

Research Article

Media Portrayal of the Nursing Homes Sector: A Longitudinal Analysis of 51 U.S. Newspapers

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Abstract

Purpose: Most Americans' low opinion of the nursing home (NH) sector could derive, in part, from the way in which it is portrayed in the media. This study furthers understanding of media portrayal of the NH sector by identifying how NHs were depicted in 51 U.S. newspapers from 1999 to 2008.

Design and methods: Keyword searches of the *LexisNexis* database were performed to identify 16,280 NH-related articles. Article content was analyzed, and tone, themes, prominence, and central actor were assessed. Basic frequencies and descriptive statistics were used to examine article content across regions, market type, and over time.

Results: Findings reveal considerably less NH coverage in the Western United States and a steady decline in NH coverage nationally over time. Most articles were news stories; more than one third were located on the front page of the newspaper or section. Most articles focused on NH industry and government interests, very few on residents/family and community concerns. Most articles were neutral or negative in tone; very few were positive or mixed. Common themes included quality, financing, and legal concerns. Tone, themes, and other article attributes varied across region, market type, and over time.

Implications: Overall, findings reveal changes in how newspapers framed NH coverage, not only with respect to tone but also with respect to what dimensions of this complex issue have been emphasized during the time period analyzed. Variation in media coverage may contribute to differences in government and public views toward the NH sector across regions and over time.

Keywords: Long-term care, Nursing facilities, Agenda setting, Content analysis

Unease with the nursing home (NH) sector exists among the general public, both with regard to honesty and ethics and overall performance (Kaiser Family Foundation [KFF], 2001, 2005, 2007). Indeed, most Americans report being very concerned (51%) or somewhat concerned (35%) about the quality of NH care available in the United States (KFF, 2007). Ongoing concern about NH care also exists

among government officials and other policy specialists especially when compared with the quality of care offered by hospitals, hospice, home health, and other types of providers (Miller, Clark, & Mor, 2010).

Outside personal experience or familiarity with the latest research, the relatively low opinion many hold vis-à-vis NHs could derive, in part, from the way in which they have

been portrayed in the media. Indeed, virtually all Americans report hearing or reading (80%) or being exposed (60%) to news stories about NHs during the course of the year (KFF, 2001). Moreover, while most Americans report basing their impression of NHs mainly on their own experience (31%–40%) or the experience of friends and family (31%–43%), a large proportion (21%–27%) report doing so in light of media reports (KFF, 2001, 2005).

The impact of the mass media on the NH sector has been discussed anecdotally for over 30 years (Hawes, 1987; Smith, 1981; Ulsperger, 2003; Vladeck, 1980). Indeed, there appear to be a number of instances where negative coverage of the NH sector played a role in greasing the wheels—so to speak—of government action. “Before 1974,” Smith (1981, p. 13) explains, “the New York state NH sector was almost undisturbed by press coverage.” But from 1974 to 1976 “NHs were engulfed in a tidal wave of coverage” about “fraud and inappropriate influence of political leaders by NH interests.” This coverage, according to Smith, led to establishment of the Moreland Act Commission, which investigated the NH industry, resulting in subsequent legislation creating a much more stringent regulatory environment in the state.

Ulsperger (2003) provides a more recent example of the mass media role in NH policy; in this case, by describing illegal transactions that took place between NH operators and Department of Health officials in the State of Oklahoma. It had been reported that the State’s Health Commissioner solicited bribes in exchange for information on the timing of state inspections. Media coverage of the scandal triggered increased awareness and public concern, a rise in official complaints, and the mobilization of interest groups bent on reform. This activity captured the attention of political leaders and government officials, leading to quick enactment of a 2000 state law aimed at improving the oversight process and preventing future corruption.

The relationship between media coverage and government policies toward NHs has been documented internationally. Lloyd, Banerjee, Harrington, Jacobsen, and Szebehely (2014), for example, analyzed the causes and consequences of NH media scandals in the United States, Canada, Norway, Sweden, and United Kingdom. Results highlight the role of for-profit, corporate ownership in precipitating recent NH scandals. Results also highlight the role of investigative reporting in raising public awareness and spurring state action, which varied across jurisdictions but generally avoided addressing underlying structural conditions due to conflicting views on the role of the state in the NH sector.

Due to the dearth of systematic content analytic research examining media coverage of the NH sector, this paper identifies how NHs were depicted in 51 U.S. newspapers from 1999 to 2008. Through content analysis of a comprehensive 16,280 article database, the aim of the present study is to provide a thorough understanding of NH coverage than has been garnered to date. In particular, we seek to answer the following questions: What kinds of NH coverage prevailed in terms of tone and content? How has NH

coverage varied over time and across regions and markets (national vs. other)? In what ways has the tone of coverage related to the other elements of the coverage analyzed?

The Media, Public, and Government Agendas

Understanding the nature and content of media coverage of the NH sector and how it has varied over time and across regions and markets is important because evidence suggests that individuals’ opinions and behaviors can be shaped by the mass media through coverage of specific topics and the nature in which such topics are presented (Brodie, Hamel, Altman, Blendon, & Benson, 2003; Dunaway, Abrajano, & Branton, 2010; Pierce & Gilpin, 2001; Quick et al., 2007). Documenting the nature and content of NH coverage, both cross-sectionally and longitudinally, is also important because evidence suggests that the mass media can influence the actions and policies pursued by government (Baumgartner & Jones, 1993; Bonafont & Baumgartner, 2013; Kingdon, 1995; Lloyd et al., 2014). In general, extant research supports a two-stage process whereby the media agenda influences the government agenda, in part, through its influence on the public agenda (Dearing & Rogers, 1996; McCombs, 2014). A direct, reciprocal relationship between the government and media agendas is supported as well.

The media exerts influence, both directly, by summoning an emotional or intellectual response, and indirectly, by controlling exposure to particular events and the complexity with which those events are discussed (Wakefield, Loken, & Hornik, 2010). Three avenues of media influence have been delineated in the literature: agenda setting, priming, and framing.

Agenda setting focuses on the association between media coverage and population perception of issue importance. Agenda setting implies that the frequency with which a news story is covered and how the media decides to convey that coverage correlate to population perception about the importance of an issue or topic. Priming refers to the media’s impact on the standards people use to evaluate issues and performance (Scheufele & Tewksbury, 2007). “By making some issues more salient in people’s mind (agenda setting),” Scheufele and Tewksbury (2007) explain, the “mass media can also shape the considerations that people take into account when making judgments about... issues (priming)” (p. 11).

First-order agenda setting effects refer to the media’s influence on people’s ranking of the importance or salience of general issues; second-order agenda setting effects refer to the way in which particular issues are framed. Framing is the way in which a particular issue is perceived by a population, based upon how the media decides to convey that issue (Matthes, 2009; Scheufele & Tewksbury, 2007). “Framing,” according to Entman (2007), “is the process of culling a few elements of perceived reality and assembling a narrative that highlights connections among them to promote a particular interpretation” (p. 2). Ghanem (1997) identifies four dimensions of framing: prominence

(e.g., placement, story format); the emotional resonance or affect; specific subtopics; and other attributes that influence people's thinking. The manner in which the mass media reports on particular issues is important because the decisions made can lead to varying perceptions about a problem—its significance, likely causes, and potential solutions.

Despite the potential linkage between media coverage, public opinion, and public policy, few studies have systematically examined the way in which the NH sector has actually been portrayed by the mass media, both cross-sectionally, across regions and markets, and over time. Smith (1981) tracked NH articles published in *The New York Times* from 1956 through 1978, finding that the noticeable increase in articles during 1974–1977 primarily covered criminal behavior on the part of NH investors and operators. Ulspenger's (2002) work identified significant changes in the way six major U.S. newspapers covered the National Citizens Coalition for NH Reform, with framing mainly revolving around resident-issues (e.g., general abuse, restraint use) during 1987–1992 and structural concerns (e.g., billing fraud, staffing shortages) during 1995–1999, following a pause in coverage in 1993 and 1994. Mebane (2001) analyzed media coverage of the long-term care sector in 1998 by 22 U.S. newspapers, 3 broadcast networks, the Cable News Network, and National Public Radio. Thirty-eight percent, 23%, and 19% of the NH articles analyzed reported on business, quality of care, and justice system issues, respectively. Only 13% of the articles were published on the front page. Finally, prior research examined the way in which NHs were covered in four widely circulated national newspapers—*The New York Times*, *The Washington Post*, *Chicago Tribune*, and *The Los Angeles Times*, during 1999–2008 (Miller, Tyler, & Mor, 2013; Miller, Tyler, Rozanova, & Mor, 2012). Prior to this investigation no study had examined the tone of NH coverage; the last time content had been examined was 2000.

Methods

Data

All NH articles published in the 51 study newspapers (Supplementary Appendix) from January 1, 1999 to December 31, 2008 were retrieved from the complete, commercial version of the *LexisNexis* database, supplemented by electronic versions of the newspapers themselves. The following search terms were used: “NH”/“NHs,” “long-term care facility”/“long-term care facilities,” and “nursing facility”/“nursing facilities.” Those excluded from the final sample consisted of duplicates (including news briefs), obituaries, advertisements, and articles that were not about NHs say, because they only mentioned NHs in passing or were about another topic (e.g., reporting on a local election site). Of tens of thousands of articles identified, 16,280 were kept for purposes of analysis. Articles from certain years for two states—New Hampshire (1999–2003) and South Carolina (1999)—were unavailable.

Coding Strategy

A coding instrument was developed to systematically abstract information from each of the articles identified. Codes were developed through an inductive process and refined over several iterations, in collaboration with other members of the research team (Glaser & Strauss, 1967). Training of the six coders was overseen by the study investigators. Bi-weekly meetings were conducted to discuss progress with the coding, the application of coding categories, and to resolve difficulties associated with coding specific articles. The second and third authors coded the vast majority of articles analyzed. Reliability analysis was performed on 120 articles coded by these two individuals using chance-corrected reliability coefficients, Krippendorff's alpha (Hayes & Krippendorff, 2007). Results ranged from 0.61 to 1.00 across categories. Krippendorff's alphas for each coding category are reported later.

Content Abstracted

Year: Years examined include: 1999–2008.

Region: At least one newspaper was chosen from the capital or largest city of 48 states and the District of Columbia, including two newspapers each from Illinois and New York (see Supplementary Appendix). Newspapers were organized according to U.S. Census region: *Northeast*, *South*, *Midwest*, and *West*.

Market Scope: As noted, four widely circulated national newspapers were examined in previous research (Miller et al., 2012; Miller et al., 2013). *The New York Times*, *The Washington Post*, and *The Los Angeles Times*, at 876,638, 600,449, 545,345, respectively, were among the top five most circulated dailies in the United States (Audit Bureau of Circulations, 2010). *The Chicago Tribune*, at 441,508, was the most circulated daily outside of California and New York.

Affect: Information on affect included the following mutually exclusive categories: positive, negative, neutral, or mixed ($\alpha = .68$). Articles with positive tone portrayed the NH sector in a favorable light, leaving the reader “feeling good” by the end. They also relied on strongly positive adjectives and anecdotes. Articles with negative tone, by contrast, emphasized less desirable aspects, leaving readers feeling negatively by the end. They also employed strongly negative adjectives and anecdotes. Articles with neutral tone were factual pieces that eschewed strong wording, personal statements, or anecdotes. These did not elicit strong emotion from the reader due to the manner in which the story was presented and worded. Articles with mixed tone presented both positive and negative aspects of a story, reporting a range of reactions and/or pitting two sides against one another. These stories often included both positive and negative wording, as described earlier, in approximately equal measure.

Prominence: Information on prominence included: article type (news, editorial, column, letter) ($\alpha = .89$);

location (front page, front section, elsewhere) ($\alpha = .88$); and the number of NH articles reported in that newspaper that day (one, two or more) ($\alpha = 1.00$). The coding categories for both article type and location were mutually exclusive.

Themes/Subthemes: Information on themes included the following general topics: quality, financing, legal issues, cost, business/property issues, home- and community-based services (rebalancing), and natural disasters. Themes were not mutually exclusive; consequently, articles could be coded under more than one theme as appropriate. Subthemes were also identified for quality, financing, and legal issues. These too were not mutually exclusive.

Quality refers to the quality of care experienced by residents and efforts to address or improve it, including government reports about the state of quality assurance in the NH sector ($\alpha = .80$). Where appropriate, these articles were also coded according to the following subthemes: *personal-centered care/culture change* ($\alpha = .80$); *consumer reporting* ($\alpha = .74$); *staffing* ($\alpha = .82$); and *safety* ($\alpha = .67$).

Financing refers to the sources of payment for NH care, including Medicare, Medicaid, private insurance, family/self-funded care, and the CLASS program ($\alpha = .80$). Where appropriate, these articles were also coded according to the following subthemes dealing specifically with *Medicaid* ($\alpha = .84$), *Medicare* ($\alpha = .88$), *private insurance* ($\alpha = 1.00$), and *family/self-funded care* ($\alpha = 1.00$).

Legal issues refers predominately to legal proceedings concerning maltreatment, fraud, misconduct, and abuse, including prevailing trends in NH litigation ($\alpha = .75$). Where appropriate, these articles were also coded according to the following subthemes: *malpractice/negligence* ($\alpha = .68$); *elder abuse* ($\alpha = .73$); *fraud* ($\alpha = .76$); and *liability claims, torts, and lawsuits* ($\alpha = .68$).

Cost refers to how much it costs to be a client at a NH or to run a facility ($\alpha = .77$).

Business/property refers to any number of business and real estate issues, including the downsizing, expansion, repair, maintenance, purchase, or opening of a facility ($\alpha = .66$).

Rebalancing refers to diverting or transitioning residents from NHs to home- and community-based services settings ($\alpha = .83$).

Natural disasters refers to the impact and response (or lack thereof) of operators, government, and other parties to natural disasters, including Hurricanes Katrina and Rita and their aftermaths ($\alpha = .79$).

Central Actor: Central actor referred to the dominant protagonist—that is, the individual or organizational entity whose behavior is the primary focus of the actions described. It included the following mutually exclusive categories: government, industry, residents/families, and community ($\alpha = .64$).

Primary issue jurisdiction: Primary issue jurisdiction referred to that level of government within which the

action reported took place. It included the following mutually exclusive categories: national, state, and local ($\alpha = .61$).

Data Analysis

Basic frequencies and descriptive statistics were used to describe article content. Cross-tabulations, Pearson χ^2 tests, and graphing were then used to describe relationships among the variables analyzed, focusing especially on region (Northeast, South, Midwest, West), market scope (national, other), year (1999–2008), and tone (positive, neutral, negative, mixed).

Findings

Volume

Most of the 16,280 articles analyzed were published in the South (33.1%) and Northeast (31.1%); less in the Midwest (24.5%) and substantially fewer in the West (11.3%) (Table 1). Approximately one tenth (10.5%) were published in four widely circulated national newspapers, and the remainder in the other newspapers (89.5%). There was a steady decline in the number of articles published through 2008 with a small jump to 10.2% in 2005 (Figure 1). The largest proportion of articles published annually varied across region ($\chi^2 = 209.4, p < .001$) (Table 2). The number of national articles peaked in 1999 and 2000 before declining in subsequent years, despite a noticeable jump in 2005 (Table 3). No discernable peak in reporting was evident in other newspapers; just a steady decline over time.

Affect

The tone of most NH coverage was typically neutral (45.5%) or negative (36.0%); very rarely positive (12.6%) or mixed (5.0%) (Table 1). General tone, however, varied over time, with the proportion of positive portrayals, for example, declining to 11.2% in 2005 before rising to 16.4% in 2008 (Table 4, Figure 1). By comparison, neutral coverage was most prominent in 2005 during which it characterized half of the articles studied. Throughout all years the modal tone was consistent with neutral always being the most prevalent tone, and negative tone being the second most prevalent tone. NH coverage tended to be least negative in the Northeast (33.9%) and most positive in the West (14.3%) where it also was most likely to be mixed (8.4%) and least likely to be neutral (37.0%) ($\chi^2 = 154.8, p < .001$) (Table 4). The four national newspapers were much more likely to publish negative articles than the other newspapers (45.1% vs. 35.9%) ($\chi^2 = 120.2, p < .001$).

Prominence

One in five of the articles (21.8%) appeared on the same day in the same newspaper as at least one other article (Table 1).

Table 1. Proportion of Nursing Homes Articles by Article Characteristic (*n* = 16,280)

| | % (<i>n</i>) |
|---------------------------|----------------|
| <i>Volume</i> | |
| <i>Region</i> | |
| Northeast | 31.1 (5,061) |
| South | 33.1 (5,387) |
| Midwest | 24.5 (3,984) |
| West | 11.3 (1,847) |
| <i>Scope</i> | |
| National | 10.5 (1,704) |
| State/local | 89.5 (14,576) |
| <i>Year</i> | |
| 1999 | 12.2 (1,981) |
| 2000 | 11.6 (1,890) |
| 2001 | 11.5 (1,875) |
| 2002 | 11.2 (1,816) |
| 2003 | 11.7 (1,902) |
| 2004 | 9.4 (1,525) |
| 2005 | 10.2 (1,655) |
| 2006 | 7.7 (1,254) |
| 2007 | 7.5 (1,215) |
| 2008 | 7.2 (1,167) |
| <i>Affect</i> | |
| <i>Tone</i> | |
| Positive | 12.6 (2,047) |
| Neutral | 45.5 (7,412) |
| Negative | 36.9 (6,005) |
| Mixed | 5.0 (816) |
| <i>Prominence</i> | |
| <i>Number of articles</i> | |
| 1 | 78.2 (12,739) |
| 2+ | 21.8 (3,541) |
| <i>Article type</i> | |
| News Story | 86.9 (14,143) |
| Editorial | 8.1 (1,326) |
| Column | 1.5 (246) |
| Letter | 3.5 (565) |
| <i>Location</i> | |
| Front page | 13.9 (2,261) |
| Front section | 20.2 (3,285) |
| Elsewhere | 65.9 (10,734) |
| <i>Themes/subthemes</i> | |
| <i>Quality</i> | |
| Safety | 56.9 (9,270) |
| Staffing | 15.4 (2,505) |
| Person-centered | 19.4 (3,159) |
| Consumer reports | 5.0 (821) |
| Consumer reports | 5.5 (900) |
| <i>Financing</i> | |
| Medicaid | 38.4 (6,251) |
| Medicare | 20.7 (3,374) |
| Private insurance | 8.9 (1,446) |
| Self/family | 1.8 (287) |
| Self/family | 1.0 (165) |
| <i>Legal</i> | |
| Malpractice/negligence | 22.0 (3,577) |
| Claims/Torts/Lawsuits | 8.1 (1,322) |
| Elder abuse | 9.9 (1,617) |
| Elder abuse | 6.9 (1,119) |

Table 1. Continued

| | % (<i>n</i>) |
|---------------------------|----------------|
| Fraud | 2.6 (430) |
| Cost | 12.5 (2,043) |
| Business/property | 10.0 (1,622) |
| Rebalancing | 7.2 (1,166) |
| Natural disasters | 3.5 (569) |
| <i>Other attributes</i> | |
| <i>Central Actor</i> | |
| Government | 40.9 (6,657) |
| Nursing home | 42.9 (6,976) |
| Residents/families | 11.0 (1,798) |
| Community | 5.2 (849) |
| <i>Issue jurisdiction</i> | |
| National | 15.9 (2,593) |
| State | 48.0 (7,817) |
| Local | 36.1 (5,870) |

Substantially more were news stories (86.9%) than opinion pieces—editorials, letters, or columns (13.1%). A little more than one third appeared either on the front page of the newspaper (13.9%) or section (20.2%).

The proportion of articles appearing on the same day as at least one additional NH article was highest (>20%) between 1999 and 2003; at 13.6% and 18.2%, it was comparatively low during 2007–2008 ($\chi^2 = 114.5, p < .001$). The proportion of opinion pieces remained steady throughout the years ranging from a low of 11.7% in 2001 to a high of 14.9% in 2007 ($\chi^2 = 83.9, p < .001$). Articles were especially likely to be on the front page of the newspaper in 2002 (15.3%), 2004 (15.3%), and 2005 (17.2%); during most years approximately 20% appeared on the front page of a section ($\chi^2 = 68.2, p < .001$).

Articles in the Northeast (25.8%) were most likely to appear on the same day as other NH articles; articles in the West (16.9%) were least likely to appear on the same day ($\chi^2 = 108.7, p < .001$) (Table 2). Southern newspapers were least likely to place an article on the front page of the newspaper (12.5%) or section (18.2%); Midwestern newspapers were most likely to place articles on the front of the newspaper (16.1%) and section (21.8%) ($\chi^2 = 68.4, p < .001$). Opinion pieces were less likely to appear in the four national newspapers analyzed (10.2% vs. 13.4%) ($\chi^2 = 16.8, p < .001$) which were also less likely to place an article on the front page of the newspaper (11.2% vs. 14.2%) or section (13.4% vs. 21.0%) ($\chi^2 = 79.4, p < .001$) (Table 3).

Editorials and letters, at 54.9% and 44.2%, respectively, were much more likely to be negative than news stories and columns (<35.1%), which were much more likely to be neutral (~50.0% vs. <29.0%) ($\chi^2 = 344.5, p < .001$) (Table 4). By contrast, columns (19.5%) were more likely to be positive than other articles (<15.9%). In general, articles were equally likely to be neutral no matter where they were located (~45.0%); however, the proportion of articles that

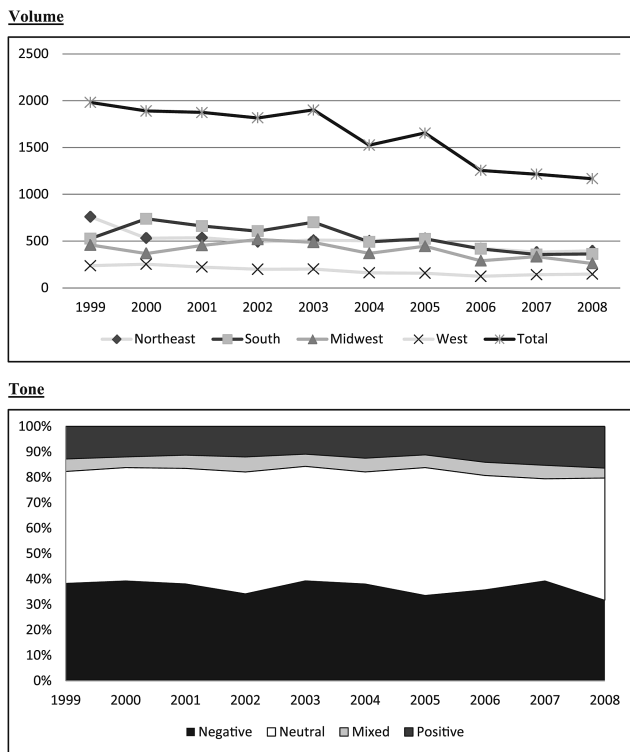


Figure 1. Annual volume and tone of nursing home coverage.

were negative in tone was highest among those posted on the front page (41.5%), followed by elsewhere within the newspaper (37.1%) and front section (32.9%) ($\chi^2 = 102.5$, $p < .001$). By contrast, the proportion of positive articles was highest among those posted on the front section (15.6%), followed by elsewhere (12.7%) and the front page (7.5%).

Themes/Subthemes

The most frequently identified themes include: quality (56.9%), financing (38.4%), and legal issues (22.0%) (Table 1). Of the quality-, financing-, and legal-related subthemes identified, staffing (19.4%), Medicaid (20.7%) and legal claims, torts, and lawsuits (9.9%) appeared most frequently, respectively.

There was variation in themes across region. Southern newspapers were especially likely to report about financing and quality (41.1% and 62.1%, respectively) ($\chi^2 = 27.8$, $p < .001$; $\chi^2 = 91.5$, $p < .001$); and Southern and Midwestern newspapers about legal issues (25.5% and 24.2%, respectively) ($\chi^2 = 117.8$, $p < .001$) (Table 2). Rebalancing articles were most likely to be published in the West (11.3%) ($\chi^2 = 152.0$, $p < .001$); articles about business issues were more common in the Northeast (12.4%) and West (11.2%) ($\chi^2 = 63.9$, $p < .001$). Content focused on natural disasters was most frequently reported in Southern newspapers (5.7%) ($\chi^2 = 117.1$, $p < .001$). The national newspapers were more likely to report about legal issues (28.1% vs. 21.3%) ($\chi^2 = 41.0$, $p < .001$) and natural disasters (5.3% vs. 3.3%) ($\chi^2 = 18.1$, $p < .001$), equally likely to report about quality (~57.0%; $\chi^2 = .020$, $p < .888$), and less likely to

report about financing issues (33.4% vs. 39.0%) and business/property issues (6.3% vs. 10.4%) than their less well-circulated counterparts ($\chi^2 = 20.2$, $p < .001$; $\chi^2 = 28.8$, $p < .001$) (Table 3).

The relative frequency of each theme varied over time (Table 5). For example, the proportion reporting on quality peaked in 2000 (63.9%) before declining steadily until 2005 (48.8%) after which it increased through 2007 (60.8%) before declining once again in 2008 (55.0%) ($\chi^2 = 122.5$, $p < .001$). By contrast, the proportion reporting on legal issues varied through 2004 (from 20.7% to 24.4%) after which it declined until 2008 (18.2%) ($\chi^2 = 33.6$, $p = .002$). The proportion reporting on natural disasters peaked in 2005 (12.6%) before decreasing in each subsequent year ($\chi^2 = 675.4$, $p < .001$).

There was variation in tone across the different themes analyzed (Table 4). On the one hand, articles about business issues (12.6%) and rebalancing (23.9%) were least likely to be characterized negatively ($\chi^2 = 489.8$, $p < .001$; $\chi^2 = 107.3$, $p < .001$). This is in contrast to articles about legal issues (67.3%) and natural disasters (50.6%) which were most likely to be presented in a negative light ($\chi^2 = 1,827.3$, $p < .001$; $\chi^2 = 65.1$, $p < .001$). Relative to other themes, articles about quality were comparatively likely to be described both positively (17.9%) and negatively (40.9%) ($\chi^2 = 999.1$, $p < .001$). At 67.8%, articles about business were most likely to be characterized neutrally ($\chi^2 = 489.8$, $p < .001$).

The overall tone of articles characterized by the three most prevalent themes varied over time (Figure 2). For example, the proportion of quality articles with negative tone peaked in 2003 (44.6%) and once again, in 2007 (43.4%) but dropped almost 10% in 2008 (33.5%) ($\chi^2 = 95.2$, $p < .001$). By contrast, the proportion of quality articles with positive tone increased after 2005 until it reached its peak in 2008 (25.2%). While the proportion of financing articles with positive tone remained small throughout (< 11.5%), the proportion with negative tone decreased to 23.8% in 2005, before reaching 36.0% in 2007 ($\chi^2 = 75.6$, $p < .001$). Similarly, the proportion of legal articles with positive tone remained low throughout (< 2.8%) while the proportion with negative tone varied somewhat, having peaked at 73.9% and 75.5% in 2004 and 2007, respectively, and reached a low of 59.5% in 2002 ($\chi^2 = 64.2$, $p < .001$).

Other Attributes

The central actors identified were typically government officials or institutions (40.9%), or the NH industry (42.9%) (Table 1). Less frequently, the central actors were NH resident(s)/family (11.0%) and the broader community (5.2%). There was some variation in central actor across regions and market scope, however. Midwestern (46.5%) and Western (46.9%) newspapers were somewhat more likely than newspapers in other regions (< 40.0%) to focus on governmental actors; newspapers in

Table 2. Proportion of Nursing Home Articles by Article Characteristic by Region ($n = 16,280$)

| | Northeast | South | Midwest | West | χ^2 -statistic | |
|---------------------------|--------------|--------------|--------------|--------------|---------------------|------------|
| | % (n) | % (n) | % (n) | % (n) | (df) | p -value |
| Year | | | | | | |
| 1999 | 15.0 (759) | 9.8 (526) | 11.5 (459) | 12.8 (237) | 209.37 (36) | <.001 |
| 2000 | 10.5 (531) | 13.7 (738) | 9.2 (367) | 13.8 (254) | | |
| 2001 | 10.6 (537) | 12.3 (661) | 11.4 (454) | 12.1 (223) | | |
| 2002 | 9.7 (493) | 11.2 (606) | 13.0 (518) | 10.8 (199) | | |
| 2003 | 10.1 (511) | 13.0 (702) | 12.2 (487) | 10.9 (202) | | |
| 2004 | 9.9 (503) | 9.1 (492) | 9.2 (368) | 8.7 (161) | | |
| 2005 | 10.4 (528) | 9.7 (524) | 11.2 (445) | 8.6 (158) | | |
| 2006 | 8.3 (422) | 7.8 (418) | 7.3 (290) | 6.7 (124) | | |
| 2007 | 7.5 (382) | 6.6 (357) | 8.4 (334) | 7.7 (142) | | |
| 2008 | 7.8 (395) | 6.7 (363) | 7.8 (395) | 8.0 (147) | | |
| Number of articles | | | | | | |
| 1 | 74.2 (3,753) | 77.7 (4,185) | 82.0 (3,266) | 83.1 (1,534) | 108.71 (4) | <.001 |
| 2+ | 25.8 (1,308) | 22.3 (1,202) | 18.0 (718) | 16.9 (313) | | |
| Article type | | | | | | |
| News Story | 86.5 (4,379) | 87.6 (4,718) | 85.7 (3,414) | 88.4 (1,632) | 121.7 (12) | <.001 |
| Editorial | 8.9 (449) | 7.7 (414) | 8.6 (341) | 6.6 (122) | | |
| Column | 0.9 (46) | 2.3 (122) | 1.0 (39) | 2.1 (39) | | |
| Letter | 3.7 (187) | 2.5 (133) | 4.8 (190) | 2.9 (54) | | |
| Location | | | | | | |
| Front page | 13.0 (656) | 12.5 (672) | 16.1 (640) | 15.9 (293) | 68.4 (8) | <.001 |
| Front section | 20.7 (1,047) | 18.2 (979) | 21.8 (868) | 21.2 (391) | | |
| Elsewhere | 66.4 (3,358) | 69.4 (3,736) | 62.1 (2,476) | 63.0 (1,163) | | |
| Major themes | | | | | | |
| Quality | 55.0 (2,784) | 62.1 (3,347) | 54.1 (2,154) | 53.3 (985) | 91.5 (4) | <.001 |
| Financing | 36.3 (1,838) | 41.1 (2,214) | 37.6 (1,496) | 38.1 (703) | | |
| Legal | 17.7 (897) | 25.5 (1,374) | 24.2 (965) | 18.5 (341) | | |
| Cost | 12.3 (624) | 13.3 (714) | 10.7 (428) | 15.0 (277) | | |
| Business/property | 12.4 (630) | 8.3 (447) | 8.5 (339) | 11.2 (206) | | |
| Rebalancing | 6.3 (318) | 4.7 (254) | 9.6 (384) | 11.3 (209) | | |
| Natural disasters | 2.6 (133) | 5.7 (306) | 2.0 (80) | 2.7 (50) | | |
| | | | | | | |
| Central actor | | | | | | |
| Government | 39.0 (1,972) | 36.5 (1,965) | 46.5 (1,853) | 46.9 (867) | 237.8 (12) | <.001 |
| Nursing home | 43.7 (2,211) | 48.8 (2,629) | 37.7 (1,500) | 34.4 (636) | | |
| Residents/families | 12.8 (646) | 9.8 (528) | 9.9 (395) | 12.4 (229) | | |
| Community | 4.6 (232) | 4.9 (265) | 5.9 (236) | 6.2 (115) | | |
| Issue jurisdiction | | | | | | |
| National | 15.0 (761) | 18.2 (983) | 11.9 (476) | 20.1 (372) | 217.6 (8) | <.001 |
| State | 43.2 (2,185) | 48.7 (2,625) | 51.6 (2,055) | 51.2 (952) | | |
| Local | 41.8 (2,115) | 33.0 (1,779) | 36.5 (1,453) | 28.3 (532) | | |

the Northeastern (43.7%) and Southern (48.8%) regions were somewhat more likely than newspapers in other regions (<38.0%) to focus on actors deriving from the NH industry ($\chi^2 = 237.8, p < .001$) (Table 2). Additionally, Northeastern (12.8%) and Western (12.4%) newspapers were somewhat more likely to focus on residents/families than other newspapers (<10.0%). The four national papers were more likely to focus on government, resident/family, and community actors than the other newspapers studied but less likely to focus on industry actors ($\chi^2 = 15.3, p = .002$) (Table 3).

Nearly half (48.0%) of the articles analyzed focused on state issues; just above one third (36.1%) on local issues; and less than one fifth (15.9%) on national issues (Table 1). There was some variation in focal jurisdiction across region and market scope, however. For example, local coverage was most prevalent in the Northeast (41.8%) and least prevalent in the West (28.3%) ($\chi^2 = 217.6, p < .001$) (Table 2). The four national papers were equally likely to focus on local (30.9%), state (34.6%), and national (34.5%) issues; by contrast, about half of the articles (49.6%) deriving from other newspapers focus on state issues as compared

Table 3. Proportion of Nursing Home Articles by Article Characteristic by Scope ($n = 16,280$)

| | State | National | χ^2 -statistic | p -value |
|---------------------------|---------------|--------------|---------------------|------------|
| | % (n) | % (n) | (df) | |
| Year | | | | |
| 1999 | 11.4 (1,657) | 19.0 (324) | 184.1 (9) | <.001 |
| 2000 | 11.1 (1,618) | 16.0 (272) | | |
| 2001 | 11.9 (1,731) | 8.5 (144) | | |
| 2002 | 11.6 (1,696) | 7.0 (120) | | |
| 2003 | 12.0 (1,746) | 9.2 (156) | | |
| 2004 | 9.6 (1,403) | 7.2 (122) | | |
| 2005 | 9.9 (1,443) | 12.4 (212) | | |
| 2006 | 7.7 (1,125) | 7.6 (129) | | |
| 2007 | 7.5 (1,088) | 7.5 (127) | | |
| 2008 | 7.3 (1,069) | 5.8 (98) | | |
| Number of articles | | | | |
| 1 | 78.1 (11,377) | 79.9 (1,362) | 3.16 (1) | .076 |
| 2+ | 21.9 (3,199) | 20.1 (342) | | |
| Article type | | | | |
| News Story | 86.5 (12,612) | 89.8 (1,531) | 16.75 (3) | <.001 |
| Editorial | 8.3 (1,212) | 6.7 (114) | | |
| Column | 1.5 (224) | 1.3 (22) | | |
| Letter | 3.6 (528) | 2.2 (37) | | |
| Location | | | | |
| Front page | 14.2 (2,070) | 11.2 (191) | 79.35 (2) | <.001 |
| Front section | 21.0 (3,057) | 13.4 (228) | | |
| Elsewhere | 64.8 (9,449) | 75.4 (1,285) | | |
| Major themes | | | | |
| Quality | 56.9 (7,297) | 57.1 (973) | .020 (1) | .888 |
| Financing | 39.0 (5,682) | 33.4 (569) | 20.2 (1) | <.001 |
| Legal | 21.3 (3,099) | 28.1 (478) | 41.0 (1) | <.001 |
| Cost | 12.8 (1,873) | 10.0 (170) | 11.5 (1) | <.001 |
| Business/property | 10.4 (1,515) | 6.3 (107) | 28.8 (1) | <.001 |
| Rebalancing | 7.3 (1,068) | 5.8 (98) | 5.7 (1) | .017 |
| Natural disasters | 3.3 (479) | 5.3 (90) | 18.0 (1) | <.001 |
| Central actor | | | | |
| Government | 40.7 (5,937) | 42.3 (720) | 15.3 (3) | .002 |
| Nursing home | 43.3 (6,308) | 39.2 (668) | | |
| Residents/families | 10.8 (1,572) | 13.3 (226) | | |
| Community | 5.2 (759) | 5.3 (90) | | |
| Issue jurisdiction | | | | |
| National | 13.8 (2,005) | 34.5 (588) | 497.8 (2) | <.001 |
| State | 49.6 (7,227) | 34.6 (590) | | |
| Local | 36.7 (5,344) | 30.9 (526) | | |

to 13.8% on national issues and 36.7% on local issues ($\chi^2 = 497.8, p < .001$) (Table 3).

The focus on particular central actors and issue jurisdictions varied somewhat over time (Figure 3). For example, the proportion of articles focusing on governmental versus industry actors alternated with the former exceeding the latter in 2002 (44.6%) and 2005 (46.6%) and the latter exceeding the former in 1999 (44.7%) and 2000 (43.9%) and, once again, in 2006 (45.5%) and 2007 (48.6%) ($\chi^2 = 148.5, p < .001$). Similarly, the proportion of state articles increased markedly (39.3%–54.9%) between 1999

and 2001, after which it remained at about 50.0%, and the proportion of national articles declined markedly (21.7%–11.6%) between 1999 and 2001, after which it remained at about 15.0%.

There was variation in tone across central actor and issue jurisdiction (Table 4). Community articles were much more likely to be positive than articles focusing on other central actors (45.3% vs. <14.2%) ($\chi^2 = 1,557.0, p < .001$). By contrast, both industry articles (42.8%) and resident/family articles (44.5%) were more likely to be negative than government (31.5%) and, especially, community (14.0%)

Table 4. Proportion of Nursing Home Articles by Article Characteristic by Tone (*n* = 16,280)

| | Positive | Neutral | Negative | Mixed | χ^2 -statistic | | | |
|---------------------------|----------------|----------------|----------------|----------------|---------------------|-----------------|-------------|-------|
| | % (<i>n</i>) | % (<i>n</i>) | % (<i>n</i>) | % (<i>n</i>) | (<i>df</i>) | <i>p</i> -value | | |
| Region | | | | | | | | |
| Northeast | 11.6 (589) | 48.5 (2,455) | 33.9 (1,718) | 5.9 (299) | 154.8 (12) | <.001 | | |
| South | 13.0 (701) | 45.5 (2,450) | 38.2 (2,059) | 4.6 (184) | | | | |
| Midwest | 12.4 (493) | 45.5 (1,823) | 37.2 (1,484) | 3.3 (177) | | | | |
| West | 14.3 (264) | 37.0 (683) | 40.3 (744) | 8.4 (156) | | | | |
| Scope | | | | | | | | |
| State | 12.9 (1,883) | 46.5 (6,782) | 35.9 (5,237) | 4.6 (674) | 120.2 (3) | <.001 | | |
| National | 9.6 (164) | 37.0 (630) | 45.1 (768) | 8.3 (142) | | | | |
| Year | | | | | | | | |
| 1999 | 12.8 (254) | 44.0 (872) | 38.2 (757) | 4.9 (98) | 92.2 (27) | <.001 | | |
| 2000 | 12.0 (227) | 44.6 (842) | 39.2 (741) | 4.2 (80) | | | | |
| 2001 | 11.3 (211) | 45.5 (854) | 38.0 (713) | 5.2 (97) | | | | |
| 2002 | 12.0 (218) | 47.9 (870) | 34.1 (620) | 5.9 (108) | | | | |
| 2003 | 10.9 (208) | 45.0 (856) | 39.2 (746) | 4.8 (92) | | | | |
| 2004 | 12.5 (190) | 44.1 (672) | 38.0 (580) | 5.4 (83) | | | | |
| 2005 | 11.2 (185) | 50.3 (833) | 33.5 (555) | 5.0 (82) | | | | |
| 2006 | 14.1 (177) | 45.0 (565) | 35.7 (448) | 5.2 (62) | | | | |
| 2007 | 15.3 (186) | 40.2 (488) | 39.2 (476) | 5.3 (65) | | | | |
| 2008 | 16.4 (191) | 48.1 (561) | 31.6 (369) | 3.9 (46) | | | | |
| Number of articles | | | | | | | | |
| 1 | 12.9 (1,640) | 45.3 (5,774) | 36.5 (4,650) | 5.3 (675) | 16.6 (3) | .001 | | |
| 2+ | 11.5 (407) | 46.3 (1,638) | 38.3 (1,355) | 4.0 (141) | | | | |
| Article type | | | | | | | | |
| News Story | 12.5 (1,773) | 47.7 (6,743) | 35.1 (4,968) | 4.7 (659) | 344.5 (9) | <.001 | | |
| Editorial | 10.3 (137) | 27.2 (361) | 54.9 (728) | 7.5 (100) | | | | |
| Column | 19.5 (48) | 53.3 (131) | 24.0 (59) | 3.3 (8) | | | | |
| Letter | 15.8 (89) | 31.3 (177) | 44.2 (250) | 8.7 (49) | | | | |
| Location | | | | | | | | |
| Front page | 7.5 (169) | 45.2 (1022) | 41.5 (938) | 5.8 (132) | 102.5 (6) | <.001 | | |
| Front section | 15.6 (511) | 46.5 (1,526) | 32.9 (1,080) | 5.1 (168) | | | | |
| Elsewhere | 12.7 (1,367) | 45.3 (4,864) | 37.1 (3,987) | 4.8 (516) | | | | |
| Major themes | | | | | | | | |
| Quality | 17.9 (1,658) | 36.1 (3,346) | 40.9 (3,793) | 5.1 (473) | 999.1 (3) | <.001 | | |
| Financing | 7.2 (452) | 54.9 (3,429) | 33.1 (2,066) | 4.9 (304) | | | | |
| Legal | 1.6 (56) | 27.9 (999) | 67.3 (2,407) | 3.2 (115) | | | | |
| Cost | 8.8 (178) | 51.4 (1,051) | 34.7 (708) | 5.1 (105) | | | | |
| Business/property | 13.3 (216) | 67.8 (1,100) | 12.6 (205) | 6.2 (101) | | | | |
| Rebalancing | 17.3 (202) | 50.9 (594) | 23.9 (279) | 7.8 (91) | | | | |
| Natural disasters | 4.6 (26) | 41.3 (235) | 50.6 (288) | 3.5 (20) | | | | |
| Central actor | | | | | | | | |
| Government | 6.3 (421) | 56.4 (3,755) | 31.5 (2,097) | 5.8 (384) | | | 1,557.0 (9) | <.001 |
| Nursing home | 14.2 (991) | 39.1 (2,726) | 42.8 (2,989) | 3.9 (270) | | | | |
| Residents/families | 13.9 (250) | 34.6 (623) | 44.5 (800) | 7.0 (125) | | | | |
| Community | 45.3 (385) | 36.3 (308) | 14.0 (119) | 4.4 (37) | | | | |
| Issue jurisdiction | | | | | | | | |
| National | 8.0 (208) | 51.1 (1,326) | 34.2 (887) | 6.6 (172) | 406.5 (6) | <.001 | | |
| State | 9.4 (732) | 48.6 (3,796) | 37.0 (2,895) | 5.0 (394) | | | | |
| Local | 18.9 (1,107) | 39.0 (2,290) | 37.9 (2,223) | 4.3 (250) | | | | |

reports. The proportion of local articles with positive tone (18.9%) was more than twice those focusing on national issues (8.0%) and state issues (9.4%) ($\chi^2 = 406.5, p < .001$).

By contrast, local articles (39.0%) were less likely to be neutral than either national articles (51.1%) or state articles (48.6%) articles.

Table 5. Proportion of Newspaper Articles by Major Theme by Year ($n = 16,280$)

| | Quality, % (n) | Financing, % (n) | Legal, % (n) | Cost, % (n) | Business/property, % (n) | Rebalancing, % (n) | Natural disasters, % (n) |
|-------------------|--------------------|----------------------|------------------|-----------------|------------------------------|------------------------|------------------------------|
| 1999 | 56.0 (1,128) | 39.7 (787) | 20.7 (411) | 11.5 (227) | 11.6 (230) | 8.6 (170) | 1.6 (32) |
| 2000 | 63.9 (1,208) | 39.9 (754) | 24.4 (462) | 12.2 (230) | 9.5 (179) | 6.5 (122) | 0.7 (13) |
| 2001 | 61.7 (1,157) | 41.8 (784) | 23.4 (438) | 9.9 (185) | 9.6 (180) | 5.8 (109) | 0.2 (4) |
| 2002 | 57.3 (1,041) | 41.6 (755) | 23.1 (420) | 13.5 (246) | 8.5 (154) | 4.2 (76) | 1.0 (19) |
| 2003 | 54.2 (1,031) | 38.3 (729) | 22.2 (423) | 12.0 (228) | 10.8 (206) | 6.0 (115) | 3.8 (72) |
| 2004 | 55.6 (848) | 32.5 (495) | 24.4 (372) | 13.7 (209) | 9.0 (138) | 8.3 (126) | 2.6 (39) |
| 2005 | 48.8 (808) | 40.2 (665) | 20.4 (337) | 11.8 (196) | 8.8 (145) | 7.4 (123) | 12.6 (208) |
| 2006 | 53.3 (668) | 33.4 (419) | 20.2 (253) | 15.2 (191) | 9.6 (121) | 10.1 (127) | 8.4 (105) |
| 2007 | 60.8 (739) | 33.6 (408) | 20.5 (249) | 13.1 (159) | 9.6 (117) | 8.8 (107) | 3.9 (47) |
| 2008 | 55.0 (642) | 39.0 (455) | 18.2 (212) | 14.7 (172) | 13.0 (152) | 7.8 (91) | 2.6 (30) |
| χ^2 (df) | 122.5 (9) | 70.5 (9) | 33.6 (9) | 33.1 (9) | 29.4 (9) | 65.5 (9) | 657.4 (9) |
| p -value | <.001 | <.001 | .002 | <.001 | <.001 | <.001 | <.001 |

Discussion

This study analyzed the content of 16,280 newspaper articles to assess how NHs were depicted in 51 U.S. newspapers from 1999 to 2008. It builds on and extends prior research based on 1,704 articles published in four widely circulated national newspapers during the same time period (Miller et al., 2012). The inclusion of 14,576 additional articles from 47 newspapers strengthens both internal validity and external validity. It strengthens internal validity by reducing the influence of random variation and outliers on study findings while increasing the likelihood of identifying statistically meaningful associations where they exist. It strengthens external validity through the inclusion of newspapers from around the country, which, in addition to the four national newspapers, includes one newspaper from the capital or largest city of nearly every state. The cross-national distribution of newspapers also enabled us to examine regional variation in newspaper coverage, in addition to variation in coverage between the nation's most circulated newspapers and other, less well-circulated dailies. Thus, to our knowledge, the current study represents both the largest NH media study to date and the first to examine regional and market differences in the nature and content of that coverage.

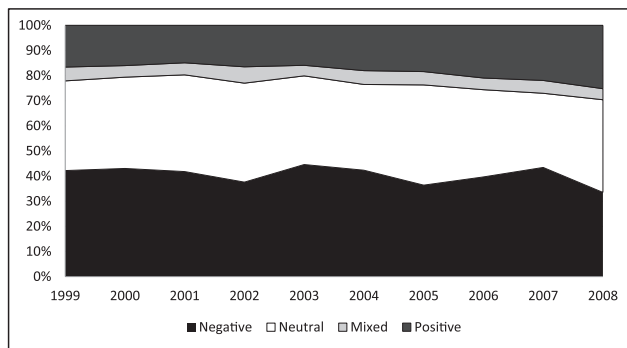
Findings highlight the potential for first-order agenda setting effects in media coverage of the NH sector. That both the general public and policymakers may have thought more about the NH sector during some years than others is suggested by changes in the overall volume of coverage which declined steadily over time, other than a small noticeable increase in 2005. This result reinforces prior research identifying significant changes in the volume of media coverage in other areas and time periods (Barry, Jarlenski, Grob, Schlesinger, & Gollust, 2011; Baumgartner & Jones, 1993; Dunaway et al., 2010; Jarlenski & Barry, 2013; Pew Research Center, 2011; Smith, 1981; Taylor-Clark, Mebane, SteelFisher, & Blendon, 2007). That the level of coverage was greater earlier in the study period

could reflect the overall decline in newspaper circulation due to the rise of alternative media sources (Pew Research Center, 2015). It could also reflect the presence of larger numbers of newsworthy events, including changes in public policy—for example, NH reimbursement reform in the Balanced Budget Act of 1997 and its effects on the NH industry (Miller, 2008; Harrington, Hauser, Olney, & Rosenau, 2011); and the release of numerous government reports on NH quality, oversight, and regulation (e.g., Health Care Financing Administration, 2000; Institute of Medicine [IOM], 2001).

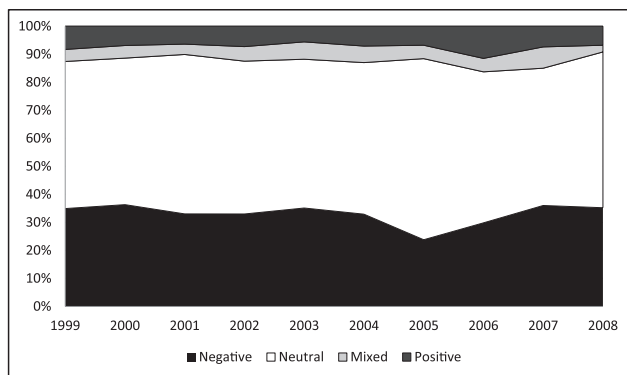
Results also suggest the potential for second-order agenda setting in media coverage of the NH sector. That the general public and policymakers view NHs relatively poorly (KFF, 2001, 2005, 2007; Miller et al., 2010) and that those views may derive, in part, from how the NH sector is portrayed in the media (KFF, 2001, 2005) is consistent with the finding that the tone of media coverage has primarily been negative, rarely positive, and otherwise neutral. This result supports anecdotal claims about the tone of NH coverage (Hawes, 1987; Smith, 1981; Vladeck, 1980), in addition to the lone systematic study to examine tone (Miller et al., 2012).

The potential for second-order agenda setting is further reflected in longitudinal variation in media framing of the NH sector. That both the general public and policymakers may have thought differently about NHs over time is suggested by the rise and fall of the major themes emphasized in that coverage. Thematically, change in the framing of newspaper coverage of the NH sector is reflected in decline in the proportion of quality articles through 2005 after which it began to rise though not to previous levels. When reporting about quality was at its lowest points (2003–2006) reporting on legal concerns (2004), costs (2006), rebalancing (2006), and natural disasters (2005, 2006) were comparatively high. This suggests that the amount of reporting about quality depended, in part, on the extent to which newspapers reported on other dimensions. Together these findings reinforce prior research identifying

Quality



Financing



Legal

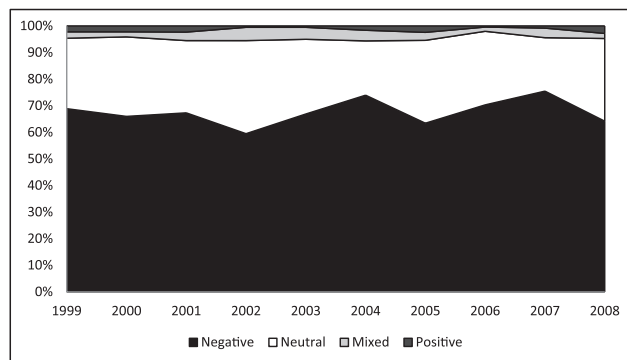


Figure 2. Proportion of nursing home articles per year by major theme and tone of coverage.

shifts in the way the media has framed a variety of issues over time (Barry et al., 2011; Baumgartner & Jones, 1993; Jarlenski & Barry, 2013; Miller et al., 2012; Taylor-Clark et al., 2007).

Longitudinal variation in the emphasis of media coverage is important because shifts from one topic to another can lead to changes in overall tone (Baumgartner & Jones, 1993). Although media coverage of the NH sector was largely negative or neutral throughout, the extent to which this was the case varied over time. Negative coverage, for example, peaked in 2003 and 2007. Our findings suggest that this growth in negative coverage was due both to increased negative coverage about quality and also shifts in the media's attention from quality to other aspects of the NH issue—i.e., negligence/fraud (malpractice) and natural

disasters (Hurricane Katrina), coverage of which was overwhelmingly negative.

The rate of litigation against NHs increased markedly beginning in the mid- to late-1990s (Stevenson & Studder, 2003). The level of reporting on this topic increased as well, with the number of articles about legal concerns increasing from about one fifth of the articles studied in 1999 to one quarter in 2000–2004 where it peaked at 24.4% in 2004 before declining in remaining years. The increase in reporting on legal issues together with the increase in litigation indicates that newspaper editors find civil and criminal activity in institutional long-term care settings particularly newsworthy (Smith, 1981; Vladeck, 1980). That articles about legal concerns were substantially more likely to be negative in tone suggests that the increase in coverage in this area may have reinforced Americans already negative assessment of the NH industry.

The Gulf Coast hurricanes may have impacted Americans' views about the NH industry as well. Consistent with our findings, Barnes et al. (2008) identified extensive press coverage in the weeks following the hurricane. Thus, although representing but a handful of stories through 2004, we found that the proportion of NH articles pertaining to natural disasters shot up to 12.6% in 2005 after which it has decreased steadily to 2.6% in 2008. In contrast to the broader population of hurricane-related articles where tone varied according to whom responsibility for the disaster was assigned (Barnes et al., 2008), coverage relating to NHs was virtually all negative due largely to several high profile incidents and their aftermath.

In addition to longitudinal variation, potentially important differences in media framing of the NH sector were identified across newspapers, whether according to region or market scope. These findings are consistent with prior research identifying cross-sectional variation in coverage, including with respect to themes (Barnes et al., 2008; Payne, Appel, & Kim-Appel, 2008) and prominence (Barnes et al., 2008; Durrant, Wakefield, McLeod, Clegg-Smith, & Chapman, 2003; Taylor-Clark et al., 2007). Although the largest proportion of NH coverage reported in each newspaper addressed quality, reports about negligence, fraud, and other legal issues, for example, were more common in Southern and Midwestern newspapers and reports about business/property issues in Northeastern and Western newspapers. For their part, the four widely circulated national newspapers were somewhat more likely than the other study papers to publish articles about quality, legal issues, and natural disasters. Assessment of prominence varied as well. Whereas Midwestern newspapers were more likely to publish NH articles on the front page of the newspaper or section, the four national newspapers were less likely than the other less well-circulated newspapers to publish NH articles so prominently.

Also consistent with prior research, we identified potentially important differences across newspapers in relation to tone (Gollust, Barry, Niederdeppe, Baum, & Fowler,

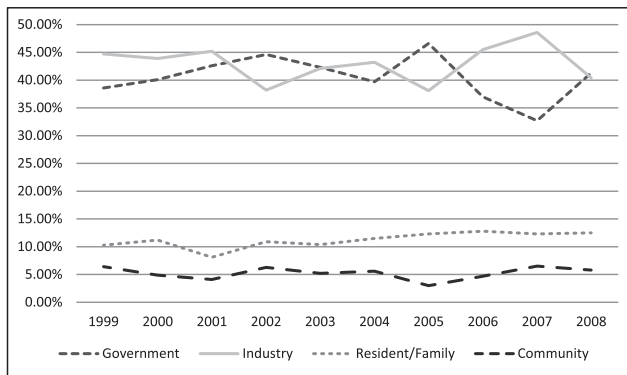
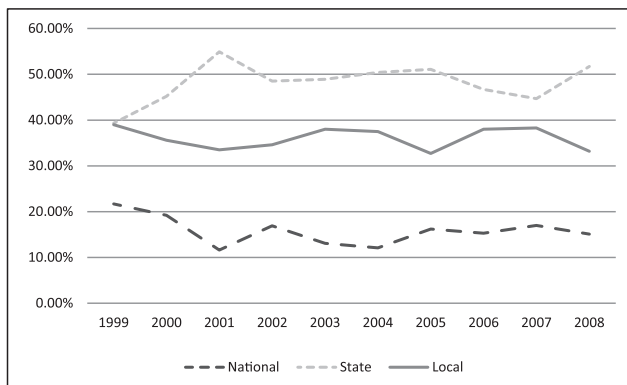
Central Actor**Issue Jurisdiction**

Figure 3. Proportion of nursing home articles per year: central actor and issue jurisdiction.

2014; Miller et al., 2013; Durrant et al., 2003) and volume (Barnes et al., 2008; Dunaway et al., 2010; Durrant et al., 2003; Gollust et al., 2014; Matthes, 2009; Payne et al., 2008; Taylor-Clark et al., 2007; Ulsperger, 2002). Although most articles were negative or neutral no matter which region was examined, there were comparatively lower proportions of positive, neutral, negative, and mixed articles in the Midwest, West, Northeast, and Midwest, respectively. Furthermore, the four widely circulated national papers were much more likely to publish negative reports than the other newspapers studied which, in turn, were more likely to publish neutral reports. The volume of coverage varied especially dramatically, with reports published in the Northeast and South constituting nearly two thirds of the articles analyzed and just a little over 10% deriving from the West.

Why did volume vary so substantially across the regions examined? One possibility is variation in the occurrence of newsworthy events, including scandals, lawsuits, bankruptcies, routine quality reporting, and fiscal setbacks. Another is varying editorial assessments about audience interest and receptiveness compared to other issue areas, perhaps due, in part, to variation in the number of NHs operators and residents, frail and disabled elders, and family caregivers within each of the particular catchment areas served. Still another possibility is varying degrees to which

NH resident advocates and industry representatives use mass media strategies to further their policy-making goals. It may be that activists in some regions or states may be more effective at nurturing relationships with journalists and providing them with credible and timely information and feedback than activists in other states. That media advocacy may help explain cross-sectional differences in the amount and nature of coverage is supported by prior research indicating that resident advocates and NH industry representatives have been more influential in heightening awareness and promoting policy changes advantageous to their respective points-of-view in some states than others (Miller, 2008; Miller & Rudder, 2012).

Limitations

This is the most comprehensive study to date examining the way in which NHs have been portrayed in the media nationally. There are several limitations worth noting, however. First, the findings may not be generalizable to other newspapers or media, though we include the most widely circulated and/or influential dailies in the 51 jurisdictions studied. Second, the findings may not be generalizable beyond the study period. However, there is little reason to suspect that the underlying dynamics of NH reporting identified do not apply to other years, including, for example, the largely negative tone of the coverage (Lloyd et al., 2014), the secular decline in newspaper coverage due to the rise of alternative media outlets (Pew Research Center, 2015), and the rise and fall of various themes/topics in light of prevailing triggering events (McCombs, 2014).

Third, a handful of general search terms were used to identify the articles analyzed. Because not all possible terms were exhausted, some potentially relevant articles may have been missed. Fourth, coders may have interpreted the information abstracted differently despite efforts to promote consistency. Fifth, although a comprehensive array of article characteristics were identified and abstracted, other potentially useful dimensions were not abstracted but may be worth examining (e.g., author/source, quotations/photographs, episodic/thematic framing).

Conclusion

Overall, results reveal changes in how 51 newspapers framed NH coverage, with respect to not only tone but also what dimensions of this complex issue have been emphasized over time. Future research should also aim to understand what cultural stereotypes and values underlie the ways in which newspaper articles speak about and portray NH-related issues, across jurisdictions and over time, say, by applying in-depth qualitative coding techniques to a subsample of articles addressing particular issue areas of interest. Future research should examine the relationship between public opinion, state and federal policy agendas,

and the ways NH-related issues are portrayed in the media, again, across jurisdictions and over time, controlling for other socioeconomic, programmatic and political characteristics using appropriate quantitative or statistical techniques.

Supplementary Material

Please visit the article online at <http://gerontologist.oxfordjournals.org/> to view supplementary material.

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References

- Audit Bureau of Circulations. (2010). *Circulation averages for the six months ended*. Retrieved September 30, 2010, from <http://abcas3.accessabc.com/ecirc/newstitlesearchus.asp>
- Barnes, M. D., Hanson, C. L., Novilla, L. M. B., Meacham, A. T., McIntyre, E., & Erickson, B. C. (2008). Analysis of media agenda setting during and after Hurricane Katrina: Implications for emergency preparedness, disaster response, and disaster policy. *American Journal of Public Health, 98*, 604–610. doi:10.2105/AJPH.2007.112235
- Barry, C. L., Jarlenski, M., Grob, R., Schlesinger, M., & Gollust, S. E. (2011). News media framing of childhood obesity in the United States from 2000 to 2009. *Pediatrics, 128*, 132–145. doi:10.1542/peds.2010-3924
- Baumgartner, F., & Jones, B. D. (1993). *Agendas and instability in American politics*. Chicago: The University of Chicago Press.
- Bonafont, L. C., & Baumgartner, F. R. (2013). Newspaper attention and policy activities in Spain. *Journal of Public Policy, 33*, 65–88. doi:10.1017/S0143814X12000219
- Brodie, M., Hamel, E. C., Altman, D. E., Blendon, R. J., & Benson, J. M. (2003). Health News and the American Public, 1996–2002. *Journal of Health Politics, Policy and Law, 28*, 927–950. doi:10.1215/03616878-28-5-927
- Dearing, J. W., & Rogers, E. A. (1996). *Agenda setting*. Thousand Oaks, CA: Sage Publications.
- Dunaway, J., Abrajano, M. A., & Branton, R. P. (2010). Agenda setting, public opinion, and the issue of immigration reform. *Social Science Quarterly, 91*, 359–378. doi:10.2139/ssrn.1017846
- Durrant, R., Wakefield, M., McLeod, K., Clegg-Smith, K., & Chapman, S. (2003). Tobacco in the news: An analysis of newspaper coverage of tobacco issues in Australia, 2001. *Tobacco Control, 12*(Suppl. 2), II75–II81. doi:10.1136/tc.12.suppl_2.ii75
- Entman, R. M. (2007). Framing bias: Media in the distribution of power. *Journal of Communication, 57*, 163–173. doi:10.1111/j.1460-2466.2006.00336.x
- Ghanem, S. (1997). Filling in the tapestry: The second level of agenda setting. In M. McCombs, D.L. Shaw, & D. Weaver (Eds.), *Communication and democracy: Exploring the intellectual frontiers in agenda-setting theory* (pp. 3–14). New York: Routledge.
- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory*. New York: Aldine De Gruyter.
- Gollust, S. E., Barry, C. L., Niederdeppe, J., Baum, L., & Fowler, E. F. (2014). First impressions: Geographic variation in media messages during the first phase of ACA implementation. *Journal of Health Politics, Policy and Law, 39*, 1–10. doi:10.1215/03616878-2813756
- Harrington, C., Hauser, C., Olney, B., & Rosenau, P.V. (2011). Ownership, financing, and management strategies of the ten largest for-profit nursing home chains in the United States. *International Journal of Health Services, 41*, 725–746. doi:10.2190/HS.41.4.g
- Hawes, C. (1987). Nursing home reform and the politics of long-term care. *PS, 20*, 232–241. doi:10.2307/419160
- Hayes, A.F., & Krippendorff, K. (2007). Answering the call for a standard reliability measure for coding data. *Communication Methods and Measures, 1*, 77–89. doi:10.1080/19312450709336664
- Health Care Financing Administration. (2000). Appropriateness of minimum staffing ratios in nursing homes. Report to Congress. #500-95-0062-T.O.3. Baltimore: HCFA.
- Institute of Medicine [IOM]. (2001). *Improving the quality of long-term care*. Washington, DC: National Academy Press.
- Jarlenski, M., & Barry, C. L. (2013). News media coverage of trans fat: Health risks and policy responses. *Health Communication, 28*, 209–216. doi:10.1080/10410236.2012.669670
- Kaiser Family Foundation [KFF]. (2001, October). National survey on nursing homes. Retrieved from <http://kaiserfamilyfoundation.files.wordpress.com/2013/01/kaiser-newshour-national-survey-on-nursing-homes-highlights-and-chartpack.pdf>
- Kaiser Family Foundation [KFF]. (2005, June). May/June health poll report survey. Retrieved from <http://kaiserfamilyfoundation.files.wordpress.com/2013/01/may-june-2005-kaiser-health-poll-report-toplines.pdf>
- Kaiser Family Foundation [KFF]. (2007, November 29). Update on the public's views of nursing homes and long-term care services - toplines. Retrieved from <http://kff.org/other/poll-finding/update-on-the-publics-views-of-nursing/>
- Kingdon, J. W. (1995). *Agendas, alternatives, and public policies* (2nd ed.). New York: Harper.
- Lloyd, L., Banerjee, A., Harrington, C., Jacobsen, F. F., & Szebehely, M. (2014). It is a scandal! Comparing the causes and consequences of nursing home media scandals in five countries. *International Journal of Sociology and Social Policy, 34*, 2–18. doi:10.1177/107769900908600206
- Matthes, J. (2009). What's in a frame? A content analysis of media framing studies in the world's leading communication journals, 1990–2005. *Journalism & Mass Communication Quarterly, 86*, 349–367. doi:10.1177/107769900908600206
- McCombs, M. (2014). *Setting the agenda: The mass media and public opinion* (2nd ed.). Cambridge, UK: Polity Press.
- Mebane, F. (2001). Want to understand how Americans viewed long-term care in 1998? Start with media coverage. *The Gerontologist, 41*, 24–33. doi:10.1093/geront/41.1.24
- Miller, E. A. (2008). Federal administrative and judicial oversight of Medicaid: Policy legacies and tandem-institutions under the Boren Amendment. *Publius, 28*, 315–342. doi:10.1093/publius/pjm035
- Miller, E. A., & Rudder, C. (2012). Engaging consumers in Medicaid nursing home reimbursement policy: Lessons from New York

- and Minnesota. *The Gerontologist*, 53, 627–640. doi:10.1093/geront/gns141
- Miller, E. A., Clark, M., & Mor, V. (2010). Reforming long-term care in the United States: Findings from a national survey of specialists. *The Gerontologist*, 50, 238–252. doi:10.1093/geront/gnp111
- Miller, E. A., Tyler, D., & Mor, V. (2013). National newspaper portrayal of nursing homes: Tone of coverage and its correlates. *Medical Care*, 51, 78–83. doi:10.1097/MLR.0b013e318270baf2
- Miller, E. A., Tyler, D., Rozanova, J., & Mor, V. (2012). National newspaper portrayal of U.S. nursing homes: Periodic treatment of topic and tone. *The Milbank Quarterly*, 90, 725–761. doi:10.1111/j.1468-0009.2012.00681.x
- Payne, B. K., Appel, J., & Kim-Appel, D. (2008). Elder abuse coverage in newspapers: Regional differences and its comparison to child-abuse coverage. *Journal of Elder Abuse and Neglect*, 20, 265–275. doi:10.1080/08946560801973135
- Pew Research Center. (2011, March 9). *Whatever happened to the health care debate?* Retrieved from <http://www.journalism.org/node/24254>
- Pew Research Center. (2015, April 29). *The State of the News Media 2015*. Retrieved from <http://www.journalism.org/files/2015/04/FINAL-STATE-OF-THE-NEWS-MEDIA1.pdf>.
- Pierce, J. P., & Gilpin, E. A. (2001). News media coverage of smoking and health is associated with changes in population rates of smoking cessation but not initiation. *Tobacco Control*, 10, 145–153. doi:10.1136/tc.10.2.145
- Quick, B. L., Meyer, K. R., Kim, D. K., Taylor, D., Kline, J., Apple, T., & Newman, J. D. (2007). Examining the association between media coverage of organ donation and organ transplantation rates. *Clinical Transplantation*, 21, 219–223. doi:10.1111/j.1399-0012.2006.00628.x
- Scheufele, D. A., & Tewksbury, D. (2007). Framing, agenda setting, and priming: The evolution of three media effects models. *Journal of Communication*, 57, 9–20. doi:10.1111/j.1460-2466.2006.00326.x
- Smith, D. B. (1981). *Long-term care in transition: The regulation of nursing homes*. Washington, DC: BeardBooks.
- Stevenson, D. G., & Studder, D. M. (2003). The rise of nursing home litigation: Findings from a national survey of attorneys. *Health Affairs*, 22, 219–229. doi:10.1377/hlthaff.22.2.219
- Taylor-Clark, K. A., Mebane, F. E., SteelFisher, G. K., & Blendon, R. J. (2007). News of disparity: Content analysis of news coverage of African American health care inequalities in the USA, 1994–2004. *Social Science Medicine*, 65, 406–417. doi:10.1016/j.socscimed.2007.03.039
- Ulsperger, J. S. (2002). Geezers, greed, Grief, and grammar: Frame transformation in the nursing home reform movement. *Sociological Spectrum*, 22, 385–406. doi:10.1080/02732170290062685
- Ulsperger, J. S. (2003). Greed, ghosts, and grand juries: The formation of nursing home law and Oklahoma's health department scandal. *Free Inquiry in Creative Sociology*, 31, 115–124.
- Vladeck, B. C. (1980). *Unloving care: The nursing home tragedy*. New York: Basic Books, Inc.
- Wakefield, M. A., Loken, B., & Hornik, R. C. (2010). Use of mass media campaigns to change health behaviour. *The Lancet*, 376, 1261–1271. doi:10.1016/S0140-6736(10)60809-4