analysis of DDR-1 vs DDR-3 gave a bias of -0.0083 and 95% limits of -0.042 to 0.025. Correlations between each index and FEV_1%pred, SpO_2 and Borg were significant for FEV_1%pred and SpO_2, but not significant for Borg (Table 1).

Abstract P85 Table 1 Coefficient of determination (r^2) for the relationships between lung function and the change from baseline for breathlessness (ΔBorg) and SpO_2. Linear regression was used for ΔSpO_2 and ΔBorg, and exponential analysis for FEV_1%pred

	FEV_1%pred	ΔSpO_2	Borg
DSP	0.53	0.1612	0.046
DDR-1	0.71	0.2246	0.034
DDR-2	0.72	0.2268	0.033
DDR-3	0.71	0.2251	0.035

Conclusions 1) there is no significant difference between DDR-1 and DDR-3, both providing an accurate assessment of changes in SpO_2 during exercise and allowing for the different storage capabilities of pulse oximeters; 2) the simplest index (DSP), showed poorer correlations cpmpared to the DDR's, perhaps reflecting the simplicity of the index; 3) the conceptual idea of a composite index of distance walked and changes in SpO_2 during a 6MWT needs further investigation in a range of different clinical settings.

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P86 SPIROMETRIC VALUES OF GREEK HEALTHY PEOPLE AND COMPARISON WITH ECSC VALUES IN COPD PEOPLE

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Introduction There have been always controversies whether, there is a hypo or hyper diagnosis of COPD according GOLD criteria with parameters driven many years ago, around many countries.

Purpose The purpose of our study is the use of mathematical models for the comparison of Greek patients with COPD, according GOLD criteria versus normal values of our country.

Methods Using spirometry results from a pool of healthy local population (n = 500, age range 18–89 years) we fitted regression models, separately for men and women, for FEV1 and FEV1/FVC ratio. The set of healthy individuals consisted of 261 women (52.2%) and 239 men (47.8%). Their mean age (SD) was 48.20 ± 17.19 and 46.92 ± 16.16 years respectively. The corresponding heights were 162.7 ± 7.2 and175.8 ± 7.3 cm. Predicted normal FEV1 was also calculated using the European Coal and Steel Community (ECSC) equations. Also 124 subjects, with a history of COPD were studied (age range 25–91 years).

Results A positive and linear association with height was apparent in women whereas for men, a guadratic height term was also statistically significant. Predicted FEV1 of healthy individuals, based on either the ECSC or the locally derived equations, was excellent with the concordance correlation coefficients being 0.986 for women and 0.991 for men ($p < 0.001$ in both cases). Using the GOLD 2008b staging definitions and the ECSC predicted FEV1, the obstructive individuals were classified as having mild (17; 13.71%), moderate (48; 38.71%), severe (40; 32.26%) and very severe (19; 15.32%) COPD. The corresponding figures for the same classification, based on our derived equations for FEV1, were 17 (13.71%), 44 (35.48%), 42 (33.87%) and 21 (16.94%), respectively. The overall agreement between the two classifications was 97.85% with the kappa coefficient of agreement indicating a very good agreement (kappa = 0.936; $p < 0.001$). Out of the 124 obstructive individuals, 4 (3.2%) were found to have an FEV1/FVC ratio which was above the LLN as predicted from our equations.

Conclusion The statistical analysis has shown a high correlation between the parameters already used and those locally derived.

Diagnosis and management of paediatric lung disease

P87 REPEAT SURVEY OF VITAMIN K PRESCRIBING PATTERNS AND BONE HEALTH SURVEILLANCE IN UK PAEDIATRIC CF CENTRES

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Introduction and objectives CF bone disease is multi-factorial; UK guidelines for screening and treatment of CF bone disease are published.[1] Despite evidence of a key role for Vitamin K in bone formation, there is limited agreement on supplementation in CF. A previous 2005/06 survey[2] of bone health surveillance and Vitamin K use in CF reported wide variation in practice. The current survey aimed to ascertain practice 10 years on.

Methods Questionnaires were sent via email to all 25 UK paediatric CF centres. Data were collected on use of vitamins A, D, E and K including preparation, dose and criteria for Vitamin K supplementation. In addition, information was obtained on bone health surveillance including use of dual-energy X-ray absorptiometry (DXA) scanning to measure bone mineral density (BMD).

Results A 60% questionnaire response representing 2805 CF children was collected. All centres reported that >90% pancreatic insufficient patients receive multivitamin supplements and 12/15 centres reported >90% patients receive additional Vitamin E.

Only 3 centres routinely supplement Vitamin K, with only 1 reporting that >90% patients receive Vitamin K. Criteria for prescribing Vitamin K were deranged liver function (10/15), clotting (5/15), low Vitamin K levels (2/15), and low BMD (3/15). Vitamin K dosage varied from 0.3–10 mg/day, with most (12/15) prescribing 10 mg/day. Menadiol was mainly (10/15) used with some using Phytomenadione for younger patients. Four centres used AquaDEKs, whilst three reported limitations in prescribing AquaDEKs due to formulary constraints.