Early Detection of Malnutrition in Community Dwelling Older People, an Evidence Based Integrated Care Approach

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Introduction: Malnutrition is an increasing problem among community-dwelling elderly and reported prevalence data are up to 50% 2. Malnutrition is associated with depression, lower cognitive and functional status, infections, comorbidities, a higher use of home care facilities and mortality 3, 4.

In older community-dwelling people malnutrition may result from poor appetite, difficulties with chewing, swallowing or tasting, wrong food choices, psychosocial problems loneliness, mourning, financial problems low budget and/or may be associated with disease 6. Malnutrition increases the costs of healthcare 7. At a European level malnutrition is estimated to cost healthcare systems €170 billion/y 8.

In this study we will develop risk profiles for malnutrition which are sensitive on individual patient level. Based on these profiles malnutrition risk screening can be applied more effectively.

Methods:

1- A systematic review of the literature on of interventions to optimize nutritional status in older patients.

2- Prognostic modelling using the data filled out by 2000 older adults themselves at www.goedgevoedouderworden.nl, on risk factors for malnutrition SCREEN and malnutrition SNAQ65+ will provide up-to-date Dutch data.

3- Developing risk profiles and implement these through internet and social media.

Results: The risk profiles fit the in the framework of the Population Screening Act WBO and are to be used for policy purposes and both the prognostic and diagnostic sets of patient characteristics with a predictive value for malnutrition are to be used by professionals and older community dwelling people and their informal care givers. This contributes to detect
malnutrition in the older community dwelling population before there are consequences of the malnutrition.

**Conclusion:** The use of tools to screen for malnutrition increases the recognition of malnutrition by 30% 9. While screening is important for the prevention and consecutive treatment of malnutrition, screening takes place in only a quarter of home care clients, which indicates that this activity is not yet standard of care 2.

**Lessons learned:** Narrowing down malnutrition screening to those at higher risk could be an effective intervention to increase malnutrition awareness, screening and treatment in the community. Using risk profiles that indicate older adults who are at risk of development of malnutrition in future, may prevent malnutrition at an earlier stage. Health care resources will be better used when healthcare professionals GP’s, GP practitioners, home care and district nurses limit malnutrition screening to the higher risk population, herewith decreasing workload and increasing sensitivity of screening.

**Limitations:** To increase reliability of screening for malnutrition in community-dwelling elderly the use of screening instruments validated for individual patients is necessary. However, the currently mostly used screening tools like SNAQ65+ 10 or MNA-SF 11 are validated on population level and not on individual patient level. Moreover, these tools identify patients who are already malnourished, while screening for risk factors may lead to earlier identification of those who will become malnourished in the future.

**Suggestions for future research:** Behaviour change intervention target groups in the society as implementation research.

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**Keywords:** detection; malnutrition; community dwelling; older people