

Technology-Enabled Diabetes Monitoring

A1C a measure of the average blood glucose levels over the past 2 to 3 months, calculated from the percentage of glucose in the blood, also known as hemoglobin A1C, it is a critical component of Technology-Enabled Diabetes Monitoring in the Professional Certificate in Diabetes Health Coaching Services, related terms include eAG, glucose control, and glycated hemoglobin, the A1C test is essential for assessing the effectiveness of diabetes management plans, with higher values indicating poorer glucose control, for instance, an A1C level of 7% or lower is generally considered a target for people with diabetes, while levels above 9% may indicate a need for adjustments to medication, diet, or exercise routines, examples of A1C levels and their corresponding average blood glucose levels can help health coaches educate patients about the importance of glucose monitoring and control.

Action Plan a detailed outline of the steps a person with diabetes will take to achieve their health goals, including specific targets and strategies for managing blood glucose levels, related terms include care plan, diabetes management plan, and treatment plan, an action plan is a crucial tool for Technology-Enabled Diabetes Monitoring, as it helps individuals with diabetes to set realistic goals, track their progress, and make informed decisions about their care, for example, an action plan might include targets for physical activity, healthy eating, and medication adherence, with strategies for overcoming barriers and staying motivated, health coaches can work with patients to develop personalized action plans that take into account their unique needs and circumstances.

Adherence the extent to which a person follows their recommended treatment plan, including medication, diet, and exercise, related terms include compliance, concordance, and self-management, adherence is a critical component of Technology-Enabled Diabetes Monitoring, as it directly affects the effectiveness of diabetes management, for instance, poor adherence to medication regimens can lead to inadequate glucose control, while high adherence can result in improved health outcomes, examples of strategies to improve adherence include simplifying medication regimens, using reminders and alerts, and providing ongoing support and education, health coaches can play a key role in promoting adherence by working with patients to identify and address barriers to adherence.

Algorithm a set of rules or procedures used to analyze data and make decisions, related terms include decision support system, predictive analytics, and machine learning, algorithms are essential for Technology-Enabled Diabetes Monitoring, as they enable the analysis of large datasets and the identification of patterns and trends, for example, algorithms can be used to analyze data from continuous glucose monitors, insulin pumps, and other devices, to provide insights into glucose control and identify opportunities for improvement, health coaches can use algorithms to develop personalized recommendations for patients, taking into account their unique needs and circumstances, and tailoring interventions to address specific challenges.

Ambulatory Glucose Profile a graphical representation of blood glucose levels over a 24-hour period,

related terms include glucose profile, glucose curve, and ambulatory glucose monitoring, the ambulatory glucose profile is a valuable tool for Technology-Enabled Diabetes Monitoring, as it provides a detailed picture of glucose control and identifies patterns and trends, for instance, the profile can help identify periods of hypoglycemia or hyperglycemia, and inform adjustments to medication, diet, or exercise routines, examples of ambulatory glucose profiles can be used to educate patients about the importance of glucose monitoring and control, and to develop personalized plans for improving glucose control.

Artificial Intelligence a type of computer science that enables machines to perform tasks that typically require human intelligence, related terms include machine learning, deep learning, and natural language processing, artificial intelligence is increasingly being used in Technology-Enabled Diabetes Monitoring, to analyze data, identify patterns, and provide personalized recommendations, for example, artificial intelligence can be used to analyze data from wearable devices, electronic health records, and other sources, to predict the risk of complications and identify opportunities for early intervention, health coaches can use artificial intelligence to develop personalized plans for patients, taking into account their unique needs and circumstances.

Blood Glucose Meter a device used to measure blood glucose levels, related terms include glucometer, glucose meter, and blood glucose monitoring system, the blood glucose meter is a critical component of Technology-Enabled Diabetes Monitoring, as it provides accurate and reliable measurements of blood glucose levels, for instance, the meter can be used to track glucose control over time, and to identify patterns and trends, examples of blood glucose meters include portable meters, continuous glucose monitors, and implantable sensors, health coaches can educate patients about the proper use and maintenance of blood glucose meters, and provide guidance on how to interpret the results.

Care Plan a detailed outline of the steps a person with diabetes will take to achieve their health goals, including specific targets and strategies for managing blood glucose levels, related terms include action plan, diabetes management plan, and treatment plan, a care plan is a crucial tool for Technology-Enabled Diabetes Monitoring, as it helps individuals with diabetes to set realistic goals, track their progress, and make informed decisions about their care, for example, a care plan might include targets for physical activity, healthy eating, and medication adherence, with strategies for overcoming barriers and staying motivated, health coaches can work with patients to develop personalized care plans that take into account their unique needs and circumstances.

Certified Diabetes Educator a healthcare professional who has specialized training and expertise in diabetes education, related terms include diabetes educator, diabetes specialist, and healthcare provider, a certified diabetes educator is a critical component of Technology-Enabled Diabetes Monitoring, as they provide personalized guidance and support to individuals with diabetes, for instance, they can educate patients about the importance of glucose monitoring and control, and provide guidance on how to use technology-enabled tools and devices, examples of certified diabetes educators include nurses, dietitians, and pharmacists, who have completed specialized training programs and have expertise in diabetes care.

Chronic Care Model a framework for delivering high-quality care to individuals with chronic conditions, including diabetes, related terms include patient-centered care, coordinated care, and comprehensive care, the chronic care model is essential for Technology-Enabled Diabetes Monitoring, as it emphasizes the

importance of patient-centered care, and the need for coordinated and comprehensive care, for example, the model can be used to develop personalized care plans that take into account the unique needs and circumstances of each patient, health coaches can use the chronic care model to develop tailored interventions that address specific challenges and barriers to care.

Clinical Decision Support System a computer-based system that provides healthcare professionals with clinical decision-making support, related terms include decision support system, clinical decision support, and expert system, clinical decision support systems are essential for Technology-Enabled Diabetes Monitoring, as they provide healthcare professionals with access to evidence-based guidelines and recommendations, for instance, the system can be used to analyze data from electronic health records, and provide personalized recommendations for patients, examples of clinical decision support systems include computerized physician order entry systems, and electronic health records with built-in decision support, health coaches can use these systems to develop personalized plans for patients, taking into account their unique needs and circumstances.

Continuous Glucose Monitor a device that measures blood glucose levels continuously over a 24-hour period, related terms include glucose sensor, glucose monitor, and continuous glucose monitoring system, the continuous glucose monitor is a critical component of Technology-Enabled Diabetes Monitoring, as it provides a detailed picture of glucose control and identifies patterns and trends, for example, the device can be used to track glucose control over time, and to identify periods of hypoglycemia or hyperglycemia, health coaches can educate patients about the proper use and maintenance of continuous glucose monitors, and provide guidance on how to interpret the results.

Data Analytics the process of analyzing data to identify patterns, trends, and insights, related terms include data analysis, data mining, and business intelligence, data analytics is essential for Technology-Enabled Diabetes Monitoring, as it enables the analysis of large datasets and the identification of patterns and trends, for instance, data analytics can be used to analyze data from electronic health records, wearable devices, and other sources, to provide insights into glucose control and identify opportunities for improvement, examples of data analytics include predictive analytics, descriptive analytics, and prescriptive analytics, health coaches can use data analytics to develop personalized recommendations for patients, taking into account their unique needs and circumstances.

Diabetes Distress a state of emotional and psychological distress that can occur in individuals with diabetes, related terms include diabetes burnout, diabetes stress, and emotional distress, diabetes distress is a critical component of Technology-Enabled Diabetes Monitoring, as it can affect an individual's ability to manage their diabetes, for example, diabetes distress can lead to poor adherence to medication regimens, and decreased motivation to engage in healthy behaviors, health coaches can work with patients to identify and address diabetes distress, using strategies such as cognitive-behavioral therapy, and mindfulness-based interventions.

Diabetes Education a process of educating individuals with diabetes about the management of their condition, including glucose monitoring, medication adherence, and healthy lifestyle habits, related terms include diabetes self-management education, diabetes education program, and patient education, diabetes education is essential for Technology-Enabled Diabetes Monitoring, as it enables individuals with diabetes

to take an active role in managing their condition, for instance, diabetes education can include instruction on how to use technology-enabled tools and devices, such as blood glucose meters and continuous glucose monitors, examples of diabetes education include group classes, one-on-one coaching, and online programs, health coaches can provide personalized diabetes education to patients, taking into account their unique needs and circumstances.

Diabetes Management Plan a detailed outline of the steps a person with diabetes will take to achieve their health goals, including specific targets and strategies for managing blood glucose levels, related terms include care plan, action plan, and treatment plan, a diabetes management plan is a crucial tool for Technology-Enabled Diabetes Monitoring, as it helps individuals with diabetes to set realistic goals, track their progress, and make informed decisions about their care, for example, a diabetes management plan might include targets for physical activity, healthy eating, and medication adherence, with strategies for overcoming barriers and staying motivated, health coaches can work with patients to develop personalized diabetes management plans that take into account their unique needs and circumstances.

Digital Health a broad term that encompasses the use of digital technologies to improve health outcomes, related terms include health information technology, digital medicine, and eHealth, digital health is essential for Technology-Enabled Diabetes Monitoring, as it enables the use of digital tools and devices to manage diabetes, for instance, digital health can include the use of mobile apps, wearable devices, and telehealth platforms, to provide personalized guidance and support to individuals with diabetes, examples of digital health include remote patient monitoring, electronic health records, and personalized medicine, health coaches can use digital health to develop tailored interventions that address specific challenges and barriers to care.

Electronic Health Record a digital version of a patient's medical record, related terms include electronic medical record, digital health record, and personal health record, the electronic health record is a critical component of Technology-Enabled Diabetes Monitoring, as it provides a centralized repository of patient data, including medical history, test results, and treatment plans, for example, the electronic health record can be used to track glucose control over time, and to identify patterns and trends, health coaches can use the electronic health record to develop personalized plans for patients, taking into account their unique needs and circumstances.

Glucometer a device used to measure blood glucose levels, related terms include blood glucose meter, glucose meter, and blood glucose monitoring system, the glucometer is a critical component of Technology-Enabled Diabetes Monitoring, as it provides accurate and reliable measurements of blood glucose levels, for instance, the glucometer can be used to track glucose control over time, and to identify patterns and trends, examples of glucometers include portable meters, continuous glucose monitors, and implantable sensors, health coaches can educate patients about the proper use and maintenance of glucometers, and provide guidance on how to interpret the results.

Glucose Control the management of blood glucose levels to achieve optimal health outcomes, related terms include blood glucose control, glucose management, and glycemic control, glucose control is essential for Technology-Enabled Diabetes Monitoring, as it enables individuals with diabetes to take an active role in managing their condition, for example, glucose control can include the use of medication, diet,

and exercise to manage blood glucose levels, health coaches can work with patients to develop personalized plans for glucose control, taking into account their unique needs and circumstances.

Health Coaching a process of guiding and supporting individuals to achieve their health goals, related terms include health education, health promotion, and patient empowerment, health coaching is essential for Technology-Enabled Diabetes Monitoring, as it enables individuals with diabetes to take an active role in managing their condition, for instance, health coaching can include instruction on how to use technology-enabled tools and devices, such as blood glucose meters and continuous glucose monitors, examples of health coaching include one-on-one coaching, group coaching, and online coaching, health coaches can provide personalized guidance and support to patients, taking into account their unique needs and circumstances.

Hemoglobin A1C a measure of the average blood glucose levels over the past 2 to 3 months, related terms include glycated hemoglobin, hemoglobin A1C test, and A1C, hemoglobin A1C is a critical component of Technology-Enabled Diabetes Monitoring, as it provides a snapshot of glucose control over time, for example, the hemoglobin A1C test can be used to track glucose control over time, and to identify patterns and trends, health coaches can educate patients about the importance of hemoglobin A1C testing, and provide guidance on how to interpret the results.

Hyperglycemia a state of high blood glucose levels, related terms include high blood sugar, hyperglycemia management, and glucose control, hyperglycemia is a critical component of Technology-Enabled Diabetes Monitoring, as it can lead to serious health complications, for instance, hyperglycemia can lead to kidney damage, nerve damage, and vision problems, health coaches can work with patients to develop personalized plans for managing hyperglycemia, taking into account their unique needs and circumstances.

Hypoglycemia a state of low blood glucose levels, related terms include low blood sugar, hypoglycemia management, and glucose control, hypoglycemia is a critical component of Technology-Enabled Diabetes Monitoring, as it can lead to serious health complications, for instance, hypoglycemia can lead to confusion, dizziness, and loss of consciousness, health coaches can work with patients to develop personalized plans for managing hypoglycemia, taking into account their unique needs and circumstances.

Insulin Pump a device that delivers insulin continuously over a 24-hour period, related terms include insulin delivery system, insulin pump therapy, and continuous insulin infusion, the insulin pump is a critical component of Technology-Enabled Diabetes Monitoring, as it provides a convenient and flexible way to manage blood glucose levels, for example, the insulin pump can be used to deliver basal insulin, bolus insulin, and correction insulin, health coaches can educate patients about the proper use and maintenance of insulin pumps, and provide guidance on how to interpret the results.

Machine Learning a type of artificial intelligence that enables machines to learn from data and improve their performance over time, related terms include deep learning, natural language processing, and predictive analytics, machine learning is essential for Technology-Enabled Diabetes Monitoring, as it enables the analysis of large datasets and the identification of patterns and trends, for instance, machine learning can be used to analyze data from wearable devices, electronic health records, and other sources, to provide insights into glucose control and identify opportunities for improvement, examples of machine learning

include supervised learning, unsupervised learning, and reinforcement learning, health coaches can use machine learning to develop personalized recommendations for patients, taking into account their unique needs and circumstances.

Mobile Health a broad term that encompasses the use of mobile devices to improve health outcomes, related terms include mHealth, mobile healthcare, and digital health, mobile health is essential for Technology-Enabled Diabetes Monitoring, as it enables the use of mobile devices to manage diabetes, for instance, mobile health can include the use of mobile apps, wearable devices, and telehealth platforms, to provide personalized guidance and support to individuals with diabetes, examples of mobile health include remote patient monitoring, electronic health records, and personalized medicine, health coaches can use mobile health to develop tailored interventions that address specific challenges and barriers to care.

Patient Engagement the process of empowering patients to take an active role in their healthcare, related terms include patient empowerment, patient activation, and patient-centered care, patient engagement is essential for Technology-Enabled Diabetes Monitoring, as it enables individuals with diabetes to take an active role in managing their condition, for example, patient engagement can include the use of patient portals, mobile apps, and wearable devices, to provide personalized guidance and support, health coaches can work with patients to develop personalized plans for patient engagement, taking into account their unique needs and circumstances.

Personalized Medicine a approach to healthcare that takes into account an individual's unique genetic, environmental, and lifestyle factors, related terms include precision medicine, tailored medicine, and targeted therapy, personalized medicine is essential for Technology-Enabled Diabetes Monitoring, as it enables healthcare professionals to develop tailored interventions that address specific challenges and barriers to care, for instance, personalized medicine can include the use of genetic testing, biomarkers, and other diagnostic tools, to provide insights into an individual's unique needs and circumstances, examples of personalized medicine include pharmacogenomics, nutrigenomics, and behavioral genomics, health coaches can use personalized medicine to develop personalized recommendations for patients, taking into account their unique needs and circumstances.

Predictive Analytics a type of data analytics that uses statistical models and machine learning algorithms to predict future outcomes, related terms include predictive modeling, predictive analytics software, and forecasting, predictive analytics is essential for Technology-Enabled Diabetes Monitoring, as it enables healthcare professionals to identify high-risk patients and develop targeted interventions, for example, predictive analytics can be used to analyze data from electronic health records, wearable devices, and other sources, to predict the risk of complications and identify opportunities for early intervention, health coaches can use predictive analytics to develop personalized plans for patients, taking into account their unique needs and circumstances.

Remote Patient Monitoring the use of digital technologies to monitor patients remotely, related terms include telehealth, remote monitoring, and virtual care, remote patient monitoring is essential for Technology-Enabled Diabetes Monitoring, as it enables healthcare professionals to monitor patients in real-time, and provide personalized guidance and support, for instance, remote patient monitoring can include the use of wearable devices, mobile apps, and telehealth platforms, to track glucose control, blood pressure,

and other health metrics, examples of remote patient monitoring include continuous glucose monitoring, blood pressure monitoring, and oxygen saturation monitoring, health coaches can use remote patient monitoring to develop tailored interventions that address specific challenges and barriers to care.

Self-Management the process of managing one's own health and wellness, related terms include self-care, self-monitoring, and self-management support, self-management is essential for Technology-Enabled Diabetes Monitoring, as it enables individuals with diabetes to take an active role in managing their condition, for example, self-management can include the use of self-monitoring tools, such as blood glucose meters and continuous glucose monitors, to track glucose control and identify patterns and trends, health coaches can work with patients to develop personalized plans for self-management, taking into account their unique needs and circumstances.

Telehealth the use of digital technologies to deliver healthcare remotely, related terms include telemedicine, virtual care, and remote health, telehealth is essential for Technology-Enabled Diabetes Monitoring, as it enables healthcare professionals to provide personalized guidance and support to individuals with diabetes, for instance, telehealth can include the use of video conferencing, phone calls, and messaging apps, to provide remote consultations and support, examples of telehealth include virtual check-ins, remote monitoring, and online education, health coaches can use telehealth to develop tailored interventions that address specific challenges and barriers to care.

Treatment Plan a detailed outline of the steps a person with diabetes will take to achieve their health goals, including specific targets and strategies for managing blood glucose levels, related terms include care plan, action plan, and diabetes management plan, a treatment plan is a crucial tool for Technology-Enabled Diabetes Monitoring, as it helps individuals with diabetes to set realistic goals, track their progress, and make informed decisions about their care, for example, a treatment plan might include targets for physical activity, healthy eating, and medication adherence, with strategies for overcoming barriers and staying motivated, health coaches can work with patients to develop personalized treatment plans that take into account their unique needs and circumstances.

Wearable Device a device that is worn on the body to track health metrics, related terms include wearable technology, wearable sensor, and wearable device, wearable devices are essential for Technology-Enabled Diabetes Monitoring, as they enable individuals with diabetes to track their health metrics in real-time, for instance, wearable devices can include fitness trackers, smartwatches, and continuous glucose monitors, to track glucose control, physical activity, and other health metrics, examples of wearable devices include smart contact lenses, implantable sensors, and biosensors, health coaches can educate patients about the proper use and maintenance of wearable devices, and provide guidance on how to interpret the results.