utmb Health
Center to Eliminate
Health Disparities

A PLAN TO ADDRESS DOCUMENTED HEALTH DISPARITIES WHILE ENHANCING UTMB CAPACITY FOR COORDINATE ACTION

THE 1ST IMPROVEMENT PLAN

FULFILLING DSRIP PERFORMANCE MEASURE I-11.1

Center to Eliminate Health Disparities (CEHD)

University of Texas Medical Branch (UTMB)

301 University Blvd, Galveston, TX 77555-0920

cehd@utmb.edu

March, 2015

Contributing Authors

Hani Serag, MD, haserag@utmb.edu
Kenneth D. Smith, Ph.D., kennsmit@utmb.edu
Wei-Chen Lee, Ph.D., weilee@utmb.edu

Acknowledgements

We are very grateful to the support from UTMB Office of the President-Waiver Operations, Office of Health Policy and Legislative Affairs (HPLA), Clinical Data Management, Oliver Center for Patient Quality and Safety, Admitting & Registration Services, and Ambulatory Training & Development.

- Center to Eliminate Health Disparities. (2015). A Plan to Address Documented Health Disparities while Enhancing UTMB Capacity for Coordinated Action: The 1st Improvement Plan. Galveston, TX: University of Texas Medical Branch. Available at: http://www.utmb.edu/hpla/health-disparities/publications.

The project that is the subject of this report was approved by Texas Health and Human Services Commission (HHSC) and conducted by members of Center to Eliminate Health Disparities with the assistance of Dr. Karl Eschbach from Department of Internal Medicine-Geriatric Medicine. The views presented in this report are those of CEHD and are not necessarily those of the funding agencies.

Table of contents

EXECUTIVE SUMMARY

This report is an improvement plan consisting of recommendations to address three disparities uncovered in an analysis of UTMB inpatient data. It also details recommended actions to address health disparities in a coordinated way at UTMB.

The REAL Data Project is a critical first step for UTMB to address health disparities in a comprehensive way, including both health care disparities in UTMB's patient base as well as health disparities in the population of Galveston County. Analyzing UTMB inpatient records from July 1, 2013 to June 30, 2014 highlighted three forms of disparity: low breastfeeding rates among African American and Hispanic females, high rates of low birth weight among babies born to African American females, and high rates of ambulatory care sensitive conditions (in hospital encounters) among African Americans.

To address these three specific disparities, the REAL data project team recommends 18 strategies that could intervene at the patient or provider level through new or improved programs and services; at the UTMB systems level through organizational practice changes; at the community level through partnerships; and at the policy level through education of leaders in the government, business, nonprofit, and philanthropic sectors.

UTMB has demonstrated a commitment to address health disparities through the support of the Center to Eliminate Health Disparities, the Diversity Council, and the Hispanic Center of Excellence. For further actions to reduce and eliminate disparities, we recommend a variety of activities as parts of an overall plan that will not only facilitate implementation of the 18 recommended strategies but will position UTMB as a leader in addressing health disparities. We envision four stages:

- Stage 1: Dissemination and Dialogue (by May 31, 2015): disseminate results and hold meetings with key stakeholders.
- Stage 2: Bridging Silos and Educating Leaders (by August 31, 2015): hold a Health Disparities Leadership Academy.
- Stage 3: Convening a Disparities Committee (by October 1, 2015): convene the first meeting of a Health Disparities Committee that will meet quarterly as a group and more frequently as subcommittees.
- Stage 4: Create a Disparities Dashboard (by July 2016): create a "disparities" dashboard composed of quality measures stratified by race, ethnicity and language.

1 INTRODUCTION

This report is an improvement plan consisting of recommendations to address three disparities uncovered in an analysis of UTMB inpatient data. In addition, the report details recommended actions to address health disparities in a coordinated way at UTMB. These more general recommendations are based on published guidance documents from professional organizations and best practices utilized by health systems that are nationally recognized leaders in addressing health disparities. More important, they represent a planned course of action that will (1) enable UTMB to address documented health disparities, and (2) build on existing infrastructure to create the capacity for UTMB to become a national leader in reducing health disparities.[i]

The next section describes the top three health disparities the project team uncovered in its first round of analysis of hospital data.[ii] It also provides perspective on how to tackle these disparities at UTMB. A list of recommendations for addressing these disparities follows. Because the analysis is based on UTMB hospital inpatient data alone, some may call for additional evidence that supplements the inpatient data with outpatient, population-level and qualitative data and research. Although confident in the results from the analysis, the project team recognizes the need for further research with supplementary data to strengthen the commitment of relevant stakeholders. Recommendations for further research are included in the last section, which details general capacity-building activities to address health disparities in a systematic way at UTMB.

2 HEALTH DISPARITIES AMONG UTMB PATIENTS AND IMPLICATIONS FOR ACTION

The REAL Data Project is a critical first step for UTMB to address health disparities in a comprehensive way, including both health care disparities in UTMB's patient base as well as health disparities in the population of Galveston County. The companion report, "Documenting Health and Healthcare Disparities in the UTMB Patient and Community Population", identifies three health disparities based on inpatient records among those individuals admitted in the study period from July 1, 2013 to June 30, 2014. These include:

- **Low breastfeeding rates among African American and Hispanic females.** Breastfeeding is not a common practice among mothers who give birth at UTMB. According to data from the University Healthcare Consortium, 49% of mothers exclusively breastfeed during the hospital stay. The Centers for Disease Control and Prevention report national and state rates of breastfeeding 6 months after delivery as 49% and 45.5% respectively. [1] By contrast, only 15% of all infants born at UTMB hospitals between July 1, 2013 and June 30, 2014 were exclusively breastfed during the entire hospital stay (which suggests even lower rates 6-months after delivery). In addition, stratification by race and ethnicity reveal significant disparities in the practice of breastfeeding. Whereas 34% of White newborns were breastfed during the entire hospital stay, only 11% African Americans and 12% Hispanic mothers breastfed during the entire hospital stay.

[i] This report is a DSRIP deliverable for the project, "Strengthening the UTMB Health Information System to Reduce Health Disparities." Because a core outcome of the project is to collect accurate **r**acial, **e**thnic **a**nd **l**anguage data, the term "REAL Data project" is used herein as the DSRIP project name.

[ii] Details of that analysis are in the companion document to this report, "Documenting Health and Healthcare Disparities in the UTMB Patient and Community Population". Although the REAL Data project team produced the report and analysis, the results would not have been produced without the contributions of other departments in UTMB that made the data available to the project team.

- **High rates of low birth weight among African American females.** Low birth weight is defined as weight less than 2,500 grams.[1] African American females at UTMB give birth to low birth weight newborns at a higher rate than all other races and ethnicities. Whereas 9.2% of all newborns at UTMB during the study period were of low birth weight, the percentage of low birth weight newborns of African American mothers was 17.5%. By contrast, the rates were 15.3% for newborns of Asian mothers (also high), and 10.4% for newborns of White mothers. At 7.1%, the rate of low birth weight newborns of Hispanic mothers was the lowest of all racial and ethnic groups at UTMB.

- **High rates of ambulatory care sensitive conditions (in hospital encounters) among African Americans.** Ambulatory care sensitive (ACS) conditions refer to medical problems for which hospitalizations could have been avoided as they are potentially preventable. During the study period, the rate of ACS conditions among hospitalized patients was 13.8% (26.4% among African American patients, 16.2% among Hispanics patients, and 11.3% among Asians patients). The relatively high rate among African American patients is statistically significant compared to all the other race/ethnic groups. Cases of heart failure and pulmonary edema contributed 37% to avoidable hospitalizations, followed by cases of diabetes mellitus (22%), chronic obstructive pulmonary diseases (15%), grand mal status and other epileptic convulsions (10%), asthma (8%), hypertension (6%) and angina (1%).

Although interpreting these findings is beyond the scope of this report, it is unsurprising that the REAL Data project team uncovered disparities in health and healthcare outcomes among African Americans, including mothers and newborns. The Institute of Medicine's (IOM) influential 2002 report, *Unequal Treatment: Confronting Racial and Ethnic Disparities*, documents a wide range of disparities in the types and quality of health care services minorities receive. The IOM report documents research showing that minorities often receive a lower quality of care than their white counterparts—even after controlling for disease stage, comorbidities, insurance coverage, socioeconomic status and other confounding factors. Subsequent research since the IOM report indicates that these racial and ethnic health disparities persist.[2]

The accumulated research traces the persistence of these disparities to the need to redesign the current system of healthcare delivery to improve overall quality of care. For example, in *Improving Quality and Achieving Equity: A Guide for Hospital Leaders*, the Disparities Solutions Center (DSC) at the Massachusetts General Hospital states:

> "To truly achieve quality of care, health systems must focus on six key elements—efficiency, effectiveness, safety, timeliness, patient centeredness, and *equity*. *Equity* is achieved by providing care that does not vary in quality by personal characteristics such as ethnicity, gender, geographic location, and socioeconomic status…."[3]

More important, addressing health disparities cannot be separated from the other dimensions of quality of care. The DSC emphasizes:

> "Research has shown that **racial and ethnic disparities in health care have an impact on quality, safety, cost, and risk management**."[4] [Emphasis added.]

The latter point has specific implications for UTMB, as it indicates that addressing health disparities like ACS among African Americans could significantly reduce the costs (among other things) associated with delivering care, which has implications for population health management.[4,5] However, the more general findings from the accumulated research stress the importance of addressing health disparities through coordinated action at the systems level. These findings have not been lost among policy makers and health care leaders nationally. For example, the National Quality Forum and the Joint Commission acknowledge the critical role of addressing health disparities as a component of overall quality improvement. The elimination of health disparities is one of the four strategic priority areas of the National Prevention Strategy, which includes specific recommendations for health systems, clinicians, and

insurers. Thus, by addressing health disparities in a more coordinated way, UTMB will be aligned with a national agenda to transform the U.S. healthcare system by addressing the triple aim to reduce improve quality at reduced cost with better outcomes for everyone.

3 Addressing Documented Health Disparities at UTMB

To develop recommendations to address the three documented health disparities, the REAL Data project team reviewed the literature to identify what strategies have been implemented elsewhere that (a) were evaluated and found effective, and (b) appear amenable to implementation at UTMB. The team considered strategies that could intervene at the patient or provider level through new or improved programs and services; at the UTMB systems level through organizational practice changes; at the community level through partnerships; and at the policy level through education of leaders in the government, business, nonprofit, and philanthropic sectors. Eighteen total recommendations by documented disparity, partner type, and level of impact are listed in Table 1. Some of these recommendations were based on discussions with clinical directors and other UTMB informants; however, additional input, engagement, and further research will be needed to implement these recommendations.

In developing the recommendations, the team considered the kinds of UTMB partners that would need to be engaged in implementing the recommendations. Health Systems partners include clinical directors and others involved in patient care in the hospital, ambulatory center, or community. Research partners are in academic departments and research Centers. Institutional Support partners include staff from a wide range of departments, including Health Policy and Legislative Affairs, the Center to Eliminate Health Disparities, Information Services, etc. Academic partners include professors and students who, under the supervision of academic advisors, could support research and service activities through newly developed electives. The next section includes an action plan for engaging these partners in coordinated action to address health disparities.

TABLE 1: RECOMMENDATIONS TO ADDRESS DOCUMENTED DISPARITIES BY PARTNER TYPE AND IMPACT LEVEL

RECOMMENDATIONS	PARTNER TYPE				LEVEL OF IMPACT			
	Health Systems	Research	Education	Institutional Support	Programs & Services	UTMB Health System	Community	Policy/ Practice
Low breastfeeding rates among African American and Hispanic females								
1.1 Develop new programs that encourage, educate, and support breastfeeding among newborns of African American and Hispanic females, including efforts taking place before and after delivery in UTMB hospitals and birthing centers.	X				X			
1.2 Strengthen and tailor existing programs to account for racial, ethnic, and socioeconomic factors that limit the adoption of breastfeeding.	X	X			X			
1.3 Develop and implement programs led by trained and certified community health workers and promotoras that target African American and Hispanic females to encourage and promote breastfeeding from preconception through 6 months postpartum.	X	X	X	X	X	X	X	
1.4 Inventory existing interventions at UTMB promoting breastfeeding, identify promising best practices shown to increase breastfeeding adoption among African American females, and disseminate the findings to UTMB clinicians, researchers, and community partners.		X		X			X	X
1.5 Increase the number and availability of professional Spanish speaking interpreters and ensure accurate capture of language preferences for all UTMB patients.	X			X		X		
1.6 Educate policy makers and local employers about practices to support breastfeeding among new mothers.		X		X			X	X
High rates of low birth weight among African American females								
2.1 Expand existing UTMB medical services for antenatal and postpartum follow up that encourage and support pregnant women, and strengthen them to be more effective for African American parents.	X				X	X	X	

RECOMMENDATIONS	PARTNER TYPE				LEVEL OF IMPACT			
	Health Systems	Research	Education	Institutional Support	Programs & Services	UTMB Health System	Community	Policy/ Practice
2.2 Strengthen UTMB outreach to include home visiting-based services focusing on African American pregnant women, especially those younger than 20 years old. This could include CHW-provided health education sessions, promotion of regular hospital-based checkups, investigation and follow up, and assistance to reduce domestic violence.	X			X	X	X	X	
2.3 Organize events and group activities for pregnant women. This may include: health education audio-visuals, group physical exercise, healthy meals, and group activities that support healthy behaviors through peer-education and support.	X		X	X			X	
2.4 Use CEHD's Social Media project to promote healthy behaviors during pregnancy through text messages and other tools.	X	X		X			X	
2.5 Conduct research to identify best practices that address low birthweight, including incorporating preconception care, and disseminate the findings to UTMB clinicians, researchers and community partners.		X	X	X			X	X
High rates of ambulatory care sensitive conditions (in hospital encounters) among African Americans								
3.1 Strengthen and expand UTMB outreach to include community-based programs and home visits schemes to improve the post-hospital management of asthma, diabetes mellitus, and cardio-vascular diseases.	X			X	X	X	X	
3.2 Coordinate outreach activities with community stakeholders including the local health department, health providers, and community-based organizations.	X	X	X	X	X	X	X	
3.3 Conduct further research of inpatient records to better understand ACS disparities and further inform suggested strategy and actions.	X	X		X		X		
3.4 Investigate the behavioral, social, and economic roots of health disparities, focusing on racial disparities and considering the implications for addressing ACS disparities.		X	X	X		X		

RECOMMENDATIONS	PARTNER TYPE				LEVEL OF IMPACT			
	Health Systems	Research	Education	Institutional Support	Programs & Services	UTMB Health System	Community	Policy/ Practice
3.5 Establish a multi-disciplinary, cross-department task force for disease prevision, health promotion, and public health. The task force would use a population health management approach to recommend solutions to reduce high rates of ambulatory sensitive conditions.	X	X	X	X		X		
3.6 Provide training for existing and all new patient registration staff on collecting accurate REAL data from patients, and implement Joint Commission recommendations and federal Office of Management and Budget standards to ensure that health information technology systems are set up to collect REAL data.	X			X	X			
3.7 Develop a system to regularly and routinely monitor rates of hospitalization of ACS conditions for different racial, ethnic, and language groups to inform the evaluation and re-planning of interventions designed to reduce disparities in inpatient ACS conditions.	X	X		X		X		

4 A PLAN FOR COORDINATED ACTION

"Addressing health disparities has been acknowledged by the National Quality Forum and the Joint Commission as an essential component of quality. Despite this, few hospital leaders have the issue of equity, and addressing disparities, prominently on their radar screen."

Disparities Solution Center at Massachusetts General Hospital

In developing a plan for UTMB, the project team draws from two sources: (1) the Equity of Care Collaborative's[iii] toolkit, *Equity of Care: A Toolkit for Eliminating Health Care Disparities* [6]; and (2) the Disparities Solution Center's[iv] guidance document, *Improving Quality and Achieving Equity: A Guide for Hospital Leaders* [4]. The Equity of Care Collaborative developed the toolkit in response to their call of action to eliminate health care disparities. The goals of the group are to increase the collection of race, ethnicity, and language (REAL) preference data to facilitate its increased use; increase cultural competency training for clinicians and support staff; and increase diversity in governance and management. The Disparities Solution Center has a leadership program that trains hospital leaders on best practices to reduce health disparities, and the guidance document provides a model of best practices in bringing about systems-level changes needed to address health disparities in a coordinated way.

In addition to reviewing these documents, the project team conducted a systems assessment before developing a final plan of action.[v] For example, the team identified the kinds of capacities needed to implement all or a subset of the recommendations (see Table 1), and successful implementation strategies discussed in guidance documents. As illustrated in Table 1, many of the recommendations require communication, coordination, cooperation, and collaboration among stakeholders across multiple, often silo-ed, departments. Therefore, a necessary systems change is to build capacity for coordinated action.

UTMB has demonstrated a commitment to address health disparities through the support of the Center to Eliminate Health Disparities, the Diversity Council, and the Hispanic Center of Excellence. These three groups and others are driving activities that align with the Equity in Health Collaborative's call to action. However, unlike some health systems across the country and in Texas, UTMB's four institutional goals do not *explicitly* mention the reduction of health disparities—although they could be interpreted to incorporate the reduction of health disparities *implicitly*. Although ongoing development of tactics and strategies to achieve institutional goals could better incorporate health disparities, without a common understanding

[iii] The members of the Equity of Care Collaborative include the American Hospital Association, Association of American Medical Colleges, American College of Healthcare Executives, Catholic Health Association of the United States, and National Association of Public Hospitals and Health Systems.

[iv] The Disparities Solution Center is a part of the Institute for Public Policy at Massachusetts General Hospital, the teaching hospital for Harvard Medical School.

[v] All staff at the Center to Eliminate Health Disparities receives training on Organizational Learning and Systems Change. Center staff conducts periodic "systems" discussions to help uncover feedback loops and other components of the complex systems that make up the academic medical center.

and language for addressing health disparities across all operational divisions, coordinated action is likely to be suboptimal. It is unclear whether and to what extent the operational divisions of UTMB have a common understanding of what health disparities are, how to address them, and their own role in addressing them in coordination with others outside of their operational divisions. Therefore, a necessary condition for effective implementation of the recommendations includes institution-wide training and dialogue about health disparities.

We recommend a variety of activities that form the components of an overall plan that will not only facilitate implementation of the recommendations but will also position UTMB as a leader in addressing health disparities. These activities, as stated above, are based on both best practices and an assessment of what works. We envision three stages:

Stage 1: Dissemination and Dialogue

Goal: By May 31, 2015, disseminate results and hold meetings with key stakeholders.

The REAL Data Project Team will disseminate the companion document, "Documenting Health and Healthcare Disparities in the UTMB Patient and Community Population" to key stakeholders to get feedback about the results and recommendations for addressing the documented health disparities. These discussions will enable the team to cultivate relationships with key partners and determine the kinds of support they need to become more involved in addressing health disparities. The discussions will also help us identify others who should be engaged in the process.

Stage 2: Bridging Silos and Educating Leaders

Goal: By August 31, 2015, hold a Health Disparities Leadership Academy

The Center to Eliminate Health Disparities, in partnership with UTMB's Diversity Council, will conduct a one-day forum to train UTMB leaders and stakeholders from across operational divisions about health disparities, best practices at addressing health disparities, and ways to address health disparities at UTMB. The interactive forum will bridge operational silos, offer a common framework for addressing health disparities, and provide an opportunity for key leaders and stakeholders to consider their potential role in addressing health disparities. It will provide a platform for identifying some of the actions consistent with institutional pillars and department priorities. The highlight of the event will be the identification of potential participants in a Disparities Committee.

Stage 3: Convening a Disparities Committee

Goal: By October 1, 2015, convene the first meeting of a Health Disparities Committee that will meet quarterly as a group and more frequently as subcommittees.

The formation of a Disparities Committee is a best practice recommended as a core systems change needed to address health disparities in a coordinated way. The disparities committee will provide the institutional platform for implementing the recommendations for addressing the targeted health disparities in this report. The Center to Eliminate Health Disparities will convene and staff the Disparities Committee. The committee will also be responsible for suggesting research and monitoring the collection of REAL data in the hospital electronic medical record.

Stage 4: Create a Disparities Dashboard

Goal: By July 2016, create a "disparities" dashboard composed of quality measures stratified by race, ethnicity and language.

Achieving this last goal will be the culmination of the team's work and would be a major success. The quality measures could include National Hospital Quality Measures, HEDIS outpatient measures, etc. The Disparities Committee could be charged with periodically reviewing the dashboard and make recommendations for action.

REFERENCES

[1] WHO and Unicef. 2004. *Low Birthweight: Country, Regional and Global Estimates*. World Health Organization.

[2] Smedley, B., Smith, Adrienne, Nelson, A. (2002). *Unequal Treatment: Confronting Racial and Ethnic Disparities*. Institute of Medicine. Washington D.C: The National Academies Press.

[3] Betancourt, J., Green, A., King, R. *et al*. (2007). *Improving Quality and Achieving Equity: A Guide for Hospital Leaders*. Disparities Solutions Center, Institute of Health Policy Massachusetts, General Hospital.

[4] Maine Quality Forum (2015). Ambulatory Care Sensitive Conditions. [Online] Available: http://www.mainequalityforum.gov/chart_12lp.html. [Cited: March 27, 2015].

[5] Utah Department of Health (2013). Complete Indicator Report of Ambulatory Care Sensitive Conditions: Diabetes Hospitalization Among Adults. [Online] Available: http://ibis.health.utah.gov/indicator/complete_profile/ACS_DiabHosp.html. [Cited: March 27, 2015].

[6] Equity of Care Collaborative (2015). *Equity of Care: A Toolkit for Eliminating Health Disparities*. Institute for Diversity in Health Management and American Hospital Association.