

Digital Diabetes Management *Market Scenario and Competitive Landscape*

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Introduction and Methodology

“Market Scenario” is a customized and organized analysis to gather information about target markets and competitive landscape in a particular sector.

“Market Scenario” provides relevant information to identify and analyze market needs, market size and competition in the fields of interest of the customer. A technology or a product developed by the customer can be characterized according to the sectors and potentiality of application, target market, competitive advantages and potential partners of the technology. The analysis is performed with the application of technology and business intelligence tools. The research in the information providers is usually based on the use of keywords or by thematic area, according to the specific topic of interest.

The results of the assessment are data about the target or global market potential, market value and applicability of the technologies or products developed by the customer, the trends of the market of interest, the segmentation of the market (e.g., by application, geography or indication), the supply chain and the competitive advantages of products or technologies, the key players active in the market of interest and the possible direct or indirect competitors of the customer.

Context

This report provides an overview of the **digital diabetes management market**, with reference to the trend and dynamics in the period 2023 – 2028, to the market segmentations by product & service, by type, by end user, by region and to the competitive landscape in the field, especially at the European level.

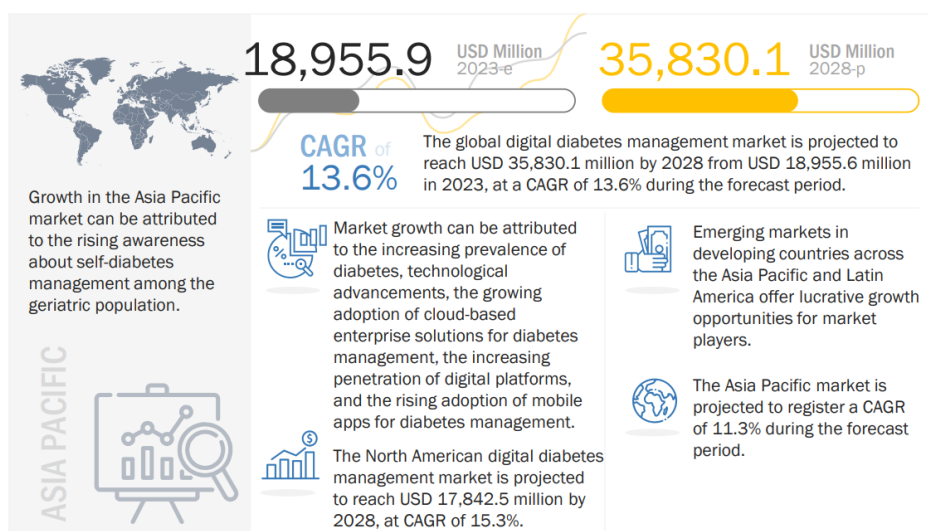
1 Digital Diabetes Management

Digital diabetes management solutions are smartphone-connected diabetes management devices and software platforms used by patients suffering from Type 1, Type 2, and gestational diabetes. Various digital diabetes management devices, such as smart glucose meters, continuous glucose monitoring systems, smart insulin pens, smart insulin pumps/closed-loop systems, and smart insulin patches, are used for glucose monitoring and insulin delivery.

1.1 Global Market and Market Dynamics

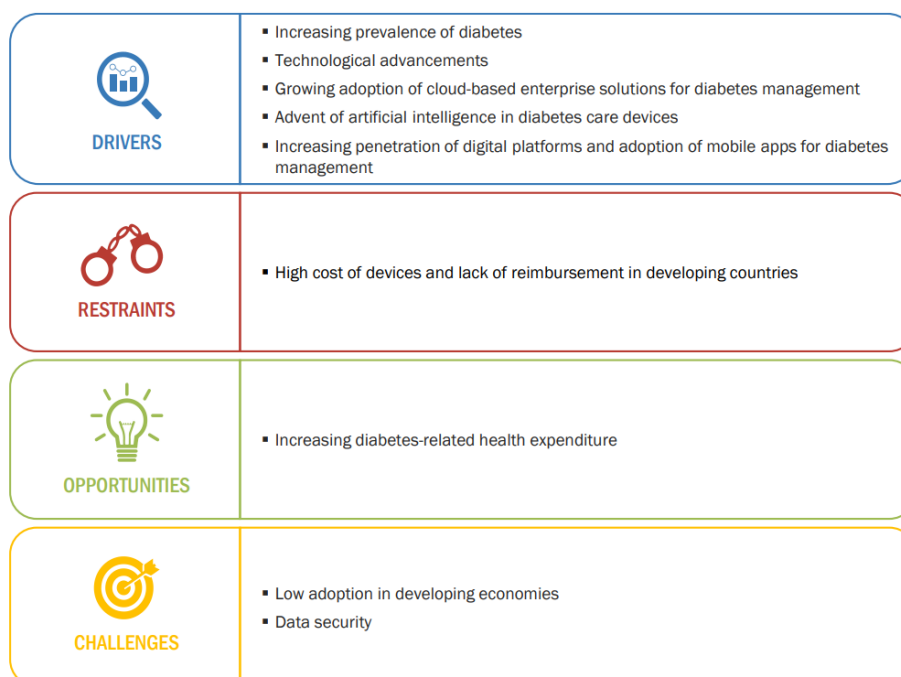
The **global digital diabetes management market** is projected to reach USD 35,830.1 million by 2028 from an estimated USD 18,955.9 million in 2023, at a CAGR of 13.6% during the forecast period (Figure 1).

Figure 1. Global Diabetes Management Market in the Period 2023 - 2028



The rising prevalence of diabetes has increased the focus on developing and adopting better solutions for diabetes care. Also, technological advancements have ensured the introduction of highly flexible solutions in the market. The increasing adoption of cloud-based enterprise solutions and the growing use of connected devices and apps are some of the other major factors supporting market **growth** (Figure 2). However, factors such as the high device costs, lack of reimbursement in developing countries, and the higher acceptance of traditional diabetes management devices are expected to **restrain** the growth of this market during the forecast period.

Figure 2. Digital Diabetes Management Market: Drivers, Restraints, Opportunities and Challenges



The increasing penetration of digital platforms and the adoption of **mobile apps** for diabetes management have transformed the way individuals with diabetes monitor and manage their condition. Mentioned below are some key factors contributing to this trend:

- **Convenience and Accessibility:** Mobile apps provide a convenient and accessible platform for individuals to manage their diabetes. These apps can be easily installed on smartphones and tablets, allowing users to track their glucose levels, record meals and physical activity, set medication reminders, and access educational resources anytime and anywhere. Examples of such apps include Dexcom Clarity (Dexcom, US) and MySugr app (Roche Diagnostics, Switzerland).
- **Data Tracking and Analysis:** Mobile apps enable users to track and analyze their diabetes-related data in one place. Individuals can log their blood glucose levels, medication intake, food intake, physical activity, and other relevant information. The apps can then generate reports and charts to help users identify patterns, trends, and correlations, empowering them to make informed decisions about their diabetes management. Examples of such apps include the Sugarmate app (Sugarmate, US).
- **Personalized Insights and Recommendations:** Many mobile apps leverage AI and machine learning algorithms to provide personalized insights and recommendations. By analyzing the collected data, these algorithms can offer tailored guidance on medication adjustments, meal planning, exercise routines, and lifestyle modifications. The apps may also provide alerts and reminders to help users stay on track with their diabetes management goals. Examples of such apps include the MySugr app (Roche Diagnostics, Switzerland) and Dexcom G6 (Dexcom, US).
- **Connectivity with Devices:** Mobile apps often integrate with various diabetes care devices, such as glucose meters, CGMs, insulin pumps, and fitness trackers. This connectivity allows for seamless data transfer, eliminating the need for manual recording and enabling real-time monitoring and analysis. The integration of devices with mobile apps enhances the accuracy and efficiency of data collection and management. Examples of such apps include Dexcom G6 (Dexcom, US), Tandem t:connect (Tandem, US), and Glucose Buddy (Azumio Inc., US).
- **Remote Monitoring and Telehealth:** Mobile apps enable remote monitoring of diabetes-related parameters, allowing healthcare professionals to provide virtual support and guidance. Through telehealth services, individuals can share their data with healthcare providers, participate in virtual consultations, receive feedback on their management strategies, and make necessary adjustments to their treatment plans. This remote monitoring capability improves accessibility to healthcare resources, especially for individuals in remote areas or with limited mobility. Examples of such apps include Dexcom Follow (Dexcom, US) and LibreLinkUp (Abbott Laboratories, US).
- **Peer Support and Community Engagement:** Mobile apps often include features that foster peer support and community engagement. Users can join online communities, participate in forums, share experiences, and seek advice from others living with diabetes. This social support network helps individuals feel connected, understood, and motivated in their diabetes management journey. Examples of such apps include the MySugr app (Roche Diagnostics, Switzerland) and Diabetes M (Sirma Medical Systems, Bulgaria).

The increasing penetration of apps and software for the management of diabetes is driving the digital diabetes management market. These apps and software are making it easier for people with diabetes to manage their condition, which is leading to improved health outcomes and reduced healthcare costs. This is encouraging diabetic patients to rely more on managing diabetes digitally than the traditional method of management.

1.2 Market Segmentation by Product & Service

On the basis of products and services, the digital diabetes management market is categorized into four major segments, namely: **devices, apps, data management software and platforms, and services** (Table 1). The **devices** segment includes smart glucose meters, continuous glucose monitoring (CGM) systems, smart insulin pens, and smart insulin

pumps/closed-loop systems and smart insulin patches. The devices segment is projected to reach USD 27,286.8 million by 2028 from USD 14,394.9 million in 2023, growing at a CAGR of 13.6% during the forecast period. The large share of this segment can be attributed to factors such as the growing demand for wireless and wearable devices for diabetes management, growing acceptance of smart insulin pumps and pens for insulin delivery, and the increasing awareness about continuous glucose monitoring in patients.

The **apps** segment is further categorized into diabetes and blood glucose tracking apps and weight and diet management apps. The apps segment is projected to reach USD 785.8 million by 2028 from USD 383.7 million in 2023, growing at the highest CAGR of 15.4% during the forecast period.

The **data management software and platforms** segment is projected to reach USD 1,094.5 million by 2028 from USD 644.7 million in 2023, growing at a CAGR of 11.2% during the forecast period.

The **services** segment is projected to reach USD 6,663.0 million by 2028 from USD 3,532.6 million in 2023, growing at a CAGR of 13.5% during the forecast period.

Table 1. Digital Diabetes Management Market, by Product & Service, 2021–2028 (USD Million)

Product & Service	2021	2022	2023	2024	2025	2026	2027	2028	CAGR (2023–2028)
Devices	10,711.2	12,451.2	14,394.9	16,551.9	18,916.4	21,497.2	24,287.7	27,286.8	13.6%
Apps	280.9	328.9	383.7	446.1	516.7	596.4	685.8	785.8	15.4%
Data Management Software and Platforms	516.2	577.3	644.7	718.8	800.3	889.7	987.5	1,094.5	11.2%
Services	2,410.6	2,945.8	3,532.6	4,164.6	4,817.7	5,472.5	6,097.6	6,663.0	13.5%
Total	13,918.9	16,303.3	18,955.9	21,881.4	25,051.1	28,455.7	32,058.7	35,830.1	13.6%

1.2.1 Focus on: Devices

The **devices** segment is categorized into smart glucose meters, CGM systems, smart insulin pens, and **smart insulin pumps/closed-loop systems** and **smart insulin patches** (Table 2). The growth of this segment is mainly attributed to the easy handling of smart glucose meters, as well as their benefits in the early detection of hypo and hyperglycemic diabetes. Technological innovations, such as all-in-one glucometers with analysis capabilities, Bluetooth-enabled glucometers, and portable pocket-sized glucometers, are some of the other factors driving the growth of this market segment.

Table 2. Digital Diabetes Management Devices Market, by Product Type, 2021–2028 (USD Million)

Type	2021	2022	2023	2024	2025	2026	2027	2028	CAGR (2023–2028)
Smart Glucose Meters	2,343.4	2,657.2	2,998.0	3,365.6	3,759.2	4,177.6	4,618.9	5,080.8	11.1%
Continuous Glucose Monitoring Systems	5,076.1	5,854.9	6,748.1	7,771.8	8,944.2	10,285.8	11,819.9	13,572.8	15.0%
Smart Insulin Pens	74.0	97.2	124.7	156.2	190.9	227.4	264.0	298.5	19.1%
Smart Insulin Pumps/Closed-loop Systems and Smart Insulin Patches	3,217.6	3,841.9	4,524.2	5,258.4	6,022.2	6,806.4	7,584.9	8,334.8	13.0%
Total	10,711.2	12,451.2	14,394.9	16,551.9	18,916.4	21,497.2	24,287.7	27,286.8	13.6%

Digital glucose meters are used to measure blood glucose levels in diabetic patients. These devices can be used by patients at home or by healthcare professionals in hospitals or clinics. Self-monitoring blood glucose meters are extremely helpful in achieving a specific level of glycemic control and preventing hypoglycemia in diabetic patients. These devices help patients adjust their therapeutic regimens in response to blood glucose values; they also help individuals adjust their dietary intake, physical activity, and insulin doses to improve glycemic control on a day-to-day basis.

The increasing demand for digital glucose meters is mainly driven by the increasing prevalence of diabetes, the need for self-monitoring in Type 1 and Type 2 diabetes, early detection of hypo and hyperglycemic diabetes, reducing prices of glucose meters, and technological innovations in glucose meters. In these smart glucose meters, personal data is stored in a secure cloud server for reference. Also, patients can sync the data to an iOS or Android smartphone, share it with diabetes care teams, and get personalized insights to improve diabetes management. A shift in consumer preference from traditional glucose meters to smartphone-connected blood glucose meters is mainly due to factors such as better diabetes management and assessment of high-low blood glucose levels, instant alerts, and remote monitoring via a Bluetooth Low Energy cloud-based solution.

Many leading players are launching smartphone-connected blood glucose meters that allow information transfer using Bluetooth. For instance, in March 2021, Roche launched the new Accu-Chek Instant system, a new "connected" blood glucose monitoring (BGM) system, which supports and enables integrated Personalized Diabetes Management (iPDM). Some apps also offer other features, such as auto-generated alerts for caregivers. Such advancements are making monitoring easy for patients as well as physicians. The adoption of these smart glucose meters in developed countries such as the US and European countries is high. However, the increasing demand for alternatives such as CGM and FGM systems may impact the growth of this market segment.

Some of the companies offering digital glucose meters include Roche Diagnostics (Switzerland), B. Braun (Germany), Abbott Laboratories (US), Ypsomed Holdings AG (Switzerland), Ascensia Diabetes Care (US), iHealth Labs Ltd. (US), GlucoMe (Israel), DarioHealth (Israel), and Medtronic (Ireland).

A **Continuous Glucose Monitoring (CGM)** system is an advanced device used to check glucose readings in real-time or monitor glucose readings over a period. This system automatically receives glucose readings after equal intervals, thus allowing patients to reduce fingerstick testing. These CGM systems are available as standalone CGM systems. Standalone CGM systems (when used alone regardless of the insulin delivery method, including insulin pumps) have the capability to result in significant A1C reductions.

The continuous glucose monitoring systems market is expected to grow at the highest CAGR during the forecast period. This is mainly because these systems are minimally invasive as compared to conventional blood glucose meters. However, CGM systems (except Abbott's new FreeStyle Libre Pro/Flash device) still require fingerstick calibration (e.g., Medtronic's CGMs and Dexcom's G5 require at least one fingerstick every 12 hours) and therefore do not completely replace home self-monitoring glucose meters. Also, the availability of comparatively low-priced substitutes, such as self-monitoring blood glucose meters, like Accu-Chek (Roche) and OneTouch Verio (LifeScan), pose a challenge to the growth of this market segment.

Medtronic incorporated CGM technology into its dominant line of insulin pumps to develop the closed-loop system or artificial pancreas device system. Similarly, in order to capitalize on opportunities in this emerging market, major companies operating in the insulin pumps market are partnering with startups developing the closed-loop insulin pump/artificial pancreas technology by integrating the CGM technology into pump systems to develop closed-loop systems. For instance, Dexcom, along with Insulet Corporation, developed the Omnipod DASH Insulin Management System, while Tandem Diabetes Care and Dexcom developed the t:slim X2 Insulin Pump with the Dexcom G7 CGM system.

1.2.2 Focus on: Apps

The apps segment is further categorized into diabetes and blood glucose tracking apps and **weight and diet management apps** (Table 3). Apps significantly help reduce overall diabetes management expenditure by enabling the continuous tracking of blood glucose levels. Companies can link these mobile apps with connected devices and also offer bundled packages along with app subscriptions. The rising demand for remote monitoring, increasing healthcare expenditure due to diabetes, growing adoption of connected diabetes management devices, growing trend of prescribing diabetes management apps, and the increasing trend of bundled offerings (with apps) are driving the growth of the apps market. However, low awareness about digital health solutions in the rural areas of developing countries and the high adoption of traditional & offline management methods are affecting the growth of this market segment to a certain extent.

Some of the players offering digital diabetes management apps include Medtronic (Ireland), Glooko (US), Dexcom (US), Abbott Laboratories (US), Roche Diagnostics (Switzerland), B. Braun (Germany), Tidepool (US), Ascensia Diabetes Care (Switzerland), LifeScan (US), AgaMatrix (US), Tandem Diabetes Care (US), Insulet Corporation (US), and DarioHealth (Israel).

Table 3. Digital Diabetes Management Apps Market, by Type, 2021–2028 (USD Million)

Type	2021	2022	2023	2024	2025	2026	2027	2028	CAGR (2023–2028)
Diabetes and Blood Glucose Tracking Apps	135.0	147.5	160.0	172.2	184.0	195.1	205.5	214.8	6.1%
Weight and Diet Management Apps	145.9	181.4	223.7	273.8	332.7	401.2	480.3	571.0	20.6%
Total	280.9	328.9	383.7	446.1	516.7	596.4	685.8	785.8	15.4%

In diabetes management, the **continuous tracking of blood glucose** plays an important role. In this regard, specific diabetes management apps, which help track diabetes and blood glucose, are available for diabetes patients. Tracking blood glucose levels using such apps helps diabetes patients to manage their condition and reduce healthcare costs.

Diabetes and blood glucose tracking apps support behavior changes, facilitate communication, and help track all relevant diabetes parameters. According to a survey conducted by the University of Bremen in 2022, more than half (52.2%) and one-third (33.3%) of respondents with Type 1 and 2 DM, respectively, reported using diabetes apps for self-management. Among these, mySugr and continuous glucose monitoring apps, such as Dexcom, Freestyle Libre, and Xdrip+, were some of the most popular diabetes apps.

Instead of focusing solely on one app or one device, companies are reviving the market through bundled offerings. For instance, the mySugr app (Roche) subscription costs USD 39.99 per month. It includes a starter kit with a lancing device, a blood glucose tracking app, and unlimited test strips for the patient. The service does not require health insurance or a prescription. Also, the mySugr app subscription gives customers access to a personal coach. The growing adoption of blood glucose tracking apps, increasing awareness of diabetes among patients, and the high adoption of connected devices are some of the factors driving the growth of this market segment.

The key players operating in this market segment include: Medtronic (Ireland), Roche Diagnostics (Switzerland), B. Braun (Germany), Abbott Laboratories (US), Tidepool (US), Dexcom (US), Ascensia Diabetes Care (Switzerland), Glooko (US), LifeScan (US), AgaMatrix Inc. (US), Tandem Diabetes Care (US), Insulet Corporation (US), and DarioHealth (US).

Software developers have launched several attractive smartphone applications that assist users in their **weight loss and diet management** efforts. For instance, calorie counter apps provide a food database with details of the nutritional values and calorie consumption depending on diabetes type. Advanced calorie counter apps can track the number of calories, saturated fats, salt, and other parameters by scanning the barcodes on food products. The market for weight management apps for specific diabetes patients is expected to grow at a significant pace over the coming years, driven mainly by the growing obese population and the increasing need to prevent diseases such as diabetes.

Some of the players offering weight and diet management apps include: Roche Diagnostics (Switzerland), Glooko (US), AgaMatrix (US), Health2Sync (US), and Common Sensing Inc. (US).

1.2.3 Focus on: Data management software and platforms

Data management software downloads data from blood glucose meters, insulin pumps and CGM systems to present information in a variety of statistical and graphical formats to accurately interpret and utilize the data to make appropriate decisions regarding therapy. Traditionally, healthcare providers were required to download the information on BGMs, CGMs, and insulin pumps. This was a tedious and time-consuming process. Some of the recent developments in this market segment have been mentioned below:

- In September 2020, Roche Diagnostics (Switzerland) launched a remote patient monitoring solution, which is a new element of the Roche Diabetes Care Platform and uses its pattern detection feature.
- In October 2021, LifeScan, Inc. (US) launched OneTouch Solutions. This is a holistic digital health offering linking people with diabetes to solutions and support from proven experts.

The growing demand for the management of patient data generated from diabetes management devices, high acceptance of software over traditional methods, need for data accuracy and efficiency in identifying glucose patterns and other key information, and increasing product launches and collaborations are expected to drive the growth of this market segment. However, the subscription charges for such software are high. For instance, the subscription charge for Glooko Kiosk is USD 300 per month. This may affect the growth of this market segment. Some of the companies offering data management software are Glooko (US), Tidepool (US), Medtronic (Ireland), Roche Diagnostics (Switzerland), Abbott Laboratories (US), B. Braun (Germany), Dexcom, Inc. (US), GlucoMe (Israel), and DarioHealth (Israel).

1.2.4 Focus on: Services

Integrated diabetes management **services** are an indispensable component of the digital diabetes management market. These services play a key role in training patients and coaching them about diabetes. The rising global adoption of remote online coaching services among patients, increasing awareness about self-diabetes management, and the increasing demand for training and diabetes-related education are the key growth drivers for this market segment.

Coaching, education, and training play an important role in diabetes management. Some market players continue to add coaching services to their service offerings. Additionally, reimbursement options from insurers are expected to drive the demand for coaching services. In March 2021, F. Hoffmann-La Roche (Switzerland) partnered with Diabeloop (France) to integrate the Accu-Chek Insight insulin pump into the automated insulin delivery (AID) system. Companies such as DarioHealth offer comprehensive diabetes management online platforms that offer data-driven monitoring, disease management, and personalized coaching.

The prominent players offering digital diabetes management services include DarioHealth (Israel), Medtronic (Ireland), Informed Data Systems Inc. (US), WellDoc Inc. (US), Livongo Health, Inc. (US), Fitscript, LLC (US), Lark Technologies, Inc. (US), Insulet Corporation (US), and Fit4D, Inc. (US).

1.3 Market Segmentation by Type

Based on type, the digital diabetes management devices market is segmented into: **handheld** devices and **wearable** devices (Table 4). **Wearable** devices accounted for the largest share of the digital diabetes management devices market in 2023. The large share of this segment is mainly attributed to factors such as the increasing number of regulatory approvals for CGM systems, technological advancements such as closed-loop pump systems, smart insulin patches, and other pipeline devices and the growing adoption of smart insulin pumps and insulin patches for self-insulin delivery in diabetes management.

The **handheld** devices segment is projected to reach USD 8,729.6 million by 2028 from USD 5,518.6 million in 2023. The handheld devices segment is projected to witness a CAGR of 9.6% during the forecast period.

Table 4. Digital Diabetes Management Devices Market, by Type, 2021–2028 (USD Million)

Type	2021	2022	2023	2024	2025	2026	2027	2028	CAGR (2023–2028)
Wearable Devices	6,318.9	7,512.5	8,876.3	10,423.2	12,156.3	14,088.0	16,220.0	18,557.3	15.9%
Handheld Devices	4,392.3	4,938.7	5,518.6	6,128.8	6,760.1	7,409.2	8,067.7	8,729.6	9.6%
Total	10,711.2	12,451.2	14,394.9	16,551.9	18,916.4	21,497.2	24,287.7	27,286.8	13.6%

Wearable devices include CGM systems, smart insulin pumps, and smart insulin patches. These devices do not only monitor blood glucose levels but also detect the glycemic condition ahead of time. Patients do not need any special training to use these devices as they are designed to deliver a precise amount of insulin to the body over a controlled period. Wearable devices are convenient to use at home and are comfortable to wear on the skin.

Increasing awareness about glucose monitoring, the increasing number of regulatory approvals for CGM systems, technological advancements such as closed-loop pump systems, smart insulin patches, and other pipeline devices (contact lenses and smartwatches synced with glucometers), the growing adoption of smart insulin pumps and insulin patches for self-insulin delivery and the low adoption of traditional insulin delivery systems such as insulin syringes and pen needles are some of the major factors propelling the demand for wearable devices for diabetes management. Also, connected devices provide instant access to glucose level readings at periodic intervals, enable dose management and recording, and allow patients to upload data online at home. These added benefits of connected devices are also increasing their adoption. On the other hand, the drawbacks associated with wearable devices include painful removal, skin sensitivity issues and irritation, and adhesive fitting issues, which may restrain the market growth during the forecast period. Low acceptance in developing economies, the high cost of integrated devices, and poor reimbursements are also affecting the growth of this market segment.

Some major companies offering wearable devices are Medtronic (Ireland), Dexcom (US), Tandem Diabetes Care (US), Animas Corporation (US), Roche Diagnostics (Switzerland), Abbott Laboratories (US), Ypsomed Holding AG (Switzerland), Insulet Corporation (US), Cellnovo Group (France), and Senseonics Holdings, Inc. (US).

Handheld devices for diabetes management include digital glucometers and smart insulin pens. These devices are mainly used in hospitals, clinics, diabetes specialty centers, and academic research institutes for blood glucose monitoring and insulin delivery.

Increasing awareness about self-glucose management and technological advancements in digital glucose meters and smart insulin pens are some other key factors driving the growth of this market segment. Also, the enhanced penetration

of smartphone-connected insulin pens and glucometers, as well as the increasing inclination toward 24/7 blood glucose level (BGL) measurement, have propelled the use of handheld devices for diabetes management.

Some major companies offering handheld devices are Abbott Laboratories (US), LifeScan (US), Ascensia Diabetes Care (Switzerland), DarioHealth (Israel), Roche Diagnostics (Switzerland), B. Braun (Germany), Medtronic (Ireland), AgaMatrix (Germany), iHealth Labs (US), IA Collaborative Holdings, LLC (US), GlucoMe (Israel), Emperra GmbH (Germany), and Companion Medical, Inc. (US).

1.4 Market Segmentation by End User

Based on end user, the digital diabetes management market is segmented into: **self/home healthcare, hospitals and specialty diabetes clinics, and academic and research institutes** (Table 5). The **self/home healthcare** segment accounted for the largest share of the digital diabetes management market in 2023. The large share of this segment can mainly be attributed to technological advancements and a shift toward home care and self-management of diabetes.

The **hospitals and specialty diabetes clinics** segment is estimated to grow at a CAGR of 10.5% during the forecast period.

The **academic and research institutes** segment is projected to reach USD 902.2 million by 2028 from USD 634.0 million in 2023, at a CAGR of 7.3% during the forecast period.

Table 5. Digital Diabetes Management Market, by End User, 2021–2028 (USD Million)

End User	2021	2022	2023	2024	2025	2026	2027	2028	CAGR (2023–2028)
Self/Home Healthcare	11,030.4	13,025.7	15,264.7	17,754.8	20,476.5	23,424.6	26,571.6	29,894.1	14.4%
Hospitals and Specialty Diabetes Clinics	2,368.0	2,700.9	3,057.3	3,434.8	3,826.2	4,227.8	4,632.3	5,033.8	10.5%
Academic and Research Institutes	520.5	576.7	634.0	691.8	748.5	803.3	854.8	902.2	7.3%
Total	13,918.9	16,303.3	18,955.9	21,881.4	25,051.1	28,455.7	32,058.7	35,830.1	13.6%

Technological advancements in **self/home** care digital diabetes management systems and platforms have made them more accurate, minimally invasive, and easy to use. The introduction of CGM systems, insulin pump therapy, applications, and services has increased the demand for non-invasive or minimally invasive systems in home care. Self/home care products are being designed with features such as backlights, large displays, preloaded drums, and even audio support.

As diabetes management is shifting from the clinical setting to home care and self-administration, the need for such platforms is growing. The increasing diabetic population across the globe, as well as lifestyle changes (that have contributed to the overall risk of and incidence of diabetes), are also influencing the growth of this end-user segment by directly driving the need for sophisticated, convenient, and reliable technologies for diabetes management.

However, limited awareness of the importance of self-glucose monitoring among diabetics has restrained market growth. As a result, several initiatives have been undertaken to provide education and specific training on the benefits and proper use of digital diabetes management solutions and platforms. Insulin at 100 is one such online platform that includes a timeline of the history of diabetes and its treatment, as well as information on the reality of access to diabetes treatments 100 years after insulin was discovered. Another campaign is the IDF's blue circle campaign, launched in 2021, which aims to share the universal symbol for diabetes awareness.

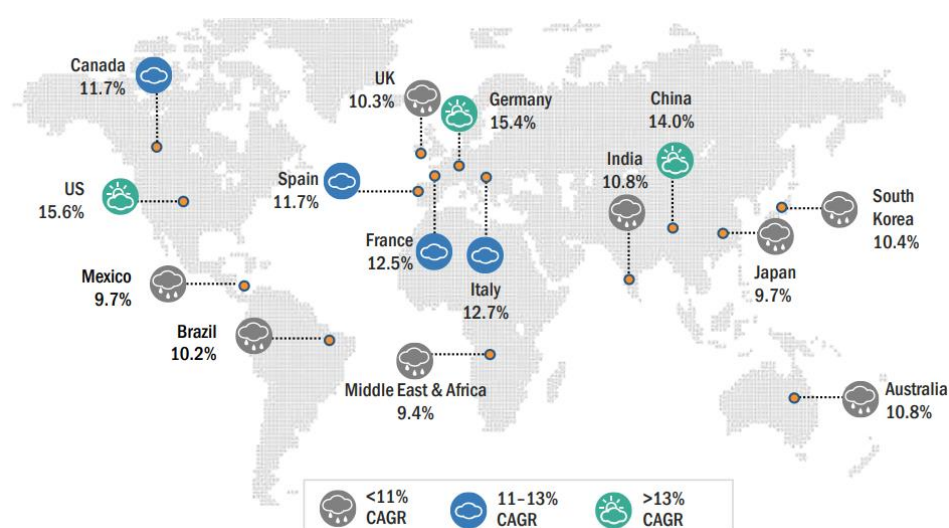
Since the introduction of digital diabetes management devices, many **hospitals** have switched from traditional blood glucose tracking devices to digital platforms, such as connected glucometers, continuous glucose monitoring systems, insulin pumps, and hybrid closed-loop systems. This has allowed for POC testing as well as reduced the overall time required, as platforms and connected devices work in tandem without needing separate analysis cycles. Additionally, these platforms require smaller sample volumes than traditional laboratory tests. These platforms, when used in professional healthcare settings, are more likely to be used on multiple patients, thus raising concerns related to infection control issues involving blood glucose meters.

Major players in the digital diabetes management market are collaborating with **academic and research institutes** to support ongoing clinical programs and accelerate clinical applications by using advanced diabetes management technologies. Research and academic institutes help players to conduct clinical trials for pipeline products for diabetes management.

1.5 Market Segmentation by Region

The global digital diabetes management market is divided into five major regions: **North America, Europe, the Asia Pacific, Latin America, and the Middle East & Africa** (Figure 3). In 2023, North America accounted for the largest market share, followed by **Europe**. The growing adoption of connected devices, high adoption of diabetes management apps, demand for integrated hybrid closed-loop systems, favorable reimbursements, and government initiatives drive market growth. In the **Asia Pacific**, China and India have a high prevalence rate of diabetes, primarily due to the growing population, urbanization, and lifestyle changes. Rising awareness, a high undiagnosed population, and the increasing penetration of smartphones and tablets have supported the adoption of digital diabetes management solutions in the region.

Figure 3. Digital Diabetes Management Market: Geographic Snapshot in the Period 2023 - 2028

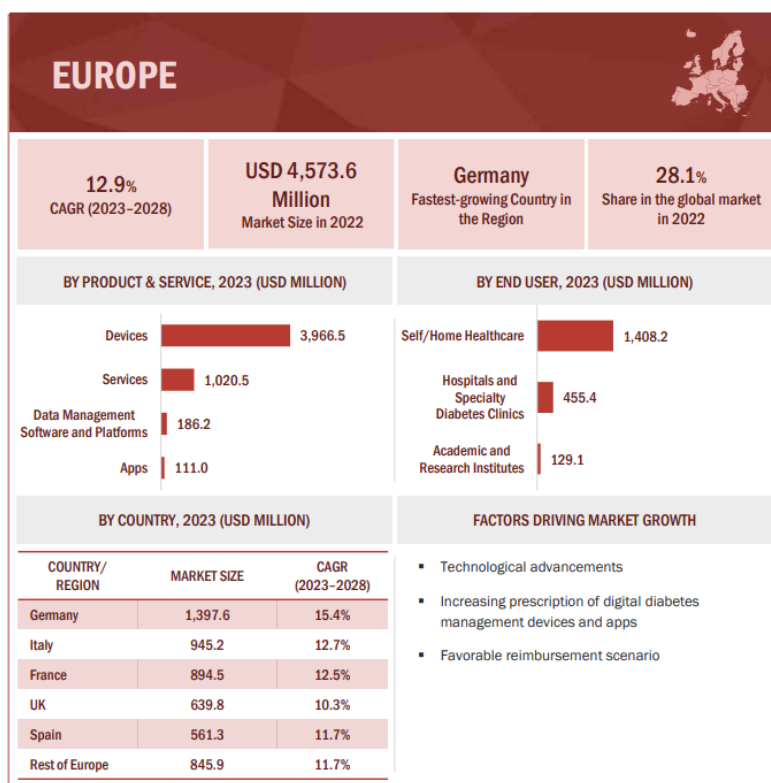


1.5.1 Focus on: Europe

According to the IDF Diabetes Atlas, ~61 million adults (20–79 years) were living with diabetes in the IDF Europe Region in 2021. The region has the highest number of children and adolescents (0–19 years) with Type 1 diabetes (295,000). This will ensure a steady demand for digital diabetes management solutions. In addition, government efforts, improved digital healthcare infrastructure, increasing prescription of digital diabetes management devices and apps, and favorable

reimbursement policies will contribute to market growth in Europe. The high adoption of digital solutions and connected devices for diabetes management in Europe is backed largely by government initiatives.

Figure 4. Europe: Digital Diabetes Management Market Snapshot



In 2022, **Italy** accounted for 17.9% of the European digital diabetes management market. This market is projected to reach USD 1,718.1 million by 2028, at a CAGR of 12.7%. Government initiatives for implementing eHealth technologies for diabetes care, emphasis on diabetes care programs, and the growing adoption of digital platforms for diabetes management are driving market growth in Italy. There is currently full reimbursement for CGM systems in two regions (Piedmont and Basilicata), whereas all other areas reimburse CGM systems on a case-by-case basis. Italy has witnessed slower growth in its healthcare sector over the last few years due to the economic downturn in Europe. To overcome this situation, Italian authorities are now considering decentralizing medical services to increase the involvement of the private sector in the healthcare industry in terms of insurance and healthcare services and offer better choices to patients for their care. Such initiatives are expected to drive the growth of the digital diabetes management market in the country. However, the high price of products may hinder the market growth during the forecast period.

The **Rest of Europe** segment comprises: Sweden, Switzerland, the Netherlands, Norway, Poland, Portugal, Romania, Denmark, Estonia, Finland, Austria and Belgium. Growing government support to strengthen the healthcare infrastructure, favorable reimbursement schemes, and the growing geriatric population are the key factors driving market growth in the RoE. According to the World Bank Group, the proportion of the geriatric population (aged 65 years and above) to the total population in Poland increased from 13.29% in 2009 to 19.13% in 2022. Similar trends were observed in other European countries, such as the Netherlands (15.06% to 19.87%) and Sweden (17.97% to 21.19%) from 2009 to 2022, respectively.

Russia, Poland, Romania, Portugal, and Ukraine were among the top 10 European countries in terms of the number of diabetes cases. Hence, most RoE countries have or are adopting various digital diabetes solutions. RoE countries are home to some international manufacturers such as Medtronic plc (Ireland), Roche Diagnostics (Switzerland), Novo Nordisk A/S (Denmark), and Ypsomed Holdings AG (Switzerland). The presence of large manufacturers in RoE countries serves to boost product availability, ensures high awareness (as companies will undertake campaigns to promote products), and also enhances affordability for patients. The high cost of connected diabetes management devices and digital platforms will continue to be a key factor restraining the growth of the digital diabetes management market in the RoE in the coming years.

1.6 Competitive Landscape

The global digital diabetes management market is consolidated, with the top 8–10 players accounting for approximately 80–85% of the market share in 2022. There are other smaller players in the market operating at the global and regional levels. The **top 5 leading market players** include: Medtronic Plc (Ireland), Roche Diagnostics (Switzerland), Dexcom, Inc. (US), Abbott Laboratories (US) and Insulet Corporation (US). **Other key players** operating in the global digital diabetes management market include: B. Braun Melsungen AG (Germany), LifeScan, Inc. (US), AgaMatrix Inc. (US), Tandem Diabetes Care (US), Ascensia Diabetes Care Holdings AG (Switzerland), Glooko, Inc. (US), Tidepool (US) and DarioHealth Corporation (Israel)

The **European players** active in the market are reported in the following Table.

Table 6. European Players in the Digital Diabetes Management Market

Company	Location	Description	Website
Ascensia Diabetes Care	Switzerland	Global company that specializes in the development, manufacturing, and marketing of diabetes management products. Its product portfolio includes connected blood glucose monitoring systems, lancing devices, and diabetes management software	Ascensia Diabetes Care
B. Braun	Germany	The company used to offer digital blood glucose meters, data management software, and applications through the B. Braun Outpatient Market division	B. Braun is one of the world's leading medical technology companies.
Decide Clinical Software	Austria	The company offers the GlucoTab software-based system to improve blood sugar management in hospitalized type 2 diabetes patients. It consists of a central server and mobile tablet computers with a user interface, making it possible to treat patients directly at the bedside	About Us – GlucoTab
Emperra	Germany	The company developed the first multi-insulin pen (Bluetooth and short-wave enabled), which is capable of wirelessly transferring the injected insulin dose to a web-based portal and making the data visible to patients and physicians as well as caregivers	Erfolge bei Diabetes mit digitalen Lösungen Emperra® GmbH
Hoffmann-La Roche	Switzerland	The company offers its digital diabetes management products under the brand name Accu-Chek. The company's digital diabetes management products include blood glucose meters, insulin pumps, apps, and diabetes management software	Roche - Doing now what patients need next

Company	Location	Description	Website
Medtronic	Ireland	The company's digital diabetes management business offers connected blood glucose meters, insulin pumps, continuous glucose monitoring (CGM) systems, and therapy management software & services	Home Medtronic
Pendiq	Germany	Pendiq GmbH produces in its own manufacturing companies and supplies products to market-leading companies in the healthcare sector in Europe	pendiq - Intelligent Diabetes Care for a better life with diabetes
Ypsomed Holding	Switzerland	The company develops and manufactures injection systems for custom-made self-administration and markets pen needles for the treatment of diabetes, growth disorders, or infertility, as well as therapeutic areas	Selfcare Solutions - Ypsomed - Group

2 Sources

MarketsandMarkets Knowledge Store - Multisectoral database that collects market research reports in various technological fields and designed to process some information interactively. More than 1,200 market reports are published each year (<https://www.mnmks.com/>). The information presented are contained in the report “*Digital Diabetes Management Market – Forecast to 2028*”, published in June 2023.

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