

# Indicators of prescriptive appropriateness on patients' pathways: definition, training, monitoring and audit with General Practice as key to NHS sustainability

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**Background and objectives.** By the Regional Executive Decree 30/2021, the Veneto Region established cost thresholds of healthcare goods to Health Authorities for year 2021. With the purpose of meeting expenditure targets for contracted pharmaceutical, while still ensuring access to care, Local Health Units (LHUs) equipped themselves with the Health-dashboard and proposed a set of indicators of prescriptive appropriateness designed on patient pathways, organized training for general practitioners (GPs), sent quarterly monitoring reports, and conducted individual or group audits.

**Methods.** The Health-dashboard, by browsing administrative flows (Contracted Pharmaceuticals, Direct Dispensing, Hospital Discharge Forms, and Outpatient Specialty Care) and data from the analysis laboratories, allows to identify intervention areas on prescription and the related indicators that, by assessing the appropriateness of patients' pathways, can measure the potential for performance improvement and the resulting impact on expenditures. The dashboard also provides a reporting system which monitors indicator performance by individual GP, by association form and by LHU, returning to each GP a comparison with therapeutic recommendations (and with colleagues) and a list of off-target patients to be checked by audit.

The Territorial Pharmaceutical Service, by means of training meetings (in person or remotely), introduces GPs to the mindset of indicators that combine therapeutic appropriateness and economic sustainability, driving them throughout the audit process.

**Results.** The four areas of greatest impact in General Medicine (PPIs, ACEi/sartans, cholesterol-lowering drugs, respiratory medications), accounting for 40% of total drug expenses, were identified and 11 indicators were then defined. More than 80% of GPs participated in the training. During these meetings, objectives were shared, performance on individual indicators was evaluated and critical issues were highlighted to be prioritized on the basis of individual data. Of the 258 GPs involved, 154 decreased per-capita expenditures with respect to year 2020 and reported an average 8.2% improvement in performance on the assigned indicators. Conversely, 104 GPs who increased per-capita expenses, worsened their performance by 5.9%.

Overall, the attentional areas reported net cost savings of 3.7%, while for the non-attentional areas, spending decreased by just 0.5%.

**Conclusions.** The Health-dashboard, along with constant training and audits with GPs, proved to be an effective tool for achieving financial targets and improving clinical practice. Accordingly, the GPs who mostly improved appropriateness indicators, showed indeed also reduced pharmaceutical expenditures.