

## Analysis of dispensing patterns and non-disease specific oral nutritional supplement usage in primary care: the ONSPres project

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Maximising dietary intake is the first line of treatment for malnutrition. However, oral nutritional supplements (ONS) are recommended when optimising the diet is insufficient<sup>(1)</sup>. Previous research indicated that ONS prescribing is problematic for GPs and that they have limited multi-disciplinary support to manage malnutrition<sup>(2)</sup>. Moreover, patterns of ONS usage and characteristics of users are unclear. In this analysis, we describe the characteristics of ONS users and dispensing patterns of ONS in primary care.

A retrospective secondary analysis was carried out on anonymised dispensed pharmacy claims data for 14,282 patients aged >18 years dispensed any ONS on the General Medical Services (GMS) Scheme during 2018 in three community healthcare organisations (CHOs) in Ireland. These data represented 30% of claims nationally and just under 33% of the population of Ireland. The following data were analysed: sex, age, living in residential care/independently, area of residence (based on CHO), number of individual ONS products dispensed, volume of ONS (in units) dispensed, and cost of ONS (€). Patients were categorised based on volume dispensed into 'Average' (<75th centile), 'High' (75th–89th centile) and 'Very High' ONS Users (≥90th centile). Differences in ONS volume and cost between groups were analysed using t-tests, Mann-Whitney U tests, and Chi-square analyses.

Median age was 76 years with 71% of patients aged ≥65 years and 18.7% living in residential care. More females were dispensed ONS than males (58.2% vs 41.8%,  $P < 0.01$ ) and females were older (80 years vs 71 years,  $P < 0.01$ ). Median volume of ONS dispensed over the year was 126 units and median cost was €251. Very high energy sip feeds were most frequently dispensed, to 45% of the cohort. There was no difference between males and females overall, but age and residential status were associated with ONS category with males aged <65 years dispensed significantly more ONS units compared to similarly-aged females (median units 135 vs 90,  $P < 0.01$ ). No difference between genders was found in those aged >65 years. Patients in residential care were dispensed twice the volume of those living independently (240 vs 112 units,  $P < 0.01$ ), with this also being reflected in costs (€541 vs €212,  $P < 0.01$ ). 'Average' ONS users were dispensed a median 84 units of ONS over the year (median cost €153), 'High' users were dispensed 420 units (median cost €806), and 'Very High' users 892 units (median cost €2,402,  $P < 0.01$ ).

Clear disparities between patient groups using ONS were identified. Further research is required to elucidate the reasons for increased ONS usage among younger males and patients in residential care. Training and support are required for health care professionals on management of malnutrition and evidence-based prescribing to enhance patient-centred care and optimise healthcare expenditure in primary care.

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### References

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