

Figure 14 Patient performance error distribution for all exercise repetitions. Most errors occurred during first and last repetitions.

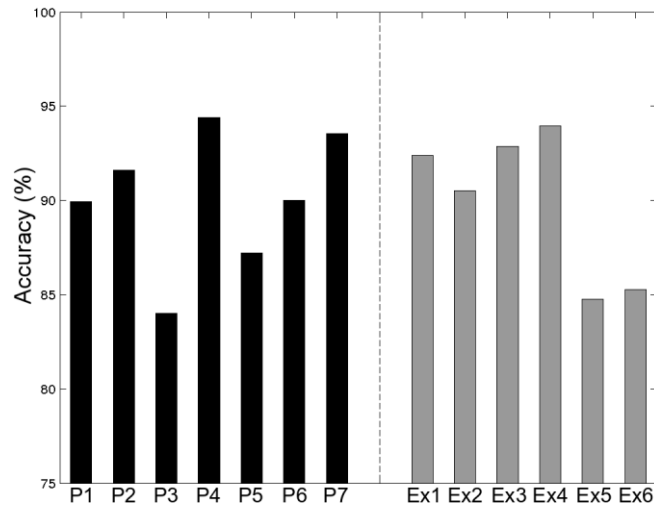


Figure 15 System feedback accuracy per patients (P1-P7) and exercise (Ex1-Ex6) in the intervention study.

Efficacy of the smartphone-based intervention. We evaluated the efficacy of feedback provided during the exercise sessions. Figure 16 shows how patients reacted to feedback during the training. After an audio feedback, a total of 297 repetitions were performed correctly. Feedback for 57 repetitions was ignored, with subsequent repetitions performed erroneously too. By analysing changes in exercise performances, we observed that in 119 cases feedback caused a change in the following movement (both, correct and other erroneous performance). In 71 cases the feedback was ignored, not causing any change in behaviour. In only 8 cases might the feedback have led to performing errors in the following repetition.