

Glucose Control - Both a Challenge and an Opportunity in MedTech

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In a 2009 educational presentation Dr. Alia Rizvi, a medical scholar-practitioner from the University Of South Carolina School Of Medicine reported that glucose control in the hospital, in-patient outcomes, and overall cost of patient care was both “a challenge and an opportunity to favorably impact patient care.” Five years have passed, yet glucose control is a continuing challenge in the human condition. Medical technology in the device industry has yet to overcome many of these ever present challenges.

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There are dozens of reasons leading into the lack of development, and ultimate implementation, of devices that “favorably impact patient care.” However, let’s explore this idea from a perspective outside of the typical technology/financial perspective through which medical devices are technology are most commonly presented. Let’s look at it from what many social scientists would call a “human perspective.”

A powerful theory in the social sciences and commonly emphasized in feminist studies is Standpoint Theory. Standpoint Theory was conceived by sociologist Dorothy Smith who claimed “what one knows is affected by where one stands in society.” Smith argued that the only true way any individual can see the world around us is through one specific perspective, and that lens is our standpoint.” One of the guiding assumptions behind this theory is that groups with ‘power,’ have a more powerful, or influential and valid, standpoint than subordinated, or subgroups. Another assumption is that the Standpoint of those in power also becomes the ‘normal’ perspective in terms of ideas that are supported. This is an imperative idea to explore. Although we are an organization, and an industry, deeply embedded in both the medical and technological industries, looking at devices, their development, adaption and ultimate implementation may best be described in sociological, or “people” terms.

Now let’s look at Standpoint Theory in relation to the tools we have to mediate the negative and potentially fatal, implications of uncontrolled blood glucose. This theory may explain why proven, often patented, innovations in medical device technology haven’t been implemented in leaps and bounds when they are accessible and financially viable. Perhaps, from the standpoint of decision-makers, the value of the device or its applications is not valuable. This idea is not really far-fetched. Until you live with a diagnosis and suffer the consequences that come with the diagnosis, assertively and aggressively implementing solutions – whether it be through tools, devices or programming, is not urgent. Hence, using Standpoint Theory as a framework, the overarching belief of those in ‘power’ (i.e. decision making power), overwhelms the subordinated group (i.e. those who could widely benefit from the technology).

Many decision makers, from financial institutions who fund medical technology to decision-makers such as doctors, hospitals, insurance groups and regulatory bodies, do not fully understand or accept the widespread implications of uncontrolled blood-glucose and the far-reaching demographic it reaches. Uncontrolled blood glucose impacts those with diabetes, pre-diabetes, the elderly, pregnant women and those undergoing surgical procedures. This is a medical issue of global proportions. Yet, it is also undervalued and unrecognized. Perhaps because when people think of blood glucose, they think of diabetics, which represent a statistically less significant group due to a smaller impacted population. Unfortunately, blood glucose is a human issue, not a 'diabetic' issue, yet isn't always valued as such.

This brings us back to Standpoint Theory. The medical conditions and diagnoses that receive the most attention, funding, and the greatest adapted innovations, are diagnoses and conditions such as cardiovascular diseases and cancers that have far-reaching public recognition and deadly reputations. Blood-glucose has not yet reached a 'critical mass' in terms of urgency. It can be argued that urgency is growing, but until we hit the tipping point, people will continue to view technology to mediate the implications of uncontrolled blood glucose from a personal perspective, which often translates to 'forgotten' if blood glucose isn't something you deal with on a daily, or even hourly, basis.

It cannot be denied that decision makers need to take into deep consideration issues such as cost when choosing to adapt new technology and new procedures. However, until decision makers decide to look at technology that is focused on overlooked, yet vitally relevant, populations that are also financially sound, small companies such as TecMed, who have dedicated decades to the refinement of blood-glucose measurement technology, will also be overlooked. This, in turn, means that millions of people, globally, will continue to suffer the consequences of uncontrolled blood glucose.

The technology to create exceptional patient care is at our fingertips. However, the challenge we face is getting decision-makers to overcome the often unconscious influence exerted by Standpoint Theory. When we do this, Dr. Rizvi's claims of glucose control being both a challenge and an opportunity will no longer be founded. Today, the technology exists to overcome many of the challenges of blood glucose management; the opportunity is ours for the taking.