

2010-2011
Summary of Scholarly Activities
Center for Strategic Health Innovations

I. PUBLISHED JOURNAL ARTICLES, BOOK CHAPTERS, AND PATENTS

Taylor CW. Disaster preparedness for healthcare professionals. In: Cohn KH, Fellows SA, editors. Getting it done: experienced healthcare leaders reveal field-tested strategies for clinical and financial success. Chicago: Health Administration Press; 2011. Chapter 2, p. 15-38.

II. PUBLISHED ABSTRACTS

III. PUBLISHED BOOKS

IV. INVITED PRESENTATIONS

Roach RD. Invited speaker. Alabama Regional Extension Center. Medical Association of the State of Alabama Technical Symposium. 2011 Jan 28; Montgomery, AL.

Roach RD. Invited speaker. Alabama Regional Extension Center. MASA Governmental Affairs Washington Meeting; 2011 Feb 7; Washington, DC.

Roach RD. Invited speaker. RECs working with rural hospitals. Alabama Regional Extension Center. Rural Quality Network; 2011 Mar 3; Prattville, AL.

Taylor C. Invited speaker. Health care outcome assessment. Southern Association of Allied Health Deans Fall 2010 Meeting; 2010 Oct 4; Mobile, AL.

Taylor C. Invited speaker. A fresh look at hazard vulnerability assessments. Sixteenth Annual Local Emergency Planning Committee of Yellowstone County/Montana Safety Services Council Safety Conference; 2011 Mar 3; Billings, MT.

Taylor C. Invited speaker. Navigating the path from as is to will be. Association of Schools of Allied Health Professions Spring Meeting; 2011 Mar 17; New Orleans, LA.

Taylor C. Invited speaker. The role of social networking and crowd sourcing in crisis response and business. Skema Business School; 2011 Apr 4; Sophia-Antipolis, France.

Taylor C. Invited speaker. Moral and ethical considerations in crisis standards of care. Mass Casualty Incident Management Conference; 2011 Jul 12; New Orleans, LA.

Taylor C. Invited speaker. Communications driven health care. Health Care for Residents of Public Housing National Training Conference; 2011 Jul 13; Washington, DC.

Taylor C, Wallace D. Invited speakers. Awareness, preparedness, planning, response and recovery for community health centers. Health Care for Residents of Public Housing National Training Conference; 2011 Jul 13; Washington, DC.

Wallace D. Invited speaker. Radiation exposure awareness, the environmental risks. Alabama Baby Coalition Infant Mortality Conference; 2011 Apr 1; Mobile, AL.

Wallace D. Invited speaker. Radiation exposure awareness, the environmental risks. The Twentieth Annual Continuing Education Conference in Obstetrics and Gynecology; 2011 Aug 19; Mobile, AL.

Wallace D. Invited speaker. Patient surges: planning, response and recovery. Mass Casualty Incident Management Conference; 2011 Jul 13; New Orleans, LA.

V. NATIONAL PROFESSIONAL RECOGNITION

Dan Roach III, MD was appointed by Governor Bentley as Health Information Technology Coordinator for the State of Alabama. Dr. Roach served as a panelist during the Regional Meeting for the Office of National Coordinator, July 19, 2011, in Atlanta, Georgia. The discussion topic was Maintaining Your Trusted Advisor Status.

Carl Taylor serves as a broadband ambassador to the Internet Innovation Alliance in Washington and a subject matter expert for the Office of the National Coordinator for Health Information Technology on the topic of end point security. He is an advisor to the European Union funded SAVE ME project which is using Second Life to develop the ability to optimize response to manmade and natural hazards to public transportation sites. He is a grant peer reviewer for the Health Resources and Services Administration, an evaluator for the Northwest Regional Telehealth Resource Center, and a member of the Institute for Health Technology Transformation's Telehealth and Remote Patient Monitoring Action Group. He was an advisor to the New Zealand Health Challenge. He served as Conference Chair and Session Chair at the SPIE Defense Sensing and Security Conference on Sensing Technologies for Global Health, Military Medicine, Disaster Response and Environmental Monitoring. He was a panelist at the International Risk and Communication Conference and the Telehealth Alliance of Oregon Annual Meeting and Summit. He served on the Department of Health and Human Services Haiti Health Facilities Work Group and serves on the American Medical Association Disaster Preparedness Health Security Card Demonstration Project. He is the Associate Editor of the careandcost.com health care blog.

VI. BRIEF SUMMARY OF ACTIVITIES AND PROGRESS

In Project Year 2010-2011, the Center for Strategic Health Innovation (CSHI) has continued a long running pattern of growth and development in the areas of health care innovation, medical informatics, and disaster preparedness. We have added staff, expanded our footprint to a new office in the Research Park, initiated renovations for the National Center for Disaster Medical Response (NCDMR), added new projects and activities in medical informatics, and continued disaster preparedness training programs. In Fall 2010, it was determined that with the continued growth of our RMEDE™ activities combined with the need to add staff for the newly funded Alabama Regional Extension Center (ALREC), CSHI needed to expand into a new suite in TRP Building II. This expansion also accommodates renovation to the existing offices in TRP Building III to house the National Center for Disaster Medical Response (NCDMR). NCDMR will offer a state of the art learning environment to advance the process of disaster preparedness and response. The simulation theater creates a live and simulated environment that immerses participants in a life-like scenario, and allows them to rehearse their response, test their plans, and to simulate the potential impact of the disaster.

Medical Informatics and Healthcare Technology Applications: CSHI continually endeavors to use emerging health technologies to improve the quality, cost, care, and access to healthcare within our state and beyond. One of the keys to our success is Realtime Medical Electronic Data Exchange (RMEDE™), a secure web-based life-state management system including in-home monitoring of patients with chronic disease and an interventional informatics reporting system. CSHI currently manages 1.1 million patient records and approximately 600 Medicaid patients participating in our in-home monitoring project. In 2010-2011, CSHI continued its critical partnership with the Alabama Medicaid Patient 1st program and the Alabama Department of Public Health for the delivery of in-home monitoring of patients using RMEDE™. In this program, patients suffering from chronic illnesses such as diabetes, congestive heart failure, and hypertension are monitored for significant changes by using an innovative Interactive Voice Response (IVR) system. Patients are instructed to dial-in their key physiological parameters, and an ADPH Life Care Nurse is assigned to monitor the results and submit reports to the patient's provider. CSHI also continued its' partnership with the Medicaid Maternity Program in their quest for Better Birth Outcomes and lower Infant Mortality rates. RMEDE™ is used to develop a data collection system with reporting capabilities utilizing recipient information gathered from enrollment activities to evaluate compliance with accepted national standards of practice. RMEDE™ provides Medicaid and their contractors the ability to enter and view the data online. Data are utilized by Medicaid to determine benchmarks for compliance and comparisons.

New this year is a project with Alabama Medicaid to plan and implement the Patient Care Networks of Alabama (PCNA). PCNA is a primary care case management (PCCM) program which establishes regional networks of care or a "medical neighborhood" that is designed to improve the delivery of health care services to Medicaid recipients, especially those recipients with complex medical conditions of diabetes and asthma.

RMEDE™ serves as the framework used by the PCNA for data management, patient risk stratification, patient case management, automatic agency to agency electronic referral, aggregation of Medicaid medical and pharmacy claims data, and program reporting needs. Three pilot areas have begun operations that will jointly serve approximately 80,000 Medicaid recipients in Alabama.

Another successful technology developed in-house by CSHI is the Alabama Incident Management System (AIMS). AIMS is management information software designed to capture Hospital Emergency Incident Command System (HEICS) reported surge data, or information regarding the real-time status of a hospital's ability to triage, treat, and transfer victims of a disaster in a timely manner. Critical data such as the number of available beds, supplies, staffing, and equipment are entered into a database at each participating healthcare facility and then transmitted and displayed at the local or regional Emergency Operations Centers (EOC) for use in making emergent decisions. CSHI boasts a network of 774 user facilities including: 18 Community Health Centers, 11 EMA facilities, 316 EMS providers, 1 EMS EOC facility, 12 ADPH EOC facilities, 27 Evacuee Shelters, 118 Hospitals, 13 Medical Needs Shelters, and 258 Nursing Homes. Under contract with the Alabama Department of Public Health Center for Emergency Preparedness (ADPH CEP), enhancements and upgrades to AIMS include development and deployment of a people tracking module to track people in medical needs shelters and evacuee shelters during a disaster, development of a disaster information repository (ncdmr.org) to provide important disaster related information to disaster management officials, and continued development of social networking capabilities to encourage the establishment of local response regions among health facilities in the same region.

Training Programs: Now in its eighth year, ARRTC is a regional response training program designed to teach effective collaborative healthcare community response to all disasters, natural or man-made. This program is made possible by a grant from the Alabama Department of Public Health Center for Emergency Preparedness through a cooperative agreement from ASPR. This year, CSHI offered training on-site in Mobile (ARRTC Basic) and at regional hospitals throughout the state (ARRTC Road Show). ARRTC Basic is a 2-day course that provides regional response partners with basic, core disaster response training. Sessions are scheduled by hospital planning region, fostering interaction with regional response partners. ARRTC Road Show is a 1 1/2-day course that takes ARRTC training to healthcare facilities across the state, thereby allowing participation by more staff, and invites the participation of regional neighbors/response partners for the purpose of establishing and enhancing a common knowledge of the basics of disaster response for healthcare facilities. This year, Road Show course content was modified to reflect the specific needs of each area. On Day 1, the morning session presented required topics. For the afternoon session, each facility selects topics from a course menu. Day 2 is an optional day of training, again with topics selected by each facility. A combined total of 42 sessions were presented to participants that included representatives from public health, hospitals, nursing homes, community health centers (CHCs), and emergency management and response agencies. Attendee evaluation scores were consistently high, with 98% rating the program as "Excellent" or "Good."