Chronic Disease Management and the Shifting Sands of Payment Reform

Asra Kermani, MD

Internal Medicine Grand Rounds

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This is to acknowledge that Asra Kermani, MD has disclosed that she does not have any financial interests or other relationships with commercial concerns directly or indirectly to this program. Dr. Kermani will not be discussing off label uses in her presentation.

Asra Kermani, MD

Assistant Professor of Internal Medicine

Division of Endocrinology

Medical Director, Southwestern Health Resources

Purpose and Overview:

The purpose is to introduce the concept of alternative payment models that focus on payment for value-based care, and provide an overview of Southwestern Health Resources, which is an Accountable Care Organization.

Educational Objectives:

1. Describe Accountable Care Organizations and Southwestern Health Resources
2. Understand the concept of financial risk as it applies to ACOs
3. Understand the quality metrics and utilization measures as they apply to ACOs
4. Understand how chronic care can be managed in an ACO

Biographic Data

Dr Kermani is an endocrinologist with experience in both the private and academic practice of general endocrinology. Her focus most recently has been establishing the UTSW Endocrinology Clinic at Park Cities Clinical Center and establishing programs for addressing diabetes through her role as a Medical Director for Diabetes in Southwestern Health Resources.

Chronic Diseases and Need for New Care Delivery Systems

The United States spends much more than other developed countries on health care per member per year. The estimated spend per person per year was over $10,000 in 2016 but without a commensurate improvement in outcomes such as longevity and measures of quality of health care. In these measures, the United States lags behind other countries such as Canada, UK, France, Germany and Japan.

By 2025, health care will increase from 18% to 20% of the US economy, with an estimated 1 in 5 persons on Medicare. The estimated per beneficiary spend for Medicare will rise from $12,000 to $ 18,000 per year by 2025! The staggering magnitude of the health care crisis is largely based on an aging population with an increased prevalence of chronic illness and is amplified by the rising cost of health care including medication and administrative costs.

Ed Wagner MD, MPH, MACP, is best known for developing and disseminating the Chronic Care Model (CCM), an evidence-based framework for health care that delivers safe, effective, and collaborative care to patients. He established in 1992 the Seattle-based MacColl Institute for Healthcare Innovation at the Group Health Research Institute of Group Health Cooperative. Kaiser Permanente purchased Group Health Cooperative in 2017. He is now is its Washington Health Research Institute's founding director. In an effort to move advances in quality improvement, he proposed a health systems change to address this problem in 1998. This article, which was published in ACP's Effective Clinical Practice journal, entitled "What Will It Take to Improve Care for Chronic Illness?" Prophetically, he describes a "comprehensive system change" that has yet to come to fruition in the American healthcare landscape on a population-wide scale. The locus of care is the primary care physician. The health system to optimize such care, he suggested, needed an overhaul to have the following:

- well-developed processes and incentives for making changes in the care delivery system
- behaviorally sophisticated self-management support that gives priority to increasing patients' confidence and skills so that they can be the ultimate manager of their illness
- reorganization of team function and practice systems (e.g., appointments and follow-up) to meet the needs of chronically ill patients
- development and implementation of evidence-based guidelines and supporting those guidelines through provider education, reminders, and increased interaction between generalists and specialists
- enhancement of information systems to facilitate the development of disease registries, tracking systems, and reminders and to give feedback on performance

With the advent of electronic medical records, providers and health care systems have been incorporating elements of this proposed model.

A few years later, the Institutes of Medicine reported in 2001, "Crossing the Quality Chasm" the following problems in the American health care system:

1. That health care harms patients more often than it benefits them, and that the best of intentions do not translate into good outcomes
2. Medical science and technology advances in recent years have been far too rapid for the health care delivery system to keep up
3. There has been an increase in the aging population which brings with it an increased incidence of chronic conditions such as diabetes, heart disease, asthma among others and these are now the leading causes of illness, disability and death

It also recognized that the American health system is primarily focused devoted to acute, episodic care needs. Other issues identified were that the health care system is overly complex and uncoordinated, leading to delays in care, reduced patient safety, wasteful, and duplicative processes, voids in coverage and information loss. It recommended the need to incentivize payment and accountability with quality measures.

As clinicians, we have observed significant stumbling blocks: poor-to-no inter-EMR data transfer, leading to duplicative and even harmful care. Providers suffer from electronic "reminder fatigue" and are over-burdened with increasing quality metrics. Tools for patient self-management and activation are still lacking and are not robust. Lastly, the

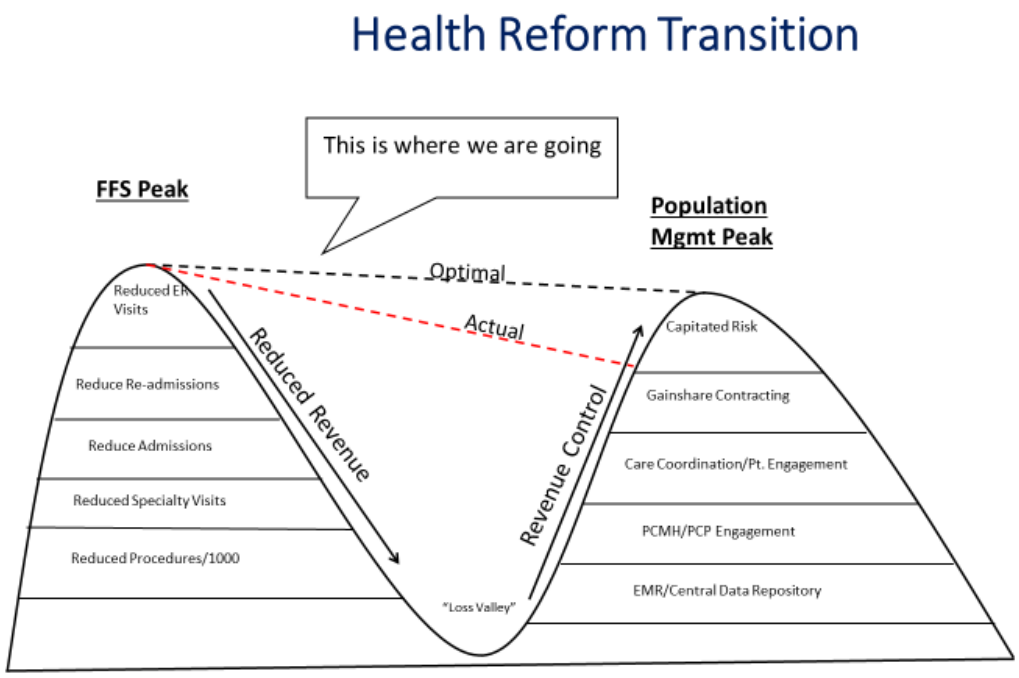
increasing demands placed on providers are met with resistance, particularly if there is no clear evidence that this correlates with improved patient outcomes or aligns with their financial incentives.

The Affordable Care Act and Origin of Accountable Care Organizations

The Affordable Care Act in 2010 tried to address this looming budget nightmare by baking into the legislation new payment models by the Centers for Medicare and Medicaid Services (CMS). These alternative payment models were designed to bridge the transition from fee-for-service to fee-for-value care.

The goal was the so-called Triple Aim proposed by then HHS Secretary Sylvia Burwell and her colleagues: improved health of given population, positive patient experience and affordable cost of care. A Fourth Aim has been proposed: improved clinician experience. One such payment model is the Accountable Care Organization, defined as groups of doctors, hospitals, and other health care providers, who come together voluntarily to give coordinated high-quality care to the Medicare patients they serve. This model has also been adopted by commercial health insurance companies.

The alternative payment models seek to transition financial risk away from taxpayers and healthcare payers and instead place the burden on providers to make smarter decisions about utilization. Where value is defined as outcomes/cost, cost reduction alone is not adequate to improve value. Poor outcomes that persist with low cost still defines low value care. Therefore, it is imperative that the outcomes improve relative to the cost for there to be value in healthcare.



Medicare ACO Models

We are going to focus on the models that are relevant to our institution. This includes the Medicare Shared Savings Program (MSSP) and the Next Generation ACO. MSSP has three tracks, which take on increasing amounts of financial risk relative to reward.

The payments are tied to improved care at lower cost. CMS sets up financial benchmarks based on historical expenditures for beneficiaries (patients) assigned to an ACO. The amount of the ACO's shared savings or losses depends on its quality performance. The newest Medicare model is the Next Generation ACO (NGACO), which takes on much higher financial risk compared to MSSP.

When we speak of financial risk, there are two terms to familiarize oneself with: upside risk and downside risk. An example of an upside risk model is Track One of the Medicare Shared Savings Program. In it, providers who reduce healthcare costs below their benchmarks receive a percentage of the difference between the actual and budgeted costs, which is known as shared savings. If actual healthcare costs go over the budget, they do not receive any shared savings, but they are also not financially penalized. An example of a downside risk model is the Next Generation ACO Model. Here, providers that exceed budgeted costs are required to refund payers (pay back Medicare) a portion of the difference in costs. Payers are increasingly transitioning providers to more risk-heavy structures.

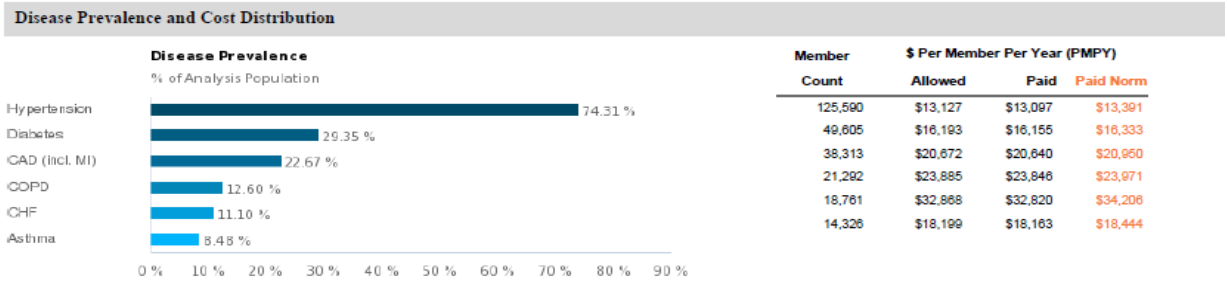
Table 1: TYPES OF MEDICARE ACOs

ALTERNATIVE PAYMENT MODEL (APM)	QUALITY MEASURES	FINANCIAL RISK
MSSP ACO TRACK 1	YES	NO
MSSP ACO TRACK 2	YES	YES
MSSP ACO TRACK 3	YES	YES
NEXT GENERATION ACO MODEL	YES	YES

Downside-risk models have the potential for shared losses but generally allow for higher shared savings. Blackstone et al showed that organizations that take on risk-based contracts perform better in a variety of scenarios:

- reduce hospital admissions and readmissions
- create preferred relationships with specialists and other hospitals
- improve care delivery for high-risk patients
- perform more effectively with post-acute care management

An example of how these payment models could operate in an ACO:



In this example, if the provider saved $40/per member per year (paid amount less than allowable amount), it could incur a savings up to $2 million/year-for diabetes - one chronic disease entity alone. (The actual figures may vary due to calculations based on population-based payment models).

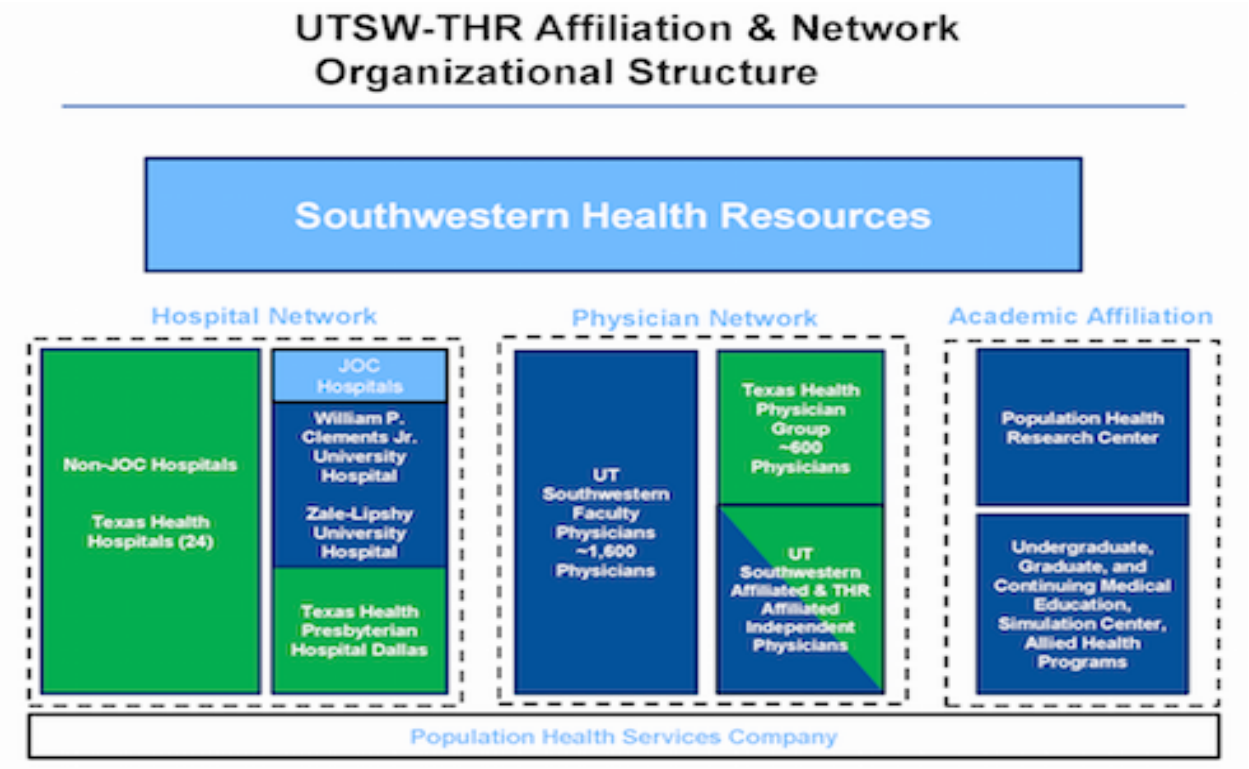
History of Accountable Care Network at UT Southwestern Medical Center

UT Southwestern Accountable Care Network was formed in 2013 (UTSACN). The MSSP contract became effective 2014. In 2015, it was the sixth largest MSSP ACO in the country. In 2015, UT Southwestern and Texas Health Resources formed a joint ACO called Southwestern Health Resources Accountable Care Network, which began functioning in April 2016 (SHWR).

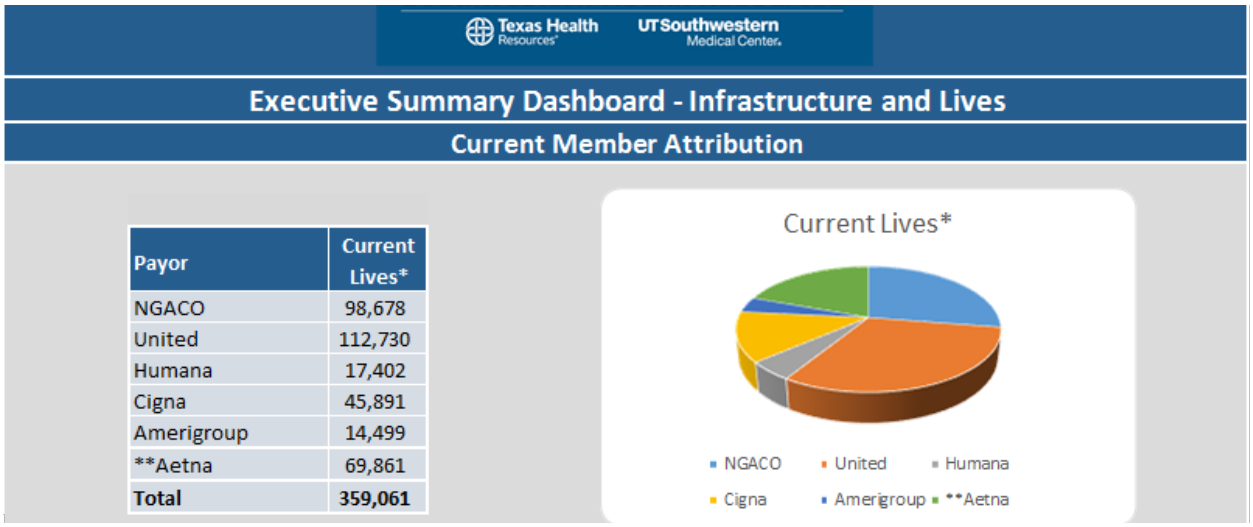
There are approximately 600 primary care providers (PCPs) and 2000 specialists in Southwestern Health Resources. The PCPs consist of approximately 323 UT Southwestern Community Affiliated Physicians, who are independent practitioners or practices; 79 UT Southwestern Faculty physicians (GIM and Family Medicine); and 230 physicians from Texas Health Physicians Group (THPG).

SWHR is an affiliation between UT Southwestern and Texas Health Resources and does not represent a merger. This affiliation combines the research depth and subspecialty care of UTSW with the broad primary care base of THR. SWHR's goal is offer its patients improved access to high quality primary and specialty care in a coordinated manner without duplicating services.

This network focuses on physician and care team collaboration – through a shared platform of data analytics and care coordinators. The data analytics provides access to quality metrics and utilization spend (such as inpatient care, ED use, home health and SNF use) as well as pharmacy data on medication utilization. Care coordinators provides services such as medication reconciliation, high risk patient management including financial assistance with prescriptions, transportation, durable medical equipment and even food as well as home safety and fall risk evaluations



SWHR has both Medicare ACO contracts (NGACO) as well as several Commercial Insurance contracts



Southwestern Health Resource Performance 2016

- Southwestern Health Resources was No. 7 in the nation in terms of MSSP savings.
- Saved more than $73 million over the past three years, including nearly $37.3 million in 2016, while maintaining a Quality Score over 95 percent.
- The Southwestern Health Resources ACN manages care for nearly 87,500 Medicare beneficiaries

Diabetes as a Chronic Disease Model in Southwestern Health Resources

Diabetes is a public health crisis; with a prevalence rate of approximately 30 million people with 1 of 4 unaware they have the diagnosis. It is also responsible for multiple comorbidities including renal failure, heart disease, amputations and vision loss, which occur with increased frequency in patients with uncontrolled diabetes. Diabetes is therefore considered a leading at-risk population by ACOs.

We are focused on diabetes care as a prototype for chronic disease management in SWHR.
Quality measures form the basis for measuring an ACO's performance, along with reduction in hospitalization and post-acute care spending. There are four domains across which performance is measured:

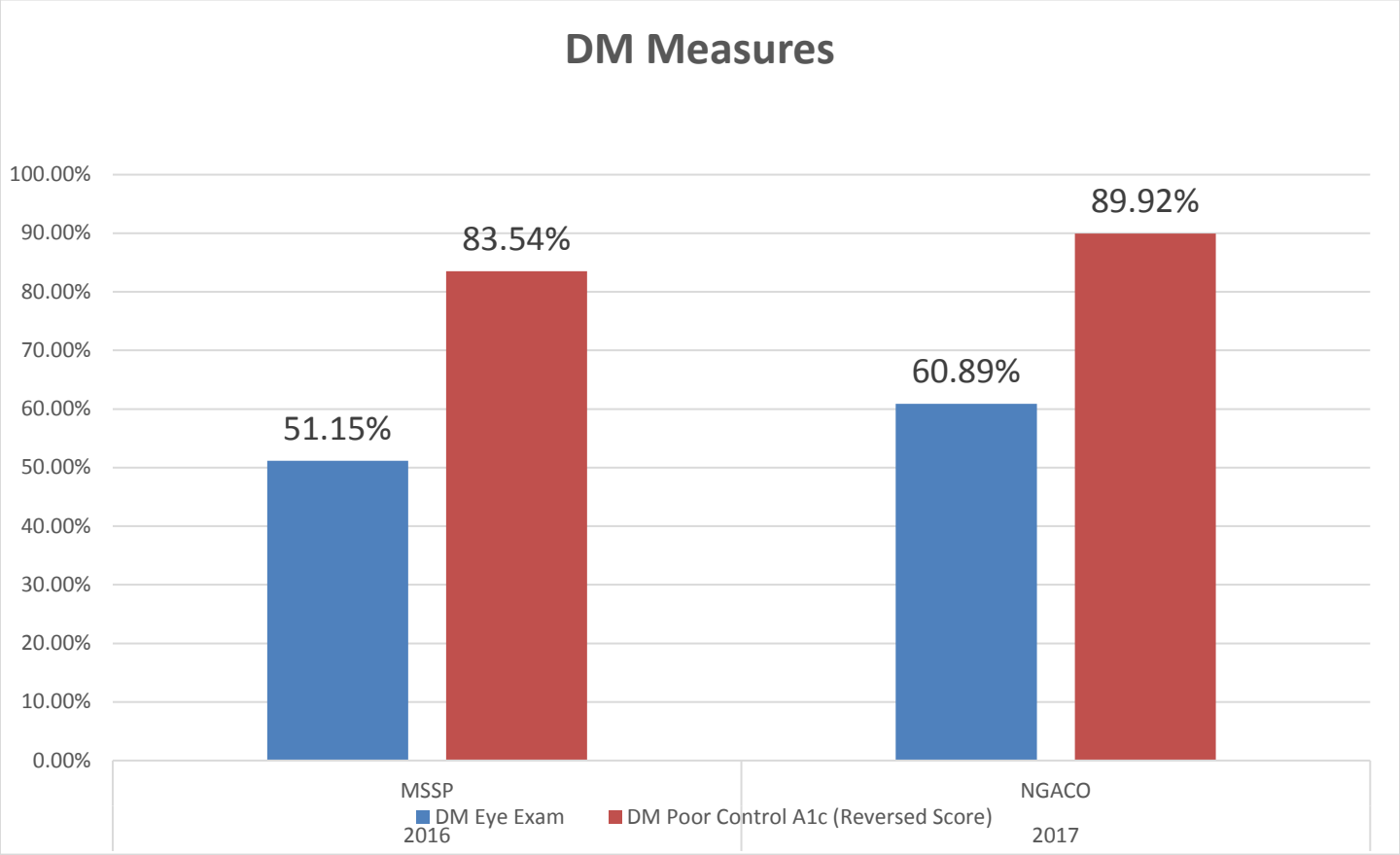
1. Patient/caregiver experience (8 measures)
2. Care coordination/patient safety (10 measures)
3. Clinic care for at-risk population
    - Diabetes (2 measures scored as 1 composite)
    - Hypertension (1 measure)
    - Ischemic vascular disease (1 measure)
    - Depression (1 measure)
4. Preventive Health (8 measures)

These current measures apply to the NGACO. The diabetes quality measure is a composite score of A1c >9% (a reverse measure) and diabetic retinopathy screening. The goals are set as 89% and 56% respectively by SWHR Quality Assurance Committee.

We observed that the baseline retinopathy measures were low across the entire network while the A1c>9% score was closer to target. We hence focused our efforts on improving retinopathy screening utilizing a portable telemedicine retina exam in what has become the tele-retina program.

The diabetes retinopathy-screening program began in 2014 as part of DSRIP (Delivery System Reform Implementation Program, a Medicaid-based performance program) and became a part of the UT Southwestern Accountable Care Network in 2015. Portable retinopathy cameras began to be used in the summer of 2015. We currently have 3 portable cameras and 4 desktop cameras. UT Southwestern ophthalmologists have been reading the retina images since 2014. The design of information flow from retina picture capture and entry into Epic, transfer to ophthalmology, and the return of the report to the ordering physician was created in 2015, via Epic Care Link software, by the Telemedicine team at SWHR. The current turnaround time for reads is five business days.

The tele-retina program has led to improvements in the retinopathy-screening rate as follows:



We also focused on the A1c itself and analyzed the diabetes data for our NGACO population from Jan 1, 2016- Dec 31, 2016. We stratified the patients by categories of A1c and looked at inpatient and skilled nursing facility spend. We observed that almost 25, 000 patients account for over $132 million in annual spend from inpatient admissions throughout the network and for $2 million in SNF care. This represents a big opportunity for savings, as even a small reduction (eg, 2% in spend can lead to marked savings throughout the network). Although we did not observe a

progressive increase in spend based on A1c categories, we will be focusing future efforts on diabetes education as several community-based programs have shown improvements in overall quality and shift in spend from inpatient to outpatient.

Cost of Diabetes Patients Stratified by A1C

A1c Group	Member Count	Total Inpatient Paid	Total SNF Paid
0.0 - 6.4	3,222	$ 29,693,982	$ 452,875
6.5 - 7.9	3,062	$ 19,721,849	$ 211,682
8.0 - 9.0	664	$ 5,202,444	$ 58,738
> 9.0	548	$ 3,905,684	$ 69,540
Missing	17,229	$ 73,782,687	$ 1,201,084
Total	24,725	$ 132,306,647	$ 1, 993,919

Data from 1-1-2016 to 12-31-2016, Prepared by Health Systems Planning and Analytics, Southwestern Health Resources, Population Health Services Company

Diabetes Education as Patient Empowerment

At SWHR, we too have been able to observe and corroborate Dr Wagner's seminal observation that empowering patients is key to chronic disease management. We have performed several pilots but in one example, we took an integrative approach to diabetes care in a single ACO clinic. This was a large and highly engaged clinic with a strong clinic staff. 212 patients were invited to attend a combination of group diabetes education, tele-retina screening and tele-consultation with the endocrinologist. Education was conducted in both English and in Spanish. Since the endocrinologist was present during the DM education classes, the show-rate for teleconsultation was high. Overall, 30 patients were scheduled out of which 7 completed all 3 components of the program. Patients expressed a high degree of engagement and satisfaction and there were improvements in reducing quality gaps, lipids and subsequent A1c levels.

Additionally, we are in the process of creating a modified teach-back diabetes program for patients, particularly for those that were recently discharged from the hospital or an ED visit, with a focus on recognizing "red flags" for hyper- and hypoglycemia, self-injection of insulin, and recognition of danger signs of infection, cardiac symptoms, dehydration, and other conditions that require urgent action. Our plan is to have this teaching module available via video to the patients and to assess if this has an impact on readmission and reducing ED visits. Future work will focus on risk-based identification of patient-specific targets such as foot ulcer, nephropathy and cardiovascular disease. We will also expand teleconsultation with endocrinologists for diabetes management.

Pharmacy Spend in Diabetes

Finally, pharmacy spending is another major challenge in the Medicare patient population, owing to the dual increase in cost and options for antihyperglycemic agents over the past several years. The cost increase for insulin more than tripled — from $231 to $736 a year per patient — between 2002 and 2013. The cap on pharmacy spend in the Medicare Part D program places vulnerable patients in the donut hole which is arrived at after a spend of $3750 for 2018. For example, the cash prices of Trulicity, a GLP1 receptor agonist is around $700/month and for Lantus insulin about $280/month. So one can see how quickly patients can arrive at this donut hole. To get out of the donut hole patients have to spend $5000. This is a significant problem that can lead to medication noncompliance in Medicare patients.

To increase awareness among the PCPs in SWHR, we created a shortlist of antihyperglycemic agents, antihypertensive and antilipemic agents by ascending cost in collaboration with the SWHR Pharmacist, and created a brief voice-over slide

presentation. This was shown to the UTSCAP physicians along with an explanation of the donut hole. Additionally, we recommended initiating basal insulin with NPH insulin in a subset of select patients in collaboration with the Division of Endocrinology at UT Southwestern Medical Center. In spite of these efforts, we recognize the cost challenges are severe, and to make a significant dent future efforts will require negotiated costs between health insurers and pharmaceutical companies.

Conclusion

Having considered the above example of diabetes, we can begin to apply similar approaches to other chronic diseases. Taking a mirrored approach one would first examine the quality measures from CMS for diseases where improvement can be made: clinic staff can assist closing gaps in documentation; providers can discuss with pharmacy to reduce cost, set patient specific goals and offer focused patient-centered education. Additionally there are data tools that our ACO offers to help identify quality gaps and utilization excesses. Another area where progress is needed is on specificity of coding to help CMS set appropriate benchmark payments (unfortunately beyond the scope of this talk).

While the Trump administration plans to roll back several aspects of The Affordable Care Act, it strongly favors value-based care. HHS Secretary Alex Azar recently stated to a group of hospital executives,

> "There is no turning back to an unsustainable system that pays for procedures rather than value," he said. "This administration and this president are not interested in incremental steps. We are unafraid of disrupting existing arrangements simply because they're backed by powerful special interests."

Several academic medical centers including UT Southwestern Medical Center have embraced value-based care thinking. Though we are subject to great external pressures, the greatest potential for change resides in us as physicians, and physicians-in-training. It is up to us to both define and apply these quality metrics appropriately, and create new care delivery models that are sustainable and effective.

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