Principles and Recommendations for Improving Health Outcomes & Lowering Healthcare Costs:

**Principle:** Healthcare organizations need to integrate the components of their business infrastructure and the transparency of their business practices not only to improve the quality of healthcare but also to respond to “consumer” needs for making effective choices.

**Recommendations:**

1. Healthcare providers and practitioners need to use digital systems that accurately capture patient care and use unified standards in order to promote interoperability. In order to promote continuity of care, a core body of information about each patient needs to be shared with each site providing healthcare services. Improving regulations for collecting and using clinical data will enhance care coordination and management while ensuring patient privacy.

2. Price transparency combined with co-payments at the point of service based on whether the service is elective or fundamental primary care can help drive a change in consumer behavior. Payment at point of service, if not well designed, can unintentionally drive negative behavior, such as not accessing care when it is needed.

3. Benefit plans and what a person pays should be designed based on the type of care provided, including effective care, preference sensitive care, and supply sensitive care.
   a. Effective care includes services of proven value, that are backed by a strong scientific evidence of efficacy and the benefit outweighs the risk (E.g. Beta blockers for heart attack patients, immunizations, and diabetes management).
   b. Preference sensitive care includes treatments for conditions where legitimate treatment options exist and involve significant tradeoffs among different possible outcomes of each treatment (E.g. Surgical treatment for low back pain). The alternative treatments have not been adequately evaluated through rigorous scientific studies. Decisions about these interventions should reflect patients’ personal values and preferences. Shared decision-making and informed patient choice would determine the selected course of action.
c. Supply sensitive care include services where the supply of a specific resource has a major influence on utilization rates (E.g. Regions with more hospital beds per capita are more likely to admit patients into the hospital). The frequency of use is not determined by scientific evidence, but by differences in local capacity and payment systems.

BACKGROUND:

Extensive information systems exist for healthcare payments and managing money, but there is a significant lack of information systems for health parameters and care coordination. The ability to share patient data has suffered due to the lack of unified data standards for electronic health records (EHR), such as listing patient health conditions and recording information like vitals. Integrated information systems that seamlessly exchange the core elements of patient information across treatment sites would allow interoperability, leading to documented improved care and outcomes with cost savings. In order to promote continuity of care, a core body of information about each patient needs to be shared with each site providing healthcare services. Currently providers often work from a blank page, which can cause negative health outcomes due to conflicting provider advice and duplication of costly tests and services.

Continuing strong oversight and developing additional regulations will be needed to ensure that fraud and abuse do not occur in the coding of evaluation services and healthcare billing. It has been documented that hospitals which received incentives to adopt electronic records had a 47% increase in Medicare payments from 2006 – 2010, compared to a 32% increase at hospitals that did not receive EHR incentives. It is currently being discussed whether this is due to more accurate coding or “upcoding” by seeking reimbursements higher than the actual rate.

In the presence of limitations in both the availability of information and the interoperability of healthcare data systems, major efforts are underway to facilitate the coordination of healthcare across providers and within provider data systems. For Texas, these efforts can be characterized on three levels:

- Coordination of regional providers as manifested by the Texas Medicaid 1115 waiver’s Regional Healthcare Partnerships (RHPs).
- Development of regional Health Information Exchanges (HIEs), and
- Federal initiatives such as implementation of the Health Information Technology for Economic and Clinical Health Act (HITECH).
TEXAS REGIONAL HEALTHCARE PARTNERSHIPS

The Texas Medicaid 1115 waiver created 20 RHPs as the basis for the allocation of the nearly $12 billion in waiver funding available to identify and implement projects capable of transforming the delivery of healthcare within each region. As a requirement of the waiver, each RHP must conduct a needs assessment and use the results to develop a region-wide plan that defines the Delivery System Reform Incentive Payments (DSRIP) projects funded through the waiver. The development of RHP plans required regional providers to engage in communications about not just their individual role in the healthcare system but how they can work together to achieve a coordinated and efficient regional healthcare system. While far from perfect the RHP plans represent a major effort at the coordination of regional services in an effort to transform the local healthcare delivery system to achieve expanded access, improved quality while containing costs.

HEALTH INFORMATION EXCHANGES

An HIE is the mobilization of healthcare information electronically across organizations within a region, community or hospital system. An example of an HIE in Texas is the Integrated Care Collaboration model (ICC) which serves 47 counties in central Texas. Functions of the ICC include:

- Exchange of patient data between different healthcare systems.
- Increased quality of care by connecting different EHRs and different organization types.
- Facilitated sharing of lab orders and results.
- Robust data analytics and quality reporting services across the continuum of care.
- Facilitation ePrescribing and receipt of medication history.
- Allowing users to meet meaningful use standards for community data exchange.

HEALTH INFORMATION TECHNOLOGY FOR ECONOMIC AND CLINICAL HEALTH

HITECH was enacted under Title XII of the American Recovery and Reinvestment Act of 2009. Under the HITECH Act the United States Department of Health and Human Services is spending $25.9 billion to promote and expand the adoption of health information technology. A major focus of the Act is to create a nationwide network of electronic health records. The Medicare and Medicaid Electronic Health Care Record (EHR) Incentive Programs provide incentive

CMS: Medicaid EHR Incentive Program

Improved Outcomes

Advanced Clinical Processes

Stage 3

Stage 2

Stage 1
payments to eligible professionals, eligible hospitals, and critical access hospitals (CAHs) as they adopt, implement, upgrade or demonstrate meaningful use of certified EHR technology.⁶

The Centers for Medicare and Medicaid Services (CMS) has developed different requirements for the different incentive programs based on the type of provider. For example, there is a Medicaid EHR Incentive Program for Eligible Professionals.⁷ The incentive program will pay eligible Medicaid professionals up to $63,750 over six years for successful participation in the program. The program consists of three stages of “meaningful use” where each stage has its own requirements that must be met to demonstrate meaningful use.

- Stage 1 is focused over a three year period on capturing patient data and sharing that data with the patient or with other health care professionals.
  - Meaningful use for this stage requires that 13 “core objectives” and 5 of 9 “menu objectives” be met. In addition, all eligible professionals have to report on Clinical Quality Measures (COMs).
- Stage 2 involves advanced clinical processes, and
- Stage 3 focuses on improvement in outcomes.

TRANSPARENCY

Beyond the issues associated with the interoperability of health care data systems, there are health system factors that drive health care costs. Since insurance lowers the price paid at point of service and there is a lack of transparent information on pricing and quality, consumers are not able to make informed healthcare decisions.⁸ Price transparency or disclosure refers to “the availability to consumers of precise total costs for specific services provided by healthcare service providers (doctors, hospitals, labs, outpatient facilities, and other service providers). Total costs include those amounts paid by consumers out of pocket or through their high-deductible insurance program and the amount paid by an insurer/intermediary on their behalf.”⁹ Price transparency combined with co-payments at the point of service based on whether the service is elective or fundamental primary care can help drive a change in consumer behavior. Payment at point of service, if not well designed, can unintentionally drive negative behavior, such as not accessing care when it is needed.

Healthcare costs for the same procedure and market can vary by over 100% in the U.S., reducing price variation through transparency is estimated to save the U.S. $36 billion a year.¹⁰ Thomson Reuters analyzed the market price variation for 300 high-volume procedures, and were able to find significant savings. When this model is applied nationally to the 108 million Americans with employee-based insurance, the savings arrived at $36 billion.¹¹
For example in the Detroit metropolitan area, a C Section delivery at one hospital costs $7,481, while at another Detroit location in the same system, the same procedure costs $11,757 – a 40% difference. Currently 30 states have enacted or proposed state legislation regarding price disclosure, transparency, reporting and publication of healthcare fees. Examples of price transparency are also seen in market innovations like convenient care clinics. For example at Target clinics, they post online a price list of all services, from treatment for bronchitis ($75) to suture removal ($39).

The Affordable Care Act (ACA) has made some inroads into addressing the issue of transparency by requiring that all health plans provide a uniform summary of coverage for all enrollees and applicants. This requirement has been implemented in the online application process for the Insurance Marketplace. In California, a regulation known as the “Payers’ Bill of Rights” requires all hospitals to provide their chargemaster to the state, which then posts them online for the public. In this way consumers are able to compare the charges across California hospitals. However, an interesting factor in this comparison, as discussed above, is that the chargemaster is only the beginning of a transparent cost analysis process. The chargemaster is typically the basis from which insurers negotiate discounts to arrive at the final cost. The irony of this process is that if a person is uninsured, then there is no health plan to negotiate a reduced cost, and as such, the indigent consumer can end up being responsible for a much higher cost. Since the indigent are uninsured, the unpaid chargemaster charges can become charity care charges.

The Healthcare Effectiveness Data and Information Set (HEDIS) is a tool used by more than 90% of America’s health plans to measure performance on important dimensions of care and services. HEDIS is designed to provide purchasers and consumers with the information they need to reliably compare the performance of health care plans. HEDIS results are included in Quality Compass, an interactive, web-based comparison tool that allows users to view plan results and benchmark information. Quality Compass users benefit from the largest database of comparative health plan performance information to conduct competitor analysis, examine quality improvement and benchmark plan performance.

**BENEFIT PLAN DESIGNS**

Benefit plans and what a person pays should be designed based on the type of care provided, including effective care, preference sensitive care, and supply sensitive care. The grid below outlines how a service would be priced based on the type of care and the patient’s income.

<table>
<thead>
<tr>
<th>Type of Care</th>
<th>Lower Income</th>
<th>Higher Income</th>
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</table>
**Effective Care:**
- Services of proven value, that are backed by a strong scientific evidence of efficacy and the benefit outweighs the risk (E.g. Beta blockers for heart attack patients, immunizations, diabetes management).

**Preference Sensitive Care:**
- Comprises treatments for conditions where legitimate treatment options exist and involve significant tradeoffs among different possible outcomes of each treatment (E.g. Surgical treatment for low back pain).
- The alternative treatments have not been adequately evaluated through rigorous scientific studies.
- Decisions about these interventions should reflect patients’ personal values and preferences.
- Shared decision-making and informed patient choice would determine the selected course of action.

**Supply Sensitive Care:**
- Services where the supply of a specific resource has a major influence on utilization rates (E.g. Regions with more hospital beds per capita are more likely to admit patients into the hospital).
- The frequency of use is not determined by scientific evidence; but by differences in local capacity and payment systems.

**EFFECTIVE CARE**

Effective care refers to services that are of proven value and have no significant tradeoffs. The benefits of the services so far outweigh the risks that all patients with specific medical conditions should receive them. These treatments, such as providing beta-blockers for heart attack patients, immunizations and diabetes management are backed by strong scientific evidence of efficacy.

Despite all the resources expended on healthcare in the United States, sometimes treatments that are known to be effective are not used. As the Dartmouth Atlas Project has documented, the underuse of effective care is widespread and occurs even at some hospitals considered to be among the best in the country. A 2003 study by the Rand Corporation published in the New England Journal of Medicine found that Americans receive only about 55% percent of recommended care for a variety of common conditions.

The failure to provide effective care can have dire consequences for patients. It is well established that beta-blockers can reduce the risk of heart attack in patients who have already had one heart attack. Yet many heart attack patients are never prescribed beta-blockers. For patients with diabetes, annual eye exams can help avoid the possibility of blindness; yet many diabetic patients do not
receive annual eye exams.

Given that providers agree on the importance of providing these types of treatments, why do so many patients go without them? The answer is not a lack of money. The Dartmouth Atlas Project has found that there is no correlation between higher spending and more widespread use of effective care. The causes of underuse include fragmented care (which tends to grow worse when more physicians are involved in the patient’s care) and the lack of systems to ensure that all eligible patients receive these treatments.

The remedies for underuse of effective treatments lie in fostering the development of organized and integrated physician practices that can implement reliable processes and changes to the payment system to reward better care, not simply more care.

PREFERENCE SENSITIVE CARE

Preference-sensitive care comprises treatments for conditions where legitimate treatment options exist. These options involve significant tradeoffs among different possible outcomes of each treatment. Some patients will prefer to accept a small risk of death to improve their function; others will not. Decision factors for these interventions include whether to have them, and which one should reflect patients’ personal values and preferences. Decisions can be made only after patients have enough information to make an informed choice, in partnership with the physician. There are two principal causes of variations in rates of preference-sensitive care.

First, there is the often a poor state of clinical science. For many conditions where major surgery is an option, the alternative treatments have not been adequately evaluated through rigorous scientific studies. Thus, when surgeons recommend surgery, they often do so on the basis of subjective opinion, personal experience, anecdote, or an untested clinical theory.

The second problem lies in how many medical decisions are made. Even when evidence exists as to outcomes, surgery rates can vary dramatically by region. This is the case in early stage breast cancer. Studies show that mastectomy and lumpectomy achieve similar long-term survival, but women generally differ sharply in their attitudes toward these treatments. An early Dartmouth Atlas study shows regions where no Medicare women underwent lumpectomy, while in another, nearly half did. There are dramatic variations in rates of surgical treatment for other conditions where multiple treatment options are possible, such as chronic angina (coronary bypass or angioplasty), low back pain (disc surgery or spinal fusion), arthritis of the knee or hip (joint replacement), and early stage cancer of the prostate (prostatectomy). Such extreme variation arises because patients commonly delegate decision-making to physicians, under the assumption that doctors can accurately understand patients’ values and recommend the correct treatment for them. However, studies show that when patients are fully informed about their options, they often choose very differently from their physicians.

Reducing unwarranted variation in preference-sensitive care and establishing the right rate of demand for discretionary treatments
requires improvements in clinical science and fundamental changes in the ethical standards that govern the way patients are informed. Delegated decision-making should be replaced by shared decision-making, and the doctrine of informed patient consent replaced by informed patient choice.

SUPPLY SENSITIVE CARE

Supply-sensitive care refers to services where the supply of a specific resource has a major influence on utilization rates. The frequency of use is not determined by medical theory or scientific evidence; rather, it is largely due to differences in local capacity and a payment system that ensures that existing capacity remains fully deployed. For example, in regions where there are more hospital beds per capita, patients will be more likely to be admitted to the hospital. In regions where there are more intensive care unit beds, more patients will be cared for in the ICU. More specialists will result in more visits to specialists. And the more CT scanners are available, the more CT scans patients will receive. The Dartmouth Atlas on Healthcare has consistently demonstrated these relationships.

In regions where there are relatively fewer medical resources, patients get less care; however, there is no evidence that these patients are worse off than their counterparts in high-resourced, high-spending regions. Patients do not experience improved survival or better quality of life if they live in regions with more care. In fact, the care they receive appears to be worse. They report being less satisfied with their care than patients in regions that spend less, and having more trouble getting in to see their physicians. Most studies show that mortality is no better in high-spending regions, almost certainly because the benefits to some patients are counterbalanced by the harms to others. At hospitals patients face the risk of medical error, adverse events, and hospital-acquired antibiotic-resistant infections. As more physicians get involved in a patient’s care, provider responsibility is less clear, and miscommunication and mistakes become more likely. Greater use of diagnostic tests increases the risk of finding and treating abnormalities that are unlikely to have caused the patient any problem. Patients who receive care for conditions that would have never caused a problem can only experience the risk of the intervention.

Supply-sensitive care also accounts for more than half of all Medicare spending. Understanding the problem of supply-sensitive care is a critical first step toward improving the quality and affordability of health care, building organized delivery systems, and scaling back costs and cost growth.
Today there are many innovative programs being tested in the market that address healthcare costs drivers, and Texas has the potential to benefit from adapting and implementing these best practices to its unique healthcare environment. The following matrix provides a selection of case-study initiatives that have addressed cost drivers with proven cost savings, and could feasibly be replicated in Texas.

**Case-Study Matrix: Opportunities to Improve Health Outcomes and Achieve Healthcare Costs Savings**

<table>
<thead>
<tr>
<th>Case Study</th>
<th>Description</th>
<th>Outcomes</th>
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<tr>
<td>Indiana Consumer-Driven Health</td>
<td>• The State of Indiana implemented a consumer-driven health plan, a high-deductible, health-account based plan.</td>
<td>• The health plan saved 10.7% in costs each year in comparison to the state’s PPO plan. The savings were the result of: increased consumer accountability and responsibility; increased knowledge of healthcare options, costs and quality; increased awareness of personal health status; and increased dialogue with doctors and discussion of alternatives.</td>
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<td>care Plans</td>
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<td>EHR in Hudson Valley New York</td>
<td>• Ambulatory medical practices across the Hudson River Valley were compared on their use of EHR versus paper records in relation to benchmark quality care measures.</td>
<td>• The use of EHR was associated with higher quality of care for diabetes hemoglobin A1c testing, breast cancer screening, chlamydia screening and colorectal cancer screening.</td>
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<tr>
<td>Ambulatory Practices¹⁸</td>
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<tr>
<td>Cardiology Consultants of</td>
<td>• A practice with 21 sites and 70 cardiologists</td>
<td>The use of EHR Systems:</td>
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<tr>
<td>Philadelphia, PA¹⁹</td>
<td></td>
<td>• Reduced transcription costs by 88%</td>
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<td></td>
<td></td>
<td>• Saved $350,000 by reducing the number of needed file clerks</td>
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<td></td>
<td>• Saved $70,000 with a 3.5% reduction in malpractice insurance expense</td>
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<td>Thomson Reuters Market Analysis</td>
<td>• Thomson Reuters analyzed the market price variation for 300 high-volume healthcare procedures, and were able to find significant savings.</td>
<td>• When this price transparency model is applied nationally to the 108 million Americans with employee-based insurance, the savings arrived at $36 billion.²⁰</td>
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<tr>
<td>– Price Transparency</td>
<td></td>
<td></td>
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<tr>
<td>Price Transparency at Convenient-</td>
<td>• For example at Target clinics, they post online a price list of all offered services, from treatment for bronchitis ($75) to suture removal ($39).</td>
<td>• In the event that price disclosure and competition were employed, it is hypothesized that a broad spectrum of innovative opportunities could be created for today’s consumer. Price lists at convenient-care clinics are an example of these innovative opportunities. Allowing consumers to see more clearly what they are paying for</td>
</tr>
<tr>
<td>Care Clinics</td>
<td></td>
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</table>

²⁰ When this price transparency model is applied nationally to the 108 million Americans with employee-based insurance, the savings arrived at $36 billion.
services would drive educated healthcare decisions.

1 Soumerai S, Koppel R. “A Major Glitch for Digitized Health-Care Records – Savings promised by the government and vendors of health information technology are little more than hype.” Wall Street Journal. September 17, 2012.
6 CMS: EHR Incentive Programs, October 2014.
7 CMS: eHealth University An Introduction to Medicaid EHR Incentive Program for Eligible Professionals, April 2014.
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14 Kaiser Family Foundation: Health Insurance Transparency under the Affordable Care Act, March 2012.
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