Have you ever wondered why the treatment of diabetes is a frightful failure all over the world? Even in the most advanced countries, subjects with diabetes undergoing coronary interventions and renal replacement therapies are alarmingly increasing. One might argue and set forth a dozen reasons for these negative outcomes viz., fear of injections, lack of glucose monitoring, fear of hypoglycemia, cost of therapy, lack of motivation, clinical inertia and so on. Thus, the reasons for failure are known to one and all.

There are more than two dozen newer therapies now available for diabetes. But unfortunately, these innovations have not been able to significantly reduce the glucose burden.\(^1\) There is only one solution and that's the only cost-effective solution to address all the prevailing challenges in diabetes. Leveraging the advances in technology and making it universally available for the benefit of all patients will drastically reduce the cost of treating diabetes and its future complications. The newer medications for diabetes including the most expensive ones, though popular, have very limited efficacy in terms of glucose-lowering. On the contrary, diabetes technologies are not harnessed by even 1% of the beneficiaries which include both physicians and patients.

**WHY UNPOPULAR?**

Diabetes technologies remain unpopular due to 4 main reasons:

- High cost
- Time consuming
- Not user-friendly
- Lack of infrastructure

Although there is a common misconception that technologies are highly priced, there are many which are cheap or even available free. Example of such a free technology solution is the widely popular diabetes mobile app, mySugr.\(^2\) It wirelessly connects with compatible glucose meters, creates graphs and trends, provides insulin carb ratio, insulin sensitivity factor and has got the entire list of medications in it. Structured Self-monitoring of blood glucose (SMBG), telemedicine, Integrated Personalized Diabetes Management (iPDM) are all proven to reduce A1c significantly with minimal chance of hypoglycemia.\(^3,4\)

Thus, cost may not be the only limiting factor when it comes to the use of technologies in diabetes. It could be partly right to blame the extra time which is required by the physician or diabetes educator to convince the patient on the necessity of an insulin pump or the routine use of a Continuous Glucose Monitoring (CGM). In addition, those patients using high-end technologies expect more time to be spent for them during every future consultation.

The success of any technology, whether in daily life or in medicine, solely depends on the user friendliness
rather than its cost. Some of the insulin pumps and continuous glucose sensors marketed in India are disgusting to the end user in terms of connectivity, deployment, navigating the menu, data downloading etc. and hence the unpopularity. This may be attributed to time wasted for technical hiccups, troubleshooting and usage errors despite repeated training.5

Majority of physicians manage diabetes without sufficient infrastructure or a team to support them whereas the same physician will be equipped with a huge number of staff for the critical management of acute and chronic diabetes complications. The policymakers are still unaware of the fact that available technologies such as Decision Support Systems, Diabetes Tele Management System (DTMS®),6 Insulin pumps,7 (preferably with connected sensor), is CGM8,9 real-time CGM, bluetooth enabled glucose meters are all proven technologies with evidence to prevent neuropathy, nephropathy, retinopathy and even major adverse cardiovascular events.10

It requires a paradigm shift in our current understanding of the use of technologies to judiciously use them for prevention of diabetes complications. The challenges that I have described above can be easily overcome if we comprehend the fact that the extra cost and the extra ounce of time spent in preventive technologies is worth a pound spent for acute care.

REFERENCES