BACKGROUND AND OBJECTIVE

Background: Standardized classification and registration of Drug Related Problems (DRP) and Pharmaceutical Interventions (PI) is essential for objective evaluation of clinical pharmacists’ contribution to pharmacotherapy. However, in Belgium as well as several other countries, a nationally standardized system for daily use in hospital setting is lacking. Similarly, other existing systems are often not adapted to the hospital and/or too elaborate for daily use. This major shortcoming complicates benchmarking, feedback to management and government, and profound analysis of clinical pharmacy impact.

Objective: Based on literature and stakeholders’ opinions, we developed and validated the Belgian Clinical Pharmacy registration System (Be-CLIPSS), specifically intended for daily classification and registration of clinical pharmacists’ activities.

LITERATURE REVIEW

SETUP
- Literature review on classification and registration systems for DRPs and PIs in hospital setting
- Questions: available systems & characteristics

OUTCOME
- 22 formal systems identified
  - Only 8 validated
  - Only PCNE classification\(^1\) compliant with all requirements for structured DRP coding\(^2\)
  - Large range of available DRP (5-57), PI (5-56) and additional causes (4-37)
- Most noted disadvantages of current systems
  - Absence of DRP/PI categories related to patient or organisation
  - Not adapted to hospital setting 
  - Ill-defined/not mutually exclusive categories
  - Too many categories complicating statistical analysis

SURVEY

SETUP
- Nation-wide electronic survey (Snap\(^\circ\) Surveys; 18/06/2018 – 15/07/2018)
- All Belgian hospital pharmacists and trainees with at least one clinical activity
- Questions: current clinical activity registration practice & prerequisites for optimal DRP and PI registration

OUTCOME
- 66 respondents – 39 hospitals, various experience levels
- Characteristics of optimal DRP and PI registration system

DEVELOPMENT & VALIDATION

Be-CLIPSS

SETUP
- Preselected DRP and PI according to type of clinical-pharmaceutical activity

VALIDATION

NP DETECTION

\(^1\)The PCNE Classification V 8.03. Available: https://www.pcne.org/working-groups/2/drug-related-problem-classification.


CONCLUSION

The Be-CLIPSS system, adapted to Belgian clinical pharmacy activities, was developed and validated, and was well received by hospital pharmacists. Based on the first round, small adaptations were made which are currently under validation. To promote the use of the Be-CLIPSS, a white-paper is under preparation and will be provided to Belgian hospital pharmacists, academics and governmental healthcare institutions. Equally, an electronic version of the Be-CLIPSS will be integrated in the PrimUZ\(^2\) electronic patient file system to allow simultaneous registration.