Service Priorities and Programmes
Electronic Presentations

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Management of Surgical Instrument in Operating Theatre for Patient Safety
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Introduction
Due to the advancement in technology, the design of surgical instrument used in the operating theatre tends to be complex and delicate containing small parts which easily break with wear and tear, or dislodge during surgery. There is an increase incident of broken instrument and some are retained in patient’s body without prior notice.

Objectives
To reduce the incident of broken instrument during surgery: -improve communication between Operating Theatre (OT) and Sterile Supplies Unit (SSU) to enhance early detection and future prevention of the incident -develop measures to alert and facilitate integrity checking of the instrument before and after surgery -devise a mechanism to monitor the condition of surgical instrument effectively

Methodology
Improve Communication 1.Instrument Team including the representatives of OT and SSU staff is formed to identify potential defect instrument and alert all staff 2.Instrument Feedback Form is revised to facilitate promptly reporting of missing or broken instrument in the surgery to OT manager, surgeon and SSU staff. Increase staff alertness in integrity checking 1.Each specialty identifies high risk instrument and makes close up photos, adds remark in the instrument count sheet together with Risk Alert cards input into the theatre iPAD to enhance awareness during instrument checking 2.Limit the utility span of instrument to prevent breakage during surgery. Arrange periodic usability check and early detection of instrument fatigue. 3.Dispose instrument with low power withstand feature after usage such as drill bit with diameter smaller than 1.1mm Conduct Staff Survey 1.Questionnaire is developed to collect staff feedback regarding the change in practice and its effectiveness.

Result
There is a decrease in Instrument incident rate from 5 incidents in between September 2016 to May 2017 to 2 incidents in between June 2017 to December 2017. 67% of respondents in the survey agree the new practice can effectively reduce the
incident and is feasible to follow. As a conclusion, the new practice can reduce the incident rate relating to surgical instrument and the sustainability can be maintained through collaborative problem solving approach and mutual support between OT and SSU staff.