









Source:



TABLE 1

Proportion of Residents with Falls With Injuries or Pain by Required Number of CNA Training Hours^a

Training Hours	Activities of Daily Living		Falls With Injuries		Pain	
	Median (MAD)	<i>p</i> ^b	Median (MAD)	<i>p</i> ^b	Median (MAD)	<i>p</i> ^b
Total		< .001		< .001		< .001
Federal minimum (75 hours)	15.15 (1.66)		3.20 (0.62)		7.09 (1.61)	
More than federal minimum	14.68 (3.08)		2.65 (1.01)		5.77 (1.72)	
Clinical		< .001		< .001		< .001
Federal minimum (16 hours)	15.00 (1.63)		3.15 (0.60)		7.25 (1.59)	
More than federal minimum	14.72 (3.10)		2.67 (1.03)		5.73 (0.00)	

Note. CNA = certified nursing assistant. MAD = median absolute deviation.

^a Data from 2014, quarter 4 (CMS, 2016a).

^b *p* values determined using the Wilcoxon signed rank sum test.













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Choi, J., Johantgen, M., 2012. The importance of supervision in retention of certified nursing assistants. *Res. Nurs. Health* 35 (April (2)) 187–199.

Fujisawa, R., & Colombo, F. (2009). *The long-term care workforce: Overview and strategies to adapt supply to a growing demand* (OECD Health Working Paper No. 44). Paris, France: OECD Publishing.

Han, K., Trinkoff, A. M., Storr, C. L., Lerner, N., Johantgen, M., & Gartrell K. (2014). Associations between state regulations, training length, perceived quality and job satisfaction among certified nursing assistants: Cross-sectional secondary data analysis. *International Journal of Nursing Studies*, 51(8), 1135–1141. doi:10.1016/j.ijnurstu.2013.12.008

Health in Aging. (2016). *Nursing homes: Basic facts & information*. Retrieved from <http://www.healthinaging.org/aging-and-health-ato-z/topic:nursing-homes/>

Hernandez-Medina, E., Eaton, S., Hurd, D., & White, A. (2006). Training programs for certified nursing assistants. Washington, DC American Association of Retired Persons

Menne, H. L., Ejaz, F. K., Noelker, L. S., & Jones, J. A. (2007). Direct care workers' recommendations for training and continuing education. *Gerontology & Geriatrics Education*, 28(2), 91–108.

Paraprofessional Healthcare Institute. (2014). *Nurse aide training requirements, October 2014*. Retrieved from <http://phinational.org/sites/phinational.org/files/research-report/nurse-aide-training-requirements-2014.pdf>

Sengupta, M., Harris-Kojetin, L. D., & Ejaz, F. K. (2010). A national overview of the training received by certified nursing assistants working in U.S. nursing homes. *Gerontology and Geriatrics Education*, 31(3), 201–219. doi:10.1080/02701960.2010.503122

Smith, B., Kerse, N., & Parsons, M. (2005). Quality of residential care for older people: Does education for healthcare assistants make a difference? *New Zealand Medical Journal*, 118, U1437. Retrieved from <http://www.nzma.org.nz/journal/118-1214/1437/>.

Trinkoff, A. M., Storr, C. L., Lerner, N. B., Yang, B. K., & Han, K (2016). CNA training requirements and resident care outcomes in nursing homes. *The Gerontologist*. Retrieved from <https://doi-org.proxy-hs.researchport.umd.edu/10.1093/geront/gnw049>

Trinkoff, A. M., Johantgen, M. E., Lerner, N. B., Storr, C. L., Han, K., & McElroy, K. (2013). State regulatory oversight of

