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Achieve a Culture Change Renaissance with Holistic Continence Care



EXECUTIVE SUMMARY

As the Culture Change movement gains momentum in the Long Term Care industry, regulators expect to see care centers respond with infrastructure changes. However, care centers are facing constant operational challenges often making the initiation of a quality improvement or a culture change initiative very difficult. Providers are pressed to utilize their available cash flow simply to fund their operations. Adding to the funding gap, demographic trends indicate an approaching critical staffing shortage, as entering the long term care workforce is not an attractive option for millennials. These challenges must be proactively addressed to meet the growing demand for high quality care options by discriminating consumers, such as baby boomers.

Futurists see that traditional Skilled Nursing Facilities (SNFs) need to move to a more modern, community-like environment, appealing to new short-stay and long-term care stay Residents. This will help improve each home's marketability within the community. To be successful, it is critical that SNFs and other extended care centers partner with companies that assist facilities with cost-effective solutions that support culture change and superior care outcomes.

Superior Care Home Nursing and Rehabilitation Center in Paducah, KY was facing these challenges. They chose to collaborate with clinical experts in a clinical study to improve Continence Care. A key study component involved the implementation of Attends® high-quality, multi-void products with advanced state-of-the-art absorbent technologies available ONLY from Domtar Personal Care for containment of urine leakage. Other components of this study addressed processes, identified areas of improvement, recognized ways to improve efficiency, and the establishment of a holistic system for continence management that supported individualized Resident care.

This white paper outlines these improvements, focusing specifically on the positive Culture Change within the Superior Care community, as a result of the improved Resident care leading to a better quality of life. For more information on this study and the positive impact and results documented by Holistic Continence Care, ask your Domtar Personal Care Representative for copies of our other two white papers.

www.attends.com January 2016



INTRODUCTION

The Culture Change movement has its original roots in Nursing Home Reform laws, enacted in the late 1980's, and established to help drive positive change throughout the nursing home industry. As with many industry changes, progress has been slowly evolving through to current efforts to transform the traditional "institutional" long term care environment into a more home-like and community environment delivering Resident-centered care that is individualized to personal preferences and needs.

Incontinence has long been one of the top reasons individuals enter a long term care facility, as it is a complex condition that often becomes unmanageable at home or without additional care assistance. The incidence of urinary incontinence among Residents in long term care facilities can be as high as 85% in most nursing homes.

In addition, incontinence has been shown increase physical and emotional issues throughout a facility, translating into financial and operational challenges for providers. Incontinence is also associated with other conditions representing higher areas of clinical and financial risk for care providers and has been linked to higher rates of social isolation, depression, and psychological problems. Risk factors including skin breakdown, urinary tract infection, and falls are also associated with incontinence.

Long Term Care providers that have adopted Culture Change reported achieving a better overall community environment and positive outcomes in the following areas:

- · Reduction in associated risk areas such as falls, skin issues, poor sleep, and UTIs
- · Quality of life for Residents, including improved comfort and dignity
- · Staff satisfaction, with lower rates of absenteeism and turnover
- Increased marketability in the community and in meeting their census

Incontinence management has been identified by industry experts as an excellent focus area for continuous quality improvement initiatives, such as Culture Change efforts. The management team at Superior Care Nursing Home and Rehabilitation Center saw the opportunity for their incontinence management practices to be a part of such an endeavor, and sought out appropriate partners to work on this effort. This work evolved into the development of a clinical study with continence care as its focus, and lead to compelling documentation of multiple benefits for Residents, staff members and the community itself.



BACKGROUND

Superior Care Home Nursing and Rehabilitation Center is a free-standing SNF, located in Paducah, KY, operating independently, under private ownership for over 40 years. Management goal was to implement a community-wide culture change initiative that would yield multiple benefits for their facility. By improving care delivery practices and improving community atmosphere, satisfaction levels would increase for both Residents and staff.

A proactive approach was adopted by reviewing facility-wide operations to identify gaps and improvements that could be implemented. These efforts led them to source new partnerships and to participate in a clinical study, with the ultimate goal of improving continence management practices and the quality of life for their Residents.

The Clinical Study of Holistic Continence Care was conducted with the aim of identifying improvement areas and testing new products and protocols developed to support Culture Change within their expanded community. The study took a holistic view of care and utilized existing, industry-established data points, as well as site observations and interviews to develop a comprehensive picture of care practices and metrics.

Superior Care Home Nursing and Rehabilitation understood that in addition to the product cost, incontinence is an issue that has a global effect on total costs, as it impacts many operational areas. Poor incontinence management leads to higher supply and labor costs, staffing inefficiencies, and can negatively impact marketability and census.

Prior to the study, Superior Care Home Nursing and Rehabilitation's continence management consisted of traditional practices such as checking and changing Residents with incontinence every two (2) hours and providing toileting support as appropriate. In addition, incontinence containment practices included: complex, inefficient practices involving the use of a variety of absorbent products supplied by family members. This system's inefficiency risked placing Resident's in incorrect products, sizes and/or absorbencies. Staff kept manual counts of inventory, which required significant staff effort and further contributed to these inefficient practices.

Management saw potential to initiate positive changes to be more Resident-centered and create a more home-like environment, ultimately more attractive and supportive for current and incoming Residents. Management reviewed manufacturers and decided to convert to Attends® high-quality, multi-void products with advanced state-of-the-art absorbent technologies available ONLY from Domtar Personal Care to support their individualized care goals.

Objectives of the holistic approach to continence care included:

- · Promotion of individualized continence care to support the highest possible quality of life
- · Improved inter-disciplinary approach and care coordination between Nursing and Therapy
- · Use of Attends® high-quality, multi-void products supporting best practice incontinence care
- · Management of nighttime incontinence and promotion of uninterrupted sleep
- · Attempt to lower continence care associated costs and improve overall efficiencies

The Clinical Study Team firmly believed that implementing best practices in support of individualized continence care would result in improved continence care and a reduction in related costs. This would translate into clear, positive quality of life outcomes, staff satisfaction improvements and operational benefits, the topic of this specific white paper.

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SOLUTION and RESULTS

The Clinical Study of Holistic Continence Care was conducted over a 12-week period. Residents admitted during the period received the newly-implemented continence care protocols and practices. This group of Residents also switched from the original nighttime multi-product practices to a new program of targeted nighttime care using Attends® high-quality, multi-void products with advanced state-of-the-art absorbent technologies available ONLY from Domtar Personal Care. Data was collected by both nursing and therapy staff utilizing the new tools, MDS assessments and therapy evaluations.

Study design was initiated to develop and test protocols and products for their effectiveness in supporting:

- · Resident-centered care
- · Greater quality of life
- · Improved efficiencies for the facility

Recommended changes implemented:

- · Developed and rolled out new continence care assessment practices and protocols.
- Switched the entire facility to Attends* high-quality, multi-void absorbent products from Domtar Personal Care.
- Simplified the incontinence products formulary to a specific **Attends* high-quality, multi-void absorbent products** to ensure efficient and easy product ordering, management, and distribution.
- · Achieved overall improved operational efficiency while reducing waste.
- Established an inter-disciplinary team and implemented a quality assurance approach between nursing and physical therapy to improve care coordination
- Trained staff on product selection, perineal care, nighttime management of incontinence with a quality assurance approach to improve the quality of sleep and overall Resident Sleep Hygiene

Tools developed based on clinical standards and best practices:

- · Bladder and Bowel Assessment Form to determine presence and history of symptoms
- Sleep Quality Assessment form to determine the hours of uninterrupted sleep
- Absorbent product usage and care practice protocols
- Skin Care protocol to support perineal care, skin health and Resident dignity
- Staff training to support individualized continence care and nighttime care

Data collected by staff:

- Bladder and Bowel symptoms
- Absorbent Product Usage and Care Practices
- Sleep Quality hours of uninterrupted sleep
- Skin Health, Urinary Tract Infection (UTI) Rate, Fall Rate
- · Activity of Daily Living (ADL) Scores, Mood Severity Scores, Brief Interview of Mental Status (BIMS)
- Balance and Strength Evaluations
- Staff Feedback and Satisfaction
- Operational Cost Changes Related to Continence Care

For more information on this clinical study and the positive impact and results documented by Holistic Continence Care including Attends® high-quality, multi-void absorbent products from Domtar Personal Care and improved Sleep Hygiene, ask your Domtar Personal Care Representative for copies of our other two white papers.



CLINICAL OUTCOMES DATA

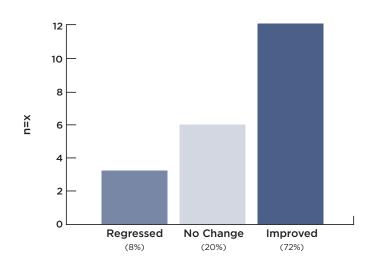
The outcomes of this Clinical Study of Holistic Continence Care are ASTOUNDING as improvement was seen in the primary endpoints relating to nighttime continence care: BIMS, Mood Severity and the Tinetti Scale, specifically Gait.

Activities of Daily Living (ADL) Scores

ADLs are reported through the MDS Assessment process (section G0110) and were tracked over the 12-week study period comparing the score at time of admission and at the study end-point.

Results indicated:

- 57.1% were improved and more independent
- Only 14.3% showed a deterioration (regressed), and 28.6% remained stable (no change)
- 71.4% maintained or improved in ADL function



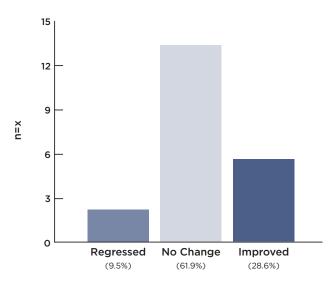
Brief Interview of Mental Status Scores (BIMS)

BIMS are reported through the MDS Assessment process (Section C) and were tracked over the 12-week study period on all Residents comparing the score at time of admission and at the study's end. BIMS identifies levels of cognitive function as it determines Resident's attention, orientation, and ability to register and recall information.

These results improved following changes to nighttime continence care that targeted improved Sleep Hygiene.

Results showed:

- 28.6% improvement in cognitive function
- 61.9% remained the same
- This translates to 90.5% stable or improved cognitive score



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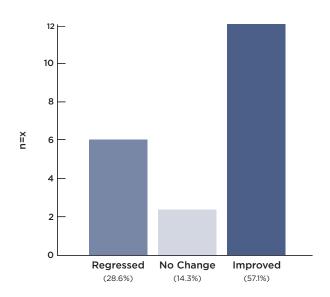
MOOD Severity Scores

Depression and sad mood are primary concerns for Residents with UI. Poor Sleep Hygiene can contribute to mood changes and depression. Mood Scores were measured through the MDS Assessment process (Section D) and were tracked over the 12-week study period on all Residents comparing the score at time of admission and at the study end-point PHQ-9 test.

Results showed:

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- Mood improved in **57.1%** of the study group
- Stable mood was seen in 14.3%



Tinetti Gait and Balance Instrument

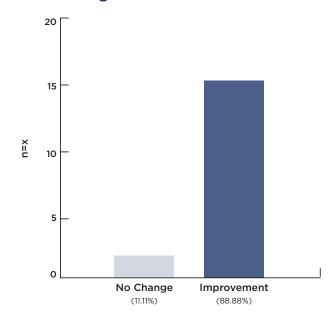
The Tinetti Gait and Balance Instrument is designed to determine an elder's risk for falls within the next year. The higher the score, the less risk for falls. Individual scores are combined to form three scales: a Gait Scale, a Balance Scale and an overall Gait and Balance score. The maximum score for gait is 12 points, while maximum for Balance is 16 points, with a total maximum for the overall Tinetti Instrument being 28 points.

The Clinical Study Group felt this was an excellent measure to determine fall risk in the study group. These data points were collected by the therapy department.

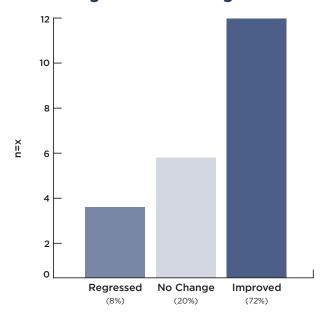
Dramatic improvement was seen in 16 of the 18 study Residents who were able to be tested. Improvements occurred once the sleep hygiene issues were addressed. Average scores increased from 8.26 to 20.05 points, showing **remarkable improvement** in strength and balance.

When analyzing just the Gait scores after Residents had more hours of sleep, **significant improvement** (72%) in gait was seen.

Change in Tinetti Scale Scores



Change in Gait Testing Scores





STAFF REPORTED OUTCOMES:

Staff were surveyed at the beginning of the study and at its completion. Staff reported clear clinical benefits and improvements in many areas throughout the community related to Resident's sleep, environment and the Attends® high-quality, multi-void products with advanced state-of-the-art absorbent technologies available ONLY from Domtar Personal Care and Attends® Professional Care skin care products.

Environment in relation to negative odors:

- 54% (n=36) noticed improved odor (less urine smell) in the Resident's room
- 55% (n=36) noticed smell in hallways had improved

Skin Health:

- 64.2% (n=43) felt the Attends® product was keeping the Resident's skin drier and was better for the skin
- 76% (n=51) had not noticed any increase in skin breakdown

Product Use, Characteristics and Preferences:

- 82% (n=55) found the new Attends® product easier to put on
- 87% (n=56) felt the product was better at "holding in" the urine
- 82% (n=55) preferred the new Attends® product over previous ones used
- 58% (n=39) noticed Resident were more comfortable at night since switching to Attends® products
- 55% (n=53) noticed less falls
- 49% (n=23) observed Residents' improved sleep; were more awake during day hours

In summary, staff felt that the Attends* high-quality, multi-void products with advanced state-of-the-art absorbent technologies available ONLY from Domtar Personal Care and Attends* Professional Care skin care products were a vast improvement over previous products used. They also reported that the Attends* Advanced Briefs were easy to size and apply and were effective for managing multiple voids without product leakage, which avoided waste and foul odors.

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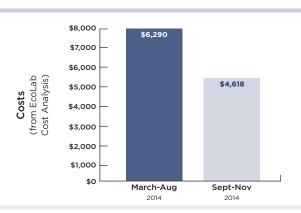
OPERATIONAL AND FINANCIAL OUTCOMES:

The new processes implemented led to greater overall efficiencies and total cost savings in the areas of labor and laundry costs. The reduction in leakage led to the elimination of an entire labor shift of laundry, which allowed those caregivers to be re-directed to other needed care duties and overall greater efficiency. The reductions of needed laundry also saved on the purchasing of reusable underpads from the beds, as these were no longer necessary. (see charts below)



OPERATIONAL LAUNDRY COSTS Labor hours were **reduced** on the Third Shift laundry and re-directed to other care duties, with **savings achieved** through the newly implemented operational efficiencies.

Laundry Costs decreased 33.7% as the cost of the required materials decreased.



CONCLUSION

Analysis of the data points from *The Clinical Study of Holistic Continence Care* concluded that Superior Care Home Nursing and Rehabilitation Center and its Residents realized multiple benefits that had immediate, far-reaching positive implications as a result of the continence care and Culture Change initiatives implemented during the study.

These compelling findings support the fact that smart providers are no longer approaching the issue of incontinence in their communities as a task management process — but rather as an opportunity to implement Culture Change initiatives that make a lasting and measurable impact for the individuals under their care. This new outlook has many providers reviewing their current practices to determine how they can implement similar Culture Change efforts to similarly generate measurable, quality outcomes that will help improve their community partnerships and overall image as a preferred referral source.



Get the Attends® Advantage™ and Be Positioned for SUCCESS!

Domtar Personal Care understands long term care economics and the constant pressures to perform with shrinking budgets. We partner with you to address top issues that tie into your financial, clinical and regulatory needs. Partner with us and our comprehensive menu of solutions, which support your staff in delivering effective, efficient care with improved outcomes. With Domtar Personal Care's clinical and business practices, we can customize our approach to suit each customer's situation and is continuously supported as we progress through our partnership.

This white paper outlines improvements and positive outcomes that can be achieved through implementation of a program as was undertaken in the Holistic Continence Care study. This study focused on the Culture Change improvements gained through implementation of new protocols for holistic continence care along with utilization of the **Attends*** **high-quality, multi-void products** in the course of the study.

For more information on this clinical study and the positive impact and results documented by Holistic Continence Care, ask your Domtar Personal Care Representative for copies of our additional two white papers.

For more information, please email: BetterOutcomes@Attends.com.

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