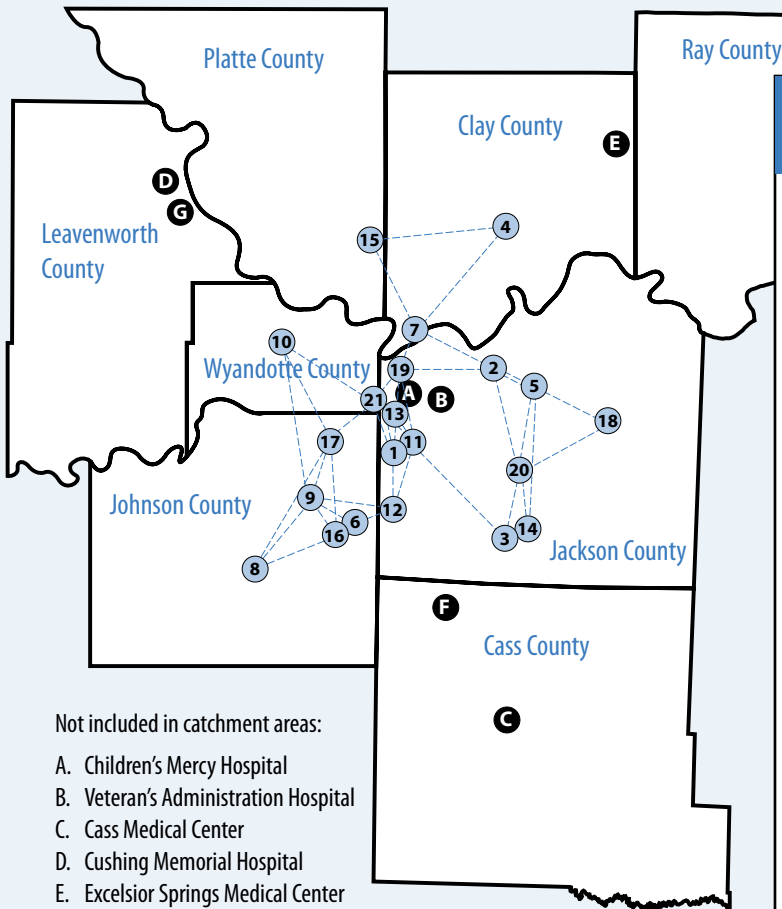


Catchment Areas: The Hub-and-Spoke System (Revised June 2005)

MARCER and the Health Alliance of MidAmerica have developed a hub-and-spoke system of catchment areas for area hospitals. Under this plan, each hospital serves as the hub of its own catchment area, and nearby hospitals — ideally within 15 minutes travel time or less — are the spokes. When a hospital is closed to ambulances and/or trauma patients, patients should be diverted to another hospital in that catchment area.



Catchment Area Hub Hospitals (with spokes in parentheses)

1. Baptist-Lutheran Medical Center (11, 12, 13, 19, 21)
2. Independence Regional Health Center (5, 7*, 18, 19*)
3. Lee's Summit Hospital (11*, 14, 20)
4. Liberty Hospital (7*, 15*)
5. Medical Center of Independence (2, 18, 20)
6. Menorah Medical Center (9, 12, 16)
7. North Kansas City Hospital (4*, 15*, 19)
8. Olathe Medical Center (6*, 9, 16*)
9. Overland Park Regional Medical Center (6, 8, 12, 16, 17)
10. Providence Medical Center (9*, 17*, 21*)
11. Research Medical Center (1, 12, 13, 19)
12. St. Joseph Health Center (1, 6, 9, 11)
13. St. Luke's — Kansas City (1, 11, 19, 21)
14. St. Luke's East — Lee's Summit (3, 5*, 20)
15. St. Luke's — Northland (4*, 7*)
16. St. Luke's — South (6, 8*, 9, 12)
17. Shawnee Mission Medical Center (8*, 9, 16*, 21)
18. St. Mary's Hospital of Blue Springs (2*, 5, 20*)
19. Truman Medical Center — Hospital Hill (1, 11, 13, 21)
20. Truman Medical Center — Lakewood (2*, 3, 5*, 14)
21. University of Kansas Hospital (1, 11, 13, 17, 19)

* Indicates more than 15-minute drive time

Not included in catchment areas:

- A. Children's Mercy Hospital
- B. Veteran's Administration Hospital
- C. Cass Medical Center
- D. Cushing Memorial Hospital
- E. Excelsior Springs Medical Center
- F. Research Belton Hospital
- G. St. John Hospital

If all hospitals in a catchment area are "closed to ambulances," the appropriate Emergency Communications Center can change their status to "forced open." Further overloading of these hospitals, however, will have a direct impact on patient care and should be avoided when possible. Patients who are critically unstable or in cardiac arrest should be taken to the closest appropriate hospital unless the hospital is out of service or unless otherwise directed by local protocols.



AMBULANCE DIVERSION IN GREATER KANSAS CITY



Putting Patient Welfare First



MARCER

MID-AMERICA REGIONAL COUNCIL
EMERGENCY RESCUE COMMITTEE

“A principal function of emergency medical services (EMS) systems is to provide patients with urgently needed emergency medical care and to deliver them to an appropriate emergency medical facility as rapidly as possible.”

—National Association of Emergency Medical Services Physicians (NAEMSP)

In an ideal world, EMS agencies should always deliver patients to the nearest medical facility. But in reality, nearest is not always an option. Hospitals sometimes face serious shortages of the staff and space resources they need to provide emergency care.

“Closed” Emergency Rooms

Hospital administrators, when faced with a serious shortage of resources, alert EMS providers of their status using EMSsystem — a web-based program that provides real-time information on patient capacity, availability of staffed beds and specialized treatment capabilities. EMSsystem displays emergency room status in one of several categories:

- Open
- Closed to ambulances
- Trauma diversion
- Trauma only
- Forced open
- Out of service

When an emergency room is closed, EMS providers must divert patients to another hospital. When all of the hospitals in a particular catchment

area are closed, however, the EMSsystem Coordination Centers (at the Johnson County Emergency Communications Center, Lee’s Summit Fire Department and MAST Ambulance Headquarters) have the authority to force the hospitals in that catchment area to reopen.

Hospital administrators in the Greater Kansas City area are committed to keeping their emergency rooms open to ambulances in all but the most serious circumstances. They recognize that adding to transport time can have an adverse effect on the care of critically ill or injured patients.

“Forced Open” Emergency Rooms

When an emergency room announces a closed status but is forced to reopen, it is logical to assume that resources at that particular ER are stretched to the limit.

Ambulance personnel must use good judgment in assessing the needs of the patients they transport to a forced-open emergency room.

While critically ill or injured patients may require immediate attention, sometimes a patient’s welfare might be better served by traveling to a nearby hospital with more available resources, even if it adds a few minutes to the transport time.

Three Reasons for Ambulance Diversion:

- Specific patient request
- Need for specialized care not available at the closest facility
- Temporary shortage of resources at the closest facility

Policies and Procedures

MARCER, the Mid-America Regional Council Emergency Rescue Committee, worked closely with member EMS agencies and the Diversion Work Group of the Health Alliance of Mid-America to develop ambulance diversion guidelines for the region. MARCER’s *Ambulance Diversion Guidelines* are designed to accommodate the interests of both hospitals and EMS agencies, while keeping patient care and safety the number one priority.

It is up to each hospital to determine its emergency room status, based on its own unique protocols and policies. Likewise, each EMS agency will follow

its own local policies and procedures as it uses the status information found on the EMSsystem and determines hospital destinations.

Online Resources:

The following resources are available online at www.marc.org/emergency/marcercer.htm

- Ambulance Diversion Guidelines
- EMSsystem Protocol and Policies Manual
- Facility Diversion worksheet and worksheet instructions
- Patient diversion refusal form

Whether your job is to transport patients to the emergency room or treat them once they arrive, you want your patients to receive the best possible care.

