Correlates of Open- and Locked-Facility Placement in a Population of Decisionally Impaired Adults

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Objectives. This study compares characteristics of public conservatees placed in locked facilities with those in less restrictive settings. Given the principle of the least restrictive alternative, the study seeks to identify factors, including the role of aging and advanced age, associated with restrictive placement within conservatorship.

Methods. Management Information Systems data on 1,534 adult conservatees in Los Angeles County in July, 1993, are examined in cross-section. Models exploring individual and environmental characteristics of conservatees and linear, curvilinear, and multiplicative aging effects are tested on the probability that adults are placed in locked facilities versus all other placement types.

Results. Locked facility placement is associated with being female, receiving SSI, a diagnosis of dementia, and being identified as a danger to oneself and to others. Locked-facility placement is associated with increasing age until age 60, when the effect becomes inversely related; the multiplicative effect of older age and impaired functioning is also inversely related.

Discussion. The curvilinear nature of age and the interaction effect of Age × Functioning implies that increasing frailty in older adults makes locked facility-placement less likely. Further research is needed on whether alternative placement types, such as special care units with secured perimeters, can further reduce the need for locked facilities.

CONSERVATORSHIP, or guardianship as it is called in many states, is a highly intrusive intervention designed to protect persons who are at risk of physical, emotional, or financial harm and sometimes to protect others from such persons. As the present study was conducted in Los Angeles, we use California’s terminology: conservatorship, conservator, and conservatee. Conservatees are adults who have been determined by a court of law to lack capacity for self-care or who are likely to be a danger to themselves or others. Accordingly, they require conservators, or surrogates, authorized by the Court to make decisions on their behalf.

Within the realm of protective interventions, such as conservatorship, placement in the least restrictive appropriate alternative is a fundamental principle of care. This principle was originally established by Lake v. Cameron (1966), when a District of Columbia Court of Appeals ruled that less restrictive alternatives must be sought before an individual is placed in an institution. Over the years, the ruling has come to imply that individuals should be served in the least restrictive care setting with as few constraints as possible. However, it is unclear how best to realize this goal when adults suffer from conditions that jeopardize their safety or the safety of others.

In addition, researchers and policy makers have tended to view conservatorship from an “all or nothing” perspective. In general, the focus has been on the extent to which various alternatives substitute for or postpone conservatorship, rather than how to reduce the restrictiveness of conservatorship as an intervention. Similarly, research on nursing home alternatives has focused on providing less restrictive alternatives within the continuum of institutional options, although this appears to be changing.

A more nuanced perspective rests on the assumption that, even within a population of highly impaired adults, living arrangements should include appropriate options and vary according to personal needs that suggest whether more or less control is required. In theory, placement decisions may be influenced by a variety of individual and environmental characteristics, including diminished cognitive capacity and judgment, deficits in physical functioning, concern for safety, need for supervision, and the availability of adequate care, support, and advocacy. To begin the task of identifying characteristics associated with more or less restrictive placement within conservatorship, this article examines the similarities and differences between public conservatees in Los Angeles County, California, who live in locked facilities and those who live in the community or in open (nonlocked) long-term care facilities.

In contrast to services that are segregated by age, conservatorship serves several, high-need, vulnerable populations. These include persons with dementing illnesses, most of whom are older adults, as well as persons of all ages with severe mental disorders or developmental disabilities. According to one view, the consequences of conservatorship for older adults are far more deleterious than for the young (Horstman, 1975; Iris, 1988, 1990; Keith & Wacker, 1992; Schmidt, 1996). However, because most studies of conservatorship focus on the elderly subpopulation, little is known about the comparative experiences of older adult conservatees that could help confirm or refute this assumption. To better understand the commonalities...
and differences among populations, how conservatorship serves older adults in particular, and how conservatorship functions in its totality, Iris (1991) suggested that comparative research across age groups and disability types is needed.

The purpose of this article is twofold. First, we begin the process of exploring less restrictive practices within conservatorship by comparing characteristics of public conservatees placed in the most restrictive settings (locked facilities) with those in less restrictive (open) settings. Second, we examine the role of age with respect to placement decisions by including all adult public conservatees in Los Angeles in the sample. The major research questions addressed in this study are (a) to what extent is age a risk factor for placement in a locked psychiatric facility, (b) to what extent do factors other than age influence such placement, and (c) to what extent do any age effects interact with other factors.

**Background**

Conservatorship is a highly intrusive protective intervention in which the court appoints a surrogate to make decisions on behalf of an adult, essentially reducing the individual to the legal status of a minor (Horstman, 1975; Kapp, 1992; Rein, 1992). Despite its intrusive nature, conservatorship is rarely studied empirically. Rather, research has focused on appropriate standards of decision-making capacity (Appelbaum & Grisso, 1988; Collopy, 1988; Kapp, 1990; Sabatino, 1996), alternative services (High, 1993; Hommel & Wang, 1990; Wilber & Reynolds, 1995), or characteristics of conservatees based on information abstracted from court files (Bulcroft, Kielkopf, & Tripp, 1991; Keith & Wacker, 1994; Stevenson & Capezuti, 1991).

Descriptive studies suggest that conservatees are likely to be older adults, female, and have relatively low income (Associated Press [AP], 1987; Bulcroft et al., 1991; Keith & Wacker, 1994; Stevenson & Capezuti, 1991). Estimates of the prevalence of dementia range from 16% (AP, 1987) to 60% (Stevenson & Capezuti, 1991). Although studies indicate that about two thirds of adult conservatees reside in institutional settings (AP, 1987; Bulcroft et al., 1991; Keith & Wacker, 1994; Stevenson & Capezuti, 1991), little beyond this is known about the living arrangements of conservatees. In one of the few studies of services provided to conservatees, Keith and Wacker (1994) found that the living arrangement, specifically living alone, was positively associated with the number of services received from the conservator.

Few studies have focused on older adults in public guardianship, who are likely to be among the least affluent and most socially isolated of the population. Studies of the practice of public guardianship also are rare (see Steinberg, 1985, and Schmidt, Miller, Bell, & New, 1981), and do not address characteristics of public conservatees in any detail.

**Procedure for Becoming a Public Conservatee**

The Los Angeles Office of Public Guardian (LAOPG) serves two types of adults who have neither family nor friends willing or able to serve as conservator. Lanterman-Petris-Short (LPS) conservatorship provides short-term, but relatively global, assistance to the mentally ill under the state’s police powers (protection of society) and *parens patriae* powers (protection of the person by the state; Kapp, 1992; Rein, 1992; Sabatino, 1996). California restricts LPS conservatorship to those individuals determined to be gravely disabled by mental illness, such that they are unable to determine or cooperate with treatment necessary to maintain their personal safety or the safety of society.

In contrast, probate conservatorship serves persons who are unable to manage personal or financial resources. Adults enter probate conservatorship through the process of a petition, which is presented to the Court, verified by a Court Investigator, and ruled on by the Probate Court Judge. Thus, for LPS and Probate conservatorship, California lawmakers have defined need as being gravely disabled, a danger to self or others, or unable to manage.

Living arrangements are managed by Deputy Public Guardians (DPGs) assigned to assess and oversee conservatees. Although input from the conservatee may be considered, the DPG is not required to consult the conservatee. Evidence that individual DPGs favor a specific type of living arrangement was ruled out through bivariate analysis. Apart from the requirement that placement in a locked facility must be approved by the Court, there appears to be no formal criteria for determining living arrangements.

At intake, information on the conservatee is taken from the petition filed with the court and from the Court Investigator. This information is revised by the DPG periodically, based on updates from physicians and other professionals. The Court requires biannual filings of reports on probate conservatorships and annual reports of LPS conservatorships suggesting that the placement information is relatively current and reasonably justified, at least to the satisfaction of the Court.

**Conceptual Framework**

Apart from the principle of the least restrictive alternative, the conservatorship literature offers little guidance on how decisions about living arrangements and treatment facilities are made. However, the literature does suggest that identified risks for conservatorship include three dimensions. These are (a) limitations such as cognitive and functional impairments or poverty that diminish an individual’s ability to understand, evaluate, or address problems; (b) risks including behavior that threatens the individual’s or society’s well-being; and (c) lack of resources that help to overcome, compensate for, or reduce limitations and risks (Bulcroft et al., 1991; Keith & Wacker, 1994; Stevenson & Capezuti, 1991; Wilber & Reynolds, 1995).

Conservatorship reform efforts have largely succeeded in eliminating age in state statutes as a measure of incapacity. However, concern remains that age is a factor in the practice of conservatorship, particularly in the determination of need for conservatorship, where advanced age may tilt the scales toward a paternalistic approach (Keith & Wacker, 1992; Rein, 1992). Although it is not clear how age is treated for those within the conservatorship system, as noted above, one view is that older age is associated with negative outcomes (Iris, 1988, 1990; Keith & Wacker, 1992; Schmidt, 1996). This perspective suggests that advanced age is associated with paternalism and control. We assumed, therefore, that age would be associated with placement in a more restrictive setting, specifically a locked facility.

Building on the three dimensions of limitations, risks, and lack of resources that shape the conservatorship decision, the principle of least restrictive alternative, and the literature’s assumption of paternalistic ageism within conservatorship leads to the following study hypotheses:
1. Conservatees will be more likely to be placed in locked facilities when they are relatively poor, have impaired functioning, or have a diagnosis of dementia.

2. Conservatees will be more likely to be placed in locked facilities when they are considered to be a danger either to themselves or to others.

3. Conservatees will be more likely to be placed in locked facilities when they are not relatively affluent or when they have fewer people in their social network.

4. After controlling for limitations, risks, and lack of resources, older conservatees will be more likely to be placed in locked facilities than younger conservatees.

5. The effects of age on locked-facility placement will be magnified by interactive effects with the limitations, risks, and lack of resources suggested above.

**METHODS**

**The Sample**

We obtained data for the study from the LAOPG Management Information Systems (MIS) records provided to the researchers. The MIS data set includes a variety of demographic characteristics, physical and mental health, functioning status, and social and financial resources. The study population begins with all adults under public guardianship in Los Angeles County in July, 1993 (N = 2,151). Observations in this population are reduced in our analysis by conservatees for whom we have no gender indication (n = 2) and conservatees for whom social network data are missing (n = 615), leaving a sample for analysis of 1,534. Characteristics of the full analyzed sample are detailed in Table 1.

Public conservatees reside across a continuum of settings, with about one third (29.2%) placed in locked psychiatric facilities, the majority (67.4%) living in other facility-based care such as skilled nursing facilities (SNFs), board and care homes, and intermediate care facilities and a small number (3.4%) living independently in the community. The average age of conservatees is 56.8, across a range of 18 to 103. The sample subjects are predominantly male, non-Hispanic whites, and not married. Approximately 15% of the sample is relatively affluent, with an average of two people in their social network. Nearly 60% receive supplemental security income (SSI), approximately 23% have a diagnosis of dementia, and the average number of activities of daily living (ADL) impairments is nearly two. Almost 73% are judged to be a danger to themselves; 53% are identified as a danger to others.

**Measures**

The dependent variable indicating the placement type is coded to reflect the placement of conservatees into locked facilities (including county hospital, jail, locked SNFs, and locked psychiatric treatment centers) versus all other placement types. Aside from limitations, risks, and lack of resources, independent variables are demographic variables including age (continuous), gender, race/ethnicity, and marital status, coded as married, with all others as the referent category.

**Limitations**

Limitation variables include poverty, measured by the receipt of SSI, functional impairments, defined as the number of ADL impairments (range 0–5), and dementia. Receipt of SSI is used as a proxy for poverty because it includes limits on both assets and income. To receive SSI an individual must have less than $2,000 in assets and monthly income under $623 in 1993 when the study was conducted. One of the functions of the DPG, as manager of the estate, is to investigate the eligibility of conservatees for public benefits. Those who meet the assets/income test are enrolled in the program accordingly.

By definition, public conservatees are impaired in cognitive functioning, as evidenced by their legally determined incapacity to make their own decisions. An additional primary or secondary psychiatric diagnosis of any type of dementia is considered a limitation and used as a proxy for diminished cognitive functioning. As with most other variables, these diagnoses are peri-

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**Table 1. Description of Variables and Characteristics of the Sample**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description/Coding</th>
<th>M or %</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Placement Type</td>
<td>Placed in locked skilled nursing facility, special treatment facility, or ward in City/County Hospital = 1; All others = 0</td>
<td>29.23%</td>
<td></td>
</tr>
<tr>
<td>Demographics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>Continuous, range 18–103</td>
<td>56.81 M</td>
<td>18.46</td>
</tr>
<tr>
<td>Female</td>
<td>0 = male, 1 = female</td>
<td>46.48%</td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>0 = no, 1 = yes (Non-Hispanic Whites/Others referent category)</td>
<td>19.21%</td>
<td></td>
</tr>
<tr>
<td>Hispanic</td>
<td>0 = no, 1 = yes (Non-Hispanic Whites/Others referent category)</td>
<td>8.07%</td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>0 = no, 1 = yes (All other marital statuses referent category)</td>
<td>4.95%</td>
<td></td>
</tr>
<tr>
<td>Limitations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Receives SSI</td>
<td>0 = no, 1 = yes</td>
<td>57.56%</td>
<td></td>
</tr>
<tr>
<td>No. of ADL</td>
<td>Continuous, range 0–5</td>
<td>1.84 M</td>
<td>1.68</td>
</tr>
<tr>
<td>Has Dementia</td>
<td>0 = no, 1 = yes, either primary or secondary psychiatric diagnosis, DSM-IV criteria</td>
<td>22.66%</td>
<td></td>
</tr>
<tr>
<td>Risks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Danger to Self</td>
<td>Yes to any of following: wanders, not oriented to time/place, history or current incidence of suicide attempts, or illegal drug use</td>
<td>72.98%</td>
<td></td>
</tr>
<tr>
<td>Danger to Others</td>
<td>Yes to any of following: coded as a danger to others, duty to warn someone if ward goes AWOL, history of homicide, or assault</td>
<td>53.13%</td>
<td></td>
</tr>
<tr>
<td>Lack of Resources</td>
<td>Assets in excess of $25,000 (approximate mean assets excluding 1 outlier with $3,000,000 in assets)</td>
<td>14.71%</td>
<td></td>
</tr>
<tr>
<td>Relative Affluence</td>
<td>Continuous, count of reported and observed family and nonfamily network, range 0–11</td>
<td>1.94 M</td>
<td>1.64</td>
</tr>
</tbody>
</table>

**Notes:** Data taken from MIS Data supplied by the Los Angeles County Office of Public Guardian, Los Angeles, CA, from the July, 1993, Population of Public Conservatees. Sample includes complete records for 1,534 Public Conservatees. ADLs = activities of daily living; SSI = supplemental security income; AWOL = absent without leave.
odically updated by LAOPG staff. The MIS data provided these diagnoses in *Diagnostic Statistical Manual—IV* code (American Psychiatric Association, 1994), from which general categories of dementia and psychosis (and other mental impairments) are constructed. Although psychosis is the diagnosis most likely to be associated with locked-facility placement, we use it as the referent category because of our interest in older adults who are more likely to have a diagnosis of dementia. The referent category, therefore, consists of all diagnoses other than dementia, but primarily psychosis.

**Risks**

Risk variables consist of dangerous behaviors, such as assault or criminal history. From available data, we constructed two variables that approximate danger to others and danger to self. Danger to self includes wandering behavior, disorientation to time or place, history or current incidence of suicide attempts, or illegal drugs. Danger to others includes LAOPG staff report of danger to others (a category available to the DPGs staff on intake), duty to warn someone if the conservatee goes absent without leave (AWOL), or history of either assault or homicide. Implied in these two types of risk is that an adult at risk only to him- or herself will be less likely to be placed in a locked facility than an adult who is a risk to others.

**Resources**

Resources include relative affluence and the size of the social network. For the purposes of determining relative affluence, we eliminated one outlier with assets of $3,000,000. The average assets of the remaining conservatees was approximately $25,000, so we defined relative affluence as having assets over $25,000. The social network variable was constructed from text variables indicating the names and relationships of all adults who either are related to or have expressed concern about the conservatee. These names are recorded by the LAOPG staff from the Court petition and are updated when other friends or family come forward, usually from information received at the conservatee’s residence. The social network variable (range 0–11) is a count of both family members and nonfamily members (excluding professionals such as attorneys).

**Statistical Analyses**

We analyzed our three main-effects hypotheses, that limitations, risks, or lack of resources increase the likelihood of locked-facility placement, by conducting logistic regression on the probability of such placement versus all other types of placement. This analysis takes the form

\[ \log (P/1-P) = a + B \text{age} + (B_1 X_1) + (B_2 X_2) + (B_3 X_3) + \varepsilon, \]

where \( P \) is the probability of placement in locked facilities, \( B \) is the linear effect of age, \( X_i \) is a vector of demographic variables, \( X_1 \) is a vector of resource variables, \( X_2 \) is a vector of limitation variables, and \( X_3 \) is a vector of risk variables, as described above. Logistic regression results are presented by showing odds ratios, with 95% confidence intervals. Goodness-of-fit tests shown include the \(-2 \log \text{Likelihood} (-2LL)\) figure, the Hosmer-Lemeshow test, the adjusted \( R^2 \), and the receiver operating characteristic curve (ROC) statistics.

To test several possible confounds, we ran alternative models on length of time in public conservatorship and type of conservatorship (LPS vs probate). Although the period of time that subjects have been under public conservatorship ranges from 1 to 30 years, the placement variable is restricted to the living arrangement in July, 1993. Therefore, we ran a model controlling for the length of time that the subject had been under public conservatorship. Results indicated that the linear model is statistically and substantively robust. In addition, because the age of the conservatee is strongly correlated with the program type (LPS vs probate), we analyzed the samples by program type. Again, we found no meaningful differences from the linear model results.

**RESULTS**

**Linear Age Model**

Table 2 contains the results of logistic regression on the probability of placement in locked facilities using a linear age term. Results indicate that age does not have a statistically significant relationship to placement. In contrast, the relative likelihood of placement in a locked facility is increased 228% by being a danger to oneself, 111% by receiving SSI, 58% by having dementia, 45% by being a danger to others, and 30% by being female. Relative affluence decreases the relative likelihood of placement in a locked facility by 40%. The model fit is acceptable as indicated by a \( p \) value of .0624, indicating that the null hypothesis (that the model provides a good fit) cannot be rejected. In addition, the \( c \) statistic is .700, indicating relatively high predictive power of the model.

**Nonlinear Age Effects**

Because of age differences in probate and LPS program types, noted earlier, and the counterintuitive lack of significance of age in the model, we developed a second model and tested it with a quadratic age term, the equation becoming

\[ \log (P/1-P) = a + B \text{age} + B_a \text{age}^2 + (B_1 X_1) + (B_2 X_2) + (B_3 X_3) + \varepsilon, \]

adding \( B_a \) as the quadratic effect of age. In this model (Table 2, middle columns) both the linear and quadratic age terms were significant but in different directions. Accordingly, we calculated the age at which the effect changes using the following equation:

\[ B \text{age} + 2(B_a \text{age}^2) = 0 \]

The change was found to occur at age 59.73, implying that if one gets older, the probability of being placed in a locked facility increases but that this effect reverses at approximately age 60. The introduction of the quadratic age term only slightly changed the effects of the other variables on the probability of locked-facility placement.

**Age Interaction Effects**

On the basis of the reversal of age effects in the nonlinear model, we dichotomized age into two groups: under age 60, and age 60 and older. The third model (Table 2, right columns) tests interaction effects of this Age Group variable (<60; 60+) X the individual variables for Limitations, Risks, and Lack of Resources. Because there were no differences when the interaction terms were serially included or added simultaneously, we present the full model only.
OPEN AND LOCKED FACILITIES

Hypothesis 1: Limitations on Locked-Facility Placement

Two out of three limitation variables were significant, partially supporting this hypothesis. Receipt of SSI appeared to exacerbate circumstances normally associated with locked-facility placement, as did the presence of dementia. The number of ADL impairments was not significant, but their interaction with the age group was significant. This implies that, while ADL impairments by themselves had little effect, younger conservatees with ADL impairments were more likely to be placed in locked facilities than older conservatees with functional limitations.

Contrary to our hypothesis 5, only one of the interaction terms in this model is statistically significant—that of the Age Group × the Number of ADL Impairments. The effect is negative, suggesting that for the older group, higher numbers of ADL impairment indicate a lower likelihood of being placed in locked facilities. In addition, interaction effects only modestly alter the nonlinear model results.

**DISCUSSION**

The present study offers an examination of factors associated with placement of older public conservatees in highly restrictive locked facilities. We designed the study to answer five hypotheses, which will be discussed in order.

**Hypothesis 2: Risks on Locked-Facility Placement**

Danger to oneself was a consistently significant factor in locked-facility placement, whereas danger to others was not significant once the interaction terms were introduced, raising the question of why danger to self is more salient than danger to others. For older conservatees, the LAOPG may be influenced by the perception that older adults are not a danger to others, as they are thought to be weaker and more frail. Conversely, younger adults who are a danger to others may be more likely to receive a different type of intervention—that is, pass conservatorship and go directly to jail. Another possibility is that, for older adults with dementia, locked facilities provide protection against such self-dangerous behaviors as wandering—protection that is lacking in many skilled nursing facilities. The implication is that innova-

<p>| Table 2. Logistic Regression on Probability of Placement Into Locked Facilities, Compared With All Other Placement Types, With Linear and Quadratic Age Terms, and Interactions Between Age Group (60+ vs &lt;60) and Resources, Presence of Limitation, and Risk |</p>
<table>
<thead>
<tr>
<th>Variable</th>
<th>Demographics</th>
<th>Risks</th>
<th>Lack of resources</th>
<th>Interactions terms</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Linear Age Model</td>
<td>Nonlinear Age Model</td>
<td>Age Interaction Model</td>
<td></td>
</tr>
<tr>
<td>Odds Ratio</td>
<td>Lower CI</td>
<td>Upper CI</td>
<td>Odds Ratio</td>
<td>Lower CI</td>
</tr>
<tr>
<td>Demographics</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>1.003</td>
<td>0.994</td>
<td>1.012</td>
<td>1.117***</td>
</tr>
<tr>
<td>Age(^2)</td>
<td></td>
<td></td>
<td></td>
<td>0.999***</td>
</tr>
<tr>
<td>Female</td>
<td>1.304*</td>
<td>1.014</td>
<td>1.677</td>
<td>1.363*</td>
</tr>
<tr>
<td>African American</td>
<td>0.964</td>
<td>0.712</td>
<td>1.305</td>
<td>0.999</td>
</tr>
<tr>
<td>Hispanic</td>
<td>0.830</td>
<td>0.531</td>
<td>1.298</td>
<td>0.848</td>
</tr>
<tr>
<td>Married</td>
<td>0.900</td>
<td>0.500</td>
<td>1.619</td>
<td>0.799</td>
</tr>
<tr>
<td>Limitations</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Receives SSI</td>
<td>2.111***</td>
<td>1.636</td>
<td>2.722</td>
<td>2.021***</td>
</tr>
<tr>
<td>No. of ADLs</td>
<td>0.982</td>
<td>0.907</td>
<td>1.064</td>
<td>0.997</td>
</tr>
<tr>
<td>Dementia</td>
<td>1.576**</td>
<td>1.136</td>
<td>2.187</td>
<td>1.746**</td>
</tr>
<tr>
<td>Risks</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Danger to Others</td>
<td>1.453*</td>
<td>1.120</td>
<td>1.884</td>
<td>1.394*</td>
</tr>
<tr>
<td>Lack of resources</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relative Affluence</td>
<td>0.605*</td>
<td>0.396</td>
<td>0.925</td>
<td>0.651*</td>
</tr>
<tr>
<td>No. in Network</td>
<td>0.979</td>
<td>0.904</td>
<td>1.059</td>
<td>0.978</td>
</tr>
<tr>
<td>Interactions terms</td>
<td>Age Group × Receives SSI</td>
<td>0.767</td>
<td>0.480</td>
<td>1.225</td>
</tr>
<tr>
<td>Age Group × No. of ADLs</td>
<td>1.474</td>
<td>0.820</td>
<td>2.651</td>
<td>1.480</td>
</tr>
<tr>
<td>Age Group × Dementia</td>
<td>1.032</td>
<td>0.886</td>
<td>1.202</td>
<td>1.032</td>
</tr>
<tr>
<td>Age Group × Danger to Self</td>
<td>1.696,531</td>
<td>1.673,658</td>
<td>1.660,409</td>
<td>1.696,531</td>
</tr>
<tr>
<td>Age Group × Relative Affluence</td>
<td>1.474</td>
<td>0.820</td>
<td>2.651</td>
<td>1.474</td>
</tr>
<tr>
<td>Age Group × No. in Family Network</td>
<td>1.032</td>
<td>0.886</td>
<td>1.202</td>
<td>1.032</td>
</tr>
<tr>
<td>Adj. (R^2) (ROC)</td>
<td>0.767</td>
<td>0.480</td>
<td>1.225</td>
<td>0.812*</td>
</tr>
<tr>
<td>Hosmer-Lemeshow Goodness of Fit</td>
<td>14.835, 8 df, (p = 0.0624)</td>
<td>14.764, 8 df, (p = 0.7827)</td>
<td>6.7033, 8 df, (p = 0.5690)</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:** MIS Data supplied by Los Angeles County Office of Public Guardian, Los Angeles, CA, from the July, 1993, Population of 2,151 Public Conservatees. Sample includes complete records from 1,534 Public Conservatees. SSI = supplemental security income; ADLs = activities of daily living; LL = log likelihood; Adj. = adjusted.

\*\(p < 0.05; **p < 0.01; ***p < 0.001.\)
tions such as California’s experimental secured perimeters program (Wilber & Machemer, in press) or secured special care units in skilled nursing facilities (Noyes & Cipriano, 1993) may offer a protective environment that is less restrictive than a locked facility.

Confirmation of either of these notions is not possible with the data used in this study. However, another possibility is that there is a hierarchical effect in which those who meet the criteria for danger to self have already met the danger-to-others criteria. To test this we ran bivariate analysis on danger to self versus danger to others, and all of the component measures against each other (e.g., wanders vs duty to warn if conservatee goes AWOL) and found that correlations were relatively weak between the danger-to-self and danger-to-others variables (.08 between wandering and duty to warn, e.g.), whereas correlations within the measures were relatively strong (e.g., .40 between wandering and history of suicide attempts). Because the correlations between the danger variables were weak, we ruled out this explanation.

Hypothesis 3: Lack of Resources on Locked-Facility Placement
As hypothesized, relative affluence was associated with less restrictive (unlocked) settings. This effect disappeared, however, when the age interaction terms were introduced. The implication is that, considering the impact of Age Group × ADL Impairments, and the increased effect of getting SSI and having dementia, the protective nature of relative affluence is sufficiently decreased. The other resource variable, size of the social network, was not significant, perhaps because public conservatees, by definition, are served by LAOPG because they lack a protective network.

Hypothesis 4: Age on Locked-Facility Placement
Hypothesis 4 suggested that limitations, risks, or lack of resources would result in older adults being more likely than younger adults to be placed in locked facilities. In the linear model, we did not find this to be true. With the introduction of the quadratic age term, we found that, from the age of 18 until one approaches age 60, increasing age was indeed associated with an increasing likelihood of placement in a locked facility. For conservatees 60 and older, however, the likelihood of locked-facility placement decreased.

One explanation for this is that the LAOPG considers age 60 to be the working definition of “old.” This definition is similar to the age at which an adult becomes eligible to receive services funded by the Older Americans Act. We posit that lower locked-placement rates could be the result of what Binstock (1985) called “compassionate ageism” at work in the LAOPG. Personal conversations with conservators indicated that the placement of older adults in locked facilities is sometimes avoided because they consider it inappropriate to place older persons with younger mentally ill adults. For older persons with mental disorders, age again appeared to be a major consideration in placement, also suggesting compassionate ageism (Binstock, 1985). Further research is needed to explore provider and patient characteristics that affect placement decisions.

Hypothesis 5: Interaction Effects on Locked-Facility Placement
Another, and perhaps simpler, explanation is suggested in the interaction model. The finding that the interaction term Age Group × Number of ADLs was significant and negative implies that, with linear and quadratic age (and all other factors) controlled, older and more frail conservatees are less likely to be placed in a locked facility because they are more likely to need a medical setting (i.e., a skilled nursing facility). An alternative explanation might be that ADL impairment in older adults is expected and thus less compelling as an issue driving locked-facility placement than in younger adults, where such ADL impairment is relatively rare. In either case, our findings are consistent with compassionate ageism affecting the placement decision, as the need for intensive medical services, in effect, intensifies the quadratic age effect for the older group.

Limitations and Suggestions for Future Studies
The present study represents an initial examination of the risk factors for highly restrictive interventions concerning adults subject to conservatorship. However, several limitations affect the generalizability of the study to other populations of conservatees. First, the data are cross-sectional; thus, we cannot determine how change in any of the risk factors affects placement. In addition, the dependent variable is the placement of the conservatee. To construct this variable, we use a field that indicates whether the conservatee is currently placed in one of several types of facilities: These include board and care, hospital, living in the community alone or with others, jail, County Hospital (mental), open or locked skilled nursing facilities, and others. Although the conservatees range in age from 18 to 103, and have been served by the public guardian for amounts of time ranging from 1 to 30 years, the placement type used in this analysis is the only one in the data—the placement of the individual in July, 1993, when the data were extracted from the system. Accordingly, we were unable to determine how stable placements were or whether they were appropriate.

Moreover, the use of MIS data restricts us to the observation of variables that are contained within the system. For example, an important factor that is missing from the data set is the extent to which the ward is uncooperative. Danger to self may be a proxy for lack of cooperation and control, but this cannot be tested. Finally, missing data primarily in the social network variable resulted in reducing the analyzed sample (n = 2,151) by 617 or approximately 29%. Comparison between those in the analyzed sample (n = 1,534) and those with missing data who were dropped from the analysis shows no significant difference, with the exception of receiving SSI. Those excluded from the study were less likely to receive SSI than those in the analyzed sample.

Although the study of public conservatorship in Los Angeles County has limitations that affect its generalizability, it raises a number of interesting questions for future inquiry. Further research is needed to explore whether alternative placement types, such as special care units with secured perimeters, might be more appropriate for older adults placed in locked facilities. Other questions include how individuals age in place within conservatorship and how aging, over time, affects placement decisions. It is also important to explore the characteristics of those who live independently in the community. Further research is needed to explore how provider, institutional, and patient characteristics affect placement decisions.

The least restrictive appropriate alternative is an important guide even for those, or perhaps particularly for those, who lack...
legal authority to make their own decisions. More research attention is needed to gain greater understanding of the correlates of determinations about living arrangements, treatment decisions, and financial management practices for dependent older individuals.

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REFERENCES


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