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# **Value-based Purchasing**

*Clinical vs. financial risk in a changing payment environment*

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**A Health Data Consulting White Paper**

10/22/2016

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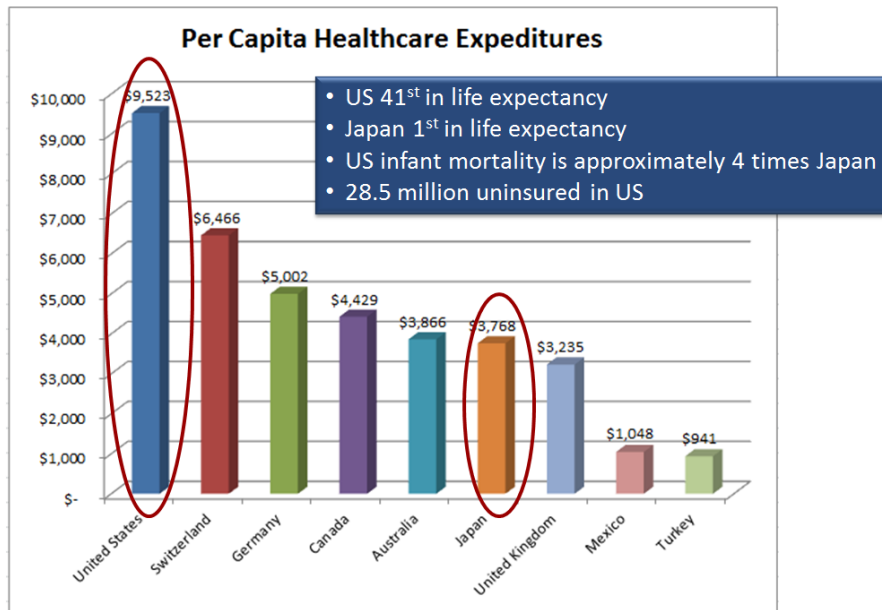
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## An Evolving Payment Environment

There is little doubt that healthcare policy is moving away from a service centric model towards a value centric model. An article in the New England Journal of Medicine on standardizing outcome measures sums up well this evolving direction; *“The arc of history is increasingly clear: health care is shifting focus from the volume of services delivered to the value created for patients with “value” defined as the outcomes achieved relative to the cost.”*<sup>1</sup> The proposed implementation of recent legislation under MACRA has caused the healthcare industry to focus on APMs, MIPS, ACOs, CCJR, HCCs and a host of other acronyms. We seem to be so driven by regulatory acronyms that we may be losing sight of the basic concepts of the underlying directional change. The models that will eventually accomplish this direction are still in a confusing state of flux. There is no clear direction that points to which model or models may eventually replace a pure fee-for-service model that has failed the test of achieving sustainable growth.



\*Source: OECD (Organization for Economic Co-operation and Development) 2015

Fig 1

Driving this change in direction is the apparent disparity of expenditures and outcomes in the United States as compared to other countries<sup>2</sup>. Despite the fact that the United States' expenditure for healthcare is over 2.5 times higher than Japan's per capita spending, yet Japan's mortality rate is ranked number 1 and the US is ranked 41<sup>st</sup> on the

<sup>1</sup> N ENGL J MED 374;6 Feb 11, 2016

<sup>2</sup> OECD (Organization for Economic Co-operation and Development) 2015

OECD listing of countries<sup>3</sup>. The rate per thousand for infant mortality for the United States is nearly four times the rate in Japan<sup>4</sup>.

Despite the fact that the US spends more per capita than other nations, we still have 28.5 million uninsured in this country<sup>5</sup>. While these data do not tell us “Why”, it clearly suggests an historical healthcare model that cannot be sustained. Given these financial realities, it is not surprising that the clear focus of healthcare policy is moving towards “value”. To achieve this transition, costs must be reduced and healthcare outcomes must be improved. The thousands of pages regulatory documentation that propose how this might happen can be overwhelming to comprehend and are likely to continue to evolve as proposed strategies are field tested. There are, however, key concepts that are likely to persist regardless of the specific methodologies used. These concepts should be the focus for how healthcare entities prepare for this evolution.

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#### DEMISE OF THE FEE FOR SERVICE MODEL?

It is highly unlikely that the fee for service model, that is, the service based payment model, will go away anytime soon. Fee-for-service payment is deeply ingrained in how individual providers have been historically financed. What is more likely is that payment will be modified over time based on “value” metrics and population based budgets for integrated “at-risk” entities. There would be a direct impact on the entity’s payment, as well as on the individual provider’s compensation, if budget targets or outcome expectations are not met. The impact on revenue could occur at any level under a number of these proposed or currently implemented alternative models.

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#### ALTERNATIVE PAYMENT MODELS

The Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) represents one of the most dramatic legislative policy approaches in decades for changing the existing payment paradigm. MACRA proposes a number of different alternatives for evolving this value-based, data-driven change. MIPS (the Merit-based Incentive Payment System) provides a mechanism for providers who are not “significantly participating” in some Advanced Alternative Payment Model (AAPM) under an Eligible Alternative Payment Entity (EAPE)<sup>6</sup>. Proposed methodologies for value-based purchasing include payment bundling, risk adjustment, episodes definitions and clinical and financial outcome metrics that are intended to modify payment based on value and resource use. Most of these approaches are complicated and confusing. It is unlikely that any of those methodologies will achieve long term adoption, at least as currently configured, given

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<sup>3</sup> [http://gamapsserver.who.int/gho/interactive\\_charts/mbd/life\\_expectancy/atlas.html](http://gamapsserver.who.int/gho/interactive_charts/mbd/life_expectancy/atlas.html)

<sup>4</sup> <https://www.cia.gov/library/publications/the-world-factbook/rankorder/2091rank.html>

<sup>5</sup> <http://kff.org/uninsured/fact-sheet/key-facts-about-the-uninsured-population/>

<sup>6</sup> <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Value-Based-Programs/MACRA-MIPS-and-APMs/MACRA-Feedback.html>

historical experience with similar efforts. What is more likely is that data-driven, risk-adjusted payment and data-driven, risk-adjusted value measurement will persist in some form.

## The Role of Risk

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A full explanation of all of the core concepts around MACRA and the value-based purchasing approach is beyond the scope of this paper. Rather, this paper focuses more specifically on risk and how data may be used to assess risk. Before proceeding however, it is necessary to define “risk” which could mean “financial risk” or “clinical risk” and to understand the relationship between these different concepts.

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### FINANCIAL RISK

Financial risk addresses the cost of providing care to a population or some stratification of the population that may not be supported by the level of reimbursement associated with that care. In a pure fee-for-service model, the approach to mitigating risk is different at the provider level vs. the payer level. For the provider, mitigating financial risk means performing more payable services to generate more revenue. For the payer, mitigating financial risk involves efforts to curb the number of payable services.

As financial risk is increasingly borne by providers, it is incumbent upon the provider to mitigate risk by controlling costs. Historically, the concept of cost control has not been as significant a component of the provider’s business focus as was the concept of revenue enhancement.

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### CLINICAL RISK

Clinical risk is about the risk of an undesired outcome for the patient relative to the baseline status of the patient’s health condition. “Sicker” patients are more likely to experience complications or undesirable outcomes. “Sicker” patients are more likely to require a greater amount of healthcare resources in an effort to maintain or improve their health status. Mitigating clinical risk becomes more and more difficult, and more resource intensive, based on the degree of severity and complexity of patients’ underlying health conditions. For any given health condition, the level of clinical risk can be impacted by:

- The specific definition of the patient condition or diagnosis
- The level of severity of the condition
- Co-morbid condition(s) that may impact outcomes
- The availability of proven and effective treatment modalities for that condition
- The ability of the patient to comply with recommended care
- Resources available for care

## THE OVERLAP

In most instances clinical risk has a significant impact on both the cost and outcome components of value measurement. Conditions with significantly higher risk of unfavorable clinical outcomes usually incur higher cost for care. Outside of death or loss of a member from the population cohort, clinical outcomes and financial risks are tightly related.

## Accessing Risk

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### DATA REQUIREMENTS

Accurate assessment of risk from both the clinical and financial perspective requires data and data aggregation that is:

- **Accurate** – reflects the relevant facts of the patient health state
- **Complete** – includes all parameters relevant to clearly defining the condition as well as the factors that impact risk, severity and complexity
- **Specific** – includes sufficient detail and granularity
- **Properly attributed** – accurately related to providers, patients, conditions and episodes of care so as not to over or under attribute data relevant to the assessment of costs and outcomes
- **Properly categorized** – aggregated at a level that is clinically meaningful, reasonably homogenous, predictive of risk, of sufficient granularity, consistently applied, and that clearly defines what is included or excluded in the data categorization scheme
- **Adequate sample size** – avoids statistical anomalies
- **Hierarchical assignment** – avoids over assigning risk by double counting risk and severity factors that may not be additive to the overall patient health state
- **Incentivizes data quality** – provides incentives needed to assure that the data meet the above requirements and does not create perverse incentives for manipulating data to improve revenue
- **Standardized condition coding** – limits variations in diagnosis coding patterns for the same condition at the same level of severity and complexity by different observers

While it is unlikely that all of these requirements will typically be met, understanding the limitations of the data used to assess risk is critical to achieving appropriate payment and adjustment to quality metrics. Assessment of data quality is every bit as important as risk assessment methodologies. The best methodologies will fail if applied to inconsistent, inaccurate and incomplete data.

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## HISTORICAL RISK ADJUSTMENT MODELS

There are currently many different risk adjustment models in use or under consideration. Each model has advantages and disadvantages. It is safe to say that no model adjusts risk at a level that recognizes the real risk, severity and complexity of the patient condition from a clinical risk perspective. Most of these models have been developed based on historical data. Unfortunately historical data does not come close to meeting the data requirements to accurately assign risk. This lack of data quality poses fundamental challenges to establishing a baseline moving forward in a value-based purchasing environment.

Most clinicians have not embraced the capture of complete, accurate and specific codification of the patient's health status as the effort needed to capture structured data is significant and clinicians may not see the value in doing so. As a result, most clinicians will seek shortcuts to identify the easiest codes that will satisfy the requirements that result in appropriate payment. They historically have not had an incentive to perform complete, detailed and accurate coding as those activities rarely impacted payment dramatically<sup>7</sup>. While some of those incentives are shifting more favorably for some providers, historical data have been lacking.

An analysis of three years of payer data demonstrates that over 50% of all codes submitted on claims would be considered "unspecified" or "symptom" and finding types of codes<sup>8</sup>. The tendency to assign such non-specific codes confounds the ability to determine the real financial risk and clinical risk of disease processes.

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## PROPOSED MODELS

Hierarchical Condition Categories (HCCs) (along with other demographic factors) have been a mainstay of risk adjustment since 2004 for the Medicare Advantage (Part C) program. These CMS-HCCs include 79 categories that represent potential categories for risk adjustment. While there has been significant actuarially experience with the use of these categories for Medicare Advantage premium adjustment, they have significant limitations for use within models proposed by MACRA.

In contrast the HHS-HCCs were introduced in 2014 to support Medicaid exchange risk adjustment under the Accountable Care Act. These HCCs include 126 defined clinical categories that are proposed for use in risk adjustment models and provider resource use metrics under MACRA. Risk adjustment for outcome measures is not clear at this time and is continuing to evolve.

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<sup>7</sup> <http://www.icd10monitor.com/enews/item/1585-data-is-what-you-make-it>

<sup>8</sup> Analysis of data by Health data consulting on 3 years of payer data for all lines of business

## CHALLENGES FOR PROPOSED RISK ADJUSTMENT APPROACHES

There are a number of challenges moving forward relative to financial and clinical risk adjustment under any of the current or proposed value-based purchasing or alternative payment models.

- **Limited historical data quality** – The data used to validate the predictive capabilities of risk categories as noted above lack sufficient data quality by most applicable measures.
- **Change to from ICD-9 to ICD-10** – The move to ICD-10 altered the landscape of health condition risk. There has been insufficient time to accumulate data to redefine risk relative to the data gathered using ICD-10 codes. Most providers have not leveraged the ability of ICD-10 to capture greater levels of risk, severity and complexity. Systems to support coding have tended to simply convert old non-specific ICD-9 codes into equally vague ICD-10 codes. Since these ICD-10 codes are still relatively new to providers, accuracy in coding may be adversely impacted for some period of time.
- **Insufficient granularity** – The currently defined risk categories do not have the granularity to distinguish significant variation in risk within different clinical domains. The additional parameters related to risk has not been incorporated into these categories. For example, ICD-10 codes for open fractures have been defined based on the Gustilo classification which recognizes dramatic differences in the potential costs and complications for open fractures. This difference and many others are not reflected in the proposed risk categories or adjustments for outcome measures. Organizations that take on high risk cases may not have healthcare outcomes or revenue appropriately adjusted to reflect the risk severity and complexity of those patients as compared to other providers who are caring for similar clinical domains, but a less complex population of patients.
- **Incomplete definitions** – There is a lack of clear definitions for currently defined risk categories. It is unclear which codes should or should not be included in these categories and why.
- **Lack of clinical relevance** – A clinical analysis of these categories calls into question the intent of defining the categories. From a clinical perspective, the codes included do not seem to align with the apparent “definition” of the category.
- **Lack of homogeneity** – Looking at the codes within the category, there appears to be a lack of homogeneity in the characterization of the disease process or the level of risk severity or complexity of any of the codes within that category.
- **Focused on premium** – The primary goal of most risk adjustment categories has been to focus on actuarial stratification of a population based on historical claims data. Application of these categories to the true risk, severity and complexity of the patients’ conditions as it might impact the cost of care or the likelihood of positive outcomes, raises significant questions.



While there will never be a perfect model, there is a lot of work that needs to be done on both data quality and the methods for risk adjustment to assure some level of confidence in this process for those impacted by these metrics.

## Requirements to Succeed

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Waiting for the realization of a perfect world of data does not address the challenges that healthcare entities currently face. A shift to value-based models has and will continue to move forward. It is important to have visibility at all levels of details into the methodologies that are implemented and to attempt to influence these methodologies wherever possible. Regardless of the challenges however, change will occur. All healthcare entities will need to prepare for these changes without necessarily knowing the eventual details of how they will be implemented. There are common steps that should be taken, regardless of the exact approaches that may be implemented. There is little doubt that accurate, reliable and complete data about the nature of patients' conditions, as well as the risk, severity and complexity of those conditions, is essential to success in this new value-based purchasing environment.

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### UNDERSTANDING YOUR OWN DATA

Most provider organizations do not have the level of data, or tools they need to fully understand their own experience as measured by the data they produce. Entities outside of their domain may know more about their data enterprise than they do. A recent news story<sup>9</sup> that examined mortality rates for a Florida hospital suggested less than positive outcomes. When presented with this data, the hospital's administration could not respond adequately with better data and as a result changed their business practices based that news report.

Healthcare entities should always seek to have a better understanding of their own data than any outside entity. Cost and quality measures should be known and addressed internally before organizations are forced to change based on outside audits or other disclosures. You can't improve what you can't see. In a value-based purchasing world, you need to know and manage your own value.

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### FOCUSING ON CONTINUOUS DATA IMPROVEMENT

As previously noted, the reliability, accuracy and completeness of data about patient's health conditions are less than optimal for most entities. The incentives for achieving quality data have been lacking. Strategies for improving data quality must include:

- Establishing the case within the organization for the value of high quality data and creating incentives for data excellence

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<sup>9</sup> CNN June 8, 2015 – “Hospital suspends elective heart surgeries on children after CNN investigation.”

- Leveraging all data to understand patterns of coding and documentation to improve data quality
- Creation of a data governance structure with all relevant stakeholders to assure that the focus on data quality is empowered and crosses organizational boundaries
- Establishing mechanisms for operational data collection that reduces the burden on clinicians while assuring that all relevant parameters of the patient risk, severity and complexity are captured

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## LEVERAGING ACTIONABLE DATA TO POSITION FOR SUCCESS

Data should not just be something that is reported, an activity that does not result in meaningful change. Rather, data and its analysis should be a robust tool for answering questions and driving adaptation and course corrections to clinical activities and business operations within an organization. That analysis should go beyond merely raising questions and instead provide reliable information to drive the pursuit of opportunities. Those results cannot occur without first having reliable, accurate and complete data about the nature of the clinical care the organization is providing, as well as the key parameters of the patients' conditions that is the basis for that care.

Once data quality is improved, analytic knowledge and tools are needed to take advantage of those data to inform relevant stakeholders. Financial stakeholders need to understand their financial risk. Executives need to know how to change strategies and approaches. Clinical leaders need to understand where to focus clinical quality and efficiency efforts.

Data about patterns of coding and clinical documentation are needed for leveraging and focusing improvement. Data provides little value if it is not reliable, accessible and leveraged for change.

## Summary

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Dramatic changes are occurring in how healthcare will be financed. The evolving value-based purchasing environment can be overwhelming in its complexity. Proposed models lack directional clarity and stability. Preparing for this inevitable move toward value driven vs. service driven healthcare policy means understanding the driving forces and the common infrastructure requirements that will persist independent of the details of any given model or methodology. There is no doubt that healthcare is becoming progressively more data driven and that high quality data particularly about the parameters of the patient's conditions will be essential to success.

*A special thank you to Bob Perna (Director-Health Care Economics) at the Washington State Medical Association for his support, advice and input into this paper.*