

# Pharmacist Drug Information Access at Patient Bedside: Using Ask Watson

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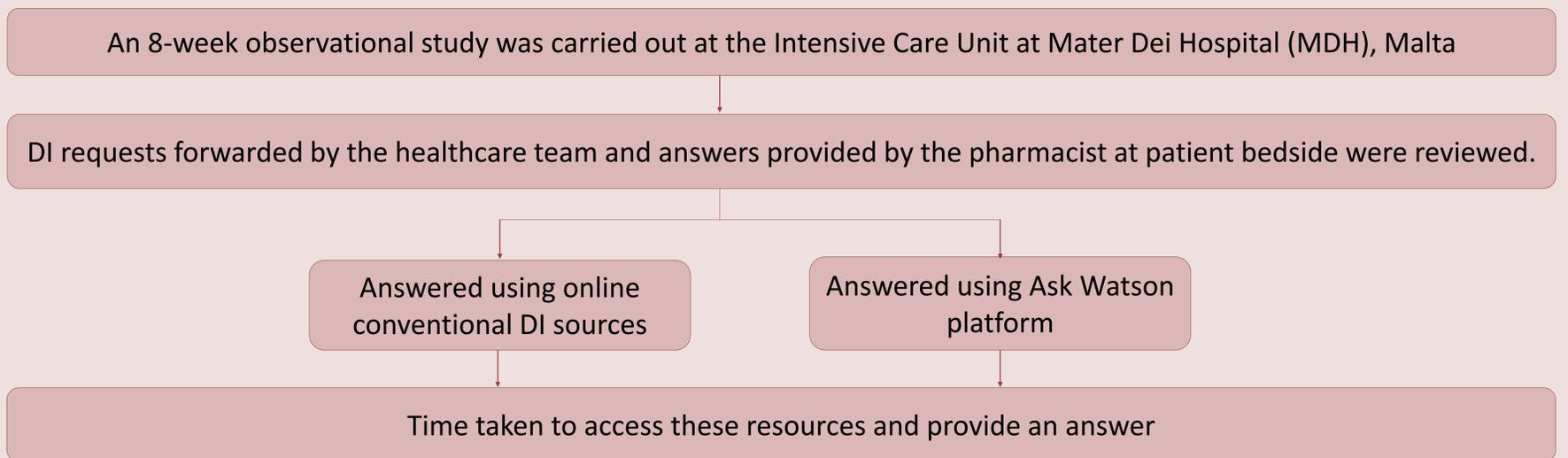
## INTRODUCTION

Micromedex® is a common online drug information (DI) resource used at patient bedside. In August 2018, Micromedex has combined the artificial intelligence (AI) of IBM Watson with the evidence-based clinical decision support of Micromedex® resulting in Ask Watson™. This platform answers drug questions from specific content within Micromedex®. The AI of Ask Watson is a new feature within Micromedex®. The AI of Ask Watson is a new feature within Micromedex intended to improve DI access, especially when used at patient bedside.

## AIMS

- To propose improvements to the current DI service at patient bedside
- To evaluate nature and extent of DI requests from clinical inpatient hospital setting at the Intensive Care Unit at Mater Dei Hospital, Malta
- To evaluate the use of Ask Watson platform when used at patient bedside

## METHOD



## RESULTS

A total of 140 queries were presented at patient bedside during an 8-week observational study at the Intensive Care Unit at MDH, all of which were answered using conventional resources such as Micromedex®, Up to Date® and other online and hardbound resources. When re-answering these queries using Ask Watson™, a response to 110 queries was found.

When answering queries using conventional resources, time take to respond to queries varied from 4 minutes to about 20 minutes as in Figure 1 while for those answered using Ask Watson, time taken was 2 minutes to about 16 minutes as in Figure 2. When comparing both sets of queries, 120 queries (N=140; 86%) were answered in <5 minutes to 10 minutes while using conventional resources while 100 queries (N=110; 91%) of the queries were answered in this timeframe when using Ask Watson. Less queries were forwarded to the DI centre, when using Ask Watson - 10 queries (N=110; 9%) when compared to the 20 (N=140; 14%) when using conventional resources. The comparison is given in Figure 3.

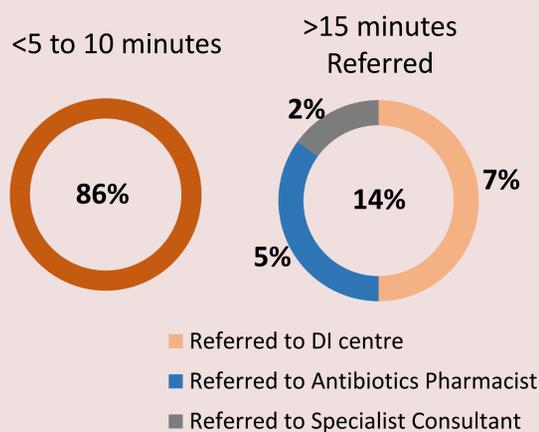


Figure 1: Time taken to answer DI queries with conventional resources

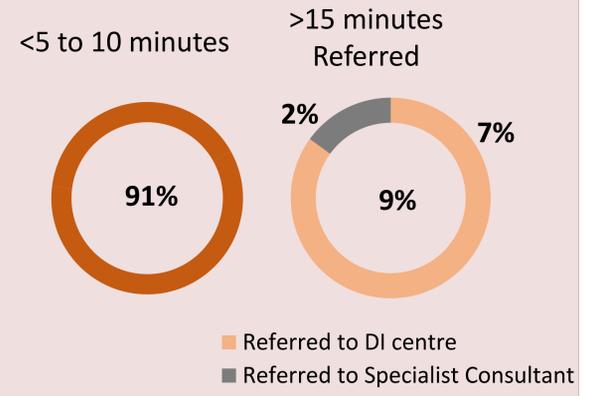


Figure 2: Time taken to answer DI queries with Ask Watson platform

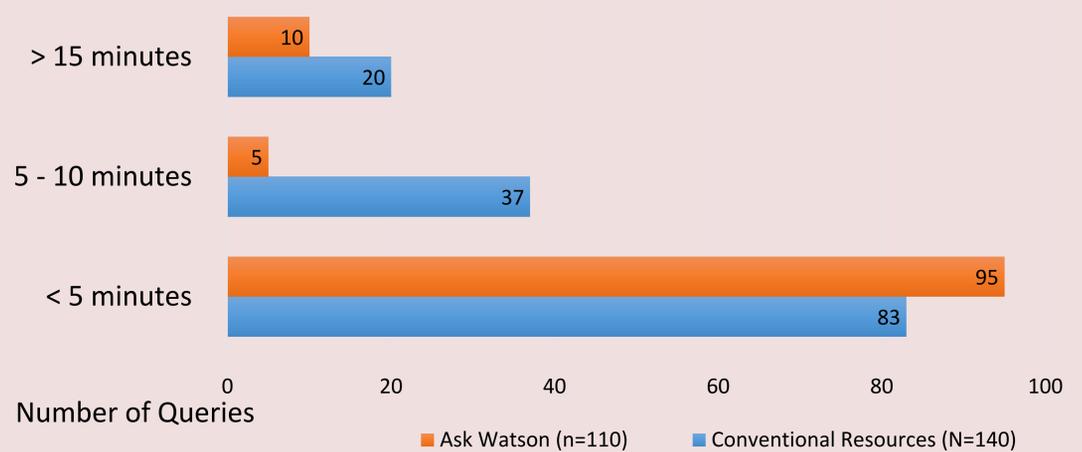


Figure 3: Comparison of time taken when answering DI queries using conventional resources and Ask Watson at patient bedside

## CONCLUSION

From a total of 140 queries presented at patient bedside, 30 could not be answered using Ask Watson™, either because it did not have sufficient information to provide a satisfactory response or because the query was a calculation. The inclusion of Ask Watson™ when answering bedside DI queries, however, helped improve the time taken. Clinical concepts necessary at patient bedside are available in Ask Watson™ and users have more flexibility to ask questions in a more conversational way. Being combined to Micromedex®, which is the source mostly used at patient bedside, Ask Watson™ contains evidence-based content.