

For Information
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LEGISLATIVE COUNCIL PANEL ON HEALTH SERVICES

Surgical Outcome Management in the Hospital Authority: Clinical Governance and Improvement Measures

Purpose

This paper briefs members on the development of the surgical outcome management in the Hospital Authority (HA).

Overview

2. Mindful of the importance to provide quality healthcare services, HA has taken various measures to monitor clinical outcomes. Since the 1990's, HA has strengthened clinical accountability through the introduction of clinical management team (CMT) framework. A CMT is a structural grouping of multidisciplinary healthcare professionals providing services to patients in the same clinical specialty or care category. Within each CMT, there are regular mortality and morbidity (M&M) meetings to monitor clinical outcomes. Peer review exercises are conducted through such meetings with a view to improving service quality and patient safety.

3. At the corporate level, HA introduced the Advanced Incident Reporting System in 2004, and the Sentinel Event Policy in 2007 (which later became the Sentinel Event (SE) and Serious Untoward Event (SUE) Policy in 2009) to help monitor clinical outcomes. The Policy stipulates that adverse clinical outcomes must be properly notified, disclosed to patients and their carers, and followed up by the CMT.

4. Clinical outcomes are affected by multiple factors including comorbidities of patients, timing of illness presentation, and other events that

occurred during the patient journey. Variability between individual cases made it difficult to develop a normative benchmark that could compare clinical outcomes between hospitals.

5. In 2002 to 2007, the Coordinating Committee of Surgery (COC-Surgery) attempted to overcome this hurdle through conducting comparative audits on a range of major and ultra major surgical operations performed in HA. These comparative audits, though not the most sophisticated, exemplified professional self-discipline and laid the foundation for the present day model of the Surgical Outcomes Monitoring and Improvement Program (SOMIP).

SOMIP

6. SOMIP, commenced in 2008, is a quality improvement program set up to monitor surgical outcomes and identify improvement opportunities in public hospitals. It makes reference to the National Surgical Quality Improvement Program (NSQIP) of Veterans Affairs Hospitals in the United States of America. An independent Steering Committee, led by clinical experts from the specialties of Surgery and Anesthesia, and supported by statisticians and executives, oversees the data collection, methodology and reporting of the program.

7. SOMIP deploys a designated team of nurse reviewers to review all clinical records and extract relevant information into the SOMIP database. Archival data, such as laboratory results, were transcribed directly from HA's clinical management system into the database for analysis.

8. The methodology of SOMIP adopts a risk adjusted model to establish a valid comparison of surgical outcomes amongst the 17 hospitals with departments of surgery in HA. A statistical team, led by a Professor of the Department of Statistics of the Chinese University of Hong Kong (CUHK), was commissioned to conduct the analysis.

9. The outcomes measured by SOMIP included the 30 day post-operative mortality and various post-operative complications such as pneumonia, anastomotic leakage, etc. The outcomes of elective and emergency surgery were expressed separately for better delineation of outcome under different

scenarios.

10. The SOMIP report is accessible to all staff via HA's electronic knowledge gateway. HA organizes an open forum for all staff to discuss the results upon the release of the report to facilitate communication and to promote learning and sharing. Given the considerable public interest in SOMIP, apart from publishing the summary of the report annually, HA also arranges a media workshop each year to explain the report, answer queries and clarify misunderstandings.

11. In the SOMIP report of 2012/13, the average 30 day crude mortality rate for elective major and ultra major operations was 0.7%, which compared favorably with other developed countries. In addition, the report noted the statistically significant improvement in the overall risk adjusted mortality for emergency operations in HA.

12. The SOMIP Report of 2012/13 indicated opportunities for improvement in Queen Elizabeth Hospital (QEH) and Prince of Wales Hospital (PWH) in emergency surgical service; and Tuen Mun Hospital (TMH) in both emergency and elective surgical services.

13. A series of follow up actions were undertaken for hospitals with indicated opportunities for improvement to help identify the root causes. Upon the release of the report, veteran surgeons and senior executives visited these hospitals to explain the report, listen to the staff's concerns and offer advice where appropriate. Furthermore, the COC-Surgery commissioned experienced members to look into the operations of the surgical departments of the hospitals concerned and deliberated the report in a peer reviewed manner. Statistical methods were also used to identify factors that might affect hospitals' performance.

14. In the latest report covering the period from July 2012 to June 2013, the COC-Surgery raised two issues to the attention of HA's management. The first was the statistical finding that high bed occupancy of surgical wards is inversely correlated with their outcomes. The second issue was the observation that the differential utilization of Intensive Care Unit beds by patients underwent elective and emergency operations might have an impact on surgical outcomes.

15. HA has actively explored means for improvement. In respect of the COC-Surgery's observations, QEH, TMH and PWH would set up surgical high dependency units in 2014/15. Other improvement measures will be implemented by way of the annual planning exercise.

Review

16. In 2012, HA commissioned the Teesside Hospital of United Kingdom to conduct an independent review of clinical governance in HA. In general, the Review Team appreciated that HA has a good system of clinical governance in place; in particular, it commended SOMIP as an efficient and effective way to capture patient related outcome. The Review Team suggested further refining this tool to make it more useful, and noted that analysis should be made pointing to prospective improvements of care. The suggestions by the Teesside Review Team were accepted by the SOMIP Steering Committee.

Cases of Members' Concern

17. We understand that the clinical governance and outcomes of two recent cases relating to interventional procedures in HA have aroused public attention. We would stress that HA has been handling both cases in accordance with the relevant procedures and guidelines.

18. For the case involving a victim in the Manila incident, she has been closely followed up immediately after her return to Hong Kong after the incident and has received a series of plastic and reconstruction surgeries at PWH. In line with the general practice, all decisions regarding the timing and treatment modality of the patient was made based on clinical needs. The Cluster Chief Executive of New Territories East Cluster personally met with the patient concerned on 17 January 2014 to reaffirm the fact that only clinical factors had been taken into account in her treatment. HA will continue to maintain contact with the patient to offer assistance as appropriate.

19. For the other case involving the temporary suspension of clinical rights of a doctor in performing certain cardiological interventions, HA has set up two expert panels and an Independent Review Committee (IRC) to look into

the matter. The objectives of the IRC are threefold. Firstly, the IRC will review findings of the two expert panels. Secondly, the IRC will deliberate on issues of clinical governance, including credentialing, which has emerged as an issue of concern in this case. Thirdly, the IRC will review the administrative handling of this case. The IRC has received the reports from the two expert panels and are deliberating the findings. Upon completion, the IRC will submit their report to the HA Board and recommend follow up actions as appropriate. The final outcome will be made public when ready. In respect of the concerned doctor's complaint against administration of PWH, HA has completed the investigation and formally replied to the complainant.

Conclusion

20. All in all, HA places strong emphasis on surgical outcomes and clinical governance. The establishment of a robust monitoring system aside, HA has a comprehensive governance structure to look into individual complaints impartially. HA will continue to work to improve the safety and quality of healthcare services provided.

Food and Health Bureau
Hospital Authority

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