




Pictured (from left to right): Muhammad Iqbal Khan, Madgy Allam, Mariam Adel Labib Younan, Eman Abdulla Yousef, Mohamed Abdelhamid



Diabetes affects an estimated 450 million people globally, with experts expecting this burden to rise to 700 million people by 2045. When left uncontrolled, diabetes is associated with higher incidence of cardiovascular diseases, neuropathy, nephropathy, blindness, foot damage (amputations), infections, and even depression. Diabetes is also responsible for an estimated 4.2 million deaths/year, attributed to conditions such as diabetic ketoacidosis (DKA) and hyperosmolar hyperglycemic state (HHS).

Globally, challenges exist to earlier identify and treat patients with poorly controlled diabetes. Thus, understanding that recognition of poorly controlled diabetes is essential to improving patient outcomes, Zulekha Hospital Dubai formed a multidisciplinary team to optimize their diabetic care. Their team consisted of representatives from laboratory medicine, endocrinology, critical care, and diabetes education. The integrated clinical care team developed and implemented a standardized clinical care pathway, informed by evidence-based international diabetic care guidelines. The team implemented their standardized diabetic care pathway for all patients visiting the Diabetes Clinic of Zulekha Hospital Dubai beginning 1 Jan 2021.

Standardization of their diabetic care pathway substantially improved patient engagement, with a corresponding 11.5% reduction in overall HbA1c levels from baseline, suggesting overall that patients have better controlled diabetes. The additional monitoring has also enabled increased early detection of complications, including an 8% improvement in detection of nephropathy (from 11% to 19%), 22% improvement of neuropathy identification (from 14% to 36%) and an 8% increase in detection of retinopathy (from 6% to 14%). Consequently, no amputations related to diabetic complications were required within the first ten months post-implementation, rates of obesity, dyslipidemia and steatohepatitis in diabetic patients decreased by more than 6%, 21% and 32%, respectively.

Due in part to more controlled diabetes and earlier identified complication, rates of unplanned admissions to the hospital for acute care decreased substantially. Prior to implementing the initiative, 4% of diabetic patients required unplanned hospital admission due to moderate to severe hypoglycemia (and one case of DKA). In the ten months post-implementation, no patients presented with the aforementioned acute needs. This reduction in acute disease not only improves diabetic care but also frees up valuable hospital resources for other patients. Dr. Sharmila C. Jadhav noted, “Closely monitoring of diabetic patients through the Zulekha Hospital Diabetic pathway implementation had a considerable impact on mitigating preventable adverse outcomes with less morbidity and mortality, resulting from missed early diagnosis. Collectively, this saves costs for the patient and the overall health ecosystem including payers.”

In recognition of their impressive success in measurably improving health outcomes for diabetic patients, the integrated clinical care team from Zulekha Hospital Dubai were awarded recognition of achievement from the 2021 UNIVANTS of Healthcare Excellence Award program. This prestigious global recognition program recognizes innovative, measurable improvements to healthcare to inform and inspire healthcare providers worldwide.

### THREE KEY TAKEAWAYS:

- Highly governed, multi-disciplinary clinical care pathways can dramatically improve patient engagement and clinician satisfaction while reducing patient morbidity.
- Early detection of poorly controlled diabetes can enable effective therapies to mitigate downstream diabetes complications.
- Implementation of evidence-based care pathways to manage chronic conditions can reduce the incidence of unexpected acute episodes and subsequent hospitalizations, reducing the overall healthcare costs

To learn more about this clinical care initiative and/or to learn more about UNIVANTS, please visit:

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