

# **CMBES PEER REVIEW OF LONDON HEALTH SCIENCES CENTRE, OCTOBER 2007**

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## **INTRODUCTION**

CMBES offers a peer review process for its members. It uses a survey questionnaire based on the CMBES "Clinical Engineering Standards of Practice for Canada". The questionnaire format is similar to the Hospital Accreditation questionnaires, except that it is exclusively focused on Clinical Engineering Services. The most recent Peer Review survey was conducted at London Health Sciences Centre (LHSC), in October 2007. The surveyors were Mike Capuano, Bill Gentles and Mario Ramirez.

LHSC is an amalgamation of three formerly independent hospitals, University Hospital, St. Joseph's Hospital and Victoria Hospital. The Biomedical Engineering departments in these three hospitals have been amalgamated into a single department under one director. The incumbent director, Fernando Lebron, was about to retire, and requested a Peer Review to provide his successor with an outside perspective on the departments strengths and weaknesses.

## **RATIONALE FOR THE PEER REVIEW PROCESS**

The purpose of Peer Review is to create periodic opportunities for a service to assess its performance, and identify how it might be enhanced. An equitable and thorough assessment is best performed by professionals with experience in the field. The assessment provides an indication of the breadth and quality of the service. Also, a Peer Review enhances the sharing of ideas throughout the clinical engineering and health service communities. The ultimate goal is to strengthen service within the organization.

This voluntary CMBES program provides a mechanism for assessing service conformance to the CMBES Standards of Practice for Clinical Engineering Services and for identifying improvements to service delivery.

The CMBES Peer Review Process is based on the Clinical Engineering Standards of Practice for Canada, a CMBES publication. [1] These standards were first

published in 1998. An updated second edition was published in 2007.

The Peer Review process uses a questionnaire that is directly based on the Standards of Practice. Each standard is listed in the Peer Review questionnaire, and a rating of compliance level to that particular standard is entered.

## **STEPS IN THE PROCESS**

The Peer Review process consists of the following steps:

1. An institution submits an application for assessment of Clinical Engineering services. The service group requesting a Peer Review will send a written request to the CMBES Chair of Professional Affairs, who will forward it to the Chair of the Peer Review Committee who will arrange for application material to be issued to the applicants. LHSC submitted their application in May 2007.

2. Internal Review: Staff of the service rate themselves according to the Standards of Practice for Clinical Engineering Services and complete a Pre-Survey Questionnaire (PSQ). LHSC submitted This questionnaire to CMBES in August 2007.

3. The PSQ is reviewed by the Peer Review Committee, who checks to confirm that the applicant has provided sufficient evidence to indicate that the service is ready for review. The Peer Review Committee asks the service unit to nominate candidates for the survey team.

4. A survey team is nominated by the service group requesting review. The Peer Review Committee approves the appointment of the survey team. The survey team must be composed of engineers and technologists with significant experience in the field of Clinical Engineering. The size of the survey team will be at least two people, with a minimum of one engineer and one technologist. The Peer Review Committee may increase the size of the survey team if deemed necessary. In approving the surveyors, the Committee will ensure that no apparent or potential conflict of interest is present due to common institutional, regional affiliation or otherwise. For

LHSC, the survey team consisted of Mike Capuano, Bill Gentles and Mario Ramirez.

5. The Survey Team arranges a mutually acceptable review date with the service group, and notifies the Committee in writing or by email. The dates for the LHSC survey were set as October 17 and 18, 2007.

6. The site to be surveyed sends the survey team a package containing the following:

- Previous Survey Report (if applicable)
- Completed Pre-Survey Questionnaire

In addition to completing the PSQ, the head of the service is required to provide a brief description of the service's position, practice or policy regarding the following items:

- i) The service's position, if any, on professional certification.
- ii) The inventory tracking database and its accuracy.
- iii) The PM process, i.e. how PMs are scheduled and the service's ability to ensure that PMs are performed on time.
- iv) The service's involvement in capital equipment planning.
- v) The service's level of involvement in equipment purchase specifications development (include an example, if applicable).
- vi) The hazard alert process.
- vii) The department's quality improvement philosophy and integrated processes.

The service is required to provide, preferably in soft-copy format, the following documentation to the survey team at least two weeks prior to the survey:

- i) Policy and procedure manual.
- ii) Quality assurance manual.
- iii) Sample statistical reports generated by the service on a regular basis with a brief description of each, e.g. PM completion report.
- iv) Documentation of other critical departmental processes, as applicable.

7. Additional background information may be requested from the applicants before the survey visit takes place.

8. Survey Visit: The time allocated to the survey should be a minimum of one full day for each site to be visited. (The LHSC survey was completed in two days, even though three sites were visited). The surveyors use an audit process to confirm important information. For example, a number of devices are selected at random, and their service histories examined to verify completeness and accuracy of all information,

including PM completions, service histories, and inventory information. Based on the clinical programs supported by the service, the survey team selects at least two areas to perform customer interviews, to assess the overall level of satisfaction with the service. In addition, they meet with the member of senior administration that the service reports to.

The LHSC survey team conducted a total of 21 interviews over two days.

Before leaving the facility, the surveyors prepare a brief summary of their findings. They allocate a minimum of 1 hour to prepare this report. The surveyors present an oral report on the findings, suggesting areas for improvement and identifying strengths of the service. It is recommended that all service staff attend this presentation.

9. Within two weeks of the visit, the surveyors provide the Peer Review Committee with a complete evaluation containing the Survey Checklist and Surveyors Evaluation Form. This report includes any recommended improvements identified during the survey.

10. Within two weeks of the survey, the staff of the service group complete and return a Post Visit Form. This short report will provide feedback on the results of the survey process.

11. Within one month of the survey, the Peer Review Committee reviews all documents and discuss any contentious issues with the surveyors.

12. Survey Report: A formal report is forwarded to the service group that was surveyed within six weeks of completion of the survey.

## CONCLUSIONS

The Peer Review process provides a valuable quality improvement tool for service groups in Canada. It provides an outside perspective on the strengths and weaknesses of a service. The final report itemizes strengths and weaknesses, and lists opportunities for improvement that have been identified by the surveyors. The Peer review also helps to raise the profile of Clinical Engineering within the institution as the surveyors meet with many of the Clinical/administrative personnel. These meetings demonstrate the fact that the Clinical Engineering service is striving to meet nationally accepted standards.

## REFERENCES

[1] Clinical Engineering Standards of Practice for Canada, CMBES, 2007. [www.cmbes.ca](http://www.cmbes.ca)