A step forward in the fight against malnutrition

Improving home nutritional therapy in Switzerland



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The Swiss Society for Clinical Nutrition (SSCN/GESKES) requested the reimbursement of medically indicated oral nutritional supplements at home - with success.

There is scientifically sound evidence that oral nutritional supplements (ONS) / sip feeding is an effective mean to combat malnutrition: it is cost-effective, causes few complications, improves the quality of life and, most importantly, allows an early treatment of malnutrition. A complete overview of the evidence base was given by the MNI-Dossier «Tackling Malnutrition. Oral nutritional supplements» in the year 2010
Despite these convincing arguments and the significant health and economic consequences of malnutrition, sip feeding at home was not covered by the compulsory health insurance in Switzerland, even if the patient was malnourished and had a medical indication, e.g. an underlying severe disease. In contrast the costs of enteral and parenteral tube feeding were fully reimbursed by the health insurers.

Nationwide studies estimated the effect of malnutrition and

Multidisciplinary project meeting

With representatives of industry, home care service, health insurances and health system

Health economics analysis

Economical development with or without reimbursement of ONS at home were calculated

Literature review

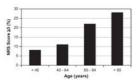
Scientific evidence of the effectiveness, appropriateness and cost-effectiveness of ONS

Request of regulatory change

Prove that reimbursement of ONS at home in Switzerland are effective appropriate and cost-effectiveness

Develop evidence base

2003-2005

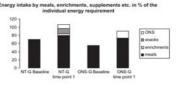


In a large cohort of 32'837 patients, the prevalence of malnutrition in Swiss hospitals was estimated using NRS-2002: Overall, 18.2 % were classified as severely malnourished or at high risk for malnutrition. There was an age-dependent distribution of the NRS-2002 (Fig).

Imoberdorf et al. Clin Nutr 2010: 20: 38-41

2005-2009

Effectiveness of nutritional intervention

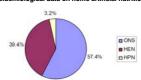


In a randomized controlled trial the impact of nutritional therapy was studied in undernourished hospital patients. One group received individual nutritional

counseling (NT group). The other group received only oral nutritional supplements without further instruction (ONS group).

Both nutritional interventions resulted in increased energy (Fig) and protein intakes. QoL improved in both groups during the hospital stay. Rüfenacht et al. Nutrition 2010; 26: 53-60

2010



The retrospective study recorded all new cases (12'917) of home artificial nutrition (HEN=home enteral nutrition, HPN=home parenteral nutrition) during four years.

This first analysis of home artificial nutrition showed that approximately half of the patients received ONS (Fig). ONS was clearly the least expensive form of artificial nutrition amounting to EURO 188 / month. Shaw et al. Ann Nutr Metab 2013; 62:205-211

Multidisciplinary project meeting

A multidisciplinary project team was built with members of different organisations

- multidisciplinary project team was built with members of different organisations:
 Food industry: President of the Federation of the Swiss Food Industries;
 Home care service: Head of the largest supplier of ONS in Switzerland
 Health insurances: Head of the department of home artificial nutrition of the Swiss association for joint
 responsibilities of health insurers (SVK)
 Public health sector: Medical doctor and dietician (both members of the GESKES)
- Scientific assistant

- Activities of the multidisciplinary project team
 To represent the current situation in Switzerland in regard to home artificial nutritional therapies
 To estimate future developments of home artificial nutrition with or without the requested regulatory change
 To find a solution how misuse of ONS can be avoided and how the expansion of the range of ONS products can be prevented (flow chart)

Persons, who have a significant influence over the decision of reimbursement were sensitized for the

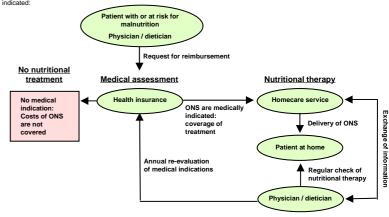
- Persons, who have a significant influence over the decision of reimbursement were sensitized for the importance and the consequences of the request:

 Prof. Peter E. Ballmer held a short presentation to the Federal Commission of Nutrition (EEK). Members of the commission include representatives in the area of nutritional and food sciences, nutritional medicine, the food industry, the cantonal enforcement authorities and consumer organisations. The commission is a body supporting the federal government and acts in an advisory capacity.

 Several members of the Federal Commission of General Services (ELGK) were contacted and personally informed about the benefit of reimbursement of ONS. The ELGK is an important commission for the reimbursement of medical services. If the commission judges a medical service as effective, appropriate and cost-effective, this medical services is included in the compulsory health insurance.

 Before submission of the request, the documents were shown to a renowned expert in the area of cost-effectiveness of medical services. The expert is a member of the alliance of the health insurers.

The multidisciplinary project team prepared a flow chart to ensure that ONS are only reimbursed, when they are medically



Health economics analysis & literature review

Initially, tube feeding at home (comparator) was covered by the compulsory health insurance, but not the initially, tube reeding at nome (comparator) was covered by the compulsory neatm insurance, but not the service of spi feeding at home (requested service). Patients often need to be fed by tube feeding due to their disease. However, there are patients in which both artifical feeding types are possible. Due to the different regulations in regard to the reimbursement, many patients initiate the invasive and costly tube feeding at hon or refrain an adequate treatment of their malnutrition:

Average treatment costs of sip and tube feeding in Switzerland were calculated

- Total extra costs of the unnecessarily tube feeding were calculated
- Additional costs due to the expected increase in prescribed sip feedings at home were calculated Indirect costs caused by malnutrition in Switzerland were estimated

ONS are an effective mean to ons are an elective mean to increase energy and protein intake. They reduce mortality and complications in elderly, hospitalised and acutely-ill patients. Furthermore, it is likely that ONS are associated with furching benefits.

Appropriateness
ONS can be regarded as a safe intervention as no trials show significant adverse effects. There may be minor gastrointestinal symptoms.

Tube feeding is more than twice Tube reeding is more than wice as expensive as sip feeding. Costs arising from reimbursement are largely covered by direct cost savings within five years. In the long term additional cost savings

Supporting literature for the evidence base: MNI (ONS-Dossier): Tackling Malnutrition, Oral nutritional supplements

Implementation

The reimbursement of medically indicated ONS at home by the compulsory health insurance is critically important for the good of the patient and cost-minimization. This is particularly true in a longer term view considering the demographic trends in industrialised western countries.

Upon approval we expect following benefits:

- Reduction of hospital costs
 Cost savings by replacing expensive tube feeding at home 3. Reduction of indirect costs caused by malnutrit
 - 4. Elimination of an unfair cost burden for the patient

Request of regulatory change

After establishing a scientifically sound evidence base (2003-2010), the request was prepared within one year (2011). During this period a multidisciplinary project team was formed, literature was reviewed and health nalysis was performed.

Most of the work was done voluntarily. Funding for the scientific assistant, who was coordinating and collecting all necessary information for the request of the regulatory change has been generated

In August 2011, the reimbursement of medically indicated ONS at home was successfully requested from the Federal Department of Home Affairs FDHA. Since July 2012, medically indicated sip feeding at home is covered by the compulsory health insurance provided that a medical diagnosis according to the guidelines from de Society for Clinical Nutrition Switzerland (SSCN/GESKES) is given.

What makes this initiative innovative?

The multidisciplinary approach and the robust evidence base is, what made this initiative successful. Switzerland is one of the only countries in Europe, in which the government could be convinced that ONS at home are cost-effective.

The strategy of the present initiative can and should be adopted by other countries. Currently, the GESKES is in exchange with the German Society for Nutrition Medicine (DGEM) and the Austrian Society for Clinical Nutrition

Key achievements and future plans

Key achievements

Although it is too early to assess the benefit of reimbursement in terms of health outcomes, ongoing collection and

- Although it is too early to assess the benefit of reimbursement in terms of health outcomes, ongoing collection and feedback of artificial nutrition data show a clear change in clinical practice since July 2012:

 Total artificial nutrition therapies increased from 6'071 cases in 2011 to 11'150 cases in 2013. The impressive increase is attributable to an increased use of sip feeding (increase of 146%). In contrast, the service of tube feeding decreased slightly (decrease of 7%). As expected, no change in parenteral nutrition therapies occurred.

 Despite the increase in total nutrition therapies, total costs for artificial nutrition therapies decreased from CHF 25'307'905 in the year 2011 to CHF 22'815'237 in the year 2013.
- Misuse could be prevented by the strict and well defined guidelines for reimbursement.

- Analysis of the epidemiological data of home artificial nutrition will be repeated to assess changes in terms o nutritional therapies (distribution, length and costs of home artificial nutrition in Switzerland since July 2012) Swiss Federal office of Public Health will be invited to repeat their analysis on the impact of malnutrition in
- Switzerland. This will enable to assess the benefit of reimbursement in terms of health outcomes