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

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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

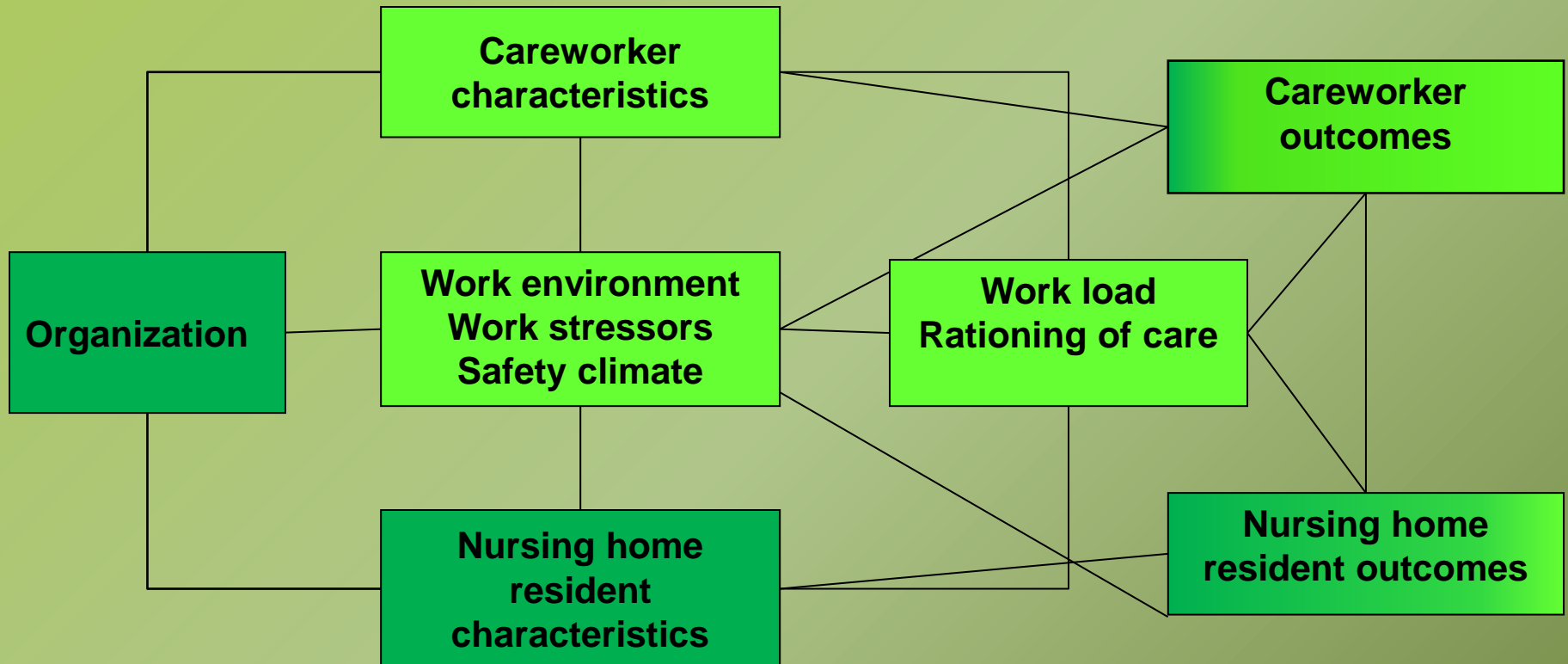
<http://www.obsan.admin.ch/bfs/obsan/de/index/05/publikationsdatenbank.Document.118249.pdf>

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

SHURP – conceptual model



*NH administrator questionnaire
(facility and unit level data)*

Careworker questionnaire

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

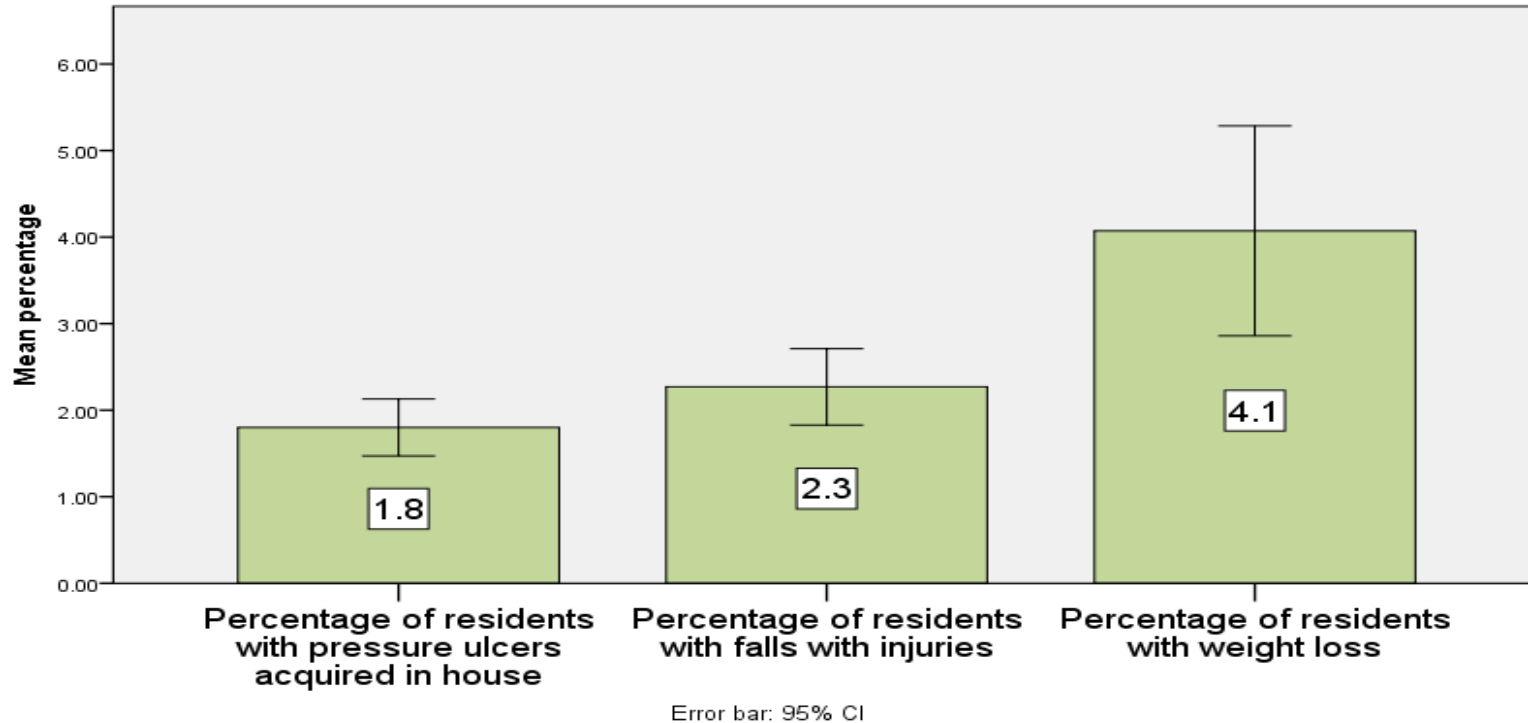
Description of units (n=400 units)

	%		%
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 (1 to 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%

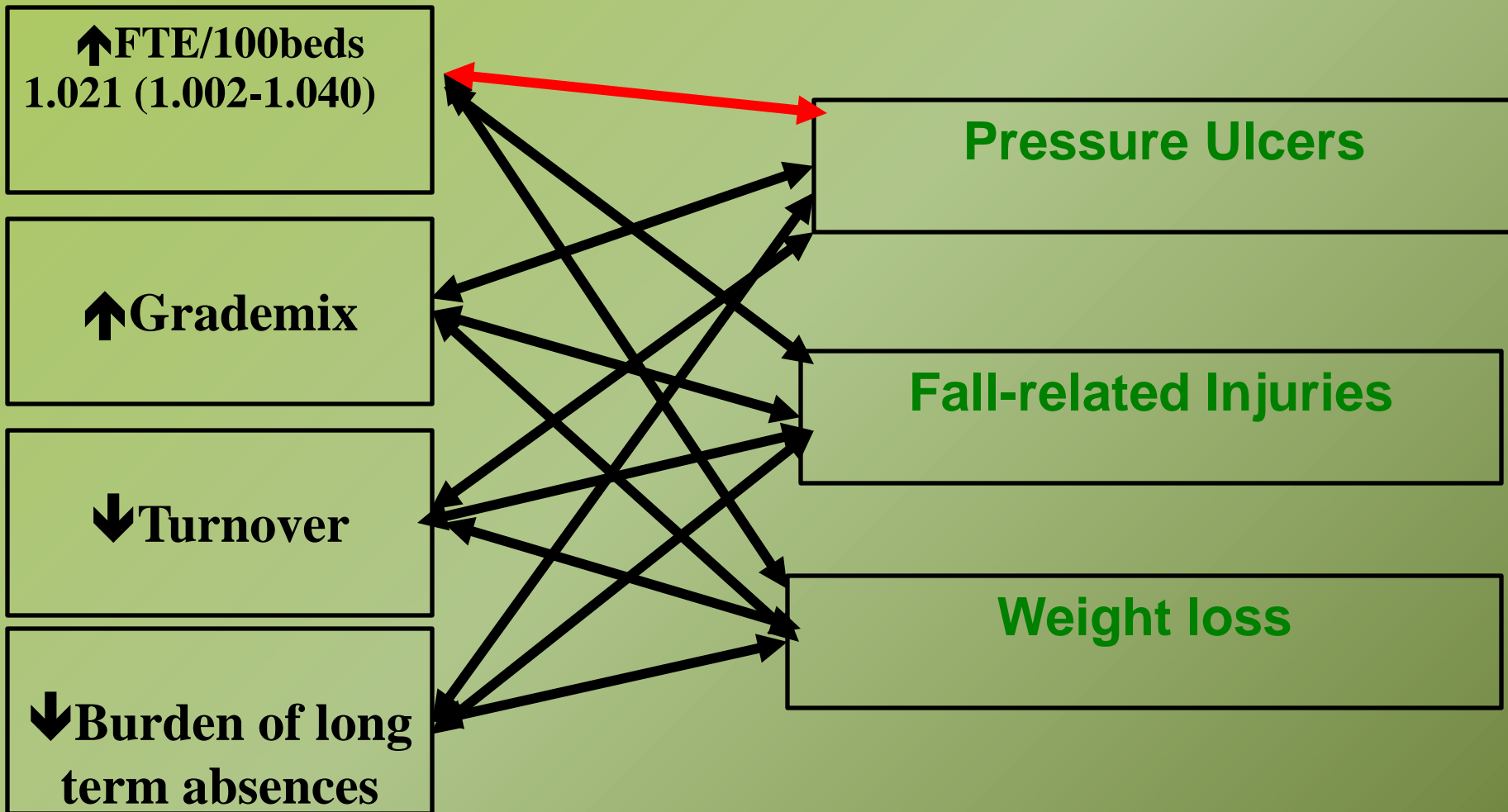
Careworker-reported quality of care

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

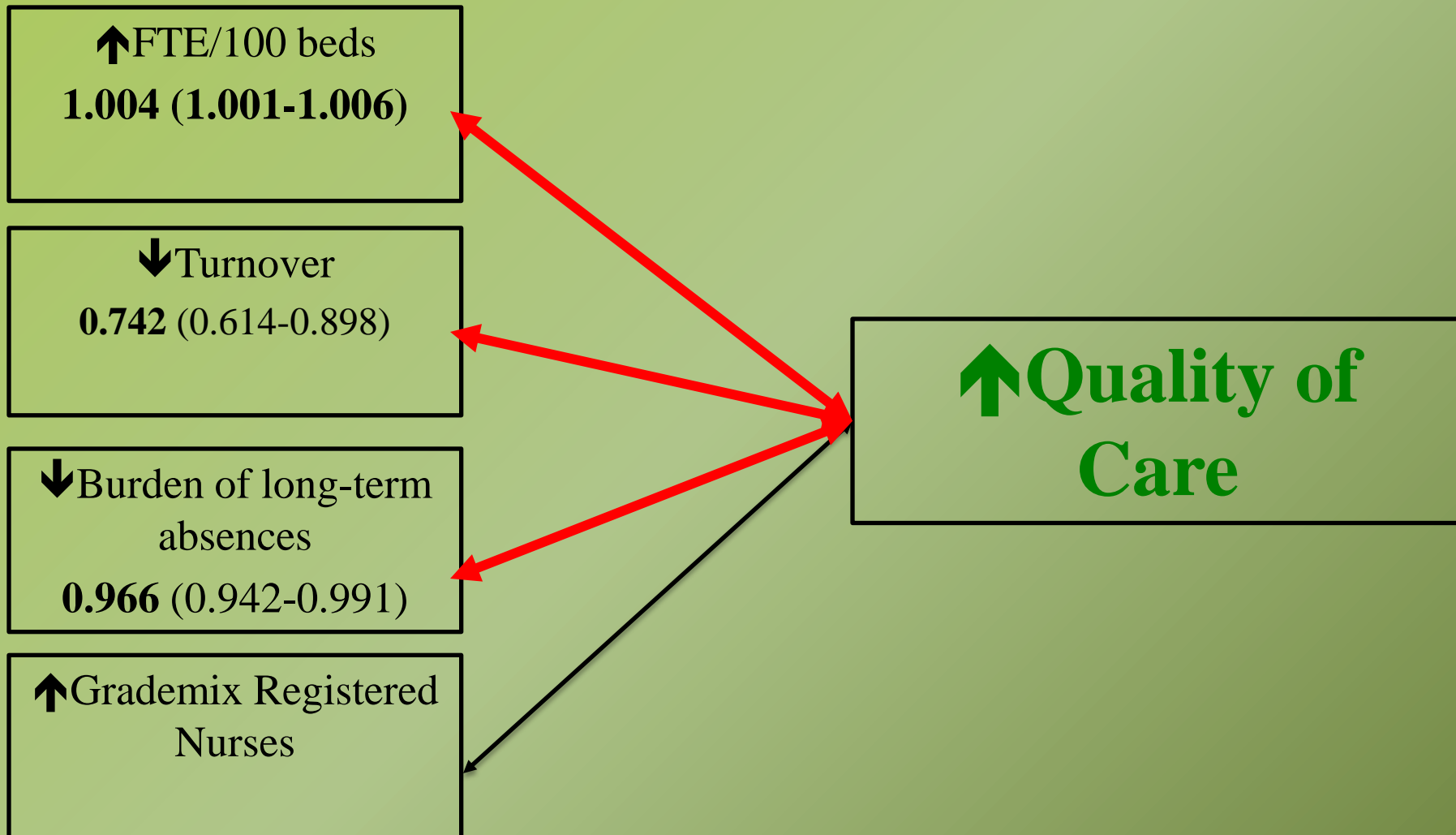
Very high



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

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