

Trends and area variations in Potentially Preventable Admissions for COPD in Spain (2002-2013): a significant decline and convergence between areas.

Julián Libroero, MD, PhD, **Berta Ibañez-Beroiz**, MSc, PhD, **Salvador Peiró**, MD, PhD, **Manuel Ridaol-López**, BEcon, Msc, **Clara L. Rodríguez-Bernal**, DMD, PhD, **Francisco J. Gómez-Romero**, MD, **Enrique Bernal-Delgado**, MD, PhD, and the **Spanish Atlas of Medical Practice Variation Research Group**.

Additional file 1

e-APPENDIX 1. CODES USED FOR IDENTIFICATION OF PPH-COPD ADMISSIONS

The PPH-COPD indicator was constructed as admissions in patients aged 20 and older with a primary diagnosis of COPD or a primary diagnosis of a related lung disease accompanied by a secondary diagnosis of COPD. Obstetric admissions and admissions for congestive heart failure, cystic fibrosis, and mental disorders were excluded.

Cases were included if:

Age \geq 18 years

AND

PRIMARY DIAGNOSIS = **491.1** OR **491.20** OR **491.21** OR **491.22** OR **491.8** OR **491.9** (Chronic bronchitis) OR **492.0** OR **492.8** (Emphysema) OR **493.20** OR **493.21** OR **493.22** (Asthma) OR **494.0** OR **494.1** (Bronchiectasis) OR **496*** (Chronic airway obstruction, not classified elsewhere)

OR

PRIMARY DIAGNOSIS = **466.0** (Acute bronchitis and bronchiolitis) OR **490** (Bronchitis, not specified as acute or chronic) AND THERE IS A SECONDARY DIAGNOSIS = **491*** OR **492*** OR **493*** OR **494*** OR **496***

OR

PRIMARY DIAGNOSIS = **518.81** OR **518.84** (respiratory failure) AND THERE IS A SECONDARY DIAGNOSIS = **491.21** OR **491.22** OR **493.21** OR **493.22** OR **494.0** OR **494.1**

Cases were excluded if

THERE IS A SECONDARY DIAGNOSIS = **630 to 677** (obstetrical care) OR **428** OR **402.01** OR **402.11** OR **402.91** OR **404.01** OR **404.03** OR **404.11** OR **404.13** OR **404.91** OR **404.93** OR **398.91** (congestive heart failure) OR **277.0** OR **747.21** OR **748.3** OR **748.4** OR **748.5** OR **748.6*** OR **748.8** OR **748.9** OR **750.3** OR **759.3** OR **770.7** OR **747.31** OR **747.32** OR **747.39** (Cystic fibrosis) OR **295.0 to 295.9** OR **296.0 to 296.99** OR **297.0 to 297.9** OR **298.0 to 298.9** OR **300.0 to 300.9** OR **301.0 to 301.9** OR **303.91** OR **304.01** OR **304.11** OR **304.21** OR **304.31** OR **304.41** OR **304.51** (Mental disorders)

*Indicates that all 4th or 5th digit codes following the respective previous code were included.