

# The CLEO assessment tool for pharmacist interventions

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Pharmaceutical care to optimise medicines use and improve patients' health outcomes is a very important role of clinical pharmacists, for which medication review is the main activity.<sup>1</sup> Several methods have been developed for documentation of pharmacist interventions (PIs) including process-related and outcome-related indicators such as potential or actual impacts of drug-related problems. There has been no research describing a fully validated and generally accepted assessment tool that can be used for PIs.

In this issue of *EJHP* a French Working group presents the CLEO (CLinical, Economic, and Organisational) tool.<sup>2</sup> This is a fully validated and generally accepted tool that can be used for assessing PIs. The tool produced inter- and intra-reliability scores of good to excellent, which is better than the majority of other published tools.

There is a need for pharmacists to document PIs in their daily activities as well as in research studies. These can include patient information, description and classification of drug-related problems, and suggestions for modifying prescriptions and physicians' acceptance of PIs. Assessing the impact on clinical improvement is needed to justify these activities, but also any economic and organisational benefits.

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The development of the multidimensional CLEO tool is based on a review of previous models and tools for the assessment of PIs,<sup>3</sup> and the clinical pharmacists' experience. Internal and external experts assessed in total 90 cases with PIs derived from daily practice. The assessment of the 'Clinical' dimension uses six levels: negative, null, minor, moderate, major, and avoiding a fatality. The 'Economic' and 'Organisational' dimensions have three levels: negative, null, positive. CLEO can be used both for daily practice and research. There are 54 possible three-component scores of the CLEO tool and the three dimensions are assessed separately. The authors state: "The external validation of the study suggested that individual clinical pharmacists can code their own interventions as they make them in daily practice, and their coding is likely to be consistent with other clinical pharmacists as experts or supervisors." Assessment of PIs by the CLEO tool may be a performance indicator and allows comparison of pharmacists' opinions and PIs' impacts among pharmacists, healthcare providers and different facilities, and may be a valuable tool in auditing them. It can be used to assess PIs with periodic assessment by others and also as training and learning activities based on the cases and evaluation by the experts. User satisfaction and acceptability with the tool was high and most raters spent no more than 1 min when rating the impact of one PI which demonstrated its feasible implementation.

We hope this tool finds acceptance for the benefit of pharmacy services, and is used further.

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