THE PARENTERALIA SELF ASSESSMENT TOOL

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BACKGROUND

From a therapeutic point of view, parenteral drugs are considered to be high-risk medications.[1]

In addition, the preparation of parenteral medication is often complex.

Instruments to assess medication safety risks of individual institutions gain more and more importance in the international medication safety literature.[2,3]

OBJECTIVE

In the scope of this study,

- the Self Assessment Tool for Parenteral Medication (PSAT), developed by the Swiss Association of Public Health Administration and Hospital Pharmacists GSASA and based on international guidelines, was validated, and
- documents were developed to apply the tool in various hospitals in Switzerland in order to subsequently obtain safety data and develop evidence-based interventions to improve medication safety.

LITERATURE

1. Institute for Safe Medication Practices. List of high-alert-medications in acute care settings, 2014, www.ismp.org/tools.
2. Institute for Safe Medication Practices. Medication safety self assessment for hospitals, 2011, www.ismp.org/selfassessments/hospital/2011/
3. Clinical Excellence Commission. Medication Self Assessment for Australian Hospitals, 2012, www.cec.health.nsw.gov.au/programs/mssa

Roll-out information

The PSAT will be accessible to all interested hospitals starting in November of 2014. The tool will be available in French and German.

Link: www.gsasa.ch, Qualität & Sicherheit, Parenteralia Self Assessment Tool

www.gsasa.ch, Qualité & Sécurité, Parenteralia Self Assessment Tool PSAT

Structured feedback from PSAT users is highly encouraged to enable further medication safety trending by GSASA.

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Acknowledgements

METHODS

1. The Self Assessment Tool, comprising 53 individual criteria, was tested with 2 different approaches (for more info on the tool, see tables 1 – 3):

a. Ward level:
   The tool was completed on 3 units by a nursing scientist in collaboration with the head nurse.

b. Management level: The tool was completed independently by an interdisciplinary team consisting of a pharmacist, a quality manager, a physician, and a head nurse.
   A team meeting to reach consensus took place after the written evaluation.

2. In addition, a questionnaire was developed to examine the comprehensibility and applicability of the tool.

Table 1: PSAT assessment categories

Chapter	Interpretation
1	Drug selection / procurement
2	Logistics
3	Drug information
4	Prescribing
5	Drug preparation / dispensing / administration
6	Monitoring
7	Education
8	Risk management

Table 2: PSAT rating scale

Score	Interpretation
1	No activity so far.
2	Possible activities have been discussed and evaluated, but not implemented so far.
3	Activities have been partially implemented or implemented in parts of the institution.
4	Fully implemented.

Table 3: PSAT excerpt

Category	Criteria	Explanations	Source	Score 1	2	3	4	Don't know	Comments
Drug selection / procurement	Non-formulary drugs are only applied if therapeutically unavoidable.		ISMP, AUS	60 2.29					
Logistics	Drugs are kept in their original packaging during storage.		NHS	5.1					
	Ward pharmacies are regularly maintained and optimized.	Special attention is awarded to high-risk drugs	ISMP, AUS	115 5.17					
Drug information	The hospital pharmacy is involved in developing medication use information.		ISMP, AUS	39 2.8					
	The hospital pharmacy is accessible 24/7.		ISMP	122					
Prescribing	Prescriptions are in a written format.	Exemptions (verbal communications) are defined.	ISMP, AUS	68, 69 3.6-8					
	Abbreviations and measuring units are standardized.	This applies to dosages as well.	ISMP, AUS	65 3.3					
	Allergy information is standardized.	Exemptions (verbal communications) are defined.	NHS	4.1					
Drug preparation / dispensing / administration	Medication use processes are standardized to ensure the applicability of the "5R-rule".		NHS	3.3					
	Drug preparation areas are partitioned off and uncluttered.		ISMP, AUS	150 7.2					
	Drugs are independently double-checked before dispensing / administration.		NHS	3.2					
Monitoring	Clinical pharmacists are involved in drug monitoring.		ISMP, AUS	49 2.9					
Education	New personnel are educated in medication use in a standardized format.		ISMP	170					
Risk management	Errors and "near misses" are regularly reported and evaluated.		NHS	3.2					

Abbreviations: ISMP= Institute for Safe Medication Practices, AUS = Australian Excellence Commission, NHS = UK National Health Service

RESULTS

1. PSAT test - most critically rated parameters

- The interdisciplinary team rated 9.62 % and the ward teams 4.08 % of the criteria with the lowest score "0".
- Among the most critically rated parameters was the lack of presence of clinical pharmacists on the wards.
- Large discrepancies could be found between existing guidelines and their actual implementation in daily practice.

2. Applicability of the PSAT

- The tool was considered comprehensible by all of the participants.
  The documents developed for the Swiss-wide roll-out were considered crucial for uniform data gathering.
- However, its implementation will depend on available time resources since it requires at least 1 hour to complete it plus another 2 hours for a consensus meeting.

CONCLUSIONS

- The tool and the accompanying documents (study protocol, evaluation template) should allow for a uniform implementation in Swiss hospitals participating in the roll-out, starting in the fall of 2014.
- Because it was difficult to get a concise safety overview of an entire hospital, the tool should be used on the basis of individual hospital departments.
- Due to substantial scoring differences between different teams, a final consensus meeting is necessary.