The Iron Triangle of Healthcare

The iron triangle of healthcare describes the interrelationships among three crucial components of a healthcare system namely access to healthcare system, cost of medical care and quality of the care. Access tells us who can receive the care when they need it. Cost represents the price tag of the care and the affordability of the patients and payers. Efficacy, value and outcome of the care reflect the quality of a healthcare system.

The word 'iron' in iron triangle represents the competition among the three components of the triangle. That is, when either the first or second component or both are improved, they can cause the third component to suffer. For example, more patients will receive care when cost is reduced though the quality of care might suffer (Carroll, 2012). On the other hand, the quality of care can be improved by increasing care cost. However a higher cost will reduce the accessibility. The goal of a healthcare system is to provide universal access to care, high quality of care and affordability. According to the iron triangle the challenge is to achieve this goal.
while alleviating the extend of the trade-offs. The following two diagrams show the correlation among the three vertices of iron triangle:

![Diagram 1: Effect of Increased Cost on the Triangle](image1)

The figure on the left depicts the effects of increased cost on healthcare accessibility and quality. It's intuitive that when the cost is increased fewer people can afford the care resulting in minimum access. One might think that there is a direct relationship between cost and quality. That is, increasing the cost of care will also improve the value or quality. However the quality of care does not always improve when cost is increased (Gawande, 2009). In fact quality of care might suffer if better outcome is not achieved when cost is increased. For example, in the pay-for-service programs the provider is paid for the services they render, not for the outcome of the care. That is, the patients and payers might pay for unnecessary tests and procedures without receiving the positive results (Gawande, 2009).

![Diagram 2: Effect of Decreased Cost on the Triangle](image2)

The figure on the right shows the changes in access and quality components of the triangle when the cost is reduced. When the care cost is reduced more patients can afford the care. Thus accessibility is increased. However the quality is reduced when care cost is also reduced. It's natural to think that the quality will suffer if more patients enter into the system when the care cost is reduced. On the contrary the current quality can be maintained even
improved while keeping the cost down and accessibility high (Carroll, 2012). This might be possible through proper payment systems, standards and policies such as value based purchasing programs.

The value based purchasing provisions such as pay for performance, accountable care organizations, bundle payments and patient-centered medical homes are designed to improve care quality and care outcome while reducing the care cost (cms.gov). Though the focus of VBP is quality and cost of the iron triangle, it should also facilitate more access to care. Because quality is meaningless to the patients if they can't access to the care when they need it. One key element of VBP is to measure and report comparative performance of providers. This will allow patients to select the high value services and providers. VBP programs pay providers differentially based on their performance which encourages providers to focus more on result than volume of work. This in turns reduce the overall care cost by cutting the unnecessary work and waste of resources. VBP can also encourage providers to improve their work efficiencies by adopting and integrating technology into their practices. Administrative overhead can take a lot of provider time as well as contribute to the care cost. With the help of right technology providers can save time and cost while focusing more on patient care. VBP can introduce liability reforms by making positive changes so providers will practice less defensive medicine by adhering to necessary testing, procedure and prescription. Universal care access is possible if care cost is affordable to most of us. We can keep the cost low by adopting cost cutting strategies without compromising the quality by adopting VBP provisions.

Our healthcare sector will not work as a system unless the patients, payers and providers work in harmony. VBP provisions need to include educational programs for the
healthcare stakeholders. Patients need to learn the importance of preventive care, communicate with their PCPs so they can make a shared decision and avoid unnecessary trip to a specialist. Providers need to better understand how good outcome can prevent patient readmission, reduce administrative overhead and allow them to see more patients. Payers need to better understand how to measure and encourage effective performance. Large payers like CMS and private payers should encourage providers to participate in Medicaid and Medicare programs and incent providers for servicing uninsured patients.

The practice of medicine is as much arts as science. Our country produces the best doctors in the world, we have the best medical care facilities, latest technologies and good pharmaceutical companies yet unfortunately we don’t have universal care access available to all our citizens. It is the culture of universal access to care that can drive the more effective and efficient healthcare system not the science, technology or regulation. Only when our payers, providers and patients can embrace this culture, we as a nation will achieve the balance of care between cost, quality and access in this country.

