

2008 PHARMACY HEALTH INFORMATION TECHNOLOGY GRANTS
FOR CRITICAL ACCESS HOSPITALS

The Florida Office of Rural Health recently awarded over \$216,000 to nine of Florida's critical access hospitals to assist them in purchasing basic pharmacy health information technology (HIT) equipment needed to prevent errors during the prescribing, transcribing, dispensing, and administration of medications to hospital patients. The grants are part of Florida's overall plan to improve medication safety in critical access hospitals by assisting them to acquire needed pharmacy HIT.⁽¹⁾ Grant funds will assist these hospitals to purchase computerized pharmacy management information systems to verify if the prescribed medication and dosage is appropriate for the patient's condition, automated dispensing cabinets to prevent the wrong medicines from being given to patients when a physician or pharmacist is not present, and computerized infusion pumps to ensure that intravenous fluids are appropriately administered to patients.

The Institute of Medicine's publication, Crossing the Quality Chasm: A New Health System for the 21st Century, reported that health information technology has a major role in improving patient safety.⁽²⁾ The report quotes various studies that have demonstrated the effect of pharmacy-related HIT on medication errors. For example, Anderson et al used a computer simulation model to show that implementation of a comprehensive medication delivery system designed to detect and prevent medication errors could save 1,226 days of hospitalization and \$1.4 million annually, even if the system only prevented 26% of medication errors.⁽³⁾

Most small rural hospitals lack the resources to obtain and support basic health information technology to assist with improving quality of care and patient safety that is available in larger hospitals. Florida's critical access hospitals are no exception as confirmed by a 2004 survey that found that five of the eleven hospitals lacked any basic pharmacy HIT equipment needed to prevent medication errors.⁽⁴⁾

Florida's Office of Rural Health has been working with small rural hospitals over the past five years to assist them with improving medication safety and quality of patient care. This program is one of the activities being conducted to assist critical access hospitals that is funded by a federal grant from the Health Resources and Services Administration. The program is being conducted in cooperation with Florida's Medicare Quality Improvement Organization, FMQAI, faculty of the University of Florida College of Pharmacy and Shands Teaching Hospital. It provides technical assistance and support to eleven critical access hospitals with no more than 25 beds that are located in rural communities. Over the past five years, the program has worked with hospital nursing and pharmacy staff to: establish functioning hospital medication safety committees; establish processes for identifying and reconciling medications that patients are taking when they are admitted to the hospital; implemented procedures for screening and immunization of all hospital patients for influenza and pneumococcal disease without requiring a physician order; developed processes, systems, and staff skills for reporting, analyzing and addressing the causes of medication errors; initiated efforts to report medication errors in emergency rooms, and provided \$200,000 in grant funding for pharmacy HIT equipment.

Florida has made progress in addressing the pharmacy HIT needs of critical access hospitals. A recent survey showed that ten of Florida's eleven critical access hospitals have implemented automated medication dispensing equipment. The 2008 pharmacy HIT grants will further assist critical access hospitals to acquire needed pharmacy HIT to improve medication safety.

For more information on Florida's medication safety program contact Bob Pannell, critical access hospital coordinator, at 850-245-4444 x2705 or robert_pannell@doh.state.fl.us.

- (1) Abraham G. Hartzema, Almut G. Winterstein, Thomas E. Johns, Jessica M. De Leon, Warren Bailey, Kathie McDonald, and Robert Pannell. Planning for pharmacy health information technology in critical access hospitals, *Am J Health-Syst Pharm*—Feb 1, 2007, Vol 64: 315-321.
- (2) The Institute of Medicine. Crossing the quality chasm: a new health system for the 21st century. Washington, D.C.: National Academy Press, 2004.
- (3) Anderson JG, Jay SJ, Anderson M, Hunt TJ. Evaluating the capability of information technology to prevent adverse drug events: a computer simulation approach. *JAMIA* 2002; 9:479-490.
- (4) Almut G. Winterstein, Abraham G. Hartzema, Thomas E. Johns, Jessica M. De Leon, Kathie McDonald, Zal Henshaw, and Robert Pannell. Medication safety infrastructure in critical-access hospitals in Florida. *Am J Health-Syst Pharm*—March 1, 2006, Vol 63: 442-450.