

The International Prevalence Measurement of Care Problems in Care Homes; interesting from different perspectives!

Prof. dr. JMGA Schols
Dr. RJG Halfens



Frail nursing home patients have a lot of problems

- ⊕ next to the main diagnosis there often is substantial comorbidity;
- ⊕ a wide range of disabilities affecting autonomous personal care, mobility and mental functioning;
- ⊕ polypharmacy;
- ⊕ and.....

Various care problems, e.g.



Falls



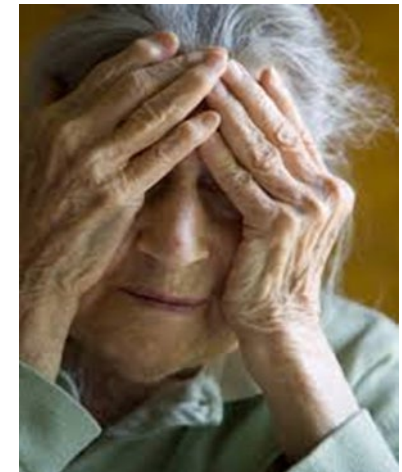
Pressure Ulcers



Malnutrition



Incontinence



Pain

Quality of Care and Patient Safety are actual and very relevant issues!

- ⊕ Fulfilling the basic care needs and adequately tackling relevant care problems are both very fundamental and important for the wellbeing and health of patients; and to a large extent also for patients' safety!
- ⊕ QoC has to contribute to QoL
- ⊕ Health care organizations and health care professionals have to be transparent w.r.t their performance related to patient safety and QoC. **This also counts for care homes!**

Health care consumers and other stakeholders in health care ask more and more for transparency...

*In God we believe; **everyone else has to come with data...!***

Nowadays...

- ⊕ Health care organizations and health care professionals need data about their performance..; we call them 'quality indicators' or 'performance indicators'

Related to health care an indicator =

"a measurable element of the provision of care that gives an indication about the quality of care"



Indicators; for whom?

For whom:

Internal indicators – for improvement of quality internally

External indicators – for outside accountability

For the own organization

- To monitor the own organization's performance
- Internal audit
- For improvement activities
- Etc.

For other parties

- Health Care Inspectorate
- Insurance companies
- Ministry of Health
- Clients/patients
- Etc.

Indicator based model of quality of basic care

Structure

Presence of:

Qualified personnel

Guidelines

Equipment

Educational system

Process

Execution of:

Activities related to:

daily care

prevention

treatment

"Outcome"

Measurement of:

Prevalence of care problems:

PU

Malnutrition

Falls

Etc.

Donabedian

The prevalence of relevant care problems is representative for the basic quality of care



Various care problems, e.g.



Falls



Incontinence



Pressure Ulcers



Malnutrition



Pain

Health care organizations (**incl. care homes**) and professionals nowadays need an objective regular measurement providing data about structure, process and outcome related to the basic care they offer!

The Dutch solution!

The Dutch National Prevalence
Measurement of Care Problems –
LPZ (Maastricht University);
In the meantime LPZ-international



Method LPZ-International

LPZ-I:

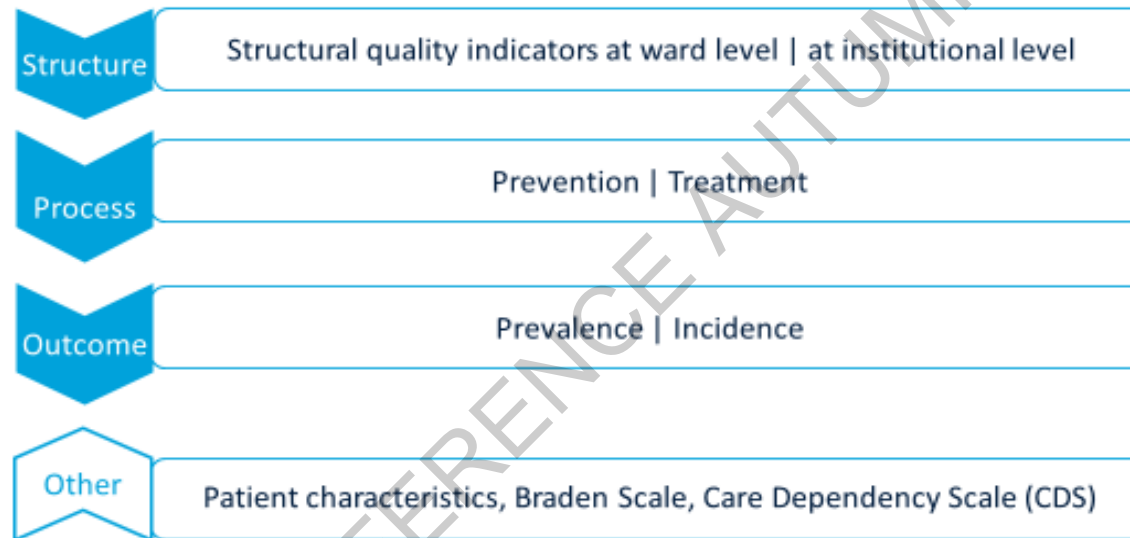
- ⊕ Annual (1 day) measurement of the prevalence, prevention, treatment and structural indicators of basic care problems
- ⊕ Pressure ulcers, malnutrition, incontinence, falls, restraints and since 2016 pain;.....
- ⊕ In different health care organizations (hospitals, nursing homes, home care) in different countries: The Netherlands, Austria, Switzerland, **UK (since 2015)**, Turkey,

Method LPZ-International

- ⊕ Hospitals, **care homes** and home care providers in each participating country are invited to participate each year
- ⊕ Prevalence measurement on one day in April or November
- ⊕ In each participating HC organization there is an LPZ measurement coordinator, trained by the LPZ team
- ⊕ All patients are assessed by two trained assessors

More information: see van Nie-Visser et al. LPZ report: study design. An International prevalence measurement of care problems: study protocol J Adv Nurs. 2013 Sep;69(9):e18-29. doi: 10.1111/jan.12190

LPZ Questionnaire: model of Donabedian



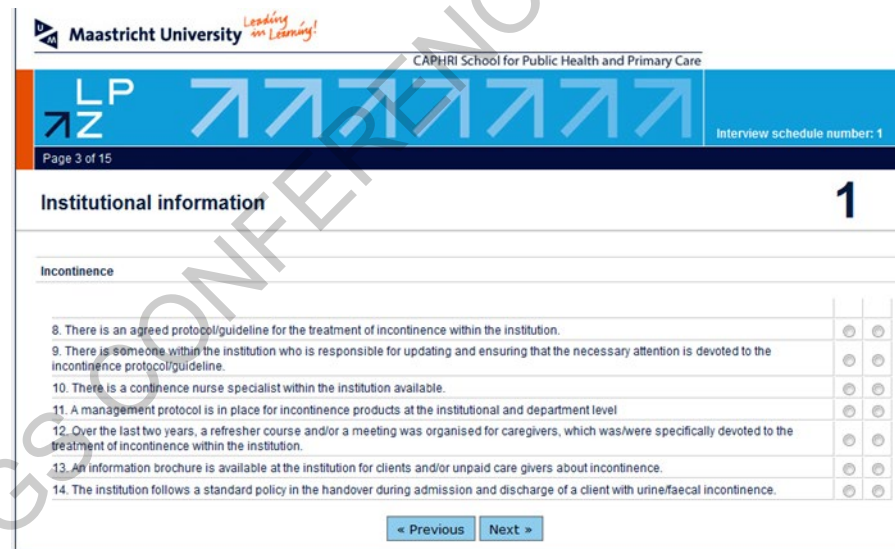
Questionnaire on three levels:

- patient level
- ward level
- institutional level

More information: see van Nie-Visser et al. LPZ report: study design. J Adv Nurs. 2013 Sep;69(9):e18-29. doi: 10.1111/jan.12190

Data entry LPZ-International

- Data can be entered in a web-based data-entry program after measurement or during the measurement with tablet/laptop



The screenshot shows a web-based data entry form for LPZ-International. The header includes Maastricht University and CAPHRI School for Public Health and Primary Care. The form is titled 'Institutional information' and is part of an interview schedule numbered 1. The form contains a table with 14 questions related to incontinence care, each with a radio button for response. The questions are:

Question	Response
8. There is an agreed protocol/guideline for the treatment of incontinence within the institution.	<input type="radio"/>
9. There is someone within the institution who is responsible for updating and ensuring that the necessary attention is devoted to the incontinence protocol/guideline.	<input type="radio"/>
10. There is a continence nurse specialist within the institution available.	<input type="radio"/>
11. A management protocol is in place for incontinence products at the institutional and department level	<input type="radio"/>
12. Over the last two years, a refresher course and/or a meeting was organised for caregivers, which was/were specifically devoted to the treatment of incontinence within the institution.	<input type="radio"/>
13. An information brochure is available at the institution for clients and/or unpaid care givers about incontinence.	<input type="radio"/>
14. The institution follows a standard policy in the handover during admission and discharge of a client with urine/faecal incontinence.	<input type="radio"/>

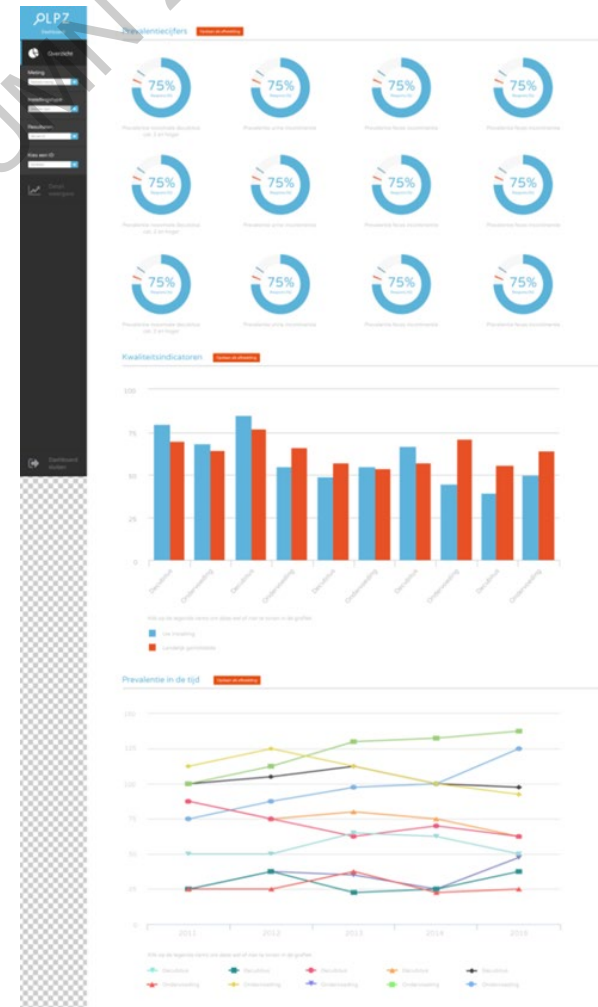
Navigation buttons: « Previous, Next »

Validity and Reliability

- ⊕ Questions based on valid instruments or developed by experts
- ⊕ Data are gathered by trained workers of the organization itself
- ⊕ Organizations get their own results
- ⊕ They have to pay to participate
- ⊕ No data of individual organizations are published.

Feedback LPZ-International

- ⊕ Results are presented on a private site for each individual organization/ institution
- ⊕ Each organization/institution receives the results compared with the results of the years before and the national figures of the related sector (benchmarking)
- ⊕ Both on organizational/institutional as on department/ward level
- ⊕ Data are presented in dashboards
- ⊕ Raw data are also available for each institution in SPSS and in Excel



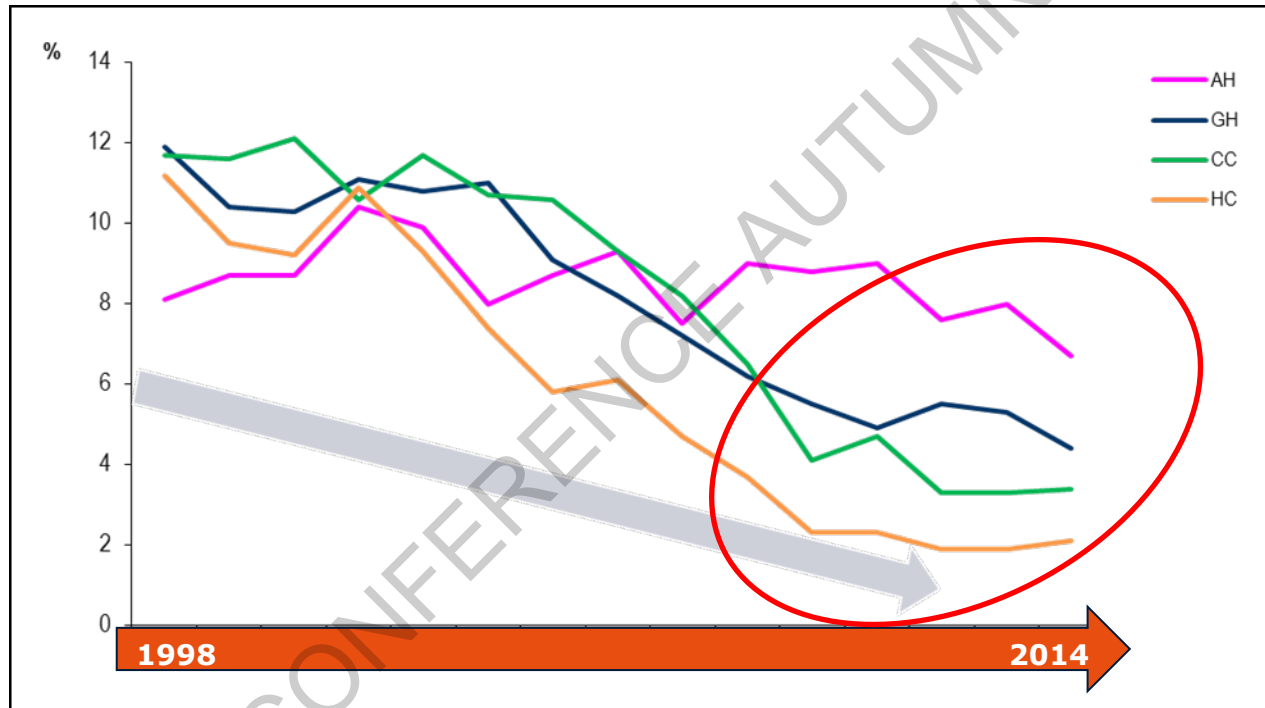
The annual (inter)national prevalence measurement of care problems (called LPZ-international)

- ⊕ Allows uniform measurement of the prevalence of relevant care problems in all health care sectors
- ⊕ Benefits HC- organizations/professionals, nationally and internationally:
 - ⊕ Feedback
 - ⊕ Benchmark
 - ⊕ Cues to optimize their (basic) care
- ⊕ Puts care problems on the agenda (AWARENESS!!) and leads to care improvement activities

Some short examples....

BGS CONFERENCE AUTUMN 2017

Achievements of LPZ:... improving PU care

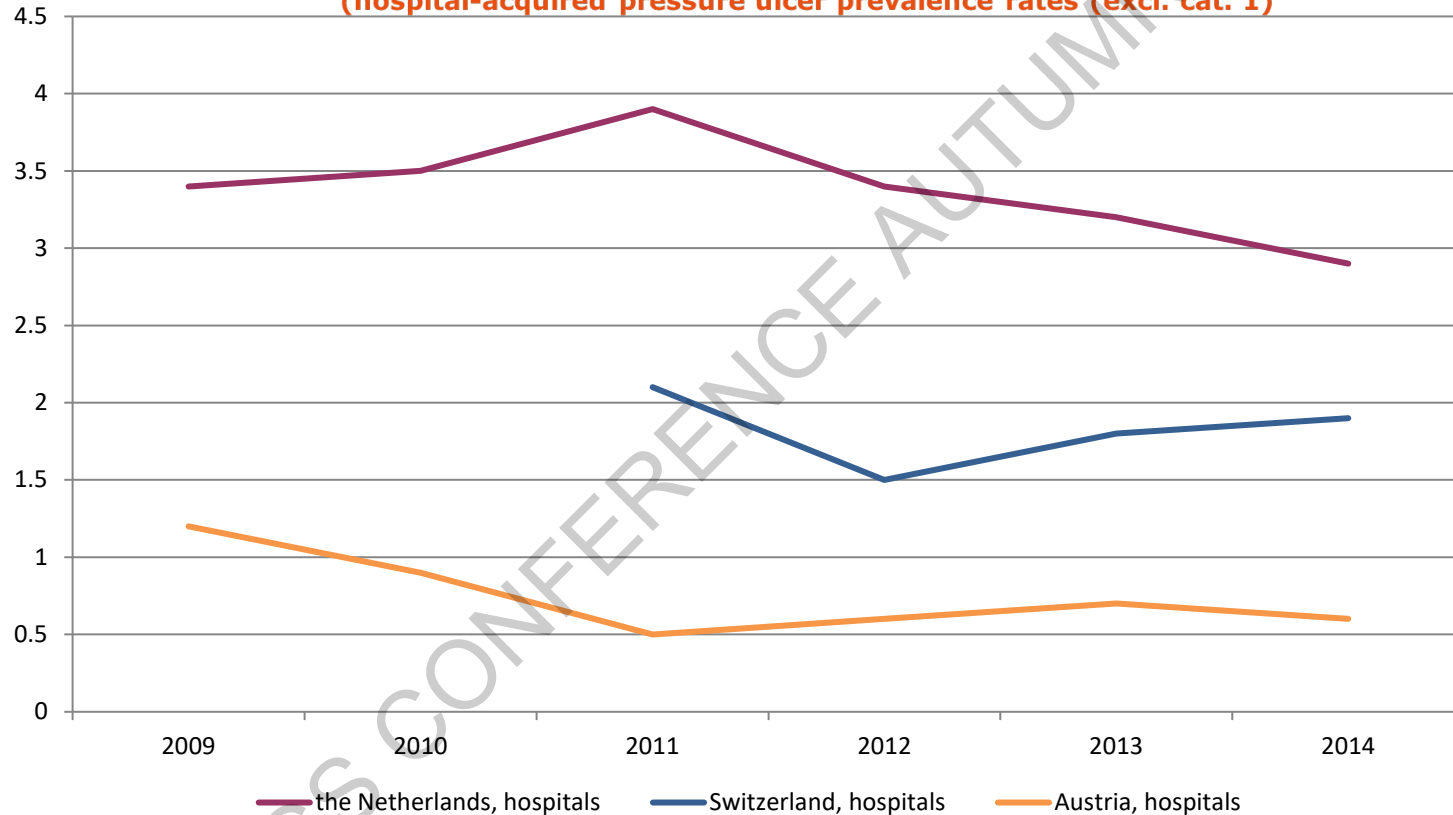


Prevalence of Pressure Ulcers excl. category 1 – **NL-HC**

International comparison...

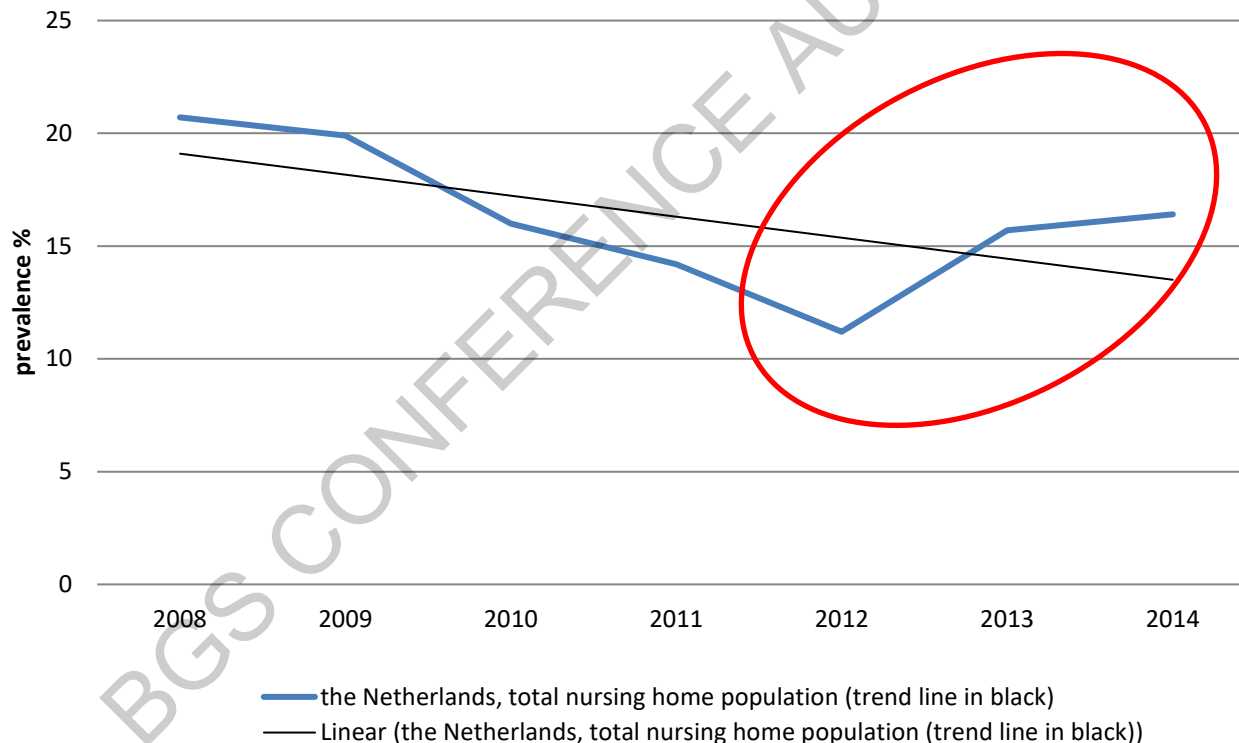
Prevalence rate Hospitals

(hospital-acquired pressure ulcer prevalence rates (excl. cat. 1))



Continuous measurement remains important to retain awareness; *the malnutrition story...*

Malnutrition in Dutch nursing homes



Scientific aim of LPZ

1. General epidemiological information
 - a) Prevalence of care problems, prevention, treatment, structural indicators and their relations
 - b) Identifying risk groups
2. Relations between care problems and relations between structure, process and outcome indicators
3. Differences between groups: wards, diseases, countries

The Journal of Nutrition
Nutritional Epidemiology

Decreasing Trends in Malnutrition Prevalence Rates Explained by Regular Audits and Feedback^{1,2}

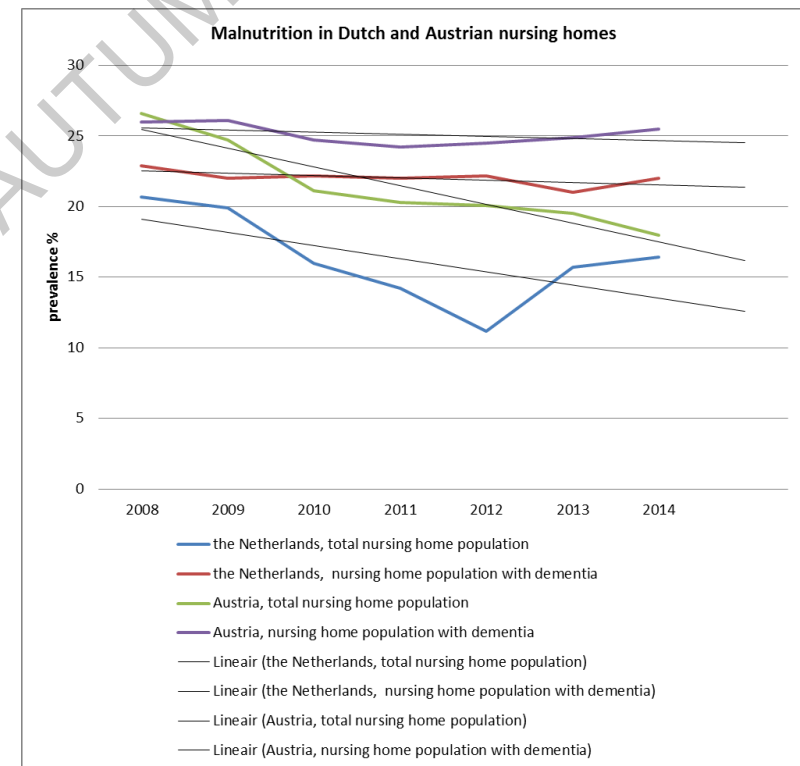
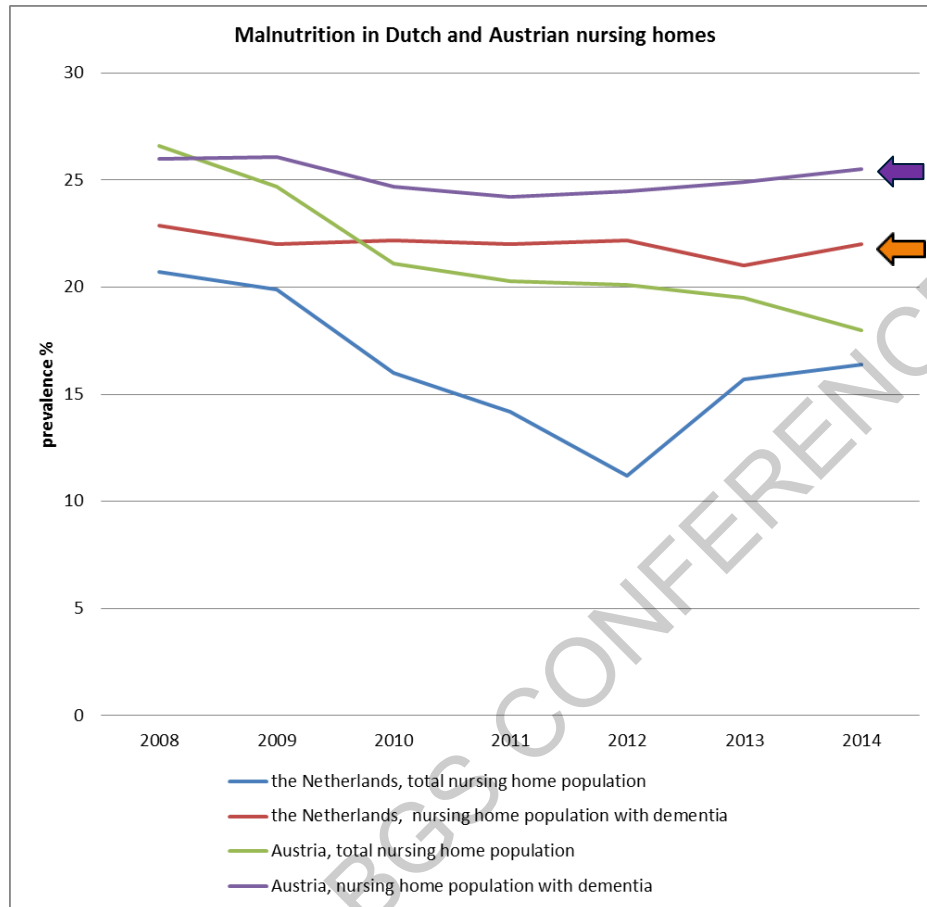
Judith M. M. Meijers,^{3*} Math J. M. M. Candel,⁴ Jos M. G. A. Schols,^{5,6} Marian A. E. van Bokhorst-de van der Schueren,⁷ and Ruud J. G. Halfens³

³Department of Health Care and Nursing Science, ⁴Department of Methodology and Statistics, and ⁵Department of General Practice, Faculty of Health, Medicine and Life Sciences, Maastricht University, Maastricht 6200 MD, The Netherlands; ⁶Tranzo Department, Tilburg University, Tilburg 5000 LE, The Netherlands; and ⁷Department of Nutrition and Dietetics, VU University Medical Centre, Amsterdam 1007 MB, The Netherlands

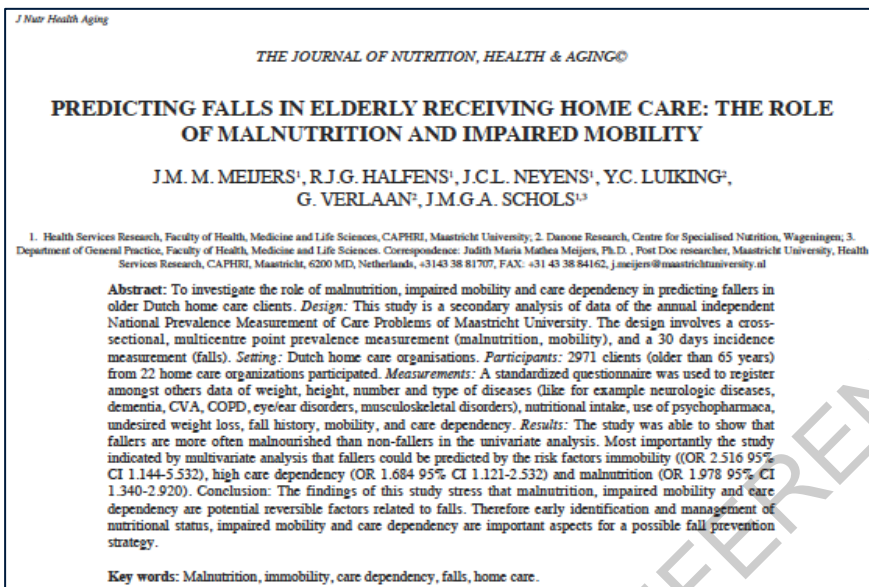
Abstract

To our knowledge, no studies have analyzed the influence of annual audit and feedback on the prevalence rates of malnutrition. This study analyzes the trend of malnutrition prevalence rates between 2004 and 2007 and the effects of previous audits and feedback from the annual Dutch National Prevalence Measurement of Care Problems (LPZ) and the effect of the participation in Dutch national improvement programs. From 2004 to 2007, an annual multicenter study was performed in Dutch hospitals, nursing homes, and home care organizations using a standardized questionnaire involving measurements at institutional, ward, and patient levels. The data were analyzed by logistic multilevel analysis. Nutritional status was assessed by BMI, undesired weight loss, and nutritional intake. In total, 80 hospitals, 141 nursing homes, and 48 home care organizations participated. The prevalence of malnutrition tended to decrease in hospitals and home care over the years. In nursing homes, prevalence rates were stable. **Furthermore, the more often hospitals and home care organizations participated in the annual LPZ audits, the lower the prevalence rate of malnutrition ($P < 0.001$).** Participation in national improvement programs also resulted in lower prevalence rates ($P = 0.027$). In conclusion, malnutrition prevalence rates have decreased over the last 4 y in hospitals and home care in The Netherlands. Participation in the LPZ and involvement in national improvement programs positively influenced these malnutrition prevalence rates, possibly indicating that increasing awareness and actively working toward improvement could be important in lowering these rates. J. Nutr. 139: 1381–1386, 2009.

Prevalence of malnutrition in Austrian and Dutch nursing home residents as a whole and in residents with dementia



LPZ-i research on the relation between individual care problems!



Contents lists available at ScienceDirect

Nutrition

journal homepage: www.nutritionjrn1.com



The relationship between malnutrition parameters and pressure ulcers in hospitals and nursing homes

Eman S.M. Shahin B.Sc., M.Sc., R.N., Ph.D.^{a,*}, J.M.M. Meijers R.N., Ph.D.^b, J.M.G.A. Schols M.D., Ph.D.^c, A. Tannen R.N., M.A., M.P.H., Ph.D.^d, R.J.G. Halfens Ph.D.^e, T. Dassen Ph.D., R.N.^f

^a Department of Medical Surgical Nursing, Faculty of Nursing, Suez Canal University, Port Said, Egypt

^b Department of Health Care and Nursing Science, School for Public Health and Primary Care (CAPHRI), Faculty of Health, Medicine and Life Sciences, Maastricht University, The Netherlands

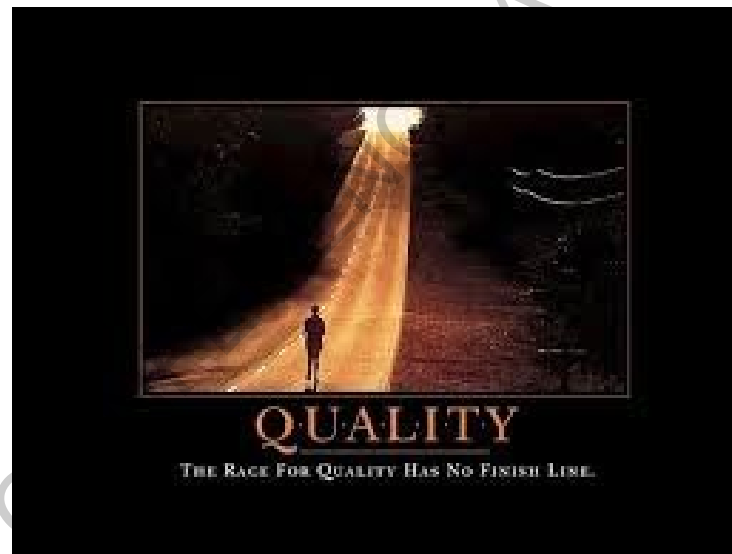
^c Department of General Practice, Maastricht University Medical Centre and School for Public Health and Primary Care (CAPHRI), Maastricht, The Netherlands

^d Department of Nursing Science, Centre for the Humanities and Health Sciences, Charité, Universitätsmedizin, Berlin

^e Department of Health Care and Nursing Science, School for Public Health and Primary Care (CAPHRI), Faculty of Health, Medicine and Life Sciences, Maastricht University, The Netherlands

^f Head of Department of Nursing Science, Centre for the Humanities and Health Sciences, Charité, Universitätsmedizin, Berlin

LPZ-International is an interesting option to support care quality improvement; however the road to optimal QoC will never have a finish line!





Thank you for your attention!