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A golden goal in 2010, and another GOLD in 2014 in primary care, or *vice versa*

See linked article by Boland *et al*. on pg 30

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In this issue of the *PCRJ*, Boland *et al*. report an assessment of the old and new GOLD COPD classifications using a large cohort obtained from 28 Dutch primary care centres.[1] In a way, we Spaniards could compare this Dutch GOLD assessment with the goal from Andrés Iniesta who scored deep into extra-time to give Spain victory over the Netherlands in the World Cup final at Soccer City in Johannesburg in 2010[2] after an exciting but goalless first 114 minutes… (see Figure 1, available online at www.thepcrj.org).

On November 16th 2011, the current revision of the GOLD Executive Summary was released in Shanghai, China,[3] and later published elsewhere.[4] It presented a new classification of COPD which was intended to provide a better understanding of the impact of the disease on an individual patient than the previous spirometry-only COPD staging. The four previous spirometry categories were reduced to two, and information on exacerbations and symptoms was added to form a three-dimensional patient evaluation.

This new Dutch research[1] should be commended, as it showcases a true real-life COPD management assessment. The GOLD Committee should be happy to see that more investigators are independently validating their new recommendations, with this study being added to the growing list of replications, most of which show consistent findings.[5] In a population with generally mild COPD – as it is often the case (but not always) in primary care – Boland *et al*. conclude that "… the GOLD ABCD groups classification is more closely associated with costs and HRQoL [health-related quality of life] than the GOLD 1234 grades classification. Furthermore, patients with GOLD-C had a better HRQoL than those with GOLD-B but the costs of the two groups did not differ." This is good news indeed for GOLD; the new GOLD ABCD staging relates very well with increasing costs, and also with both disease- and generic-HRQoL. However, even in this primary care population, patient symptoms in groups B and D produce inconsistencies in staging. There are also novel and very important findings here on comorbidities.[1] GOLD clearly indicates the relevance of COPD comorbidities in their latest updates, and these primary care COPD patients in stages GOLD B and D have more comorbidities, less physical activity and self-efficacy, and more unemployment.

The strengths of this research from Boland *et al*.[1] include novelty; there are only a handful of assessments available in primary care,[6-9] mostly with consistent findings that neither age nor gender should be associated with the GOLD severity distribution. The study also includes a comprehensive cost-associated analysis (which includes travel costs) from a prestigious, experienced group of researchers, as well as very sophisticated statistics (which are not for the mere mortal clinical reader…). There is also a comprehensive online appendix with extensive sub-analyses. All in all, this study[1] should indeed stimulate

thinking on patient-centred outcomes, and is a significant step towards personalised medicine.

However, some limitations should also be noted – i.e. representativeness and misdiagnosis. As a true real-world assessment, Boland *et al.*'s Figure 1[1] indicates that less than half of those approached finally participated, so a non-response study might be welcome. Also it is stated that 29.6% (575/2006) were found to be misdiagnosed with COPD. It is likely therefore that both issues make an impact on the severity distribution (over 50% are GOLD A and only 14 COPD participants are GOLD D_3). Heterogeneity among the 28 practices must be expected. In terms of quality of life assessment, there was no CAT score used in this research and the SGRQ has been used as an outcome measure. Such re-categorisation when produced by different methods (e.g. using CAT, or mMRC dyspnoea scale, CCQ, or other), might produce very different groupings, and therefore categories might not be internally consistent. Finally, the working definition of acute exacerbation of COPD is *sui generis* (i.e. unique).

Meanwhile, some practical questions remain for GPs to answer. Is the new GOLD staging being implemented in primary care? What are the hurdles? Regrettably, after so many years and different versions, there is still no primary care representation included in the GOLD guideline. It has recently been argued that any new treatment algorithm aimed at primary care clinicians should fully involve members of this community in its production, and should be piloted and evaluated rigorously in primary care settings before dissemination.[10] As per the new Spanish GESEPOC COPD guidelines,[11,12] a multicomponent assessment of COPD severity (within primary care or elsewhere) should take into account a range of items including spirometry, smoking, exacerbations, health status, and comorbidities. This could be done using multi-component indices such as BMI, airflow Obstruction, Dyspnoea, and Exercise capacity (BODE), or its modifications, or other.

Pooling together Boland *et al.*'s primary care data[1] with other COPD GOLD replications obtained in specialised settings will likely be extremely useful,[5,13] allowing clinically- and very practically-oriented sub-analyses, thus encompassing all respiratory effectiveness assessments.[14] Already, the current COPD Cohorts Collaborative International Asssessment (3CIA) initiative, aimed at pooling European and other COPD cohorts, might explore further new, objectively-obtained respiratory endpoints and thresholds.[15]

Back to the beautiful game; things would be very different if GOLD included primary care players in its team, or if Arjen Robben's clear chance had not been lost in the 68th minute as he left Puyol and Piqué in his wake before "Saint" Casillas smothered the ball with the edge of his right foot. From now onwards, the rest is history to be written…

Conflicts of interest The authors declare that they have no conflicts of interest in relation to this article.

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Figure 1 to accompany Editorial by Soriano and Román-Rodríguez

Andres Iniesta's winning goal against Netherlands in the July 11th, 2010 World Cup Final. [as per www.google.com photo search on February 6, 2014.]