

Fighting malnutrition, The Dutch approach

Hinke Kruizenga, PhD RD

Project leader Dutch Malnutrition Steering Group



Content

- **PAST** - What has been achieved?
- **PRESENT** - The current situation
- **FUTURE** - Future plans and ambitions

The Dutch Malnutrition Steering Group

MALNUTRITION KNOWLEDGE CENTRE

The Malnutrition Steering Group is the multidisciplinary knowledge centre for the awareness, prevention, identification and treatment of malnutrition.

MISSION: to reduce the occurrence and burden of malnutrition in the Netherlands

Our **mission** is to coordinate the collaboration between stakeholders and to initiate activities to reduce malnutrition, in particular in children, chronically and acutely ill and older persons.

VISION:

The prevention and treatment of malnutrition are an integral part of the intra-, trans- and extramural health care in the Netherlands.



AIM: The Malnutrition Steering Group is committed to reduce the prevalence of malnutrition with 3-5% in the next 5 years within all sectors.

Board of Dutch Malnutrition Steering Group

Independent Chair - Eeke van der Veen, former member Dutch parliament



Finances – Martin Bontje, former chair of board of largest Dutch Insurance company



Member – Koen Joosten, pediatrician and member DMG since founding in 2005, NESPEN board member



Member – Aldwin Vriesema, MNI



Projectleaders and sections

Section older persons



Section acute and chronically ill



Scientific advisory board



Section kids



PAST – What has been achieved?

- Malnutrition is recognised as an important health care problem
- Malnutrition has become a mandatory quality indicator for Dutch health care
- New malnutrition guidelines, tools, validated quick and easy screening followed by in-depth diagnostics by the dietitian
- Malnutrition has become an official indication for reimbursement of medical nutrition in the basic health insurance

Time line activities DMSG

2006-2009	Hospitals
2008, 2011	Nursing homes
2008-2011	Home care and General Practice
2012	Rehabilitation clinics
2013	Hospital outpatient clinics
2014	Continuing care after hospital discharge
2016	Focus on community dwelling older persons

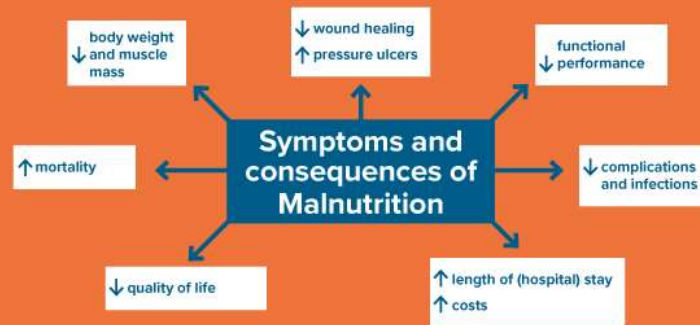
The Dutch approach in 10 steps

1. Raise a multidisciplinary steering group, which represents all disciplines involved in screening and treatment of malnutrition and which has authority
2. **Create awareness** for the problem of disease related malnutrition by **collecting prevalence data**
3. **Quick and easy screening tools**, connected to a treatment plan
4. Screening as a **mandatory quality indicator**
5. Evidence based, validated tools and cost-effectiveness research
6. Ministry of Health as a key stakeholder to strengthen the message
7. Implementation projects in all health care settings:
 - Start pilot projects to implement screening and treatment of malnutrition in.
 - Evaluate and adjust where necessary
 - Use the field to **develop tools and a toolkit**
 - **Disseminate the project over more institutions and organizations.**
 - Make sure projects team are multidisciplinary and have authority
 - A website to communicate between participating teams and organizations with
8. Toolkits with tools, ready-to-use presentations and best practices, downloadable, **free accessible to everyone**
9. **Multidisciplinary project teams** in all institutions
10. Training programs and workshops

Creating awareness – e.g. online fact sheet

MALNUTRITION IS A MAJOR ISSUE

Not everyone is able to eat and drink well. Malnutrition can be the result of an extended period of insufficient eating and drinking caused, for example, by a loss of appetite or taste, problems with chewing or swallowing, illness, or loneliness. Malnutrition has negative consequences for recovery from illness and for a person's general health status, as shown in the figure below.



How prevalent is malnutrition?

Malnutrition occurs at all ages. Recent research by the Malnutrition Steering Group shows that at hospital admission, 15% of patients are screened as 'malnourished'. In children, 19% are screened as malnourished. Among adults, malnutrition is more common in older adults, both in hospitals and at home. One out of ten community-dwelling older persons is malnourished. This percentage increases with increasing age to 15-20% in persons over 75 y. In the group of community-dwelling older adults with home-care, even one-third is malnourished. The National Prevalence Measurement of Quality of Care (the LPZ) recorded in 2014 that 17% of nursing home residents are malnourished. If no action is taken, the number of malnourished community-dwelling older persons is expected to rise in the next few years, as older people tend to live at home for longer.

What are the costs of malnutrition?

The total cost of disease-related malnutrition in the Netherlands amounted to nearly € 2 billion in 2011. Recent research by the Malnutrition Steering Group covering more than half a million hospital patients documented a 1.4 day longer hospital stay for patients that were malnourished when admitted to hospital.

REFERENCES:

- SEO-report no. 2014-11 Malnutrition is underestimated (report in Dutch)
- Freijer K. e. a. The economic costs of disease related malnutrition. Clin Nutr 2013; 32: 136-141
- Krulzenga HM e.a. Undernutrition screening survey in 564,063 patients: Patient with a positive under-nutrition screening score stay in hospital 1.4 day longer. Am J Clin Nutr. 2016; (Mar 9)
- Schlip J. High prevalence of undernutrition in Dutch community-dwelling older individuals. Nutrition 2012; 28: 1151-1156

- Complexity of the problem of malnutrition
- Prevalence
- Costs of malnutrition

SNAQ tools - quick and easy screening by the nurse followed by in-dept diagnostics by the dietitian

Translated in 6 languages:

English, French, German, Spanish, Italian and Portuguese

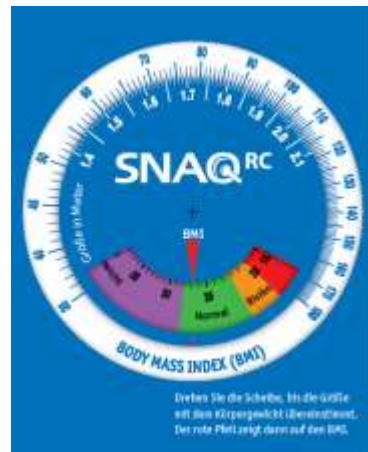
Available on: www.fightmalnutrition.eu

SNAQ
Breve cuestionario de evaluación nutricional

www.fightmalnutrition.eu

- Ha perdido peso intencionalmente?
Más de 6 kg en los últimos 6 meses
Más de 3 kg en el último mes
- Se ha reducido su apetito en el último mes?
- Ha recibido alimentación por sonda o tomado bebidas complementarias en el último mes?

● Ninguna acción
●● Malnutrición moderada; intervención nutricional
●●● Malnutrición severa; intervención nutricional y tratamiento dietético



Stellen Sie diese Fragen

Haben Sie ungewollt Gewicht abgenommen?

- mehr als 6 kg in der letzten 6 Monaten
- mehr als 3 kg im vergangenen Monat

Berätigen Sie Hilfe beim Essen?

Hatten Sie im vergangenen Monat weniger Appetit?

Messen Sie den BMI

BMI unter 20 ist rot

BMI von 20 bis 22 ist orange

BMI von 22 bis 28 ist grün

BMI über 28 bedeutet Übergewicht

Gesamtscore Fragen + BMI

● + ● = ●●
● + ● = ●●
● + ● = ●●●
● + ● = ●●
● + ● = ●●

SNAQ⁶⁵⁺

1	Perdita di peso	meno di 4 kg	4 kg o più
2	Circonfenza del braccio	25 cm o più	meno di 25 cm
3	Appetito e funzionalità	un buon appetito e/o buona funzionalità	poco appetito e funzionalità ridotta
4	Politica di trattamento	nessun problema nutrizionale	rischio di malnutrizione

Piano per fasi

Screening as a mandatory quality indicator

On going collection and feedback of malnutrition data by the Dutch Health Care Inspectorate

- In-hospital
 - % of malnourished patients with sufficient protein intake on day 4 of hospital admission
- Outpatient
 - % of screened patient at the geriatric and surgical outpatient clinic

Undernutrition screening survey in 564,063 patients: patients with a positive undernutrition screening score stay in hospital 1.4 d longer¹

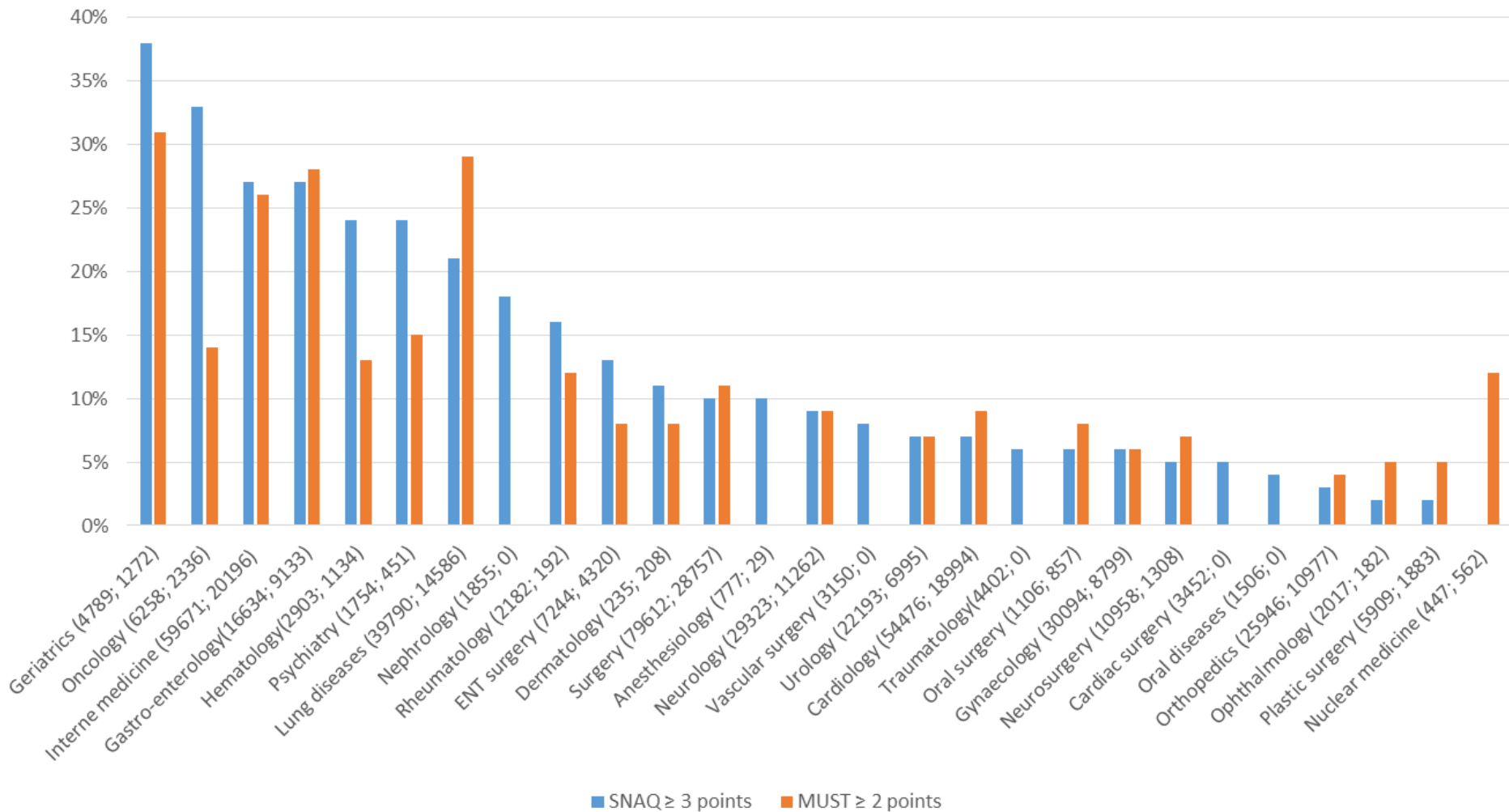
Hinke Kruijzenga,^{2,3,10} Suzanne van Keeken,² Peter Weijs,³ Luc Bastiaanse,^{2,4} Sandra Beijer^{2,5} Getty Huisman-de Waal,^{2,6} Harriët Jager-Wittenaar,^{2,7} Cora Jonkers-Schuitema,^{2,8} Mariël Klos,^{2,9} Wineke Remijnse-Meester,^{2,10} Ben Witteman,^{2,11} and Abel Thijs^{2,3}*

Am J Clin Nutr. 2016 Apr;103(4):1026-32.

- N= 564,063 patients
- 80% screened
- 1 out of 7 (14-15%) scored malnourished at admission
- Malnutrition most prevalent at geriatrics, oncology, gastroenterology, internal medicine
- Hospital stay 1.4 days longer in malnourished patients

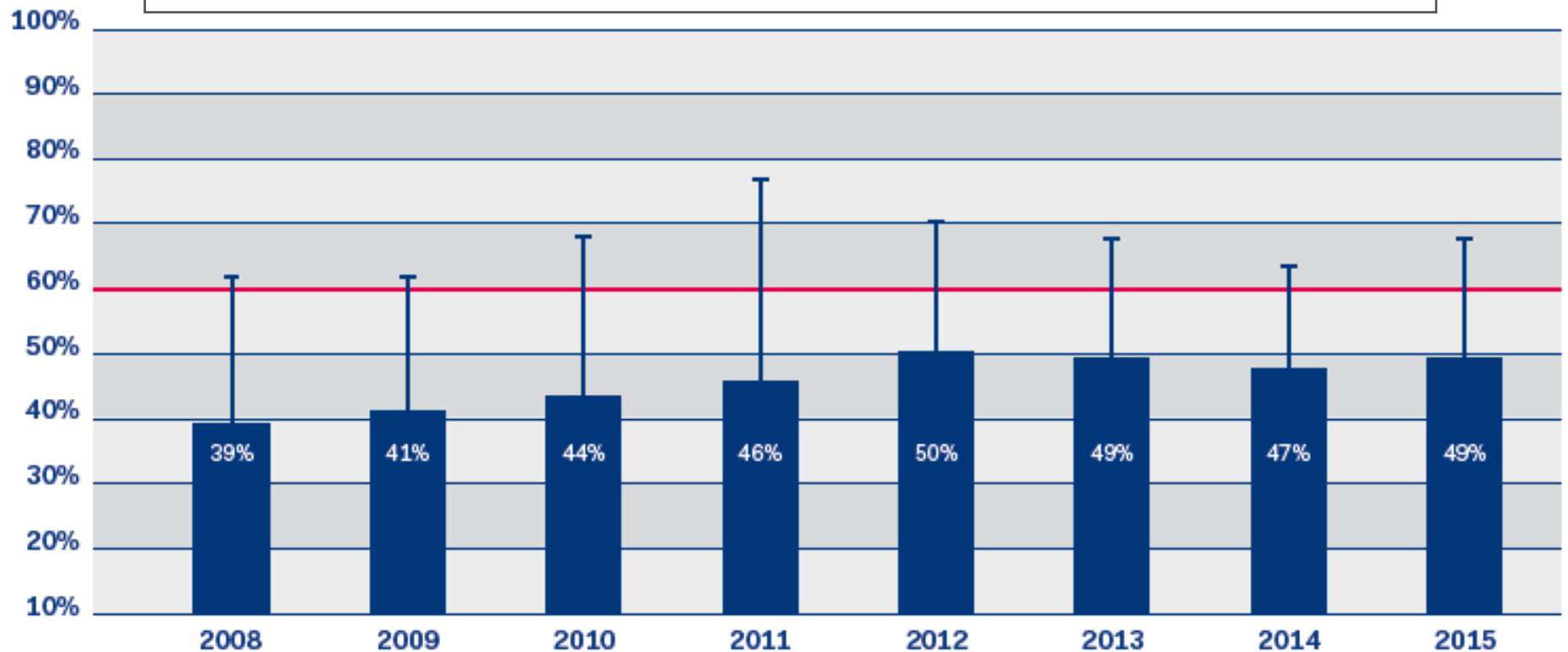
Positive SNAQ / MUST at admission

Percentage "screening result undernourished" per medical specialty



Quality indicator: protein requirements on the 4th day of admission in malnourished patients

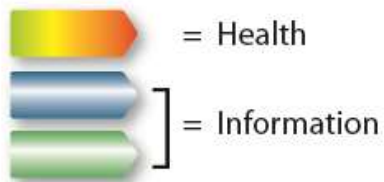
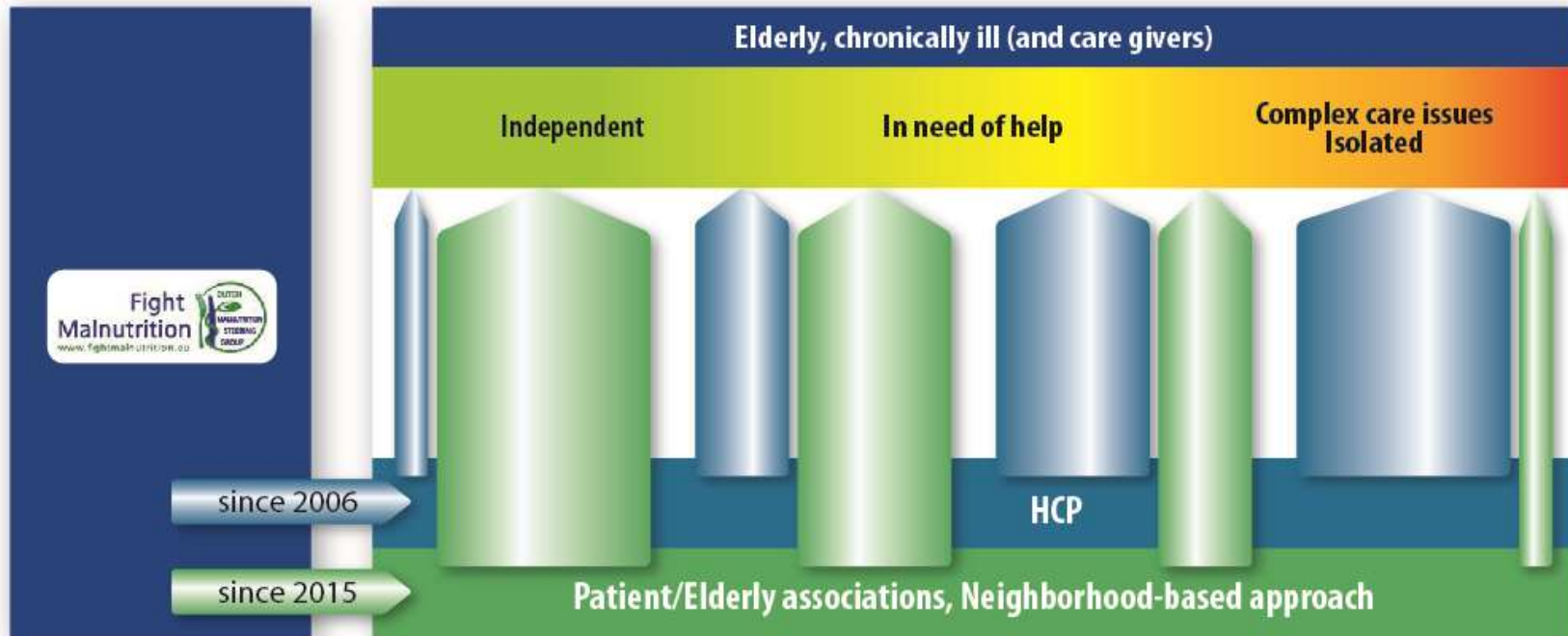
Mean of all Dutch hospitals:
50% of patients reaches 1.2-1.5 g P/kg on the 4th day of admission



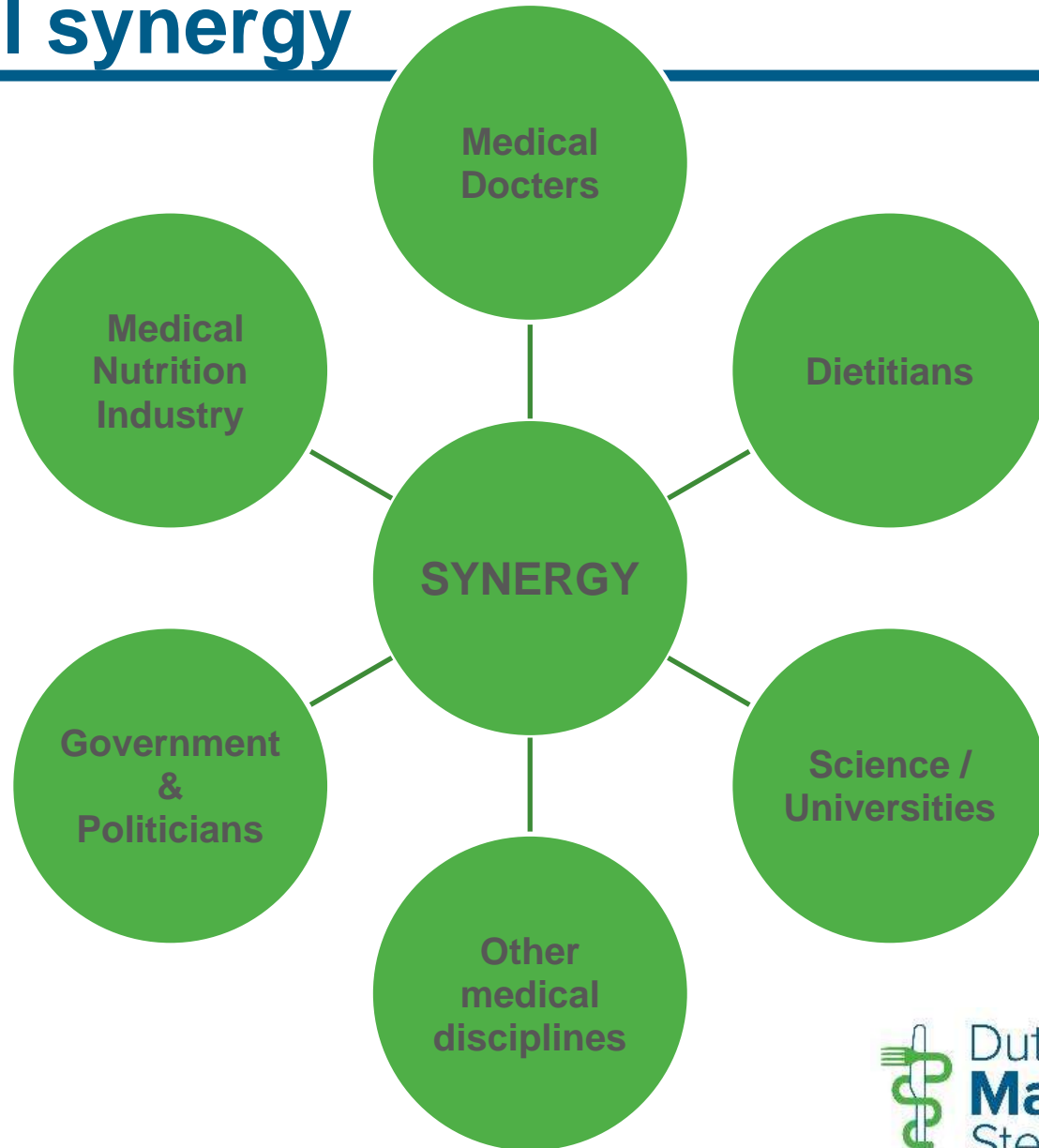
Future plans of the Dutch Malnutrition Steering group

- Maintaining the quality indicators and analyse and report on the results
- Focus on diagnostics and integration of nutritional treatment in total medical treatment
- Strengthening the chain of care
- Improvement in the basic education of (clinical) nutrition for medical doctors and nurses
- National information campaign on malnutrition for older adults and family care givers
- Sharing knowledge and experience in Europe

Focus on the community-dwelling older person



Fighting malnutrition together: finding the optimal synergy



More information: www.fightmalnutrition.eu

Info@fightmalnutrition.eu

The screenshot shows the homepage of the website. At the top, there is a navigation menu with links for Home, Fight Malnutrition, Malnutrition, Hospital, Nursing homes, and Home care. Below the menu is a banner image showing various healthcare settings. The main content area is divided into several sections:

- Latest news:** Three news items are listed, each with a date and a brief description. The first is dated 14 August 2013 and discusses mandatory screening for malnutrition in hospital outpatients. The second is dated 28 July 2013 and discusses malnutrition guidelines. The third is dated 28 July 2013 and discusses systematic screening for undernutrition in hospitals.
- Short overview:** A section providing a brief overview of the website's content and the combined efforts of Dutch healthcare providers to fight malnutrition.
- Fighting malnutrition:** A section discussing the importance of sharing knowledge and the unique challenges of fighting malnutrition in different European countries.
- In the fight against malnutrition:** Three sub-sections are provided: Hospitals, Nursing homes, and Home care, each with a brief overview of the prevalence of malnutrition and the challenges of screening and treatment in that setting.

At the bottom left, there is a contact link. At the bottom right, there is a search bar and a search button.