

# Tillman County TeleEMS Pilot

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CENTER FOR  
**RURAL HEALTH**  
OSU Center for Health Sciences

## OSU-CHS Center for Rural Health

The Center for Rural Health at Oklahoma State University Center for Health Sciences provides telemedicine, distance learning resources, and services to physicians, students, residents, faculty and health care professionals involved in serving rural and underserved patients in Oklahoma.

## TeleEMS Pilot

- **Goal:** Overcome disparities rural residents face in emergency care
- **Background:** Tillman County rural hospital closed in 2016
- **Problem:** Significant increase in EMS call volume
- **Disparity:** ~40 miles to nearest ER / hospital
- **Disparity:** USDA persistently impoverished county facing significant health inequality & disparities
- **Solution:** Connecting rural EMS with OSU Medical Center Emergency Department (ED) for a virtual consult
- **How:** OSU TeleHealth installed tablets in Tillman EMS ambulances, connected via FirstNet, a first responder network powered by AT&T. Tillman EMS then utilized the tablets and HIPAA compliant Zoom software to virtually connect with the ED and receive direction from a physician.
- **Challenge:** Language barrier throughout rural Oklahoma
- **Solution:** Phase II included a TeleEMS translation service, Voyce



## OVERALL BENEFIT OF TELEMEDICINE CALLS CONDUCTED

	Tillman County EMS (N=30)	OSU Medical ER (N=28)
<b>Overall Benefit</b>		
Very Beneficial	15 (50%)	12 (43%)
Beneficial	10 (33%)	10 (36%)
Neutral	4 (13%)	3 (11%)
Not Beneficial	1 (3%)	2 (7%)
Definitely Not Beneficial	0 (0%)	1 (4%)

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## TeleHealth at OSU:

- OSU TeleNutrition project
- HTRC Project ECHO series
- Telehealth Alliance of Oklahoma (TAO)
- Mobile Telemedicine Clinic
- Rural Clinic Technology Support
- Broadband Connectivity Research



## The Future of Rural Medicine

EMS personnel are essential in achieving positive health outcomes in rural areas. As rural hospitals continue to face closures, TeleEMS is a promising approach to improve emergency outcomes and reduce EMS blackout times.