2017 Hospital Authority Convention 醫院管理局研討大會

ROAD TO ACHIEVE ZERO RETAINED SURGICAL ITEMS INCIDENTS – USING ARTIFICIAL INTELLIGENCE TO SAFEGUARD SURGICAL SAFETY IN OPERATING THEATRE

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ANAESTHESIA AND OPERATING THEATRE SERVICES

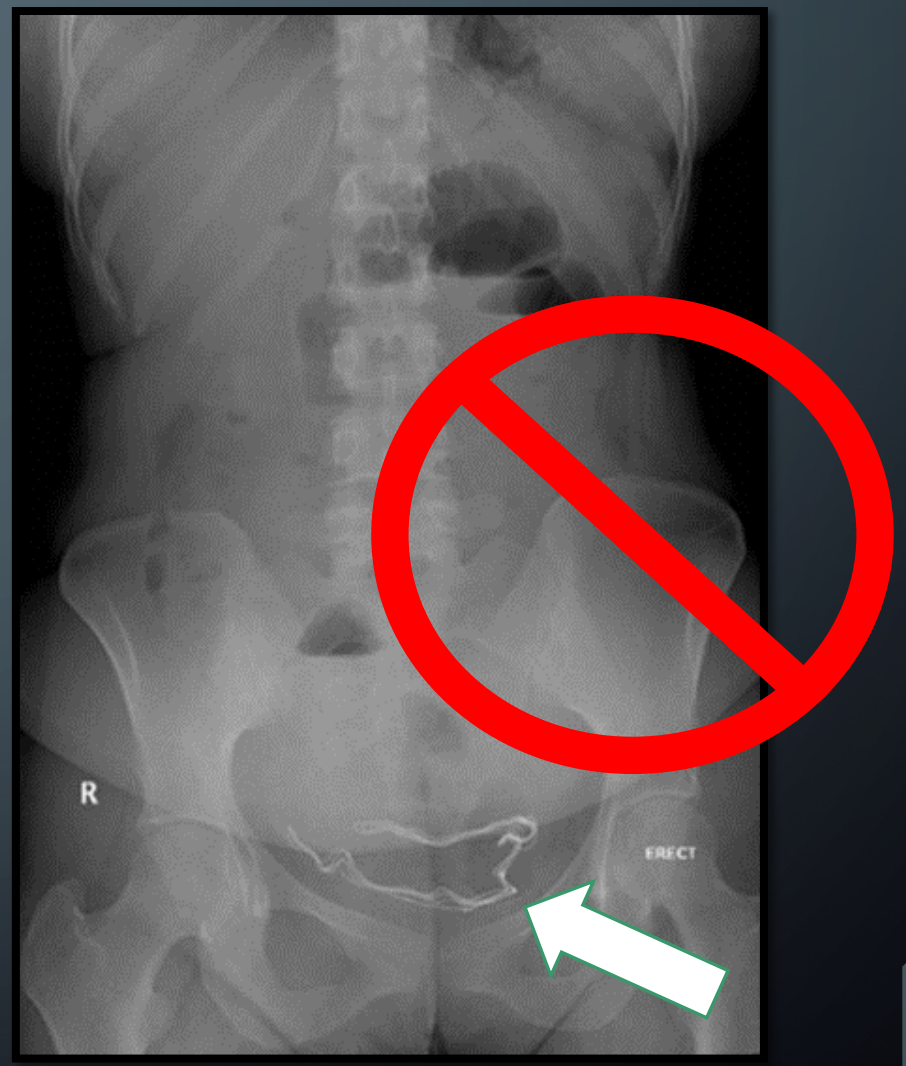
TSEUNG KWAN O HOSPITAL

Anaesthesia and Operating Theatre Services
Tseung Kwan O Hospital

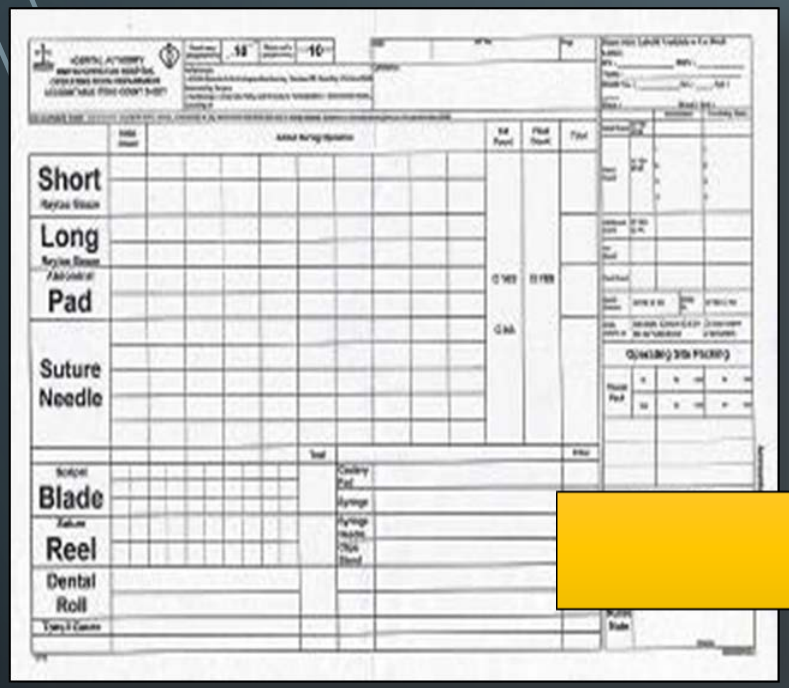
九龍東醫院聯網
KOWLOON EAST CLUSTER

OBJECTIVES

- To **enhance patient safety** in the perioperative setting, with an aim of **achieving zero incident of retained surgical items (RSI)**
- To enhance the **efficiency and transparency** of intraoperative documentation

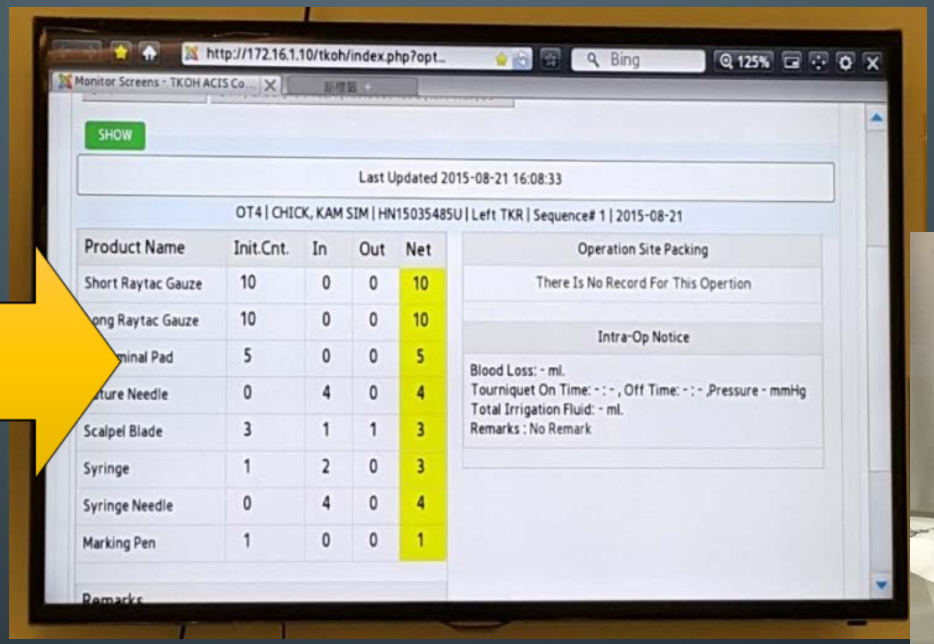


HOW DOES THE SYSTEM WORK?



Cluster Based Count Sheet + Intraoperative Nursing Documentation

PNIS



Display on Smart TV

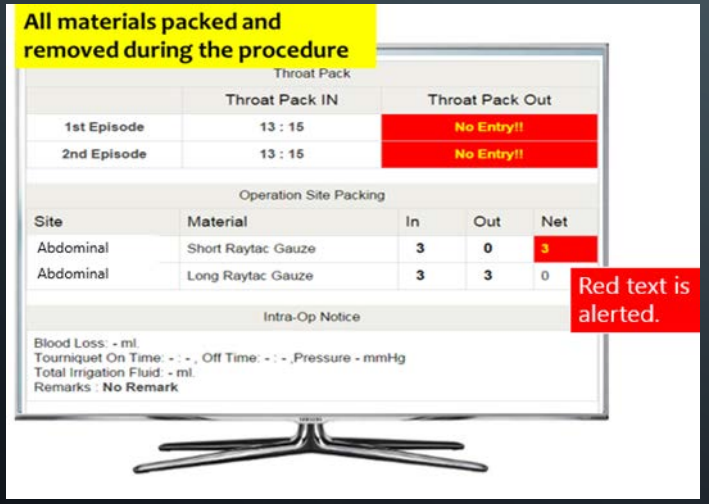
Data entry through iPad

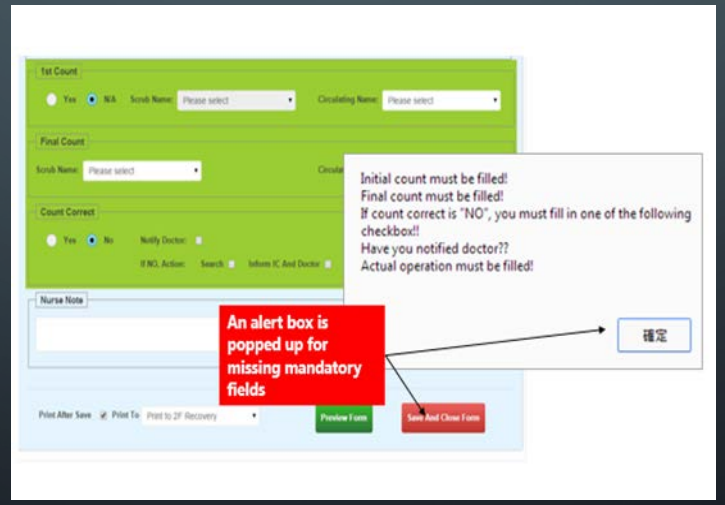
ARTIFICIAL INTELLIGENCE OF PNIS

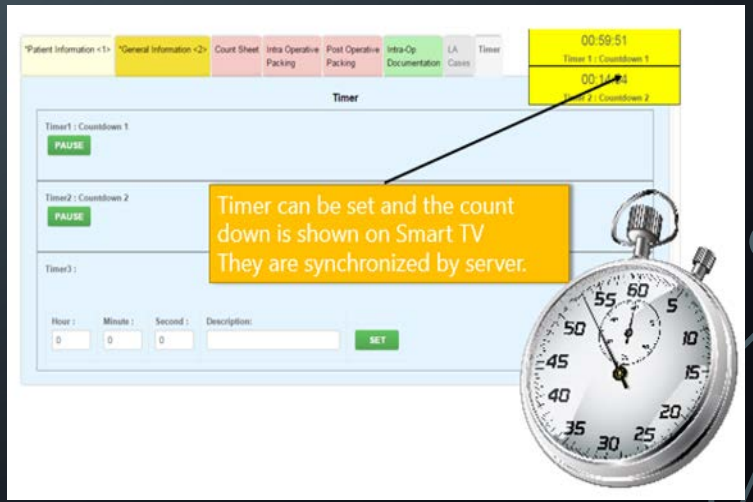
ALERT ON SMART TV SCREEN TO ENSURE THE REMOVAL OF INTRAOPERATIVE PACKING OF SWAB

PROP-UP ALERT IN IPAD FOR MISSING MANDATORY DATA TO ENSURE ALL COUNTING PROCESSES ARE CONDUCTED

ACTIVATE **THE TIMER FUNCTION** ESPECIALLY FOR REMINDING THE ADMINISTRATION OF REGULAR MEDICATION

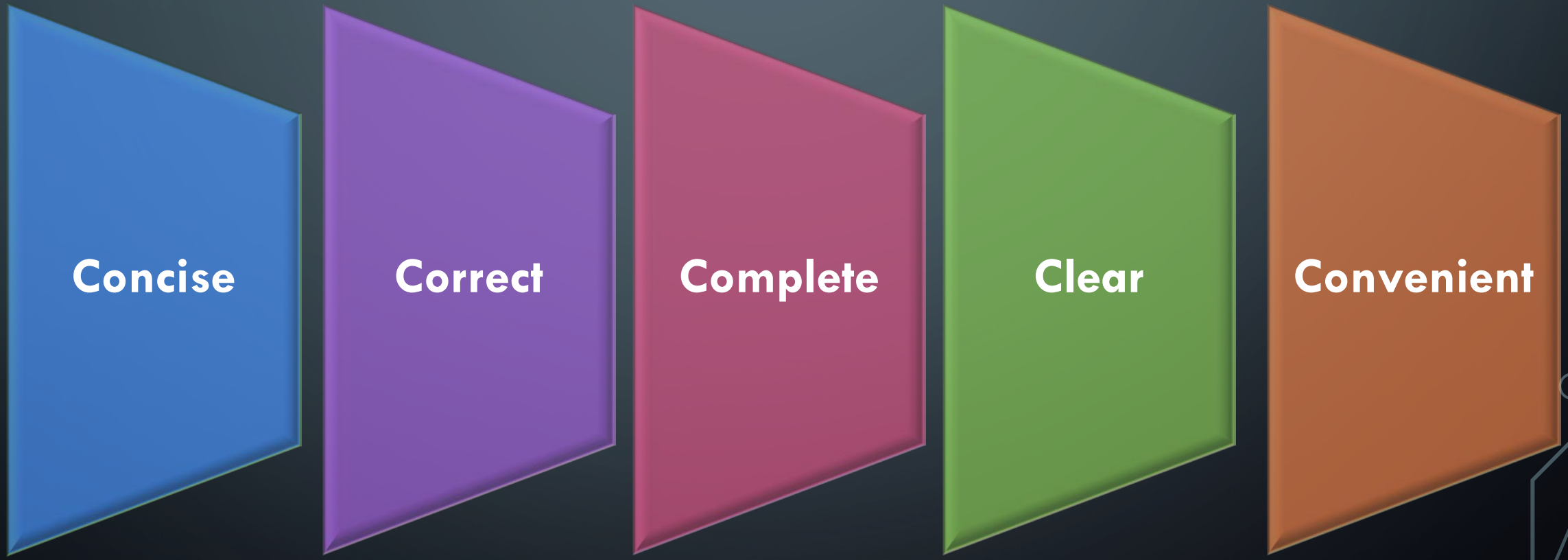




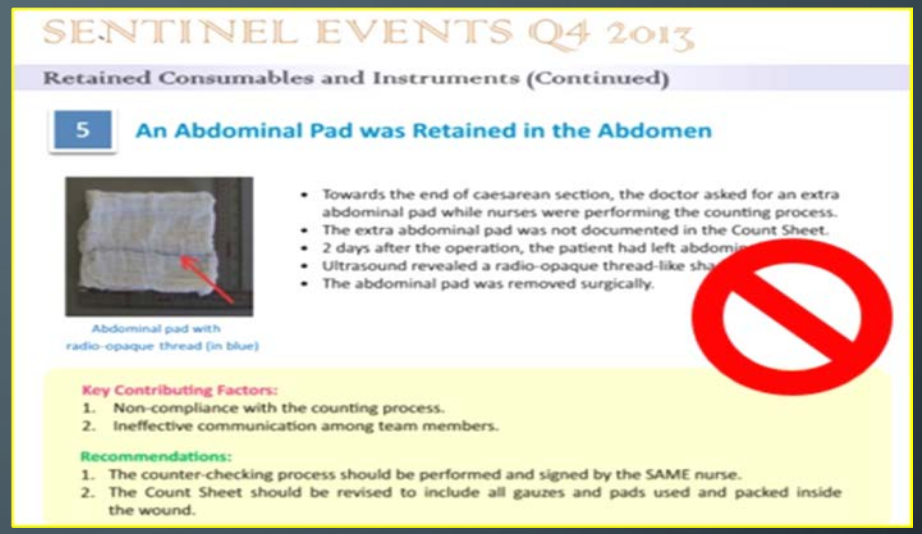
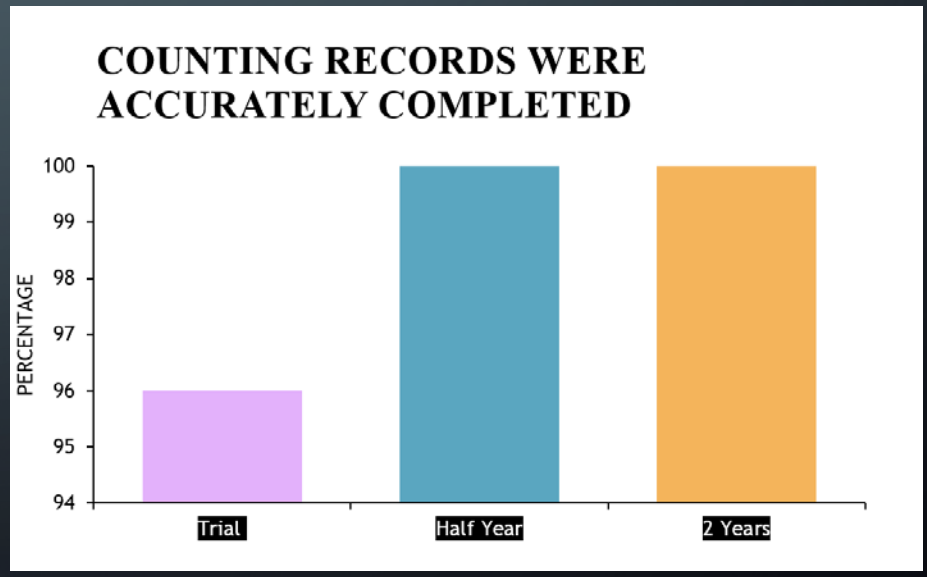


ADVANTAGES OF USING PNIS

THE FIVE Cs



RESULT

- **No RSI and missing medication incidents** in the operating theatres of TKOH

- Staff compliance rate were 96%, **100%** and **100%** for three documentation audits.