Background
Clinical pharmacy services (CPS) have been shown to provide significant clinical benefits on patient care. The paucity of literature reports within the Austrian healthcare system highlights that studies showing the evidence for CPS are urgently needed.

Purpose
To assess the clinical significance and value of the CPS by determining the number, type and clinical significance of identified drug-related problems (DRPs), the acceptance rate of suggested interventions and their benefit to inpatient care.

Methods
Two-phase mixed method:
1) Prospective descriptive study of number and type of identified DRPs, suggested interventions and their acceptance rate based on a validated classification-system
2) Independent expert panel rating of the clinical significance of identified DRPs and the clinical value of suggested interventions based on a reliable rating-method

Setting:
455-bed teaching hospital in Vienna; CPS across two surgical, two trauma, one cardiology and two internal medicine wards.

Sampling:
• All patients receiving the CPS during a 4-week data collection period
• Expert panel assessment carried out on randomly selected representative sample (confidence-level 95%)

Results
• 250 medication reviews in 162 patients (54% ±)
• 200 DRPs, on average 1.2 (± 1.8) DRPs/patient
• 54% of patients at least one DRP
• Patients with DRPs: in average on 11.2 (± 4.0) drugs

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Conclusion
The expert panel assessed the CPS to be of great clinical significance and of high clinical value to inpatient care. The prevalence of identified DRPs and the high rate of accepted interventions reflect the contribution of the service to the reduction and prevention of adverse drug events, treatment failure and the achievement of therapy goals. This suggests that the CPS is a valuable contribution to improve patient safety and patient care.

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\[\text{Percentage interventions per category}\]

\[\text{Median ratings severity of error/event (n = 132)}\]

\[\text{Median ratings value of service (n = 132)}\]

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