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Staffing, turnover and long-term absences do *not* relate with quality of care in Swiss nursing homes

Presented by Suzanne R. Dhaini, RN

Franziska Zúñiga, MSN
Dietmar Ausserhofer, RN, PhD
Michael Simons, RN, PhD
Sabina De Geest, RN, PhD
René Schwendimann, RN, PhD
Institute of Nursing Science, Basel University, Switzerland

Background of study

- Increase of ageing population in Switzerland and accumulation of chronic conditions
- Increase in the need for professional careworkers in nursing homes (NHs)
- Minimal nurse staffing requirements in place for nursing homes in Switzerland
  - (e.g. 15%-20% of nursing staff must be registered nurses).

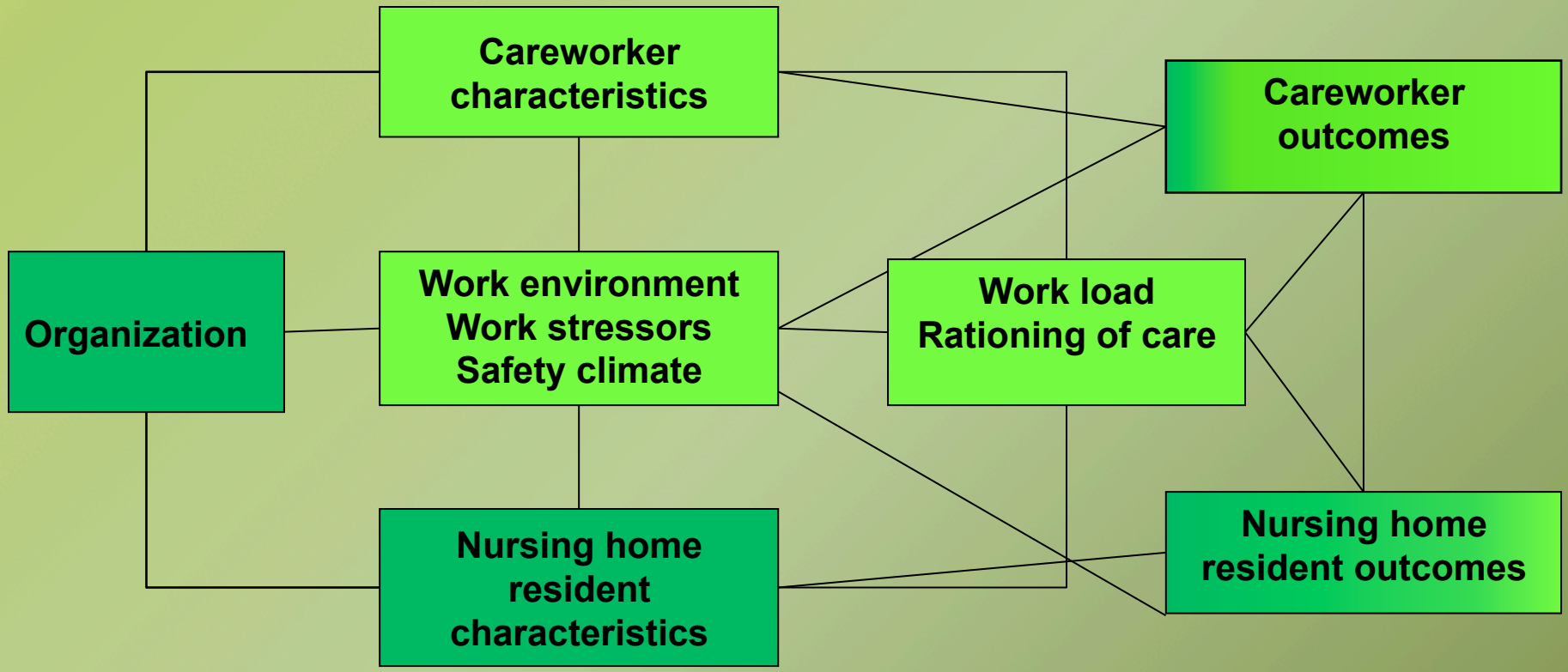
Swiss Health Observatory (2009) . Retrieved from http://www.obsan.admin.ch/bfs/obsan/de/index/05/publikationsdatenbank.Document.118249.pdf
Dolder et al. (2009), Schweizerische Konferenz der kantonalen Gesundheitsdirektorinnen und -direktoren (GDK) und Nationale Dachorganisation der Arbeitswelt Gesundheit (OdASanté)

Staffing and quality of care

- Staffing level ***alone*** is not a sufficient predictor of quality of care
- Linear relationships in low staffed nursing homes ***only***
- Additional predictors including other staffing aspects, and work environment factors need to be included
- Most studies so far are US based

Backhaus et al. (2014), *J Am Med Dir Assoc,*
Spilsbury et al. (2011), *International Journal of Nursing Studies*

SHURP – conceptual model



NH administrator questionnaire (facility and unit level data)

Careworker questionnaire

Schwendimann et al. (2013), *Journal of Advanced Nursing*

Study question

1. What is the relationship of staffing aspects *(staffing level, grade mix, turnover, burden of long-term absences)* with selected indicators of quality of care (pressure ulcer, falls-related injuries, weight loss)?
2. What is the relationship of staffing aspects and the careworker-reported overall quality of care?

SHURP - Methods

- **Design:** Multi-center cross-sectional survey study (2011-2013)
- **Study population & sampling approach:**
  - 163 nursing homes with 400 units ***randomly*** selected out of 1,600 Swiss nursing homes.
  - Sample ***stratification*** according to language region and nursing home size: small (20-49 beds), medium (50-99 beds) and large (≥ 100 beds)

SHURP-RESULTS

Description of units (n=400 units)

	%		%
Language region		**Nursing home size**	
- German	81.8	- Small (20-49 beds)	18.0
- French	12.8	- Medium (50-99 beds)	54.0
- Italian	5.4	- Large (100 and more beds)	28.0
Profit status			
- Public	42.3		
- Private	23.3		
- Private subsidized	34.4		

Staffing and resident characteristics (n=400 units)

Staffing	Median	IQR
Full-time equivalent / 100 beds	50.9	19.4
Percentage registered nurses in team (grade mix)	30.3	15.5
Percentage turnover	9.1	13.3
Burden of long-term absences (1to 4)	2.0	2.0
Resident characteristics	**Mean**	**SD**
Resident mean age	84.6	3.1
Resident mean length of stay (years)	3.5	435.2
Residents' mean care load (1=20 min. of care/d)	5.9	1.6

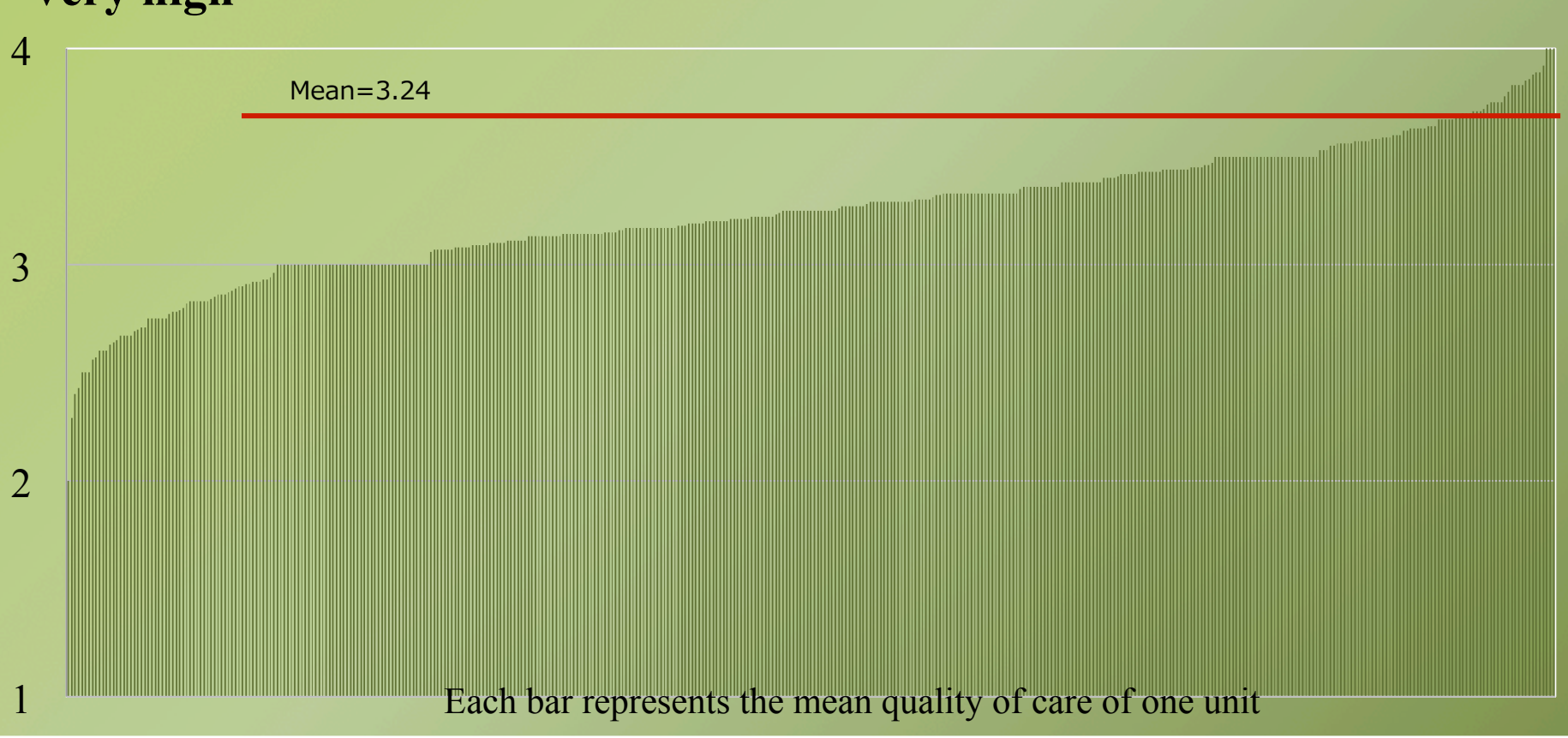
Quality of care indicators

% of units **without** any residents with outcome:

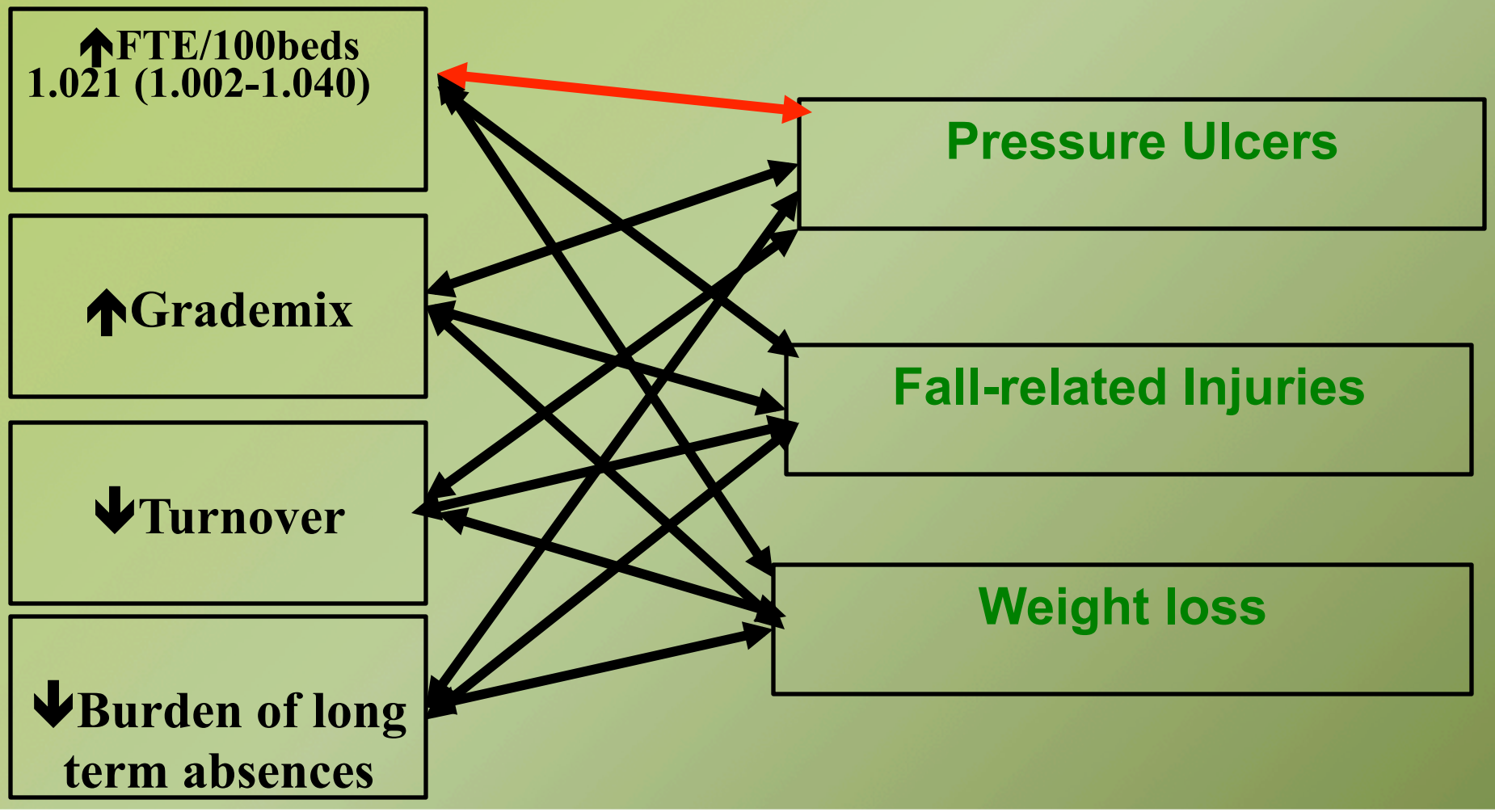
- Pressure ulcer: 70.5%
- Fall-related injuries: 63.0%
- Weight loss: 44.2%

Careworker-reported quality of care

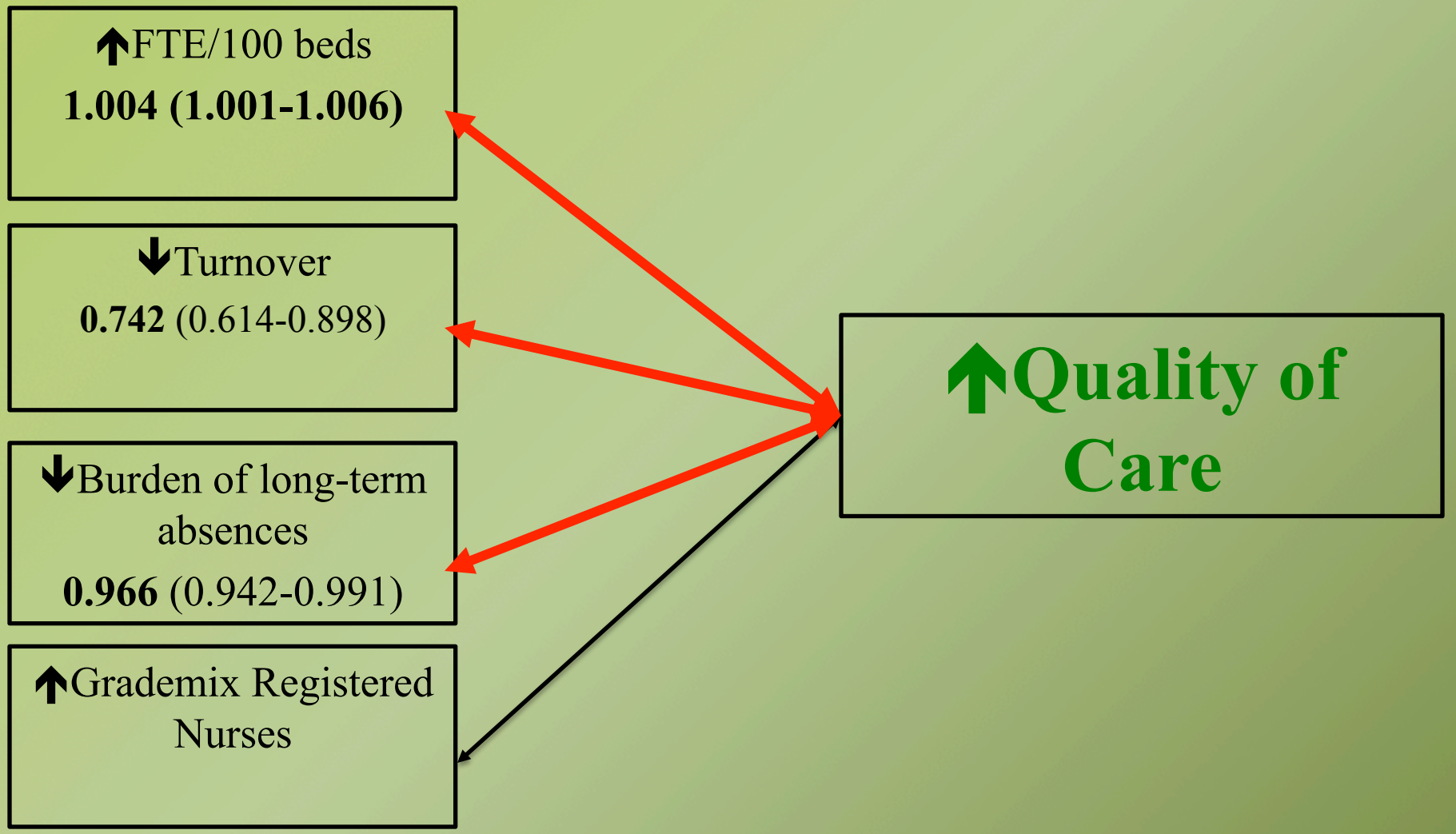
Quality of care: *"In general, how would you rate the quality of care for the residents on your unit?"*



Relationship staffing and quality of care



Staffing and Careworker-reported Quality of care



Summary

- Staffing level, mix, turnover, and burden of long-term absences are **not** associated with falls, weight loss, pressure ulcers
- staffing level, turnover and burden of long-term absences are **associated with** staff-reported quality of care.

Conclusions

- There is small variability between high quality of care and quality indicators analyzed,
- The quality indicators analyzed might ***not*** be sensitive to changes in staffing levels above a certain threshold.
- Swiss nursing homes might already have reached the necessary threshold to maintain quality of care with the minimal staffing requirements given

SHURP

Swiss Nursing Homes Human Resources Project

Thank you for your attention

shurp-nursing@unibas.ch

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