

## Facility Design Planning Principles

### Small Rural Hospital

The Rural Hospital Performance Improvement (RHPI) Project recently supported targeted consultation for a small rural hospital in the Delta Region on facility design, focusing on the emergency department. The RHPI Project worked with American Health Facilities Development, LLC. This paper is about the planning principles that went into the design plans.

Some of the performance improvement and functional issues that were considered in this county hospital planning engagement for the emergency department (ED) services included:

- Clinical services
- Customer service, which includes patients, family and friends
- Regulations
- Efficiencies, which includes patient and staff flow, and work environment

Patient and family experience with the emergency department and facility impacts their overall and often first impression of the hospital. This in turn can impact the performance of the hospital in the areas of market share and service area, clinical services and physician practice.

In the area of **clinical services**, the following components are important for consideration:

- Quick access to a helicopter landing pad.
- The design must facilitate the triage process to distinguish between urgent and true emergency cases.
- Emergency department design should provide separate distinct and easily identified entrances for ambulance traffic.
- The ED should be located for quick access to diagnostic imaging, surgery and the ICU/CCU.

**Customer service** for patients and their family members (or others who are with the patients) is important and includes:

- Adequate waiting space that is not shared with other departments or services.
- Access to a small consultation/ grieving room.
- Provide separate distinct and easily identified entrances for walk-in traffic.
- The walk-in patient should have a double door vestibule to protect the waiting area from exterior elements.
- Convenient patient parking.
- The decontamination area must be designed to provide as much privacy as possible for the patient.
- Confidentiality must be addressed throughout the emergency department.
- In those facilities offering an Urgent Care or “Fast Track” service, separate sub-waiting space for those patients should be considered.
- When possible, patient traffic flow patterns should not expose emergency patients to outpatients and visitors.

**Regulation** considerations for the design of an emergency department must include the following:

- Confidentiality during the registration process is important, particularly in small rural communities.
- Close-in handicapped parking must be provided to meet ADA requirements.
- Decontamination has a major issue in response to heightened security awareness throughout the country and must be designed with its own exterior access.
- With recent privacy laws being enacted, such as HIPAA, confidentiality concerns must be addressed in the patient treatment, triage and registration areas. Enclosed exam/ treatment rooms are desirable as they provide sound and visual privacy not possible with cubical curtains. Treatment spaces with solid side-walls and open at the foot of the table are preferable to open bay designs.

**Efficiencies**, which includes patient and staff flow, and work environment, impact other components such as customer satisfaction and clinical services:

- Convenient physician parking.
- Access to support spaces such as clean and soiled utility rooms, linen storage and medication must be convenient to the Nurse Station.
- Physician work/ charting space should be located away from the noise and activity of the nurse station.
- Provide separate workspace for EMS staff so as to minimize congestion at the main nurse station.
- Planning must consider information systems space required for terminals, PCs and printers throughout the ED.

The emergency department should be planned in a way that makes future expansion possible with the least amount of inconvenience and disruption possible. Another principle is that the ambulance canopy should be designed to provide cover for at least two ambulances unloading at the same time.

The emergency department is an important part of the hospital's operations, as it can contribute to the in-patient admissions. It is anticipated that the need for urgent care (or sometimes referred to fast track) will likely increase. Communities frequently value emergency services and care. However, the use of emergency departments as physician offices is not cost effective and hospitals need to monitor use to determine needs of an urgent care facility. Small rural hospital need to address their census and one way to do this is through the use of emergency department.