Challenges in Making a Business Case for Effective Pain Management in Nursing Homes

ABSTRACT
The lack of a systematic and comprehensive pain management program is a common quality problem in nursing homes. The purpose of this article is to address the business case for effective pain management in this setting, including the conceptual domains and processes that should be considered in improving quality and reducing costs. Unfortunately, the literature contains very little to inform those working to implement effective and efficient pain management programs in nursing homes. This article suggests several strategies for establishing an internal business case to support the implementation of a comprehensive pain management program in a nursing home setting.

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Concerns about the quality of care in nursing homes have prompted public outcries, grassroots advocacy movements, and an array of mechanisms to increase state and federal oversight. The Agency for Healthcare Research and Quality (AHRQ) and the Centers for Medicare & Medicaid Services (CMS) are both federal agencies concerned with quality of care in nursing homes. AHRQ is charged with ensuring that health care is of the highest quality and is appropriate and effective, while CMS is the primary payer of services for older adults and is concerned with the value of the services delivered. Both agencies have identified pain management as a quality of care issue in nursing homes and have sponsored several efforts to improve quality of pain management in the past (CMS, 2010; Wells, Pasero, & McCaffery, 2008). CMS incorporates pain management into its overall quality score in its Five-Star Quality Rating System (CMS, 2010).

More than 1.5 million adults reside in nearly 16,000 freestanding nursing homes in the United States, and studies report pain prevalence rates range from 47% to 82.9% among nursing home residents (Shapiro, 1996; Zanocchi et al., 2008; Zwakhalen, Koopmans, Geels, Berger, & Hamers, 2009). The high prevalence of pain and its common undertreatment in nursing homes have been documented by clinicians and researchers for the past two decades (Bernabei et al., 1998; Teno, Bird, & Mor, 2002; Teno, Kabumoto, Wette, Roy, & Mor, 2004). Pain continues to be a common chronic condition in nursing home residents that is often unrecognized and undertreated (Decker, Culp, & Cacchione, 2009; Hadjistavropoulos et al., 2007; Hutt, Pepper, Vojir, Fink, & Jones, 2006; Won et al., 2006).

Pain may be associated with acute conditions such as surgery or trauma but often arises from complex chronic medical conditions. A particular challenge is pain that occurs in nursing home residents with dementia who are unable to provide reliable self-report. These residents may frequently cry out with vocalizations that are disturbing to other residents, as well as to staff, and have higher risk of aggressive behaviors that contribute to increased caregiver burden and stress (Kunik et al., 2010). Another hindrance is that some residents make frequent requests for pain medications and may be labeled by staff as drug seekers. In addition, the complexities of assessing and treating pain coupled with limited staff can bias administrators and staff into believing that effective pain management is labor intensive, expensive, and exceeds available resources. The fallacy in this line of thinking is that anticipatory, preventive pain management interventions are often the most clinically effective approaches—as well as the most efficient use of staff time—and are consistent with high quality of care.

Although Americans continue to be concerned with the quality of health care, they have also developed a heightened sensitivity to the high cost of this care. Expenditures now exceed $2.3 trillion per year and account for 16.6% of the gross domestic product for 2008 (Keehan et al., 2008). The oldest old (>85) adult population, the fastest growing segment of society (U.S. Census Bureau, 1995), are known to be disproportionate users of health care and account for more than one third of health care costs (Hartman, Catlin, Lassman, Cylus, & Heffler, 2008). At the same time, their quality of care has also been under scrutiny for the past several years (Boyd et al., 2005; Warshaw, 2009). Nursing home care (now more than $125 billion per year) and prescription drug expenditures (more than $217 billion per year) are both frequently cited as areas of concern in relation to the tremendous cost of caring for older adults (The Henry J. Kaiser Family Foundation, 2008). As geriatric leaders are challenged to focus on these excessive costs and to provide high-quality care in the most frugal manner, the temptation to sacrifice quality in the name of cost savings is high. Therefore, addressing the financial aspects—both benefits and costs—for improved pain management in nursing homes is an important process for geriatric leaders to embrace. Unfortunately, the literature contains little research on the business case for pain management in nursing homes. This article addresses the conceptual domains and processes that should be considered in improving quality and reducing costs in a comprehensive pain management program.

PAIN MANAGEMENT IN NURSING HOMES

Primary goals for any pain management program revolve around decreasing pain to an acceptable level, maintaining or improving functional capabilities, and enhancing quality of life (Jablonski & Ersek, 2009). Older adults in nursing homes are typically not in control of this process and rely on nursing staff to help them achieve these goals. In many cases, nursing staff must anticipate the needs of older adults, particularly those with cognitive decline. An effective and efficient pain management program can improve the quality of care for nursing home residents and may greatly enhance their quality of life as well. Therefore, a comprehensive pain management program must consider quality-of-life issues such as residents’ ability to have daily so-
cial interactions or to sleep through the night.

Unmanaged or poorly managed pain can affect other chronic conditions as well. Consider the effect of pain on diabetic residents with neuropathic pain or patients with severe arthritis who can no longer feed themselves due to poorly managed pain. Poorly controlled pain can contribute to respiratory distress in patients with congestive heart failure or chronic obstructive pulmonary disease. Nursing staff are responsible for assessing nursing home residents, ensuring effective and timely delivery of therapies, and monitoring for pain reduction. Nursing home personnel who lack knowledge in these areas will not be effective in decreasing residents’ pain. Additionally, the lack of systemized care processes contributes to poor management of pain, so leadership in nursing homes should strive to have policies and procedures in place that will assist nursing staff in meeting pain management goals (Swafford, Miller, Tsai, Herr, & Ersek, 2009).

**Barriers to Effective Pain Management**

Studies have identified several obstacles to effective pain management in nursing homes. These can be categorized into at least three areas. First, health care professionals lack knowledge and clinical expertise, resulting in fears of overdose and addiction, difficulties with assessing pain, and problems selecting or accessing the preferred medications (Jones et al., 2005). Second, insufficient education and awareness on the part of older adults in nursing homes or their family members results in misconceptions and concerns regarding side effects, overdose, and addiction and may contribute to a hesitancy to ask for help or report pain. Dementia is a common problem that further complicates older adults’ ability to report pain. Finally, facilities have not used existing processes and tools effectively to better manage pain (Weiner & Rudy, 2002). Another barrier that is rarely acknowledged but could be the source of some of these impediments, is the cost (both real and perceived) associated with providing high-quality pain management. Unfortunately, almost no research has been conducted on the cost of pain management in nursing homes. Therefore, we must look to

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**Figure 1. Mechanisms to make the business case for a pain management program.**

*Note. ROI = return on investment.*
evaluations of cost in other settings to develop a beginning business case for pain management.

METHODS FOR MAKING THE PAIN MANAGEMENT BUSINESS CASE

To establish a business case for a comprehensive pain management program, nursing home leaders need to weigh the benefits (improved quality of care and resident/family satisfaction) and the associated costs (training, additional staff, supplies) of the program. Unfortunately, little information regarding costs or benefit analyses has been published in the pain literature. However, a variety of ways to evaluate the business case for other quality processes have been used; these include cost benefit and cost effectiveness, return on investment, revenue enhancements, cost savings, and cost avoidance (Epstein & Peters, 2009; Luck, Parkerton, & Hagigi, 2007; Lurie et al., 2008; Virkstis, Westheim, Boston-Fleischhauer, Matsui, & Jaggi, 2009). Figure 1 provides a brief overview of these methods that are further explained in the sections below. Each of these processes requires estimating the costs of the program and the benefits derived from program implementation. The business case can be made if the benefits outweigh the costs and quality is improved or at least maintained (Luck et al., 2007).

Cost Benefits and Cost Effectiveness

A frequently cited benefit of a comprehensive pain management program is increased quality of life for individual residents that results in improved quality measures for nursing homes (Lurie et al., 2008). In light of the move toward making care more “resident focused,” incorporating resident experiences of care and quality of life issues are increasingly important when measuring improvement in health care delivery services. Research has shown that involving patients in the decision-making process in these areas may reduce costs while improving satisfaction; thus, integrating the resident’s voice into care may be an important part of the quality improvement process (Epstein & Peters, 2009). In estimating the benefits of a program, the analysis should include evaluating the impact of the program in terms of reduced redundancy (e.g., timing and documentation of assessments, documentation in multiple places on the medical record), improved efficiencies (e.g., preprinted evidence-based forms, structured communication, procedures for nonpharmacological treatments), and decreased costs, such as avoidable hospitalizations, that are currently being scrutinized as a means of reduced payments to facilities.

Estimating the costs of a pain management program includes the expected start-up costs of implementing a program (e.g., training, equipment, consultants) along with the projected direct (e.g., new nursing staff, additional staff time, medications, supplies) and indirect (e.g., management participation, increased demand for services, reinforcing standards) costs of the program. Interventions that show cost savings should obviously be implemented; however, even if there is not a significant cost reduction, there may be other reasons for implementing the program. One weakness of a cost-benefit analysis is that it does not take into consideration that some programs improve quality in a way that cannot be captured in financial measures but have a substantial effect on the improvement of quality of life and therefore may be worth implementing, even at a higher cost. This may be the case with pain management, so managers should consider that a cost-effectiveness analysis (CEA) may provide better support for the business case.

**SIDEBAR**

**OPERATIONAL STRUCTURES AND PROCESSES IN PAIN MANAGEMENT**

- Baseline evaluations of staff knowledge, current pain management interventions, and patient outcomes regarding pain (i.e., incidence, prevalence, types, severity, resident and family satisfaction), along with determination of staff competencies
- Targeted educational offerings for both licensed and unlicensed staff
- Educational interventions for residents and their families related to pain
- Additional staff time for more comprehensive pain assessment and documentation
- Modifications to documentation forms and revision of practices to meet current standards of care for comprehensive pain management
- Nonpharmacological intervention resources (e.g., heat and cold applications, massage)
- Information resources (e.g., pain texts, journals, guidelines, standards, Internet access)
- Acquisition of additional or more effective analgesic and adjuvant medications when needed
- Standardized, evidence-based practices that emphasize comprehensive assessment and management
- Addition or designation of key personnel to lead the change (e.g., advanced practice nurse, pain management consultant) and key staff to facilitate the change on each unit
- Designated personnel and time to monitor and audit process improvements
CEA is a form of economic analysis that compares relative costs and outcomes of different courses of action (Centers for Disease Control and Prevention, 2006). A key difference from cost-benefit analysis is that the impact of cost effectiveness does not have to be measured in monetary costs and considers reduced morbidity and delayed mortality in the equation and thus will typically estimate the quality-adjusted life years instead of estimated dollars.

A number of additional potential benefits may be difficult to quantify but are also important to quality of care. Improved satisfaction in residents and families can be an excellent marketing tool and may also have more direct financial implications if satisfied residents stay in the facility and recommend the facility to others. Improved satisfaction and morale of staff are associated with improved retention and reduced staff turnover, which may directly reduce costs (Dupree & Lin, 2008). Use of a structured pain assessment tool and process to help recognize pain in individuals with dementia has been shown to decrease staff stress and increase morale in nursing home nurses, which may contribute to staff retention and decreased costs (Hadjistavropoulos et al., 2007).

Another significant issue is that pain management, particularly pain assessment, is a nurse-sensitive process. Unfortunately, nurses are almost always viewed as a cost center with addition, some researchers suggest that changes in pay for performance and in prospective payment systems—where several nurse-sensitive outcomes (e.g., catheter-associated infections, pressure ulcers, glycemic control, falls) are identified—indicate there may be incentives to perform a greater analysis of nursing costs in relation to nurse-sensitive outcomes (Horn, 2008). One issue that may be even more problematic in nursing homes compared with hospitals is the overall low numbers of RNs needed to perform a comprehensive pain assessment. The ratio of RNs to residents should be considered as part of this analysis.

Considerations for Return on Investment

In a time of limited resources, investments in quality improvement require justification, particularly in a nursing home setting. Fiscally responsible organizations invest in quality improvement only if there is a reasonable return on that investment (Greene et al., 2008). These investments can be viewed from three different perspectives: (a) revenue enhancing, (b) cost savings, and (c) cost avoidance. Toward this end, nursing home directors and administrators should consider the impact of enhanced pain management on potential revenue enhancements, cost savings, and cost avoidance, as well as patient and staff outcomes and the less tangible quality-of-care measures.

Potential Revenue Enhancements. Organizations that can document and market successful pain management programs may increase their admissions and market share, particularly of residents with the option of choosing their nursing homes on the basis of quality indicators, which are now publically available online at http://www.medicare.gov/NHCompare. These residents often have greater resources or bring higher reimbursement rates that will increase the nursing home’s revenue. For example, a home with a reputation for effective pain management with better quality measures on pain could potentially draw higher-paying short-term postoperative and post-hospitalization clients, who are increasingly a higher percentage of the overall nursing home population (Grabowski, O’Malley, & Barhydt, 2007). Patient outcomes demonstrating effective pain management could be used as a tool to market the facility to local physicians and hospital discharge planners. Likewise, other community-based health organizations (e.g., hospitals, clinics) may target local nursing homes that have a comprehensive pain program for residents who need this specific care (e.g., postoperative care, diabetic neuropathy, trauma diagnoses). With the growing movement toward pay-for-performance mechanisms, out-
come data demonstrating a highly effective pain management program could also position a facility for additional revenue from quality-oriented bonuses.

Cost Savings. Cost savings are associated with increasing efficiencies and effectiveness. One of the best ways to accomplish increased efficiency is to standardize care processes, which is often best done by following clinical practice guidelines (Boyd et al., 2005). The American Geriatrics Society Panel on Pharmacological Management of Persistent Pain in Older Persons (2009) and the American Medical Directors Association (2009) have recently published clinical practice guidelines on pain management for older adults. These guidelines provide an excellent start for nursing homes to establish a cost-effective program. Unfortunately, nursing home staff do not always adhere to clinical practice guidelines or evidence-based best practices (Jablonski & Ersek, 2009). The use of information technology has also been found to provide cost savings; therefore, nursing homes should consider that electronic medical records, telemedicine, and point-of-care charting may contribute greatly to cost savings (Luck et al., 2007). Use of online resources such as those available at http://www.GeriatricPain.org or http://www.nhqualitycampaign.org (the site for the Advancing Excellence in America’s Nursing Homes campaign) can also be useful in improving quality while potentially reducing staff education costs. Both groups provide best practice resources specifically for nursing homes, and http://www.GeriatricPain.org has downloadable forms and PowerPoint® slides that can be customized to individual nursing home needs. All of these resources can help nursing homes standardize their programs, reduce inefficiencies within the program, and decrease costs while improving quality.

Cost Avoidance. Cost avoidance is the process of averting costs brought on by poor care processes that can affect nursing homes both directly and indirectly. Poor pain care may result in unnecessary rehospitalizations (Boutwell, Jencks, Nielsen, & Rutherman, 2009; Grabowski et al., 2007), prolonged rehabilitation, increased staffing needs and caregiver burden, fines, and increased risk of lawsuits (Frank, Kleinman, Ciesla, Rupnow, & Brodaty, 2004; Herrmann et al., 2006).

The most dramatic examples of cost avoidance are lawsuits associated with untreated or poorly managed pain. Shapiro (1994) described five legal liability concerns: (a) health care providers’ liability for inappropriate pain management, (b) health care providers’ liability to parties for injury caused by treatment for patients’ pain, (c) distinguishing between euthanasia (physician-assisted suicide) and pain management, (d) payers’ liability to patients due to cost-containment decisions, and (e) manufacturers’ and providers’ liability for any risks or side effects of pain medication. Providers and clinicians are at risk for lawsuits when they do not meet the standard of care, that which is usual and customarily provided by qualified caregivers (Shapiro, 1994). Case law has demonstrated that most claims against nursing home staff are based on a standard of care that is lower than that held by a reasonable physician. The American Society for Pain Management Nursing (2009) stated that the standard of care...
homes are associated with negligence or what staff failed to do, such as failure to effectively manage pain through use of evidence-based practices.

Efforts at tort reform have placed caps on liability claims over the past several years. Despite that, there are cases where the lack of quality pain management was considered elder abuse (Rich, 2004). There have also been cases of alleged elder abuse due to inadequate pain management from which nursing homes have received citations.

Other care processes that are attributable to cost avoidance are associated with delayed recovery due to excessive pain that increases the length of stay (Fox, Sidani, & Brooks, 2009), ineffective pain management requiring greater nursing hours secondary to more patient complaints, and additional pain-related symptom management such as.
as nausea and lack of sleep, as well as depression that is often associated with chronic pain (Won et al., 1999). Transfers to the emergency department and actual inpatient hospitalizations are also potentially avoidable costs (Grabowski et al., 2007; Ouslander et al., 2010). Patients who cannot get their pain needs met in the nursing home are often transferred to the emergency department and occasionally admitted to the hospital at great expense to the system (Luck et al., 2007). Each of these problems can increase the cost of care, and failure to address these issues increases the risk of quality-of-care complaints and therefore the risk of lawsuits and state or federal fines.

Laying a Foundation for the Business Case

Initial work in making the business case includes examining the operational structures and processes that exist in the nursing home. The Sidebar outlines some of the structures and processes that should be considered when making the business case. Nurse leaders should first review each of these steps to determine their internal capabilities to evaluate their existing program. Second steps include meeting their administrator to identify other internal resources to assist with the evaluation of nonclinical areas. Schnelle (2007) emphasized the importance of ensuring that the following nursing care processes are also consistent with resident preferences: frequency and consistency of care, length of care, quality of staff interaction during care, and how often care is provided. Knowledge of the staff; appropriate policies, procedures, and forms; availability of nonpharmacological interventions; information resources; and availability of nursing leaders are key components that should be assessed in the evaluation (Keeney et al., 2008; Leone, Standoli, & Hirth, 2009). In addition, leaders should examine the systems and processes that enhance workforce efficiencies (Schoenwald, Hoagwood, Atkins, Evans, & Ringeisen, 2010). Organizations need to ensure the comprehensive pain management program is consistent with all regulatory guidelines (i.e., F-Tag 309), evidence-based care, clinical practice guidelines, and best practices.

Nursing homes may lack sophisticated financial tracking systems due to the costs of such programs, making it more difficult to analyze the costs associated with a comprehensive pain management program. They may also lack the RN staff needed to perform comprehensive assessments, develop quality improvement systems, and track and trend data. Therefore, nursing homes that are committed to transitioning toward a pain-free environment will require some intentional investments of time and resources to implement an effective pain management program; these additional costs should be included in estimates.

Nursing home administrators and nurse leaders who are committed to enhancing pain practices and outcomes may initiate one, all, or any combination of the cost-effectiveness strategies but they should ensure they are considering issues related to quality as part of the equation. Targeted pain management process improvement initiatives can be implemented by existing nursing home staff, if there is sufficient administrative support to allow staff to redirect adequate time and effort toward meeting pain management goals. However, given the limited staffing resources in most nursing homes, the addition of an expert consultant, such as an advanced practice nurse with geriatric and/or pain management expertise, would expedite the process. The Table provides a hypothetical example of major costs that might be incurred for first-year implementation of a pain management program in a 100-bed nursing home.

APPROACH TO IMPROVING PAIN MANAGEMENT

Nurse leaders must start the process by conducting an assessment of current pain management practices, identifying areas needed for improvement, and then drafting a plan to improve, similar to a SWOT (strengths, weaknesses, opportunities, threats) outline. This plan is the basis for evaluating costs. In the past few years, several resources have become available that aim to facilitate developing a comprehensive and evidence-based pain management program. Using clinical practice guidelines and other resources, as referenced earlier, not only provides evidence-based care guidelines but indirectly promotes efficient processes that reflect cost-effective care. One of these resources that has recently become available, GeriatricPain.org (http://www.geriatricpain.org), is a website focused on pain management specifically for nursing home staff. It is the result of a project primarily funded by The Mayday Fund, housed at Sigma Theta Tau International’s Center for Nursing Excellence in Long-Term Care(TM). The site provides best practice web-based pain resources, including educational, assessment and management, and quality improvement tools that are evidence based and facilitate quality pain assessment and management in the nursing home setting.

Also available is an important pain management quality initiative, the Advancing Excellence in America’s Nursing Homes Campaign, which is an all-volunteer group composed of more than 30 industry and professional organizations dedicated to improving the quality of care in nursing homes (Advancing Excellence Campaign Steering Committee, n.d.). Improved pain management has been one of the major goals of the campaign since its inception. The Advancing Excellence campaign pain management goal is for nursing home residents to experience minimal, if any, pain. To help facilities reach this
The purpose of this article is to address the conceptual domains and processes that are important to improving quality of care and reducing costs in a comprehensive pain management program. Many barriers to effective pain management exist, including lack of knowledge and clinical expertise of staff, insufficient education and awareness of older adult patients and families, and ineffective use of existing processes and tools for pain management. Evidence-based tools and resources exist through free online resources such as GeriatricPain.org and the Advancing Excellence in America’s Nursing Homes Campaign. A strong financial and operational commitment from the nursing home leadership is critical to the success of developing a comprehensive pain management program to support quality pain assessment and management in nursing homes.

KEYPOINTS

1 The purpose of this article is to address the conceptual domains and processes that are important to improving quality of care and reducing costs in a comprehensive pain management program.

2 Many barriers to effective pain management exist, including lack of knowledge and clinical expertise of staff, insufficient education and awareness of older adult patients and families, and ineffective use of existing processes and tools for pain management.

3 Evidence-based tools and resources exist through free online resources such as GeriatricPain.org and the Advancing Excellence in America’s Nursing Homes Campaign.

4 A strong financial and operational commitment from the nursing home leadership is critical to the success of developing a comprehensive pain management program to support quality pain assessment and management in nursing homes.

areas for Outcome Evaluation and Future Research
Numerous potential research opportunities related to the business case for a comprehensive pain management program would ultimately help nursing home administration establish high-quality, cost-effective programs (Swafford et al., 2009). Quantitative studies that examine the cost benefits and cost effectiveness of a comprehensive pain management program will help geriatric leaders understand which specific strategies are most cost effective and can be implemented effectively. Qualitative research that examines the effects of a pain program on residents, families, and staff will also be helpful in understanding the role of improved pain management on quality of life. Comparative effectiveness studies could examine the relative effectiveness of clinical factors such as pharmacological and nonpharmacological inter-
ventions, nurse staffing, information technology, and associated organizational factors that affect cost and quality. Nursing home leaders who are embarking on a pain management quality improvement project may consider examining the effectiveness of their program using research methods and then publishing their findings. These types of quality improvement or cost-effectiveness studies can contribute greatly to the knowledge within the field.

CONCLUSION

Pain management is a nurse-sensitive process, and the lack of a systematic and comprehensive pain management program is a common quality problem in nursing homes. There is a paucity of knowledge on the cost effectiveness or even the costs of implementing a comprehensive pain management program. Establishing a business case for high-quality programs is challenging and has not always yielded evidence indicating that programs make good business sense. It is time for health care leaders in nursing homes to take an active role in demonstrating the case for comprehensive pain management. Consumers are increasingly demanding high-quality care; therefore, pain management is a quality issue that cannot and should not be ignored.

This article has suggested several strategies for establishing an internal business case to support implementation of a comprehensive pain management program in a nursing home. Additionally, it is suggested that nurse leaders take primary responsibility in evaluating their existing care processes and bring in administration and finance personnel to assist with the cost analysis. This information could be shared with other nursing homes at conferences or through written manuscripts. Sharing the systems, processes, and outcomes of programs that carefully examine the cost along with quality of pain management will prove useful to the nursing home industry and for those residents who experience daily pain.

REFERENCES


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