

# Service Priorities and Programmes Electronic Presentations

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# The application of QR Code for Real Time Alignment on Work Orders of Medical Equipment Maintenance Management

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#### Introduction

The Key performance indicators (KPIs), corresponding to Preventive Maintenance (PM) and Corrective Maintenance (CM) of Medical Equipment, are critical for HealthCare Providers to monitor the overall performance of service providers. By keeping track of PM and CM's Work Orders (WOs) through Enterprise Asset Management (EAM), the crucial point is whether the data can be kept step with real time statistics and achieve a full synchronization on solving the time delay of WOs' completion. A more advanced use of Quick Response Code (QR Code), which currently applies on asset stocktaking only, is beneficial to reflect corresponding KPIs for efficient performance management on maintenance contractors and in turn allocate the optimum resource to different areas within hospital.

## **Objectives**

- (1)To achieve a real time alignment of WOs' details among medical equipment in EAM database
- (2)To increase the reliability of EAM by enhancing the interaction between service providers and Hospital Medical Maintenance Team

# **Methodology**

(1)QR Code is a two dimensional barcode technology which hold more information in both horizontal and vertical directions, compared to one direction of conventional barcode. It is first attached to each medical equipment, which provides basic asset information (asset no, serial no, etc.) and the pathway for accessing EAM. Maintenance service provider can scan the QR code to get connected with corresponding asset page of EAM under mobile network coverage.

(2)Given that service providers have their unique accounts for logging in EAM, EAM thus manages to record the attendance time of WOs at the moment of scanning QR code. After the service providers complete WOs, they should scan QR code again before taking the snapshot of their corresponding service reports for uploading back

to EAM, so that completion time of work orders can also be captured by the system. (3)Hospital Medical Maintenance Team can also be benefited from the following arrangement, in which the service report can be previewed at the earliest convenience.

# Result

The advanced application of QR code brings along real time alignment of WOs,including the attendance and completion time, together with the preview of service report by Hospital Medical Maintenance Team. The significance of KPIs can be revealed by the use of data collected without time delay.