receiving an assessment and the index of service use for the 85+ populations in PSAs 3, 5, 7, and 9 should be interpreted with caution due to small numbers of people in this category in those regions.
Summary. In general, hard-to-reach older adults were receiving services at higher rates than the general population in 2004, though great variation exists between PSAs as well as counties. Low income older adults were accessing and utilizing services at more than three times the rate of the general population. In addition, older adults who lived in rural residences, were of minority status, or had limited English proficiency were receiving services at 1.2 to 1.5 times the rate of the general population. For the populations we examined who met two of the hard-to-reach criteria (rural or minority status and low income), the index of service use was higher than the index of service use for one of the hard-to-reach criteria alone (e.g., rural or minority status), which indicates that these older adults are also accessing and utilizing KDOA/AAA services.

Older adults, who were low income, had minority status, and who had limited English proficiency, were utilizing HCBS/FE services at rates much higher than the general population. Minority adults age 60+ were utilizing HCBS/FE services at 2.5 times the rate of the general population in Kansas and low income adults were utilizing HCBS/FE services at 7.9 times the rate. In addition, hard-to-reach older adults were utilizing Senior Care Act services at higher rates than the general population. Comparatively, minority older adults were utilizing OAA services at similar rates as the general population, and limited English proficiency older adults were utilizing OAA services at half the rate of the general population. Low income older adults were, however, utilizing OAA services at 2.8 times the rate of the general population. Tables 16 and 17 provide the index of service use by type of services by hard-to-reach criteria.

Table 16: Index of Service Use for Services for the Population Age 60 Years and Older

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Assessment</th>
<th>Any Service</th>
<th>HCBS/FE</th>
<th>OAA</th>
<th>SCA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Population</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Low Income</td>
<td>3.1</td>
<td>3.1</td>
<td>7.9</td>
<td>2.6</td>
<td>3.4</td>
</tr>
<tr>
<td>Rural</td>
<td>1.5</td>
<td>1.5</td>
<td>0.9</td>
<td>1.6</td>
<td>1.2</td>
</tr>
<tr>
<td>Rural and Low Income</td>
<td>2.0</td>
<td>1.9</td>
<td>7.1</td>
<td>1.6</td>
<td>2.8</td>
</tr>
<tr>
<td>Minority</td>
<td>1.2</td>
<td>1.2</td>
<td>2.5</td>
<td>1.0</td>
<td>1.5</td>
</tr>
<tr>
<td>Minority and Low Income</td>
<td>3.9</td>
<td>3.8</td>
<td>11.8</td>
<td>2.9</td>
<td>3.6</td>
</tr>
<tr>
<td>Limited English Proficiency</td>
<td>1.4</td>
<td>1.4</td>
<td>6.5</td>
<td>0.5</td>
<td>1.6</td>
</tr>
</tbody>
</table>
### Table 17: Index of Service Use for Services for the Population Age 85 Years and Older

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Assessment</th>
<th>Any Service</th>
<th>HCBS/FE</th>
<th>OAA</th>
<th>SCA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Population</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Low Income</td>
<td>1.7</td>
<td>1.6</td>
<td>3.9</td>
<td>1.4</td>
<td>1.7</td>
</tr>
<tr>
<td>Rural</td>
<td>1.3</td>
<td>1.3</td>
<td>0.8</td>
<td>1.4</td>
<td>1.2</td>
</tr>
<tr>
<td>Rural and Low Income</td>
<td>1.1</td>
<td>1.1</td>
<td>3.8</td>
<td>0.9</td>
<td>1.6</td>
</tr>
<tr>
<td>Minority</td>
<td>1.5</td>
<td>1.4</td>
<td>3.2</td>
<td>1.2</td>
<td>1.8</td>
</tr>
<tr>
<td>Minority and Low Income</td>
<td>2.5</td>
<td>2.4</td>
<td>8.0</td>
<td>1.8</td>
<td>2.0</td>
</tr>
<tr>
<td>Limited English Proficiency</td>
<td>1.4</td>
<td>1.4</td>
<td>5.9</td>
<td>0.6</td>
<td>1.7</td>
</tr>
</tbody>
</table>

### Conclusion

This component of the Hard-to-Reach Kansans study provided baseline data on the percentage of hard-to-reach older adults who utilized KDOA/AAA services and the penetration rates of these services in different geographic locations throughout the state. The index of service use provided a valuable tool for examining whether older adults who are hard-to-reach are utilizing services at different rates than the general older adult population. The index of service use provides a measure of adequacy for establishing targeting priorities when examined across time. Thus, the index could be utilized in future years to reexamine the penetration rates of KDOA/AAA services to these populations in order determine how the penetration rates have changed. In particular, this could be a valuable endeavor soon after the next county-level Census data is released for Kansas. In addition, other groups of interest to KDOA/AAA could be examined using this same methodology if the data were available from aging databases and the Census.

We conclude this section by highlighting the main findings and implications from the mapping component. Table 18 provides an overview of the percentage of the Census population who are hard-to-reach, the percentage of each hard-to-reach population that received an assessment, and the index of service use for hard-to-reach older adults. Overall, we found that hard-to-reach older adults are accessing and utilizing the services provided through the KDOA/AAA service delivery system at rates higher than the general population. This is a positive finding for KDOA and the AAAs and older Kansans.
Table 18: Overview of the Mapping Findings for the Hard-to-Reach Population Aged 60 Years and Older by Criteria

<table>
<thead>
<tr>
<th>Hard-to-Reach Criteria</th>
<th>Percentage of the 60+ Population</th>
<th>Percentage of the 60+ Population Assessed</th>
<th>Index of Service Use (Assessment)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Population</td>
<td>100%</td>
<td>9.1%</td>
<td>1.0</td>
</tr>
<tr>
<td>Low Income</td>
<td>8.0%</td>
<td>30.0%</td>
<td>3.1</td>
</tr>
<tr>
<td>Rural Residence</td>
<td>17.5%</td>
<td>13.8%</td>
<td>1.5</td>
</tr>
<tr>
<td>Minority Status</td>
<td>7.3%</td>
<td>10.5%</td>
<td>1.2</td>
</tr>
<tr>
<td>Limited English Proficiency</td>
<td>0.9%</td>
<td>12.5%</td>
<td>1.4</td>
</tr>
</tbody>
</table>

* Low level of literacy is excluded from this table due to lack of comparable statistics.

In Kansas, there were 454,837 adults aged 60 years and older. Of these, 34,009 were low income (8.0%), 79,603 lived in rural residences (17.5%), 33,427 were members of racial and ethnic minority groups (7.3%), and 3,910 had limited English proficiency (0.9%). Older adults who met the hard-to-reach criteria were located throughout the state of Kansas; however, there were pockets with higher percentages of these populations in different parts of the state. By examining where the hard-to-reach populations are located throughout the state, we can understand further who resides in each geographical location and this can help service providers and policymakers better understand and work with the unique needs of older adults in a particular location. In addition, it can provide AAAs with information needed to target specific outreach efforts.

Statewide, 9.1% of the older adult population received an assessment from an AAA in 2004. Comparatively, 30.0% of low income older adults, 13.8% of older adults living in rural counties, 10.5% of minority older adults, and 12.5% of older adults with limited English proficiency received an assessment in 2004. For all hard-to-reach populations, except those with limited English proficiency, the highest percentage of the population received Older Americans Act services. However, the percentage who received HCBS/FE, OAA, or SCA services varied by the specific hard-to-reach group. In addition, the percentage of each hard-to-reach population who received services varied for each PSA and county.

The index of service use allowed us to determine whether the percentage of services received in each PSA and county by the hard-to-reach population was different from the percentage of services received in the same PSA and county by the general older adult population. Based on KAMIS and Census data, we determined that each hard-to-reach population received KDOA/AAA services at rates comparable to or higher than the general population. However, there are variations in the service utilization of hard-to-reach populations

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9 The Census universes for those who are low income and those who have limited English proficiency are 427,370 and 453,465, respectively. Differences result due to variance in the data collection by the U.S. Census Bureau.
in different PSAs, and some PSAs have hard-to-reach populations utilizing KDOA/AAA services at a lower rate than the general population. These geographic variations raise questions about access and potential barriers to service utilization for these populations of older adults, which warrant further exploration.

Specific services are utilized at different rates by each of the hard-to-reach populations. Rural older adults underutilize HCBS/FE services except those older adults who are rural and low income. Comparatively, Older Americans Act services are underutilized by older adults who are members of a racial and ethnic minority group and older adults who have limited English proficiency. Part of the reason for this could be that the minority and immigrant populations aged 60 years and older in Kansas are growing and some aging service providers might not have experience in specifically targeting outreach to these populations. Further examination of the particular trends for specific minority populations could provide greater insight into these findings. In addition, further exploration of the specific OAA services utilized by the minority and limited English proficiency population could be useful for sorting out the trends in service utilization patterns for these highly heterogeneous groups.

Although hard-to-reach older adults are accessing and utilizing services provided by KDOA/AAA at a higher rate than the general population, there is quite a bit of variability across the PSAs that warrants further exploration. In addition, this variability suggests there are possible areas for enhancement. We hope the findings from the mapping segment will spur more in-depth discussion of how to enhance access in each AAA and the state system as a whole. In order to facilitate this discussion, the second component of this project was designed to identify the specific strategies and needs of case managers in the state for serving these hard-to-reach populations. Case managers' assessments of barriers and the successful strategies for working with older adults who meet the hard-to-reach criteria are explored.
Survey Component: Case Managers

Purpose

We surveyed the AAA case managers to examine the extent to which the current KDOA/AAA service system is serving Kansans who are hard-to-reach. This component of the study examined the barriers that case managers perceived hard-to-reach older adult clients might encounter in receiving KDOA/AAA services (i.e., HCBS/FE, OAA, and SCA), and the successful strategies case managers used to serve these populations. This study also explored the adequacy of knowledge and resources case managers perceived they have in serving these specific populations and the additional knowledge and resources that case managers would like in order to better serve these populations. The specific aims of this study were:

- To examine the portion of hard-to-reach older adults that the AAA case managers serve on the basis of low income, rural residence, minority status, limited English proficiency, or low level of literacy.
- To identify the frequency of barriers that hard-to-reach older adults encounter to receiving KDOA/AAA services.
- To explore the successful strategies that case managers use to meet the needs of hard-to-reach older adults.
- To identify the case managers’ perceived level of knowledge and resources for serving hard-to-reach older adults.
- To explore any additional knowledge and resources that the case managers would require to provide better services for the hard-to-reach older adults.

Methodology

In order to address the aims of this study, we conducted a self-completion survey of all case managers (N=134) in all eleven PSAs in the state of Kansas. The survey instrument was developed by OALTC staff and reviewed by a staff member at KDOA and a AAA director (See Appendix C-1 for a copy of the survey). In addition, we conducted a pilot with a case manager and incorporated all feedback received into the final survey instrument. A list of case manager names was obtained from each AAA. Surveys were sent to all case managers using a three wave distribution process. This yielded three additional case managers who were not on our original list, increasing the total population size to 137. On the first wave, survey forms with letters explaining the purpose of the study were sent to the eleven AAA directors, who were asked to distribute them to their case managers. Forty-six case managers, including one pilot
case manager, completed the survey, resulting in an initial response rate of 33.8%. On the second wave, follow-up phone or email contact was made with each AAA director, asking them to encourage non-responding case managers to complete their surveys. As a result, eighteen additional case managers completed the survey, increasing the response rate to 47.1%. On the third wave, another set of survey forms and letters were sent to the individual non-respondents. Subsequently, an additional thirty-four surveys were returned for a total response rate of 70.8% (N = 97). See Appendix C-2 for respondent numbers and rates by PSA.

The survey data were entered in SPSS 14. Descriptive statistics were used to analyze: case manager demographic characteristics, their estimates of the portion of clients who met the hard-to-reach criteria, their perceptions of how often hard-to-reach older adult clients encounter barriers to receiving KDOA/AAA services, and case managers’ perceived level of knowledge and resources to serve hard-to-reach older adult clients. Qualitative analysis was completed for survey questions concerning the following: types of barriers experienced by clients in each hard-to-reach group; case managers’ most successful practice or strategy for each of the particular target populations; additional resources and information needed to effectively serve each population; and what, if anything, the Kansas Department on Aging or the Area Agencies on Aging could do or provide to better serve these groups.

The qualitative answers were not mutually exclusive, and a case manager may have more than one answer for each of the questions. For analysis of each question, similar answers were grouped into categories. In addition, we looked for trends specific to a particular Planning Service Area, by identifying items reported by a majority of case managers within a PSA. Trends by PSA are highlighted at the end of each findings section, reported in terms of the percent of responding case managers. It is important to keep in mind that the percentage responding in each PSA was small, therefore, these trends should be interpreted with caution.

Description of the Study Population

The respondents in this study were predominantly female (85.6%) and white (95.8%). Approximately twenty-four percent had a master’s degree and sixty-seven percent (n = 65) had a bachelor’s degree. Of the case managers who responded, 37.1% had social work degrees and 17.5% had nursing degrees. Table 19 shows the population characteristics.
Table 19: Characteristics of the Case Manager Study Population

<table>
<thead>
<tr>
<th>Socio-Demographic Characteristics</th>
<th>% (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>85.6% (83)</td>
</tr>
<tr>
<td>Male</td>
<td>14.4% (14)</td>
</tr>
<tr>
<td><strong>Highest Educational Degree</strong></td>
<td></td>
</tr>
<tr>
<td>Master’s degree</td>
<td>23.7% (23)</td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>67.0% (65)</td>
</tr>
<tr>
<td>High school diploma or equivalent</td>
<td>1.0% (1)</td>
</tr>
<tr>
<td>Other (all non-bachelor nursing degrees)</td>
<td>8.2% (8)</td>
</tr>
<tr>
<td><strong>Race/Ethnicity</strong></td>
<td></td>
</tr>
<tr>
<td>White/Caucasian</td>
<td>94.7% (90)</td>
</tr>
<tr>
<td>Black/African American</td>
<td>3.2% (3)</td>
</tr>
<tr>
<td>White/Caucasian AND American Indian/Native American</td>
<td>2.1% (2)</td>
</tr>
<tr>
<td><strong>Work History</strong></td>
<td></td>
</tr>
<tr>
<td>Years of work experience for AAA</td>
<td>5.5 (SD: 3.2)</td>
</tr>
<tr>
<td>Number of clients on caseload (per month)</td>
<td>77.9 (SD: 30.7)</td>
</tr>
</tbody>
</table>

On average case managers have worked for the Area Agencies for 5.5 years (range = 4 months to 11 years) and serve 78 clients per month (range = 1 to 145). Three respondents were not included because they are supervisors without a current caseload. Case managers (n=91) indicated “client’s home” when asked to identify the primary place where they meet clients.

Case managers (n=97) were also asked what type of services they arrange for their clients. The most frequent was the HCBS-FE waiver (91.8%), followed by Senior Care Act (81.4%), and Older Americans Act (75.3%) services. In addition, 24.7% of case managers indicated that they arrange other services such as the CARE Assessment, caregiver and informal supports, private services, and respite services.

**Case Manager Report Format**

The case manager findings are presented next in a question and answer format. The summary of key findings provides a brief overview of the research questions and answers, which is followed by a more detailed explanation of the main answers to the research questions.
### Summary of Key Findings from Case Manager Surveys

**QUESTION 1. What percent of clients served by case managers statewide are estimated to be in the hard-to-reach groups?**

- Approximately two-thirds are low income.
- Almost fifteen percent live in rural areas or are members of racial/ethnic minority group.
- Less than ten percent have limited English proficiency or a low level of literacy.

**QUESTION 2. According to case managers, how often do hard-to-reach older adults encounter barriers to receiving KDOA/AAA services?**

- Rural residents encounter barriers the most frequently of all hard-to-reach groups, with the majority of case managers indicating these clients often or very frequently encounter barriers.
- Older adults who are low income or minorities encounter barriers the least, with the majority of case managers indicating these clients rarely or never encounter barriers.
- Older adults with a low level of literacy and those with limited English proficiency were perceived to rarely, sometimes, and often encounter barriers by approximately one-third of case managers.

**QUESTION 3. What barriers do hard-to-reach older adults encounter to receiving KDOA/AAA services?**

- Lack of knowledge about how to access services or that services exist
- Unwilling to ask about or to apply for services
- Economic and financial barriers
- Lack of transportation
- Communication for older adults with limited English proficiency

**QUESTION 4. What are the successful strategies that case managers use to meet the needs of hard-to-reach older adults?**

- Utilizing family and friends to complement formal resources.
- Ensuring timely and consistent contact with clients.
- Facilitating self-directed services, especially for older adults who are rural.
- Using informal resources in the community, particularly for older adults who are rural, low income, and members of a racial or ethnic minority group.
- Networking with other providers and agencies, specifically for older adults who are low income, rural, and have a low level of literacy.
- Using an interpreter/translator or contacting the Language Line for clients with limited English proficiency.

**QUESTION 5. What level of knowledge and resources do case managers perceive they have for serving hard-to-reach older adults?**

- Case managers have the highest level of knowledge and resources for working with older adults who were low income, with the average case manager reporting they had very adequate knowledge and resources for working with this population.
- Case managers have the lowest level of knowledge and resources for working with older adults with limited English proficiency, with the average case manager reporting they had somewhat adequate knowledge and resources for working with this population.
QUESTION 6. What additional knowledge and resources do case managers require to provide better services for hard-to-reach older adults?

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>More knowledge about state services in general and about services available in their area.</td>
<td>Additional informal supports within the community.</td>
</tr>
<tr>
<td>Information about specific resources available for rural clients or clients with low levels of literacy.</td>
<td>Reimbursement for case managers’ transportation costs, especially for rural clients.</td>
</tr>
<tr>
<td>Training on cultural diversity and sensitivity.</td>
<td>List of translators/interpreters available in the community.</td>
</tr>
<tr>
<td></td>
<td>Documents and brochures in other languages.</td>
</tr>
</tbody>
</table>

Key Findings from Case Manager Surveys

QUESTION 1. What percent of clients served by case managers statewide are estimated to be in the hard-to-reach groups?

- Clients Served. Case managers estimated that approximately two-thirds of the clients served by the Area Agencies on Aging are low income, almost fifteen percent live in rural areas or are members of a racial or ethnic minority group, and less than ten percent have limited English proficiency or a low level of literacy. These findings are highlighted in Table 20.

Table 20: Case Managers’ Estimates of the Percentage of Clients who Met the Hard-to-Reach Criteria (n = 91)

<table>
<thead>
<tr>
<th>Hard-to-Reach Criteria</th>
<th>Percentage of Clients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Income</td>
<td>66.0%</td>
</tr>
<tr>
<td>Rural Residence</td>
<td>14.0%</td>
</tr>
<tr>
<td>Minority Status</td>
<td>14.4%</td>
</tr>
<tr>
<td>Limited English Proficiency</td>
<td>4.2%</td>
</tr>
<tr>
<td>Low Level of Literacy</td>
<td>5.3%</td>
</tr>
</tbody>
</table>

QUESTION 2. According to case managers, how often do hard-to-reach older adults encounter barriers to receiving KDOA/AAA services?

- Low Income and Minority Status. Older adults who are low income or members of a racial or ethnic minority group encounter barriers the least of all hard-to-reach groups. Case managers consistently stated that low income and minority older adults rarely or never encountered barriers, 71.5% and 69.5% of case managers respectively.

- Rural Residence. Older adults who are living in rural areas encounter barriers the most frequently of all hard-to-reach groups. Only 12.9% of case managers stated that rural clients rarely or never encountered barriers compared to 54.1% of case managers who stated that this population often or very frequently encounters barriers.
Limited English Proficiency and Low Level of Literacy. Case managers’ perceptions of barriers for the limited English proficiency and low level of literacy populations were mixed. Approximately one-third of case managers perceived older adults in these two groups encountered barriers rarely or never, approximately one-third reported barriers sometimes, and approximately one-third reported barriers often or very frequently.

Figure 4: Case Managers’ Perception of the Frequency of Barriers to KDOA/AAA Services Encountered by Hard-to-Reach Older Adults

QUESTION 3. What barriers do hard-to-reach older adults encounter to receiving KDOA/AAA services?

- Lack of Knowledge Concerning Access and Existence of Services. Across all hard-to-reach categories, case managers identified an overall lack of knowledge, either about the services themselves or how to access information as a major barrier. Some hard-to-reach older adults had a particularly difficult time accessing services. For example, case managers stated clients who have low levels of literacy cannot read any information or mail associated with state programs because everything is in written form.

- Unwilling to Apply for Services. Case managers suggested that minority older adults and older adults with limited English proficiency might be unwilling to apply for services or to ask for help because of their cultural beliefs. In addition, these groups at times do not apply for services because their family should help to take care of them.

- Economic and Financial Barriers. As might be expected, economic and financial barriers inhibited the use of KDOA/AAA services by older adults who were low income. Specific difficulties that older adults encounter are the inability to afford the room and board costs at assisted living facilities, not being able to afford services or health products, and not being able to afford a telephone or transportation.
Lack of Transportation. Older adults encounter transportation barriers for two primary reasons: 1) they live too far from services, and 2) they cannot access transportation. Case managers also encounter transportation difficulties because they are unable to find reliable or available workers or providers as well as that many providers cannot afford the financial costs associated with driving to rural areas.

Communication Difficulty. Older adults with limited English proficiency often encounter barriers when communicating with providers including to not having access to a translator or interpreter. Case managers mentioned the general lack of bilingual staff as a barrier for this population.

QUESTION 4. What are the successful strategies that case managers use to meet the needs of hard-to-reach older adults?

Utilizing Family and Friends to Complement Formal Resources. Case managers worked with family and friends to help meet the needs of hard-to-reach older adults, particularly with rural older adults. Case managers utilized informal supports such as family and friends in order to fill the gaps in services. Specific strategies utilized by case managers were:
- Identify and work with a person who the older adults trusts, such as a family member, friend, neighbor, power of attorney, or durable power of attorney when completing the assessment and the care plan
- Use family and friends as translators
- Speak with family and friends about possibilities for non-paid assistance
- Utilize family or friends to help with transportation, running errands, or filling out paperwork
- Meet with older adults and their families in remote rural areas to think of ways meals could get delivered

Ensuring Timely and Consistent Contact. Case managers spend additional time with hard-to-reach clients in order to ensure that the older adult’s needs are being met. Case managers often spend additional time reading paperwork about state services out loud to clients and explaining the documents in a way that ensures understanding. In addition, case managers mentioned that some hard-to-reach older adults needed more frequent phone contact. Specific strategies include:
- Establish trust with older adults so they feel comfortable asking questions
- Build rapport with older adult from the very beginning
- Provide more frequent home visits for older adults with low levels of literacy
- Assure an older adult with a low levels of literacy that the case manager understands their situation, is willing to read information for them, and does not think less of them because they are unable to read

Facilitating Self-Directed Services. Case managers assisted clients with setting up self-directed services, particularly for low income, rural, and minority older adults. Due to rural older adults’ proximity to service providers compounded with transportation barriers, case managers identified self-direction as a successful practice with rural older adult clients.

Using Informal Resources in the Community. Identifying and working with informal resources in the community was a successful strategy for meeting the needs of older
adults, particularly for low income, rural, and minority older adults. For instance, it was mentioned that getting to know the volunteers and volunteer organization was effective in rural area.

- Networking with Other Providers and Agencies. Case managers found that networking with service providers was their most successful practice for ensuring low income clients’ needs were adequately met. Case managers relied on these connections with other providers and agencies to find needed services for clients. Specific strategies mentioned by case managers were:
  - Assist in outreach by going to seniors centers, doctor’s offices, SRS offices, and churches
  - Be an advocate for older adults with other agencies
  - Work with agencies, such as Adult Protective Services, to establish a payee, particularly for older adults with low levels of literacy
  - Call provider agencies to ask about utilizing bilingual staff as well as providers from racial or ethnic minority groups
  - Network with ethnic organizations

- Using an Interpreter or Translator. Case managers identified a variety of strategies for working with older adults who had limited English proficiency including the use of an interpreter or translator and contacting the Language Line. Case managers recognized the need to have interpreters available in order to communicate with this population, with some case managers specifically working with translators with a social service background. Other strategies were:
  - Note behavioral keys and facial expressions of older adults when working with translators
  - Use freetranslation.com to translate mailed information
  - Work to utilize translators with social service backgrounds

**QUESTION 5. What is the level of knowledge and resources that case managers perceive they have for serving hard-to-reach older adults?**

- Highest Level of Knowledge. Case managers’ level of knowledge was the highest when working with older adults with low income, followed by older adults with low levels of literacy, rural residents, and racial or ethnic minority groups.

- Lowest Level of Knowledge. Case managers’ perceived knowledge to serve older adults with limited English proficiency was the lowest; however, on average their level of knowledge is “somewhat adequate.”
Figure 5: Case Managers’ Perceived Knowledge to Serve Hard-to-Reach Older Adults

- **Highest Level of Resources.** Similar to the level of knowledge, the perceived level of resources was available for serving older adults with low incomes. This was followed by minorities, older adults with low levels of literacy, and rural residents.

- **Lowest Level of Resources.** Case managers rated the adequacy of resources for working with older adults with limited English proficiency the lowest.

Figure 6: Case Manager’s Perceived Resources to Serve Hard-to-reach Older Adults
QUESTION 6. What additional knowledge and resources do case managers require to provide better services for the hard-to-reach older adults?

KNOWLEDGE:

➢ Knowledge about State Services. A large number of case managers mentioned that they would like to see more information about what each of the state programs entail, both for themselves as well as service providers, and would also like more training on the programs that are available in specific locations or areas of the state. Specific suggestions include:
  o Provide more education to doctors and nurses about AAA services
  o Receive more information about payee services

➢ Additional Information/Knowledge about Resource Availability. Case managers would like to receive additional information and obtain more knowledge about what resources are available for rural clients or clients with low levels of literacy in each community. Several mentioned that they had difficulty determining if their clients had low levels of literacy, and would like more knowledge in that as well as the following areas:
  o Legal representatives in general and specifically for those who speak Spanish
  o Tools for older adults to manage debt, such as credit card debt
  o Access to mental health services

➢ Training on Cultural Diversity and Sensitivity. Case managers would like more knowledge and training on cultural diversity and sensitivity for working with older adults who members of a racial or ethnic minority group or who have limited English proficiency. Specifically, case managers requested more information specific to the culture of clients and additional training or knowledge on problems faced by minorities. Also, case managers mentioned that it would be helpful to have bilingual case managers.

RESOURCES:

➢ More Informal Support within Communities. Case managers identified having informal support within the community as beneficial for older adults across all hard-to-reach categories. A large number of case managers stated that additional transportation services in the community was vital to clients' well-being. Case managers also cited a lack of informal support—specifically volunteers—in communities to be mail readers, bill payers, or to help fill out application.

➢ Transportation Reimbursement. Case managers would like additional reimbursement for their transportation costs, especially when they are driving to see rural older adults. Case managers see a real need for more transportation options for older adults, an increase in travel reimbursement, and more providers who are willing to drive to rural areas.

➢ Translators/Interpreters. Case managers who had clients who had limited English proficiency wanted to have translators and interpreters available in the community to use with clients, or, at the very least, lists of these individuals. In addition, some case managers wanted more affordable translators available and education regarding their responsibilities and regulations for using interpretation. A large number of case
managers believed that having access to cultural resources, such as translators or interpreters and resources in other languages, was important for meeting the needs of older adult clients who were members of a racial or ethnic minority group. Case managers suggested that they perhaps could either be paid for by the state or AAAs or work on a voluntary basis.

- Documents in Other Languages. Case managers would like specific state documents or brochures/pamphlets in other languages. The fact that most materials are only in English is seen as a possible barrier by the case managers, and they requested that KDOA and the AAAs have resources and program materials in other languages in order to better serve their clients limited English proficiency.
Survey Component: Intake Personnel

Purpose

We surveyed intake personnel to learn more about the demographic characteristics of the clients served by the Area Agencies on Aging in Kansas and to identify successful practices that intake personnel employ. The survey was designed to understand what intake personnel do to meet the needs of hard-to-reach older adults who access AAA services. Specifically, the surveys were administered:

- to examine whether intake personnel screen older adults for the hard-to-reach criteria,
- to identify how often intake personnel encounter and work with older adults who meet the hard-to-reach criterion,
- to identify successful practices that intake personnel used to provide information and services to older adults who meet the hard-to-reach criterion, and
- to identify additional information and resources that intake personnel may need to increase their knowledge of culturally competent practices that they could employ with hard-to-reach older adults.

Methodology

Intake personnel in the 11 Area Agencies on Aging were contacted for the purpose of this study. In the initial round of gathering the sample, thirty people who were assumed to be intake personnel were contacted. Of those contacted, two were not intake personnel. After these two were removed, there were 28 intake personnel to interview. A total of 18 intake personnel worked in 10 AAAs, while 10 intake personnel were identified in PSA 10. Whereas most AAAs hire in-house intake personnel, PSA 10 hires one intake personnel per county on a contractual basis. Random sampling of the intake personnel in PSA 10 was conducted to ensure an equal representation of intake personnel among the counties within PSA 10. Five out of ten intake personnel were chosen from PSA 10. Our final sample size was 23 intake personnel, of which 100% completed the survey.

Intake personnel of the 11 AAAs ($N = 23$) were mailed an informational letter on the purpose and intent of the survey. Approximately one week later, staff at the Office of Aging and Long Term Care called each intake person to schedule and complete the interviews. The survey was conducted via the telephone. See Appendix D-1 for a copy of the interview questions. Each interview lasted approximately twenty minutes. Interviews were conducted from May 17 to July
July 7, 2006. Intake personnel were assigned id numbers to assure their confidentiality when answering the survey. Data obtained from the survey which were both open ended and numeric in their content, were entered in SPSS 14. Descriptive statistics were used to analyze the demographic characteristics of intake personnel, whether information is gathered by intake personnel on older adults who meet the hard-to-reach criteria, the nature of procedures used by intake personnel in gathering information from older adults (classified as routine or special), the percentages of intake calls received that are from older adults who meet the hard-to-reach criteria, and any additional resources needed by intake personnel to better respond to calls.

**Findings**

**Sample Description**

Among the intake personnel who were surveyed ($N = 23$), 87% were women and 13% were men. When questioned about their highest degree of educational attainment, 17.4% indicated that they had a master’s degree, 34.8% had a bachelor’s degree, and approximately fifty percent indicated “other.” Intake personnel that indicated “other” reported diverse educational attainments including completion of some college, associates degrees, or certificates. Eighty-seven percent of intake personnel were white, approximately nine percent were African American, and one intake person reported their race as other. Intake personnel worked for the Area Agencies on Aging a mean of 8.7 years with a minimum of .01 years and a maximum of 29 years at the job. Intake personnel took a mean of approximately 27 calls per week, ranging from 1 call per week to 100 calls per week. Based on intake personnel estimates of average calls per week, PSAs 8 and 11 received the most intake calls with 170 and 120 calls, respectively. PSAs 6 and 3 received the fewest calls with 10 or fewer calls per week.

**Screening for the Hard-to-Reach Criteria**

Intake personnel were asked questions to ascertain whether they screened older adults for the hard-to-reach criteria. It was found that intake personnel generally screened older adults for all hard-to-reach criteria except literacy. The hard-to-reach criterion, rural residence, was the most screened for criterion. Ninety-one percent of intake personnel obtained information on whether older adults were calling from isolated rural areas. Limited English proficiency followed rural residence as the most screened for hard-to-reach criterion. Eighty-seven percent of intake personnel obtained information on whether older adults had limited English proficiency.
Seventy-eight percent of intake personnel obtained information on the minority status of older adults. Approximately sixty-five percent of intake personnel obtained information on low income older adults. In the case of literacy, only 13% screened for the literacy level of older adults while eighty-two percent did not obtain this information. Table 21 provides an overview of the percentage of intake personnel who obtained information from older adults for each hard-to-reach criterion.

### Table 21: Percentage of Intake Personnel that Screen for the Hard-to-Reach Criteria

<table>
<thead>
<tr>
<th>Hard-to-Reach Criteria</th>
<th>Yes</th>
<th>No</th>
<th>Other*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low income</td>
<td>65.2%</td>
<td>13.0%</td>
<td>21.7%</td>
</tr>
<tr>
<td>Rural residence</td>
<td>91.3%</td>
<td>4.3%</td>
<td>4.3%</td>
</tr>
<tr>
<td>Minority Status</td>
<td>78.3%</td>
<td>17.4%</td>
<td>4.3%</td>
</tr>
<tr>
<td>Limited English Proficiency</td>
<td>87.0%</td>
<td>13.0%</td>
<td>---</td>
</tr>
<tr>
<td>Literacy</td>
<td>13.0%</td>
<td>82.6%</td>
<td>4.3%</td>
</tr>
</tbody>
</table>

* Certain intake personnel indicated a response other than yes or no to this question. These responses are discussed further in the following section.

**Low income.** Sixty-five percent of intake personnel asked older adults about their income status to determine if the older adult had an income below the poverty level. Intake personnel who did not obtain information about whether a person was low income indicated that income was a sensitive issue and the question would be handled by the case manager.

Some people are real sensitive to disclosing this information and I have to take it slow and talk to them about it, and tell them that specific services are income based. We don't say, 'are you low income', we have a sheet here and tell them what they qualify for. We can help set up services and they may have to pay if their income is too high for HCBS or Medicaid.

They don't disclose to us but to the case manager.

A large percentage (21.7%) of intake personnel did not give a clear yes or no answer to this question but instead indicated that they would ask questions on income based on whether the question was in keeping with the needs of the client. Intake personnel also indicated that if the information was volunteered by the individual, they could determine whether they were low income, but it was not common to do so.

**Rural residence.** Ninety-one percent of intake personnel obtained information from older adults as to whether they resided in rural areas. Often intake personnel demonstrated knowledge of the location of various counties and addresses and said that they were able to determine whether the older adult was from an isolated rural residence based on the county of residence or zip code that was mentioned.
I don't ask directly, but determine from their county and directions they give me to their house.

Minority status. Despite racial and ethnic background being a standard question on the intake form, only seventy-eight percent of intake personnel obtained information on race/ethnicity. Some intake personnel who obtained this information commented that questions on racial and ethnicity were standard ones and that the older adults calling them were likely to be Caucasian. Also even the intake personnel who did ask questions about race found it a difficult issue to address and felt uncomfortable asking about race.

It's formally on the intake form for KDOA. We find it awkward, offensive to ask. If we're speaking to a Hispanic person, we would know. I know of no one in the aging network who is comfortable with this.

Limited English proficiency. Eighty-seven percent of intake personnel obtained information on older adults’ ability to speak English even though the question was not on the intake form. Intake personnel indicate that they often are able to determine whether a person has limited English proficiency or whether English is not their primary language based on conversation.

Not on form, but will look for clues. Often families will just say, "you need to bring an interpreter" or "come when the family is available."

It may be inferred that the intake personnel gauge an older adult’s ability to speak English so that they could provide them with an interpreter if necessary. This would help them to provide more effective service.

Literacy. Unlike other variables, literacy was the only hard-to-reach variable that the majority of intake personnel did not screen for when they received intake calls. Thirteen percent of intake personnel said that they ask questions about literacy level while eighty-two percent of intake personnel do not obtain information on literacy level. Some of the reasons given for intake personnel not obtaining information on literacy level were that the question was not on the intake form and that the information was not gathered unless the older adult was to specifically tell them about their literacy level.

Some are capable and fluent, but I can't tell unless they express themselves and say they can't read.
Thus, it may be inferred that unless information on literacy is specifically volunteered by the older adult, this information is usually not obtained.

Summary. Overwhelmingly, intake personnel are screening older adults for each of the hard-to-reach criterion except literacy. In the case of the literacy, the majority of intake personnel did not screen for this variable. Some intake personnel indicated that they also do not screen older adults for their race or ethnicity because they are not comfortable asking older adults questions regarding race. Intake personnel did ascertain older adults’ ability to speak English, income level, and rural residence fairly consistently. Our findings indicate that questions on literacy and race are awkward ones and if intake personnel are to screen consistently for this information, further training or information is needed on how to obtain this information from older adults without offending them or feeling awkward themselves. With regards to literacy, one suggestion may be to include it as specific criterion on the intake form so as to further aid intake personnel in their task.

Clients Served

Intake personnel were queried about the percentage of calls that they thought they received from hard-to-reach older adults. This was done to determine how often intake personnel encounter and work with hard-to-reach older adults. Note that one caller may fit in several categories. Major findings were:

- 46.8% of calls were received from adults with low incomes,
- 18.4% of calls were received from adults who lived in isolated rural areas,
- 17.4% of calls were received from adults with a minority status,
- 5.1% of calls were received from older adults who had limited English proficiency, and
- 6.2% of calls were received from older adults who had low levels of literacy.

Intake personnel estimate that, on average, 46.8% of calls come from adults with low incomes, with specific responses ranging from 10% to 80%. Based on the mapping component of this study, 7.2% percent of older adults in Kansas have low incomes. Approximately one in five intake calls (18.4%) were received from older adults who were living in an isolated rural area. The range of calls extended from a maximum of 50%-60% to a low of 0%-1% in certain PSAs. When asked to estimate the percentage of calls received from older adults who are members of racial or ethnic minority groups, intake personnel indicated they received approximately seventeen percent of calls (one in six calls) from older adults who meet this hard-
to-reach criteria. The percentage of calls ranged from 70-80% to a low of 1% in certain PSAs. When asked to identify the percentage of calls that intake personnel received from hard-to-reach older adults who may have difficulty in speaking English, intake personnel indicated that 5.1% of calls are from older adults with language difficulties. The range of calls extends from no calls at all to receiving at least 25% of calls from adults with limited English proficiency. Approximately six percent of intake calls are from older adults who have low levels of literacy. The range of calls extended from receiving no calls to receiving 25% of calls from hard-to-reach older adults who had problems with literacy.

Intake personnel appear to be encountering and serving older adults in each of the hard-to-reach populations. Also it was found that hard-to-reach older adults are spread across different PSAs and specific PSAs receive more calls from certain hard-to-reach older adults than others do. This finding may have implications for targeting services to older adults who reside in PSAs where greater percentages of calls are received from hard-to-reach older adults.

**Practices Employed by Intake Personnel**

Intake personnel were questioned about the procedures they adopted to inform older adults about available services. Procedures were labeled as routine and special. Routine procedures are procedures that intake personnel employ on a regular basis with clients who are not in the categories under study. Special procedures are procedures employed by intake personnel in areas where they feel that additional effort is required to help hard-to-reach older adults understand what services are available to them and how they may best access these services. Response categories were listed under special procedures and routine procedures. Intake personnel were asked to elaborate on the special procedures that they used. The majority of intake personnel used routine procedures when working with older adults that meet the hard-to-reach criteria except for limited English proficiency. Table 22 further expands on the results for each of the hard-to-reach criteria.

**Table 22: Percentage of Intake Personnel that Use Routine/Special Procedures**

<table>
<thead>
<tr>
<th>Screening criteria</th>
<th>Routine procedures</th>
<th>Special procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Income</td>
<td>82.6%</td>
<td>17.4%</td>
</tr>
<tr>
<td>Rural Residence</td>
<td>91.3%</td>
<td>8.7%</td>
</tr>
<tr>
<td>Minority Status</td>
<td>95.7%</td>
<td>N/A</td>
</tr>
<tr>
<td>Limited English Proficiency</td>
<td>38.1%</td>
<td>61.9%</td>
</tr>
<tr>
<td>Literacy</td>
<td>62.5%</td>
<td>37.5%</td>
</tr>
</tbody>
</table>
Low income. Intake personnel were also asked about procedures used with older adults who were below the poverty level. Approximately 82.6% of intake personnel used routine procedures with the above mentioned clients while approximately 17.4% used special procedures. To ensure this population would be adequately served, the intake personnel took extra time to notify the case manager that the older adult might qualify for programs because they were low income.

Isolated rural residence. Intake personnel were questioned on the procedures employed when the client was from a rural residence. Ninety-one percent of intake personnel said that they used routine procedures when working with clients from a isolated rural area. The intake personnel who used special procedures (8.7%) said that they try to take the needs of the older adult into consideration.

We go as far as we can, and go to next level. An example is areas that maybe a meal program can't be reached, we try to see if family, and friends can come get it. Another example is transportation. We try to find someone for them.

Minority status. When a potential client was a member of a racial/minority group, 95.7% of intake personnel were found to have used routine intake procedures. No special procedures were used and the rest of the responses given by this group fell under the not applicable category. Intake personnel indicated they were aware of possible religious and cultural influences on older adults.

Limited English proficiency. When the client had difficulty communicating in English because English was not their primary language, 38.1% of intake personnel who were questioned used routine procedures while approximately 61.9% percent of intake personnel who were questioned used special procedures. Most intake personnel made use of translators and interpreters to help older adults who had limited English proficiency. Intake personnel also said that people other than older adults such as family or friends would call for the older adult and the intake personnel would communicate with the person who was calling for the older adult.

We try to use family members or use an interpreter. Sometimes if people can't speak English when they call, they can at least give their phone number and we can have someone call them back. KDOA has a language link line for access to Spanish and other interpreters and we use this. We have someone on staff that uses sign language and works with the hearing impaired.

Literacy. When asked about procedures used with older adults who had a low level of literacy 62.5% of intake personnel said that their intake procedures were routine. Approximately thirty-eight percent used special procedures for older adults with a low level of literacy. Some of
the special procedures used with this group of older adults were that intake personnel took 
special care to make sure that they received accurate information and “did not make them wait 
to get resources from case managers”.

_We don't ask, but the example I have is a person who was limited on reading 
ability (actually an employee) I didn't' realize for a long time that she was that 
way, so we always ask if they need help with a form, so we wouldn't do anything 
specific._

The response from the intake surveys indicates that intake personnel mostly use routine 
procedures with hard-to-reach older adults except those who have difficulty communicating in 
English. Intake personnel may require additional information and training to use special 
procedures to work with other categories of hard-to-reach older adults as hard-to-reach older 
adults might have barriers that require more specialized procedures.

**Additional Resources**

Intake personnel were asked if they needed any additional resources (external or 
internal) to help them respond to calls from hard-to-reach older adults. External resources 
would be resources that could help older adults reach intake personnel in the first place, such 
as initiatives to increase public awareness of services. Internal resources are something within 
the organization that might help intake personnel deal more effectively with the needs of hard-
to-reach older adults who call them.

_'External resources.' External resources recommended by intake personnel included 
more public awareness and transportation services. Intake personnel stated that they would be 
helped by greater outreach services. Intake personnel felt that more information on availability 
of their service needed to be much more widely provided because older adults may not know 
that they can call and receive information about services._

_\textit{My biggest problem is that we need to make sure that the information about us is 
out there. Sometimes people are surprised that we even exist, and then they are 
surprised that it costs money for our services.}_

A need for transportation services was expressed by intake personnel, particularly in rural 
areas. Some intake personnel felt that better transportation services would help older adults 
achieve access to services.

_'Internal resources.' Intake personnel also made recommendations for internal resources 
such as greater availability of information, availability of language resources and funding 
services. Intake personnel felt that they should be able to offer more information on various_
health and community services and wanted to be able to inform older adults about the programs that each town offered.

*Maybe offer more information on Durable Powers of Attorney, once they get to the stage of calling, they probably feel they need more assistance, and they need DPOA for health and finances.*

*We have quite a few brochures and pamphlets, but I wish we were able to tell people what each town offers for clients with needs. I’d recommend extending the “Senior Companion” project (out of Ft. Hays State), because I refer my clients to that a lot.*

*I would like a specific guide with the available resources within each county. Make it available to everyone at the courthouse or city hall for when new people move to town or need services.*

Some intake personnel requested the availability of greater language resources for hard-to-reach older adults who did not speak English, such as brochures in Spanish.

*If anything, it would be more brochures in Spanish. We have something in Spanish. Medicare booklet is in Spanish. But if there was anything, it would be that.*

*Translation services - what to do with someone that speaks another language - if there is a policy, I'm not aware of it.*

The final suggestion was a request for more funding to provide effective services for hard-to-reach older adults.

*Just additional funding to support I & A. We're the single point of entry for the county. We tried to set it up in our area (single point of entry). We're a unique AAA which tries to work with what clients need.*

Intake personnel identified a number of resources which would enable older adults to both easily access and to provide better service to the hard-to-reach older populations. However each of these recommendations was made by a small number of intake personnel and cannot be viewed as representative of the views of most of the intake personnel questioned for the survey. Further information should be obtained from specific areas to determine the resources that would help each PSA maximize their services for hard-to-reach older adults.

**Conclusion**

Overall intake personnel appear to be reaching and working with older adults who meet the hard-to-reach criteria. There are however certain areas where improvement could be seen. In screening for hard-to-reach criteria, intake personnel do not effectively screen for the hard-to-reach criterion literacy. Yet, intake personnel indicated that approximately 6.2% of intake calls
are from older adults who have low levels of literacy. In addition, some intake personnel do not
ask about race or ethnicity because they are uncomfortable asking about it. Case managers
need additional training and information to help them screen for literacy and to feel more
confident in asking questions related to race and ethnicity.

Intake personnel were also asked about the procedures they use with hard-to-reach
older adults. Special procedures were mostly used with those who had difficulty communicating
in English, such as the use of a translator, but not in working with the other groups. Considering
that there are significant number of hard-to-reach older adults in these groups, intake personnel
may require additional information and training to use special procedures to work with other
categories of hard-to-reach older adults as hard-to-reach older adults might have barriers that
require more specialized procedures.

When asked about resources that would help to more effectively serve older adults in
hard-to-reach categories, intake personnel recommended: greater outreach to older adults
about available services, language resources such as brochures in Spanish, information
resources about services available in specific areas, more funding for services overall, and
better transportation options.
Interview Component: Older Adults

Purpose

The final component of the Hard-to-Reach Kansans project included semi-structured interviews with older adults who met the hard-to-reach criteria. In these interviews, we examined how older adults learned about and were able to access KDOA/AAA services, as well as any barriers faced when accessing and utilizing these services. We also explored older adults’ perspectives on successful practices and strategies of AAA case managers and service providers. Interview participants were asked to provide suggestions on how to improve services and ensure that additional older adults who meet the hard-to-reach criteria learn about and utilize services. The specific aims of the interviews were guided by the following research questions:

- How do older adults who meet the hard-to-reach criteria learn about the Area Agency on Aging and KDOA/AAA services?
- What AAA outreach strategies were influential for hard-to-reach older adults in finding out about services provided by KDOA/AAA?
- What practices of AAA intake personnel and AAA case managers are successful in providing information and/or services to older adults who meet the hard-to-reach criteria?
- What barriers, if any, do older adults who meet the hard-to-reach criteria encounter when accessing services through KDOA/AAA?
- What barriers, if any, do older adults who meet the hard-to-reach criteria encounter when utilizing services through KDOA/AAA?
- What do older adults who meet the hard-to-reach criteria think would be helpful for increasing the proportion of hard-to-reach older adults who access and/or utilize KDOA/AAA services?

Methodology

We conducted semi-structured interviews with fifty-two older adults who met one or more of the hard-to-reach criteria. We used an interview guide, which was developed based on the research questions. (See Appendix E-1 for a copy of the interview guide.) The interviews ranged in length from 15 to 75 minutes. Each interview was audio-recorded and transcribed verbatim. Interviews were coded and analyzed based on the research questions. During the coding,
themes emerged that were not specifically related to the research questions. These themes were analyzed and included in the report.

In order to ensure that we captured the perspective of older adults throughout the state of Kansas as a whole as well as within each hard-to-reach criterion, we first stratified our sample by PSA and then randomly selected individuals within each PSA who met each hard-to-reach criterion. Different sampling strategies were employed to address each of the hard-to-reach criteria. The sample of older adults who were low income, lived in a rural residence, were a member of a racial or ethnic minority group, and had limited English proficiency was obtained from KAMIS during calendar year 2006. Because an individual’s level of literacy is not identified in the KAMIS data, we obtained a sample of older adults with low levels of literacy directly from AAA staff. We interviewed a range of 8 to 12 older adults who met each of the hard-to-reach criteria.

We obtained KAMIS data on all older adults who had received an assessment (i.e., UAI, Abbreviated UAI, or UPR) during calendar year 2006. We attempted to select individuals who had most recently received services; however, our sample was not limited to those individuals because we did not have data indicating who had received an assessment in the year prior. Using SPSS, we drew random samples of seven potential participants for the individual hard-to-reach criteria in each PSA. For example, in PSA 1, we randomly sampled seven individuals who were low income, seven individuals who had minority status, etc. Starting at the top of the list of random participants, we called potential interview participants to determine if they were willing to participate in an interview. See Appendix E-2 for detailed information about the selection process of interview participants for each hard-to-reach category. Overall, 258 attempts were made to contact potential participants. Table 23 shows the number of older adults in each hard-to-reach category who were interviewed as well as those who declined to participate and those who we were unable to contact.

**Table 23: Number of Contacts with Potential Participants by Hard-to-Reach Category**

<table>
<thead>
<tr>
<th>Contact</th>
<th>Low Income</th>
<th>Rural Residence</th>
<th>Minority Status</th>
<th>Limited English Proficiency</th>
<th>Low Level of Literacy</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interviewed</td>
<td>12</td>
<td>11</td>
<td>11</td>
<td>8</td>
<td>10</td>
<td>52</td>
</tr>
<tr>
<td>Declined to Participate</td>
<td>18</td>
<td>20</td>
<td>16</td>
<td>20</td>
<td>4</td>
<td>78</td>
</tr>
<tr>
<td>Unable to Contact</td>
<td>25</td>
<td>33</td>
<td>29</td>
<td>35</td>
<td>6</td>
<td>128</td>
</tr>
<tr>
<td><strong>Total Contacts</strong></td>
<td><strong>55</strong></td>
<td><strong>64</strong></td>
<td><strong>56</strong></td>
<td><strong>63</strong></td>
<td><strong>20</strong></td>
<td><strong>258</strong></td>
</tr>
</tbody>
</table>
We had a difficult time reaching potential participants, as shown in that we were unable to contact nearly 50% of the potential participants in each hard-to-reach category. This was mostly due to incorrect or disconnected phone numbers. In addition, about one-third of potential participants in each category declined to participate, possibly demonstrating that trust is a concern for these populations. The low level of literacy group was easier to reach, due to the fact we obtained information directly from AAA staff, in which trusting relationships had been built. Out of the four groups we contacted from KAMIS data, we obtained the highest interview rate from the low income population (21.8%) and the lowest from the limited English proficiency population (12.7%).

**Interviews by PSA.** The total number of interviews completed in each PSA ranged from 2 in PSA 7 to 7 in PSA 5. Table 24 indicates the number of interviews completed in each PSA as well as the number of interviews completed for each criterion. We interviewed participants until reaching saturation, meaning until we heard a number of duplicate answers to research questions.

<table>
<thead>
<tr>
<th>PSA</th>
<th>Low Income</th>
<th>Rural Residence</th>
<th>Minority Status</th>
<th>Limited English Proficiency</th>
<th>Low Level of Literacy</th>
<th>Total Interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
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<td>1</td>
<td>1</td>
<td>1</td>
<td>4</td>
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<td>8</td>
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<td>-</td>
<td>1</td>
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<td>2</td>
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<tr>
<td>10</td>
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<td>1</td>
<td>-</td>
<td>-</td>
<td>4</td>
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<tr>
<td>11</td>
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<td>3</td>
<td>1</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>12</td>
<td>11</td>
<td>11</td>
<td>8</td>
<td>10</td>
<td>52</td>
</tr>
</tbody>
</table>

**Sample Description**

In order to obtain our sample, we selected participants who met at least one of the hard-to-reach criteria. In some cases, an interview participant met additional hard-to-reach criteria. Twenty interview participants (38.5%) were known to have met two of the hard-to-reach criteria and an additional 12 participants (23.1%) met three. The majority of interview participants were low income (73.1%), making our sample predominantly low income. Similar percentages were rural (36.5%) and minority (40.4%). Of those who were members of a minority group (n = 21), 66.7% were Black/African American, 28.6% were Hispanic, and 4.7% were Native
American/Alaskan Native. Fifteen percent of the interview participants (n = 8) had limited English proficiency including five whose primary language was Spanish and three whose primary language was Russian. Ten interview participants (19.2%) were sampled for low levels of literacy. We did not collect literacy information for all participants, thus cannot characterize literacy levels across all participants. Table 25 portrays the number of interview participants who met one or more of the hard-to-reach criteria.

Table 25: Number of Interview Participants who Met Each Hard-to-Reach Criteria (N = 52)

<table>
<thead>
<tr>
<th>Only One Hard-to-Reach Criteria</th>
<th>Low Income</th>
<th>Rural Residence</th>
<th>Minority Status</th>
<th>Limited English Proficiency</th>
<th>Low Level of Literacy</th>
<th>Total Interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>38</td>
<td>19</td>
<td>21</td>
<td>8</td>
<td>10</td>
<td>52</td>
</tr>
</tbody>
</table>

The mean age of the interview participants at the time of their interviews was 78 years, ranging from 63 to 94 years. The majority of the interview participants (n = 34) were female. Of all the interview participants, 59.6% were receiving an HCBS/FE service (n = 31), 55.8% were receiving an OAA service (n = 29), and 17.3% were receiving a SCA service (n = 9). Table 26 provides a breakdown of the services that interview participants were receiving.
Table 26: Specific Services Utilized by Interview Participants

<table>
<thead>
<tr>
<th>Services by Funding Source</th>
<th>N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Home and Community-Based Services Frail Elderly Waiver</strong></td>
<td></td>
</tr>
<tr>
<td>Personal Emergency Response Monitoring</td>
<td>21 (40.4%)</td>
</tr>
<tr>
<td>Self-Directed Attendant Care</td>
<td>17 (32.7%)</td>
</tr>
<tr>
<td>Attendant Care – Level II</td>
<td>8 (15.4%)</td>
</tr>
<tr>
<td>Attendant Care – Level I</td>
<td>7 (13.5%)</td>
</tr>
<tr>
<td>Assistive Technology</td>
<td>4 (7.7%)</td>
</tr>
<tr>
<td>Wellness Monitoring</td>
<td>4 (7.7%)</td>
</tr>
<tr>
<td>Sleep Cycle Support</td>
<td>3 (5.8%)</td>
</tr>
<tr>
<td>Nursing Evaluation Visit</td>
<td>1 (1.9%)</td>
</tr>
<tr>
<td><strong>Older Americans Act</strong></td>
<td>29 (55.8%)</td>
</tr>
<tr>
<td>Home Delivered Meals</td>
<td>17 (32.7%)</td>
</tr>
<tr>
<td>Congregate Meals</td>
<td>8 (15.4%)</td>
</tr>
<tr>
<td>Congregate Meals – Illness Home Delivery</td>
<td>2 (3.8%)</td>
</tr>
<tr>
<td>Counseling (one-time service)</td>
<td>4 (7.7%)</td>
</tr>
<tr>
<td>Homemaker</td>
<td>1 (1.9%)</td>
</tr>
<tr>
<td><strong>Senior Care Act</strong></td>
<td>9 (17.3%)</td>
</tr>
<tr>
<td>Case Management</td>
<td>9 (17.3%)</td>
</tr>
<tr>
<td>Homemaker</td>
<td>5 (9.6%)</td>
</tr>
<tr>
<td>Personal Emergency Response Monitoring</td>
<td>2 (3.8%)</td>
</tr>
<tr>
<td>Mobility Aids</td>
<td>1 (1.9%)</td>
</tr>
<tr>
<td>Bathroom Items</td>
<td>1 (1.9%)</td>
</tr>
<tr>
<td>Incontinence Supplies</td>
<td>1 (1.9%)</td>
</tr>
</tbody>
</table>

* Participants could have one or more services.

Older Adult Interviews Report Format

The findings from interviews with older adults are presented next in a question and answer format. The summary of key findings provides a brief overview of the research questions and answers, which is followed by a more detailed explanation of the main answers to the research questions. The findings presented in this section are those of older adults who meet the hard-to-reach criteria and receive KDOA/AAA services. Much can be learned from these older adults who successfully navigated the KDOA/AAA system in order to meet their needs with home and community-based services. Interviews with this population of older adults provided unique insight into older adults’ experiences with the KDOA/AAA service system including successful strategies of case managers and barriers to service access and utilization. However, it is important to keep in mind that there is more to learn about older adults who meet the hard-to-reach criteria and are not receiving services, as their experiences could be different.
## Summary of Key Findings from Older Adult Interviews

### QUESTION 1. How do older adults who meet the hard-to-reach criteria learn about the Area Agency on Aging and KDOA/AAA services?

- Medical providers
- Long-term community knowledge
- Family or friends
- Work or volunteer experience
- Service referral

### QUESTION 2. What AAA outreach strategies, if any, were influential for hard-to-reach older adults in finding out about services provided by KDOA/AAA?

The majority of older adults interviewed could not remember viewing outreach materials. Outreach materials that were seen included: Newspapers, Print Materials, Television, Senior Fair

### QUESTION 3. What practices of AAA staff are successful in providing information and/or services to older adults who meet hard-to-reach criteria?

- Devoting extra time to create a trusting relationship with the older adult
- Timely, consistent, and flexible meetings with case managers
- Networking with other providers/agencies
- Identifying resources for home modifications and finances

### QUESTION 4. Do older adults who meet hard-to-reach criteria recommend KDOA/AAA services to others?

<table>
<thead>
<tr>
<th>Yes/No</th>
<th>Specific reasons given for response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes (90.5%)</td>
<td>o Has been treated well, thought others could benefit</td>
</tr>
<tr>
<td>Have or would</td>
<td>o Others not receptive due to trust issues and being stubborn</td>
</tr>
<tr>
<td>recommend services</td>
<td></td>
</tr>
<tr>
<td>No (9.5%)</td>
<td>o Does not talk to anyone</td>
</tr>
<tr>
<td>Would not</td>
<td>o Everyone already knows about services</td>
</tr>
<tr>
<td>recommend services</td>
<td></td>
</tr>
</tbody>
</table>

### QUESTION 5. What barriers do older adults who meet the hard-to-reach criteria encounter when accessing services through KDOA/AAA?

Many of the older adults who were interviewed did not report any barriers to accessing KDOA/AAA services. For those who did, the barriers reported included:

- Lack of funds needed to access services
- Lack of service availability
- Delayed eligibility for services
- Lack of knowledge of service system
QUESTION 6. What barriers do older adults who meet the hard-to-reach criteria encounter when utilizing services through KDOA/AAA?

Many of the older adults who were interviewed did not report any barriers to utilizing KDOA/AAA services. For those who did, the barriers reported included:

- Difficulty with case manager or service provider not being sensitive to their needs
- Language difficulties
- Shortage of workers and services
- Distance and travel
- Lack of information about services they can understand

QUESTION 7. Do older adults who meet hard-to-reach criteria know others who have had difficulties obtaining services?

<table>
<thead>
<tr>
<th>Yes/No</th>
<th>Specific reasons given for response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes (40.9%)</td>
<td>Others:</td>
</tr>
<tr>
<td></td>
<td>o Were too stubborn, proud, or independent to accept help</td>
</tr>
<tr>
<td></td>
<td>o Had too much money</td>
</tr>
<tr>
<td></td>
<td>o Lived in a rural area</td>
</tr>
<tr>
<td>No (59.0%)</td>
<td></td>
</tr>
</tbody>
</table>

QUESTION 8. What do older adults who meet the hard-to-reach criteria think would be helpful to ensuring that others could get services from the AAA?

- Increased opportunity to hear about services face-to-face
- More visibility of AAA services
- More funding for services
- Additional resources to fill gaps and improvements to current services

QUESTION 9. What strategies do older adults who meet hard-to-reach criteria use to remain living in the community?

- Assistance in addition to KDOA/AAA services
  - o Family and friend assistance
  - o Deliveries
  - o Medical assistance
  - o Financial assistance
  - o Home modifications
  - o Other services
- Thoughts about nursing home placement
  - o Extreme desire to remain at home
  - o Precursors to nursing home placement
- Activities for staying active and engaged in the community
  - o Social activities
  - o Church activities
  - o Personal activities
  - o Pet companionship
Key Findings from Older Adult Interviews

QUESTION 1. How do older adults who meet the hard-to-reach criteria learn about the Area Agency on Aging and KDOA/AAA services?

- Medical Providers. Most older adults learned about KDOA/AAA services from medical providers, such as a doctor, nurse, or hospital social worker when they were utilizing medical services. Many were either in or being released from the hospital when they learned about services, often following a major surgery or major incident such as a car accident, when they needed assistance with added health care needs.

- Community Knowledge. Some older adults mentioned having long-term knowledge of available KDOA/AAA services in the community, indicating that information about these services was general knowledge. This was predominantly mentioned by older adults living in rural areas.

- Family or Friends. A number of older adults learned about KDOA/AAA services from family members or friends, many of whom actually contacted the AAA to set-up services for the older adult. Some older adults had family members and friends who were social workers or who knew someone working at the AAA whereas other older adults had family members and friends who had received services.

- Other ways older adults learned about services included:
  - Work or Volunteer Experience. A few older adults had worked or volunteered at the AAA, most of whom were rural residents.
  - Service Referral. Some low income older adults learned about services through their interaction with other social service agencies.

QUESTION 2. What AAA outreach strategies, if any, were influential for hard-to-reach older adults in finding out about services provided by KDOA/AAA?

- Types of Outreach. The types of outreach that were seen by older adults included:
  - Menus for senior meals as well as advertisements for the AAA in the newspaper.
  - Brochures about services in their apartment complexes, signs for transportation displayed in a public area, a quarterly newsletter at a doctor’s office and a public library, and flyers for additional services with their senior meals.
  - Television advertisements or advertisements at a Senior Fair sponsored by the AAA.

- No Outreach. Most older adults interviewed did not recall receiving or viewing any outreach material from the Area Agency on Aging or from the Kansas Department on Aging.
QUESTION 3. What practices of AAA staff are successful in providing information and/or services to older adults who meet hard-to-reach criteria?

- Devoting Extra Time to Create a Trusting Relationship with the Older Adult. The most identified successful strategy employed by case managers and services providers was spending extra time in developing a positive, trusting relationship with the older adult. This included three items:
  - Positive and polite attitudes and displaying a willingness to help.
  - Being easy to speak with or get in touch with as well as helpful with paperwork.
  - Going “above and beyond” in assisting them with services, such as helping to purchase a bus ticket or helping older adults to qualify for or transition between government programs.
  - Being aware of the unique problems of hard-to-reach older adults and developing strategies to address these issues, such as utilizing self-directed care.

- Timely, Consistent, and Flexible Meetings with Case Managers. Many older adults mentioned the importance of timing and scheduling, finding that scheduling the first appointment and the start of services in a timely manner (between a few days to a week from the first contact) as well as having frequent visits with the case manager as effective. In addition, some case managers were flexible in scheduling appointments and willing to work around the older adults’ schedules.

- Networking with Other Providers/Agencies. Some older adults pointed out that their case manager worked with other agencies to ensure their service needs were met. The case manager worked to coordinate the services among agencies in town, which improved services for older adults.

- Identifying Resources for Home Modifications and Finances. Providing assistance with home modifications and/or finances was mentioned as a successful strategy by a number of hard-to-reach older adults. AAA staff would help to ensure the older adult was able to remain living in their home with the assistance of things like a chair or shower modification. In addition, case managers helped older adults, particularly those with low income, identify resources to help with financial difficulties, such as resources to help pay for prescription drugs, phone bills, or food.

QUESTION 4. Do older adults who meet hard-to-reach criteria recommend KDOA/AAA services to others?

- Yes. Most older adults (90.5%) communicated that they would or have recommended services to others. These older adults found that they have been treated well, so thought others could also benefit from services and continue to live at home. A number of older adults pointed out that some people have not been receptive to their advice, often because they do not trust service providers or are “too stubborn” to accept help.

- No. A few older adults (9.5%) would not recommend services, however this was not due to their own dissatisfaction with services. These older adults stated that they did not talk to anyone who would need services or figured that everyone either had services or knew about available services.
QUESTION 5. What barriers, if any, do older adults who meet the hard-to-reach criteria encounter when accessing services through KDOA/AAA?

- Many of the older adults interviewed did not report any barriers to accessing services. For those who did, the barriers reported included:
  
  - Lack of Funds Needed to Access Services. Of those who did experience difficulty accessing services, having a lack of funds for filling gaps in services and for accessing services not paid for by the AAA was the most commonly mentioned. Some older adults were unable to meet their needs, such as food, clothing, eye care, medical expenses, or prescription drugs because they could not afford to pay for these services or because the services they received did not cover the expenses. In addition, some older adults found themselves “a dollar or two over the limit” in qualifying for programs, yet still unable to pay out-of-pocket for needed services.
  
  - Lack of Service Availability. Some older adults found that they could not access needed services because they were not available in their towns, mostly affecting those in rural areas. Either services were not available in town or transportation to get needed services was not available.
  
  - Delayed Eligibility for Services. Some older adults faced the difficulty of not being able to access services because paperwork took a very long time to go through, or they were placed on a waiting list for services. In addition, some people mentioned they were not receiving enough services to meet their needs.
  
  - Lack of Knowledge of Service System. A few older adults had difficulties understanding how to begin services, had an overall lack of knowledge about the service system, or did not understand eligibility guidelines.

QUESTION 6. What barriers, if any, do older adults who meet the hard-to-reach criteria encounter when utilizing services through KDOA/AAA?

- Many of the older adults interviewed did not report any barriers to utilizing services. For those who did, the barriers reported included:
  
  - Difficulty with Case Manager or Service Provider. Despite the many positive findings regarding the work of case managers, a few older adults felt that their service provider or case manager was not performing his or her job adequately. This was due to a number of difficulties including not providing services in a timely manner, losing paperwork, not showing up at scheduled times, or having a negative attitude.
  
  - Language Difficulties. Those with limited English proficiency encountered numerous barriers such as having difficulty filling out paperwork or understanding materials written in English and not being able to understand instructions for their prescription medication. Adding to this, some people mentioned that translators were not often available.
  
  - Shortage of Workers and Services. Some older adults mentioned they had difficulties utilizing services due to a shortage of workers and services. In some areas, older adults found it difficult to find workers who would assist older adults. In addition, services often were not available on weekends, or people found it difficult to find transportation unless planning far in advance.
Distance and Travel. Another barrier, faced mostly by those in rural areas, dealt with having to travel great distances to receive services. Older adults found it difficult to get transportation to services or found it difficult to pay high gas prices to obtain services. In addition, it was mentioned that some people hesitate to receive needed services due to distance and travel.

Lack of Information about Services They Can Understand. Older adults, particularly those with low incomes, were concerned about having a lack of information and not being able to comprehend information given to them. Older adults with a low level of literacy had difficulty with reading and understanding information that they received in the mail from the AAA.

QUESTION 7. Do older adults who meet hard-to-reach criteria know others who have had difficulties obtaining services?

Yes. Many older adults (40.9%) did know of someone who was having a difficult time obtaining services. Most of these individuals mentioned that others were too proud or independent to accept assistance. Others knew older adults who had too much money, lived in a rural area where services were not available, or experienced changes in their services due to funding issues.

No. Most older adults (59.0%) did not know of anyone who had difficulty in obtaining services.

QUESTION 8. What do older adults who meet hard-to-reach criteria think would be helpful to ensuring that others could get services from the AAA?

Increased Opportunity to Hear about Services Face-to-Face. Many older adults thought that increased opportunities for face-to-face exchange rather than in the mail or on the phone, would be a good outreach strategy. Some mentioned that case managers and service providers should do more verbal outreach whereas others mentioned that older adults themselves should “reach out” to others, possibly by making the initial phone call or discussing service with other older adults. Other suggestions included:
  - Provide more in-home meetings versus phone discussion or in the mail.
  - Have speakers come to Senior Centers.
  - Ensure physicians and nurses provide outreach.
  - Work with churches to reach older adults.

More Visibility of AAA Services. Several older adults mentioned that services should be further advertised, as many older adults have no idea that the AAA is available in their community. Ensuring that each AAA has a prominent sign was also discussed.

More Funding For Services. Some older adults suggested that increased funding for services in general would help others get services. In addition, it was mentioned that increased funding should go towards improving transportation and increasing the amount of food stamps given to older adults.
Additional Resources and Improvements to Current Services. A number of older adults suggested that obtaining additional resources or improving current services would help to ensure more older adults could receive services from the AAA. Some older adults made specific suggestions such as:
- Make services more easily accessible.
- Increase/improve training for those working with older adults, particularly in working with hard-to-reach groups.
- Provide legal services.
- Increase coordination with other organizations.
- Fix Senior Centers to make more accessible.
- Provide volunteers for those who cannot pay for services.
- Translate paperwork and instructions for common medication in various languages.
- Have Adult Day Care.
- Provide more stimulating activities for older adults.
- Improve food in home-delivered meals.

QUESTION 9. What strategies do older adults who meet hard-to-reach criteria use to remain living in the community?

- Additional Assistance. Many participants discussed the various people and services, in addition to KDOA/AAA services, that enabled them to remain living in the community. Older adults received assistance most from family and friends. Other services discussed were medication and grocery delivery, medical assistance such as a home nurse, financial assistance such as a power of attorney for paying bills, home modifications, and other services such as help with yard work or transportation assistance.

- Thoughts about Nursing Home Placement. Older adults expressed a strong desire to remain in their homes as opposed to entering a nursing home. Specifically, participants discussed wanting to remain active in the community as well as a desire to die in their own homes. In addition, older adults mentioned that having family as well as KDOA/AAA services allows them to remain living in the community. However, a fear of falling was a concern, and that this event would prompt nursing facility placement.

- Activities. A number of older adults talked about the importance of various activities that helped them remain active and engaged in the community. Social activities, such as playing cards or organizational membership, were discussed as well as attending church-related activities. Some people had personal activities, such as crocheting, doing puzzles, or reading books that kept them busy. Pet companionship was also mentioned as important.

Conclusion

The findings from these interviews with older adults indicate that KDOA/AAA services are utilized successfully by older adults in each of the hard-to-reach criteria, and that case managers are an integral part of this success. In this section, the main findings and implications from this component are highlighted. These findings have implications for older adults in the
hard-to-reach groups who are already getting KDOA/AAA services as well as for those who have not yet accessed or utilized these services.

For older adults who are accessing and utilizing services, KDOA/AAA services can be an important support for living in the community. However, it is important to consider that older adults who were interviewed were actually receiving services from KDOA/AAA, meaning that they had already successfully navigated the KDOA/AAA service system in order to have their needs met. There is more to learn about those who do not receive these services that could not be understood firsthand from the interviews we conducted. It is unknown whether hard-to-reach older adults who were not utilizing services would provide different insight regarding the primary research questions. For instance, older adults who are not receiving services might encounter different barriers to service utilization as well as have different ideas about how to provide outreach to themselves and other hard-to-reach older adults. Therefore, an important next step to this project would be to interview older adults who are members of each of the hard-to-reach groups and who are not utilizing KDOA/AAA services.

Most of the older adults we interviewed either learned about services or were signed up for services following a medical emergency or health issue that required them to seek medical treatment. Very few older adults had knowledge of KDOA/AAA services prior to this medical incident. This could be a result of another finding in which most older adults interviewed could not remember receiving or viewing any outreach material about KDOA or AAA services prior to receiving those services. Further examination by KDOA and the AAAs of how older adults learn about and decide to access services could be beneficial, especially in terms of whether outreach materials are targeting these specific hard-to-reach groups (e.g., outreach materials that are culturally appropriate). In particular, it is important to continue coordinating services with medical professionals in order to ensure that medical providers are informing older adults about available services. In addition, it would be beneficial to get information about KDOA/AAA services to older adults prior to a medical crisis, which is being done successfully in rural areas with older adults describing their community knowledge of the AAA and the senior center. Another outreach strategy suggested by many older adults was a desire to have outreach provided through personal contact, which would allow them to listen and ask questions.

There were a number of successful strategies utilized by AAA case managers in serving older adults who met the hard-to-reach criteria. In particular, it was important to older adults that case managers and service providers take the extra time to understand the specific challenges they face and to develop positive, trusting relationships with them as well as to provide services in a timely, efficient manner. In addition, older adults made note of the importance of case
managers’ ability to coordinate the various services received by other agencies and their effective identification of resources for home modifications and financial needs. Though these practices may seem basic, older adults appreciate the respect given to them by AAA staff and value the services they receive in helping them to remain living at home.

A large number of older adults did not encounter barriers when accessing services, meaning that services were available and easy to access. In addition, some participants said they did not encounter any barriers to utilizing the available services. This is an indication that KDOA and the AAAs are successfully addressing some of the needs of older adults who wish to remain in the community, in particular for those who are already getting services. However, some older adults did encounter barriers to service access and utilization, and the barriers that were mentioned were generally related to their hard-to-reach criteria, with the exception of the minority groups. For example, low income older adults in this study frequently experienced barriers in accessing services because they were unable to afford to fill gaps in services or older adults with low levels of literacy had a difficult time comprehending information about AAA services that came in the mail. It is important to continue to work to find effective strategies to address the barriers that older adults in specific hard-to-reach categories encounter.

In addition to KDOA/AAA services, numerous older adults mentioned some type of social or personal activity that kept them active in the community, which seemed to act as a protective factor in helping the older adult remain living in the community. These activities included social interaction with family and friends, belonging to different organizations, attending church services, and having a pet as a companion. The fact that older adults mentioned these activities as being important to them led us to believe that this is one of the reasons why they continued to be able to remain living in the community. It is important to investigate this further and for AAAs to consider what additional strategies could be implemented to increase social integration. Although it was not explored in this study, it is important to consider how the social interactions and informal assistance provided for older adults who are hard-to-reach influences their ability to access and utilize formal community-based services as well as how to support and encourage these interactions.
Overall Summary and Implications

This study examines the extent to which the current KDOA/AAA service system is serving older Kansans (aged 60+) with potential barriers to service use. The populations of interest for this project had one or more of the following characteristics: low income, minority status, rural residence, limited English proficiency, and/or low level of literacy. These hard-to-reach populations were identified based on language from the Older Americans Act, literature from the Centers for Medicare and Medicaid, and other literature describing populations who have difficulties accessing and utilizing community-based services. The information gathered through this study will enable the Kansas Department on Aging and Area Agencies on Aging to gain a more comprehensive understanding of how the KDOA/AAA service system is meeting the needs of older adults who meet the hard-to-reach criteria as well as learn how to more effectively serve these older adults.

This research report presents the findings of the three components of the project: mapping, surveys, and interviews. The mapping component illustrates the location of older adults meeting hard-to-reach criteria throughout the state of Kansas by examining the distribution of hard-to-reach older adults based on Census data in relation to the number who are receiving services. The survey component provides results of mailed surveys of case managers and phone surveys of intake personnel that explored barriers and successful strategies for serving older adults who met the hard-to-reach criteria as well as any additional information and resources identified by AAA staff members that could be helpful in further serving hard-to-reach older adults. Finally, we present information from in-person interviews that examined the experiences of older adults who met the hard-to-reach criteria focusing on barriers encountered, successful strategies of AAA staff, and suggestions on how to further reach hard-to-reach older adults. The key findings are highlighted below.

Key Findings: Mapping

- In Kansas, there are 454,837 adults aged 60 years and older. Of these, 34,009 are low income (8.0%), 79,603 live in rural residences (17.5%), 33,427 are members of racial and ethnic minority groups (7.3%), and 3,910 have limited English proficiency (0.9%).

- Higher proportions of each hard-to-reach group are concentrated in different Planning Service Areas and counties. Therefore, the structure of the older adult population in each PSA is unique and should be examined closely to determine the population who could be served.
Statewide, 30.0% of adults 60+ who are low income, 13.8% of adults living in a rural county, 10.5% of adults who are minorities, and 12.5% of adults with limited English proficiency received a KDOA/AAA assessment. For all hard-to-reach groups except limited English proficiency, OAA services are utilized by a higher percentage of older adults when compared to HCBS/FE and SCA services. A higher percentage of older adults with limited English proficiency utilize HCBS/FE services than OAA or SCA.

The percentage of hard-to-reach older adults receiving HCBS/FE services is highest for those who are low income (12.4%), followed by those with limited English proficiency (9.5%), minority status (3.6%), and rural residents (1.4%).

Overall, older adults in each of the hard-to-reach categories are accessing KDOA/AAA services at a higher rate than the general older adult population. The index of service use for any service provided by KDOA/AAA for hard-to-reach older adults was: low income (3.1), rural (1.5), minority status (1.2), and limited English proficiency (1.4). See p. 45 for an explanation of how the index of service use is calculated.

All hard-to-reach criteria except those who live in rural counties utilize HCBS/FE Waiver services at rates higher than the general population. The index of service use for HCBS/FE services was: low income (7.9), rural (0.9), minority status (2.5), and limited English proficiency (6.5).

There are tremendous variations in the service utilization patterns by hard-to-reach population across PSAs with hard-to-reach populations in certain PSAs utilizing services at a lower rate than the general population.

Key Findings: Case Manager Surveys

Case managers estimated that approximately two-thirds of the clients served by the Area Agencies on Aging are low income, almost fifteen percent live in rural areas or are members of a racial or ethnic minority group, and less than ten percent have limited English proficiency or a low level of literacy.

Case managers reported that older adults who lived in rural areas encounter barriers the most frequently of all hard-to-reach groups. This is followed by those with limited English proficiency and those with low levels of literacy. Individuals who are low income and of minority status encounter barriers to accessing and receiving services less frequently than other hard-to-reach groups.

Lack of knowledge of available service and generally, how the service system works, was one of the most commonly mentioned barriers identified by case managers for all hard-to-reach categories. In addition, older adults are at times unwilling to ask about or to apply for services, which was mentioned most frequently for minority groups. Other barriers encountered by low income older adults specifically include economic and financial barriers including the inability to afford a telephone or transportation. Transportation was also a concern for rural older adults as older adults were unable to get to services and service providers had difficulty reaching older adults. Older adults with limited English proficiency have difficulties communicating without an interpreter.
Although case managers were able to identify specific barriers for each of the hard-to-reach groups, it is important to note that many of these individuals are accessing and utilizing services. In part, the ability of older adults to access services is due to their own initiative and in part this is due to the ability of case managers to develop specific strategies for working with older adults who are hard-to-reach.

Some of the specific strategies identified as successful were: 1) For individuals of minority status or with limited English proficiency, case managers utilized informal services such as using family or friends to translate and finding services within the older adults’ ethnic community, 2) For older adults located in rural areas or who were low income, case managers facilitated self-directed services, and 3) Case managers spent extra time and had timely and consistent contact with older adults who had low levels of literacy in order to help them understand their services.

Key Findings: Intake Personnel Surveys

Intake personnel, in general, screen for all hard-to-reach criteria with the exception of low level of literacy. Intake personnel expressed that screening for minority status, even though part of the intake form, is awkward and therefore sometimes not done. Screening for English as a second language and low level of literacy can also be awkward.

Routine intake procedures of all older adults are believed to work well when serving hard-to-reach clients, with the exception of limited English proficiency clients who often require the use of translators or family and friends to help communicate.

Intake personnel stated that greater outreach, language resources, information resources, funding, and transportation resources would help to more adequately serve clients who meet hard-to-reach criteria.

Key Findings: Older Adult Interviews

The majority of older adults in hard-to-reach categories who were interviewed learned about services from a medical professional when utilizing medical services or immediately following a medical emergency, though many older adults living in rural residences discussed having long-term community knowledge of services.

Most hard-to-reach older adults who receive services could not remember receiving or viewing any outreach material about KDOA/AAA services prior to getting services. Those older adults who did see outreach materials most likely saw an advertisement in the newspaper and lived in a rural area.

The most prominent successful practice of AAA staff was the establishment of a positive relationship with the older adult by being polite, easy to speak with, and exceeding expectations. Case managers spent extra time with older adults and provided timely, consistent, and flexible meetings with hard-to-reach older adults.

To improve access to services and current services, older adults suggested having increased opportunities to talk face-to-face about services, more visibility of AAA services in communities, more funding for services, and number of additional resources.
and service improvements, such as improved training for those working with older adults and providing more opportunities for engaging activities.

- A large number of interviewees did not encounter barriers when accessing services. Those who did encounter barriers reported: having a lack of funds for filling gaps in services and for accessing services not paid for by the AAA, encountering a lack of service availability in their communities, experiencing delayed eligibility for services, and having an overall lack of knowledge of the service system.

- In addition, few older adults encountered barriers to utilizing services. Those barriers reported by the older adults were: being in a rural environment and having to travel long distances to obtain services, having limited English proficiency and not understanding paperwork written in English or having a translator to assist, or having a low level of literacy and not being able to comprehend information.

- Older adults in the study had a strong desire to remain living at home, therefore it is important for AAA’s to consider the multitude of informal and formal supports utilized by hard-to-reach older adults as well as the importance of social activities when helping to coordinate community-based services for these populations.

Integration of Study Components

In this segment, the literature review and findings for each hard-to-reach category of older adults are integrated. This composite picture can make it possible to identify current successes and next steps in improving services to hard to reach older adults.

Low-Income

Low income older adults are accessing services at 3.1 times the rate of the general older adult population in Kansas. This finding is not surprising given that low income older adults are one of the primary target groups for KDOA/AAAs. However, based on the case manager survey, 17% of case managers felt that low-income clients and often their families, lacked knowledge about available services—either about the services themselves or how to access services—and that this was a barrier. They also indicated that these older adults often lacked general knowledge about how the service system worked. A general lack of knowledge about available services was also reported in the literature for low income older adults as well as other hard-to-reach populations (Pezzin & Kasper, 2002). In addition, the low income population of older adults in the interview component of the study most often stated that they did not view any outreach material prior to receiving services, perhaps suggesting a lack of knowledge about available services until a medical crisis required older adults to find more assistance.

Further, a small percentage (7%) of the case manager surveys revealed that low-income older adults are often unwilling to apply for services, or see a stigma being attached to receiving
services. Prior research (Minear & Crose, 1996; N. E. Schoenberg et al., 2001) reveals that low income older adults may not access available services because of the threat of more financial expense. In addition, there was some indication that older adults are often unwilling to apply for services because of the difficulty and anxiety surrounding the application process and the feeling of discomfort about providing financial information, both of which could be related to stigma. Forty seven percent of case managers echoed what was found in the literature, with several case managers (n=10) pointing out that low income older adults could not afford services or did not have access to services because of a lack of telephone services or transportation (n=22). From the older adult interviews, similar findings emerged, such as the fact that low income older adults experienced difficulties in accessing services related to delayed eligibility and a lack of knowledge of the service system including eligibility guidelines. Older adults also mentioned that they knew friends and family members who were “too stubborn” or too proud to accept assistance, therefore went without help that could help them remain living in the community longer.

**Rural Residence**

According to the literature, a lack of available services, problems finding transportation, and a lack of awareness concerning available services all served as access barriers to older adults who live in rural residences. These barriers also emerged from the case manager surveys. Twenty-four percent of case managers mentioned that rural older adults had access barriers that were transportation-related, with older adults not being able to obtain transportation in order to reach service providers. In addition, 48% of case managers themselves faced transportation issues when trying to serve rural older adults. A number of the older adult interview participants living in rural areas found it difficult to access and utilize needed services due to transportation issues, particularly expenses related to driving long distances to obtain services due to high gas prices and no longer being able to drive.

This problem of transportation further exacerbates the issue of the shortage of providers in rural areas. The literature refers to the problem of provider availability (Krout, 2001), which resonated with the case manager surveys. Twenty-five percent of case managers claimed that the distance many of these older adults live away from services left them with few choices for services, with a lack of meal services being mentioned both by case managers (n=8) and the literature (Bull, 2003). This was also found in the older adult interviews where there tends to be a shortage of workers and services, particularly on the weekends. Case managers identified
self-directed services as one of the successful practices with rural older adults, which might be a result of the limited number of service providers.

Finally, a lack of knowledge concerning services was cited in the literature as being one of the most important factors impacting rural older adults’ utilization of service (Cherry, 2002; Minear & Crose, 1996; Richardson, 1992; Starrett & Decker, 1984; Yeatts et al., 1992). Interestingly, only 6% of case managers who responded to the survey felt that this was a barrier. In the older adult interviews, a lack of information did appear as a barrier to service use, particularly for low income and rural older adults.

A successful strategy mentioned by 40% of case managers was to use informal services in order to ensure that rural older adults’ needs were met. The literature also revealed that this trend was occurring, though it was indicated that informal support in rural areas is not greater than in urban areas (Krout, 1998). However, the large percentage of case managers who felt that using informal support was a successful strategy indicates that perhaps this is still a viable and reliable option in rural areas. Because of the heavy reliance on informal support networks in rural areas, additional initiatives to shore up these caregivers may help keep this critical source of care intact.

**Minority Status**

The information available in the literature concerning the service utilization by older adults of minority status differs somewhat from what emerged from the case manager surveys. For example, the literature indicates that a lack of culturally sensitive services, such as information in other languages and available translators/interpreters, is a major barrier to service utilization (Averill, 2002; Damron-Rodriguez, 1998; Damron-Rodriguez et al., 1994; Pardasani, 2004). Out of 32 case managers who stated that the barriers older adult clients of minority status faced to receiving services were cultural barriers, only 5 commented that the cultural barrier was associated with cultural perceptions and issues of trust due to cultural differences. The remainder of the case managers (n=27) associated the cultural barrier with communication issues due to language differences. None of the minority older adults interviewed thought that their minority status caused them difficulties in receiving or utilizing services. However, one must keep in mind that we interviewed people who had successfully accessed services and not necessarily those who struggled to find services. Further, knowledge barriers were also considered significant within the literature, but only 6% of case managers acknowledged this to be a barrier to service utilization by minority older adults, and no minority older adults stated that a lack of information was a barrier in obtaining services.
Another area in which the literature differs from the data collected via the case manager survey concerns informal support. According to the literature, older adults of minority status tend to utilize informal support due to (or as a result of) long-standing traditions based on shared cultural and historical experiences as well as mistrust of the formal service system (Carlton-Laney, 2006; Rasheed & Rasheed, 2003). While 19% of case managers found that minority older adults use informal services in order to meet their needs, these informal services were overwhelmingly language-based such as helping with translation (n=15). Sixteen minority older adults who were interviewed communicated that they depended on family and friends to assist and support them in meeting various needs, including but not limited to assistance with translation for those who also had limited English proficiency.

**Limited English Proficiency**

Thirty-three percent of case managers cited communication problems with clients due to differences in language. Older adults with limited English proficiency (n = 5) found that filling out paperwork and understanding material was difficult due to their limited English proficiency. The literature reveals a similar trend, with older adults with limited English proficiency receiving services based on inaccurate or incomplete information due to communication problems with providers (Office for Civil Rights, 2000). The literature also indicates that the use of “ad hoc” interpreters such as family or friends can actually serve as a barrier to service utilization due to perhaps a low level of comfort with the information being translated or the inaccuracies in translation. However, 30% of case managers who responded to the survey indicated that a successful practice they utilize to meet the needs of older adult clients with limited English proficiency was to rely on family members or friends to interpret. In addition, all of the limited English proficiency older adults who were interviewed relied on family and friends to assist them in meeting their daily needs as well as to help them communicate with medical personnel and service providers. The potential threats to effective service provision present when family and friends are relied on for translation may need to be explored more thoroughly with case managers and intake workers.

**Low Level of Literacy**

While low literacy is common in the general public, it is often hidden among older adults and difficult for experts to identify (Ad Hoc Committee on Health Literacy for the Council on Scientific Affairs & American Medical Association, 1999; Kutner et al., 2005). Although case managers who responded to the survey mentioned the social barriers that clients with low levels
of literacy face, only two brought up the fact that it is often difficult to ascertain whether or not an older adult client has a low level of literacy.

The fact that written materials associated with care programs are written at a high grade level is well-documented in the literature (Wilson et al., 2003), and two case managers specifically brought up the fact that all of the applications for state services require proficiency in use of written forms. Further, 29% of case managers stated that the fact that their clients could not read any mail associated with state programs was a barrier, while 11% said that these clients must have additional help in order to deal with paperwork. Older adults meeting the hard-to-reach category of a low level of literacy did find it difficult to understand information provided by KDOA/AAA. Case managers (n= 9) indicated that older adult clients with low levels of literacy may be afraid to sign any forms or paperwork due to the fact that they did not understand what was on the paper. A successful practice used to work with clients who have low levels of literacy is to read paperwork out loud and spend extra time ensuring that they understand the paperwork. Forty-one percent of case managers utilized this strategy which was found to be successful in the literature as well. Many older adults with a low level of literacy relied on family and friends to help them sort through mail and attend to important documents. In addition, a number of them utilized a power of attorney to pay bills and manage finances.

**Conclusion**

Our findings indicate that overall, older adults in each of the hard-to-reach categories are accessing KDOA/AAA services at a higher rate than the general older adult population. When we compared people who were low income and from a racial and ethnic minority group to the low income population, we found that minority older adults who met both criteria were accessing KDOA/AAA services at a higher rate than the low income older adult population. However, it does not tell us whether rates of service provision are adequate given the unique needs of these older adults. Information from case managers, intake personnel, and older adults themselves helped to identify successful practices already in place in certain regions of the state and also additional initiatives that KDOA and the AAA may need to undertake. The success of self-directed care, particularly with rural older adults and older adults with low income was reported. The need to attract more case managers from racial and ethnic minority groups and more bilingual case managers was pointed out. Wider use of interpreting services such as Language Line was urged, and suggestions for further training included cultural diversity and sensitivity training as well as training on what formal and informal services are available in different communities, particularly in rural areas. Strategies for screening for low level of literacy in ways
that are comfortable for both providers and older adults are needed. The need for more effective strategies to deal with high transportation costs, particularly in rural areas was a recurrent theme as was the need for more opportunities to talk face-to-face about services. These suggestions have been highlighted as a starting point in considering implications of the information contained in this report. KDOA and AAA staff who are experienced in service provision will undoubtedly be able to identify many more potential strategies to improve services for hard-to-reach older adults based on these results.
References


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