

# Why Didn't I Think of That...?

## Creating a CQI Tool to Improve After Hours Pharmacy Services



The on-call database desktop

### PROVIDING AFTER HOURS PHARMACY SERVICES

can be very stressful for the on-call pharmacist in a 739-bed tri-site primary care hospital such as ours. To reduce the anxiety experienced by the pharmacists, our Pharmacy Continuous Quality Improvement (CQI) Committee assigned a subcommittee, the On-call Committee, to brainstorm possible solutions. Their proposal was to develop a tool to capture trends of after-hour calls and service. Reports generated from this database would enable us to identify inefficiencies in the current system and institute strategies for improvement.

### Design and Programming

The database interface uses MS Access and was designed to be user friendly. To decrease the amount of data entry needed, and to increase accuracy, features such as drop boxes and buttons were used wherever possible. Interface design was crucial because ease of use will ensure that pharmacists record all calls. The database was built to use maximum desktop space and large, easy-to-read fonts. It resides on the "On-call" Notebook computer, which the on-call pharmacist brings home each night.

The log-a-call function is launched from the desktop. Key data collected for each call include date and time of call (automatically populates at sign-on), and drop-down lists for other basic information such as drug and problem type. Pharmacists free-text problem details and resolution, or additional details, and questions such as whether a call back was required are yes/no boxes.

A quality assurance function allows the site system administrator to review calls bi-weekly and make comments and/or suggestions for system improvement. In addition, the on-call pharmacist can view previous calls by any field. This database was designed to allow full reporting capabilities for each field or combination of fields.

### Results

Data from the pilot indicated that 80% of calls were preventable, and immediate quality improvement initiatives were implemented to establish a proper escalation procedure for paging the on-call pharmacist, including contacting a night nurse coordinator. To reinforce the escalation procedure, the pharmacist's pager number was made available only to the switchboard.

	POST-IMPLEMENTATION (9/1/03 to 4/30/04)	PRE-IMPLEMENTATION (11/1/02 to 6/30/03)	% REDUCTION
# of preventable call backs	5	15	33 %
# of call backs	16	26	61 %
# of preventable calls	140	270	52 %
Total number of calls	261	374	70 %

Results comparing pre- and post-implementation of the on-call database show a definite reduction in calls and call backs.

Logging of calls by the on-call pharmacist on a user-friendly electronic database has allowed pharmacy administrators to identify issues and develop a rapid-action plan to resolve them. The quality of after-hours service has improved greatly, and the process of screening has vastly reduced the number of preventable calls. Records of previous calls and call backs are used as reference guides in handling similar types of calls, thus reducing the anxiety of on-call demands for the pharmacist. **RP&P**

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### Acknowledgments:

We would like to acknowledge the efforts of the Pharmacy On-call CQI subcommittee for providing the framework for the database and the expertise provided by Faraz Choudary RPh, BSc. Phm, of MedCounsel.com for building a robust, user-friendly database from a practicing pharmacist's point of view.

**LOGGING OF CALLS  
BY THE ON-CALL PHARMACIST  
ON A USER-FRIENDLY  
ELECTRONIC DATABASE  
HAS ALLOWED PHARMACY  
ADMINISTRATORS  
TO IDENTIFY ISSUES  
AND DEVELOP  
A RAPID-ACTION PLAN  
TO RESOLVE THEM.**

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