

## **Improving the Quality of Care - Increase Nursing Staffing Minimum Hours in Kansas Nursing Facilities**

Prepared by AARP-Kansas & Kansas Advocates for Better Care

January 2011

### **Correlation between Nursing Staffing Hours and Quality Outcomes**

There is an indisputable correlation between the number of nurses (*registered and licensed practical*) who provide direct care to residents on a daily basis (high “nurse staffing” levels) and high quality of care and quality of life for residents. Numerous reports and studies confirm that nursing facilities provide better care to their residents, and residents have better outcomes, when facilities are adequately staffed. No report finds better quality with fewer staff.<sup>1</sup>

A study in California state found residents in the highest-staffed facilities "spent more time out of bed during the day; were engaged more frequently; received better feeding and toileting assistance; were repositioned more frequently; and showed more physical movement patterns during the day that could reflect exercise."<sup>2</sup>

Qualitative studies have also established a relationship between staffing characteristics and resident outcomes. For example, inadequate staffing levels, lack of training, and a dearth of supervision of [certified nurse assistants] CNAs have been associated with poor incontinence care, inadequate repositioning (*to prevent bedsores/pressure ulcers*), and insufficient mouth (*oral hygiene*) care. Inadequate staffing and poor supervision have also been related to insufficient nutritional intake and increased prevalence of malnutrition and dehydration among nursing facility residents...<sup>3</sup> The health care costs related to poor continence care, bed sores, and insufficient mouth care are loss of bladder and bowel control are higher rates of infection due to catheter use and gum disease or oral infection, loss of teeth, increased costs of medications, more assistance required from nursing staff for catheter care, higher rates of hospitalization and others. The cost in human terms is increased pain and suffering, loss of dignity, loss of ability to eat and enjoy solid foods, greater dependence, and increased risk for falling and confusion due to infection are some of the human costs.

RN/DON (register nurse/director of nursing) hours per resident day were more strongly associated with lower rates of hospitalization in the long-stay population (*of nursing facilities*) than any other single staffing measure in risk-adjusted analysis. LPN hours per resident day...were not favorably associated with hospitalization rates, and total licensed staff (RN & LPN) was less strongly associated with quality than RN/DON alone.

CNA (certified nursing assistants) hours per resident day were strongly associated with better scores for three quality measures in residents including high-risk residents with pressure sores, indwelling catheters and weight loss. CNA levels were associated with lower hospitalization rates for residents.<sup>4</sup>

Lower nursing staffing levels are associated with high urinary catheter use, low rates of skin care, low resident participation in activities. Higher staffing rates are related to improved resident functioning. Higher RN staffing levels and adjusted for case-mix were found to reduce the likelihood of death. Higher LPN staffing levels significantly improved resident functional outcomes.<sup>5</sup>

Inadequate staffing and inadequately trained staff are major contributors to poor feeding of residents, inadequate nutritional intake, undiagnosed dysphagia (*difficulty or pain with swallowing*), poor oral health, resident deterioration, hospitalization, malnutrition, dehydration and starvation.<sup>6</sup>

### Care hours per day in Kansas and surrounding states

1) Kansas (revised 2/1997, did not increase requirement for care hours per day)

2.0 hprd weekly average with 1.85 hprd minimum 24-hr. avg.

1:30 minimum staff to resident ratio;

RN .08, LN .48, DC 2.0 Total 2.06 hprd

2) Iowa (revised 7/1991)

2.0 hprd on 7 day week

RN .08 LN .32 DC 2.0 total 2.32

\*3) Arkansas (revised 10/2003)

Direct Care Staff 1:6 ratio days (total licensed or certified); 1:9 evenings; 1:14 nights

RN .06, LN .56, DC 2.8, Total 3.36

4) Colorado (revised 7/1988)

Direct Care Staff for 1-60 residents, 2.0 hprd; 2.0 excluding the DON, staff development coordinator & other supervisor personnel.

RN .24, LN .48, DC 2.0, Total 2.48.

\*5) Illinois (revised 7/2010 and gradually increased through 1/2014).

2.5 hprd with Day @ 40%, Eve @ 25%, and Night @ 15%,

RN .18, LN .58, DC 2.5 Total 3.08.

Gradual Increase – 2.5 hprd Eff. 7-1-10, 2.7 on 1-1-11, 3.0 hprd on 1-1-12, 3.4 hprd on 1-1-13, 3.8 on 1-1-14.

6) Missouri (revised 1/2004)

No minimum for direct care staff, RN .08; LN .24.

7) Nebraska (revised 2/2007)

No minimum for direct care staff, RN .08; LN .32.

\*8) Oklahoma (revised 11/2005)

Direct Care Staff 1:6 7 am to 3 pm; 1:8 3 pm to 11 pm; 1:15 11 pm to 7 am. Must maintain 2.86 hours 7 days per week and 1:16 ration with 2 staff on duty & awake at all times. Progressive increases in staffing based on reimbursements from 2.86 to 3.2 to 3.8 to 4.1 hrs/day per occupied bed.

RN .01, LN .32, DC 2.86, Total 3.18.

KEY – Registered Nurse (RN), Licensed Nurse (LN), Direct Care (DC) usually includes Certified Nursing Assistants (CNAs). Hours per resident day (hprd). Time allocated 2.0 hprd = 120 minutes. \* **recently raised**

from Nursing Home Staffing Standards in State Statutes and Regulations by Charlene Harrington, PhD, RN. University of California, San Francisco December 2010.

### **Estimate of Cost of Proposed Nursing Time per Resident Day from national report**

See page 13 of The Gerontologist Volume 40, No. 1 year 2000. For chart comparisons report. Notes the cost is related to the difference between actual time and proposed times with a range of cost per hour increase for RNs \$0 to \$6.65, LPNs \$0-\$0.12, CNAs \$2.64-\$4.16, Total nursing \$2.64 to \$10.93 cost per resident day.

A US Government Accounting Office report prepared in 2001 estimates an 8% increase in cost to implement staffing increases in the range recommended in this legislation.<sup>7</sup>

In Kansas, costs would vary by facility based on current levels of staffing which range from 5.62 hprd to 1.45 hprd in Kansas nursing homes on the most recent semi-annual report January – June 2010.

According to an AARP 2009 report, Kansas averages 3.6 hours per resident day, ranking 34th in the US.

According to KDOA's most recent available (through June 2010) semi annual nursing facility report the State Staffing/Resident Ratio state average is 3.59 hours per resident day.

### **Savings from Increased Nursing Staffing**

States can see savings in reimbursement based upon nursing facilities cost reports from those facilities below the 4.44 hprd recommended staffing level.

Facilities may see reduced costs of:

- hospitalization,
- lower worker compensation costs related to less worker injury (currently high in the nursing facility industry),
- reduced cost of supplies and drugs for incontinence and nutrition, and
- reduced turnover and the expenses related to recruiting and training new staff (estimated at four times an employee's monthly salary),<sup>8</sup>

### **Medicaid Reimbursement Rates**

In 1998 Kansas Medicaid Reimbursement Rate in US – Ranked 46<sup>th</sup>  
Missouri 32<sup>nd</sup>, Nebraska 39<sup>th</sup>, Iowa 47<sup>th</sup>, Oklahoma 50, Arkansas 51

In 2008 Kansas Medicaid Reimbursement ranked 13<sup>th</sup> (\$132.41 per resident day). Illinois was 10<sup>th</sup>. Iowa 12<sup>th</sup>. Missouri 19<sup>th</sup>. Nebraska 21<sup>st</sup>. Oklahoma 32<sup>nd</sup>.

For 2010 Kansas is projected to rank 13<sup>th</sup> (\$154.02 per resident day).

<http://www.docstoc.com/docs/70086870/A-Report-on-Shortfalls-in-Medicaid-Funding-for-Nursing-Home-Care>)

## Footnotes

<sup>1</sup> Toby S. Edelman and Charlene Harrington, “An Analysis of the Shirlee Sharkey Report on Long Term Care Homes Human Resource Issues in Ontario.” Research commissioned by the Ontario Health Coalition, December 2009. [http://www.cupe.on.ca/aux\\_file.php?aux\\_file\\_id=2556](http://www.cupe.on.ca/aux_file.php?aux_file_id=2556)

<sup>2</sup> John E. Schnelle, Sandra F. Simmons, Charlene Harrington, Mary Cadogan, Emily Garcia, and Barbara M Bates-Jensen, “Relationship of Nursing Home Staffing to Quality of Care,” *Health Services Research*, Vol. 39, No. 2, pages 225-250 (April 2004), [http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1361005/pdf/hesr\\_00225.pdf](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1361005/pdf/hesr_00225.pdf)

<sup>3</sup> Edelman and Harrington Report, page 7.

<sup>4</sup> Schnelle, Simmons, Harrington, Cadogan, Garcia, and Bates-Jensen, page 9.

<sup>5</sup> Schnelle, Simmons, Harrington, Cadogan, Garcia, and Bates-Jensen, page 6.

<sup>6</sup> Schnelle, Simmons, Harrington, Cadogan, Garcia, and Bates-Jensen, page 7.

<sup>7</sup> Schnelle, Simmons, Harrington, Cadogan, Garcia, and Bates-Jensen, pgs. 12-14.

<sup>8</sup> Schnelle, Simmons, Harrington, Cadogan, Garcia, and Bates-Jensen, page 13.