How LiveWell Reduces Costs and Increases Profits for Long Term Care Facilities A Report by The Malden Collective

LIVEWELL

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INVESTING IN QUALITY IMPROVEMENT MAKES FINANCIAL SENSE

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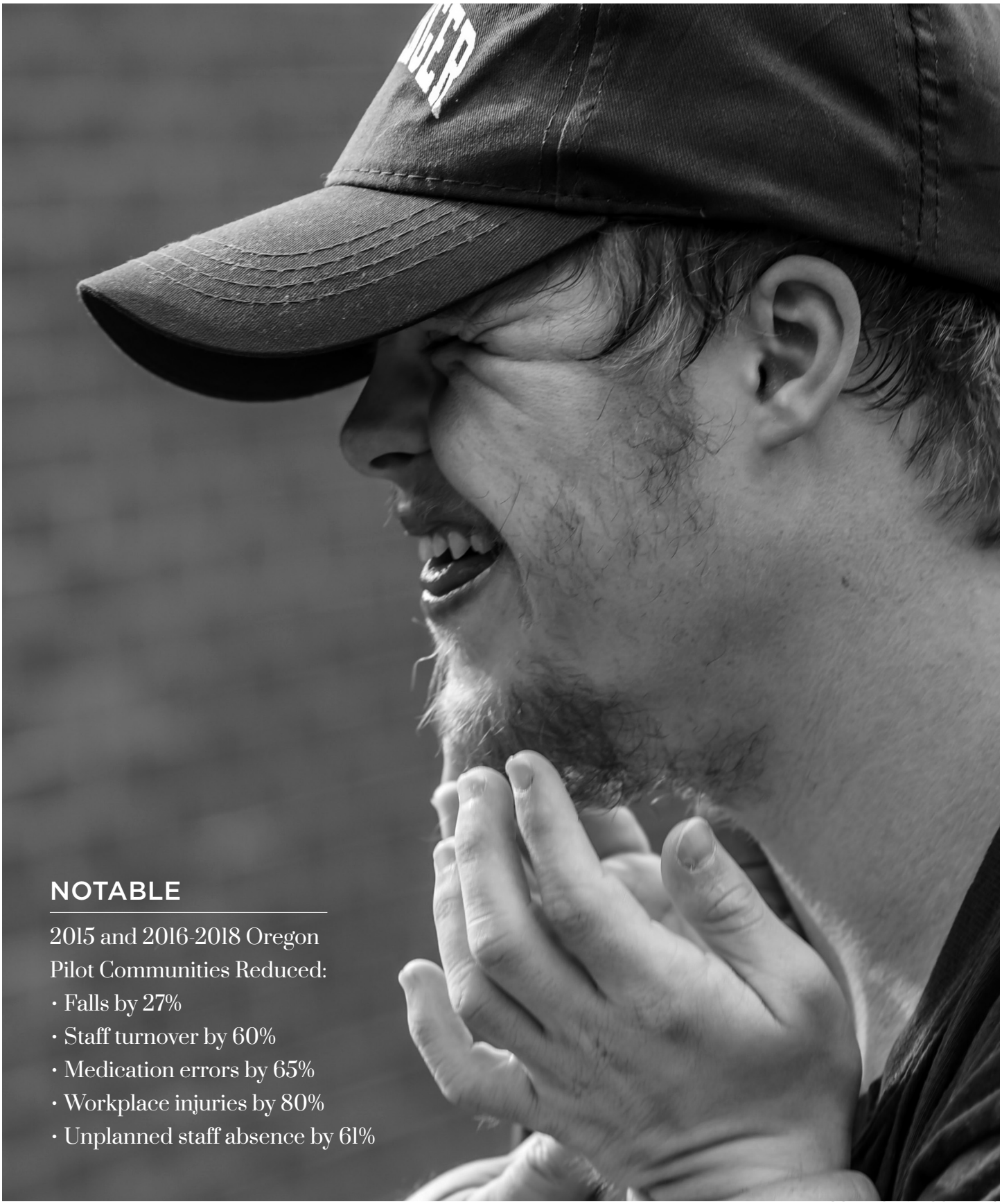
- LiveWell, Oregon's Quality Assurance and Performance Improvement (QAPI) program, reduces falls, medication errors, staff turnover, and staff absence
- Improving the quality of care in long term care facilities (LTCFs) increases profitability
- Improving the quality of care in LiveWell pilot facilities generated a minimum of $100,000 per year in cost avoidance

Most owners and management companies are unaware of the enormous costs that they incur on a regular basis due to staff turnover, absenteeism, resident falls, medication errors, and workplace injuries. These events occur regularly, and they are usually considered the cost of doing business. Yet they are not a fixed cost. Owners and management companies can do something about them.

The LiveWell Method ™ is a validated QAPI method endorsed by the State of Oregon. It empowers staff and creates strong organizational practices for teamwork and communication. Long term care facilities that implement the LiveWell Method ™ or a comparable QAPI methodology can generate significant savings year-over-year.

If a portion of these savings are then re-invested in financial and other incentives for workers, staff turnover (a central cost-driver in long term care) could decrease significantly. Investing in QAPI also sends a clear message to staff, residents, family members and other stakeholders that owners and management companies care about their dignity, safety and wellbeing.[1]

1. In a 2015 report prepared by RTI International for Oregon DHS, the mean hourly wage of direct care workers was $11.10 ($12.34 in today's dollars) and the most common fringe benefits provided by communities included paid personal time off (60.2%), paid holidays (45.6%), employee-only health insurance (41.9%), health insurance with family coverage (34.0%), retirement plan (33.8%), and life insurance (30.9%). Offering such benefits—and more of them—along with living wages will retain staff and lower these and other unseen costs that drain profits.



NOTABLE

2015 and 2016-2018 Oregon Pilot Communities Reduced:

- Falls by 27%
- Staff turnover by 60%
- Medication errors by 65%
- Workplace injuries by 80%
- Unplanned staff absence by 61%

Through its Department of Human Services/Aging and People with Disabilities, the State of Oregon invested in the development, piloting, and rollout of a quality assurance and performance improvement (QAPI) program called the LiveWell Method™. Starting in 2015, then through follow up funding in 2017-2018 and 2019-2021 its investment sought to find out whether: 1) communities could track and measure key indicators of quality, and 2) whether communities implementing a comprehensive quality improvement method would have fewer falls, medication errors, staff turnover, and staff absences.

The LiveWell Method™ approach is based on Lean Management principles. Results from the pilots were impressive. They demonstrated that with a strong quality assurance and performance improvement (QAPI) program in place, communities can reduce falls by more than 25% and can reduce medication errors, staff turnover, and unplanned staff absence by almost two-thirds, saving individual communities at least $111,000-$143,000 each year on administrative costs alone.

THE LIVEWELL PILOT STORY

INDICATOR	RESULT	YEAR REPORTED	#MONTHS REPORTED	#COMMUNITIES REPORTING
Falls	27% Reduction	2017-18	6 Months	13 Communities
Medication Errors	65% Reduction	2015	6 Months	10 Communities
Staff Turnover	60% Reduction	2016-18 and 2017-18	14 Months and 8 Months	13 Communities and 8 Communities
Unplanned Staff Absences	61% Reduction	2015	6 Months	10 Communities
Workplace Injuries	80% Reduction	2017-18	10 Months	13 Communities

Table 1: Percent Improvement in Five Key Quality Indicators During Two LiveWell Pilots

Equally impressive was the improvement of team communication, morale, and engagement of staff in all communities participating. These harder to measure qualitative results provided the basis for the improvements on clinical measures. Because when staff feel empowered to contribute meaningfully to the quality of care and when they work together as a team, they start improving immediately. The qualitative results were captured in interviews and written feedback.

A DEEPER DIVE INTO THREE OREGON ALF/RCFS

In the following table and figure on page 6 are examples from three different communities in different geographic areas of Oregon that tracked quality measures in 2017-2018. They shed light on what happens in real life. The indicators that were self-reported show that all three communities experienced high levels of falls, staff absence and turnover, and work-related injuries.

INCIDENTS	COMMUNITY 1	COMMUNITY 2	COMMUNITY 3
# Falls, no harm	272	153	160
# Falls requiring 911 call	19	26	8
# Falls resulting in hospital stay	3	4	7
# Unplanned staff absences	49	141	212
# Staff separations	41	31	45
# Work-related injuries, no claim filed	0	0	13
# Work-related injuries, claim filed	2	10	8

Table 2: Numbers of Falls, Unplanned Staff Absence, Staff Separations, and Work-Related Injuries Self-Reported by Three Individual LTCFS Over One Year, April 2017-March 2018

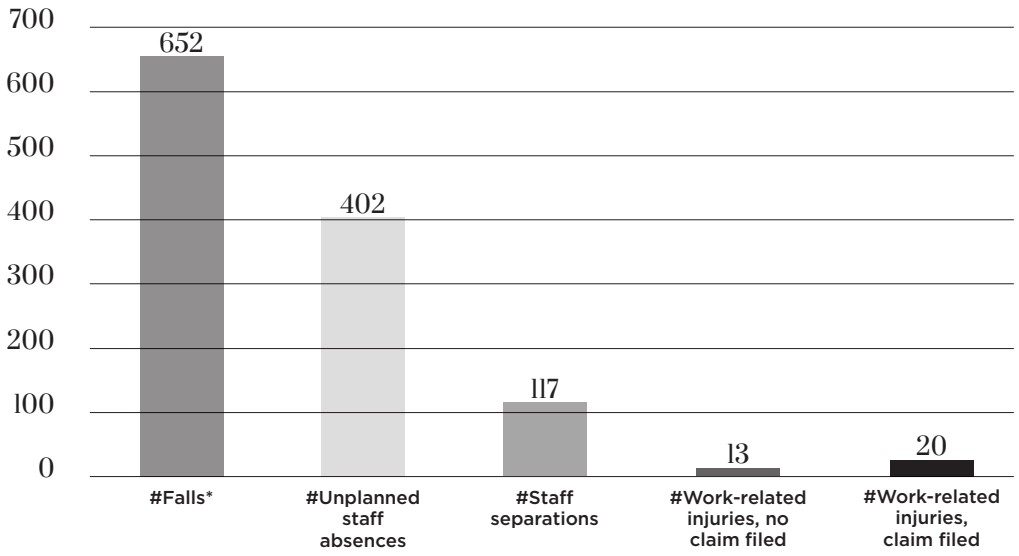


FIG. 1: INCIDENTS REPORTED IN THREE COMMUNITIES, APRIL 2017-MARCH 2018
*Of the total number of falls, 2% required a hospital stay and 8% required a 911 call

NOTES ON PILOT DATA IN TABLE 2 AND FIGURE 1: *Evaluators at Portland State University selected three communities for an in-depth profile. They were categorized generally as high, medium, and lower performing communities. More about their results can be found in the LiveWell™ Method Pilot Final Report June 2018. Community 1 is based in Southern Oregon. It had 60 residents, is part of a national chain and has a Memory Care endorsement. Community 2 is based in Woodburn, with about 50 residents, part of a local chain, and also has a Memory Care endorsement. Community 3 is located in Sherwood. It had about 69 residents and is part of a local chain.*

HOW QUALITY IMPROVEMENTS CAN TRANSLATE INTO COST SAVINGS

What did these incidents cost, and if they had been avoided at the quality improvement rates found in the two LiveWell pilots, what resources would have been freed up? Using process maps and salary data collected via interview with several administrators in 2015, the LiveWell team quantified the administrative costs to show owners and corporate leaders a portion of the savings they could achieve by implementing an effective QAPI program such as the LiveWell Method™.

Now imagine if each of these communities could reduce the administrative cost alone of falls, unplanned staff absences and staff separations in one year. Using the percent reductions from the pilot reports described above, consider these savings as shown in table 4.

Community 1 would have at least an additional $139,000 to redirect to staff or other efforts. Community 2 would have at least $111,000 and Community 3 would have at least $156,000.

INCIDENTS	ADMIN COST PER INCIDENT*	COMMUNITY 1	COMMUNITY 2	COMMUNITY 3
Falls, no harm**	$156	$42,432	$23,868	$24,960
Falls requiring 911 call	$313	$5,947	$8,138	$2,504
Falls resulting in hospital stay	$713	$2,139	$2,852	$4,991
Unplanned staff absences	$102	$4,998	$14,382	$21,624
Staff separations	$5000	$205,000	$155,000	$225,000
Total Cost		$260,516	$202,240	$275,455

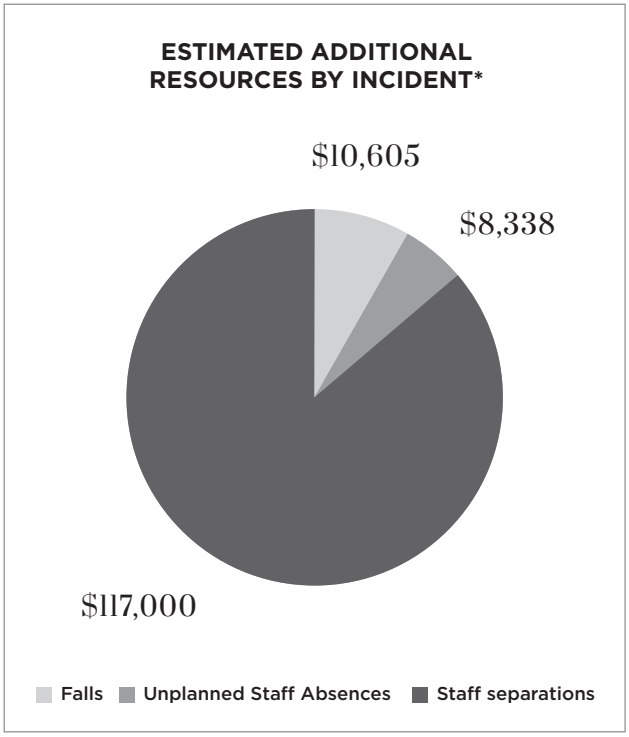
Table 3: Estimated Administrative Costs of Falls, Unplanned Staff Absence, And Staff Separations in Three Oregon LTCFs Over One Year, April 2017-March 2018 Using Numbers of Actual Incidents from Table 2

** Administrative costs per incident represent monthly averages for 10 facilities over a six-month period in 2015. These averages were then extrapolated for a year. Staff turnover costs assume it takes 6 weeks from departure of a direct care staff to a new person fully onboarded. Costs in the pilot facilities ranged from $1500 to $7000 depending on whether regular or agency staff were used to backfill the position that was vacated. Most communities used existing staff with significant overtime and some agency staff. The figure of $5000 most closely matches the costs these communities incurred.*

*** A no-harm fall is a fall that did not result in hospitalization or a doctor's visit but nevertheless had to be assessed to determine whether more help was needed. For that reason, administrative costs were incurred.*

INCIDENTS	EXPECTED REDUCTION	SAVINGS COMMUNITY 1	SAVINGS COMMUNITY 2	SAVINGS COMMUNITY 3
Falls	27%	$13,640	$9,412	$8,763
Unplanned staff absences	61%	$3,049	$8,773	$13,191
Staff separations	60%	$123,000	$93,000	$135,000
Total Cost		$139,689	$111,185	$156,953

Table 4: Estimated Additional Resources the Community Would Have Annually If Falls, Unplanned Staff Absence, And Staff Separations Were Avoided, Using Pilot Results from Table 1 and Cost Data from Table 3



*These are expected savings per incident per community per year.

The administrative costs presented here are but a small portion of the real cost of staffing and resident quality problems. A fall can injure a resident or staff person and diminish their health and wellbeing. A fall can result in medical bills and higher insurance costs, affecting families of residents and staff. A fall that results in hospitalization means that the facility may not receive compensation for the loss of the bed days. The Gerontologist, Vol 48 issue 2, April 2008 found the cost of falls among those living in nursing facilities (not assisted living/residential care/skilled nursing facilities) was roughly $1500 per fall and $6200 per faller per year. In today's dollars, these would be $1847 per fall and $7635 per faller per year (https://data.bls.gov/cgi-bin/cpicalc.pl) These costs are significantly higher than the administrative costs we found. [Note: The Institute on Aging at PSU did an updated literature review to look for recent publications on the cost of resident falls in assisted living/residential care communities and could not locate any reliable studies.]

Similarly, a staff person who becomes disabled because of work-related injuries may end up without a job in the future, hurting them and their family while also contributing to higher societal costs. Workplace injuries affect providers in the form of insurance claims, litigation, and higher premiums. And conversely, if these events do not happen, the facility does not have to pay for litigation, higher premiums, disability claims, penalties, and loss of reputation.

To capture more unseen cost factors, the LiveWell team created a social return on investment map in 2015. (CareHomes Wellbeing). Of course, any fall, medication error, or other safety problem harms the wellbeing and thus the dignity of the people involved – two costs that aren't captured with proxies and are likely incalculable.

Going forward, LTCFs will face more natural disasters such as wildfires and the COVID-19 pandemic that afflicted so many communities in 2020. Owners will need to invest in infrastructure and technology to bring the sector into the digital age. Utilizing the State of Oregon's LiveWell Method is a first step toward achieving significant cost savings that translate into additional resources. Doing so builds dignity and helps the bottom line.

NOTES BASED ON PILOT PROJECTS:

- A key measure that is not reported here is that 98% of staff were trained in and using LiveWell in just over a year (2017-2018), demonstrating that LiveWell is easy to use and easy to spread.
- Staff turnover decreased by 57% for thirteen communities reporting between Dec. 2016-Jan. 2018 and by 63% for eight communities reporting Aug. 2017-Mar. 2018; average of 60%. That said, the average staff turnover rate was 6-7% per month for all communities. At that improved rate, 84% of staff leave in one year, a rate that is still too high to provide stability for resident wellbeing not to mention operational excellence. Our findings resonate with a 2015 report prepared for Oregon DHS by RTI International which found that turnover among direct care workers was 64% per year.
- Workplace injuries leading to filed complaints decreased 80% over ten months among the communities reporting. However, the numbers were small, declining from 10 to 2 injuries. There were also a number of workplace injuries that did not lead to claims filed.
- Unplanned staff absence decreased from 212 unplanned staff absences in Jan. 2015 to 129 absences in Jun. 2015 for the ten communities reporting.
- Medication errors decreased from 72 errors in January 2015 to 25 errors in June 2015 from ten communities reporting.

Note: The source report on CareHomes Wellbeing contains two calculation errors: medication errors declined by 65%, not 35% and unplanned staff absence by 61% and not 40%.

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