

# Drug Information Access to Pharmacists' Bedside Decision Making

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## INTRODUCTION

Provision of drug information (DI) is one of the most fundamental professional responsibilities of all pharmacists in a community pharmacy, hospital pharmacy and clinical practice<sup>1</sup>.

The clinical practice of drug information involves the efficient retrieval, evaluation and communication of medication information in order to assist in care decisions, develop evidence-based recommendations and improve patient outcomes. This has been associated with decreased drug costs and reduction in hospital mortality rates<sup>2</sup>.

## AIMS

- To review different models of DI services in hospitals
- To assess DI services currently offered in an acute general hospital
- To assess bedside DI service requirements in acute clinical settings in the hospital

## METHODOLOGY

### Step 1. Analysis of different DI models

A 3-week observation study at the DIC and clinical services at University of Illinois (UIC) and Northwestern (NW) Memorial Hospital both in Chicago was carried out.

Papers and studies about different DI models used internationally were used to compare and contrast DI services standards and guidelines used in different hospitals in the US, Europe, UK and Scandinavia<sup>3</sup>.

### Step 2. Assessment of DI models at local hospitals

A 45-minute focus group was set up to assess and review the current DI service being provided at Mater Dei Hospital (MDH). The focus group intended for this study consisted of users of DI and those who provide it.

An online questionnaire consisting of the same questions asked in the focus group was compiled and distributed to pharmacists (n=6) working in other local hospitals.

### Step 3. Launch of DI framework

A pilot study to assess a framework for bedside DI services is undertaken. This involves a prospective study at Intensive Therapy Unit (ITU) at MDH. During this time period the resources available, the requests received, the timeframe to answer a DI query and the documentation of the DI requests are assessed. The feasibility and practicality of the system at this section of MDH is reviewed in an acute setting.

## RESULTS

DI services at Malta's main hospital, Mater Dei Hospital, are combined to the clinical services. Each clinical pharmacist is requested approximately 10 drug information queries at patient bedside. 70% of queries (n=10) are answered during the ward round because the answer to this is known or resources to find the answer are available. The other 30% are forwarded to the drug information centre. 60% of queries are forwarded by consultants, 20% by medical practitioners and 20% by the clinical pharmacists themselves while reviewing drug treatment.

In Chicago clinical pharmacists at patient bedside respond to DI queries using a portable bedside computer having all resources. The DI centre in Chicago provides extramural services in the state and outside Illinois. In the US, only 25% of the DICs provide direct patient care at bedside

**Table 1: Challenges faced by pharmacists providing DI services at MDH, as concluded from focus group**

After hours Pharmacists	Clinical Pharmacists
Time	Queries may be urgent or complicated and pharmacist might need to leave ward to obtain more information
No access to patient history	Patient history and tests not readily available; only as hard copy and not always updated
Limited and out-dated resources available	
Slow IT systems and limited wifi access	

## CONCLUSION

Recommendations brought forward include the availability of a bedside tablet or computer with all available resources to all clinical pharmacists. Training and clinical experientials should be provided to all pharmacists especially those at patient bedside so as to understand better the clinical context of certain queries.

## REFERENCES

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