## Clinical Audit: A Synopsis

## Myra K Tilney

This synopsis is a brief report of the proceedings of the Clinical Audit Seminar organized by the Continuing Professional Development (CPD) Committee, held on the 29<sup>th</sup> October 2002. The seminar attracted a broad inter-professional audience, mainly consisting of doctors but also including pharmacists, nurses, and health service managers. In an effort to provide a broader focus, an effort has been made to introduce various perspectives on the topic, including one external to medicine. The idea was to try to learn concepts from other professions which could then be used to improve patient care; this practice has taken place in many industries, and is finally beginning to develop in medicine in different spheres.

The Seminar started with a brief introduction of the Continuing Medical Education (CME) committee and its' work by Professor CL Cutajar, Chairman of the CME Committee of the Faculty of Medicine and Surgery. The component committees including the Continuing Professional Development Committee, the 5<sup>th</sup> Malta Medical School Conference Committee and the Malta Medical Journal Editorial Board were described; each is aiming to enable further professional development so as to enable higher standards of local care.

The subject of Clinical Audit was introduced by Dr Miriam Camilleri, Chairperson of the Clinical Audit Initiative Committee. She described the forces leading up to the introduction of clinical audit internationally, including increasing pressures on the practice of medicine, such as financial restrictions with increasing emphasis on achieving better value for money, increasing political pressures and patient demands for more accountability. Structures have evolved within the healthcare professions, with the development of informal audit leading to better patient care; all developing within an environment of maturing administrative and legal structures. Audit requires different stages, moving from an initial study stage assessing practice, then determining what needs to improve, followed by acting on this to improve patient care.

These developments have taken place internationally; Maltese medicine is not immune to these same pressures, and unless the professions put their own house in order, showing that optimal management strategies are being developed, others will try to do so, with perhaps less emphasis on the quality of patient care delivered and a reduction in the autonomy that

**Myra K.Tilney** MD, MBA, MRCP Chairperson, Continuing Professional Development Committee Email: myra.tilney@um.edu.mt characterises professionals. The key point is review of current practice with a focus on improvement; without explicit selfexamination, it is very difficult to improve patient care. The other salient feature is that this needs to be under individual control. The main concerns emanating are the insularity of local practice, raising issues of identification. However, if individuals were to audit their own area of practice, this would empower them to improve healthcare and address any lacunae identified: it may even provide the data required to convince others of the need for change and improve resource provision.

Mr Steve Cachia, Partner at Deloitte and Touche gave an overview of the similarities between the accounting and medical professions, not least our common propensity to being sued! He gave what he described as a 'mini-skirt presentation, showing enough to interest the audience, whilst covering all the interesting bits'. Auditing has evolved into a complex process, mainly in response to external forces driving risk management so as to reduce liability; in so doing it has enabled the development of better practice for their clients. There are different types of audit, including administrative audit, where auditors can provide an input to the actual process so as to assist its' development. Various concepts are important including benchmarking, which can be used to compare practices; data warehousing is being developed locally by government in the financial sphere, enabling data capture and analysis. Software is being used to enable convenience analysis of data, all of which is in the public domain. These concepts are all applicable to medicine in a clinical context, and auditors could potentially usefully contribute to this process. Medicine is a fairly new area for local auditors, but internationally, this has become an established field in itself.

A surgical clinical audit was graphically illustrated by Mr Alex Manche, Consultant, Cardiothoracic Surgeon. Cardiothoracic surgery, by virtue of its' specific throughput, is probably the most audited procedure world-wide. Monitoring certain parameters using international standards as benchmarks for comparison enables the identification of areas requiring further elucidation. Clinical audit can and should produce changes in practice. This was illustrated with the example of monitoring blood usage; local audit had revealed that three units, instead of the usual four units were adequate, thus freeing up resources for more efficient use. Comparisons of outcome audit were illustrated with complication rates, and their international benchmarks. Such data collection enables participation in ongoing international data comparisons, in which the cardiothoracic department is participating. A simple financial audit illustrated how the establishment of the unit has saved the country millions of Liri. This area is still in its' infancy and obtaining such data can be very difficult, particularly with existing structures. Mr Manche noted that the actual data collection was minimally time-consuming, requiring no more than three to four minutes per patient overall, although the actual analysis was time consuming and mainly took place after hours. All in all, this was an elegant exposition of the levels audit can reach, given adequate time and effort.

Cardiothoracic surgery is a highly specific area that lends itself very well to such auditing, as most patients are chanelled through a similar clinical pathway that can then be easily audited; albeit requiring time and effort. Areas that can be easily audited include procedures on similar patient groups, processes; outcomes and financial audit, amongst others.

A pathology audit was illustrated by Dr David Schembri Wismayer, Consultant Pathologist, who presented a cytology audit carried out with other members of the pathology department. This focused on the results of Fine Needle Aspiration procedures, which lately accounted for 70% of all cytological samples. The group studied the correlations between the cytology and subsequent histologies, identifying the specificity and sensitivity of the procedure, as well as the false positive and negative rates for the procedure. The results were used as the basis for informed discussions with the surgical department with a view to improving the results, and subsequent care offered to patients.

If this sort of data were to be clearly presented to clinicians on a regular basis, it would enable a more informed selection of investigations and procedures.

The last guest speaker focused on the medical area. Dr Mario Cachia, Consultant Physician and a member of the Quality Assurance Initiative Committee noted that many of the applications to the committee were surveys or studies, but did not actually demonstrate the characteristics of audit, in that they did not go on to close the audit loop. Specific examples of where audit could be applied in the Medical Department were illustrated, giving the examples of a prospective audit of anticoagulation rates for patients in atrial fibrillation, or monitoring the attendance of patients at the outpatient department, identifying reasons for non-attendees as these represent a high wastage of resources. The actual mechanics of the process were illustrated, also listing possible pitfalls and their avoidance.

Finally, the panel responded to questions and comments from the audience. Professor VG Griffiths noted that surgeons had been the forerunners of audit through their morbidity and mortality meetings; the importance of such meetings cannot be underestimated. Prof J Muscat continued in the same vein; he asked Dr A Caruana Galizia, Chairman of Medicine to comment about the current position of audit in routine medical practice. The latter noted that the area had been long in developing, noting that both protected time and resources were required for audit to flourish.

In conclusion, the seminar described how audit is part of the quality improvement spiral: it is a tool to improve patent care, assisting in risk reduction in clinical practice, and enabling more effective use of (scarce) resources.

*Evaluation*: Participants were asked to evaluate the seminar at its' conclusion; the time and location were judged as good to excellent by 97%. The overall response was very satisfactory. The keen participation of the professions allied to medicine is acknowledged with satisfaction.

The CPD Committee<sup>\*</sup> is grateful to all those who supported this seminar including the guest speakers, Servier, the Department of Health, and all participants.

\*The CPD Committee members are Dr M K Tilney (Chair), Mr G Caruana Dingli, Dr D Vella Briffa, Dr M Cordina and Dr P Sciortino

## Corinthia Paediatric Research Fund donates Equipment for Screening of Hearing Loss

Recently, the local services available for the identification of potential hearing problems in infants and young children have been considerably augmented by the acquisition of an otoacustic emission monitor which is capable of detecting minor deficiencies in hearing and 'flagging' those cases for more detailed hearing assessment.

This equipment was purchased through a generous donation from the Corinthia Paediatric Research Fund and presented to Dr John Cachia on behalf of the Health Divison by Mr George Pisani, Chairman of the Fund. The equipment has been installed in the ENT out-patient department at St Luke's Hospital and is currently being used to screen all infants treated on the Special Care Baby Unit, and all those deemed at risk of hearing loss for whatever reason. To date, several cases with hearing defects have been identified using this equipment and all have benefited from early intervention and support including hearing aids where necessary. It is planned to introduce routine neonatal screening for hearing loss in the near future. Whilst we have absolutely no doubt that the monitor will continue to prove its worth, we are extremely grateful to all those who, in one way or other, have supported and facilitated this initiative and, in particular, the Corinthia Paediatric Research Fund for their financial backing, Dr Paul Vassallo Agius who launched the initiative and the medical staff in ENT including Dr Tony Fenech, Dr Alec Lapira and Mr Mario Said. To all these individuals, a hearty thanks indeed!