

Financial performance, employee well-being, and client well-being in for-profit and not-for-profit nursing homes: A systematic review

Aline Bos

Paul Boselie

Margo Trappenburg

Background: Expanding the opportunities for for-profit nursing home care is a central theme in the debate on the sustainable organization of the growing nursing home sector in Western countries.

Purposes: We conducted a systematic review of the literature over the last 10 years in order to determine the broad impact of nursing home ownership in the United States. Our review has two main goals: (a) to find out *which topics* have been studied with regard to financial performance, employee well-being, and client well-being in relation to nursing home ownership and (b) to assess *the conclusions related to these topics*. The review results in two propositions on the interactions between financial performance, employee well-being, and client well-being as they relate to nursing home ownership.

Methodology/Approach: Five search strategies plus inclusion and quality assessment criteria were applied to identify and select eligible studies. As a result, 50 studies were included in the review. Relevant findings were categorized as related to financial performance (profit margins, efficiency), employee well-being (staffing levels, turnover rates, job satisfaction, job benefits), or client well-being (care quality, hospitalization rates, lawsuits/complaints) and then analyzed based on common characteristics.

Findings: For-profit nursing homes tend to have better financial performance, but worse results with regard to employee well-being and client well-being, compared to not-for-profit sector homes. We argue that the better financial performance of for-profit nursing homes seems to be associated with worse employee and client well-being.

Practical Implications: For policy makers considering the expansion of the for-profit sector in the nursing home industry, our findings suggest the need for a broad perspective, simultaneously weighing the potential benefits and drawbacks for the organization, its employees, and its clients.

Key words: for-profit, nursing homes, performance, systematic review, well-being

Aline Bos, MSc, is PhD Student, Utrecht University School of Governance, the Netherlands. E-mail: A.Bos@uu.nl.

Paul Boselie, PhD, is Professor of Strategic Human Resource Management, Utrecht University School of Governance, the Netherlands.

Margo Trappenburg, PhD, is Professor of Social work, University of Humanistic Studies, Utrecht, the Netherlands, and Associate Professor, Utrecht University School of Governance, the Netherlands.

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A nursing home is viewed as a place of residence for people who require round-the-clock nursing care and have significant difficulty coping with the required activities for daily living. In the United States, over half of all nursing home residents are aged 85 or older. Nursing home residents experience a wide array of physical or mental disorders, and most of them can be considered as long-term care patients: They will never recover to the point where they can take care of themselves (Sengupta, Harris-Kojetin, & Caffrey, 2015).

The demand for nursing home care is likely to grow. The number of people in the 80 years and above category is growing faster than any other segment of the population. The European Union forecasts that public expenditure on long-term care will almost double by 2060 in its member states (European Commission, 2012, p. 197, 224). Likewise, the number of people using long-term care services in the United States “is projected to increase from 15 million in 2000 to 27 million in 2050” (U.S. Department of Health and Human Services, 2013, p. 3). This growth poses challenges in terms of both costs and care quality with regard to the sustainable organization of the nursing home sector. A central question is whether nursing home care should be delivered by for-profit (FP) or not-for-profit (NFP) providers.

In Western countries, long-term care for frail elderly people is delivered through a mix of FP and NFP facilities. In the United States, 68% of all nursing homes are FP (U.S. Department of Health and Human Services, 2013). In the United Kingdom, 42% of the major care home providers (i.e., those with three or more homes) for older and physically disabled people are FP, and 55% of all care home beds are in FP facilities (Forder & Allan, 2011, p. 13). Eight of the 10 largest U.K. care home providers are FP companies (Lakhani & Whittell, 2012). In Canada, the mix of providers varies by province, with for example 52% FP nursing homes in Ontario, 30% in British Columbia, and 15% in Manitoba (McGregor et al., 2006). European countries also vary in the extent to which they allow or encourage FP nursing homes. In the Netherlands, FP nursing homes are not allowed, although an exception is made for private, small-scale facilities. In Finland and Sweden, where nursing home care was traditionally run by the public sector, an increasing number of private FP providers have established themselves in the market (Heponiemi et al., 2011; Kirsebom, Hedström, Wadensten, & Pöder, 2014, p. 116).

Opinions differ strongly as to the desirability of extending the trend of growing FP nursing home care (e.g. Dyson, 2014; Sennero & Pollard, 2014; U.S. Government Accountability Office, 2010). The key difference between FP and NFP nursing homes is in the identity of those who possess ultimate control over them, owners versus boards of trustees: “the wealth of owners of FP nursing homes is tied to the financial success of the nursing home in which they have ownership stakes, whereas the individuals who control NFP nursing homes have no legal ownership stakes” (Ben-Ner & Ren,

2008, p. 2). If income exceeds operational costs, NFP nursing homes typically put that “profit” back into the facility. An FP provider may choose its own objectives, resources, and management perspectives, and this can affect the nursing home organization as a whole, its employees, and its clients. It is claimed that FP providers can contribute to leaner nursing home organizations and improved management control systems that will keep costs under control (e.g., Weech-Maldonado, Laberge, Pradhan, Johnson, & Hyer, 2012). FP providers may also feel pressure to compete on price and quality, and this may result in higher-quality care that is also more efficiently organized (Konetzka, 2009). However, FP nursing homes may favor financial returns for their owners over high-quality care (e.g., Kitchener, O’Meara, Brody, Lee, & Harrington, 2008). If, as is likely, their management objective is to provide returns to investors, FP owners could prioritize profits over employee and client well-being (e.g., Harrington, Zimmerman, Karon, Robinson, & Beutel, 2000).

Given these uncertainties, we present a systematic review of the literature published between 2004 and 2014 on the role of nursing home ownership in the United States and compare evidence on FP and NFP nursing homes in the private sector. We have focused on the United States because most studies on this topic relate to American nursing homes. We build on insights from the Human Resource Management (HRM) literature on multistakeholder perspectives by distinguishing relevant differences for the organization as a whole, its employees, and its clients (Beer, Spector, Lawrence, Mills, & Walton, 1984). The main aim of this review is to qualitatively assess and summarize current evidence related to the effect of nursing home profit status by answering two research questions:

RQ1: *What topics have been studied with regard to financial performance, employee well-being, and client well-being in relation to nursing home ownership?*

RQ2: *What are the outcomes of these topics for financial performance, employee well-being, and client well-being, and how are these outcomes related to each other?*

On the basis of the findings, we offer two propositions on the interaction between financial performance, employee well-being, and client well-being as related to nursing home ownership.

Previous reviews of FP nursing home ownership have focused on the relationship between ownership and quality of care indicators (Comondore et al., 2009; Hillmer, Wodchis, Gill, Anderson, & Rochon, 2005). Furthermore, more than 80% of the articles used in these earlier reviews were published prior to 2004, meaning that these reviews are mainly based on publications that are now more than a decade old.

Our systematic review of the literature on FP and NFP nursing homes makes two contributions. First, it updates the earlier reviews by assessing articles published between

2004 and 2014, with 72% of the articles reviewed here not having been included in previous reviews. Second, whereas previous reviews have concluded that FP nursing homes appear to provide lower-quality care (Comondore et al., 2009, Hillmer et al., 2005), our systematic review synthesizes the accumulated evidence on a much broader spectrum of criteria. We regard care quality as just one of the possible indicators of client well-being and also consider hospitalization rates and the incidence of lawsuits and complaints. Furthermore, we also include differences between FP and NFP nursing homes with regard to financial performance and employee well-being. Our presumption is that there will be some kind of relationship between financial performance, employee well-being, and client well-being, although we are unsure as to the nature of that relationship. In addition, we include studies where the ownership status is the independent variable and others where ownership is a covariate.

Theoretical Framework

We view nursing home performance as a multidimensional construct, incorporating variables that are relevant to various stakeholders (i.e., owners, employees, and clients). We build on HRM research, in which Beer et al. (1984) distinguish multiple stakeholders and define multidimensional performances for HRM policy and practice outcomes, including organizational effectiveness (e.g., financial outcomes) and individual well-being (e.g., satisfaction). Various scholars have stressed the need to balance a range of outcomes, and by treating nursing homes as social systems, we place the outcomes for the different stakeholders at the center of our study. Our premise is that performance is created in the way that owners, employees, and clients are jointly affected by a nursing home's type of ownership (Freeman, Harrison, Wicks, Parmar, & De Colle, 2010). Taking a broad perspective, this review explores whether positive outcomes for one stakeholder come at the expense of other stakeholders, or whether all can gain. We therefore introduce two competing perspectives derived from the literature on HRM and performance (e.g., Van De Voorde, Paauwe, & Van Veldhoven, 2012): the "mutual gains perspective" and the "conflicting outcomes perspective."

Mutual Gains Perspective

The "mutual gains perspective" holds that positive/negative outcomes for one stakeholder are accompanied with similar outcomes for other stakeholders. For example, if nursing homes provide inferior care quality, this is accompanied by a poor financial outcome. This "mutual gains perspective" states that the outcomes on different dimensions reinforce each other in the same direction. Recognition of this perspective is seen in the expression "doing well by doing good": Paying attention to all stakeholders will

benefit all stakeholders (Falck & Heblich, 2007; Laszlo, 2008). In this regard, FP nursing homes might function as not-just-for-profit homes and purposefully treat the multiple stakeholders in a balanced way, because this provides a win-win situation. Several studies in the area of HRM indeed highlight the possibility to create parallel positive outcomes for both employees and employers (e.g., Macky & Boxall, 2007).

Conflicting Outcomes Perspective

Arguing from the alternative "conflicting outcomes perspective," a skeptical view can be perceived of the concept of performance as a multidimensional construct. The conflicting outcomes perspective views the maximization of value for one stakeholder as not necessarily benefitting other stakeholders. Hence, the overall impact of a nursing home profit status may be a trade-off in terms of positive and negative outcomes for the different stakeholders. For example, if an FP nursing home adopts a profit maximization perspective—with a focus on economic efficiency, minimizing costs and maximizing profit for shareholders—this may well come at the expense of employee well-being (e.g., fewer staff and therefore higher work pressure) and client well-being (e.g., higher incidence of pressure ulcers). In comparison, NFP facilities may emphasize public service values by prioritizing medical and personnel aspects of care and reinvesting their revenues back in the facilities (e.g., Haley-Lock & Kruzick, 2008; Harrington et al., 2000; Heponiemi, Elovainio, Kouvonen, Kuusio, et al., 2011; Heponiemi, Elovainio, Kouvonen, Noro, et al., 2011). The broader HRM literature observes the possibility of conflicting outcomes related to employee well-being and financial performance. For instance, a high level of people orientation in leadership has been related to low financial performance (Van Veldhoven, 2005), while aiming for high financial performance may come at the cost of intensified work and job strain for employees (Ramsay, Scholarios, & Harley, 2000).

To summarize, the "conflicting outcomes perspective" sees potential trade-offs in different dimensions of performance, whereas the "mutual gains perspective" assumes that the outcomes for the different stakeholders will reinforce each other in the same positive or negative direction. By using a multidimensional performance construct, we explore which of these perspectives is most appropriate for describing the impact of FP ownership in comparison to NFP ownership of nursing homes.

Method

Our systematic review of the literature is based on the replicable and transparent steps specified in the PRISMA method (Liberati et al., 2009). The PRISMA checklist in Appendix B (see Appendix B, Supplemental Digital

Content 2, <http://links.lww.com/HCMR/A18>) records how we followed the required steps.

Data Sources and Searches

The PiCarta, Scopus, PubMed, Google Scholar, and Web of Science databases were searched for relevant studies. The searches were conducted in January 2015. The references of retrieved articles were manually searched for further material. The terms searched for in titles and abstracts were “health care/health services AND ownership,” “for profit nursing home,” “investor-owned AND health care,” “profit AND health care,” and “ownership conversion AND health care.”

Inclusion Criteria

We used six inclusion criteria in selecting or rejecting studies identified in the database searches. First, they had to be in English. Second, we only included studies that were published between 2004 and 2014. Third, we only reviewed studies that were published in peer-reviewed journals. Fourth, we only selected studies that included United States-based research. Fifth, studies had to be empirical, and we excluded commentaries, reviews, and theoretical analyses. Sixth, studies had to have investigated the differences between private FP and private NFP nursing homes in terms of variables that were relevant to financial performance, employee well-being, or client well-being. Only studies that satisfied all six criteria were included in the review.

Variables

The central variable is the profit status of nursing homes. We study whether a nursing home’s profit status influences the variables that emerge from our review. These variables are categorized into the dimensions of “financial performance,” “employee well-being,” and “client well-being.”

Nursing home profit status. Generally, three types of ownership can be distinguished within the nursing home industry: public, private FP, and private NFP. Our review focuses on the differences between private FP and private NFP nursing homes. Several of the studies we reviewed also included public facilities in their sample. As our focus is on the difference between private FP and private NFP nursing homes, we excluded the results for public homes from our analysis. We did this for three reasons. First, the nature of many public nursing homes is distinct from that of private ones. Public facilities are often linked to particular populations (e.g., military veterans) or serve as a safety net (e.g., many city or county facilities; Grabowski, Feng, Hirth, Rahman, & Mor, 2013, p. 15). Moreover, there are relatively few public nursing home facilities in the United States (6.8%: U.S. Department of Health and Human

Services, 2013). Second, the available evidence pushes us in this direction, because most of the studies (57% of the studies included in our review) treat ownership as a dummy variable (FP vs. NFP). Third, the studies that do include public homes as a separate category mainly show that the results of FP nursing homes can be contrasted with those of NFP and public nursing homes (Amirkhanyan, Kim, & Lambright, 2008; Dobalian, 2004; Grabowski & Angelelli, 2004; Haley-Lock & Kruzich, 2008; Mueller et al., 2006; Park & Stearns, 2009; Seblega et al., 2010; Zhang, Unruh, & Wan, 2008; Zinn, Spector, Hsieh, & Mukamel, 2005). Another subset of the studies that distinguish public homes do not report results for this specific category (Akinici & Krolikowski, 2005; Konetzka, Norton, Sloane, Kilpatrick, & Stearns, 2006). The number of studies that report differences between NFP and government facilities is relatively small (Bardenheier, Shefer, Tiggler, Marsteller, & Remsburg, 2005; Grabowski, Angelelli, & Mor, 2004; Konetzka, Spector, & Shaffer, 2004; Konetzka, Yi, Norton, & Kilpatrick, 2004; Zhang & Grabowski, 2004). For these three reasons, we treat the profit status of a nursing home as a dummy variable.

Financial performance. Financial performance covers variables that affect the performance of the organization as a whole; in our study, the variables used address profit margins and efficiency.

Employee well-being. “Ownership is an important structural factor to consider as an influence on human services job quality because of its presumed relationship to organizational goals and behavior” (Haley-Lock & Kruzich, 2008, p. 448). We treat employee well-being as a broad concept that includes both subjective employee experiences (such as satisfaction) as well as objective measures of working conditions. In this area, the following variables emerged from our literature review: staffing levels, turnover rates, job benefits, and job satisfaction.

Staffing levels were mainly presented as hours per resident day, as an indicator of the time professionals have for carrying out their tasks in a fulfilling way. Several studies regard staffing levels as a structural measure of care quality (e.g., Hillmer et al., 2005). However, we treat staffing level as an employee well-being variable because (a) research on the relationship between staffing levels and direct quality of care suggests analytical differences between them, for example, in studying the impact of staffing on resident outcomes (e.g., Schnelle et al., 2004) and (b) the quality of nurses’ working life is related to staffing levels with staffing adequacy having been directly related to work intensification and emotional exhaustion (Aiken, Clarke, Sloane, Sochalski, & Silber, 2002; Laschinger & Leiter, 2006). Turnover rates are an indicator of HRM practices, with long-term investments leading to lower turnover (Batt & Colvin, 2011). Job benefits include salaries and staff training. In general, these variables have been related to job satisfaction (e.g., Harter, Schmidt, & Hayes, 2002), but job

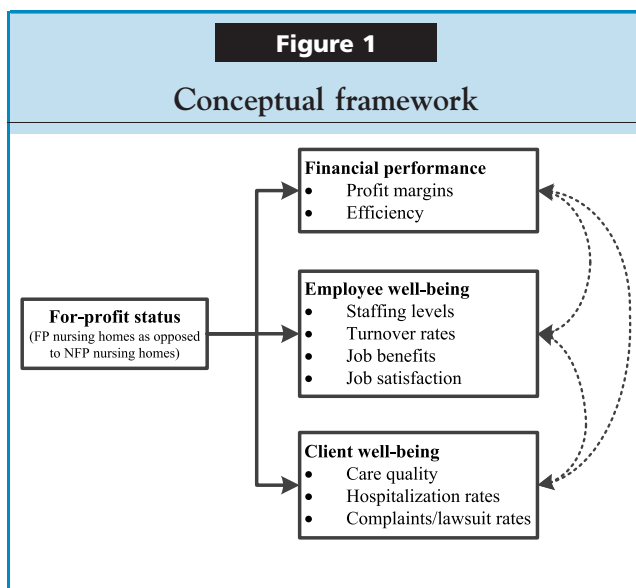
satisfaction is also included as a separate variable to reflect an employee's perceived well-being in terms of the job and working conditions.

Client well-being. We relate client well-being to direct care quality outcomes, hospitalization rates, and the rate of lawsuits and complaints. Care quality can be defined by clinical measures, such as the prevalence of catheter use, pressure ulcers, and use of antipsychotic medication. A second dimension of care quality is the number of serious deficiencies identified in facilities that fail to meet the federal standards for Medicare and Medicaid participation. Deficiencies provide an overall measure of quality.

The second variable linked to client well-being is the number of hospitalizations linked to a nursing home. This is justified on the basis that most of the hospitalizations are potentially avoidable (Givens, Selby, Goldfeld, & Mitchell, 2012). We have categorized hospitalizations as a client well-being variable, because hospitalization is likely to be physically and mentally stressful for frail elderly people living in nursing homes and may result in a further decline in health and have limited clinical benefit.

Finally, we include the number of lawsuits and complaints as a client well-being variable and include articles that investigate their prevalence in FP and NFP nursing homes as an indicator of client satisfaction. Figure 1 summarizes the indicators that emerge from our literature search for each dimension distinguished.

We judge the outcomes on each dimension from the perspective of the relevant stakeholder (i.e., the organization as a whole, the employee, or the client). For example, higher profit margins are regarded from the organizational point of view as positive results, and higher staffing levels are evaluated from an employee perspective as positive.



Quality Assessment

In the final part of the review, we analyzed each study for its methodological quality using a quality assessment tool to remove low-quality studies. This tool uses eight criteria to assess three study aspects: design, sampling, and statistical analysis. The tool was adapted from an instrument developed by Cummings et al. (2010) that has been used in earlier systematic reviews (e.g., Bronkhorst, Tummers, Steijn, & Vijverberg, 2014). Appendix A (see Appendix A, Supplemental Digital Content 1, <http://links.lww.com/HCMR/A17>) summarizes the quality assessment findings and provides the quality scores for the individual articles. We stress the findings of high-quality studies in our findings.

Article Selection

The decision to include a study was determined in a three-step procedure. First, the bibliographic data and abstracts of retrieved studies were evaluated for concordance with the formal inclusion rules (the first four inclusion criteria). Studies that failed any criteria were discarded at this stage. The full texts of the 83 remaining studies were retrieved for critical appraisal. We then consulted senior scholars in the field to add to our list of relevant studies for the subsequent in-depth analysis. In the second step of the inclusion procedure, the full texts were checked against all six criteria and excluded if they did not satisfy all the criteria. In reviewing the full texts, studies were classified according to their focus into the "financial performance," "employee well-being," and "client well-being" categories. We extracted the publication year and journal title, the country of origin, the methods used, and relevant findings and placed this information in a database.

Results

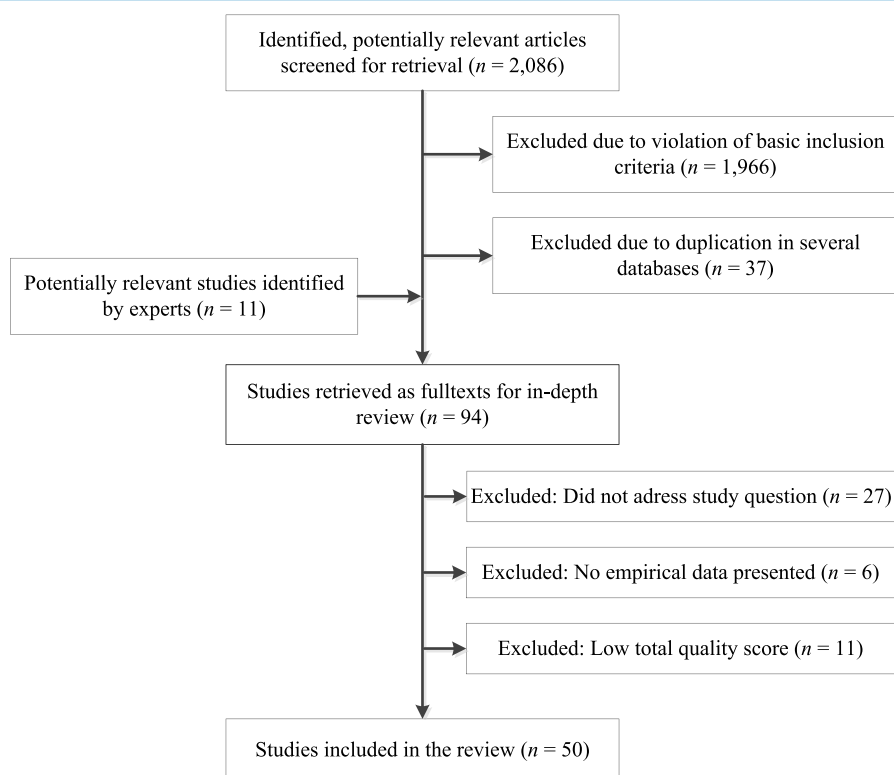
Search Results

The database searches yielded 2,028 potential articles. Another 58 studies were identified through the manual review of references, resulting in a total of 2,086 candidate articles (Figure 2). Using the selection criteria, 83 of these studies were identified for full-text retrieval and in-depth study. Next, 11 additional articles were identified by six senior scholars in the field (see Acknowledgments), leading to 94 full texts for in-depth review.

Of these, 27 were then rejected because they did not address the topic of our study (e.g., focusing on variables such as nursing home market structure that transcended the organizational level) and six because they did not present empirical data (review articles, etc.). We then applied the quality assessment tool (see Appendix A, Supplemental

Figure 2

Flow diagram for search and selection processes



Digital Content 1, <http://links.lww.com/HCMR/A17>) to the remaining 61 studies, and another 11 were excluded because they were rated as low quality. At the end of this process, 50 publications had therefore satisfied all the criteria and were included in the review.

Having established our sample, we first considered some characteristics of the papers found. First, we noted a downward trend in the number of articles over time. The publications mostly reported quantitative studies, with only three studies combining quantitative and qualitative methods (see Table 1). Twenty-nine of the included studies (58%) drew some of their data from the same data source, namely the Online Survey, Certification, and Reporting data network maintained by the Centers for Medicare and Medicaid Services (2013) in cooperation with statewide long-term care surveying agencies. Only one study focused on financial performance and employee well-being variables simultaneously (Kash, Castle, & Phillips, 2007). Four others combined employee well-being and client well-being variables (Akinici & Krolkowski, 2005; Decker, 2006; Grabowski & Stevenson, 2008; Konetzka, Yi, et al., 2004). Thus, only 5 of the 50 studies (10%) have included variables related to more than one of the dimensions distinguished in this review.

Table 1

Details of the studies included in the review (N = 50)

Study characteristic	Included studies, n (%)
Type of empirical study	
Quantitative	47 (94%)
Quantitative and qualitative	3 (6%)
Design	
Cross-sectional	49 (98%)
Longitudinal	1 (2%)
Publication year	
2004–2006	28 (56%)
2007–2009	16 (32%)
2010–2012	3 (6%)
2013–2014	3 (6%)
Focus of article ^a	
Financial performance	6 (12%)
Employee well-being	18 (36%)
Client well-being	30 (60%)

^aSome studies focus on more than one variable, thereby covering more than one dimension. The total number of studies focusing on each of the three performance aspects is therefore higher than the total number of individual studies in the review.

In half of the studies reviewed, ownership was treated as an independent variable and, as such, the main focus. The other studies used ownership as a control variable (or covariate), and these are indicated by the superscript ^c in the tables (and listed below those adopting the independent variable approach). The proportion of FP nursing homes in the individual studies ranged from 44% to 86%, and the proportion of NFP homes from 14% to 51%. The average split between FP and NFP homes across all the samples was 69%–29%, which is roughly in line with the 68%–25% distribution of ownership types in the U.S. nursing home industry (U.S. Department of Health and Human Services, 2013).

Profit Status and Financial Performance

Six of the studies (12%) included in the review focus on the differences in financial performance between FP and NFP nursing homes (see Table 2).

Profit margins. Two of these studies addressed differences in profit margin between FP and NFP nursing homes and found that FP nursing homes have significantly higher profit margins (Kash et al., 2007; Weech-Maldonado et al., 2012). These are seen as robust outcomes because both studies control for relevant organizational and market level variables, such as chain membership, case mix, per capita income, and market competition, in determining the relationship between ownership and profit margins.

Efficiency. Two of the other studies show that FP nursing homes have higher efficiency levels than NFP ones (Lee,

Bott, Gajewski, & Taunton, 2009; Zhang et al., 2008). The first of these controlled for quality variations, whereas ownership is only a covariate in the second.

Two other studies had findings that we link to financial performance. First, the study by Davis, Marino, Aaron, and Tolbert (2009) shows no differences between NFPs and FPs in the extent to which they can be associated with innovativeness, risk-taking, and proactiveness (i.e., entrepreneurial orientation). Second, the study by Givens et al. (2013) concludes that FP nursing homes are more likely to transfer their residents to skilled nursing units and suggests that this is due to financial considerations with the Medicare payments for skilled nursing services much higher than the Medicaid daily rate for long-term nursing home care.

Overall, evidence on financial performance is relatively scarce. The few studies identified show that nursing homes with an FP status can be associated with higher profit margins and higher efficiency levels. Furthermore, although Davis et al. (2009) failed to find differences between FP and NFP nursing homes with regard to their entrepreneurial orientation, Givens et al. (2013) suggest that FP homes do weigh financial considerations more seriously in their referral decisions than NFP homes.

Profit Status and Employee Well-being

Eighteen of the 50 studies reviewed (36%) include employee well-being variables (see Table 3). The most prevalent variable used was staffing levels, although turnover was also prominent. We also found some studies addressing job satisfaction and job benefits.

Table 2

Details of studies that assessed financial performance

Reference	Sample	Relevant findings: FP vs. NFP nursing homes
Profit margin		
Kash et al., 2007, <i>Health Care Management Review</i>	1,014 Texas facilities	FPs: higher operating profit margins
Weech-Maldonado et al., 2012, <i>Health Care Management Review</i>	11,236 U.S. facilities	FPs: higher operating and total margins
Efficiency		
Lee et al., 2009, <i>Health Services Research</i>	107 Kansas and Missouri facilities	FPs: more efficient
Zhang et al., 2008, <i>Health Services Research</i> ^c	8,361 U.S. facilities	FPs: more efficient
Other		
Davis et al., 2009, <i>Nonprofit and Voluntary Sector Quarterly</i>	134 Florida nursing home administrators	No differences in entrepreneurial orientation of FPs and NFPs
Givens et al., 2013, <i>Journal of the American Geriatrics Society</i>	4,177 U.S. nursing home residents with advanced dementia	FPs: more likely to refer to <i>skilled</i> nursing home (possibly because of financial considerations)

Note. Superscript ^c refers to a study in which ownership is a covariate. FP = for-profit; NFP = not-for-profit.

Table 3

Details of studies that assessed employee well-being

Reference	Sample	Relevant findings: FP vs. NFP nursing homes
Staffing (occupational categories: RN, LVN, CNA)		
Grabowski & Stevenson, 2008, <i>Health Services Research</i>	194,556 U.S. OSCAR surveys; 383,937 facility-quarter records	RN staffing levels decrease after conversion from NFP to FP
Kash et al., 2006, <i>The Gerontologist</i>	1,014 Texas facilities	FPs: lower staffing levels in each occupational category
Rantz et al., 2004, <i>The Gerontologist</i>	92 Missouri facilities	No significant differences in overall staffing levels
Seblega et al., 2010, <i>Medical Care Research and Review</i>	11,611 U.S. facilities	FPs: lowest mean values for all types of nursing staff and lower skills mix
Akinci & Krolikowski, 2005, <i>Applied Nursing Research</i> ^c	90 Pennsylvanian facilities	FPs: lower staffing levels for each occupational category
Decker, 2008, <i>Health Economics, Policy, and Law</i> ^c	10,606 U.S. facilities; 21,212 observations	FPs: lower RN staffing levels
Feng, Grabowski, Intrator, Zinn, & Mor, 2008, <i>Medical Care</i> ^c	9,996 U.S. facilities; 77,622 observations	FPs: lower staffing levels for each occupational category
Intrator et al., 2005, <i>The Gerontologist</i> ^c	17,635 U.S. facilities; 137,190	No differences with regard to the staffing of nurse practitioners and physician assistants (dummy variable)
Konetzka, Yi, et al., 2004, <i>Health Services Research</i> ^c	60,283 surveys from 18,134 U.S. facilities	FPs: lower staffing levels (significant for RNs, RNs + LVNs, CNAs, $p < .001$)
Mueller et al., 2006, <i>The Gerontologist</i> ^c	14,147 U.S. facilities	FPs: significantly lower total, LVN, and CNA staffing levels
Park & Stearns, 2009, <i>Health Services Research</i> ^c	15,217 U.S. facilities; 55,248 facility-year observations	FPs: more likely to be low-staff facilities ($p < .01$)
Turnover		
Castle & Engberg, 2006, <i>The Gerontologist</i>	854 facilities in Missouri, Texas, Connecticut, New York, Pennsylvania, New Jersey	FPs: higher turnover for all occupational categories
Kash et al. 2006, <i>The Gerontologist</i>	1,014 Texas facilities	FPs: higher turnover for all occupational categories
Castle, 2005, <i>The Gerontologist</i> ^c	419 facilities in Kansas, Maine, Mississippi, South Dakota, Texas	FPs: higher turnover for all occupational categories
Castle et al., 2007, <i>The Gerontologist</i> ^c	72 facilities in Colorado, Florida, Michigan, New York, Oregon	No differences in turnover rates
Job satisfaction		
Decker et al. 2009, <i>The Gerontologist</i>	2,146 U.S. CNAs, working >30 hours a week	FPs: lower intrinsic job satisfaction, but not lower overall satisfaction
Choi et al., 2011, <i>The Gerontologist</i> ^c	863 RNs in 282 nursing facilities, New Jersey	FPs: lower RN job satisfaction
Job benefits		
Haley-Lock & Kruzich, 2008, <i>Nonprofit and Voluntary Sector Quarterly</i>	54 Wisconsin facilities	FPs: negatively related to CNA job benefits
Kash et al., 2007, <i>Health Care Management Review</i>	1,014 Texas facilities	FPs: lower expenditure on employee benefits and staff training

Note. Occupational categories in order of hierarchy: RNs have the highest level of training, CNAs the lowest. Superscript ^c refers to a study in which ownership is a covariate. FP = for-profit; NFP = not-for-profit; RN = Registered Nurse; LVN = Licensed Vocational Nurse; CNA = Certified Nurse Assistant; OSCAR = Online Survey, Certification, and Reporting.

Staffing. Eleven studies identified staffing level differences between FP and NFP nursing homes and in general found that FP nursing homes have lower staffing levels for direct care professionals. Although five studies found lower staffing levels across all occupational categories (Registered Nurses, Licensed Vocational Nurses, and Certified Nurse Assistants), two other studies only show significant differences one or several occupational categories, but not all (see Table 3). One study failed to find differences in staffing levels between FP and NFP nursing homes (Rantz et al., 2004); another study reports no difference in the staffing of Nurse Practitioners or Physician Assistants (Intrator et al., 2005). None found more favorable staffing levels in FP homes. The results do not show different patterns between studies treating ownership as a central independent variable and those in which ownership was a covariate.

An interesting, high-quality study in this area is by Grabowski and Stevenson (2008), who studied ownership conversions and concluded that staffing levels decrease after a switch from NFP to FP ownership, even after controlling for chain affiliation, case mix, and local economic conditions.

Turnover. A second common variable related to employee well-being is the difference in turnover rates between FP and NFP nursing homes. Although one study found no difference in turnover rates (Castle, Engberg, Anderson, & Men, 2007), three other studies did find significantly higher turnover rates for all occupational categories in FP nursing homes than in NFP homes (see Table 3). A study, ranked as high quality, by Castle and Engberg (2006) controlled for chain membership and local economic conditions and found higher turnover rates for all occupational categories in FP nursing homes. The study by Kash, Castle, Naufal, and Hawes (2006) similarly controlled for competition, chain membership, and case mix and came to similar conclusions. Castle (2005) also reports higher turnover rates in FP nursing homes. The study that did not find any differences treated ownership as a covariate. We therefore conclude that, overall, the studies provide strong evidence for turnover rates being generally higher in FP nursing homes.

Job satisfaction. The two studies that considered job satisfaction found lower satisfaction scores in FP nursing homes than in NFP nursing homes (see Table 3). However, specific conditions apply to this statement. Although Decker, Harris-Kojetin, and Bercovitz (2009) did find lower *intrinsic* job satisfaction (which is about responsibility, self-direction, skill development, and observed accomplishments associated with doing the work) in FP homes, the *overall* job satisfaction was not significantly different between FP and NFP nursing homes. Moreover, the study did not control for relevant variables such as case mix. The other study, by Choi, Flynn, and Aiken (2011), treated ownership as a covariate and found lower Registered Nurse job satisfaction in FP nursing homes.

The evidence thus points toward lower job satisfaction in FP nursing homes, but only under specific conditions, and therefore, we view the evidence as relatively weak.

Job benefits. Two final studies compared job benefits in FP and NFP nursing homes. Both studies controlled for case mix and competition, and Kash et al. (2007) also for chain membership. Both studies report better job benefits in NFP homes (Haley-Lock & Kruzich, 2008; Kash et al., 2007).

Overall, the studies that have investigated employee well-being generally conclude that NFPs have higher staffing levels and lower turnover rates and offer greater job satisfaction and better job benefits.

Profit Status and Client Well-being

Most of the studies in our review (31 of 50; 62%) deal with variables that relate to client well-being (see Table 4). In 18 of these studies, ownership is treated as a covariate. Studies on client well-being address two aspects: direct measures of care quality outcomes (such as pressure ulcer incidence and violations of regulations) and indirect measures such as the number of hospitalizations (transfers of nursing home residents to a hospital) and the lawsuit and complaint rates.

The largest group of these studies focuses on direct care quality outcomes (20 studies), and in 12 of these studies, ownership is treated as a covariate. The other studies focus on the number of hospitalizations (10 studies; 6 of them treating ownership as a covariate) and on lawsuit/complaint rates (2 studies in which ownership is a central independent variable).

Care quality. Nine of the 20 studies on direct quality outcomes found no differences between FP and NFP nursing homes. Eight studies identify higher-quality outcomes in NFP nursing homes, whereas three studies report diverse outcomes for different quality indicators, variably favoring FPs and NFPs or finding no differences (see Table 3). None of the studies found FP homes consistently outperforming NFP ones. Most of the studies that treated ownership as a central independent variable included several control variables such as chain affiliation, resident case mix, and competition. Two of the studies that failed to find any differences between FP and NFP nursing homes did not include any control variables (Bardenheier et al., 2005; Zinn et al., 2005).

We have only included medium- and high-quality studies in our review, and here two of the three high-quality studies found worse-quality outcomes in FPs (Amirkhanyan et al., 2008; Konetzka, Yi, et al., 2004). Stevenson and Grabowski (2008), in the other high-quality study, consider ownership conversions. Their study is unique in that it is the only one in our review where the independent ownership variable changed over time. It nuances the negative results seen in other studies in that they show that a change from NFP to FP ownership is not accompanied by a change in care quality.

Table 4

Details of studies that assessed client well-being

Reference	Sample	Relevant findings: FP vs. NFP nursing homes
Care quality		
Amirkhanyan et al., 2008, <i>Journal of Policy Analysis and Management</i>	14,423 U.S. facilities	FPs: lower quality (violation of regulations)
Bardenheier et al., 2005, <i>Journal of the American Geriatrics Society</i>	1,409–1,488 U.S. facilities; 7,374–7,399 residents (1995/1997/1999)	No significant difference in pneumococcus vaccinations
Chesteen, Helgheim, Randall, & Wardell, 2005, <i>Journal of Operations Management</i>	42 Utah facilities; 890 CNAs	No differences on outcome quality
Grabowski & Stevenson, 2008, <i>Health Services Research</i>	383,937 U.S. facility-quarter records; 194,556 surveys	Care quality generally does <i>not</i> change following NFP to FP and FP to NFP conversions
Grabowski et al., 2013, <i>Journal of Health Economics</i>	874,143 U.S. residents	FPs: poorer postacute care quality
Lau, Kasper, Potter, & Lyles, 2004, <i>Health Services Research</i>	3,372 U.S. nursing home residents	No difference between FPs and NFPs in potentially inappropriate medication prescriptions
Williams, Zimmerman, Sloane, & Reed, 2005, <i>The Gerontologist</i>	331 Philadelphia residents, 10 nursing homes	FPs: supervisors more often report resident pain; residents less likely to undergo professional pain assessment and to receive pain medication
Zinn et al., 2005, <i>The Gerontologist</i>	16,559 U.S. facilities	FPs (long stay): score worse on pressure sores, restraint use, and the prevalence of infection but better on “loss of ability in daily tasks.” No difference for pain. FPs (short stay): score better for delirium and pain; lower percentage “walk as well or better.”
Akinci & Krolkowski, 2005, <i>Applied Nursing Research</i> ^c	90 Pennsylvanian facilities	FPs: lower quality (violation of regulations)
Barry, Brannon, & Mor, 2005, <i>The Gerontologist</i> ^c	156 facilities in Maine, Mississippi, New York, Ohio; 156 directors of nursing, 430 day-shift charge nurses	No significant quality difference for pressure ulcer incidence and resident social engagement
Baumgarten et al., 2004, <i>Journal of the American Geriatrics Society</i> ^c	59 Maryland facilities; 1,938 residents	FPs: lower quality (higher incidence of pressure ulcers)
Castle & Engberg, 2005, <i>Medical Care</i> ^c	354 U.S. facilities in four states	FPs: greater use of physical restraints, no significant differences for catheter use, contractures, pressure ulcers, psychoactive drug use, and deficiencies
Decker, 2008, <i>Health Economics, Policy, and Law</i> ^c	10,606 U.S. facilities; 21,212 observations	FPs: higher restraint use, but <i>not</i> after controlling for the percentage of Medicaid residents, Medicaid payments, occupancy
Grabowski, 2004, <i>Medical Care</i> ^c	2,690 U.S. nursing home admissions	No difference in number of deficiencies
Grabowski & Angelelli, 2004, <i>Health Services Research</i> ^c	13,736 U.S. facilities	FPs: higher prevalence of pressure ulcers
Grabowski et al., 2004, <i>Health Affairs</i> ^c	13,169 to 13,859 U.S. facilities per quality indicator	FPs: more incidences of pressure ulcers and physical restraints; NFPs: more daily pain
Kamimura et al., 2007, <i>Health Care Management Review</i> ^c	117 Michigan facilities; 86 North Carolina facilities	No quality differences (deficiencies, pressure ulcers) between FP and NFP chains

(continues)

Table 4
Details of studies that assessed client well-being, Continued

Reference	Sample	Relevant findings: FP vs. NFP nursing homes
Konetzka, Yi, et al., 2004, <i>Health Services Research</i> ^c	18,134 U.S. facilities; 60,283 surveys	FPs: more deficiencies
Konetzka et al., 2006, <i>Medical Care</i> ^c	1,704 U.S. facilities, 395,264 residents	No differences on the incidence of urinary tract infections and pressure sores
Zhang & Grabowski, 2004, <i>The Gerontologist</i> ^c	5,092 U.S. facilities in 22 states	FPs: higher incidence of pressure ulcers, more catheters used
Hospitalizations		
Gozalo & Miller, 2007, <i>Health Services Research</i>	183,742 nursing home/hospice residents in Kansas, Maine, New York, Ohio, South Dakota	FPs: greater likelihood of hospitalization ($p < .001$)
Grabowski et al., 2013, <i>Journal of Health Economics</i>	874,143 U.S. nursing home residents	FPs: poorer postacute care: rehospitalization after discharge (within 30 days) more likely
Hirth et al., 2014, <i>International Journal of Health Care Finance Economics</i>	278,848 U.S. nursing home residents	FPs: higher hospitalization rates that cannot be explained by resident differences
Konetzka, Spector, et al., 2004, <i>Medical Care</i>	766 U.S. nursing home residents suspected of having pneumonia infections	FPs: higher hospitalization rate for residents with suspected pneumonia
Boockvar et al., 2005, <i>Journal of the American Geriatrics Society</i> ^c	59 Maryland facilities; 2,285 residents, follow-up for 2,153 residents	FPs: increased hospital triage (residents transferred to hospital within 3 days of infection onset, worse resident results)
Decker, 2006, <i>Medical Care</i> ^c	6,386 discharges in U.S. facilities	FPs: hospitalizations more likely
Dobalian, 2004, <i>The Gerontologist</i> ^c	16,760 U.S. facilities; 1,560,003, 1,536,525 residents	FPs: hospitalizations more likely
Inrator, Zinn, & Mor, 2004, <i>Journal of the American Geriatrics Society</i> ^c	54,631 residents; 663 facilities in Maine, Kansas, NY, and South Dakota	FPs: hospitalizations more likely
Inrator & Mor, 2004, <i>Journal of the American Geriatrics Society</i> ^c	253 nursing homes in 10 U.S. states; 2,080 residents	FPs: higher rate of hospitalization and a higher rate of death (without hospitalization) - but not statistically significant
Inrator et al., 2007, <i>Health Services Research</i> ^c	570,614 residents; 8,997 U.S. facilities	FPs: higher rate of hospitalizations
Lawsuits/complaints		
Johnson et al., 2004, <i>The Gerontologist</i>	478 Florida facilities	FPs: more lawsuits (but very weak association with ownership type)
Stevenson, 2005, <i>Medical Care</i>	539 Massachusetts facilities	FPs: higher rates of complaints

Note. Superscript ^c refers to a study in which ownership is a covariate. FP = for-profit; NFP = not-for-profit.

Overall, most studies report no difference between the care quality provided in FP and NFP nursing homes. Although several studies do suggest better care in NFP homes, none of the studies found that FP nursing homes consistently outperform NFP ones on this variable.

Hospitalizations. When it comes to the number of hospitalizations, the evidence is clear-cut: FP nursing homes show higher hospitalization rates than their NFP counterparts (see Table 4). The high-quality study by Hirth, Grabowski, Feng, Rahman, and Mor (2014) suggests that the higher hospitalization rates in FP nursing homes are due to a greater willingness or ability of NFP nursing homes to

manage cases in-house. Their study also shows that differences cannot be explained by resident characteristics. Konetzka, Spector, et al. (2004) in another high-quality study, after controlling for chain affiliation, resident payer sources, and resident characteristics, find evidence for higher hospitalization rates for residents with suspected pneumonia in FPs. We therefore conclude that the evidence showing higher hospitalization rates in FP nursing homes is convincing.

Lawsuit/complaint rates. The two studies that emerged from our search that addressed lawsuits and complaints both show a higher rate of lawsuits and complaints in

FP nursing homes after controlling for facility size (see Table 4). Johnson, Dobalian, Burkhard, Hedgecock, and Harman (2004, p. 344) found that litigation activity was 19% higher in FP homes than in NFP ones. Stevenson (2005) found that FP nursing homes have higher complaint rates.

Overall, none of the studies reviewed found that FP nursing homes consistently outperform NFP ones in terms of direct care quality indicators, whereas several studies found that NFP nursing homes scored more highly on a range of quality indicators. Furthermore, FP nursing homes show higher hospitalization rates and are subject to more lawsuits and complaints.

Profit Status and Multidimensional Performance

In the available evidence, FP nursing homes demonstrate better financial performance than their NFP counterparts, with higher profit margins and greater efficiency. However, these positive findings with regard to financial performance do not go hand in hand with positive findings for employee well-being and client well-being. FP nursing homes tend to have lower staffing levels, higher turnover rates, lower job satisfaction, and less job benefits than NFP nursing homes. Likewise, with regard to client well-being, FP homes are more likely to score worse on care quality outcomes, have higher hospitalization rates of their residents, and are more often the target of complaints or lawsuits. Most of these results are robust, controlling for relevant variables such as market features, resident characteristics, and sometimes also chain affiliation. Although Hirth (1999) warned of a potential bias in the ownership–quality literature because competition was not taken into account, more recent research does often control for competition (e.g., Amirkhanyan et al., 2008; Grabowski et al., 2013; Grabowski & Stevenson, 2008; Kash et al., 2007).

Here, we employ a multistakeholder perspective in which we combine the results from all 50 studies.

First, based on the results, it seems that policies and procedures that improve profit margins and efficiency require strict control over personnel costs and resident costs. The suggestion that deteriorating client well-being can be partly blamed on the FP motive is certainly not undermined by our review of the last 10 years of literature. If anything, the “conflicting outcomes perspective” is supported with regard to “financial performance” versus “employee well-being” and “client well-being”: Although a nursing home’s FP status can be associated with positive financial performance, it can at the same time be related to predominantly worse outcomes in terms of employee and client well-being. Only one of the studies included in our review combines financial performance and employee well-being, and this found that higher profit margins in FP nursing homes are

matched by lower expenditure on employee benefits and staff training (Kash et al., 2007). This leads to the first proposition drawn from our systematic review:

Proposition 1: The “conflicting outcomes” perspective applies to FP nursing homes in that better financial performance is associated with worse employee and client well-being.

Second, it seems that poor results for employee well-being appear to go together with negative outcomes for client well-being in FP nursing homes. The three studies that combined staffing and direct care quality measures (Akinici & Krolikowski, 2005; Decker, 2008; Konetzka, Yi, et al., 2004) all showed this pattern. Grabowski and Stevenson (2008) presented a more nuanced picture in that the decreasing staffing levels in nursing homes converting from NFP to FP did not lead to changes in the direct care quality indicators. As such, the “mutual gains perspective” seems applicable to employee well-being and client well-being, leading to our second proposition:

Proposition 2: The “mutual gains” perspective applies to FP nursing homes insofar as better employee well-being is associated with better client well-being.

Figure 3 provides a summary of the findings and the propositions.

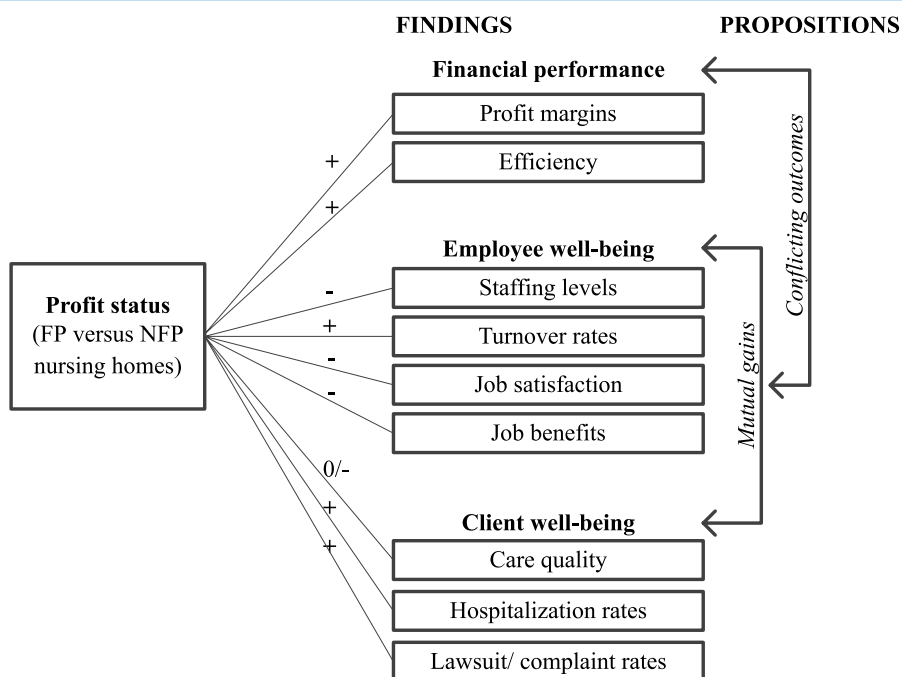
Conclusions and Implications

Conclusions

The implications of FP ownership of nursing homes have been a controversial subject for decades. Concerns are expressed that the focus on profits comes at the expense of care quality for the frail and elderly people that reside in nursing homes. An extensive body of research exists on the differences between FP and NFP nursing homes. To date, individual articles and reviews have largely focused on client well-being or employee well-being or financial performance, whereas the discussions on the significance of profit status in nursing homes are often about the interaction *between* these outcomes. The reviews by Comondore et al. (2009) and Hillmer et al. (2005) both show a lower quality of care in FP nursing homes compared with NFP ones. Our systematic review of the literature on FP nursing home ownership and its effects over the last 10 years shows that these earlier outcomes are largely supported by more recent research, although we also report articles that fail to find care quality differences between FP and NFP nursing homes. Going beyond recent reviews of the effects of nursing home profit status, we apply a multistakeholder perspective that results in a multidimensional performance

Figure 3

Summary of the findings and the propositions



The figure shows the differences between for-profit (FP) and not-for-profit (NFP) nursing homes. A “+” means that FP nursing homes generally score higher on this variable than NFP nursing homes, a “-” means that FP nursing homes generally score lower than NFP nursing homes. A “0” means that there is no difference between FP and NFP nursing homes.

construct that incorporates financial performance, employee well-being, and client well-being. FP nursing homes, when compared to their NFP counterparts, show better financial performance but tend to score worse on most employee well-being and client well-being variables. These outcomes are robust, and we did not find differences between studies in which ownership is the central independent variable and those in which ownership is a covariate (which can be interpreted as an indicator of the absence of publication bias). Furthermore, the high-quality studies at the center of our review include relevant control variables such as case mix, chain affiliation, and per capita income.

Implications for Research

This review has several limitations, which we now consider, and these often suggest opportunities for future research. First, we adopted the operationalizations and measurements of the dependent variables directly from the individual papers reviewed. As such, there is some variation in the way the individual measures of the dependent variables, such as care quality or profit margins, are defined.

Second, we found only very limited research into several of the variables addressed, and this calls for further research. For example, not many studies address financial performance or several of the employee level variables such as employee satisfaction. Most of the research to date has focused on client well-being variables and especially on care quality. Furthermore, the focus in care quality measurements is on clinical measures, such as pressure ulcer prevalence. Given that people often spend the last years of their lives in nursing homes, we would suggest adding broader quality of life indicators such as social engagement, client satisfaction, and family caregiver satisfaction (e.g., Gawande, 2014; Li et al., 2013).

Third, the results of this review suggest that the consequences of the profit status of a nursing home can in different aspects be interpreted as conforming to the conflicting outcomes perspective as well as to the mutual gains perspective. Our conclusions are largely based on separate studies that cover varying samples while focusing on a single stakeholder. We would encourage future research to combine variables that are relevant for multiple stakeholders in a single study and investigate whether our propositions

can be supported. We also suggest that it would be particularly valuable to study ownership conversions (from NFP to FP) to see if any changes occur in financial performance, employee well-being, and client well-being after conversion (e.g., Grabowski & Stevenson, 2008).

Fourth, the distinction we made between FP and NFP might be too coarse (Meagher & Cortis, 2009, p. 35). The debate on nursing home ownership is entering a new phase in which attention is shifting from the FP and NFP divide to the complicated ownership structures seen *within* the FP sector (Stevenson, Bramson, & Grabowski, 2013), including the role of private equity owners (e.g., Harrington, Olney, Carrillo, & Kang, 2012; Pradhan, Weech-Maldonado, Harman, Laberge, & Hyer, 2013; Stevenson & Grabowski, 2008). The early empirical studies on this topic, for example, show that private equity-owned nursing homes have higher operating and total margins than other FP nursing homes. The differences *within* FP nursing home ownership therefore seem worthy of a study in their own right. At the same time, researchers need to be more precise with regard to NFP nursing homes. Twenty-nine of the 50 studies included in our review treated profit status as a dummy (yes/no) variable, often without making clear if the NFP category includes only private NFP nursing homes, or *also* public nursing homes. Because public homes often work for particular populations or serve as safety net providers (e.g., Grabowski et al., 2013), it would help clarify outcomes if results were specifically tied to NFP or to public providers. The indistinct dividing line between private NFP and public homes is a weakness of existing research that placed limitations on our review.

Fifth, we used broad search terms in finding articles relevant for this review. The broad scope of the search terms enabled us to identify a wide range of potentially relevant articles. At the same time, more specific search terms (such as “family caregiver satisfaction”) might have revealed other publications that were not included in this review.

Finally, the review focuses on studies based in the United States, where the majority of nursing homes are “for-profits.” The relatively few NFP nursing homes in the United States “tend to focus on the clinically more severe and financially more lucrative end of the payer spectrum,” whereas FP facilities “usually have a less lucrative payer mix” (Konetzka, 2009, p. 339). As we noted in our introduction, other Western countries are increasingly seeing it as desirable to extend the availability of FP nursing homes. In contrast to the United States, NFP nursing homes in these countries may emphasize a community-oriented mission, including care for the less profitable patients. Furthermore, in the United States, NFP nursing homes are granted some specific advantages including income and property tax exemptions and access to tax-deductible donations and bonds (Hirth et al., 2014). Translating the finding from our review to other territories therefore needs caution. Some studies in Canada and Finland have indicated that outcomes are in-

deed similar in terms of employee well-being (e.g., Heponiemi, Elovainio, Kouvonen, Kuusio, et al., 2011; Heponiemi, Elovainio, Kouvonen, Noro, et al., 2011; McGregor et al., 2005) and client well-being variables (e.g., McGregor et al., 2006, 2011). However, further research is needed in other countries to determine whether outcomes are similar in different institutional contexts.

Implications for Practice

For policy makers considering the expansion of the FP nursing home industry, our findings suggest the need to adopt a broad perspective, simultaneously weighing up the potential benefits and drawbacks for the organization as a whole, for its employees, and for its clients. Careful consideration is needed in balancing the results on the different dimensions for multiple stakeholders. This is true in any situation, and one needs to be cautious in applying findings in one country (e.g., the United States) to elsewhere. As mentioned earlier, the outcomes of this review might reflect an underlying distinction in the U.S. nursing home industry with its two-tier system. In this system, the superior care quality offered in NFP nursing homes is related to their inclination to shun Medicaid patients because these provide less money for health services. FP nursing homes are more willing to accept Medicaid recipients but may well offer a reduced care quality. This leads to a situation “in which elitist NFP providers serve healthier, more educated, and affluent consumers and FP homes provide substandard quality to everyone else” (Amirkhanyan, 2008, p. 676; Mor, Zinn, Angelelli, Teno, & Miller, 2004). Given these concerns, it is important to remember that all the high-quality studies in our review controlled for market variables that might distort the relationship between ownership type and the dependent variables. Here, the high-quality studies controlled for poverty rates, per capita income, or for the percentage of Medicaid recipients in the area where a nursing home was located (see Appendix A, Supplemental Digital Content 1, <http://links.lww.com/HCMR/A17>). Moreover, the first set of studies in other Western countries point in the same direction as U.S. studies in terms of employee well-being and client well-being. The evidence thus emphasizes the continuing importance of nursing home ownership in policy decisions on the structuring of a sustainable nursing home industry.

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