nutritionDay worldwide

benchmark & monitor your nutrition care

nutritionDay Report

Unit Performance & Actions

November 2017

Hospital:	nutritionDay Draft Report Hospital
Unit:	Draft Unit
Specialty:	Draft Specialty
Centre Code:	9999
Unit Code:	999

ESPEN

MEDICAL UNIVERSITY OF VIENNA

AKE ARBEITSGEMEINSCHAFT KLINISCHE ERNÄHRUNG

Understanding the data

Unit data: is based on your online data input
Region/country reference: is provided if participation is higher than xx units and xx patients in the country or xx units and xx patients in the region and presents data of [**2016**].
nDay reference: represents international data of your specialty of [**2016**]
Top Units reference: compares to the best ranked units of [**2016**]

Inclusion criteria:

- High participation units: Median size of the unit or bigger, minimum xx % outcome recorded
- Best ranked units: Mean of top 50%/25%/10% units of the question under consideration

Colour

Unit

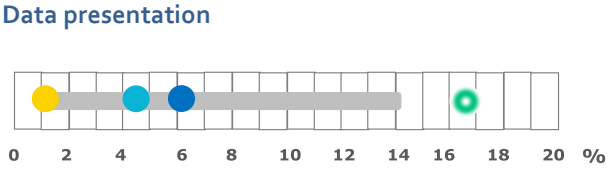
Region/Country

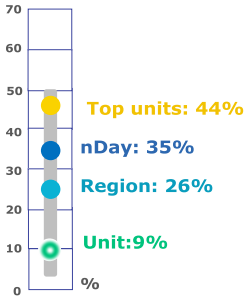
nDay (international)

Top Units

nDay **Range**

Data presentation





Data on ward/hospital level		Reference	
	Unit	Region	nDay
Unit: **green checkbox**: **done** or **available** in your unit.	✓	75-100%	75-100%
White: not done or **available** in your unit		50-74%	50-74%
Reference: shades of blue indicate extent of availability in the reference		20-49%	20-49%
		0-19%	0-19%

Definitions

Malnutrition[1]: (GLIM criteria have been adapted to fit to the risk categories of the nDay questionnaires)

	Core assessment criteria				Supporting Etiologic Criteria	
	Weight loss	BMI	Food intake week before	Food intake on nDay	Acute disease	Chronic disease
Risk of malnutrition (requires one criteria)	5-10% within 3 months	<20 if <70 years or <22 if >70 years	< 75% within last week	<50%		
Malnutrition (requires 1 core and 1 supporting criteria)	5-10% within 3 months	<20 if <70 years or <22 if >70 years	< 75% within last week	<50%	e.g. emergency admission, Comorbidities: infection,	Comorbidities: chronic lung disease, chronic liver disease, chronic kidney disease, diabetes
Severe Malnutrition (requires 1 core and 1 supporting criteria)	>10% within 3 months	<18.5 if <70 years or <22 if >70 years	< 75% within 1 week	<50%	e.g. emergency admission, Comorbidities: infection,	Comorbidities: chronic lung disease, chronic liver disease, chronic kidney disease, diabetes

1 Exponent: describes how malnutrition /risk of malnutrition is defined in this report

Regions: **acc. to MDG: World & Regional Groupings/ UNCTAD / Worldbank or WHO**

Missing data: see numerical report for exact number of missing data. "**Caution – insufficient data**" indicates that >10% of patient data is missing or <5 patients have been included.

Abbreviations

BMI=Body Mass Index
EN=Enteral Nutrition
ESPEN= European Society for Clinical Nutrition and Metabolism
(h/u)= hospital or unit
m / maln = malnourished
nDay=nutritionDay
ONS=Oral Nutritional Supplements
PN=Parenteral Nutrition
QI=Quality indicator
r=risk

Introduction and Interpretation

General Facts about Malnutrition

Malnutrition, as cause and consequence of disease affects 20-50% of hospitalized patients.

It is associated with increased morbidity and mortality and has serious implications for recovery.

Malnutrition increases the risk of hospital acquired infections, complications, falls, pressure ulcers and leads to increased readmission.

Malnutrition increases hospital length of stay by 2-6 days and hospitalization costs by 19-29%.

An association exists between malnutrition and impaired quality of life of hospitalized patients.

Malnutrition (risk) in this unit:

62%

This report compares nutrition care of your ward and your patients to national/regional and international results of the same specialty and top units. This feedback should not be mistaken as definitive evidence of effectiveness and performance but may help to better understand and discuss nutrition care in your unit and encourage to take actions based on your feedback.

Participation 2016	Unit	Country	Region	nDay
Reference units[2]		x	x	x
Patients				
Present on nDay	160	N	N	N
Who gave consent [3]	82 (51%)	228 (82%)	1835 (70%)	8743 (63%)
Completing Sheet 3a/3b [4]	81 (100%)	225 (81%)	1708 (65%)	8368 (60%)
Malnourished or at risk patients[5]	50 (62%)	n (%)	n (%)	n (%)
30-day outcome assessment[6]	66 (80%)	205 (88%)	1796 (97%)	8655 (98%)
Demographic information				
Age				
Female				
Weight				
Height				
BMI				

2-6 Exponents: are provided in the report next to each graph and refer to the total number of patients/units (n) that have been included for the unit and the reference groups (country/region/nDay/top units). Total numbers are provided in the above table.

Try to include all patients in the nDay survey and collect 30-day outcome assessment to receive a full picture of your unit and a certificate. In case of low participation please interpret the results with caution.

Data quality: xx% of your patients on nDay are included; xx patients have more than xx% missing data; xx patients have implausible data; to improve data quality log in to your account and download the plausibility report.

We recommend discussing the results within your team and with the hospital management. The report can serve as a basis for further steps.

Attachment I: Full numerical report (download separately from your personal account)

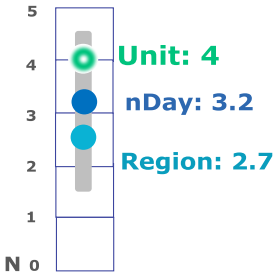
Exponents 1 refers to definitions indicated in the section "Understanding the data" p.2
Exponents 2-6 refer to patient groups indicated in the section "Introduction and interpretation" p. 3

Screening

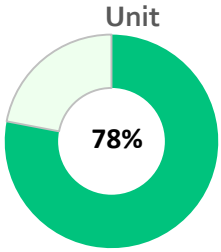
Unit Nutrition Indicators

1. Malnutrition screening structures on ward level[2]

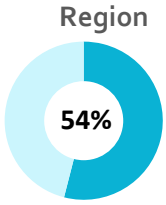
	Unit	Region	nDay
Screening using a validated screening tool		55%	51%
Routine screening at admission	✓	3%	61%
Routine weighing at admission	✓	65%	60%
Guidelines or standards are routinely used for nutrition care	✓	78%	75%
Nutrition care strategy exists (hospital /unit)	✓	79%	83%

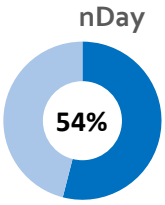


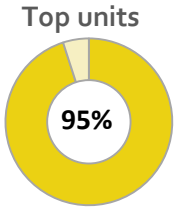
2. Proportion of patients weighed at admission[4]

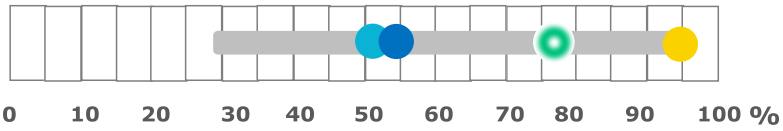


Caution!
Insufficient data



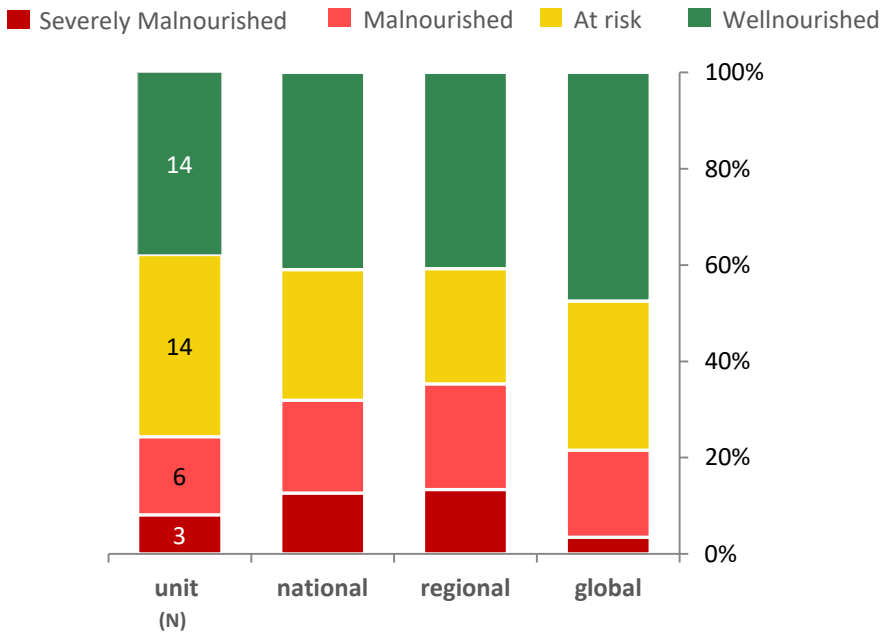






Prevalence of Malnutrition

3. Prevalence of malnutrition according to definition[1]



23 (62%) patients are malnourished or at risk of malnutrition according to definition. 6 thereof are considered well-nourished by staff.

Well nourished patients acc. to staff	Unit	Country	Region	nDay
...but **malnourished** by definition [1]	N (%)	N (%)	N (%)	N (%)
...but **at risk** by definition[1]	N (%)	N (%)	N (%)	N (%)

Exponents 1 refers to definitions indicated in the section "Understanding the data" p.2
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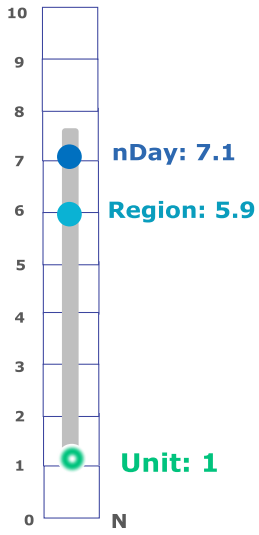
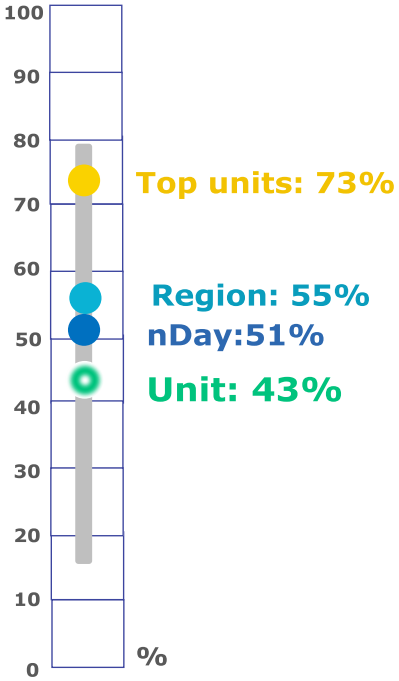
4. Food, meals and mealtime structures on ward level[2]

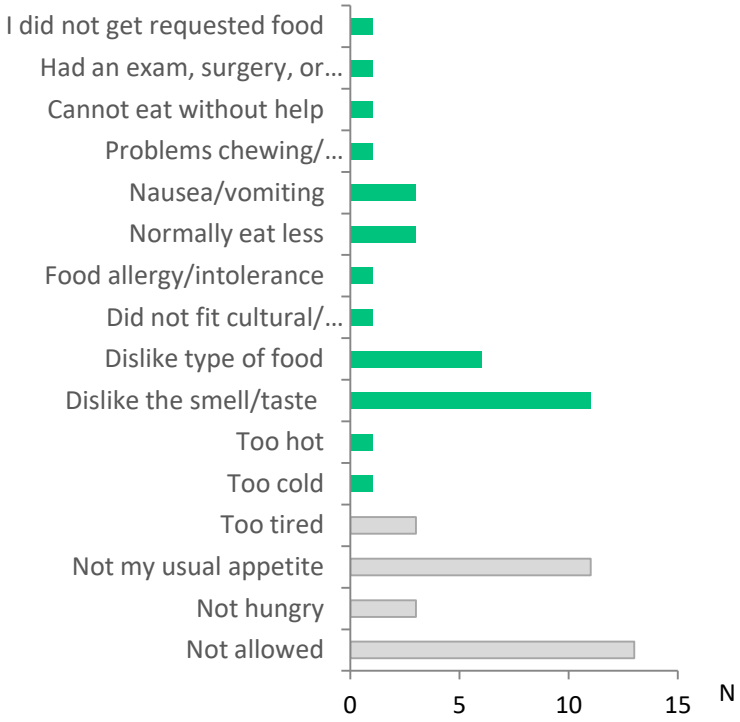
	Unit	Region	nDay
Promote positive eating environment		19%	15%
Protected mealtime policy		14%	20%
Consider food presentation		30%	36%
Consider patient allergies / intolerances		37%	40%
Consider cultural/religious preferences		23%	35%
Change food texture/consistency as needed		78%	78%
Consider patient problems with eating and drinking		58%	75%
Offer additional meals or in between snacks	✓	65%	63%
Offer meal choices		65%	63%
Offer different portion sizes		59%	53%



5. Food satisfaction[4]



6. Reasons for eating less[4]



Food and foodservice quality is known to impact patient satisfaction with hospital stay. Hospital food service should be beneficial for recovery, customized to meet patients needs and give an example of healthy nutrition.

Considering the patients' eating preferences and wishes (green bars) may support eating the full meal.

Exponents 1 refers to definitions indicated in the section "Understanding the data" p.2
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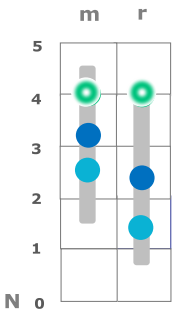
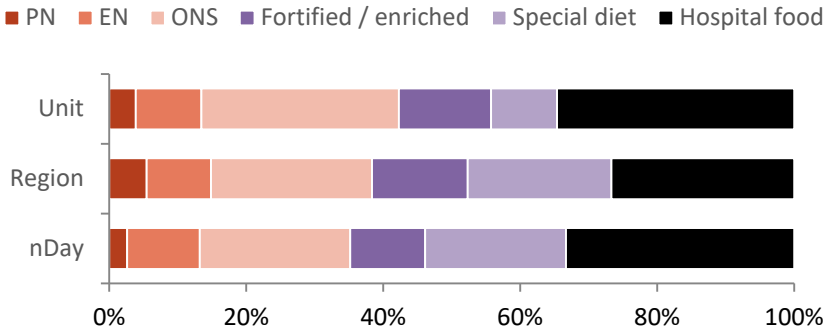
Treatment

7. Routine nutrition treatment structures for malnourished/at risk patients [2]

	Unit		Region		nDay	
	m	r	m	r	m	r
Develop an individual nutrition care plan			55%	55%	51%	51%
Consult a nutrition expert	✓	✓	3%	3%	61%	61%
Consult a medical professional	✓	✓	65%	65%	60%	60%
Initiate treatment / nutrition intervention	✓	✓	78%	78%	74%	74%
Calculate energy/protein requirements	✓	✓	80%	80%	88%	88%

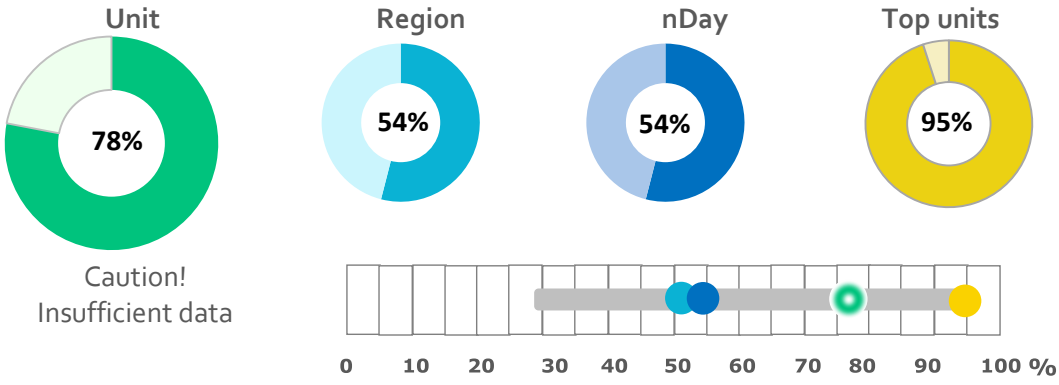


8. Nutrition treatment of malnourished / at risk patients[5]

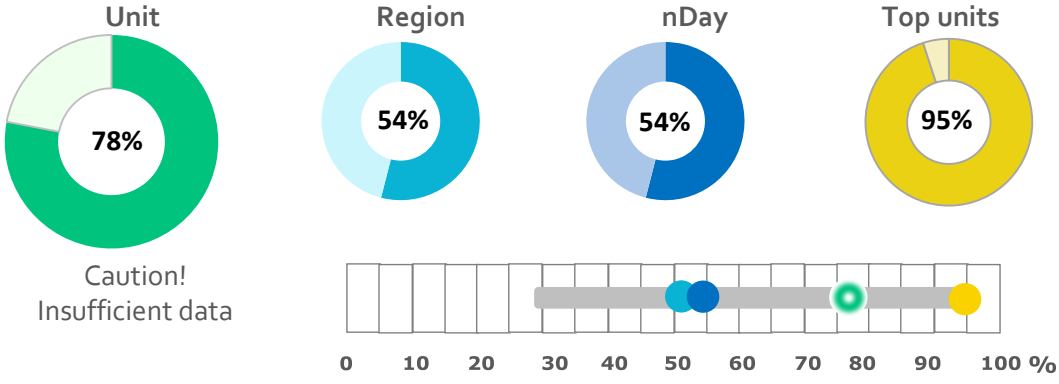


68% of malnourished /at risk patients receive nutritional support while **32%** (black bars) receive regular hospital food in your ward.

9. Malnourished / at risk patients seen by a nutrition expert[5]



10. Malnourished / at risk patients with a nutrition treatment plan[5]



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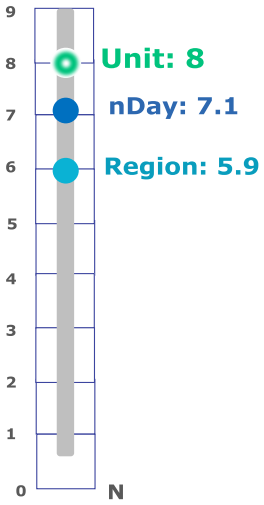
Monitoring and Documentation

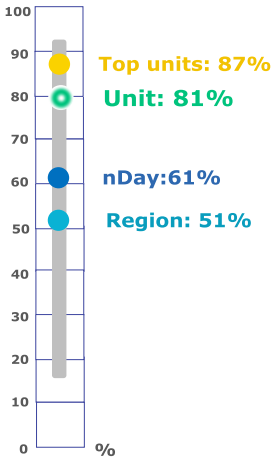
11. Monitoring and documentation structures on ward level[2]

	Unit	Region	nDay
Weighing during hospital stay		55%	51%
Routine monitoring during hospital stay	✓	3%	61%
Documentation at admission: weight change	✓	78%	76%
Eating habits/difficulties	✓	55%	51%
Nutrition before admission	✓	3%	61%
Patient record has a section for: documentation of nutrition treatment	✓	85%	79%
documentation of nutrition status	✓	55%	51%
Discharge letter has a section for: nutrition treatment during hospital stay	✓	3%	61%
future nutrition recommendations	✓	93%	75%

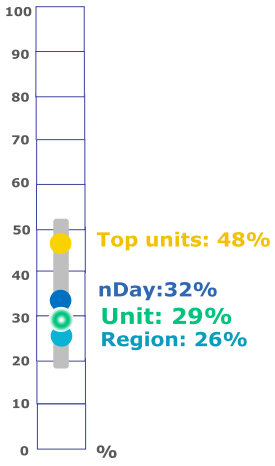


12. Monitoring & documentation of malnourished/at risk patients[5]

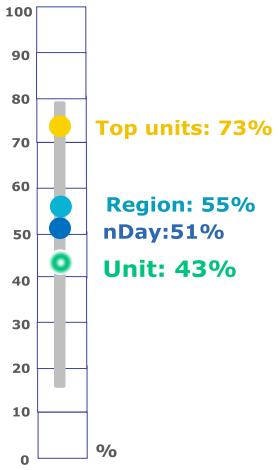
Malnutrition status recorded



Protein /Energy requirements determined



Food / Nutrition intake recorded

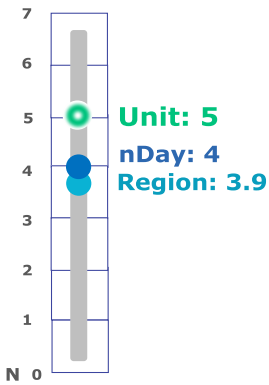


Compare your unit to the top units to see where improvement in monitoring and documentation may be possible.

Multi-professional Communication, Coordination & Training

13. Multi-professional communication, coordination & training on ward level[2]

	Unit	Region	Global
Discuss nutrition care activities of malnourished/at risk patients during ward rounds		55%	51%
Provide Brochures about malnutrition to malnourished/at risk patients	✓	3%	61%
Nutrition training is available (h/u)	✓	65%	60%
Ask for patient feedback about food and food services (h/u)	✓	78%	74%
Report nutrition related information to hospital managers	✓	67%	50%
Report QIs to national/regional level (h/u)	✓		
Use QIs for internal benchmarking (h/u)			



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Staffing

14. Health care professionals per 10 patients on nDay[2]

	Unit	Region/Country	nDay
Medical Doctor	2.5	2.3	1.2
Medical Students	2.4	0	1.7
Nurses	0.4	2	3.9
Nursing aides	3.5	5.1	5.1
Dieticians	2.5	0	1.3
Nutritionists			

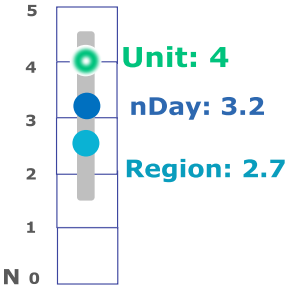
= 1 staff member

Reading example:
[2.5] Medical doctors care for 10 patients in your unit…

In case of 0:
[0] nutritionists are available for your unit…

15. Nutrition staff available on ward level[2]

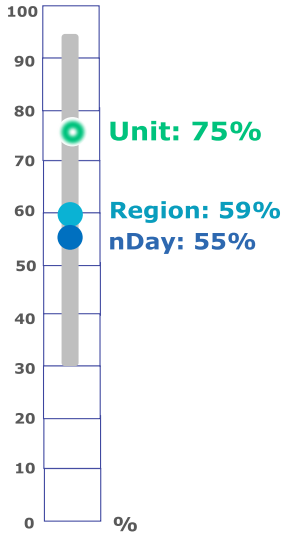
	Unit	Region	nDay
Nutrition steering team in the hospital		55%	51%
Nutrition support team in the unit	✓	3%	61%
Person responsible for nutrition care in the unit	✓	65%	60%
Dietician, Nutritionist, Dietetic assistant available	✓	78%	74%
Staff providing feeding assistance	✓	67%	50%



Financing

16. Financing[2]

In your hospital 8 different financing codes are available for the special reimbursement of nutrition-related care. 75% of these codes are currently used.



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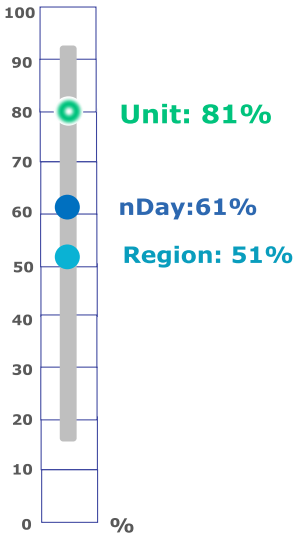
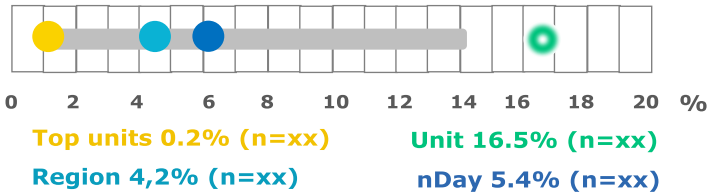
Outcomes

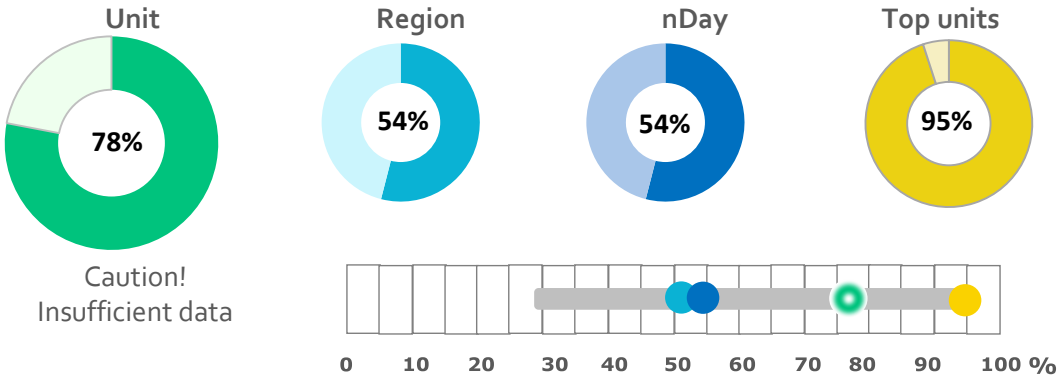
17. Self-rated health[4]



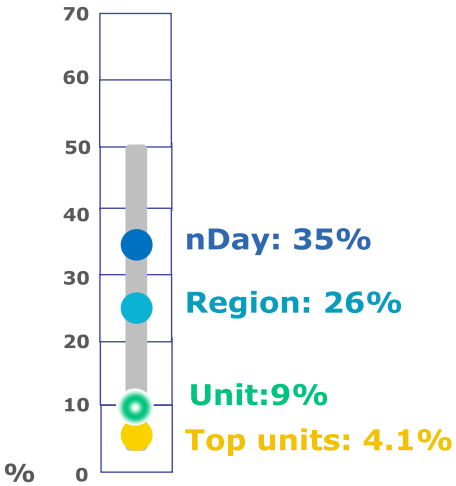
18. Complications with feeding tubes



19. Proportion of patients with adequate energy intake[3]



20. Unplanned readmission[6]



9% of all patients **were readmitted unplanned**. This accounts for xx% of all readmissions.

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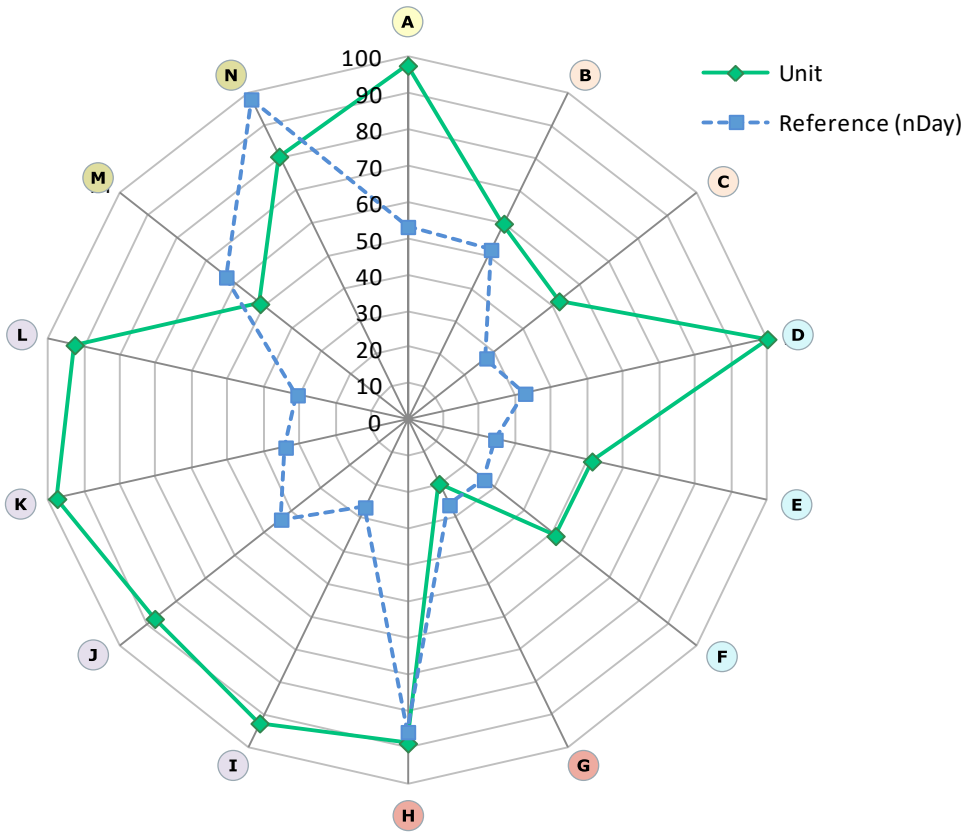
Compare your Quality of Care Indicators

Summary – Benchmark and Compare your Nutrition of Care

Judge the performance of each process indicator (A-K). Your unit performance is compared to the performance of the international average (nDay Reference). The **green continuous line shows the unit results** while the **blue dashed line shows the international results (nDay).**



Quality of care indicators

Screening	A	Patients **weighed at admission**[4]
Prevalence	B	**Malnourished/ at risk** according to **definition**[1]
	C	**Patients identified** as malnourished/at risk of malnutrition[1,5]
Treatment	D	**Nutritional expert consulted** in case of malnutrition/ at risk of malnutrition[5]
	E	Malnourished/at risk patients receiving **artificial treatment**[5]
	F	**Identified** and **treated** malnourished/at risk patients[5]
Food & Meals	G	**Food satisfaction**[4]
	H	Patients whose food **preferences** and **wishes** were met[4]
Monitoring & Documentation	I	**Malnutrition status recorded** in the patient record[5]
	J	Patients whose food **intake** was **recorded**[3]
	K	Malnourished/ at risk patients with **nutrition treatment plan developed**[5]
	L	Malnourished/ at risk patients with **energy/protein requirements determined**[5]

Data uncertainty

Patient inclusion	M	Proportion of admitted patients **included** in the nDay survey[2]
	N	Proportion of included patients **with** 30-day outcome assessment[6]

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Exponents 2-6 refer to patient groups indicated in the section "Introduction and interpretation" p. 3

From Knowledge to Action

Implementation of a Quality Improvement Project

Before you start a quality improvement cycle...

✓

- ☐ Are unit staff aware of the importance of malnutrition and nutrition treatment?
- ☐ Are there clear signs form management about the importance of nutritional care?
- ☐ Do you have the needed financial and human resources for a quality improvement initiative?
- ☐ Do all important stakeholders and decision makers support the project?
- ☐ Are all teams/committees/professionals on board (nutrition team, nutrition steering committee, decision makers, quality improvement team, representatives of all professions,...) ?
- ☐ Is a multidisciplinary project team in place and a project leader defined?

Define what, when, how and who...

✓

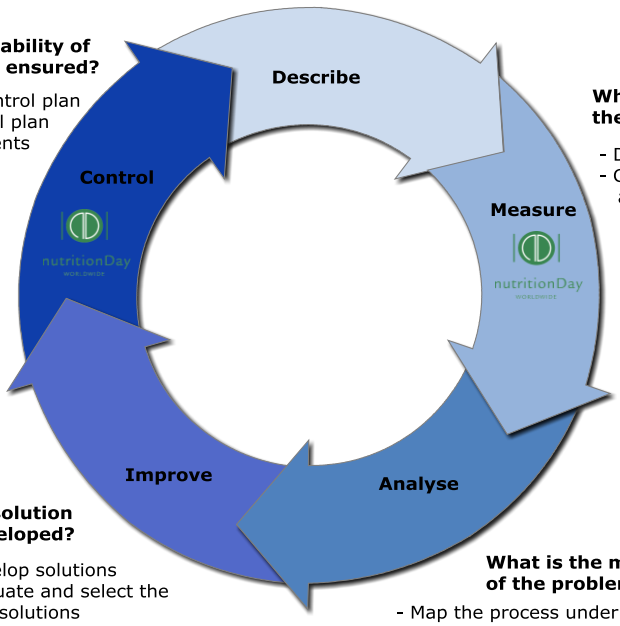
- ☐ Results of the report help to define blind spots or areas with potential for improvement
- ☐ Consider what is important for the hospital and if implementation is feasible
- ☐ Choose one or two areas that shall be improved
- ☐ Define specific goals, roles and responsibilities, resources allocation, milestones and timeline (what, who, how, when)
- ☐ Do not forget to keep all relevant stakeholders informed about developments

The DMAIC is a data-driven quality improvement strategy for improving processes and carrying out change. Repeating the 5 steps (describe – measure – analyse – improve – control) in small circles shall direct into a continuous change of an organisation in the desired field of interest and shall institutionalize the improvements by monitoring and modification of structures.

DMAIC cycle

What is the problem?

- Identify the area of interest
- Define and understand the problem.
- Define the required "inputs" (who, what, when, how)
- Develop an implementation plan
- Use nDay indicators and consider defining additional measures to allow following up on the progress.



How can the sustainability of the improvement be ensured?

- Develop a process control plan
- Implement the control plan
- Document improvements
- Monitor the process

What magnitude does the problem have?

- Develop a data collection plan
- Collect data to understand the actual situation

Can a solution be developed?

- Develop solutions
- Evaluate and select the best solutions
- create a change plan
- carry out a pilot
- roll out the solution

What is the major cause of the problem?

- Map the process under consideration (flow chart)
- Find out the root of the problem
- Identify influencing factors and their relationship

Exponents 1 refers to definitions indicated in the section "Understanding the data" p.2
Exponents 2-6 refer to patient groups indicated in the section "Introduction and interpretation" p. 3

Your personal development plan

Priority	Area to improve	Current state	Target performance	Actions to take	How and when I will measure success
I	*e.g. Proportion of malnourished / at risk patients seen by a dietician*	*Screening is done systematically ; dietician is not requested systematically for malnourished patients. xx% of malnourished/at risk patients have been seen by a dietician*	*Increase proportion of malnourished patients seen by a dietician from xx% to xx%.*	*Nutrition team to define standard process (how, when and who to call a dietician). Communicate and train new procedure. Include specific section in patient record.*	*1 month after implementation: check patient records of all admitted patients of 1 week. 1 year: repeat nDay and see if target performance has been reached*

Exponents 1 refers to definitions indicated in the section “Understanding the data” p.2
Exponents 2-6 refer to patient groups indicated in the section “Introduction and interpretation” p. 3