

Staff responsible for operating or maintaining medical equipment should receive special training. The training can be from the hospital, the manufacturer of the technology, or some other knowledgeable source.

The training program should be designed in a way that ensures that it covers staff transferred from a department to another, new staff hired, and departments with evidence of recurrent misuse of equipment.

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**FMS.28 The hospital has a utility system management plan.**

FMS.28.1 The hospital has adequate number of qualified staff to manage the utility system.

FMS.28.2 There is a utility system management plan that includes management of failure or interruption of the following utilities:

FMS.28.2.1 Normal power.

FMS.28.2.2 Emergency power, cases of no power at sockets at critical areas, and lamp failure at critical areas.

FMS.28.2.3 Elevators.

FMS.28.2.4 Water supply.

FMS.28.2.5 Reverse osmosis plant.

FMS.28.2.6 Air-conditioning fan coil unit (FCU) at patient rooms.

FMS.28.2.7 Air-conditioning air handling unit (AHU) at operating rooms.

FMS.28.2.8 Medical gas system.

FMS.28.2.9 Sewer lines.

FMS.28.2.10 Boiler.

FMS.28.2.11 Telephone service (Public Address Exchange - PABX).

FMS.28.2.12 Intercom, nurse call, and overhead paging.

FMS.28.2.13 Fire alarm.

FMS.28.3 The utility system management plan includes description of necessary hospital programs to:

FMS.28.3.1 Acquire necessary equipment.

FMS.28.3.2 Upgrade equipment.

FMS.28.3.3 Upgrade physical condition of the building.

FMS.28.4 Emergency plans are tested in simulation at least once a year and the test results are evaluated.

FMS.28.5 The utility system plan ensures the availability of the following:

FMS.28.5.1 Technical utility drawings that show the distribution lines for all utilities and how to control them centrally and peripherally so that lines can be controlled as required in case of emergency.

FMS.28.5.2 Statistical data produced by the maintenance management system as an indicator to evaluate performance of the systems, suggest improvements and upgrade as required.

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**Standard Intent:**

Utilities can be defined as the systems and equipment that support essential services that provide for a safe health care. Such systems include electrical distribution, water distribution, ventilation and airflow, medical gases, plumbing, heating, waste, and communication, and data systems.

Effective utility management throughout the hospital creates a safe patient care environment.

To ensure 24/7 provision of utility services, the utilities management plan needs to highlight that specifies what corrective actions are going to be taken to restore the functionality of interrupted utilities and what back-up plans are going to be initiated in case repair activities fail.

The plan should identify the areas that pose the highest risk to patients and staff (in case of utility interruptions, for example, it identifies where there is the greatest need for electricity and water supply and assesses and minimizes the risks of utility system failures in these areas.

Hospitals must test its utility failure management plans in simulation at least once a year and the test results are evaluated.

Monitoring each of the facility management programs through data collection and analysis provides information that helps the hospital prevent problems, reduce risks, make decisions on system improvements, and plan for upgrading or replacing.