

# Design, Introduction and Evaluation of a New Outpatient / Discharge Prescription Form for Beaumont Hospital

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#### Introduction

Prior to the implementation of this change project, a small (102mm x 178mm) single copy outpatient / discharge prescription form was in use in Beaumont Hospital. The small size, lack of structure and lack of space for prescriber contact details all raised patient safety concerns. In addition, these forms did not request the prescriber's medical council registration number (MCRN), a legal requirement arising from the Medical Practitioners Act (2007), and this information was rarely volunteered. International studies have demonstrated that prescription form redesign can reduce the potential for medication errors. <sup>1,2</sup> Prescription form redesign also afforded the hospital the opportunity to improve communication with general practitioners (GPs) and to enhance the quality of information on medicines in healthcare records.

#### Aim / Objective

To design and introduce a new outpatient / discharge prescription form to address the patient safety and legal concerns surrounding the traditional forms.

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• To evaluate the new forms through an audit of the provision of prescriber details and a satisfaction survey of prescribers and community pharmacists.

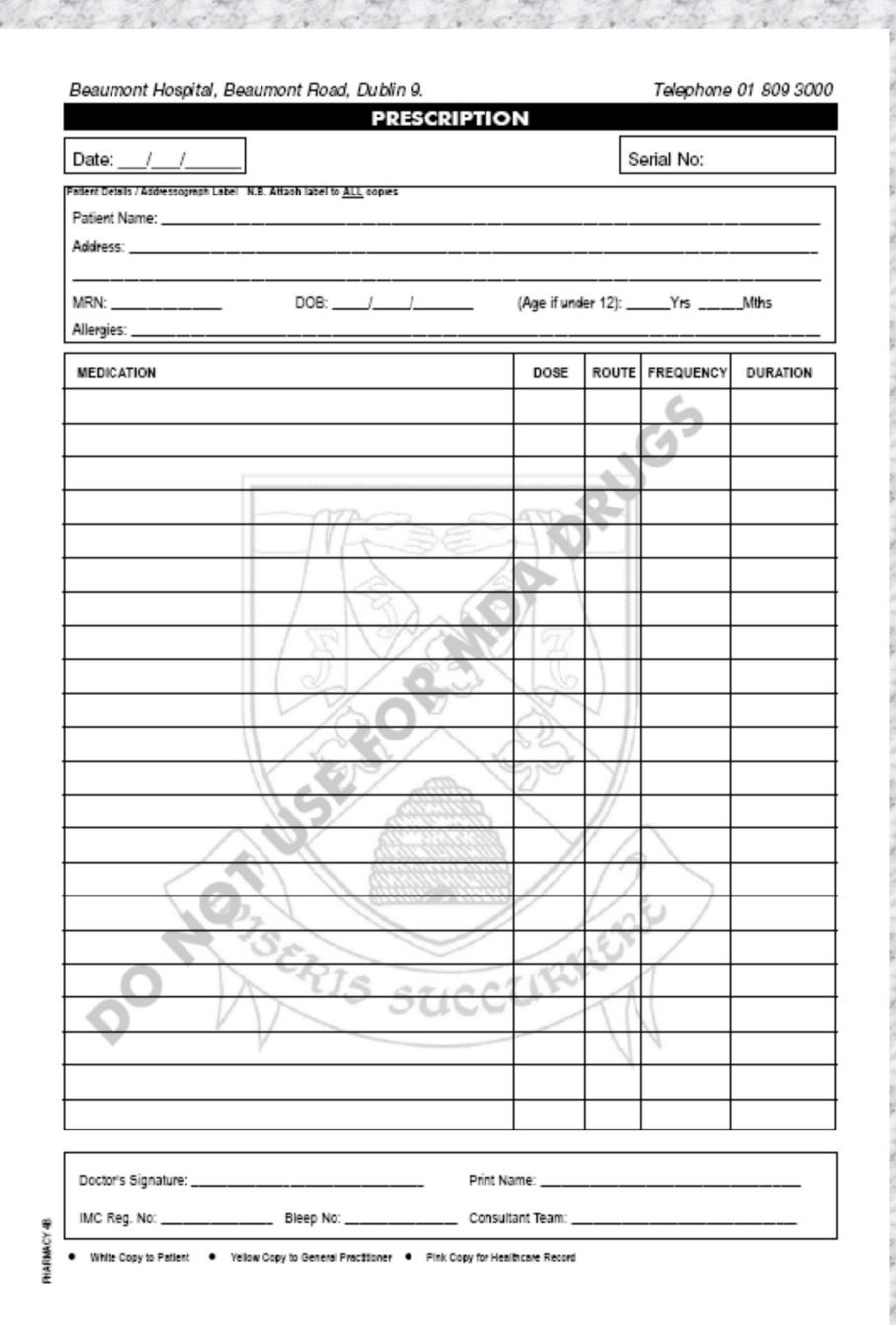
#### Methodology

A new A4 (210mm x 297mm) triplicate prescription form was designed by the author and approved by Beaumont Hospital's Drugs and Therapeutics Committee. The triplicate form comprised an original with copies for the GP and healthcare record. The original (top) copy of the form is reproduced below. The form was introduced in October 2010 using Kotter's eight step change methodology as a guide.<sup>3</sup>

The new forms were evaluated in two ways. Firstly, a sample of 40 of the traditional forms and 37 of the new forms were scrutinised for inclusion of specific prescriber details including the MCRN. The percentage of both traditional and new forms containing each prescriber detail was calculated.

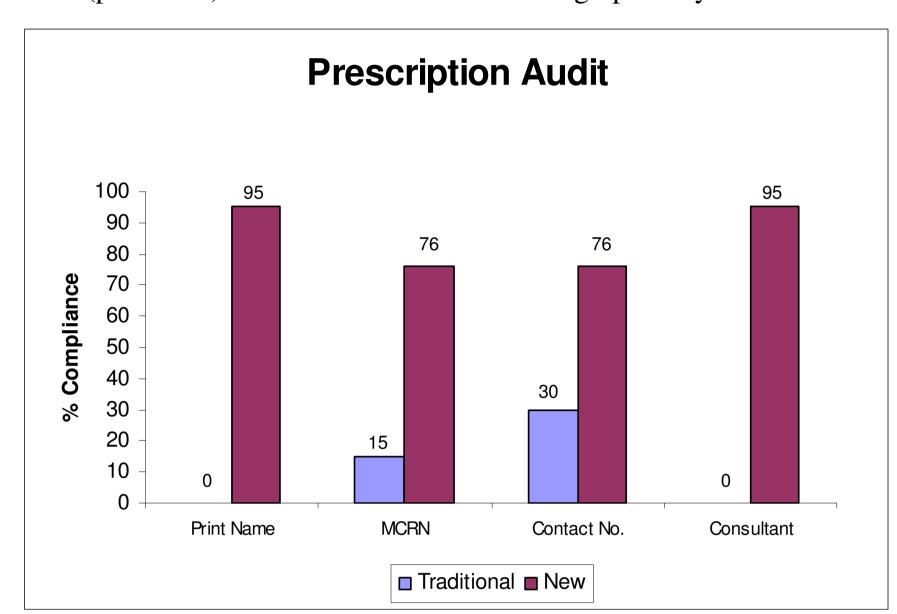
Secondly, a survey of prescribers' and community pharmacists' attitudes to the new form was conducted. The survey consisted of six statements relating to the new prescription forms and respondents were invited to indicate their agreement or otherwise with the statements on a five-point Likert scale which ranged from strongly agree to strongly disagree. (See table 1) Analysis was on the basis of the aggregate of the 'strongly agree' and 'agree' responses for each group.

Statistical analysis was conducted using PASW.  $\chi 2$ -test was used to compare the results of the prescription audit and Fisher's Exact Test (2-sided) was used to compare the results of the two groups who participated in the survey. p values were calculated and the  $\alpha$  level used was 0.05.



## Results

The prescription audit confirmed that the new prescription form was associated with a significant increase in the inclusion of all prescriber details. Prescribers provided their MCRN in 76% of the new format forms compared to 15% of the traditional forms (p < 0.001) and provided a contact number in 76% of the new forms compared to 30% of the traditional forms (p < 0.001). Prescribers printed their name and provided their consultant team in 95% of the new format forms compared to none of the traditional forms (p < 0.001 in both cases). Only 45% of prescribers provided any identification detail on the traditional forms but 100% of prescribers provided 2 or more identification details on the new forms (p < 0.001). These results are illustrated graphically below.

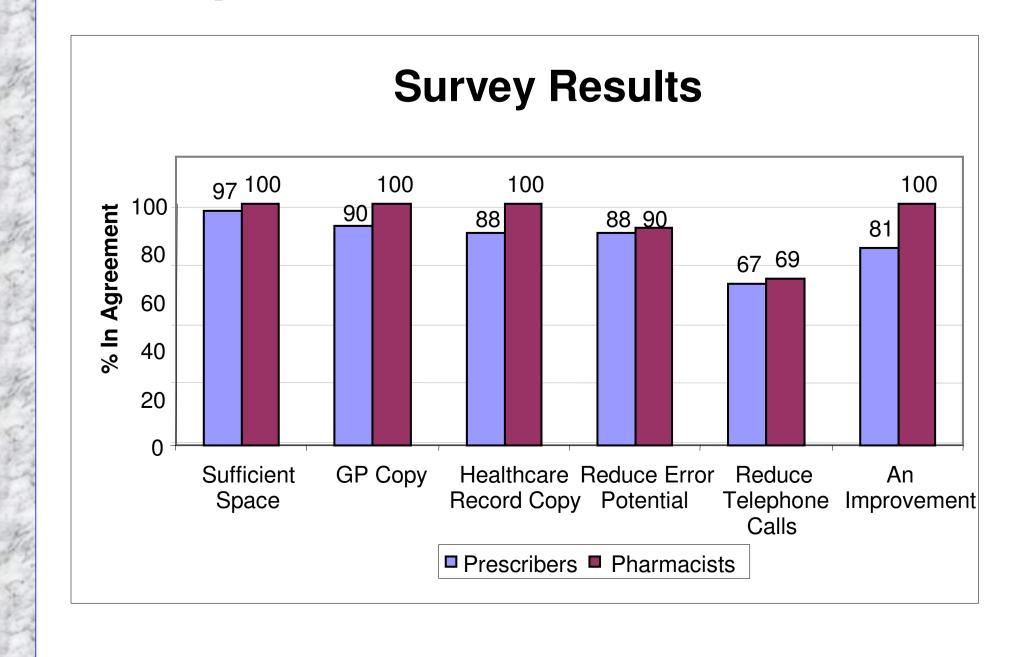


Prescribers were surveyed at a Medical Grand Rounds conference and in the Emergency Department (ED) and a total of 34 participated. Pharmacists were surveyed by means of a postal survey of all supervising community pharmacists in the Dublin 5 and 9 postal areas and a total of 29 (69%) returned completed survey forms.

Table 1: Results of Prescriber and Community Pharmacist Survey

Statement (Shortened form used in graph 2 in brackets)	Prescribers (n = 34)	Pharmacists (n = 29)	Fisher's Exact Test (2- sided) p Value
	% strongly agree / agree	% strongly agree / agree	
The new A4 format outpatient / discharge prescription form provides sufficient space to prescribe a large number of medicines in a clear manner. (Sufficient Space)	97	100	1.000
It is useful that the hospital is able to provide a copy of the out-patient / discharge prescription to the patient's general practitioner. (GP Copy)	90	100	0.238
It is useful that the hospital is able to retain a copy of the out-patient / discharge prescription for the healthcare record (medical notes). (Healthcare Record Copy)	88	100	0.116
The new prescription form could reduce the likelihood of errors or confusion concerning medications after outpatient visit or hospital discharge. (Reduce Error Potential)	88	89	1.000
The new prescription form could reduce telephone calls requesting clarification of medication orders from the community pharmacist to the prescriber / hospital. (Reduce Telephone Calls)	67	69	1.000
The new A4 triplicate prescription form is an improvement over the smaller single copy prescription form it replaces. (An Improvement)	81	100	0.025

A further analysis was conducted to compare the responses of consultants and non-consultant hospital doctors (NCHDs). The consultants were less likely to agree or strongly agree that the new forms could reduce telephone calls from the community pharmacist to the prescriber (p = 0.001) and that the new forms were an improvement (p < 0.001). Only one out of seven consultants agreed or strongly agreed that the new forms were an improvement over the traditional forms



### Discussion

The new A4 triplicate prescription form provides sufficient space to allow prescriptions to be written clearly in compliance with Joint Commission standards. <sup>4</sup> It is structured to provide prompts for all prescribing information (medication name, dose, route of administration, frequency and duration) to reduce the potential for omission of important information. The form requests four separate prescriber contact details and the prescription audit found that all prescribers now provide a minimum of two details compared to 55% of prescribers providing no details on the traditional forms. This is a significant improvement and ensures that, in the event of a query arising, it is now much easier to identify and contact the prescriber.

Prescribers are legally required to provide their MCRN on prescriptions as a result of the Medical Practitioners' Act (2007). This information was only provided on 15% of the traditional forms but, by requesting this information, this has increased to 76% with the new forms. Although there is still some way to go, this is a significant improvement in prescribers' compliance with this legal requirement.

Following an inpatient stay or outpatient visit, a letter is sent to the patient's GP, however information regarding medicines is often incomplete or absent. The new form ensures that GPs receive a comprehensive list of their patients' medications following a hospital visit. This conforms to the Joint Commission's National Patient Safety Goal 2 to 'improve the effectiveness of communication among caregivers.' Similarly, the new form provides a complete record of the patient's outpatient / discharge medications for the healthcare record.

The survey of prescribers and community pharmacists confirmed a high level of satisfaction with the new forms among both groups of healthcare professionals. However it was disappointing to note that only one out of seven (14%) consultants agreed or strongly agreed that the new forms were an improvement over the traditional forms. This suggested a high level of resistance to change amongst this influential group of hospital staff.

## Conclusion

A new A4 triplicate prescription form introduced in Beaumont Hospital was well received by both prescribers and community pharmacists. Prescribers were significantly more likely to include their MCRN and other contact details on the new forms compared to the traditional forms.

## References

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## **Statement of Disclosure**

Authors of this presentation have the following to disclose concerning possible financial or personal relationships with commercial entities that may have a direct or indirect interest in the subject matter of this presentation.

Mark McCullagh Nothing to disclose.