

Maintaining the critical function of a busy Medical Intensive Care Unit (MICU) while shutting down the oxygen supply to facilitate installation of new valves in the pipes

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Introduction

Installation of medical gas valves to serve the **New Medical Intensive Care Unit (MICU)** at Ward 45B without disruption to critically ill patients that require Oxygen support in existing MICU

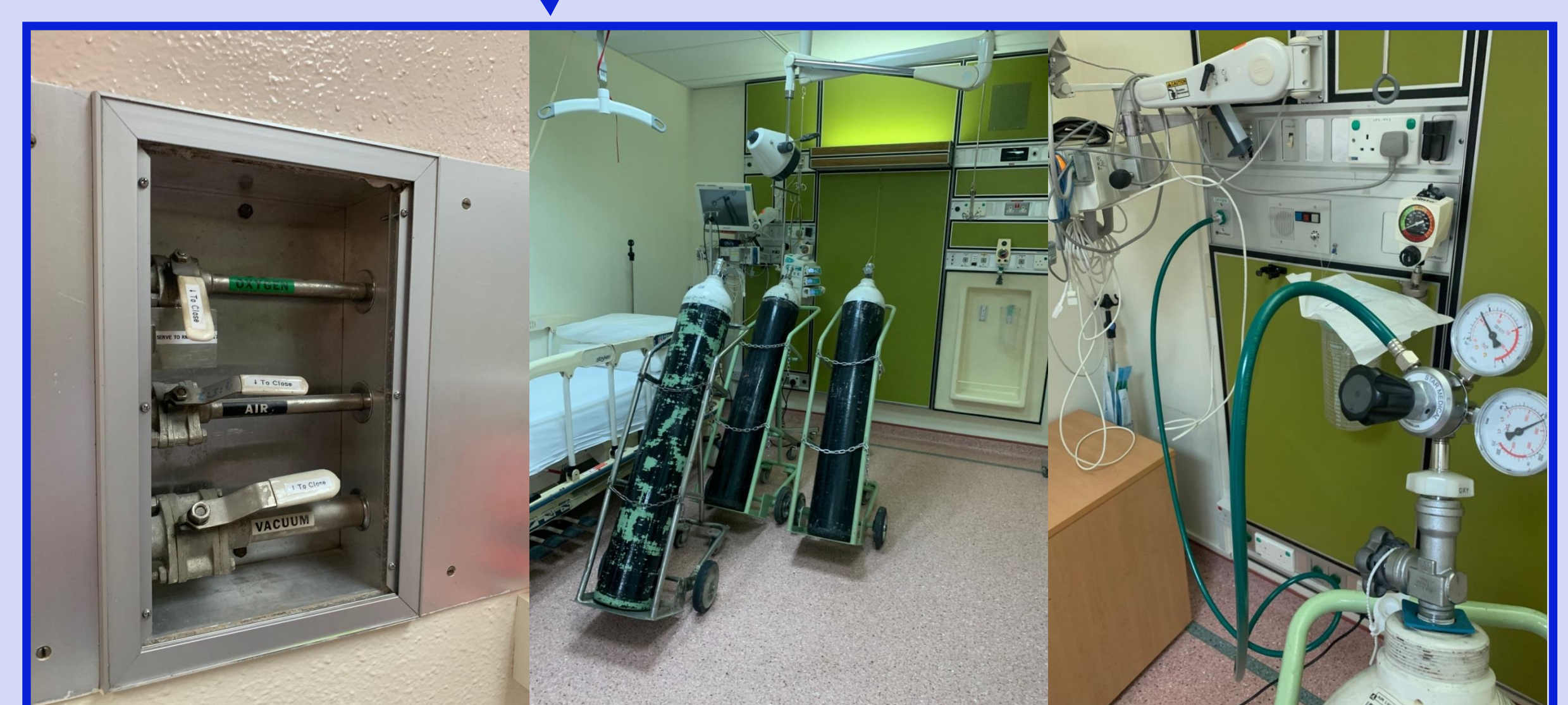
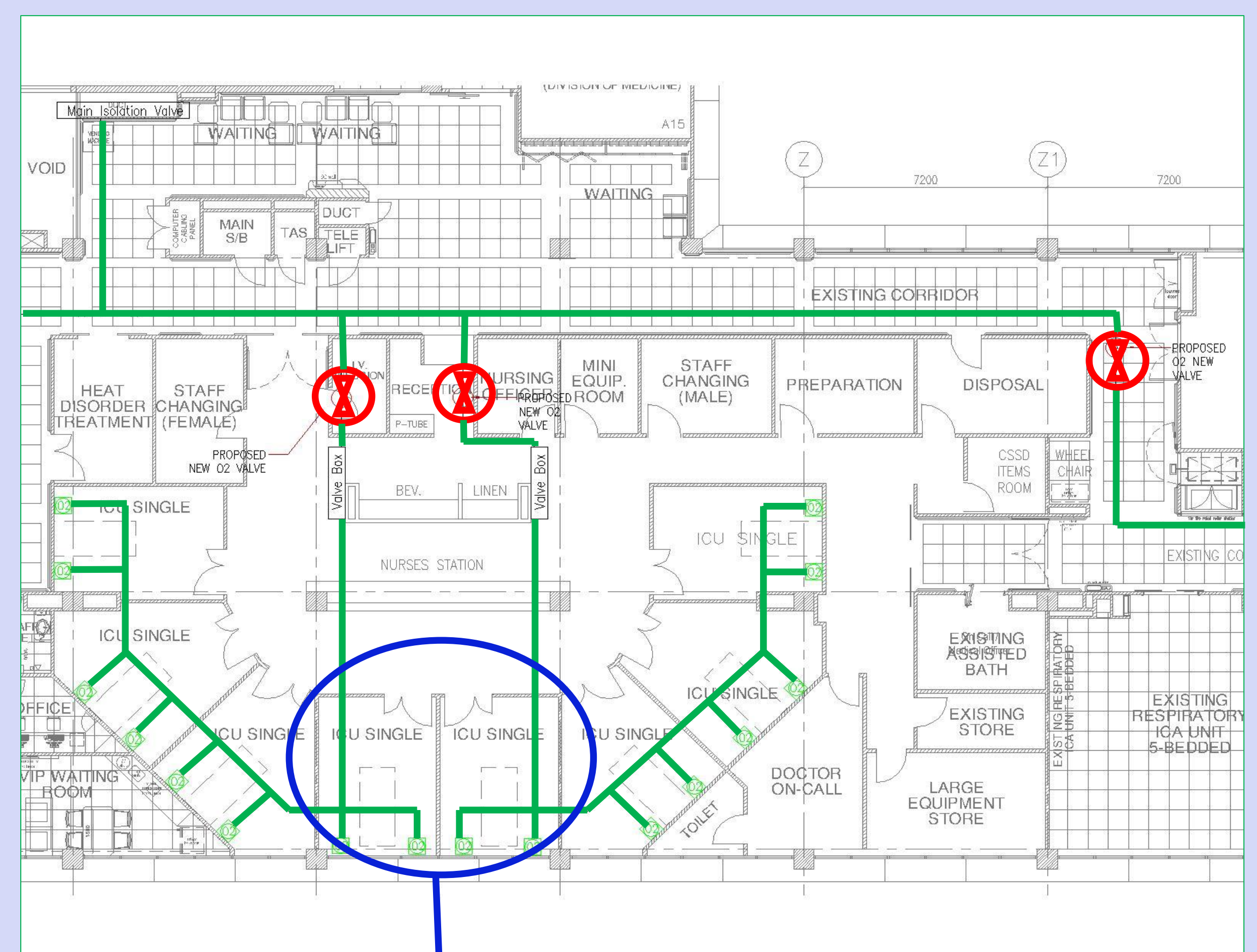
Additional Oxygen valves are also installed to prevent future disruption to whole of Ward 45

Challenges

- ★ High occupancy rate of MICU beds and insufficient ICU beds for decantment
- ★ To ensure the continuous oxygen supply and no disruption to all patients in existing MICU during the installation of new valves

Methodology

- **Site surveys** to ensure positions of line valves are identified and in place and **labelling of pipes** to prevent error during shutdown
- **Discussions of issues with all stakeholders** – Doctors, Nurses, Respiratory Therapists and Maintenance Engineers as they are on duty to provide close monitoring to patients during shutdown
- **Trial runs and safety checks before actual day of shutdown**
- Making use of vacant ICUs to set up temporary manifold system to supply oxygen
- Provision of Oxygen Cylinders connected to manifold system to provide continuous supply of Oxygen to the occupied ICUs



Results

There was **NO** interruption to Oxygen supply to the patients and no disruption to ICU operations during the 2 hour shutdown



Conclusion

Detailed planning and involvement of the stakeholders working as a team are critical to facilitate shutdown smoothly

Doctors, Nurses, Respiratory
Therapists and Maintenance
Engineers