# TABLE OF CONTENTS
# FOR
# HEALTH AFFAIRS COMMITTEE

**Committee Meeting:** 8/20/2014

**Board Meeting:** 8/21/2014
Austin, Texas

*Robert L. Stillwell, Chairman*
*Ernest Aliseda*
*Jeffery D. Hildebrand*
*Brenda Pejovich*
*Wm. Eugene Powell*

**1. U. T. System Board of Regents: Discussion and appropriate action regarding Consent Agenda items, if any, referred for Committee consideration**

RECOMMENDATION

The proposed Consent Agenda is located at the back of the book.

## 2. U. T. System: Approval to distribute a portion of The University of Texas System Professional Medical Liability Benefit Plan premium returns and approve rates for the Plan

### RECOMMENDATION

The Chancellor concurs in the recommendation of The University of Texas System Professional Medical Liability Benefit Plan (Plan) Management Committee, chaired by the Vice Chancellor and General Counsel and comprised of the Chair, the Executive Vice Chancellor for Health Affairs, and the Executive Vice Chancellor for Business Affairs, after consultation with Milliman, Inc., actuary for the Plan, that:

a. overall premium rates remain unchanged with the addition of a minimum $100 annual premium being set for the institution premiums;

b. $6 million in premiums be returned to the participating U. T. System institutions based on a methodology that considers each institution's losses; and

c. $1.5 million to be distributed for patient safety initiatives and for an independent evaluation of the effectiveness of the patient safety initiative program.

The proposed distribution of $7.5 million is set forth in Exhibit 1 (Page 287).

### BACKGROUND INFORMATION

With the implementation of tort reform in 2003, the Plan Management Committee (Committee) has consistently recommended significant reductions in total Plan assets to bring the reserve levels to those generally accepted by the industry. The Committee continues balancing Plan revenue from premiums charged and investment income with adequate capitalization from which to pay Plan claims, reserves for future claims, and administrative expenses. As part of this effort, Plan premiums were significantly reduced for several years immediately following tort reform adoption, and since 2007, the premium rates have either been reduced or unchanged. However, Plan premiums are adjusted annually for institutional loss experience.

For the coming year, the Committee recommends maintaining overall premiums at the current rate with modifications for institutional loss experience. Based on Plan investment income and efficient management of claims, the Committee recommends a return to the contributing institutions of $6 million so that excessive reserves are not maintained. The combination of unchanged rates along with this distribution should still allow for adequate capitalization of the Plan.

The methodology for distribution of $6 million to participating institutions considers the proportion of each institution's payment into the Plan as well as each institution's loss experience. Thus, those institutions with higher claims receive lower distributions.

In addition to the $6 million to be distributed to participating institutions, $1.5 million is recommended for U. T. System efforts in clinical effectiveness, patient safety, and quality of care. Funds were authorized for these purposes in 2008, 2010, and 2013. With this funding, a grant competition has funded research, collaboration, and education in the area of patient safety and quality improvement. This funding has also enabled the expansion of clinical effectiveness courses to all U. T. System health institutions to educate health care providers in current methodologies and best practices to improve clinical care.

Exhibit 1

**The University of Texas System Professional Medical Liability Benefit Plan**

Proposed Distribution of Plan Returns

FY 2014

| ***Institution*** | ***Premium Paid 2012-2014*** | ***Claims Expenses 2012-2014*** | ***Net Contribution Amount*** | ***Rebate based on Net Contribution*** |
|---|---|---|---|---|
| UTSWMC | 6,305,515 | 2,057,464 | 4,248,051 | 1,501,033 |
| UTMB | 4,537,759 | 956,408 | 3,581,351 | 1,265,457 |
| UTHSCH | 4,365,093 | 2,437,851 | 1,927,242 | 680,984 |
| Medical Foundation (UTHSCH) | 1,923,370 | 973,794 | 949,576 | 335,529 |
| UTHSCSA | 5,024,887 | 1,697,366 | 3,327,521 | 1,175,767 |
| UTMDACC | 3,430,384 | 800,110 | 2,630,274 | 929,398 |
| UTHSCT | 252,579 | 272 | 252,307 | 89,152 |
| UT Arlington | 4,268 | - | 4,268 | 1,508 |
| UT Austin | 56,187 | 3,816 | 52,371 | 18,505 |
| UT Dallas | 1,386 | - | 1,386 | 490 |
| UT El Paso | 674 | - | 674 | 238 |
| UT Pan American | 1,148 | - | 1,148 | 405 |
| UT San Antonio | 4,340 | - | 4,340 | 1,534 |
| **Subtotal** | **$ 25,907,590** | **$ 8,927,081** | **$ 16,980,509** | **$ 6,000,000** |
| **Patient Safety Initiative** | | | | **$ 1,500,000** |
| **TOTAL PROPOSED DISTRIBUTION** | | | | **$ 7,500,000** |

## 3. U. T. Southwestern Medical Center: Report on the William P. Clements, Jr. University Hospital

### REPORT

President Podolsky will report briefly on the William P. Clements, Jr. University Hospital at U. T. Southwestern Medical Center.

### BACKGROUND INFORMATION

On November 15, 2014, the William P. Clements, Jr. University Hospital at U. T. Southwestern Medical Center will open its doors to the public, transforming medical care in North Texas and serving as a model for academic medical centers across the country. The goal of the new hospital is to bring together innovative hospital design, state-of-the-art technology, and industry best practices to create an environment that seamlessly integrates patient care with leading-edge research and medical education.

In 2009, former Texas Governor William P. Clements, Jr., made an unprecedented $100 million gift to U. T. Southwestern Medical Center, the largest single gift in the institution's history. In the spirit of Governor Clements' intentions, the institution chose to use the funds to support construction of a new university hospital (approved by the Board on November 11, 2009) to replace the aging St. Paul University Hospital. The new university hospital broke ground in March 2011 on the West Campus, immediately northwest of the existing St. Paul Hospital building. The hospital is comprised of 460 patient beds, 24 operating rooms, 40 emergency rooms, endoscopy and catheterization/interventional rooms, and imaging services. The total cost for the hospital and related components is $800 million.

On April 12, 2012, the Board of Regents approved the honorific naming of the new university hospital as the William P. Clements, Jr. University Hospital.

## 4. U. T. System: Discussion and possible appropriate action regarding development of proposal to improve care of patients with diabetes through improved data collection, management, analysis, and application

### RECOMMENDATION

Lynda Chin, M.D., Chair at U. T. M. D. Anderson Cancer Center's Department of Genomic Medicine and a Chancellor's Health Fellow, will introduce a proposal to improve care of patients with diabetes through improved data collection, management, analysis, and application. Executive Vice Chancellor Greenberg may recommend appropriate action at the meeting regarding development of the proposal.

An Executive Summary of the Diabetes Obesity Control in South Texas project is set forth on the following pages.

### BACKGROUND INFORMATION

U. T. System has recently been focused on how advanced information technology can enhance the ability to manage chronic health conditions. By collecting extensive amounts of information on large populations of patients, as well as assimilation of the latest research and treatment results, large scale clinical decision-support systems can be developed to provide more consistent, data-driven management of individual patients. In so doing, the latest advances in health care will be more rapidly disseminated and the quality of care can be elevated to a more consistent level across delivery settings, including those that have been underserved historically. The expected result is to reduce adverse health events, thereby improving both clinical and financial outcomes. If one can demonstrate success in using data analysis and application to manage a common, serious illness, then the precedent can be set for expansion to other clinical conditions.

Diabetes is a leading cause of morbidity and mortality in the United States, and is a particular challenge in some population groups. Standard care of this disease requires active patient engagement, regular monitoring and evaluation, with frequent adjustments of regimens. Measurement of blood sugar control typically is sporadic, and a more continuous monitoring and adjustment process, including the management of the large volumes of data that would be generated, might lead to the anticipation and prevention of sudden and unexpected swings in blood sugar and better long-term metabolic control. Improved control of blood sugar has been shown repeatedly to reduce the risk of the common serious complications of diabetes, including those involving eye, kidney, and nervous system impacts, among others.

The population of South Texas has a particularly high rate of diabetes, as well as an infrastructure in place with the creation of the new U. T. Rio Grande Valley medical school making it an ideal setting to undertake an exploratory study of improved management of this disease. If the technological solutions that are developed there prove to be successful, they can be further tested and developed in larger populations and ultimately transform the way diabetic patients are treated around the world.

**The University of Texas System**

# Project DOC

## Diabetes Obesity Control in South Texas

Lynda Chin, MD

Chancellor's Health Fellow

August 7th, 2014

## EXECUTIVE SUMMARY

The state of Texas is facing an impending healthcare crisis due to declining population health, increasing prevalence of chronic diseases such as diabetes and obesity, and the extraordinarily high cost of care with the highest percentage of uninsured individuals in the United States[1]. Furthermore, South Texas Rio Grande Valley (RGV) region is additionally challenged by poverty (e.g. this region is among the poorest and least educated in the nation[2]) and severe shortage of physicians (e.g. 40% fewer direct care physicians per 100,000 in RGV compared to the entire state of Texas[3]). The economic impact of these conditions in RGV is felt by the entire state, as the state of Texas spent $18 billion in 2012 to treat and manage diabetes[4], not including estimated indirect costs of ~$227 million per year in lost wages[5].

Some of major contributing factors to this expensive and debilitating cost of diabetes in Texas include (1) over-utilization of costly acute care (e.g. ER visits) or expensive hospitalization due to delayed access to or suboptimal care or poor self-management by uninformed patients and families, as well as (2) loss of productivity and wages (due to absenteeism) by patients and families due to chronic nature of the disease. The potential economic impact of effectively managing 50% of the diabetic population in Texas has been estimated at an annual cost savings of $13B for the State.

However, traditional chronic disease management relies primarily on manual intervention, which is labor intensive and un-scalable. Social, mobile, and cloud technologies, combined with big data and advanced analytics, are poised to fundamentally transform healthcare, particularly in management of chronic disease like diabetes where disease control outside of traditional care providing facilities (e.g. hospitals) can be greatly facilitated and augmented. Not only can technology reduce the cost of managing diabetic patients through better self-management and facilitated access, real-time biometrics with remote sensing can transform the current paradigm of episodic reactive care to a future of proactive and interventive management where we not only provide the right care at the right time but importantly intervene to prevent the need for costly care. To this end, the UT System is proposing a new initiative to leverage ***technology and big data innovation*** to improve **Diabetes Obesity Control** in South Texas.

Building upon the technical and conceptual foundation, leveraging the assets, capabilities and know-how as well as existing Technology Core partnerships with IBM, PwC and AT&T which have been established as part of the UT MD Anderson's OEA™ Network Democratization Pilot, Project DOC can leapfrog the development timeline to build big data analytics and mobile healthcare solutions designed to improve current diabetes management in Texas. By deploying and integrating these fit-for-purpose technology solutions into the fabrics of local healthcare infrastructure, Project DOC will facilitate access to chronic diabetes care, improve self-management and augment care with remote monitoring, thus minimizing the need for and utilization of expensive acute care and hospitalization. The deliverables of Project DOC are to (1) demonstrate feasibility and scalability of a technology-enabled and data-driven model of value-based diabetes care, and (2) achieve measurable improvement in both patient outcome and health economics.

Based on the experience of MD Anderson's OEA™ Network Democratization Pilot, we have undertaken a 6-week high level planning effort to map out a 3-year Program Plan for Project DOC. The Program Plan can be divided into the following phases and associated deliverables:

- *Assessment*: Conduct a systematic needs/gaps analysis specific to the RGV communities we intend to serve. This assessment must be conducted in close collaboration with all RGV stakeholders, so that the business and technical requirements of fit-for-purpose technology solutions can be defined. Such requirements will drive a set of budgets with milestones and deliverables supported by sufficiently detailed workplans with realistic timelines.

- *Year 1 Design and Develop:* Year 1 is to design and build a set of fit-for-purpose technology solutions that are integrated in a care pathway framework to deliver optimized and efficient care for diabetes patients. These solutions and framework will be incorporated into the local care delivery and health management infrastructure in Brownsville to accrue 300 patients as a proof of concept for a patient-centric ecosystem.
- *Year 2 Implement:* Year 2 is to create patient-centric ecosystems in new RGV communities to accrue 3,000 patients, leveraging the fit-for-purpose technology solutions built in Year 1. This is to prove that the Technology Core is repeatable and can rapidly facilitate creation of a local ecosystem, setting the stage for scaling in Year 3. In parallel, we will track Brownsville cohort of 300 to collect tangible evidence of improved outcome and economics, in order to engage risk-bearing entities (e.g. insurers) to support Year 3 program.
- *Year 3 Scale:* Year 3 is to demonstrate that the program and the Technology Core have the assets, solutions and infrastructure as well as the know-how to scale beyond RGV to accrue 30,000 patients (~ 0.7% of the Texas diabetic population) to demonstrate measurable cost savings.

When benchmarked against the development cost of MD Anderson's OEA™ Network Democratization pilot, we can reasonably estimate that Project DOC will require multiple tens of millions in funding to achieve sustainability in 3 years. Accordingly, Project DOC will require funding from U.T. System, particularly during early phases. To mitigate the financial risk to U.T. System, some degree of co-investment between the System and other sources, such as philanthropy, government or industry support, is also expected. In all cases, trenched funding is expected, where incremental funding is contingent upon meeting demonstrable milestones of success. Finally, because Project DOC will produce cost savings to both insurers and other "risk bearing" entities, there is strong potential that these groups can be targeted financial partners in the mid- to later term of the project.

Lastly, Project DOC will not only integrate and complement existing UT System investment in South Texas, it can also bring patient big data and analytics to UT institutions to accelerate research and innovation as well as to modernize medical education and health professional training.

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