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Users' expectations and opinions on a computerised physician order entry (CPOE) system before and after its implementation

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Background and importance

CPOE systems can enhance medication safety, but their implementation often faces hurdles, frequently due to user resistance. Implementation success depends on users' acceptance of the system. Therefore, it is important to know the users' views to tailor the implementation process and to further optimize the system.

Aim

Our aim was to examine physicians' and nurses' expectations before and opinions after the implementation of a CPOE system.

Methods



Survey development:

We set up a survey that combined **validated tools** (which are not in the scope of this poster) and **self-developed implementation-oriented questions** (questions 1-7).

Question 1: Rating scale

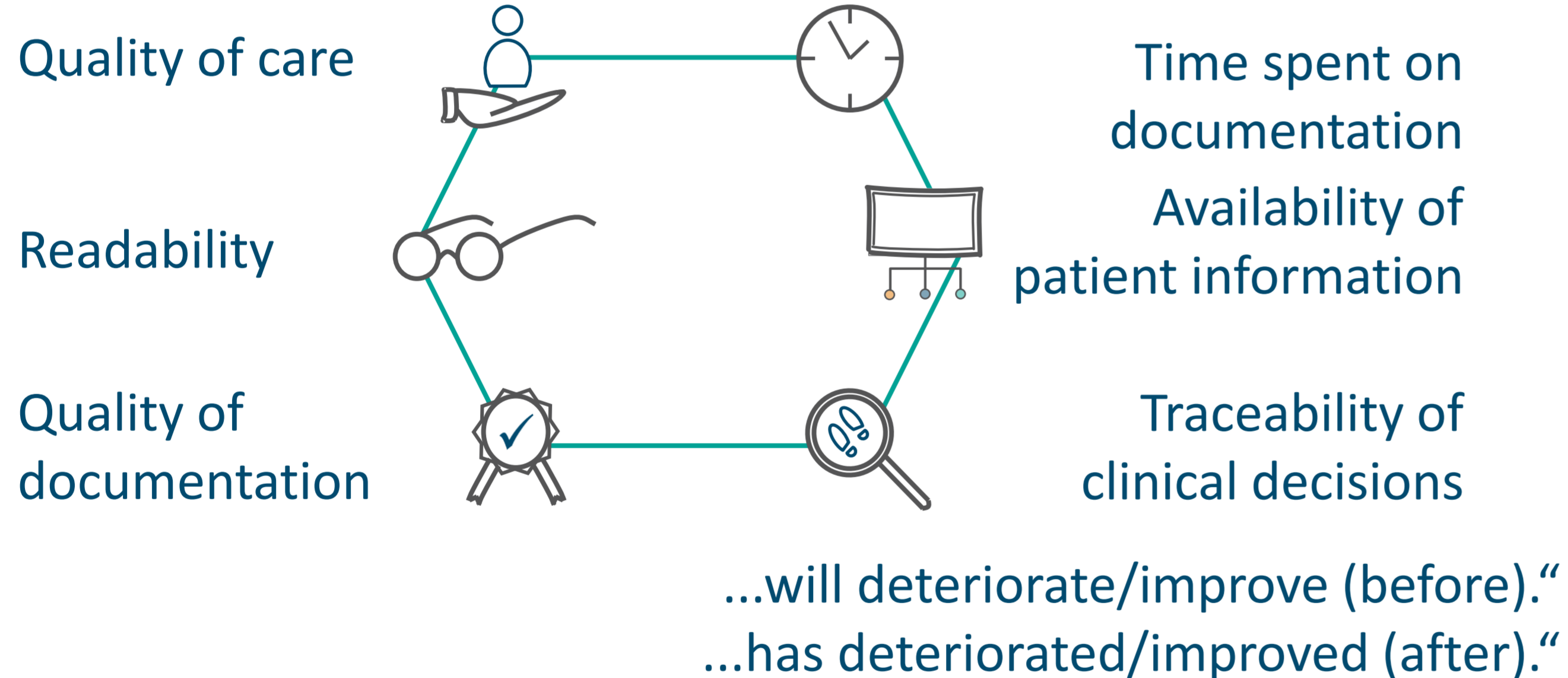
For the analysis, the position of the respondent's mark was assigned a numerical value from 0% (negative) to 100% (positive).

„Overall, I view the CPOE implementation...“

Questions 2-7: 5-point Likert scale

For the analysis the number of responses of the upper and lower two Likert points was added up. Time spent on documentation was asked to be rated as increased/decreased.

„I think that...“

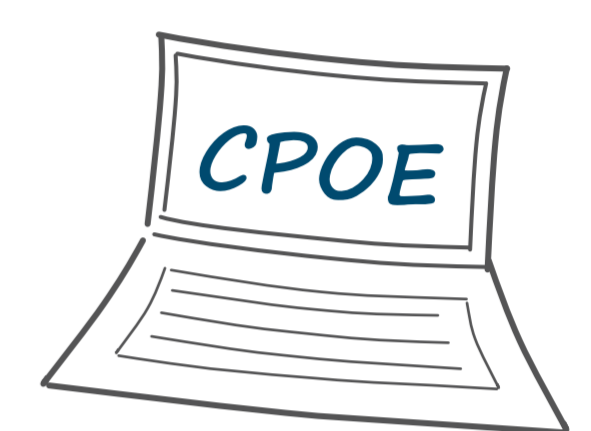


Survey distribution:



to **physicians & nurses** (anonymously)

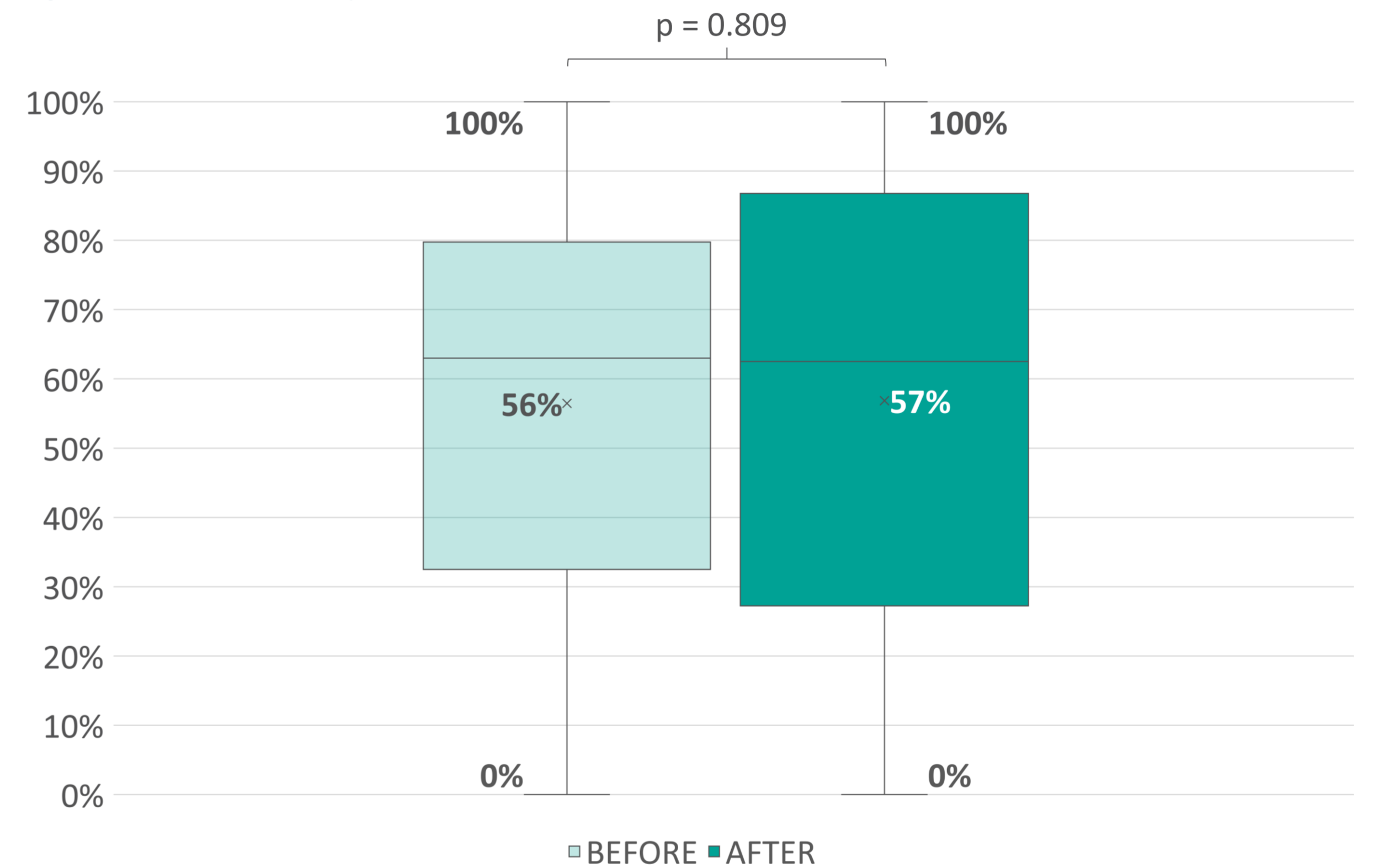
at 7 wards of the Center for Orthopedics, Trauma Surgery and Spinal Cord Injury, Heidelberg University Hospital



1 month **before** & 3 months **after** implementation

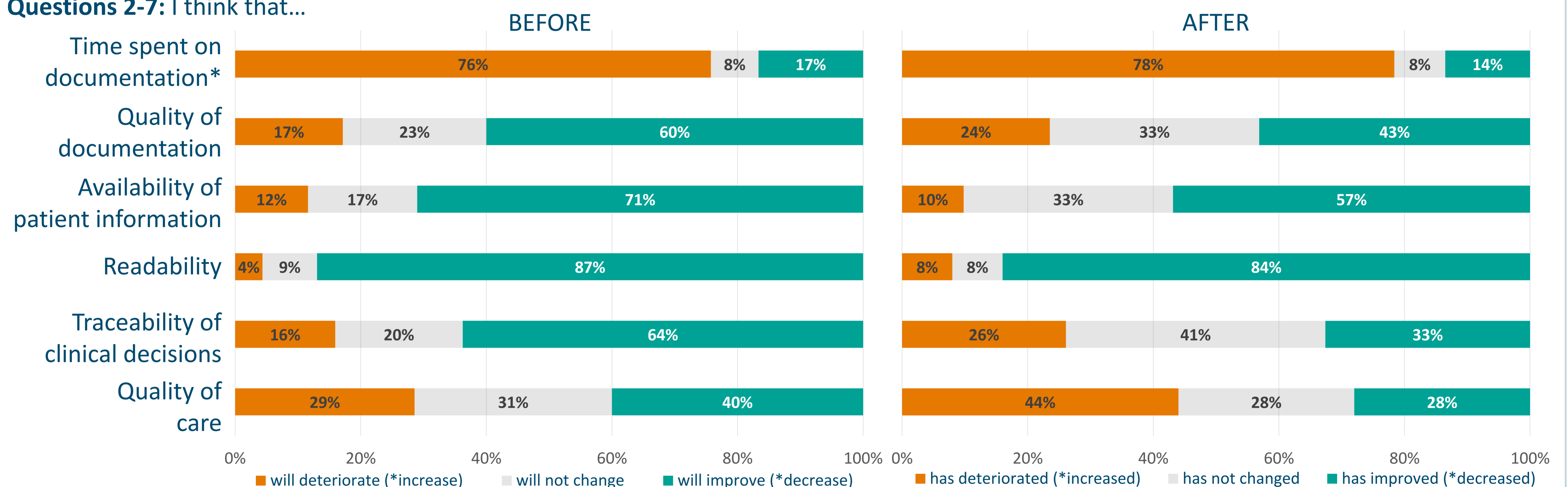
Results

Question 1: Overall, I view the CPOE implementation negative (0%) to positive (100%):



Results

Questions 2-7: I think that...



The return rate was 36% (N=72) before and 26% (N=53) after implementation. Of the total of 125 surveys, 121 were included in the analyses (surveys with a non-response rate of >25% were not analysed). 25 surveys were returned by physicians and 100 by nurses.

Conclusion and Relevance

The anonymous data collection did not allow for paired analysis of responses before and after implementation. The fact that the rate of positive and negative attitudes remained unchanged may suggest that the opinions of doubters and enthusiasts were not significantly affected by the implementation. If this were the case, it might be worthwhile to choose different implementation strategies for these two groups.



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