Results: During this period, 157 patients (73 males and 84 females) with a mean age of 55 years (18-89 years) were evaluated. On admission, the mean body weight was 72 kg (38-160 kg), BMI 25 kg/m²(16-52) and gripstrength dynamometry 29 kg (6-58). SGA was estimated to be A in 60%, B in 19% and C in 21%. There was a significant correlation between the SGA status and the values of the hand grip dynamometry. The parameters associated with a SGA (B or C) were a low muscle and fat man, an older age, a low body weight, a previous weight loss >10% and the presence of a malignant disease and an hepatic or pancreatic disease.

**Conclusions:** The prevalence of malnutrition reached 40% in patients hospitalized for GI diseases. The SGA was significantly correlated to the muscle function. The loss of weight (>10%) was more accurate than the BMI values for scoring malnutrition.

#### ${\bf 362\text{-P.}}$ INCIDENCE OF NUTRITIONAL RISK IN A UNIVERSITY HOSPITAL

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Rationale: The screening of the nutritional risk (NR) at admission is considered the first step for an adequate prevention of the in-Hospital malnutrition. Worsening of nutritional status during hospitalisation may be, in part, a consequence of a poor Food Service System. This study was undertaken to evaluate NR and the need of specific regimens during hospitalization.

Method: The 13 Depts (300 beds) of the Turin University Hospital (1350).

Method: The 13 Depts (300 beds) of the Turin University Hospital (1350 beds) that more frequently request the Clinical Nutrition Team advice were considered. The NR screening of the Nottingham University Hospital was applied by Dietitians to all consecutive pts (n 478) admitted during a 3-weeks period; they moreover evaluated the pt need for a specific diet instead of the regular hospital diet.

**Results:** are reported (median, range) per each Dept as: n (number of pts); y: age in years; NR: score 0-2,3-4,<sup>3</sup>5 (%); RF: pt on regular food (%). Internal Medicine: n 80; y:60(17-83); NR:22,43,35; RF:60. General Surgery: n 84; y:60(19-92); NR:61,24,15; RF:66; Emergency Surgery: n 38; y:63(21-85); NR:37,42,21; RF: 80; Gastro-Epatology: n 46; y:59(29-87); NR:0,26,7 (67% not valuable); RF: 30; Nephrology and Dialysis: n 39; y:603(17-83); NR:41,8,13 (38% not valuable); RF: 82; Neurology: n 58; y:61(14-86); NR: 48,39,13; RF: 72; Radiotherapy: n 27; y:70(37-86); NR:0,11,89; RF: 77; Oncology: n 22; y:62(22-83); NR:9,5,86; RF: 87; Coronary Care Unit: n 39 y:64(45-83); NR:100,0,0; RF: 96; Psychiatry: n 25; y:44(23-82); NR:68,8,15; RF: 80; Rheumatology: n 11; y:50(19-71); NR:54,36,9; RF: 80; Pneumology: n 9; y:56(39-79); NR:22,33,45; RF: 80.

Conclusions: Oncology, Radiotherapy and Internal Medicine Depts show the higher scores of NR. In Epatology and Nephrology Dept this screening tool is poorly useful. The need for specific regimens is overall 20%, but higher in the Gastro-Epatology Dept.

#### 363-P. DOES TUBE FEEDING AFFECT HOSPITAL MORTALITY

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Rationale: Naso-gastric (NG) and gastrostomy (PEG) feed are frequently used to treat malnutrition in hospital patients. Our aim was to prospectively determine clinical outcome.

Table 1

| Feed group (n. pts) | Died     | Median age | Mean days NBM | Mean days to feed |
|---------------------|----------|------------|---------------|-------------------|
| No feed (11)        | 6 (55%)  | 73         | 3.9±1.1       | N/A               |
| NG≤2days (23)       | 12 (52%) | 73         | $2.6 \pm 0.8$ | $14 \pm 4.5$      |
| NG>2days (46)       | 20 (43%) | 72*        | 2.7±0.5*      | $17 \pm 3.3$      |
| PEG only (18)       | 5 (28%)  | 70.5       | 4.6±2         | 25±5.4            |

**Method:** All enterally fed patients (not intensive care) were identified over 5 months. Malnutrition risk (MR) was defined by BMI≤20 or score giving high MR on validated nutrition screening tool (Burden 2001).

**Results:** 98 were recruited (62M), median age 72 (range 21-96) yrs. Diagnoses were 27 CVA, 17 surgical, 10 renal, 7 alcohol-related, 12 respiratory, 25 other medical. Malnutrition screening took place in 77 patients; 63(82%) were at risk.

18(18%) had a PEG directly (9 did not tolerate tube); 11(11%) received no nutritional support (6 did not toleratetube, 5 unclear/other) and 69(70%) received standard overnight NG feed.

\*Mortality was positively related to age and days NBM in patients fed > 2 days (Mann W p $\le$ 0.05) but was not predicted by no. days fed (chi² p=0.54). Mortality in NG fed patients >65 yrs was 53.8% (28/52) vs 8.5% (302/3535) in unselected admissions >65 yrs (during study period).

In another 94 unselected medical patients >65 yrs, mortality in those with MR was 39.4% (13 died/33 at risk).

**Conclusions:** Patients selected for NG feed have higher mortality than both the hospital population and all patients with MR. Feeding does not reduce mortality in these patients. This suggests that illness severity is an influential factor in the decision to feed. Guidelines in patient selection are urgently required to ensure maximum benefit and appropriate resource allocation.

## 364-P. STUDY OF THE DIRECT COSTS OF HOSPITALIZATION IN A PARENTERAL NUTRITION WARD: IS THE FINANCING

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Rationale: Valorization of the activity of parenteral nutrition is not judge appropriate by the health professionals. The objectives are of the study is to measure the direct cost of the hospitalizations in a parenteral nutrition ward and to compare it with the national reference costs.

Method: A 3 months prospective study was carried out, among all inpatients of this ward in Lariboisi re hospital (Paris). For each stay, the consumptions and the expenditures of care (wages, examinations, drugs) were assessed. Hospital case mix was used. From this case-mix and the data of the french National Scale of Costs, it has been possible to calculate the standard direct costs and to compare it (student test, level of signification: 0,05) with observed direct costs. A study of sensitivity was undertaken (variation of wages and length of stay). The nursing care activities (indicator SIIPS) were measured among patients of the study and among a sample of patients hospitalized without parenteral nutrition.

Results: Our study is composed of 77 inpatients. The average lenght of stay is higher (4 days) than the national reference, the average age is lower of 11 years. The average cost of a stay is 60% more expensive than the national reference. The significant overcosts is on the non medical staff costs, and on the medical consumables costs. The overcost on wages of nurses is partly explained by the results of the indicators of nursing activities.

**Conclusions:** In the perspective of a financing of each hospitalization based on french Diagnosis Related Groups, a complementary financing seems necessary for the activity of parenteral nutrition.

# 365-P. ATTITUDES OF NUTRITION NURSE SPECIALISTS (NNS) TOWARDS TELEMEDICINE (TM) IN HOME PARENTERAL NUTRITION (HPN) IN THE UK

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Rationale: To analyse the attitudes of NNS towards use of TM in HPN. Method: As yet few centres in the UK have used TM to support HPN patients. Seven NNS in 7 different hospitals in the UK, taking part in a randomised controlled trial of TM in HPN (1) were contacted. A telephone questionnaire was administered which included logistical questions about TM and included a free section which enabled responders to express their opinion and relevant experiences.

Results: Five of the centres had TM access for over 2 years, and all of the TM terminals were located in a private office. The numbers of TM calls made and received per month ranged from 0-2 and only one of the centres used TM to contact the HPN provider. Three of the NNS felt TM enabled them to improve their service, and 6 felt TM had clinical benefits for patients. Only 2 of the NNS disliked TM with 6 thinking it has more benefits than telephone contact alone. Just over half (4) felt that TM reduced outpatient visits, but it didn't save them time. Six of the nurses said that if they were the patient they would like the option of access to TM. All of the nurses felt confident using the technology.

**Conclusions:** Our sample consists of opinions of nurses who are familiar with using TM in clinical practice. Although the data suggests that the estimated number of TM calls made or received was relatively low, this study has highlighted that the NNS using this technology feel that TM has many positive aspects.

(1): Chambers et al. Clin Nut 2002

### 366-P. THE NUTRITIONAL GAP BETWEEN ICU AND GENERAL HOSPITAL WARD

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Rationale: Nutrition protocols have been implemented in most intensive care units (ICU's). However, little is known about the continuation of nutritional care after transferral from the ICU to the general hospital ward. The objective of this study was to investigate nutritional care after transfer.

**Method:** Interviews were held with disciplines involved in the care for patients before and after transfer from the ICU. Using the information obtained from these interviews, a checklist was compiled which was then used to observe the patient transfer process during a 7-day period: 1 day before and 6 days after transfer. The difference between energy-intake and energy needs was used as an indicator of quality of the transfer process. Indirect calorimetry was performed once, before transfer, to determine energy-needs.

Results: From the interviews it was concluded that the policy of nutritional care after transfer was unclear and that a protocol was lacking. 9 ICU patients were observed. In all cases the patients received enteral tube feeding during their stay at the ICU. In 3 of 9 cases enteral feeding was discontinued on the general ward. These patients showed a decrease in energy intake resulting in an energy-deficit of more than 80%. No dieticians were involved in the transfer process. For 2 of 9 patients a dietician was consulted afterwards on the hospital ward.

Conclusions: This study showed an inadequate quality of continuing nutritional care after transfer from the ICU to general hospital ward. Often there was a discontinuation of enteral feeding and consequently an inadequate energy intake in transferred patients. A recommendation to involve dieticians in the planning and supervising of the transfer process has been made as a result of this study.

### 367-P. MANAGEMENT OF HYPOALBUMINEMIA IN HOSPITALIZED PATIENTS

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Rationale: Indications for serum albumin (SA) in septic and critical patients are criticized, but in cases of burns, malnutrition, and ascitis this therapy is less controversial. In a retrospective study aiming to identify patterns of SA therapy, total consumption of SA in a 180-bed hospital was analysed.

Method: Prescriptions of SA in the Intensive Care Unit (ICU), for patients

submitted to parenteral nutrition (TPN), as well as for other purposes were tracked during a 3-month period. Each unit of SA had 12.5 g. During that period 24 patients underwent TPN and 193 were admitted to the ICU.

**Results:** Principal indication for albumin therapy was hypoalbuminemia with edema. A total of 921 units was delivered of which 492 (53.4%) to the ICU, 74 (8.0%) to surgical theaters and recovery rooms, 62 (6.7%) to TPN

cases, and the remainder to other hospital services. Nominal per capita use for ICU and TPN patients was similar (approximately 2.5 units/subject) and the same was true for actual administration (0-18 units/patient). No patient received SA inside TPN bags.

**Conclusions:** 1) Numerically ICU cases were the major recipients of SA, but global consumption was restricted; 2) Per capita volume was not different from that of TPN subjects; 3) SA treatment was never a routine during TPN.

#### **368-P.** ORAL NUTRITION SUPPLEMENTS USE IN AN IRISH COMMUNITY

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Rationale: A review of the General Medical (Payments) Scheme (GMS) data in the Midland Health Board (MHB) Ireland identified a spend of just over Euro 1/2 million on enteral nutritional supplements (oral and tube feeds) in an 11 month period in 1998. In 2000, a soaring figure of Euro 5 million was reported as the annual spend (oral & tube feeds).

Reasons for escalating costs needed investigation.

Research has shown that a high proportion of Oral Nutrition Supplements (ONS) are inappropriately prescribed by primary care practitioners (Gall et al, 2001).

The role of General Practitioners (GPs) and Public Health Nurses (PHNs) in prescribing ONS to patients aged 65 years and older was examined.

**Method:** A cross-sectional study was conducted among 99 GPs and 120 PHNs in the MHB. All GPs were selected to participate. 50% (60) of PHNs were randomly selected. A structured, piloted telephone questionnaire was administered to each subject over a two-week period.

**Results:** 78% of GPs and 47% of PHNs reported an increased use of ONS in the last 4 years. 27.5% of GPs relate this to PHN/patient/family pressure. None of the subjects conduct a full nutritional assessment as part of decision-making.

Only 19.6% of GPs and 6.8% of PHNs surveyed were aware of the calorie content of a standard 200ml ONS (sip-feed). In addition, a very significant proportion of both GPs and PHNs do not appear to give appropriate dietary advice to patients who may be at risk of malnutrition.

Only 55% of GPs stated that they would specifically review a patient's ONS prescription but a full nutritional assessment would not take place.

**Conclusions:** The results of this study raise concerns regarding the decision-making of ONS prescription and monitoring in the community. They also highlight the need for dietetic intervention to ensure that nutritional criteria forms the basis for selection and treatment of ONS.

#### 369-P. A SURVEY OF SCREENING AND NUTRITIONAL MANAGEMENT IN HOSPITALS AND THE COMMUNITY

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Rationale: Up to 40% of patients in UK hospitals and 11% in the community are malnourished. The aim of this study was to survey how patients are nutritionally screened, treated and followed up in hospitals and community to understand how this affects treatment.

**Method:** In-depth interviews (covering questions on screening, patient management before/after discharge and treatment guidelines) were conducted in the UK in March 2003 with 5 hospital dietitians (3 teaching, 1 NHS trust, 1 infirmary), 5 community dietitians, 2 gastroenterologists & 2 district nurses.

Results: Community health professionals agreed that nutrition screening occurs mainly in hospital. Numbers treated for malnutrition vary with disease condition/hospital. Rates are 50-90% (cancer), 5-90% (elderly), and 1-75% (Parkinson's disease). Screening is not routine but may include blood tests and height/weight measurement. The type/frequency of tests is not consistent. Fewer tests are done after discharge and include height/weight measurements by the community dietitian, and sporadic blood tests re-