

# Emergency contraception in community pharmacies

## Validation of an electronic counseling and documentation tool

Esther Spinatsch, Audrey Wamister, Aline Hofstetter, Lia Giamboni, Kurt Hersberger, Samuel Allemann

### Background

- In Switzerland, prescription-free dispensing of oral emergency contraception (EC) requires a consultation with the pharmacist about EC and various sexual health issues.
- The Swiss Pharmacists Association has published an official 1-page written patient assessment form and guidelines to standardize counseling and assist pharmacists in dispensing EC.
- To streamline EC counseling and documentation, we have developed “EC-support”, an electronic counseling and documentation tool for community pharmacies.
- “EC-support” includes an electronic version of the official patient assessment form and embedded guidelines to help pharmacists provide high-quality counseling and complete documentation.

### Method

- We validated “EC-support” according to recommendations from the literature<sup>1,2</sup>, pre-implementation in fictitious scenarios and post-implementation in Swiss community pharmacies.
- In both steps, we conducted a survey among participating pharmacists to measure usability (based on SUS-score<sup>3</sup>), acceptability, and appropriateness (on Likert scales).
- Post-implementation, we compared counseling with paper-based documents with the “EC-support” guided counseling in terms of:
  - Quality of documentation (rate of missing items in the assessment)
  - Completeness of counseling (mean number of sexual health topics discussed)
  - Compliance to guidelines (drug selection according to current EC-guidelines)
  - Cost-effectiveness (time spent on counseling)

### Conclusion

- The usability of “EC-support” was rated as excellent, and pharmacists strongly agreed with the positive acceptability and appropriateness criteria.
- Compared to paper-based documents, “EC-support” resulted in better compliance with dispensing guidelines, better completeness of documentation, and a higher number of counseling topics in a shorter consultation time.

### Literature

- 1 Scheepers-Hoeks A-MJ, Grouls RJ, Neef C, Ackerman EW, Korsten EH. Strategy for development and pre-implementation validation of effective clinical decision support. *Eur J Hosp Pharm Sci Pract* 2013;20:155. <https://doi.org/10.1136/ejpharm-2012-000113>.
- 2 Fitzpatrick, Davey, Buxton, Jones. Evaluating patient-based outcome measures for use in clinical trials. *Health Technol Assess* 1998;2. <https://doi.org/10.3310/hta2140>.
- 3 John Brooke. SUS: A Retrospective. *J Usability Stud* 2013;8:29–40.



**Esther Spinatsch**  
esther.spinatsch@unibas.ch  
Pharmaceutical Care Research Group, University of Basel  
Klingelbergstrasse 61, 4056 Basel, Switzerland  
www.pharmacare.unibas.ch



### Aim

The aim of our study was to validate “EC-support” in terms of usability, acceptability, and appropriateness and to analyze whether it leads to optimized counseling compared to the use of paper-based documents.

### Results

- The survey was conducted among 37 pharmacists pre-implementation and 28 pharmacists post-implementation.
- Usability, acceptability, and appropriateness did not differ significantly by age, practice experience, or frequency of dispensing EC. Key findings are presented in Figures 1 and 2.

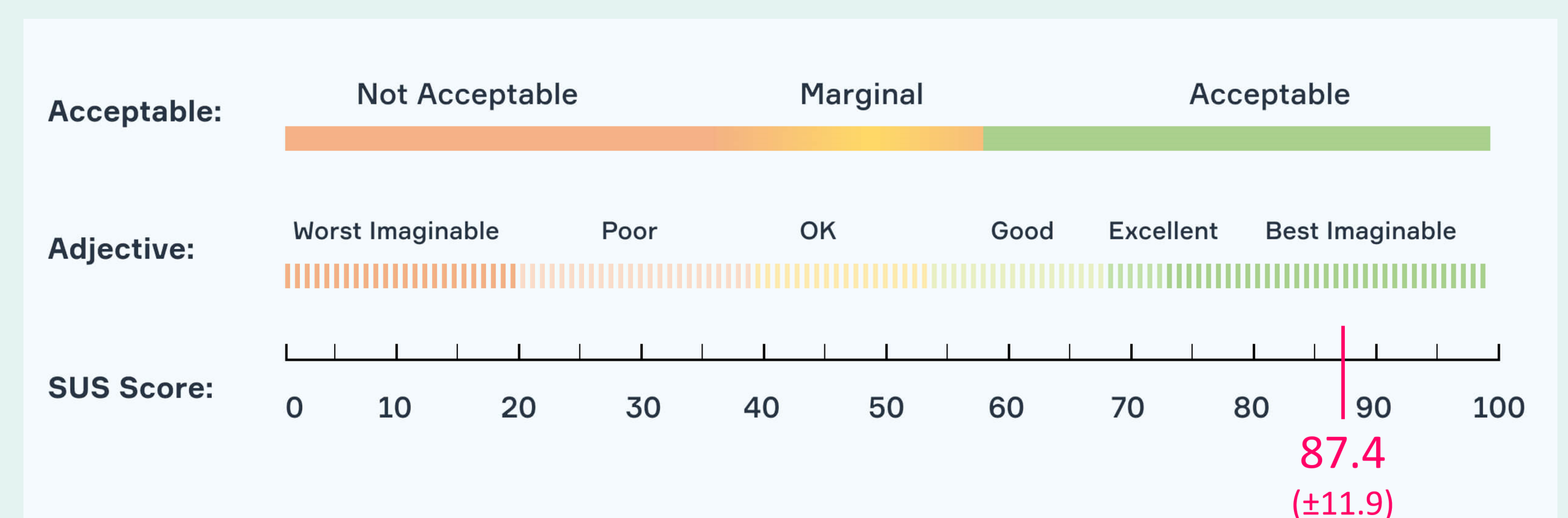


Figure 1: Usability (n=65)



Figure 2: Acceptability and appropriateness (n=65)

- During the post-implementation validation, in which fourteen community pharmacies participated, 75 consultations were documented on the paper-based assessment form and 71 on “EC-support”.
- The comparison between “EC-support” and the paper-based assessment form is shown in Figure 3.



Figure 3: Comparison of EC-support and paper protocol