Enhancement of Surgical Safety: Lean management in OT list arrangement under OTMS

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Introduction
In order to fully utilize the resource under cluster, patient in PWH eye center need to be arranged to have operation in AHNH. During the whole process of OT arrangement, there was room for improvement in the accuracy of electronic OT list and surgical safety. Current workflow: After confirmation of OT date, PWH health nurse fax related document to AHNH include operation listing form and out-patient progress sheet. The critical information included patient particular, diagnosis and operation procedure would be transcribed by AHNH health nurse on the hand-written OT booking form. During the process of i) data entry of the critical information into OT list under OTMS and ii) OT publication before OT date, AHNH health nurse only checked against the hand-written OT booking form without double confirmed with the original patient record. This practice posed potential risk in surgical safety e.g. i) entering of wrong critical information in the electronic OT list, ii) wrongly booking of OT session under different subspecialty. As such, we decided to change the workflow of OT list arrangement and reformulate a proper checking mechanism.

Objectives
a) To enhance surgical safety with lean management in OT list arrangement under OTMS
b) To ensure correct critical information in the electronic OT list and arrangement of correct OT session under different subspecialty,
c) To formulate a proper checking mechanism before OT publication

Methodology
a) A taskforce include doctor and nurses was formed to review the existing workflow from confirmation of OT date, data entry into OTMS to OT list publication.
b) With lean approach, PWH health nurse changes practice to i) direct entry of OT information into OT list under OTMS with patient record; ii) provide double checking for the accuracy of the OT information prior notice to AHNH health nurse.
c) AHNH health nurse abort the practice of transcription of OT information from the faxed patient record into a hand-written OT booking form.
d) A standardized & proper checking mechanism before publication of final OT list has been formulated for AHNH health nurse: To check the critical information against patient’s record instead of any transcription.

e) Surgeons are encouraged to access OTMS and check the correctness of OT list information after OT publication and before operation.

**Result**
The process of OT list management is streamlined and leaned by revised workflow through collaborative efforts among PWH and AHNH health nurses. Direct entry of OT information into electronic OT list by respective party eliminates the risk of wrong entry with transcription. More important, surgical safety can be ensured with the enhanced checking mechanism. The new workflow has been implemented since March 2016 and so far no incident of incorrect OT information on the OT list and wrong booking of OT session have been found.