AMERICAN INDIANS AND ALASKA NATIVES IN NURSING HOMES: INITIAL RESULTS FROM THE 2008 MINIMUM DATA SET

Mario D. Garrett, Dave Baldrige, and Erin Williams

Abstract

This study questions the assumption that American Indian and Alaska Natives (AIANs) provide care for their frail older adults within the community. Using the Minimum Data Set (MDS) this study examined the status of Native elders in nursing homes compared to the white residents. The initial results indicate that AIANs enter the nursing homes at earlier stages of need and are more likely to be independent than white patients. In addition, AIANs were more likely to have lived alone or in another nursing home or residential facility prior to their present nursing home. This study is a wake-up call to examine the continuum of care for American Indian and Alaska Native elders. With the migration of young people out of Native communities, and with a lack of social services infrastructure, Native elders are being placed in nursing homes much earlier than necessary and earlier than whites.

Keywords: Aging, Indigenous, American Indian, Alaska Native, nursing home, continuum of care, ADL, IADL, MDS, Minimum Data Set, independence, family, socializing, missing cohort, dementia, cognitive impairment, demographic

Introduction

An assumption persists that American Indian and Alaska Natives (AIANs) — similar to other minority populations — provide care for their frail older adults within the community. However, earlier studies show that a subtle but radical demographic transition, currently underway in some Native communities, may prevent them from doing so. In some communities, potential caregivers do not exist because they have migrated out of the reservation/trust land/Native lands to meet work, education, or family obligations (Garrett et al., 2008; Garrett and McGuire, 2008; Garrett et al., 2010). In these studies, using 2000 US Census data, the demographic make-up of 345 Native communities was examined to identify those communities with a deficit of potential caregivers. Earlier results showed that the communities with the lowest percentages of potential caregivers — reflecting higher outmigration — also have higher unemployment (Garrett et al., 2010).

Demographically, some Native communities are losing their capacity to care for frail older adults. Lacking services in general, and specifically lacking supportive home-based services — these communities have few options when dealing with isolated frail and impaired older adults. When family members have either migrated out of the reservation or exceeded their caretaking limits, external support is necessary. This external support can be a combination of informal (neighbours, friends, extended family) or formal (home help agencies, county and state services). When such external support cannot be accessed because it either does not exist or is

* This project was made possible by partial funding to the American Association for International Aging from the Healthy Aging Program, Centers for Disease Control and Prevention, Atlanta, GA. The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.
unaffordable, the family is left with nursing home (NH) placement as the only viable option. This perspective argues that NH placement doesn’t necessarily mean that families have abandoned older adults, but that the elder requires care beyond that which the proximal family and community can provide.

The literature identifies two factors that predict NH placement—deterioration of the elder’s physical and mental state and/or the deterioration of the caregivers’ capacity to provide care. Previous studies have shown that because of migration there is an increased likelihood that vulnerable older adults have lost their familial support network. Currently, there are no studies evident that have looked at the deterioration of the AIAN elder’s physical and mental state prior to NH placement.

**ADLs**

Deterioration of the elder’s physical and mental state is usually measured by the level of help required for activities of daily living (ADL). Although assessment of ADL is crude, it remains a significant predictor of admission to a nursing home (Branch and Jette, 1982) as well as utilization of other services including: use of paid home care (Garber, 1989; Soldo and Manton, 1985); use of hospital services (Branch et al., 1981; Wan and Odell, 1981); living arrangements (Bishop, 1986); use of physician services (Wan and Odell, 1981); insurance coverage (Dunlop et al., 1989); and mortality (Manton, 1988). In this case the ability to perform ADLs has become a standard variable to include in analyses (Fillenbaum, 1987). Cognitive impairment and ADL status are separate, but correlated, dimensions of functioning (Fillenbaum et al., 1978). However, not all persons with substantial cognitive impairment have ADL needs and vice versa.

Although NH placement is usually set into motion by an elder or caregiver’s deteriorating physical or mental status, rather than a weakening of familial ties (Bowers, 1988), with AIAN communities — due to the migration of younger adults — this decision may occur earlier than in other ethnic groups. With fewer available caregivers, the level of burden on the remaining few caregivers may be exacerbated.

Caregivers’ burden has long been a topic of interest to researchers. Earlier studies have identified caregivers’ burden as arising from anxiety about managing in-home medical care to problems in dealing with psychosocial aspects of care, strains on family relations, and negative effects on personal health and well-being (Hennessy and John, 1996; John et al., 2011). As with the rest of the aging population, the older AIAN elders the more likely they are to develop disability and functional impairment, which cause significant burden to family caregivers who are less likely to have the appropriate home-based resources to assist them (Indian Health Service, 2001).

Without home-based supportive services, the tipping point for sending frail older adults to NHs may be far earlier than it would be for older adults residing in communities with home-based supportive services. In a review of the effectiveness of community-based assessments of geriatric patients (Smith et al., 1993) it was reported that some clients who met criteria for NH admission can still be cared for in the community without NH placement. Furthermore, the provision of home and community services may prevent or delay nursing home placement (Gunner-Svensson et al., 1984; Montgomery and Borgatta, 1989; Stuck et al., 1995). While tribes recognize the need for long-term care, only a few have the resources to develop tribal nursing homes (Administration on Aging, 2002). Consequently, most AIAN elders are either cared for at home or reside in non-native NHs, sometimes far from reservation or home. This suggests that AIANs enter NHs at earlier stages of need and therefore are more functional than other residents.

**FAMILY**

In the general population, families and friends often stay in contact with older adults following institutionalization. Families and friends continue to be involved with residents after placement by remaining emotionally close, continuing to provide basic care and/or support to residents, and participating in decision-making (Bitzan and Kruzich, 1990; Naleppa, 1996; Rowles and High, 2003; Schwartz and Vogel, 1990; Stull et al., 1997). This is, however, dependent on the proximity of the NH. If the NH is too far from the community, maintaining contact with the residents may be eroded. Proximity to the NH
has been linked to an increase in family visits (Bitzan and Kruzich, 1990; Gaugler et al., 2003; Greene and Monahan, 1982; Port et al., 2001; Yamamoto-Mitani et al., 2002).

There is no literature that examines the level of contact by family and friends with AIAN NH residents. If proximity to a NH is a determining factor for contact, then it is important to locate NHs in close proximity to Native communities. However, one recent survey reported that only 15% of tribes had nursing home services and 16% had assisted living services available for elders (Goins, 2010). Fewer than 16 tribally managed NHs exist among 568 tribes (IHS, 2010; Benson, 2002; Finke, 2002; Smith, 1993). Those that do exist often have limited services, lack certified doctors and staff, and are relatively small with an average bed capacity of about 50 (Finke, 2002). In addition, there are no known urban tribal nursing homes (Forquera, 2002). While only a few tribes have NHs on reservation or in close proximity to reservations, most NHs are located far away from tribal communities (Jervis et al., 2002; Manson and Callaway, 1988). If NHs are likely to be located away from the reservation/trust lands, this may have a detrimental effect on family and friends’ interaction with the AIAN NH resident.

SOCIALIZING
Elders in nursing homes far from their families often feel isolated and abandoned because families cannot visit on a regular basis. In addition, the lack of AIAN-managed and staffed NHs may translate to cultural needs being met inadequately or not at all. Most elders want to remain close to family members. Those that had a close family life before entering NH are more likely to continue to have close contact with their family once institutionalized (Friedemann et al., 1999; Bowers, 1988, Gaugler et al., 2003; Naleppa, 1996, Port et al., 2001, Yamamoto-Mitani et al., 2002). If family involvement is possible (or desirable) residents still report that they want to retain some of their normal behaviours such as eating familiar foods and practicing traditional rituals that bring them comfort (Jervis et al., 2002).

AIANs tend to be more group-oriented rather than individualistic (Joe and Malach, 1992; Brucker and Perry, 1998) and can be seen as being more concerned with other community residents than themselves. Whether this is retained in NHs is not known. Sharing has been documented to represent an expression of AIAN’s honour and respect (Brucker and Perry, 1998; Garrett and Garrett, 1994). Whether this remains true in NHs might be challenged.

DESIGN AND METHODS
The Minimum Data Set (MDS) is a standardized, uniform, comprehensive assessment of all residents in Medicare or Medicaid certified facilities mandated by federal law (P.L.100-203). The MDS is completed by each NH and electronically transmitted to state authorities, identifying potential resident problems, strengths, and preferences. Some 483 variables are collected by nurses on each patient that enters a NH (see Appendix 1 for list of variables).

The role of the MDS has expanded beyond its primary purpose of an assessment tool for individualized care plans. Data collected from MDS assessments are used for the Medicare reimbursement system, many state Medicaid reimbursement systems, and to monitor the quality of care provided to NH residents. The MDS, containing items that reflect the acuity level of the resident including diagnoses and treatments, and an evaluation of the resident’s functional status, is used to monitor the quality of care in the nation’s NHs.

Access to the MDS database is provided by The Research Data Assistance Center (ResDAC) at the University of Minnesota which contracts with the federal Centers for Medicare and Medicaid Services (CMS). A request for the data was submitted through ResDAC with payment of $5,000. Because the ethnic code is incorrect in the data file, the file was merged with a corrected ethnicity code from a private company, Buccaneer Incorporated. The resultant data file combines corrected ethnic codes and data from the beneficiary files.

For ethnicity, the MDS form uses six mutually exclusive categories: White not of Hispanic origin (hereafter referred to as white), Black or African American, Other, Asian or Pacific Islander, Hispanic (regardless of race, hereafter referred to as Latinos/Hispanic), and American Indian and Alaska Native (hereafter referred as AIAN).
**Study Measures**

To measure the racial and ethnic composition of the nursing home population, we used both the absolute number and the percentage share of residents in each racial and ethnic group, all at the national level. The analyses include cross tabulation of ethnic categories by all variables in the MDS.

**Limitations**

Our analysis was based on annual snapshots of the nursing home population, including everyone residing in a facility at a given period in time. We eliminated those that died during that year, in order to minimize the effect of increasing medical complications associated with moribund patients.

**Results**

There were 2,308,759 total cases in the MDS database for 2008, which translates to 2,308,759 residents in NHs. The category “Other” was cross-tabulated with state data. Most of these cases came from California (28.1%), Hawaii (9.7%), and Texas (4.4%). For parsimony, and to match other studies, the “Other” category was combined with “Latino/Hispanic.” We do not use this combined category in this study. Comparative analysis is conducted between AIAN and white. To minimize biases from moribund patients — those that are approaching death — NH residents who died that year were eliminated from the analyses. This reduced the data by 518,938 or 22.5% to 1,789,821. Duplicate entries on the basis of the beneficiary ID and state were culled and the latest entry retained. This dual filtering — residents who died that year and duplicate cases — is illustrated in Table 1.

Using these categories, cross-tabulations were run against all of the outcome variables. The initial results (Table 2) indicated significant differences between ethnic groups, with AIANs showing the highest or lowest rates in some variables. Table 2 shows a list (below) identifying all variables where AIAN showed significant differences when compared against all the other ethnic groups:

Identifying significant differences between ethnic groups across specific variables is interesting, but does not necessarily point to a trend. Therefore, the analysis categorized individual variables into groups related to ADLs, family, and socializing.

**ADLS**

Activities of Daily Living (ADL) was not administered as part of the Minimum Data Set. Instead a much more detailed review of the patient’s level of independence was conducted. This included the following variables:

- Bed mobility self performance
- Bed mobility support provided
- Transfer self performance
- Transfer support provided
- Walk in room self performance
- Walk in room support provided
- Walk in corridor self performance
- Walk in corridor support provided
- Locomotion on unit self performance
- Locomotion on unit support provided

---

**Table 1: Frequency and Percentage of Nursing Home Population in the Minimum Data Set for 2008 after Filtering for Those Who Died in 2008 and had Duplicate Records as Compared with Two Other Studies, Buchanan et al. (2008) and Feng et al. (2011) That Report Data for the MDS for 2008.**

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Raw Frequencies</th>
<th>Raw %</th>
<th>Filtered Frequencies</th>
<th>Filtered %</th>
<th>Final Frequencies</th>
<th>Final %</th>
<th>Buchanan* %</th>
<th>Feng** %</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>1,963,092</td>
<td>85.0</td>
<td>76.9</td>
<td>1,314,341</td>
<td>86.0</td>
<td>79.0</td>
<td>86.7</td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>221,324</td>
<td>9.6</td>
<td>78.6</td>
<td>150,033</td>
<td>9.8</td>
<td>12.9</td>
<td>9.6</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>17,822</td>
<td>0.8</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>24,246</td>
<td>1.1</td>
<td>79.0</td>
<td>13,087</td>
<td>0.9</td>
<td>1.9</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>Latino/Hispanic</td>
<td>37,491</td>
<td>1.6</td>
<td>77.5</td>
<td>44,615</td>
<td>2.9</td>
<td>5.3</td>
<td>2.3</td>
<td></td>
</tr>
<tr>
<td>American Indian/Alaska Native</td>
<td>8,260</td>
<td>0.4</td>
<td>79.5</td>
<td>5,444</td>
<td>0.4</td>
<td>0.7</td>
<td>—</td>
<td></td>
</tr>
</tbody>
</table>

* Buchanan et al., 2008; ** Feng et al., 2011
Table 2: Variables from the Minimum Data Set for 2008 Found to be Significantly Different for American Indian and Alaska Native When Compared with other Ethnic Groups (Parenthesis Includes Original MDS Variable Name)

| (AB5A) Prior stay in this nursing home | (E4DB) Socially inappropriate behavior alterability (no) | (J2L) Wound infection |
| (AB5B) Stay in other nursing home | (E5) Change in behavioral symptoms (deteriorated) | (J1A) Weight gain/loss of ≥15 pounds |
| (AB5D) MH/Psychiatric setting | (F1A) At ease interacting with others | (J1D) Insufficient fluid |
| (AB5E) MR/DD setting | (F1E) Pursues involvement in life of facility | (J1E) Delusions |
| (AB7) Education (no schooling) | (F1F) Accepts invitations into most group activities | (J1O) Vomiting |
| (AB9) Mental health history | (F2E) Absence of personal contact with family/friends | (J2B) Pain intensity |
| (AB10A) No MR/DD | (F2G) Does not adjust well easily to change in routine | (J3B) Bone pain |
| (AC1B) Naps regularly during day | (F2H) None of above unsettled relationships | (J3D) Headache |
| (AC1E) Spends most of time alone/ | (F3A) Strong identifications with past roles | (J3F) Incisional pain |
| watching TV | (F3B) Expresses sadness/anger over lost roles | (J3G) Joint pain |
| (AC1J) Eats between meals | (F3C) Perceived daily routine is very different from prior pattern in community | (J3H) Soft tissue pain |
| at least weekly | (G1AA) Bed mobility self performance (with bed rails) | (J4B) Fell in past 31-180 days |
| (AC1M) In bedclothes much of day | (G1BA) Transfer self performance | (J5A) Conditions/disease make resident’s mood/behavior unstable |
| (with blacks) | (G1CA) Walk in room self performance | (J5B) Resident experiencing episode of recurrent/chronic problem |
| (AC1N) Wakens to toilet most nights | (G1DA) Walk in corridor self performance | (K4A) Complains about the taste of many foods |
| (AC1O) Has irregular bowel movement | (G1EA) Locomotion on unit self performance | (L1F) Daily cleaning of teeth/dentures |
| (AC1P) Showers for bathing | (G1GA) Bathing self performance | (M4E) Skin desensitized to pain/pressure |
| (AC1W) Daily animal companion/presence | (G1HA) Eating self performance (with Whites, but with less help) | (M5B) Pressure relieving devices for bed (no) |
| (B2A) Short term memory (OK) | (G2A) Toileting self performance | (M6B) Infection of foot |
| (B5A) Easily distracted (with white | (G3A) Balance while standing | (M6C) Open lesions on foot |
| present long term) | (G3B) Balance while sitting | (M6D) Nails/calluses trimmed on foot |
| (B5B) Altered perception (not present with whites) | (G4AA) Neck range of motion (G4AB) Neck voluntary movement | (N2) Time involved in activities (more than 2/3 of time) |
| (B5C) Disorganized speech (not present) | (G5A) Bed mobility self performance (with bed rails) | (N3A) Prefers own room |
| (B5E) Lethargy (not present) | (G5B) Transfer self performance | (N3B) Prefers day/activity room |
| (C3A) Speech (to communicate) | (G6A) Resident believes he/she capable of increased independence (do not) | (N3C) Prefers inside NH/off unit |
| (C6) Ability to understand others | (H1B) Bladder continence | (N3D) Prefers outside activity |
| (E1E) Self depreciation (no) | (H3D) Indwelling catheter (11.5%) | (N3E) None of above preferred activity settings |
| (E1J) Unpleasant mood (no) | (H3G) Pads/briefs used (do not) | (N4A) Cards/other games |
| (E1L) Sad facial expressions (no) | (H4) Change in urinary continence (improved) | (N4B) Crafts/arts |
| (E2) Mood persistence (no) | (H4A) Wandering frequency (not exhibited this week) | (N4C) Exercises/sports |
| (E3) Change in mood (improved) | (H4B) Wandering alterability (not present) | (N4G) Trips/shopping |
| (E4AA) Wandering frequency (not present) | (H4C) Verbally abusive frequency (no) | (N4H) Walking/wheeling outdoors |
| (E4AB) Wandering alterability (not present) | (H4D) Verbally abusive alterability (no) | (N4K) Talking or conversing |
| (E4AD) Verbally abusive frequency | (I1Q) Alzheimer’s disease (do not) | (N4L) Helping others |
| (E4A) Verbally abusive frequency (no) | (H4E) Physically abusive frequency (no) | (I2A) Antibiotic resistant infection |
| (E4BB) Verbally abusive alterability (no) | (I1W) Multiple Sclerosis (do not) | (I2C) Bed mobility self performance (with bed rails) |
| (E4CA) Physically abusive frequency (no) | (I1X) Paraplegia (do not) | (I2D) Transfer self performance |
| (E4CB) Physically abusive alterability (no) | (I1Z) Quadriplegia (do not) | (I2E) Vomiting |
| (E4DA) Socially inappropriate behavior frequency (no) | (I1Q) Alzheimer’s disease (do not) | (I2F) Walk in room self performance |
| (E4DB) Socially inappropriate behavior alterability (no) | (I1U) Dementia other than Alzheimer’s disease (do not) | (I2G) Walk in corridor self performance |
| (E5) Change in behavioral symptoms (deteriorated) | (I1V) Dementia other than Alzheimer’s disease (do not) | (I2H) Change in urinary continence (improved) |
| (F1A) At ease interacting with others | (I1W) Multiple Sclerosis (do not) | (I2I) Wound infection |
| (F1E) Pursues involvement in life of facility | (I1X) Paraplegia (do not) | (I2L) Wound infection |
| (F1F) Accepts invitations into most group activities | (I1Z) Quadriplegia (do not) | (J2B) Pain intensity |
| (F2E) Absence of personal contact with family/friends | (I2A) Antibiotic resistant infection | (J3B) Bone pain |
| (J1A) Weight gain/loss of ≥15 pounds | (J1D) Insufficient fluid | (J3D) Headache |
| (J1E) Delusions | (J1O) Vomiting | (J3F) Incisional pain |
| (J1O) Vomiting | (J3G) Joint pain | (J3H) Soft tissue pain |
| (J1O) Vomiting | (J3H) Soft tissue pain | (J4B) Fell in past 31-180 days |
| (J1O) Vomiting | (J3H) Soft tissue pain | (J5A) Conditions/disease make resident’s mood/behavior unstable |
| (J1O) Vomiting | (J3H) Soft tissue pain | (J5B) Resident experiencing episode of recurrent/chronic problem |
| (J1O) Vomiting | (J3H) Soft tissue pain | (K4A) Complains about the taste of many foods |
| (J1O) Vomiting | (J3H) Soft tissue pain | (L1F) Daily cleaning of teeth/dentures |
| (J1O) Vomiting | (J3H) Soft tissue pain | (M4E) Skin desensitized to pain/pressure |
| (J1O) Vomiting | (J3H) Soft tissue pain | (M5B) Pressure relieving devices for bed (no) |
| (J1O) Vomiting | (J3H) Soft tissue pain | (M6B) Infection of foot |
| (J1O) Vomiting | (J3H) Soft tissue pain | (M6C) Open lesions on foot |
| (J1O) Vomiting | (J3H) Soft tissue pain | (M6D) Nails/calluses trimmed on foot |
| (J1O) Vomiting | (J3H) Soft tissue pain | (N2) Time involved in activities (more than 2/3 of time) |
| (J1O) Vomiting | (J3H) Soft tissue pain | (N3A) Prefers own room |
| (J1O) Vomiting | (J3H) Soft tissue pain | (N3B) Prefers day/activity room |
| (J1O) Vomiting | (J3H) Soft tissue pain | (N3C) Prefers inside NH/off unit |
| (J1O) Vomiting | (J3H) Soft tissue pain | (N3D) Prefers outside activity |
| (J1O) Vomiting | (J3H) Soft tissue pain | (N3E) None of above preferred activity settings |
| (J1O) Vomiting | (J3H) Soft tissue pain | (N4A) Cards/other games |
| (J1O) Vomiting | (J3H) Soft tissue pain | (N4B) Crafts/arts |
| (J1O) Vomiting | (J3H) Soft tissue pain | (N4C) Exercises/sports |
| (J1O) Vomiting | (J3H) Soft tissue pain | (N4G) Trips/shopping |
| (J1O) Vomiting | (J3H) Soft tissue pain | (N4H) Walking/wheeling outdoors |
| (J1O) Vomiting | (J3H) Soft tissue pain | (N4K) Talking or conversing |
| (J1O) Vomiting | (J3H) Soft tissue pain | (N4L) Helping others |
- Locomotion off unit self performance
- Locomotion off unit support provided
- Dressing self performance
- Dressing support provided
- Eating self performance
- Eating support provided
- Toilet use self performance
- Toilet use support provided
- Personal hygiene self performance
- Personal hygiene support provided
- Bathing self performance
- Bathing support

For each of these variables the code 0 was designated for those patients that needed “no setup or physical help from staff.” If a patient recorded that they did not need any setup of physical help from staff, for all 22 variables listed above, they were identified as completely independent. There were 3,557 White and 31 AIAN NH patients who reported that they did not need any help with any of these activities.

The $\chi^2$ was significant ($\chi^2 = 756.945$, df = 1, two-tailed test $p < 0.001$). The odds ratio (OR) shows that most patients in NHs are likely to be dependent (2.1 times more likely to be dependent; with a Confidence Interval (95% CI) of 1.48–3.0). AIANs are half as likely to be dependent as White patients in NHs (OR = 0.476; 95% CI = 0.335 - 0.676).

Another indicator of independence was behaviour. The following ten variables were selected to identify problematic behaviours:
- Wandering frequency
- Wandering alterability
- Verbally abusive frequency
- Verbally abusive alterability
- Physically abusive frequency
- Physically abusive alterability
- Socially inappropriate behavior frequency
- Socially inappropriate behavior alterability
- Resists care frequency
- Resists care alterability

For these variables a score of “0” indicated that the “Behavior not exhibited this week” or “Behavior not present.” A variable was computed that aggregates all the variables where the resident was reported not to have any of these ten problematic behaviours. Those that scored “0” in all variables were placed in the category of non-problematic behaviours. The results show that there were 1,065,234 White and 4,359 AIAN who did not exhibit any problematic behaviours.

The $\chi^2$ was not significant. The odds ratio (OR) shows that most patients in NH are just as likely to have problematic behaviours as are not likely (OR=0.940; 95%CI=0.879-1004). AIANs are just as likely as White to not exhibit problematic behaviours.

### Table 3: Crosstabulating White and AIAN against Being Completely Independent in Nursing Homes

<table>
<thead>
<tr>
<th>Race</th>
<th>Total</th>
<th>White</th>
<th>AIAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count</td>
<td>1316197</td>
<td>1310784</td>
<td>5413</td>
</tr>
<tr>
<td>% Within</td>
<td>99.6</td>
<td>.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Independent</td>
<td>99.7</td>
<td>99.4</td>
<td>99.7</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>3588</td>
<td>3557</td>
<td>31</td>
</tr>
<tr>
<td>% Within</td>
<td>99.1</td>
<td>.9</td>
<td>100.0</td>
</tr>
<tr>
<td>Independent</td>
<td>.3</td>
<td>.6</td>
<td>.3</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count</td>
<td>1319785</td>
<td>1314341</td>
<td>5444</td>
</tr>
<tr>
<td>% Within</td>
<td>99.6</td>
<td>.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Independent</td>
<td>100.0</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

### Table 4: Crosstabulating White and AIAN against Non-problematic Behaviour in Nursing Homes

<table>
<thead>
<tr>
<th>Race</th>
<th>Total</th>
<th>White</th>
<th>AIAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count</td>
<td>250192</td>
<td>249107</td>
<td>1085</td>
</tr>
<tr>
<td>% Within</td>
<td>99.6</td>
<td>.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Behaviour</td>
<td>19.0</td>
<td>19.9</td>
<td>19.0</td>
</tr>
<tr>
<td>Count</td>
<td>1069593</td>
<td>1065234</td>
<td>4359</td>
</tr>
<tr>
<td>% Within</td>
<td>99.6</td>
<td>.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Non-problematic Behaviour</td>
<td>81.0</td>
<td>80.1</td>
<td>81.0</td>
</tr>
<tr>
<td>Count</td>
<td>1319785</td>
<td>1314341</td>
<td>5444</td>
</tr>
<tr>
<td>% Within</td>
<td>99.6</td>
<td>.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>
FAMILY

Four variables were used to assess family involvement prior to NH placement and during NH residence.

- Live alone prior to entry
- Prior stay in this nursing home
- Stay in other nursing home
- Other residential facility
- Openly express conflict with family/friends
- Absence of personal contact with family/friends

A recorded value of “0” in each of these variables denoted that the patient did not live alone or had any prior stay in this or any other NH or residential facility. Three other variables can be used as a proxy for family/friends involvement with the NH resident:

- Resident supported by someone
- Family participation in assessment
- Significant other participation in assessment

For these variables a “1” signified that there was someone to support the resident in NH. These nine variables were combined to create an additional variable that approximates prior ties with family and friends, and current ties with family and friends, while in NH placement. The final variable was applied as an indication of the availability and proximity of family or friends to the NH resident. There were 36,283 White and 118 AIAN NH residents who did not live alone or in NH/residential facility prior to the present NH placement, and who had someone supporting them during the participation of the MDS assessment process.

The χ² analysis was significant (χ² 7.1089, df = 1, p < 0.007). The odds ratio shows that most NH residents were 78% less likely to not have lived alone or in NH/residential facility prior to the present NH placement, and less likely to have someone supporting them during the participation of the MDS assessment process (OR = 0.78; 95% CI = 0.65 - 0.937). AIANs were 28% more likely (OR = 1.28; 95% CI = 0.67 - 1.536) to have lived alone or in NH/residential facility prior to the present NH placement, and less likely to have someone supporting them during the participation of the MDS assessment process.

SOCIALIZING

There were no formal standardized tests of socializing activity. However the MDS does have a detailed review of the patient’s level of preference for activities that included the following variables:

- Prefers day/activity room
- Prefers inside NH/off unit
- Prefers outside activity
- None of above preferred activity settings
- Cards/other games
- Crafts/arts
- Exercises/sports
- Music
- Reading/writing
- Spiritual/religious activities
- Trips/shopping
- Walking/wheeling outdoors
- Watching TV
- Gardening or plants
- Talking or conversing
- Helping others

If a patient recorded that they undertook any of these activities a “1” was recorded for that variable. Combining all variables, a new variable was created—identified as “social,” the higher the number the more activities within this list that the patient performed. There were 131,328 White and 538 AIAN NH patients who reported that they performed all of these activities, and these were designated as social in the analysis.
The $\chi^2$ analysis was not significant. The odds ratio (OR) shows that most patients in NH are just as likely to be social as not social (OR=0.988; 95% CI=0.904–1.08). The same result comes out for the analysis comparing AIAN being more social than White (OR=1.012; 95% CI=0.926–1.106).

**Table 6: Cross-tabulating White and AIAN against being completely Social in Nursing Homes**

<table>
<thead>
<tr>
<th></th>
<th>Race</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>White</td>
<td>AIAN</td>
<td>Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social</td>
<td>Count</td>
<td>1183013</td>
<td>4906</td>
<td>1187919</td>
<td></td>
</tr>
<tr>
<td></td>
<td>% Within Social</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>99.6%</td>
<td>.4%</td>
<td>100.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not Social</td>
<td>Count</td>
<td>131328</td>
<td>538</td>
<td>131866</td>
<td></td>
</tr>
<tr>
<td></td>
<td>% Within Social</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>99.6%</td>
<td>.4%</td>
<td>100.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social</td>
<td>Count</td>
<td>1314341</td>
<td>5444</td>
<td>1319785</td>
<td></td>
</tr>
<tr>
<td></td>
<td>% Within Social</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>99.6%</td>
<td>.4%</td>
<td>100.0%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Discussion**

The analysis resulted in three significant findings. AIANs are more likely to be independent than White patients in NHs. AIAN NH residents are a third more likely to have lived alone or in another NH/residential facility prior to the present NH placement. And the final finding in this study was that AIAN NH residents are less likely to have someone supporting them during the participation of the MDS assessment process. The general premise of this analysis is that family or friend involvement is limited prior to, and during NH placement, but that AIANs are more likely to be independent and require “no setup or physical help from staff.”

**Conclusion**

Tribes acknowledge the need to build new nursing homes on reservations, support or enhance existing tribal nursing homes, and work with non-Indian homes to bring traditional foods, language, and activities to the elders who reside there. However, these identified needs cannot be filled with current limited resources (Benson et al., 2002). It is also difficult to address the migration of adults out of reservation or trusts lands to find work when reservations have chronic unemployment.

Demographic changes have repercussions. Social upheaval results when younger cohorts move away from a reservation to find work. These young migrants are likely to be better educated and healthier, and their departure leaves noticeable gaps in their community. We have started to examine only one aspect of this vacuum; elder care. Other repercussions from this demographic transition may involve the status of younger children, economic development, and cultural discontinuity. Moving to more urban communities with better infrastructures, employment prospects, and higher standards of living means that few are prepared to return home and accept the conditions at their original communities. The impression is that these conditions will be long rather than short-term.

This study looked at an aspect of these implications on NH placement among AIANs. The implications from this demographic transition suggest that AIANs enter NHs at earlier stages of need. The analysis satisfied this premise. AIANs are more likely to be independent than White patients in NHs.

That AIANs were a third more likely to have lived alone or in NH/residential facility prior to their present NH placement attests to the likelihood that they did not have caregivers within the community. Again this does not seem to be a temporary phenomenon. Because AIAN NH residents were less likely to have someone supporting them during the MDS assessment process it is likely that contact with family and friends in NH is more limited than for White residents.

This study raises a number of potential issues with AIANs in NHs. Of interest is the sequence of events before AIAN elders are admitted to a NH. While residing in NHs it would be of interest to examine what barriers exist for family and friends to visit, and to examine transportation issues.

This study is a wakeup call to examine the continuum of care for American Indian and Alaska Native elders. Demographic changes within the community have direct repercussions on AIAN elders. Delaying entry to nursing homes might be
a reachable goal among Native communities. With the migration of young people out of Native communities, and with a lack of social services infrastructure, Native elders are being placed in nursing homes much earlier than is necessary.

**Acronyms**

AIAN American Indian and Alaska Native  
MDS Minimum Data Set, an intake form used to evaluate all patients in Nursing Homes  
NHs Nursing Homes  
ResDAC The Research Data Assistance Center, at the University of Minnesota  
CMS Centers for Medicare and Medicaid Services, a federal agency

**References**


American Indian and Alaska Native communities. The IHS Primary Care Provider, 33(4), 105–111.


Appendix 1

1. Resident Internal ID
2. State ID
3. Encrypted CCW BENE_ID
4. (A10B) Do Not Resuscitate
5. (A7G) Self/Family Pay Full Per Diem
6. (A9A) Legal Guardian
7. Matched on CCW RES_INT_ID/STATE_ID
8. (A5) Marital Status
9. (A9C) Power of Attorney/Health Care
10. (A9D) Power of Attorney/Financial
11. (A9E) Family Member Responsible
12. (A9F) Patient Responsible for Self
13. (A9G) None of Above Legal Guardian
14. (A10A) Living Will
15. (A10C) Do Not Hospitalize
16. (A10D) Organ Donation
17. (A10E) Autopsy Request
18. (A10F) Feeding Restrictions
19. (A10G) Medication Restrictions
20. (A10H) Other Treatment Restrictions
21. (A10I) None of the Above Advanced Directives
22. (AA3) Birth Date
23. (AAA) Race/Ethnicity
24. (AB1) Date of Entry
25. (AB3) Lived Alone Prior to Entry
26. (AB4) ZIP Code of Prior Primary Residence
27. (AB5A) Prior Stay in This Nursing Home
28. (AB5B) Stay in Other Nursing Home
29. (AB5C) Other Residential History
30. (AB5D) MH/Psychiatric Setting
31. (AB5E) MR/DD Setting
32. (AB5F) None of Above Residential History
33. (AB6) Lifetime Occupation
34. (AB7) Education
35. (AB8A) Language
36. (AB8B) Other Language
37. (AB9) Mental Health History
38. (AB10A) No MR/DD
39. (AB10B) Downs Syndrome
40. (AB10C) Autism
41. (AB10D) Epilepsy
42. (AB10E) Other Organic Condition Related to MR/DD
43. (AB10F) MR/DD with No Organic Condition
44. (AB11) Background Information Completed Date
45. (AC1A) Stays Up Late at Night
46. (AC1B) Naps Regularly During Day
47. (AC1C) Goes Out 1+ Days a Week
48. (AC1D) Stays Busy With Hobbies/Reading/Fixed Daily Routine
49. (AC1E) Spends Most of Time Alone/Watching TV
50. (AC1F) Moves Independently Indoors
51. (AC1G) Overseas of Tobacco Products at Least Daily
52. (AC1H) None of Above Cycle of Daily Events
53. (AC1I) Distinct Food Preferences
54. (AC1J) Eats Between Meals
55. (AC1K) Use of Alcoholic Beverages at Least Weekly
56. (AC1L) None of Above Eating Patterns
57. (AC1M) In Bedclothes Much of the Day
58. (AC1N) Wakens to Toilet Most Nights
59. (AC1O) Has Irregular Bowel Movement Pattern
60. (AC1P) Showers for Bathing
61. (AC1Q) Bathing in PM
62. (AC1R) None of Above ADL Patterns
63. (AC1S) Daily Contact with Relatives/Closed Friends
64. (AC1T) Usually Attends Church/Temple/Synagogue
65. (AC1U) Finds Strength in Faith
66. (AC1V) Daily Animal Companion/Presence
67. (AC1W) Involved in Group Activities
68. (AC1X) None of Above Involvement Patterns
69. (AC1Y) Unknown Customary Routine
70. (B1) Comatose
141. (F1F) Accepts Invitations Into Most Group Activities
140. (F1E) Establishes Own Goals
139. (F1D) At Ease Doing Planned Activities
138. (F1C) At Ease Doing Self-Initiated Activities
137. (F1B) At Ease Interacting with Others
136. (F1A) At Ease Doing Most Group Activities
135. (E4CA) Physically Abusive Frequency
134. (E4BB) Verbally Abusive Alterability
133. (E4BA) Verbally Abusive Frequency
132. (E4AB) Wandering Alterability
131. (E4A) Change in Mood
130. (E4) Change in Community
129. (E3C) None of Above Visual Limitations
128. (E3B) None of Above Visual Limitations
127. (E3A) None of Above Visual Limitations
126. (E3) Visual Appliances
125. (E2O) Withdrawal
124. (E2N) Repetitive Physical Movements
123. (E2M) Crying
122. (E2K) Insomnia
121. (E2I) Repetitive Health Complaints
120. (E2H) States Something Terrible About to Happen
119. (E2G) Unrealistic Fears
118. (E2F) Persistent Anger
117. (E2E) Repetitive Verbalizations
116. (E2D) None of Above Modes of Locomotion
115. (E2C) Other Limitation of Range of Motion
114. (E2B) Other Limitation of Voluntary Movement
113. (E2A) Covert/Open Conflict with Staff
112. (E1O) Withdrawal
111. (E1N) Repetitive Physical Movements
110. (E1M) Crying
109. (E1L) Repetitive Physical Movements
108. (E1K) Insomnia
107. (E1J) Unpleasant Mood
106. (E1I) Repetitive Anxious Complaints
105. (E1H) Repetitive Health Complaints
104. (E1G) States Something Terrible About to Happen
103. (E1F) Unrealistic Fears
102. (E1E) Self Depreciation
101. (E1D) Persistent Anger
100. (E1C) Repetitive Verbalizations
99. (E1B) Repetitive Questions
98. (E1A) Negative Statements
97. (E1) Mode of Expression
96. (E3C) None of Above Communication Devices
95. (E3B) None of Above Communication Devices
94. (E3A) None of Above Communication Devices
93. (E3) Communication Board
92. (E2D) None of Above Modes of Locomotion
91. (E2C) Other Limitation of Range of Motion
90. (E2B) Other Limitation of Voluntary Movement
89. (E2A) Covert/Open Conflict with Staff
88. (E2) Mode of Expression
87. (E1) Mode of Expression
86. (C1) Hearing
85. (C2) Hearing
84. (C3) American Sign Language/Braille
83. (C4) Making Self Understood
82. (C5) Speech Clarity
81. (C6) Ability to Understand Others
80. (B3B) Altered Perception
79. (B3A) Current Season
78. (B3) Location of Own Room
77. (B3E) None of Above are Recalled
76. (B3D) That He/She is in Nursing Home
75. (B3C) Staff Names/Faces
74. (B3A) Easily Distracted
73. (B3) At Ease Doing Planned Activities
72. (B2O) Withdrawal
71. (B2N) Repetitive Physical Movements
70. (B2M) Crying
69. (B2K) Insomnia
68. (B2I) Repetitive Health Complaints
67. (B2H) States Something Terrible About to Happen
66. (B2G) Unrealistic Fears
65. (B2F) Persistent Anger
64. (B2E) Repetitive Verbalizations
63. (B2D) None of Above Modes of Locomotion
62. (B2C) Other Limitation of Range of Motion
61. (B2B) Other Limitation of Voluntary Movement
60. (B2A) Covert/Open Conflict with Staff
59. (B1) Mode of Expression
58. (B1) Mode of Expression
57. (A1) None of Above Past Roles
56. (A1B) Bed Mobility Support Provided
55. (A1A) Bed Mobility Self Performance
54. (A1) Mode of Expression
53. (A) Change in Community
52. (A) Change in Community
51. (A) Change in Community
50. (A) Change in Community
49. (A) Change in Community
48. (A) Change in Community
47. (A) Change in Community
46. (A) Change in Community
45. (A) Change in Community
44. (A) Change in Community
43. (A) Change in Community
42. (A) Change in Community
41. (A) Change in Community
40. (A) Change in Community
39. (A) Change in Community
38. (A) Change in Community
37. (A) Change in Community
36. (A) Change in Community
35. (A) Change in Community
34. (A) Change in Community
33. (A) Change in Community
32. (A) Change in Community
31. (A) Change in Community
30. (A) Change in Community
29. (A) Change in Community
28. (A) Change in Community
27. (A) Change in Community
26. (A) Change in Community
25. (A) Change in Community
24. (A) Change in Community
23. (A) Change in Community
22. (A) Change in Community
21. (A) Change in Community
20. (A) Change in Community
19. (A) Change in Community
18. (A) Change in Community
17. (A) Change in Community
16. (A) Change in Community
15. (A) Change in Community
14. (A) Change in Community
13. (A) Change in Community
12. (A) Change in Community
11. (A) Change in Community
10. (A) Change in Community
9. (A) Change in Community
8. (A) Change in Community
7. (A) Change in Community
6. (A) Change in Community
5. (A) Change in Community
4. (A) Change in Community
3. (A) Change in Community
2. (A) Change in Community
1. (A) Change in Community
0. (A) Change in Community
211. (H2A) Bowel Elimination Pattern Regular
212. (H2B) Constipation
213. (H2C) Diarrhea
214. (H2D) Fecal Impaction
215. (H2E) None of Above Bowel Elimination Pattern
216. (H3A) Any Scheduled Toileting Plan
217. (H3B) Bladder Retraining Program
218. (H3C) External Condom Catheter
219. (H3D) Indwelling Catheter
220. (H3E) Intermittent Catheter
221. (H3F) Did Not Use Toilet Room/Commode/Urinal
222. (H3G) Pads/Briefs Used
223. (H3H) Enemas/Irrigation
224. (H3I) Ostomy Present
225. (H3J) None of Above Appliances and Programs
226. (H4) Change in Urinary Continence
227. (I1A) Diabetes Mellitus
228. (I1AA) Seizure Disorder
229. (I1B) Hyperthyroidism
230. (I1BB) Transient Ischemic Attack
231. (I1C) Hypothyroidism
232. (I1CC) Traumatic Brain Injury
233. (I1D) Arteriosclerotic Heart Disease
234. (I1DD) Anxiety Disorder
235. (I1E) Cardiac Dysrhythmias
236. (I1EE) Depression
237. (I1FF) Congestive Heart Failure
238. (I1F) Peripheral Vascular Disease
239. (I1G) Deep Vein Thrombosis
240. (I1GG) Schizophrenia
241. (I1H) Hypertension
242. (I1HH) Asthma
243. (I1I) Hypotension
244. (I1II) Emphysema/COPD
245. (I1J) Peripheral Vascular Disease
246. (I1JJ) Cataracts
247. (I1K) Other Cardiovascular Disease
248. (I1KK) Diabetic Retinopathy
249. (I1L) Arthritis
250. (I1LL) Glaucoma
251. (I1M) Hip Fracture
252. (I1MM) Macular Degeneration
253. (I1N) Missing Limb
254. (I1NN) Allergies
255. (I1O) Osteoporosis
256. (I1OO) Anemia
257. (I1P) Pathological Bone Fracture
258. (I1PP) Cancer
259. (I1Q) Alzheimer’s Disease
260. (I1QQ) Renal Failure
261. (I1R) Aphasia
262. (I1RR) None of Above Diseases
263. (I1S) Cerebral Palsy
264. (I1T) Cerebrovascular Accident/Stroke
265. (I1U) Dementia Other than Alzheimer’s Disease
266. (I1V) Hemiplegia/Hemiparesis
267. (I1W) Multiple Sclerosis
268. (I1X) Paraplegia
269. (I1Y) Parkinson’s Disease
270. (I1Z) Quadriplegia
271. (12A) Antibiotic Resistant Infection
272. (12B) Clostridium Difficile
273. (12C) Conjunctivitis
274. (12D) HIV Infection
275. (12E) Pneumonia
276. (12F) Respiratory Infection
277. (12G) Septicemia
278. (12H) Sexually Transmitted Diseases
279. (12I) Tuberculosis
280. (12J) Urinary Tract Infection
281. (12K) Viral Hepatitis
282. (12L) Wound Infection
283. (12M) None of Above Infections
284. (13A) Other Diagnosis/ICD-9 Codes
285. (13B) Other Diagnosis/ICD-9 Codes
286. (13C) Other Diagnosis/ICD-9 Codes
287. (13D) Other Diagnosis/ICD-9 Codes
288. (13E) Other Diagnosis/ICD-9 Codes
289. (13F) Weight Gain/Loss of 3+ Pounds
290. (13G) Inability to Lie Flat to Shortness of Breath
291. (13H) Dehydrated/Output Exceeds Input
292. (13I) Insufficient Fluid
293. (13J) Delusions
294. (13F) Dizziness/Vertigo
295. (13G) Edema
296. (13H) Fever
297. (13I) Hallucinations
298. (13J) Internal Bleeding
299. (13K) Recurrent Lung Aspirations
300. (13L) Shortness of Breath
301. (13M) Syncope/Fainting
302. (13N) Unsteady Gait
303. (13O) Vomiting
304. (13P) None of Above Problem Conditions
305. (13Q) Pain Frequency
306. (13R) Pain Intensity
307. (13S) Back Pain
308. (13T) Bone Pain
309. (13U) Chest Pain while Doing Usual Activities
310. (13V) Headache
311. (13W) Hip Pain
312. (13X) Incisional Pain
313. (13Y) Joint Pain
314. (13Z) Soft Tissue Pain
315. (13AA) Stomach Pain
316. (13BB) Other Pain Site
317. (13CC) Fell in Past 30 Days
318. (13CD) Fell in Past 31-180 Days
319. (13CE) Hip Fracture in Last 180 Days
320. (13CF) Other Fracture in Last 180 Days
321. (13CG) None of Above Accidents
322. (13CH) Conditions/Disease Make Residents Mood/Behavior Unstable
323. (13CI) Resident Experiencing Episode of Recurrent/Chronic Problem
324. (13CJ) End Stage Disease
325. (13CK) None of Above Stability of Conditions
326. (13CL) Chewing Problem
327. (13CM) Swallowing Problem
328. (13CN) Mouth Pain
329. (13CO) None of Above Oral Problems
330. (13CP) Height
331. (13CQ) Weight
332. (13CR) Weight Loss
333. (13CS) Weight Gain
334. (13CT) Complaints About the Taste of Many Foods
335. (13CU) Regular Complaints of Hunger
336. (13CV) Leaves 25 percent or more Food Uneaten at Most Meals
337. (13CW) None of Above Nutritional Problems
338. (13CX) Parenteral IV
339. (13CY) Feeding Tube
340. (13CZ) Fluid Tube
341. (13D) None of Above Nutritional Approaches
342. (13DA) None of Above Nutritional Problems
343. (13DB) None of Above Nutritional Approaches
344. (13DC) Unstable
353. (L1E) Inflamed/ Swollen/Bleeding Gums
354. (L1F) Daily Cleaning of Teeth/Dentures
355. (L1G) None of Above Oral Status
356. (M1A) Stage 1 Ulcers
357. (M1B) Stage 2 Ulcers
358. (M1C) Stage 3 Ulcers
359. (M1D) Stage 4 Ulcers
360. (M2A) Pressure Ulcers
361. (M2B) Stasis Ulcers
362. (M3) History ofResolved Ulcers
363. (M4A) Abrasions/ Bruises
364. (M4B) Burns 2nd/3rd Degree
365. (M4C) Open Lesions Other Than Ulcers/ Rashes/Cuts
366. (M4D) Rashes
367. (M4E) Skin Desensitized to Pain/ Pressure
368. (M4F) Skin Tears/ Cuts
369. (M4G) Surgical Wounds
370. (M4H) None of Above Skin Problems
371. (M4I) Pressure Relieving Devices for Chair
372. (M4J) Pressure Relieving Devices for Bed
373. (M4K) Turning/ Repositioning Program
374. (M4L) Nutrition/ Hydration Intervention to Manage Skin Problems
375. (M5A) Ulcer Care
376. (M5B) Surgical Wound Care
377. (M5C) Application of Dressings
378. (M5D) Application of Ointments/ Medications
379. (M5E) Other Preventative or Protective Skin Care
380. (M5F) None of Above Skin Treatments
381. (M6A) Resident Has 1 or More Foot Problems
382. (M6B) Infection of Foot
383. (M6C) Open Lesions on Foot
384. (M6D) Nails/ Calluses Trimmed on Foot
385. (M6E) Received Preventative/ Protective Foot Care
386. (M6F) Application of Dressings to Foot
387. (M6G) None of Above Foot Problems
388. (N1A) Morning
389. (N1B) Afternoon
390. (N1C) Evening
391. (N1D) None of Above Time Awake
392. (N2) Time Involved in Activities
393. (N3A) Prefers Own Room
394. (N3B) Prefers Day/ Activity Room
395. (N3C) Prefers Inside NH/ Off Unit
396. (N3D) Prefers Outside Activity
397. (N3E) None of Above Preferred Activity Settings
398. (N4A) Cards/ Other Games
399. (N4B) Crafts/ Arts
400. (N4C) Exercises/ Sports
401. (N4D) Music
402. (N4E) Reading/ Writing
403. (N4F) Spiritual/ Religious Activities
404. (N4G) Trips/ Shopping
405. (N4H) Walking/ Wheeling Outdoors
406. (N4I) Watching TV
407. (N4J) Gardening or Plants
408. (N4K) Talking or Conversing
409. (N4L) Helping Others
410. (N4M) None of Above Activity Preferences
411. (N5A) Type of Activities Currently Involved In
412. (N5B) Extent of Involvement
413. (O1) Number of Medications
414. (O2) New Medications
415. (O3) Injections
416. (O4A) Antipsychotic
417. (O4B) Antianxiety
418. (O4C) Antidepressant
419. (O4D) Hypnotic
420. (O4E) Diuretic
421. (P1AA) Chemotherapy
422. (P1AB) Dialysis
423. (P1AC) IV Medication
424. (P1AD) Intake/ Output
425. (P1AE) Monitoring Acute Medical Condition
426. (P1AF) Ostomy Care
427. (P1AG) Oxygen Therapy
428. (P1AH) Radiation
429. (P1AI) Suctioning
430. (P1AJ) Tracheostomy Care
431. (P1AK) Transfusions
432. (P1AL) Ventilator/ Respirator
433. (P1AM) Alcohol/ Drug Treatment Program
434. (P1AN) Alzheimer’s/ Dementia Special Care Unit
435. (P1AO) Hospice Care
436. (P1AP) Pediatric Unit
437. (P1AQ) Respite Care
438. (Q1B) Resident Supported by Someone Positive Toward Discharge
439. (Q1C) Discharge within 90 Days
440. (Q2) Change in Care Needs
441. (R1A) Resident Participated in Assessment
442. (R1B) Family Participation in Assessment
443. (R1C) Significant Other Participation in Assessment
444. (VA01A) Delirium Triggered
445. (VA01B) Delirium Care Planning Decision
446. (VA02A) Cognitive Loss Triggered
447. (VA02B) Cognitive Loss Care Planning Decision
448. (VA03A) Visual Function Triggered
449. (VA03B) Visual Function Care Planning Decision
450. (VA04A) Communication Triggered
451. (VA04B) Communication Care Planning Decision
452. (VA05A) ADL Functional Potential Triggered
453. (VA05B) ADL Functional Potential Care Planning Decision
454. (VA06A) Urinary Incontinence Triggered
455. (VA06B) Urinary Incontinence Care Planning Decision
456. (VA07A) Psychosocial Well-Being Triggered
457. (VA07B) Psychosocial Well-Being Care Planning Decision
458. (VA08A) Mood State Triggered
459. (VA08B) Mood State Care Planning Decision
460. (VA09A) Behavioral Symptoms Triggered
461. (VA09B) Behavioral Symptoms Care Planning Decision
462. (VA10A) Activities Triggered
463. (VA10B) Activities Care Planning Decision
464. (VA11A) Falls Triggered
465. (VA11B) Falls Care Planning Decision
466. (VA12A) Nutritional Status Triggered
467. (VA12B) Nutritional Status Care Planning Decision
468. (VA13A) Feeding Tubes Triggered
469. (VA13B) Feeding Tubes Care Planning Decision
470. (VA14A) Dehydration Triggered
471. (VA14B) Dehydration Care Planning Decision
472. (VA15A) Dental Care Triggered
473. (VA15B) Dental Care Planning Decision
474. (VA16A) Pressure Ulcers Triggered
475. (VA16B) Pressure Ulcers Care Planning Decision
476. (VA17A) Psychotropic Drug Use Triggered
477. (VA17B) Psychotropic Drug Use Care Planning Decision
478. (VA18A) Physical Restraints Triggered
479. (VA18B) Physical Restraints Care Planning Decision
480. (VB2) Rap Date
481. Assessment Correction Version
482. Facility Internal ID
483. Submission Date
Mario D. Garrett is Chairman of the Department of Gerontology, San Diego State University, CA USA; and Visiting Professor at Onemda, Center for Health and Society, Faculty of Medicine, Dentistry and Health Sciences, Melbourne, Australia. A former United Nations International Institute on Ageing deputy director, he has been working with indigenous health and demographic data for the past 20 years.

Contact Details: Professor Mario D. Garrett Ph.D. San Diego State University. San Diego, CA 92182-4119; TEL: 619 594 2818; FAX: 619 594 5991; E-mail: mgarrett@mail.sdsu.edu

Dave Baldridge is a member of Cherokee Nation, and is the Executive Director of the American Association for International Aging (AAIA) and Director of the National Indian Project Center. He was the Director of the National Indian Council on Aging and has worked on American Indian and Alaska Native issues for the past 25 years, leading and promoting programs and research on native elders.

Erin Williams is a psychology and gerontology undergraduate senior student at San Diego State University.