Methodist Le Bonheur Center for Healthcare Economics

Annual Report for May 2014 - April 2015

May 20, 2015
As in previous years, this year’s annual report of the Methodist Le Bonheur Center of Healthcare Economics begins with a description of the mission, history, and objectives of the Center. This is followed by a brief review of a recently completed major research project titled, *Improving Pharmaceutical Supply Chain Security: Costs and Benefits of Global Standards*. The final report of the research was prepared for the Asian-Pacific Economic Corporation (APEC) Business Advisory Council that included, as members and sponsors, major pharmaceutical companies such as Merck, Eli Lilly, Abbot and Abbvie. The rest of the Annual Report summarizes the Center’s specific goals, objectives, and major accomplishments for the just completed 2014-2015 academic year. Finally, the goals and objectives for 2015-2016 are presented.

**Mission and Brief History:** In March 2003, Methodist Le Bonheur Healthcare, Inc., and the Urban Child Institute (formerly the LHS, Inc.) gave the University of Memphis a donation of $1.0 million to establish The Methodist Le Bonheur Center for Healthcare Economics (hereafter the Center) in the Fogelman College of Business and Economics. The mission of the Center is to address complex health care issues of efficiency, effectiveness, and equity with a focus on emerging health care issues that affect Memphis, Shelby County, and the state of Tennessee.

**Objectives:** Through a variety of research, instruction, and public service programs, the Center works closely with entities both internal and external to the University to accomplish its mission and objectives. In the near term, the key policy objectives emphasized by the Center will include, among other topics:

1. Evaluation of health care programs, such as health care reform, TennCare, and consumer-driven health plans, and the development of strategies and solutions for improving the quality and efficiency of health care delivery;
2. Analysis of regional and state health economic trends;
3. Assistance to stakeholders such as hospitals, nursing homes, and health plans in developing market analyses and business plans; and
4. Dissemination of best practice models to assist employers in the development and implementation of cost-effective strategies for improving employee health and saving health care costs.

**Expertise:** The Center is supported by a superb group of faculty associates who have distinguished themselves in the fields of health care economics and health care administration. These faculty associates are experts in conducting research in a wide range of critical health care issues including:

- Access to health care
- Health insurance coverage
- Health and health care disparities
- Cost effectiveness analysis of health care programs and interventions
- Quality improvement in health care
- Employee health benefits
- Hospital cost management
- Methodological issues in data collection, analysis, and management
Improving Pharmaceutical Supply Chain Security:
The Costs and Benefits of Global Standards

A report summarizing relevant literature prepared for
The APEC Business Advisory Council (ABAC)

by

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April 2015
Abstract of the Global Pharmaceutical Supply Chain Security Report

The purpose of this report is to conduct a review of relevant peer-reviewed articles and selected governmental and practitioner publications to accomplish three major objectives. The first is to gain a better understanding of the costs and benefits associated with the adoption of global data standards for serializing, tracking and tracing of pharmaceutical products in global supply chains. The second objective is to identify and analyze the major barriers to the development and acceptance of global data standards to gain a better understanding of the sources of these barriers and their causes. The third objective is to present major lessons learned from the review of relevant literature and to find a practical path forward in the global quest for an efficient and effective harmonized system of global data standards for serializing, tracking and tracing pharmaceutical products.
Specific Goals and Objectives for 2014-2015

Goal 1: Explore external opportunities

Objective 1.1 - Promote visibility through outreach and exchange

- The APEC Business Advisory Council
  - The Methodist Le Bonheur Center for Healthcare Economics and the University of Memphis FedEx Center for Supply Chain Management planned and organized, in collaboration with the Vice Chancellor’s Office at the University of Tennessee, a workshop in Memphis in February 2015 to discuss the promotion and adoption of global pharmaceutical supply chain security standards. Participants included members of the Asian Pacific Economic Cooperation (APEC) Business Advisory County and representatives from CDC, US State Department, and major U.S. pharmaceutical companies. Dr. Cyril Chang, as a member of the local planning committee, met with workshop participants and discussed with them at length the costs and benefits of global standards for pharmaceutical supply chain security and opportunities for future collaboration.

Objective 1.2 - Develop collaborative relationships

- Baptist Memorial Health Care
  - Continued the discussion and negotiation with Baptist Memorial Health Care on the establishment of a physician leadership institute at the University of Memphis. The ongoing discussion with Baptist Memorial Health Care involved the University of Memphis Development Office, The UoM School of Public Health, and the Fogelman College of Business and Economics. Contact persons: Lendon Ellis of UoM Corporate and Relations and Stephanie Clark of Baptist Memorial Health Care.

- Church Health Center:
  - Worked closely with the President and CEO of the Church Health Center to assist in their strategic planning process to position this charitable health care organization for growth in a rapidly changing health care environment.

- Methodist Le Bonheur Healthcare:
  - Collaborated with the Corporate Office of Methodist Le Bonheur Healthcare in providing expertise and technical assistance on a wide range of projects. Specific projects included:
    - Analyzed the health and financial implications of Governor Haslam’s Insure Tennessee Program and evaluate the arguments for and against this market-driven alternative to the Medicaid expansion program under the Affordable Care Act.
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- Offered expertise and advice on the ongoing effort at Methodist to transform its primary care practices into NCQA recognized Patient Centered Medical Homes.
- Worked closely with physician and non-physician researchers on innovation projects for potential submissions of research proposals;
- Provided consultation service and offered expertise to upper management of Methodist Le Bonheur Healthcare on a wide range of business and economic issues.
- Contacts: Gary Shorb, President and CEO, Donna Abney, Executive Vice President, and Meri Armour, President and CEO, Le Bonheur Children’s Medical Center.

- The Memphis Triple Aim Project
  - Initiated by County Mayor Mark Luttrell in 2011, the Memphis Triple Aim Project brought the nationally known Triple Aim Model of health improvement to Memphis to improve health and health care delivery in Shelby County, Tennessee. The Center worked closely with Dr. Kenneth Robinson, the special health care advisor to Mayor Luttrell, and the Steering Committee of the Memphis Triple Aim Project to develop and implement this ongoing community-wide health improvement project.
  - Participated in the preparation of a subcontract grant submitted by the Memphis Triple Aim Project in collaboration with the Harvard-based Institute of Health Improvement.

- QSource® Tennessee, Tennessee’s Medicare Quality Improvement Organization (QIO)
  - Worked closely with QSource,® in developing collaborative opportunities for health care research and consulting projects. Contact person: Dawn Fitzgerald, CEO.
  - Continued to serve on the Board of Directors of QSource®-Arkansas, a fully owned subsidiary of QSource®-Tennessee.

- University of Tennessee Health Science Center:
  - Worked closely with a wide range of researchers and administrators on a variety of projects including:
    - Provided advice and expertise to the Chancellor’s Office of UT Health Science Center on a wide range of strategic and operation issues and challenges.
    - Conducted economic impact studies to document the economic contributions of UT Health Science Center and its major capital projects what were the major building blocks of the medical school’s new five-year master plan.

- The Memphis Business Group on Health:
  - Partnered with this Memphis area business coalition that facilitates the effective and efficient purchases of health services in a series of joint efforts for promoting workplace health promotion and cost-effective disease management programs.
  - Contacts: Cristie Travis, President and CEO.

- Mississippi State University and Harvard University
  - Met and discussed at length on research projects of mutual interest with Dr. Maya McDoom of Harvard University who is currently serving as a Delta Public Health Fellow at Mississippi State University’s Social Science Research Center. Possible projects included a comprehensive analysis of the
impact of health care reform on the financial health and viability of rural hospitals in both Mississippi and Tennessee and needs assessment in the Mississippi Delta. Contract person: M Maya McDoom, Ph.D., MPH, the Social Science Research Center at Mississippi State University.

- Department of Pediatrics at UTHSC
  o Met and interacted with faculty members and researchers to explore opportunities to collaborate on research projects of mutual interest. Made substantial progress in the discussion of potential projects and preparation of research proposals for submission to the Centers for Medicare and Medicaid Services. Contact persons: Jon McCullers, MD.

- QSource,® Tennessee’s Medicare Quality Improvement Organization (QIO)
  o The Center worked closely with QSource® research personnel in the development of a wide range of collaborative opportunities for health care research and consulting projects. Contact person: Dawn Fitzgerald, President and CEO.

**Objective 1.3 - Plan, prepare, and submit grant and service contract proposals for external funding**

- Baptist Memorial Health Care
  o **Action:** Prepared and submitted jointly with the School of Public Health a service contract proposal ($203,000) to Baptist Memorial Health Care to establish a Physician Leadership Institute at the University of Memphis. The first-year work plan was designed to enroll a cohort of 20 physician leaders for a 12-month training program to prepare them for future leadership roles in health care management and administration.
    o **Result:** Pending

- Le Bonheur Children’s Hospital Le Bonheur Community Health and Well-Being
  o **Action:** A proposal ($91,650) was submitted to conduct a cost analysis of the Le Bonheur Asthma Project and an economic feasibility study of setting up a dedicated asthma unit in the Le Bonheur Children’s Hospital as an alternative to the more expansive ER care.
    o **Result:** Funded

- UT Health Science Center
  o **Action:** A proposal ($44,526) was submitted to conduct an economic impact study of the major capital projects projected in the new UT Campus Master Plan.
Recent state and local foundation grants

- **Action:** Submitted research proposals to a variety of state and local foundations and funding agencies.

- **Result:** Received the following grants and awards:
  - **2013** A proposal submitted to United HealthCare ($40,000) to conduct a utilization analysis of ED services under the UnitedHealthcare Community Plan of Tennessee.
  - **2013** “Return on Investments in Public Health in Shelby County, Tennessee,” $10,350 awarded by the Healthy Shelby Project of the Memphis Fast Forward Initiative.
  - **2011-2013** “Aligning Forces for Quality,” a $60,000 subcontract grant received from the Healthy Memphis Common Table for cost analysis under a $1.3 million grant awarded by the Robert Wood Johnson Foundation for the Aligning Forces for Quality Project.
  - **2011-2013** “Cost Analysis of the Nurse-Family Partnership Program,” $41,625, a subcontract grant awarded by the Le Bonheur Children’s Hospital under a principal grant funded by the Health Resource and Services Administration, the U.S. Department of Health and Human Services.

**Objective 1.4** Explore consulting opportunities

**Actions and Results:**

- **e4Enterprise of Littleton, Colorado**
  - **Action:** Discussed consulting opportunities with this Littleton, Colorado based health care consulting company to assist several health services Quality Improvement Organization (QIOs) in their efforts to bid for service contracts with the federal Center for Medicare and Medicaid Services (CMS).
  - **Result:** Discussion and negotiation ongoing

- **Tennessee Rural Health Partnership**
  - **Action:** Explored and discussed collaboration opportunities with Tennessee Rural Health Partnership and Tennessee Hospital Association with a focus on
(a) rural health workforce shortages, (b) economic and health care implications of workforce shortages, and (c) the different pathways to a better solution for rural health care challenges.

- **Result:** A service contract under negotiation.

**UT Health Science Center**

- **Action:** Made numerous visits to the Office of Executive Vice Chancellor and Chief Operating Officer to discuss opportunities for collaborations and consulting services.

- **Result:** A service contract is under consideration for a study the economic impacts of UTHSC’s capital expenditures and major construction projects on the local economy.

**Methodist Le Bonheur Healthcare**

- **Action:** Worked closely with the Corporate Office of Methodist Le Bonheur Healthcare, Le Bonheur Children’s Medical Center, and Methodist College of Nursing in providing expertise and technical assistance on a wide range of research and operational issues and projects.

- **Result:** The collaboration resulted in the following tangible outcomes:
  1. An economic impact study of the expanded Cancer Care Center Project.
  2. Consultation service to Methodist Le Bonheur Healthcare to assist in the implementation of patient-centered medical homes.
  3. Technical assistance to the Methodist Le Bonheur Corporate Office in connection with its evaluation of a faith-based community outreach program.
  4. Participation in the design of a study of the recently expanded ED facility at the Methodist University Hospital to focus on the effects of expansion on payer mix and patient volume.

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**Goal 2:** Study and analyze health economic trends and issues

**Objective 2.1** Study emerging health care issues

**Actions and Results:**

- **Action:** Teamed up with a group of nursing policy researchers led by Dr. Lin Zhan, Dean of the Loewenberg School of Nursing at the University of Memphis, to analyze the current supply and demand for Advanced Practice
Registered Nurses (APRNs) in Tennessee and how they can practice to the full extent of their education and training to contribute as a workforce solution to the emerging shortage of primary care providers.

- **Results**: A special edition of a Policy Brief is expected to be completed in July 2015 for dissemination.

- **Action**: Purchased jointly with the School of Public Health a large, multi-year hospital dataset, the National Sample of Hospital Emergency Department Data, from the HCUP Project of the federal Agency for Health Research and Quality (AHRQ). The data were acquired for use by health care researchers and graduate students interested in the research of hospital emergency department utilization and cost patterns.

- **Results**: The data sets have been installed and the data cleaning and preparation process has started. A special workshop was held in the Fogelman College of Business and Economics on 5/13/2015 to exchange research ideas and plan research agenda with about 20 participants in attendance.

- **Action**: Analyzed hospital utilization and discharge data

- **Result**: Published health care issue briefs and occasional Center reports (available at the Center’s Website: [http://www.memphis.edu/mlche/](http://www.memphis.edu/mlche/)):


  - **Chang**, Cyril F. “Status Report on Efforts to Advance Understanding and Awareness of Non-Urgent and Primary-Care-Sensitive Hospital Emergency Department Visits in Memphis and Shelby County, Tennessee,” Healthy Memphis Common Table Take Charge Report #7, March 2013

  - **Chang**, Cyril F. “Status Report on Efforts to Understand and Create Awareness of Potentially Avoidable Hospitalizations in Memphis and
Shelby County, Tennessee,” Healthy Memphis Common Table Take Charge Report #5, September 2012.


  - **Action:** Prepared and submitted manuscripts to reputable refereed journals.
  
  - **Result:** Published the following reports and peer-reviewed articles:


### Goal 3: Increase visibility of the Healthcare Economics Center within the University of Memphis campus and in the external Memphis health care community

**Objective 3.1** Engage in collaborative research and service activities with health-related units/departments across the University of Memphis campus to promote engaged research

**Actions and Results:**

- **Action:** Built on the momentum from previous years, The Healthcare Economics Center continued to organized and held monthly interdisciplinary research seminars under the funding support of Health Care Research Journal Club.

- **Result:** A total 6 well attended seminars were held in 2014-2015. Topics ranged from health care mega trends to social determinants of mortality and to Patient-Centered Medical Homes. In addition to their education value, the seminars also provided a forum for health care practitioners and university researchers to network and to exchange research ideas.

**Objective 3.2** Provide research opportunities and assist in the development of a richer research environment

**Actions and Results:**

- Applied for and received Hospital Inpatient and Outpatient Discharge Datasets for 2012 and the Joint Annual Report of Hospitals for the same year for use by faculty and students

- Offered travel funds for graduate students and faculty members to attend health care conferences

- Sponsored healthcare speakers for research seminars

- Provided graduate and undergraduate internships to work on health care projects

**Objective 3.3** Serve the external health care community in the greater Memphis area

**Actions and Results:**

- In 2014-15, Dr. Cyril Chang continued his service on the Board of Directors of the Urban Child Institute serving as both a Board member and the
Chairman of the Board. He also chaired the Institute’s Investment Committee that oversees the management of the Institute’s investment portfolio.

- Dr. Cyril Chang serves on the Board of Directors of QSourceAR™, a fully owned, non-profit subsidiary of QSource™ Tennessee. QSource AR™ and QSource™ Tennessee are both organized as nonprofit centers for health care quality improvement. QSource™ Tennessee is also officially recognized as a Medicare Quality Improvement Organization (QIO) for Tennessee.

- **Public Speeches by Dr. Cyril F. Chang in 2014-2015:**

  - **March 20, 2014**  
    “Mechanism Linking Self-Regulation in Early Life to Adult Health and Well-Being: What Do We Know and What Do We Need to Find Out?” Norfleet Forum for the Advancement of Health: Early Brain Development and Function – Impact on Social and Health Outcomes, A lecture conference sponsored jointly by the University of Tennessee Health Science Center and the Urban Child Institute.

  - **May 14, 2014**  
    “Health Care Reform after ACA,” an invited lecture given to St. Jude Clinical Fellows at the St. Jude Children’s Research Hospital at Memphis, Tennessee.

  - **Feb. 20, 2014**  
    “ACA and End-of-Life Care,” an invited lecture given at the Methodist University Hospital in Memphis, Tennessee.

  - **May 10, 2013**  
    “Health Reform in Tennessee and Pediatric Practice,” an invited lecture given at the 2013 Etteldorf Symposium at Le Bonheur Children’s Hospital in Memphis, Tennessee.

  - **May 8, 2013**  
    “National Health Care Reform – An Update,” an invited lecture given at the St. Jude Children’s Research Hospital.

  - **March 5, 2013**  
    “Should Tennessee Expand Medicaid/TennCare: What Are the Options,” given to the Mid-South Chapter of the American Association of Health Insurance Underwriters in Memphis, Tennessee.

  - **January 31, 2013**  
    Keynote speech, “Potentially Avoidable Hospitalizations and Non-Urgent ED Visits in Shelby County, Tennessee,” give to the Learning Collaborative training meeting sponsored by the Diabetes for Life Project of the Healthy Memphis Common Table.
Objective 3.4: Engage print and other media outlets to promote the Center’s visibility and outreach

- Engaged print media and contributed op-ed articles on TennCare and health-related topics:
  
  
  - Interviewed and quoted by three Tennessee newspapers in April 2014: Dr. Cyril F. Chang, the Director of Methodist Le Bonheur Center for Healthcare Economics, was quoted at length in an April 9, 2014, Memphis Commercial Appeal article by reporter Kevin McKenzie about the release of Medicare doctor reimbursement data by the Center of Medicare and Medicaid. This was followed by a second article in the Nashville paper, the Tennessean, on the same topic on 04/09/2014. Four days later on 04/13/2014, The Chattanooga Press Free Press published a long news analysis article on the controversy surrounding the release of Medicare doctor data and quoted Dr. Chang extensively.
  
  - Featured in a Memphis Commercial Appeal dated, October 16, 2013, on ObamaCare and its impact on physician practices in Memphis by reporter Kevin McKenzie.
  
  - Quoted extensively in a feature article in the online news magazine, “Nooga.Com” on health care spending trends by freelance reporter Chloe Morrison dated January 14, 2013.

Goal 4: Promote wellness and health promotion programs for a healthier community

Objective 4.1 Develop a close working relationship with external partners and stakeholders to explore collaborative opportunities

Actions and Results:

- Contacted, met, and discussed projects of mutual interest with representatives from a wide range of community partners including:

  - Shelby County Mayor’s Office
Objective 4.2 Participate in community wellness and health promotion activities

Actions and Results:

- Worked with QSource™ Tennessee, the Center for Healthcare Quality in Tennessee, in providing expertise in economic evaluation of health promotion and intervention programs

- Worked with the Healthy Memphis Common Table in promoting health and wellness of residents and employees of the greater Memphis area

Goal 5: Provide analytical expertise to external stakeholders

Objective 5.1 Provide technical assistance

Actions and Results:

- Provided health insurance coverage data to YMCA of Memphis and the Mid-South to assist in their community needs assessment.

- Worked with and advised Dr. Kennard Brown, Executive Senior Vice Chancellor of UTHSC, on a wide range of strategic planning issues of mutual interest.
Primary Goals for 2015 - 2016 and Evaluation Metrics

**Goal 1:** Explore external opportunities
- Promote visibility through outreach and exchange activities
- Plan, prepare, and submit grant proposals
- Explore consulting opportunities

**Goal 2:** Study and analyze health economic trends including the impact of Affordable Care Act in Tennessee and related state health reform issues
- Measure the economic contributions of RNs and APRNs
- Continue the collection and analysis of data for Tennessee Hospital Data series and the publication of Issue Briefs on issues relating to potentially avoidable hospitalizations and non-urgent emergency room visits
- Collect and compile reliable TennCare data and documentation
- Analyze TennCare’s financial status and disseminate information to inform the public of TennCare’s past, present and future

**Goal 3:** Increase visibility of the Center within the University of Memphis campus and in the external Memphis Health Care community
- Manage the University of Memphis Health Care Research Journal Club as a forum for health policy discussion and exchange of ideas for practitioners in the health care community and academic researchers.
- Engage in collaborative research and service activities with health-related units/departments across the University to promote engaged research
- Serve the external health care community in the greater Memphis area
- Engage printed and other media outlets to promote the Center’s visibility

**Goal 4:** Promote wellness and health promotion programs for a healthier community
- Develop a close working relationship with external partners and stakeholders to explore collaborative opportunities
- Participate in community wellness and health promotion activities

**Goal 5:** Provide analytical expertise to external stakeholders
- Provide technical assistance to external stakeholders such as Methodist Le Bonheur Healthcare, Baptist Health Care, the Urban Child Institute, and major local employers