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 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
An 8-week observational study was carried out at the Intensive Care Unit at Mater Dei Hospital (MDH), Malta

DI requests forwarded by the healthcare team and answers provided by the pharmacist at patient bedside were reviewed.

Answered using online conventional DI sources
Answered using Ask Watson platform

Time taken to access these resources and provide an answer

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.

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.