

# Uporaba priporočil in smernic v multidisciplinarni prehranski obravnavi bolnika izboljša kvaliteto zdravljenja bolnikov

Nada Rotovnik Kozjek

# Izhodišča

- Prehranska podpora je paralelna terapevtka pot
- Terapija zahteva diagnozo bolezenskega stanja
- Terapijo predpišemo v skladu s smernicami
- Učinek terapije preverjamo in terapijo po potrebi prilagajamo

# Paralelne terapevtske poti



|                 |  |             |                   |
|-----------------|--|-------------|-------------------|
| Route           | food despite adequate individualised nutritional advise.<br>If patients are not able to maintain adequate oral intake from normal food, use  | C<br>A      | 2.3<br>2.3        |
|                 | • Oral nutritional supplements or<br>• Tube feeding (even in the presence of oesophageal varices)  |             |                   |
|                 | PEG placement is associated with a higher risk of complications and is not recommended.  | C           | 2.3               |
| Type of formula | Whole protein formulae are generally recommended.<br>Consider using more concentrated high-energy formulae in patients with ascites.<br>Use BCAA-enriched formulae in patients with hepatic encephalopathy arising during enteral nutrition. | C<br>C<br>A | 2.3<br>2.3<br>2.3 |
|                 | The use of oral BCAA supplementation can improve clinical outcome in advanced cirrhosis.   | B           | 2.3               |
| Outcome         | Enteral nutrition improves nutritional status and liver function, reduces complications and prolongs survival in cirrhotics and is therefore recommended.  | A           | 2.4               |

Grade: Grade of recommendation; Number: refers to statement number within the text.

# PREDLOG SLOVENSKIH SMERNIC ZA

## PREHRANO KRITIČNO BOLNIH ODRASLIH

### BOLNIKOV



REPUBLIKA SLOVENIJA  
MINISTERSTVO ZA ZDRAVSTVO  
Slovenski smernici

#### Summary of statements: Transplantation and surgery

| Subject       | Recommendations  | Grade <sup>25</sup> | Number   |
|---------------|--|---------------------|--|
| General       | Use simple bedside methods such as the Subjective Global Assessment (SGA) or anthropometry to identify patients at risk of undernutrition.<br>Use phase angle or body cell mass measured by bioimpedance analysis to quantitate undernutrition, despite some limitations in patients with ascites. | C<br>B              | 3.1<br>3.1   |
| Indication    |  |                     |  |
| Preoperative  | Follow recommendations for cirrhosis.  |                     | 3.2  |
| Postoperative | Initiate normal food/enteral nutrition within 12–24 h postoperatively.<br>Initiate early normal food or enteral nutrition after other surgical procedures.   | B<br>B              | 3.2<br>3.2   |
| Application   |  |                     |  |
| Preoperative  | Follow recommendations for cirrhosis.<br>For children awaiting transplantation consider BCAA administration.   | B                   | *Klinični center Ljubljana, Klinični oddelek za anesteziologijo in intenzivno terapijo operativnih strok |
| Postoperative | Recommended energy intake: 35–40 kcal/kgBW/d (147–168 kJ/kgBW/d)<br>Recommended protein intake: 1.2–1.5 g/kgBW/d   | C<br>C              | 3.3<br>3.3   |
| Route         |  |                     |  |
| Preoperative  | Follow recommendations for cirrhosis.  |                     |  |
| Postoperative | Use nasogastric tubes or catheter jejunostomy for early enteral nutrition.   | B                   | 3.3  |

PRIPOMOČILA ZA PREHRANSKO OBRAVNAVO  
BOLNIKOV V BOLNJIČNEM  
STAROSTNIKOV V DOMOVINAH ZA STARKEŠE  
OBČANE

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Terapijo predpišemo v skladu s smernicami

# Prehranska obravnav

Prehransko presejanje



Prehranska ocena



Prehranski ukrep

# Vnos hrani/Presnovna podpora

Spremembe v  
sestavi telesa

Presnovne  
spremembe

sarkopenija

osteoporoz

debelost

menopavza

staranje

kaheksija

# PRIPOROČILA, SMERNICE

# Prehranska podpora je presnovna podpora

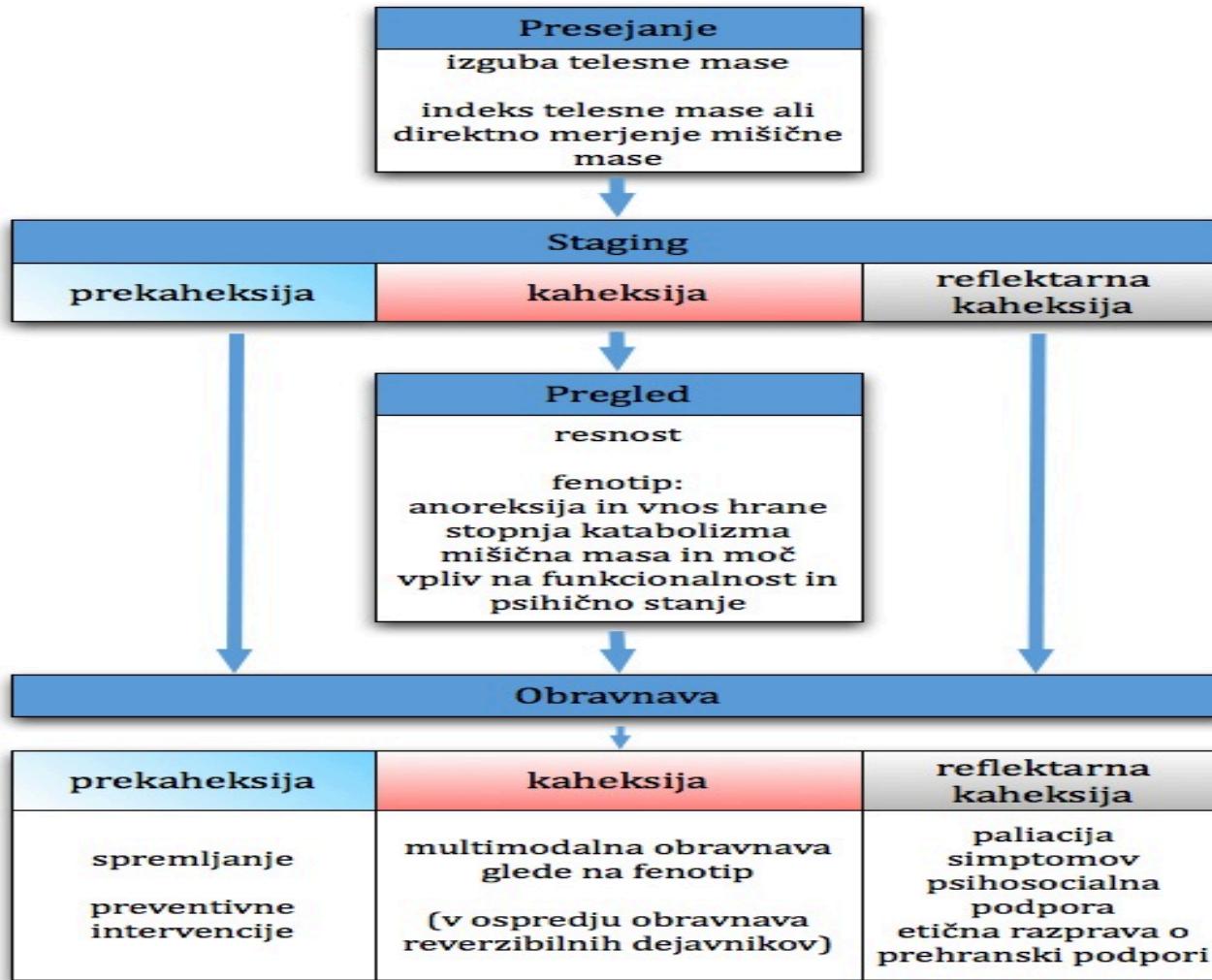
- Prehransko diagnozo
- Presnovno diagnozo

+ prilagoditev osnovnemu bolezenskemu stanju  
(bolezni organov, organskih sistemov)

**PRIPOROČILA, SMERNICE**

# PRIMER Obravnava kaheksije

Smernice 2012



Good news! After adjusting for BMI, age, smoking, activity level, history of heart disease and diabetes, race, socioeconomic status, and alcohol use, it turns out you're perfectly healthy.



**UČINEK TERAPIJE PREVERJAMO IN  
TERAPIJO PO POTREBI PRILAGAJAMO**

# PREHRANSKA MUNODEFICIENCA

MAIDS - malnutrition associated immune deficiency syndrome



INFEKTI

TERAPEVTSKI NIHILIZEM NA PODROČJU  
PREHRANSKE PODPORE  
JE ŠKODLJIV!

# Kronični bolniki imajo (več) prehranskih težav!

**Table 2**

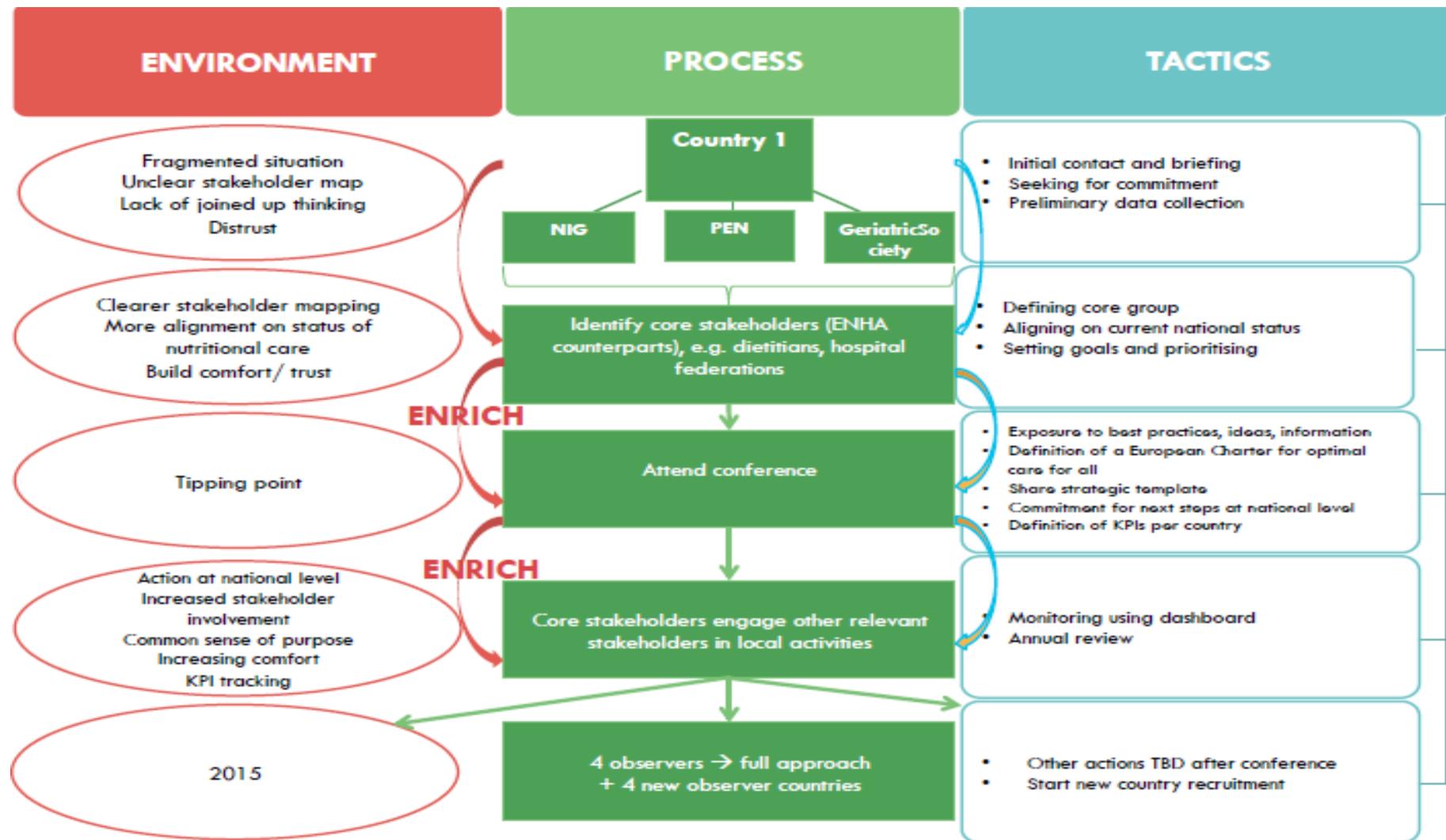
Patients' comorbidities at baseline.

| Comorbidity                 | Percent of patients with comorbidities |                                     | <i>p</i> value |
|-----------------------------|--|-------------------------------------|----------------|
|                             | Malnourished patients (n = 1000)       | Non-malnourished patients (n = 996) |                |
| Gastrointestinal disorder   | 43                                     | 11                                  | <0.0001        |
| Psychiatric illness         | 36                                     | 9                                   | <0.0001        |
| Musculoskeletal disorder    | 34                                     | 26                                  | <0.0001        |
| Pulmonary disease           | 25                                     | 19                                  | <0.005         |
| Skin disorder               | 23                                     | 7                                   | <0.0001        |
| Cancer                      | 20                                     | 12                                  | <0.0001        |
| Cardiovascular disorder     | 20                                     | 12                                  | <0.0001        |
| Oedema                      | 18                                     | 6                                   | <0.0001        |
| Benign tumours              | 17                                     | 3                                   | <0.0001        |
| Renal disease               | 12                                     | 10                                  | ns             |
| Anaemia                     | 12                                     | 4                                   | <0.0001        |
| Endocrinological disorder   | 11                                     | 6                                   | <0.0001        |
| Cerebrovascular diseases    | 10                                     | 4                                   | <0.0001        |
| Hernia                      | 9                                      | 1                                   | <0.0001        |
| Sleeping disorder           | 9                                      | 3                                   | <0.0001        |
| Diabetes                    | 8                                      | 9                                   | ns             |
| Neurological disorder       | 8                                      | 3                                   | <0.0001        |
| Haemorrhoids and fissures   | 8                                      | 0                                   | <0.0001        |
| Peripheral vascular disease | 7                                      | 0                                   | <0.0001        |
| Bone disease                | 7                                      | 4                                   | <0.005         |
| Dementia                    | 7                                      | 2                                   | <0.0001        |
| Diverticular disease        | 7                                      | 2                                   | <0.0001        |
| Gynaecological disorder     | 6                                      | 1                                   | <0.0001        |

# Zaključek

- Prehranska podpora je paralelna terapeutka pot  
**Vključitev v medicinsko obravnavo**
- Terapija zahteva diagnozo bolezenskega stanja  
**Znanje prehranskih in presnovnih diagoz**
- Terapijo predpišemo v skladu s smernicami  
**Jih imamo in jih vključimo v obravnavo bolnika**
- Učinek terapije preverjamo in terapijo po potrebi prilagajamo

# ONCA –STROKOVNA PLATFORMA



“.... it is almost astonishing to find  
that health professionals in a  
modern society are incapable of  
providing one of the basics of care  
– the provision of food”

*Ljungqvist O*  
*Clin Nutr 2002; 21(6)449*