This research seeks to understand the factors associated with older rural migrant healthcare bypass, a behavior where patients travel farther than necessary to obtain primary healthcare. Since 1970 a significant portion of net in-migration flows of older adults have been into rural communities. One limitation in these rural communities is the sparse healthcare options for older migrants. While most residents in urban communities have multiple convenient and quality healthcare options, in rural communities there are fewer healthcare providers. Therefore, older migrants living in rural communities must expand the distance they are willing to travel to obtain similar levels of healthcare options. Although the willingness to bypass local healthcare can increase healthcare options for older migrants, bypassing local providers can erode the financial sustainability of local rural healthcare providers. Over time, this behavior can affect the viability of rural healthcare providers and in the extreme lead to the loss of the limited healthcare services that exist in rural communities resulting in a "healthcare desert" (Buczko, 1994, 2001; Chan et al., 2006; Hall, Marsteller, & Owings, 2010; Liu et al., 2008; Radcliff et al., 2003).

The net in-migration of older persons has been link to both the rural population rebound and economic revitalization of many rural communities (Glassgow 1980). As a result, some rural communities view retirement-age migration as a potential economic boon, and designed community development programs explicitly to attract older migrants (Reeder 1980). A major component of some of the older migration based development programs is an investment in local healthcare services. Because healthcare consumption increases with age, community developers consider providing quality local healthcare as an important factor in helping to recruit older migrants and capture the "gray gold"

associated with their pensions and retirement income (Brown and Glasgow 2008; Brown et al 2011). However, for these development policies to be successful, healthcare services need to be consumed locally. When older migrants choose to bypass local healthcare options, local physicians and clinics loose this important revenue stream. Analysis form this research indicates that almost 42% of all older migrants age 65 or older bypass local healthcare providers. This figure is double the bypass rates of non-migrant adults age 65 or older. The exceptionally high bypass rate of older migrants can potentially contribute to the loss of rural healthcare options for all rural residents.

This research builds on the bypass literature by arguing that healthcare selection is multifaceted, and that older migrants adults take into account the perceived quality of local healthcare and other community services, as well as social factors when selecting their healthcare (Cvitkovich and Wister 2001; Ziller et al 2003). Base on the outshopping theory, we argue that in addition to the level of satisfaction with local healthcare, dissatisfaction in local services and shops can "push" older migrants to bypass local healthcare and travel greater distances for primary healthcare. We further contend that assimilation of older migrants into communities, measured by a community attachment index, reduces the likelihood of bypass behavior. Strong community ties also help to create an opposite "pull" on older migrants and can help to negate the push of outshopping.

To test this hypothesis our analysis includes variables measuring how satisfied older adults are with local healthcare, local shopping, as well as measures of community attachment and social ties. Based on the bypass and outshopping literature it is expected that the level of dissatisfaction for healthcare and local shopping will significantly

increase the likelihood of older adult bypass behavior, while community ties, like the number acquaintances in the community and overall fit in a community, will decrease the probability of bypass.

Data for this analysis come from the Montana Health Matters (MHM) study. MHM gathered self reported information from Montana residents on their healthcare utilization patterns, satisfaction with healthcare services, healthcare access issues, military history, and current care giving arrangements. Measures of family, community and demographic characteristics provide the social context for the reported healthcare experiences. Of the 3,512 respondents in the MHM data, 283 were coded as older migrants because they reported moving to a new community in the past 10 years and were age 60 or older at the time of the move.

Results from logistic regression models indicate that dissatisfaction with local healthcare and shopping increased the likelihood of older migrants exhibiting bypass behavior (See Table 1). In addition, older migrants with strong social ties, measured by the percentage of people known in a community, as well as high levels of community attachment significantly reduce the likelihood of older migrants seeking healthcare outside their community. These findings are consistent with the outshopping literature and suggest that older migrants take into account both economic and social factors when selecting healthcare. The results of this research also suggest that the more assimilated older migrants are in their new community, the more likely they will choose local services.

The significance of the age variable indicates that older migrants age 70 or higher are less likely to exhibit bypass behavior. This finding is most likely associated with

decreased mobility and health often associated with older ages. The significant and positive effects of income on bypass behavior and the negative effects of the Medicare variable are most likely related, and suggest that the likelihood of bypass increases when older migrants have the financial resources needed to afford both private insurance and the added travel expenses associated with bypass behavior.

Table 1: Logistic Regression Examining the Odds of Older Migrant Healthcare Bypass

Variables	Odds Ratio
Dissatisfaction with local healthcare	1.23*
Dissatisfaction with local shopping	3.34**
Pct. Of people known in community	0.82*
Community attachment index	0.90*
Age 71+ (age 60-69 reference group)	0.94*
Male	1.18
Married	1.44
Self-reported health	1.16
College degree or more	1.02
Income	1.03*
Medicare (Employee/purchased insurance ref.)	.86*
Dissatisfaction with community roads	0.89

Notes: * $p < .5$, ** $p < .01$, *** $p < .001$.

The findings of the research indicate that older migrant healthcare selection is multifaceted. To fully understand how older migrants utilize healthcare services social and community characteristics, like the ones used above, must be included in future research. Finally, the results of this study can help to shape rural community development policies, as well as help to improve healthcare access of older migrants.