Mental Health Treatment in Nursing Homes

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MENTAL HEALTH TREATMENT IN NURSING HOMES

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INTRODUCTION

Nursing homes (NHs) have been called psychiatric institutions...
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without trained psychiatric staff, and more stridently ‘psychiatric ghettos. Although it is not the purpose of this paper to provide a historical analysis of trends in mental health care for NH residents, a brief overview will contextualize the main issues addressed throughout this paper.

The advent of the new psychiatric drugs in the 1950s and 1960s triggered a societal hope that chronic psychiatric patients could be maintained in the community if the proper infrastructure supports (e.g., housing, social support, and regular visits to community mental health centers) were provided to keep these patients psychiatrically stabilized. Although the full promise of the deinstitutionalization movement was never realized, one enduring consequence was the closing of many state hospitals. For older adults, what ensued was the trans-institutionalization of older state psychiatric patients into NHs, with the percentages of former state hospital psychiatric patients lodged in NHs reflective of varied state NH policies.

Unfortunately NHs, then and now, have few staff members with specialities in mental health, and by default the primary treatment for these new NH residents was psychiatric medications. Indeed, some early studies suggested that mental health professionals provide very limited mental health treatment of any kind in NHs. In a study by Burns et al. (1993),

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4. Id.
5. Debra Street et al., The Effect of Licensure Type on the Policies and Resident Composition of Florida Assisted Living Facilities, 49 GERONTOLOGIST 211, 213 (2009); TORREY, supra note 3, at 102.
6. Rovner, supra note 1, at 21.
7. Barbara J. Burns et al., Mental Health Service Use by the Elderly in Nursing Homes, 83 AM. J. PUB. HEALTH 331, 336 (1993); William E. Reichman et al., Psychiatric Consultation in the Nursing Home: A Survey of Six States, 6 AM. J. GERIATRIC
for example, over a one-month period less than 5% of the NH residents with a psychiatric diagnosis received treatment. Of great concern is that although most NH treatment of mental health disorders is psychopharmacological, the majority of NHs have no full-time mental health professionals on staff, and most of the residents with mental health concerns are left untreated.

Although there has been longstanding unease about the lack of mental health treatment in NH settings, there have been equal and continuing concerns about the inappropriate use of psychotropic medications. In an early study conducted in the state of Massachusetts, Avorn, Dreyer, Connelly, and Soumerai (1989) found that 55% of a random sample of residents of fifty-five NHs was taking at least one psychiatric medication. Of the residents, 39% were prescribed at least one antipsychotic medication, with 18% receiving two or more antipsychotic medications. Most compelling, about one-half of these cases had no evidence of a physician participating in mental health decisions during the year of the study. Approximately one-third of the residents had cognitive deficits on mental status testing, and 6% evinced significant tardive dyskinesic symptoms, which the authors attribute to side-effects of their psychoactive medication regimens. These findings reflect obvious concerns that residents on psychiatric medications are often not under adequate medical supervision. Similar results were found by Arling, Ryther, Collins, and Zimmerman (1991)

8. Burns et al., supra note 7, at 331.
10. Grabowski et al., Quality of Mental Health Care, supra note 9, at 629.
12. Id. at 229–30.
13. Id. at 230.
in a study of 2,000 NH residents in Texas; they discovered that although 45% of the residents receive psychotropic medication, close to one-half did not have a psychiatric diagnosis.\textsuperscript{15}

The reason why these results are of grave concern is that the negative effects of psychoactive over-medication have been amply documented with increasing research rigor over the years. Studies suggest a general increased risk of hospitalization\textsuperscript{16} and adverse drug events.\textsuperscript{17} Specific associations have been discovered between antidepressants and fall risk;\textsuperscript{18} antipsychotic drugs and sedation, parkinsonism, infections, edema, stroke, and mortality for those with Alzheimer’s Disease;\textsuperscript{20} and sedative drug use (anxiolytics/hypnotics) and mortality, cognitive impairment, and balance problems.\textsuperscript{21}

To address some of the above concerns, the Omnibus Budget Reconciliation Act of 1987 (OBRA-87) was enacted to promote the mental health of NH residents in four ways: first, by mandating that new residents briefly be screened for mental health problems via the Preadmission Screening and Resident Review program (PASRR 1) and if found to have a Severe Mental Illness (SMI) or altered mental status receive a more

\begin{itemize}
  \item \textsuperscript{15} Greg Arling et al., \textit{Mental Illness and Psychotropic Medication Use in the Nursing Home}, 3 J. AGING & HEALTH 455, 455, 461, 466, 469–70 (1991).
  \item \textsuperscript{16} James W. Cooper et al., \textit{Psychotropic and Psychoactive Drugs and Hospitalization Rates in Nursing Facility Residents}, 5 PHARMACY PRAC. 140, 140–44 (2007).
  \item \textsuperscript{17} Jerry H. Gurwitz et al., \textit{Incidence and Preventability of Adverse Drug Events in Nursing Homes}, 109 AM. J. MEDICINE 87, 87, 90 (2000).
  \item \textsuperscript{18} Louis F. Draganich et al., \textit{The Effects of Antidepressants on Obstructed and Unobstructed Gait in Healthy Elderly People}, 56A J. GERONTOLOGY: MED. SCI. M36, M36, M40–41 (2001).
  \item \textsuperscript{19} Chi-Shin Wu et al., \textit{Association of Cerebrovascular Events with Antidepressant Use: A Case-Crossover Study}, 168 AM. J. PSYCHIATRY 511, 511, 515 (2011).
  \item \textsuperscript{20} Clive Ballard et al., \textit{The Dementia Antipsychotic Withdrawal Trial (DART-AD): Long-Term Follow-Up of a Randomised Placebo-Controlled Trial}, 8 LANCET NEUROL. 151, 151 (2009); Clive Ballard et al., \textit{Alzheimer’s Disease}, 377 LANCET 1019, 1025 (2011).
\end{itemize}
extended mental health evaluation (PASRR 2); second, by providing guidelines to reduce inappropriate usage of medication and physical restraints; third, by implementing staffing requirements, treatment plan reviews, and specialized training of nursing staff; and lastly, by encouraging nonpharmacological approaches via more favorable reimbursement rates for non-medical health professionals under Medicare. Since its passage, research has suggested that the PASRR process has promoted more appropriate admission policies for those with SMI. There also have been some favorable reports of more thoughtful utilization of psychiatric medications, with decreases in prescriptions of anxiolytics, sedative-hypnotics, and antipsychotics, but greater use of antidepressants.

Unfortunately, the literature is not all positive. Some studies have suggested only a limited reduction in the usage of antipsychotic drugs or increases in behavioral management programs since the passage of OBRA. One study indicated that after an initial dip, there has been a subsequent increase in antipsychotic medication usage, with over 25% of all Medicare beneficiaries receiving at least one prescription for an antipsychotic drug in the 2000–2001 study period.

The authors

22. See Margaret Norris, Policies and Reimbursement: Meeting the Needs for Mental Health Care in Long-Term Care, in GeroPSYCHOLOGY AND LONG TERM CARE: A PRACTITIONER’S GUIDE 1, 3 (Erlene Rosowsky et al. eds., 2009).

23. Karen W. Linkins et al., Use of PASRR Programs to Assess Serious Mental Illness and Service Access in Nursing Homes, 57 PSYCHIATRIC SERV. 325, 332 (2006).


27. Becky A. Briesacher et al., The Quality of Antipsychotic Drug Prescribing in
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imply that this increase could be attributed to the introduction of the newer atypical antipsychotics which may be safer than conventional anti-psychotics, but whose use may or may not be justified.\textsuperscript{28} Regrettably, fewer than 50\% of the treated residents had the medication prescribed in adherence with NH guidelines, and compliance with prescribed medication regimens is often lacking.\textsuperscript{29} A recent study once again suggests some decline in anti-psychotic medication usage, perhaps due in some part to the FDA ‘black box’ warning on prescription bottles regarding adverse side effects.\textsuperscript{30} However, another report disagrees with the latter study’s conclusion, reporting that approximately 29\% of the NH residents were on at least one psychoactive medication in 2006, with large institutional variability in the prescriptions of anti-psychotic medications.\textsuperscript{31} Of most concern, those with SMI were just a small proportion of residents receiving anti-psychotic medications, and over 16\% of residents with no indications for the use of anti-psychotic medications nonetheless received them.\textsuperscript{32} 

Oversight of psychoactive medication usage continues to be a problem. French, Campbell, Spehar, and Accomando (2007) employed the Minimum Data Set (MDS) to review long-term residents of all Veterans Administration NHs, and found a significant gap between use of psychotropic medications and mental health diagnoses.\textsuperscript{33} These findings were consistent with international research. A Danish study found that psychiatric need as perceived by staff overshadowed traditional diagnostic

\begin{footnotesize}
\textsuperscript{28} See generally id.
\textsuperscript{29} Id. at 1280, 1282–84; Grabowski et al., Quality of Mental Health Care, supra note 9, at 635.
\textsuperscript{30} Helen C. Kales et al., Trends in Antipsychotic Use in Dementia 1999–2007, 68 ARCHIVE GEN. PSYCHIATRY 190, 192–95 (2011).
\textsuperscript{31} Yong Chen et al., Unexplained Variation Across US Nursing Homes in Antipsychotic Prescribing Rates, 170 ARCHIVE INTERNAL MED. 89, 89, 93 (2010).
\textsuperscript{32} Id. at 93.
\end{footnotesize}
criteria as the rationale for psychotropic medication prescription. In a Swedish study, Holmquist, Svensson and Hoglund (2003) reported that half of the 73% of NH residents who were using at least one psychoactive drug lacked a psychiatric diagnosis. Similarly, a federal investigative study (OIG, 2011) of older NH residents on Medicare found that 83% of claims for atypical antipsychotic drugs were for off-label conditions, over half did not comply with Medicare reimbursement criteria, and 22% did not meet CMS standards (e.g., excessive dosages or durations).

With OBRA-87 focusing attention on NH residents with SMI, one unanticipated consequence was an over-emphasis on this group by researchers and policymakers, to the detriment of the much larger number of NH residents whose mental health problems do not meet the diagnostic criteria of SMI. When one looks at the total NH population, the statistics are sobering. As many as two thirds of NH residents are reported to have a mental disorder, many have symptoms of depression, 3.3–16.3% experience symptoms of anxiety, and at least half of the residents in NHs have dementia.

The literature suggests the presence of three major groups of residents with mental health problems. One group, as previously mentioned, is those residents with SMI. Depending upon broader or narrower definitions of SMI, these make up

34. L. Sorenset al., Determinants for the Use of Psychotropics Among Nursing Home Residents, 16 INT’L J. GEROGERIATRIC PSYCHIATRY 147, 147, 151, 153 (2001).
37. Burns et al., supra note 7, at 331.
40. Rovner et al., supra note 1, at 13.
between 3–27% of the NH population. Despite the legislative intent regarding residents with SMI, they now may be ‘under the radar screen’ of NH staff because they are frequently admitted with significant medical problems which take precedence over mental health issues.

A second group, one which is not given the attention their numbers accord, are those residents who have difficulties adjusting to their medical illnesses, life in the communal NH setting, or both. Transitions to NH settings not only trigger psychiatric symptoms for many residents and their caregivers, but also frequently are made in response to a medical crisis that itself may compound the psychosocial upheaval. Separation from family and home, for example, is often an extremely stressful part of the transition, precipitating abandonment fears in the resident. Residents are often in the process of enduring additional losses including relationships, physical functioning, privacy, personal possessions, life roles, cognitive functioning, and independence. Such losses have long been associated with lowered morale, social disruption, and disorientation, all of


which are linked to increased mortality rates.\textsuperscript{47} Aneshensel, Pearlin, Levy-Storms, and Schuler (2000), for example, found that relocation from community to NH doubles the risk for mortality.\textsuperscript{48} Such psychological distress may be associated with psychiatric symptoms, especially depression and anxiety. Indeed, anticipation of NH placement has been linked with suicide,\textsuperscript{49} and relocation aggravates existing health and emotional problems.\textsuperscript{50}

Given the numerous stressors attendant on life in a NH, it is not surprising that depression is common.\textsuperscript{51} Depression in the elderly population has been associated with many adverse outcomes, including more frequent medical office visits,\textsuperscript{52} longer hospital stays for NH residents,\textsuperscript{53} poorer self-rated health,\textsuperscript{54} and higher rates of mortality.\textsuperscript{55} Depressive symptoms can also negatively affect functioning,\textsuperscript{56} exacerbate medical illness,\textsuperscript{57} and heighten physical disability.\textsuperscript{58} Furthermore, depression and

\textsuperscript{48} Carol S. Aneshensel et al., \textit{The Transition from Home to Nursing Home Mortality Among People with Dementia}, 55B J. GERONTOLOGY S152, S152–53 (2000).
\textsuperscript{49} J. Pierre Loebel et al., \textit{Anticipation of Nursing Home Placement May be a Precipitant of Suicide Among the Elderly}, 39 J. AM. GERIATRICS SOC’Y 407, 408 (1991).
\textsuperscript{51} Grabowski et al., \textit{Quality of Mental Health Care}, supra note 9, at 633.
\textsuperscript{52} M. Philip Luber et al., \textit{Diagnosis, Treatment, Comorbidity, and Resource Utilization of Depressed Patients in a General Medical Practice}, 30 INT’L J. PSYCHIATRY MED. 1, 5, 6 (2000).
\textsuperscript{53} Id. at 7.
\textsuperscript{54} Benoit H. Mulsant et al., \textit{The Relationship Between Self-Rated Health and Depressive Symptoms in an Epidemiological Sample of Community-Dwelling Older Adults}, 45 J. AM. GERIATRICS SOC’Y 954, 954, 956–57 (1997).
\textsuperscript{55} Barry D. Lebowitz et al., \textit{Diagnosis and Treatment of Depression in Late Life}, 278 J. AM. MED. ASSOC. 1186, 1188 (1997).
\textsuperscript{57} Mark D. Miller et al., \textit{Chronic Medical Illness in Patients with Recurrent Major Depression}, 4 AM. J. GERIATRIC PSYCHIATRY 281, 281 (1996).
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anxiety frequently co-occur in NH residents, and anxiety is associated with decreased physical health status, greater functional disability, and increased rates of cognitive impairment.59

A third group of NH residents with mental health problems is those residents with dementia. Residents with cognitive impairment make up half of the NH population60 with 40% having significant psychiatric symptoms such as depression and delusions.61 Furthermore, estimates range widely from 20–90% of those with cognitive impairment having behavioral problems during the course of their illness at significant economic costs.62 Indeed, behavior problems and psychiatric symptoms of those with dementia are a risk factor for institutionalization,63 with aggression related to cognitive impairment and physical limitations.64 Allen-Burge, Stevens, and Burgio (1999) identify behavioral excesses (e.g., disruptive vocalizations, wandering, and physical aggression) and behavioral deficits (e.g., excess dependency) as challenging behaviors in NHs.65 Although agitation of NH residents is a frequent precipitant of psychiatric consultation, it should be noted that lethargy and social withdrawal may be overlooked.66

59. Parmelee et al., supra note 39, at 46.
60. Jay Magaziner et al., The Prevalence of Dementia in a Statewide Sample of New Nursing Home Admissions Aged 65 and Older: Diagnosis by Expert Panel, 40 GERONTOLOGIST 663, 663 (2000).
61. Rovner et al., supra note 1, at 13.
64. Mark Snowden et al., Assessment and Treatment of Nursing Home Residents with Depression or Behavioral Symptoms Associated with Dementia: A Review of the Literature, 51 J. AM. GERIATRICS SOC’y 1305, 1308 (2003).
UNIVERSITY OF SOUTH FLORIDA STUDIES

The major question addressed by the two studies described in this paper is whether the intent of OBRA-87, to promote optimal mental health care of NH residents, has been realized. An Office of Inspector General report (OIG, 2001) suggested that perhaps 15% of the usage of psychotropic medications in NHs was inappropriate, and there is continued concern about lack of adequate documentation for such usage and adherence to standards of care. It appears that professional geriatric organizations are, to some extent, aware of the problem. In their joint position statement on psychotherapeutic medication in NHs, the American Geriatrics Society and the American Association of Geriatric Psychiatry placed emphasis on distinguishing between appropriate and inappropriate use of psychoactive medications. Bartels et al. (2002) warn of an “impending public health crisis” in geriatric mental health care and identify a gap between evidence-based practice and the delivery of mental health services to older adults. As suggested above, although NH residents are known to have untreated mental health problems, the factors associated with this neglect and the proper approaches to implement effective mental health interventions are not well established. Bartels, Moak, and Dums (2002) reviewed the models of mental health service delivery in NHs and concluded that more health services research is needed “to determine which psychiatric treatments

67. DEPT OF HEALTH & HUMAN SERV., OFFICE OF INSPECTOR GEN., PSYCHOTROPIC DRUG USE IN NURSING HOMES 8 (2001).
70. Stephen J. Bartels et al., Evidence-Based Practices in Geriatric Mental Health Care, 53 PSYCHIATRIC SERVICES 1419, 1419, 1427–28 (2002) [hereinafter Bartels et al., Evidence Based Practices].
are most effective in the nursing home, which disciplines should provide such treatments, what competencies are crucial for nursing home staff, and which interventions are the most cost-effective.” To pursue this question of psychiatric treatment, we undertook two studies, both focused on the use of psychoactive medications in NHs.

STUDY 1

To address the provision of mental health care in NH residents, our group conducted an analysis of all new Medicaid residents of Florida NHs enrolled in 2003. Using Medicaid demographic and Online Survey and Certification and Reporting System (OSCAR) institutional secondary data sets, this study (Molinari, Cho, Chiriboga, Turner, & Guo, 2008; Molinari et al., 2010a) yielded the following results:

Within three months of admission, nearly 75% of new NH residents received mental health treatment. Most of this treatment was psychopharmacological, with approximately 72% of new residents receiving at least one psychiatric medication, and 66% of those receiving psychopharmacological medication taking two or more psychiatric medications. More than 15% of these residents were taking four or more psychiatric medications.

The majority of the new residents who are prescribed psychotropic medication had not received previous psychopharmacological treatment six months to a year before

73. Molinari et al., Factors and Outcomes, supra note 42, at 2; Molinari et al., Provision of Psychopharmacological Services, supra note 72, at 58.
74. Molinari et al., Factors and Outcomes, supra note 42, at 2; Molinari et al., Provision of Psychopharmacological Services, supra note 72, at 58.
the hospitalization preceding admission (58–64%), and many had not had a prior psychiatric diagnosis during the preceding six months to a year. The most common diagnoses were vague categories such as “other mental health” and “other dementia,” suggesting lack of diagnostic precision.

New NH residents are prescribed a variety of psychiatric medications including antidepressants (49%), mood stabilizers (12%), antipsychotic medications (26%), anti-anxiety agents (23%), and medications for dementia (19%).

Broadly defined, billable non-psychopharmacological mental health treatment (e.g., assistive care; behavioral health emergency; partial hospitalization; assessment/lab work) is relatively infrequently provided for new NH residents (12%), but when implemented is always associated with a psychiatric diagnosis.

Approximately 85% of those NH residents who had psychiatric treatment before admission to the NH were currently receiving mental health treatment; “they were almost three times as likely to receive treatment as those residents who had not had past psychiatric treatment.”

Residents who received mental health services were more likely to be male, of younger age, of non-minority status, and to reside in non-profit NHs with a relatively low number of beds.

The findings of this study were consistent with those reported in the literature review, which suggests there has been an upturn in the amount of psychiatric medications (especially antidepressants) prescribed to NH residents, coupled with a lack

75. Molinari et al., Factors and Outcomes, supra note 42, at 12; Molinari et al., Provision of Psychopharmacological Services, supra note 72, at 58.
76. Molinari et al., Factors and Outcomes, supra note 42, at 2; Molinari et al., Provision of Psychopharmacological Services, supra note 72, at 59.
77. Molinari et al., Factors and Outcomes, supra note 42, at 2.
78. Id. at 2, 9; Molinari et al., Provision of Psychopharmacological Services, supra note 72, at 58.
80. Id.; Molinari et al., Provision of Psychopharmacological Services, supra note 72, at 58–60.
of requisite psychiatric diagnoses and perhaps lack of adherence to NH guidelines when administering psychotropic medications, and the continued limited amount of non-pharmacological care (even when broadly defined) relative to psychopharmacological treatment.81

The lack of past psychiatric treatment and psychiatric diagnoses in the year leading up to NH placement (at least prior to hospital admission precipitating NH entry) for many of these new residents who received psychopharmacological services within three months of admission may be attributable to a number of possible explanations. New NH residents may have an undiagnosed psychiatric condition that should have been treated prior to NH admission; the NH placement may have triggered a psychiatric emergency dictating psychopharmacological care; or the NH residents may be treated inappropriately or with off-label uses of the psychiatric medications.

**STUDY 2**

As a follow-up to our concerns that over 70% of the newly admitted NH residents are on psychotropic medication within three months of their admission, our group then attempted to understand the implications of the results of Study 1 by conducting intensive chart reviews of residents in select NHs to determine if the use of psychoactive medication is justified.82 “Justification was documented either through assignment of a current psychiatric diagnosis or . . . a stated rationale indicating psychoactive medications were used to target specific symptoms or problem behaviors.”83 Our intent was to ascertain whether there are specific evidence-based indications for such

81. See, e.g., Briesacher et al., supra note 27; Hawes et al., supra note 26, at 977, 983; Holmquist et al., supra note 35, at 669, 674.
82. VICTOR A. MOLINARI ET AL., REASONS FOR PSYCHIATRIC MEDICATION PRESCRIPTION FOR NEW NURSING HOME RESIDENTS 1 (2010) [hereinafter MOLINARI ET AL., REASONS FOR PSYCHIATRIC MEDICATION PRESCRIPTION].
83. Id. at 7.
psychopharmacological interventions. If there was lack of adequate justification, then there would be additional evidence supporting the worrisome national and international trend of increased usage of psychoactive medications in NHs without adequate documentation or rationale. Another purpose of this study was to determine whether the completion of PASRR2 evaluations was associated with more appropriate psychopharmacological treatment. Finally, focus group questions were designed to identify reasons for lack of adherence to published medication parameters for NH residents, “to generate some specific hypotheses regarding the possible failure of PASRR to assure adequate mental health treatment of NH residents,” and “to establish why the non-pharmacological interventions specified by OBRA-87 [are not] used as a first-line of treatment.”

We extracted information from seventy-three charts drawn from a convenience sample of seven NHs to determine the presence and rationale for psychoactive medication use. Six focus groups with NH staff were conducted to explore rationale for psychoactive medication usage documented in the record abstractions.

Overall the results suggested that NH residents with mental health problems receive attention and treatment:

The old lore that there is limited treatment for addressing the mental health problems of NH residents can be put to rest! On a very broad level, many residents had mental health problems and most received treatment in the hospital prior to placement and during their NH residence. Of the NH residents, 73% carried a psychiatric diagnosis on admission, with 25% being diagnosed with some type of dementia. Eighty-nine percent of the residents who were prescribed psychoactive

84. Id.
85. Id.
86. Id.
87. Id. at 11.
medications had a psychiatric diagnosis and all residents who were on psychoactive medications had a written physician’s order for their use. Mental status was monitored by the staff, with psychoactive medications at times being added and at times being dropped. Nearly three-fourths of NH residents on psychoactive medications had at least one note in the chart justifying psychoactive medication prescription. Over 92% of the residents had at least one note in the chart regarding a behavior that deserved staff attention; over 80% of those residents who had a psychoactive medication added had some behavioral monitoring prior to psychoactive medication prescription. Impressively, half of the residents received additional mental health consultation, and 59% of the NH residents had at least one note specifying the observation of side-effects.

Focus group data suggested that the NH staff seemed fairly knowledgeable regarding how to manage the behavioral difficulties of residents. However, staff members were concerned about how to sort out the medication regimens with which new residents are discharged from the hospital to the NH, and they acknowledged “the need for more communication/teamwork and training to address the mental health needs of the residents.”

Several of the findings however do raise concerns:

1. No PASRR 2s had been completed. Although 68% of the residents were admitted with a psychoactive medication, almost 100% of the PASRR 1s in the charts specified that the new NH residents did not have a mental disorder and did not merit a

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88.  Id. at 12.
89.  Id.
90.  Id.
91.  Id.
92.  Id.
93.  Id.
94.  Id.
95.  Id. at 2.
96.  Id. at 13.
PASRR 2.97 “In informal discussions with NH administrators regarding this matter, it appear[ed] that there [was variability] of interpretation regarding when a PASRR 2 [was] needed.”98 The belief of NH administrators appeared to be that PASRR 2s are initiated by meeting the criteria for SMI, instead of the more common psychiatric/behavior problems that could be triggered by adjustment issues and reflected in “mental status change.”99 Our results were quite consistent with those of Linkins, Luca, Housman, and Smith (2006) who found that very few PASRR 2 assessments were triggered by significant alterations in the patient’s condition.100 Indeed, the term ‘mental status change’ may be too nebulous to be identified in a consistent manner by NH personnel. Somewhat paradoxically, our findings suggested that NH administrators pay attention to the quality of life of their residents, often resorting to mental health referrals rather than the PASRR system to evaluate mental status changes of residents. The PASRR process itself seems to be perceived as a government mandated stumbling block rather than a guarantee for proper mental health care for all NH residents who need it. Perhaps these different interpretations of PASRR justify further instruction on this issue, some additional guideline specification, or even a complete evaluation of the outcomes of the PASRR process and whether the end products are consistent with the original goals.

2. Sixty-eight percent of residents were on at least one psychoactive medication when admitted to the NH.101 However, “more striking is the fact that 84% of the NH residents were admitted from the hospital, and 84% of these residents were admitted on at least one psychoactive medication.”102 A strength

97. Id. at 11, 13.
98. Id. at 2.
99. Id.
100. Linkins et al., supra note 23, at 329.
101. MOLINARI ET AL., REASONS FOR PSYCHIATRIC MEDICATION PRESCRIPTION, supra note 82, at 2.
102. Id.
of the chart reviews in this study was that they allowed more access to hospital data than the prior study, and such data yielded a prime pathway for the origins of psychoactive medication usage in NHs.

3. “Over 85% of the NH residents were on a psychoactive medication within three months of admission, and 13.7% were on four or more psychoactive medications.” These findings are consistent with our prior research suggesting heavy use of psychoactive medications, and underscore continued concerns with undesirable side-effects and troublesome medical sequelae. These results strongly suggest that NH residents are on a psychoactive track even before admission to the NH, and that a point of entry for interventions could be at discharge from the hospital and upon NH entry to determine whether each drug in a resident’s psychoactive regimen is essential. It should be noted that one focus group member “indicated the NH staff often have to ‘clean up’ the situation they inherit from the hospitals that do not have strict rules and regulations” regarding psychoactive medications. As suggested above, a broader interpretation of the need for PASRR 2s (e.g., rescinding the exclusionary criteria for those with dementia) may yield a larger number of in-depth mental health assessments upon admission which might promote both non-psychopharmacological and appropriate pharmacological strategies linked to a mental health treatment plan that could be routinely monitored regarding the need for psychoactive medications.

4. Although just over half of the residents had chart notes regarding non-psychopharmacological approaches (e.g., one-on-one, sensory stimulation, involvement in activities, soothing conversation, validation therapy) to address difficult behaviors, this percentage is dwarfed by the 85% who receive treatment that is psychopharmacological in nature.

103. Id.
104. Id. at 21.
105. Id. at 3.
Despite the limitations of the convenience sample used in this study, our results highlighted the large amount of psychoactive medications administered to NH residents, with evidence for even more psychopharmacological treatment than our prior study (85% versus 72% three months post admission).\footnote{106} Our current data also suggests much more non-psychopharmacological care (54% versus 12%) for patients with mental health problems.\footnote{107} One explanation for this gap is that this informal type of mental health care is not necessarily reimbursed and therefore not included in the Medicaid B data set (used in Study 1) but is included in the patient’s progress notes. Surprisingly, the number of residents in the current study with a hospital admission-based diagnosis (73%) and prior psychoactive treatment (68%)\footnote{108} is dramatically different from what was found in our previous study, where 29% had a prior psychiatric diagnosis and 36% received prior psychopharmacological treatment.\footnote{109} We suspect that the Medicaid data base we used in Study 1 did not capture the hospital data and thereby underrepresented prior psychiatric diagnosis and prior treatment.

These findings and our review of the literature suggest that there is a good deal of mental health care that occurs in NHs. The underlying question remains however: how optimal is this care? In this study, it appeared that a high percentage of NH residents were being treated for specific mental health problems for which they were diagnosed and then monitored regarding the effects of the treatment. Approximately one-half of residents received outside mental health consultation.\footnote{110} Most residents were prescribed psychoactive medications, and over half
Mental health treatment received broadly defined non-psychopharmacological care. Is there an over-reliance on psychopharmacological interventions, a particular concern for those residents (13.7% to 15%+) who we have found in these two studies to be taking four or more psychoactive medications? It does seem that psychopharmacological care remains the major strategy used by NHs to address the mental health problems of residents, and that the spirit of OBRA has not been realized. NH staff and administrators appear sensitive to the psychological needs of their residents. However, faced with residents with multiple medical and psychiatric problems, the need for continued mental health training of staff, the lack of available geriatric mental health professionals, and perceptions that PASRR rules hinder rather than assist in targeting mental health problems, NH staff and administrators resort to psychopharmacological care as a primary way of attempting to resolve a NH resident’s distress.

Discussion

A variety of systemic problems may be causing the potential over-use of psychoactive medications in NHs. One problem, as noted by Reichman et al. (1998), Gallagher-Thompson, Cassidy, and Lovett (2000), and Bartels et al. (2002), is that there is an “expertise gap” in long term care with far too few NH providers across a variety of disciplines trained in geriatrics and/or trained in mental health. Indeed, most of the mental health prescriptions in NHs are written by non-psychiatrists. Advanced skill may yield more judicious prescription patterns and higher quality of care.

111. Id. at 21.
112. Id. at 20; Molinari et al., Provision of Psychopharmacological Services, supra note 72, at 58.
113. Reichman et al., supra note 7, at 321; Dolores Gallagher-Thompson et al., Training Psychologists for Service Delivery in Long-Term Care Settings, 7 CLINICAL PSYCHOL.: SCI. & PRAC. 329, 329 (2000); Bartels et al., Evidence Based Practices, supra note 70, at 1419.
114. See Bartels et al., Evidence Based Practices, supra note 70, at 1427.
A second problem is that there remains a limited amount of mental health training for front-line staff regarding mental health issues in NHs. Approximately 70–80% of daily resident care is provided by direct care workers, including certified nursing assistants (CNAs) who receive a minimum of 75 hours of training. Florida is among a handful of states requiring four additional hours of training for dementia care (but has no training requirements for other psychiatric conditions). In another study not reported here, our team evaluated stakeholders for those with SMI in NHs by conducting interviews, surveys, and focus groups. We found that both NH administration and front-line staff are concerned about the possibility of aggressive behavior, and consistently endorse education as one way to address such concerns. Given the high turnover rates in NHs for all levels of staffing, such training needs to be an ongoing feature of staff education. It also needs to incorporate a ‘hands-on’ approach building worker competency that complements didactic learning and teaches new caregiver skills.

A third problem is that the potential for inappropriate usage of psychoactive medications may be part of a longstanding larger issue of unsuitable overall medication prescription in NHs. For example, Lau, Kasper, Potter, and Lyles (2004) conducted an analysis of a nationally representative sample of 1.6 million NH residents and found that at least half of those over the age of 65 had received a potentially inappropriate

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117. Victor Molinari et al., *Serious Mental Illness, supra note 2, at 67.*
118. *Id.* at 75–76.
medication prescription in 1996.\footnote{121}

A fourth problem is that over-medication of NH residents is part of a general societal problem reflected in an increasing number of Americans taking psychoactive medications. A recent study by Mojtabai and Olfson (2008) used National Ambulatory Medical Care surveys to examine patterns of outpatient psychotropic medication usage in office-based psychiatric practices.\footnote{122} Over a ten-year period, the study found an increase in the number of psychotropic medications prescribed.\footnote{123} A recent report highlights the concerns over polypharmacy and accidental death.\footnote{124}

A fifth problem is that there is limited agreement about “best mental health practices” regarding prescription protocols and mental health treatments for long-stay NH residents with multiple comorbidities. Studies suggest that preventable hospitalizations have been associated with some of the medications prescribed, with inadequate mental health training of NH staff, and limited assessment of residents.\footnote{125} NH administrators appear sensitive to mental health issues but believe that resident and family attitudes towards mental health services are a major barrier to providing services.\footnote{126} When asked about the difficulty of providing services, administrators considered psychotherapeutic interventions as the most difficult for NHs to provide and psychopharmacological treatment as least difficult to provide.\footnote{127}

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\item Ramin Mojtabai & Mark Olfson, National Trends in Psychotherapy by Office-Based Psychiatrists, 65 ARCHIVES GEN. PSYCHIATRY 962, 963 (2008).
\item Id. at 963–64.
\item See, e.g., Yuchi Young et al., Factors Associated with Potentially Preventable Hospitalization in Nursing Home Residents in New York State: A Survey of Directors of Nursing, 58 J. AM. GERIATRICS SOC’Y 901 (2010).
\item Id. at 906.
\item Victor Molinari et al., Mental Health Services in Nursing Homes: A Survey of
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A sixth problem is that regulatory procedures may be roadblocks to better care. The NH administrators of a previously cited study report that the survey standards and PASRR regulations have created disincentives to provide adequate mental health services in NHs. Indeed, although the PASRR process may help triage residents with SMI to less restrictive community settings, if residents are admitted to the NH, PASRR also appears to create requirements inconsistent with good quality mental health care. The bottom line is that the PASRR process, whether or not it has done its intended job of preventing inappropriate SMI admissions, may lull those charged with NH quality of care into erroneously believing that mental health care in NHs is thereby addressed. There are many NH residents not meeting the criteria for SMI who have significant mental health problems and who need mental health care.

A seventh problem is that reimbursement for mental health nursing home services is limited. Our survey of Florida NH administrators suggests that NH administrators are aware of the mental health needs of NH residents and attempt to address these needs the best way they can but have limited reimbursement and resources. They frequently employ outside consultants to provide mental health care, and they report high satisfaction with these services. Grabowski, Aschbrenner, Feng, and Mor (2009) note that in addition to differential adherence to PASRR requirements, variation in admission of residents with significant mental illnesses across states may be linked to the wide range of Medicaid mental health payment policies, presence of home and community-
based services, and state mental health infrastructure (e.g. number of state psychiatric facilities). Indeed, the Medicaid benefit only pays for basic mental health services and does not include payment for the specialized rehabilitation treatment that may be needed.

**Recommendations**

Can cost-efficient mechanisms be utilized to assure that the spirit and intent of OBRA is realized in all NHs? A variety of approaches should be considered. One possible solution is to educate staff on a consistent basis regarding how best to assist with the implementation of a variety of valid and available evidence-based mental health programs that can be tailored to the unique psychiatric circumstances of each resident. Staff and provider education have been shown to be effective in improving mental health care. Such training should certainly include material on communication among staff members at all NH levels (e.g., how a CNA would express her concerns to the treatment team regarding a resident’s increasing psychological distress), and how to improve teamwork within and across disciplines.

Second, related to the above, dissemination of specific evidence-based non-pharmacological approaches to reduce behavior problems in NHs must become a priority. Many such approaches are available. Validation therapy and behavioral interventions for a host of mental health problems including sleep difficulties, disruptive behavior, pain, and depression

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136. See, e.g., Burgio & Burgio, *supra* note 120, at 288; Cameron J. Camp et al.,
are well-researched treatments whose potentials have not been realized. Interestingly, although knowledge of such treatment varies, physicians who provide NH services are generally more favorably disposed towards use of non-pharmacological than psychopharmacological means to address behavioral problems associated with dementia. Access and availability of mental health services by trained geriatric professionals has often been cited by NH staff as a major hurdle in providing quality care.

Third, there must be continued refinement of protocols for the use of psychoactive medications in NHs. Ryan, Kidder, Daie, and Tariot (2002) suggest a number of issues that should be investigated to assure proper medication usage in NHs including: the epidemiology of psychiatric problems among NH residents; the development of better assessment instruments; clinical trials that target combinations of psychoactive medications; the effects of the NH environment, better staffing, diverse training programs, and diagnostic comorbidity on psychoactive treatment algorithms; and non-pharmaceutical funded research on psychiatric medications that address overarching public health issues.

Fourth, more extensive assessments of mental health problems via strict interpretation of PASRR rules triggering

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Use of Nonpharmacologic Interventions Among Nursing Home Residents with Dementia, 53 PSYCHIATRIC SERV. 1397, 1398 (2002); P. Andrew Clifford et al., Cognitive-Behavioral Pain Management Interventions for Long-Term Care Residents with Physical and Cognitive Disabilities, in HANDBOOK OF BEHAVIORAL AND COGNITIVE THERAPIES WITH OLDER ADULTS 76, 77 (Dolores Gallager-Thompson et al. eds., 2008); Jiska Cohen-Mansfield et al., Can Persons with Dementia be Engaged with Stimuli?, 18 AM. J. GERIATRIC PSYCHIATRY 351, 360-62 (2010); Lee Hyer et al., Group, Individual, and Staff Therapy: An Efficient and Effective Cognitive Behavioral Therapy in Long-Term Care, 23 AM. J. ALZHEIMER’S DISEASE & OTHER DEMENTIAS 528, 528 (2009); Suzanne Meeks et al., Increasing Pleasant Events in the Nursing Home: Collaborative Behavioral Treatment for Depression, 5 CLINICAL CASE STUD. 287, 287 (2006).


138. Linkins et al., supra note 23, at 331; MOLINARI ET AL., FACTORS AND OUTCOMES, supra note 42, at 4.

139. Ryan et al., supra note 24, at 1412.
evaluations not only upon admission but also based on residents’ mental status changes (regardless of diagnosis), or even other required non-PASRR type mental health evaluations may yield more optimal mental health treatment. Poston and Hanson (2010) conducted a meta-analysis of studies using psychological assessment as a therapeutic intervention and found that providing feedback regarding testing in a collaborative manner led to robust and meaningful positive outcomes.\textsuperscript{140} A mandatory comprehensive evaluation of the need for psychiatric medications upon NH admission (for all residents or at least for all those from hospital settings) by qualified geropsychiatrists, geriatricians, or geriatric pharmacologists therefore should be considered. Of note, a recent evaluation of a pilot study by our team found that those NH residents administered a brief mental health assessment upon admission received less psychoactive medications at one-month follow-up than a comparison group who did not receive such an assessment.\textsuperscript{141}

Fifth, there must be enhanced financial incentives for geriatric mental health professionals to provide treatment in long term care settings and for NHs to receive adequate Medicaid reimbursement for appropriate mental health services. Reichman et al. (1998) note that NH directors would gratefully accept a wider role for psychiatrists in their facilities.\textsuperscript{142} They cite data to suggest that formal contracts between NHs and psychiatric providers yield more satisfactory care for residents while fee-for-service arrangements result in greater reliance on medications.\textsuperscript{143} It has been suggested that consultation-liaison psychiatric services to NHs could result in less need for crisis

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\footnotesize{\textsuperscript{140} John M. Poston & William E. Hanson, \textit{Meta-Analysis of Psychological Assessment as a Therapeutic Intervention}, 22 PSYCHOL. ASSESSMENT 203, 203, 211 (2010).}
\textsuperscript{141} \textit{VICTOR MOLINARI ET AL., EFFECT OF MENTAL HEALTH ASSESSMENT ON PRESCRIPTION OF PSYCHOACTIVE MEDICATION FOR NEW NURSING HOME RESIDENTS 9} (2011).
\textsuperscript{142} Reichman et al., \textit{supra} note 7, at 325.
\textsuperscript{143} \textit{Id.}}
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services, better behavioral management strategies, and reduced staff burnout.\footnote{Elizabeth Craig & Hieu Pham, \textit{Consultation-liaison Psychiatry Services to Nursing Homes,} 14 \textit{Australasian Psychiatry} 46, 46–47 (2006).}

Sixth, NH quality assessments need to be revamped to promote interdisciplinary approaches and, in the spirit of OBRA-87, incentivization of optimal mental health care should generate better management of psychoactive medication regimens and more options for non-psychopharmacological interventions. Quality indicator reviews that guide inspections, and which can be used to compare NHs in the same state on different criteria (e.g., prescription patterns),\footnote{Carmel M. Hughes & Kate L. Lapane, \textit{Administrative Initiatives for Reducing Inappropriate Prescribing of Psychotropic Drugs in Nursing Homes: How Successful Have They Been?,} 22 \textit{Drugs & Aging} 339, 340, 344–45 (2005).} have been shown to be an evidence-based approach to improving mental health care in NHs.\footnote{Id. at 345.} Rantz et al. (2003) described a statewide strategy to improve quality of care in NHs which included a partnership between a state agency responsible for NH survey/certification and an academic school of nursing, and the provision of on-site clinical expertise by a team of nurses.\footnote{Marilyn J. Rantz et al., \textit{Statewide Strategy to Improve Quality of Care in Nursing Facilities,} 43 \textit{Gerontologist} 248 (2003).} Scott-Cawiezell (2005) proposed a conceptual model to build organizational capacity to promote quality in NHs.\footnote{Jill Scott-Cawiezell, \textit{Are Nursing Homes Ready to Create Sustainable Improvement?,} 20 \textit{J. Nursing Care Quality} 203, 204 (2005).} The capacity to “make and sustain improvement” of resident outcomes must involve culture change that includes more open communication, leadership that promotes teamwork, a ‘rewards-based’ administrative system, and knowledgeable use of data (e.g., MDS).\footnote{Id. at 203–05.} Regarding the latter, Mor (2005) suggested that the mandated use of uniform publicly reported data is a step in the right direction to improve the quality of long-term care, but must be supplemented by information on quality of life, autonomy, and resident...
satisfaction.\textsuperscript{150}

Seventh, more research needs to be conducted on resident, facility, and provider variables that will illuminate process, structural, and outcome aspects of quality of life of residents with mental illness in NHs.\textsuperscript{151} In particular, racial/ethnic disparities should be explored, and such research should be extended to other housing options for older adults with mental illness such as assisted living facilities.\textsuperscript{152}

In a thoughtful article, Cody, Beck, and Svarstad (2002) delineate a variety of internal and external challenges to the use of non-pharmacological interventions in NHs.\textsuperscript{153} Internal barriers include organizational arrangements (multiple physicians; inadequate ability of front-line staff to interpret problem behaviors), social factors (staff avoidance of aggressive NH residents; cultural/ethnic backgrounds of NH staff; family’s lack of acknowledgment of resident’s behavior problems), technology (access to mental health specialists; tracking resident behaviors), and physical setting (use of space; institutional appearance; noise levels).\textsuperscript{154} External challenges include regulatory forces (lack of tolerance for safety violations; lack of information regarding implementation of non-psychopharmacological interventions), legal forces (punitive legal environment), and economic forces (formidable reimbursement issues for providers of specialty mental health services; limited promotion of mental health services in NHs).\textsuperscript{155} These authors argue that resident-centered treatment cultures, better monitoring and documentation, participation in resident care planning meetings by nursing assistants, educational programs

\textsuperscript{150} Vincent Mor, Improving the Quality of Long-Term Care with Better Information, 83 MILBANK Q. 333, 333, 351 (2005).
\textsuperscript{151} Grabowski et al., Quality of Mental Health Care, supra note 9, at 649.
\textsuperscript{152} Id.
\textsuperscript{153} Marisue Cody et al., Mental Health Services in the Nursing Homes: Challenges to the Use of Nonpharmacologic Interventions in Nursing Homes, 53 PSYCHIATRIC SERV. 1402, 1402 (2002).
\textsuperscript{154} Id. at 1403–04.
\textsuperscript{155} Id. at 1404.
that include special directives for staff communication, and thoughtful environmental adaptations will address internal barriers.\textsuperscript{156} To overcome external barriers, consideration should be given to strategies that include: developing outcome-based care plans; improving state surveyors’ understanding of the types of non-pharmacological interventions that can be employed in NHs; implementing risk management techniques; and expanding payment incentives for non-physician mental health providers.\textsuperscript{157} Some of these ideas are reflected in the American Geriatrics Society and American Association for Geriatric Psychiatry recommendations to promote quality mental health care in NHs which advocate policies to improve the availability of mental health services in NHs, to build a mental health professional workforce trained in long-term care, and to use payment systems to reward NHs for appropriate mental health treatment.\textsuperscript{158}

The proportion of residents in NHs being admitted with mental illness now appears to have overtaken the number of those with dementia.\textsuperscript{159} Given the long history of concerns regarding mental health care in NHs, and the slow pace for the implementation of proposals to manage these concerns, a final recommendation would be to plan a summit that ideally would encourage federal and state agencies responsible for quality NH care to begin a dialogue with NH stakeholders, including administrators, medical directors, nursing staff, social work, ombudsmen, long-term care organizations, family members, and residents.

\textsuperscript{156} Id. at 1404–05.
\textsuperscript{157} Id. at 1405.
\textsuperscript{158} Am. Geriatrics Soc’y & Am. Ass’n of Geriatric Psychiatry, supra note 69, at 1299–1301.
\textsuperscript{159} Catherine Anne Fullerton, Trends in Mental Health Admissions to Nursing Homes, 1999–2005, 60 PSYCHIATRIC SERV. 965, 970 (2009).