

## **DexCom, Inc.'s entry strengthens Penang's position as a leading medtech hub**

Penang continues to attract and welcome international medical technology (medtech) leaders, with DexCom, Inc., a global leader in Continuous Glucose Monitoring (CGM) technology, being the latest to establish a facility here.

With a revenue of US\$1.5 billion in 2019, Dexcom is a fast-growing, innovative medical device cum data-driven company. The S&P 500 constituent is a CGM pioneer that is reshaping the industry landscape, bringing a profound positive impact to people living with diabetes.

Dexcom strategically picked a 28-acre site in Batu Kawan Industrial Park, Penang, for its third and newest facility, which will also be its first outside of the U.S. Construction on the facility is expected to begin in the second half of 2020. The facility will be dedicated to **manufacturing sensors and applicators for Dexcom CGM systems**, and for the next ten years, it is expected to create high-value jobs in manufacturing, facilities management, as well as manufacturing-related research and development.

### **CGM systems transform lives of people living with diabetes**

CGM systems measure patients' glucose levels in interstitial fluid, and transmit the information to a receiver/monitor to display the results. They help contribute to better diabetes management by providing users the ability to proactively manage glucose levels and gain insight into the impact of meals, exercise, and other lifestyle factors on glycemic health. This, in turn, reduces the risk of diabetes-related complications, and ultimately improves patients' health and lowers healthcare costs.

Dexcom CGM systems\*\* transmit real-time glucose readings every five minutes to a compatible display device such as a mobile medical app, and trigger an alarm when the patient's blood sugar level breaches pre-set parameters. When integrated with an automated insulin delivery system, the CGM device can communicate wirelessly with the insulin pump to regulate insulin delivery based on the user's blood glucose levels.

### **Technological advances are transforming medical practices**

Rapid advances in medical technology have transformed the way doctors and patients participate and interact with each other. Medical devices with remote data tracking capabilities, coupled with telemedicine and virtual connectivity, are enabling an efficient platform that connects clinicians, patients and medtech companies. This ability to obtain real-time information, track past health records, identify potential health issues and devise treatment plans with minimal face-to-face interaction is driving a gradual shift from "traditional" medical practices, toward increasing adoption of tech-driven, smart medical devices and technologies, including CGM systems.

Based on a study by Allied Research, the CGM market was valued at US\$1.8 billion in 2019, and is projected to grow at a CAGR of 22% to reach US\$8.8 billion by 2027. Rising incidences of diabetes around the world, the growing advantages of CGM over Point-of-Care glucometers, and greater awareness of CGM technologies in developing countries are the key drivers of growth for CGM systems. CGM technology has tremendous potential to support diabetic patients amid the increasing adoption of telemedicine, particularly with the prevailing need for social distancing. In fact, Dexcom has obtained U.S. FDA approval to supply CGM systems to hospitals during the COVID-19 pandemic, allowing healthcare practitioners to monitor patients remotely with minimal face-to-face interaction.

### **Penang's medtech industry continues to grow in strength**

Malaysia's exports of medical devices grew at a 4-year CAGR of 12% to reach an all-time high of RM24 billion in 2019, with the Malaysian Investment Development Authority (MIDA) approving investments amounting to RM11 billion into the sector over 2016-2019. Penang has one of the highest concentrations of medtech companies in Malaysia and Southeast Asia, with over 50 medical device companies (including companies that are involved in manufacturing parts or components of medical devices) present in the State. These include some of the world's biggest medical device companies such as Abbott Laboratories, B. Braun, Boston Scientific, Canon Medical Systems, Pentax Medical and Smith & Nephew\*, along with other prominent names such as Ambu, Bactiguard, CCB Medical Devices, Haemonetics, Integer Holdings, Japan Lifeline, Straits Orthopaedics, Tecomet and Visco Technology.

With half a century of industrial experience, Penang has built a strong industrial ecosystem, which complements the needs of medtech players. Dexcom CGM systems require expertise and support in electronics engineering and manufacturing and related ancillary services, which are already well-established in Penang. The continuous investment inflows from leading global medtech players is testament to the ability of the State's industrial ecosystem to meet the stringent quality standards required of the medtech supply chain. The medtech industry continues to be one of the State's promoted industries, and the State government will continue to support the development of the industry to create more high-skilled jobs as well as supply chain localization opportunities that will benefit local companies.

Notes:

\* Smith & Nephew held a ground-breaking ceremony of its upcoming plant at Batu Kawan Industrial Park on 28 February 2020. First shipment is expected by the fourth quarter of 2021.

\*\* For more information about Dexcom CGM systems, please visit <https://provider.dexcom.com/education-research/cgm-education-use/videos/dexcom-g6-auto-insertion-video>