

Appendix A: Calculating the complexity of prescribing tasks

Table 1: Complexity of prescribing tasks.

Task type	Task complexity: GOMS working memory changes*		
	total	average	peak
SIMPLE: Create new electronic medication chart. Enter allergy status and prescribe six medications	214	9.4	12
COMPLEX: Update existing medication chart. Replace two medications, prescribe two new medications	333	10.9	16

*working memory changes generated by the GOMS model of prescribing

total= number of stores + number of replacements + number of deletions.

average= the integral of the number of items over time to execute task.

peak= peak working memory load (i.e. number of tags) during the execution of task.