



Diabetes Digital Health: Intersection of Self-care and Healthcare



During this Twitter chat we posed a number of questions on the topic of Diabetes Digital Health at the Intersection of Self-care and Healthcare. Healthcare providers who engaged in this chat shared their learnings, insights and tips. We've culled through the hundreds of tweets posted during the chat and below share the tweets that we believe will be most valuable as you transform the diabetes care you deliver.



#DigitalHealth tools are a growing part of #diabetes management for HCPs and people with diabetes (#PWD). Which digital tools do you consider to be a regular part of your “toolkit”?

Digital Health & Technologies that support tracking blood glucose levels, weight, healthy eating & physical activity. Plus helping PWD remember to take medications, and developing supportive social networks. All invaluable!
@StarlinRPh

Digital tools including smartphones, apps & data driven tools can link #PWD & caregivers with their HCP's. This increases communication, provides support and potentially improves #diabetes care and outcomes. @susangweiner

Social support may be the most amazing advancement brought about by digital tools. Let's normalize, model, and build peer networks around self-care in a built environment that makes self-care hard! @KellyRawlings. We have got to help people with #diabetes feel less isolated, shame and blame!! @HopeWarshaw

CGMs have been a game changer, esp with the newest Time in Range guidelines. It's so much more relatable than A1c and eAG, etc.
@Type2andYouCDE

I talk about virtual log books for tracking, glucose values, medication use, food logs, etc. I always have my phone w/ me, so why do HCPs expect PWD to bring more to appointments? @zsquaredmama

It's good for me to see #SMBG meters evolve to integrate more tech including integrated decision support, visual feedback using colors to help users more quickly and easily analyze results. Makes it easier for the client to get feedback and evolve therapy. @hopewarshaw

Digital Health & Technologies that integrate Continuous Glucose Monitoring #CGM have revealed an abundance of blood glucose patterns that better predict the #PWD's patterns, review and revise regimens more precisely.
@StarlinRPh

More research needed around if/how apps help PWD improve glycemic management. Discussion around why a PWD might give up using an app (i.e. amount of time to enter data or not seeing benefits) is helpful & adds to collaborative discussion. @susangweiner

I point you to a new article in @aadediabetes AADE In Practice by C. Parkin (Sept 2019). Discusses cont'd use and value of #SMBG with caveat about using tech-enhanced devices to evolve and improve #diabetes care for masses unlikely to use #CGM in near future.
@HopeWarshaw

Related to physical activity, check out hundreds of #diabetesprotips from our Twitter Chat, Advising People with Diabetes to be Physically Active: Get Beyond 'Go for a Walk' here: <https://t.co/2K3qMrpT2R>.
@HopeWarshaw



What reasons led you to incorporate those #diabetes digital tools into your “toolkit” eg: effective, easy-to-use, customizable, offers two-way communication (other factors)?

I have found I need some baseline information from clients prior to recommending digital health tools. For starters: do they have/use a smart phone? How do they use it? Simply for phone calls or as a critical tool to manage their life? Other questions to meet people where they are: what apps do you currently use? Why do you like them? How do they help you manage your life? @HopeWarshaw

My “aha” moment was understanding the importance of communication with prompt support. Keeping the human in healthcare includes embracing emerging digital tools while maintaining human touchpoints. @susangweiner

Most of the #PWD I counsel, both T1D & T2D, need more info about their patterns of glucose highs & lows as they work shift work. The two-way sharing of info is a huge advantage & proactive to treatments as well as complications at bay. @StarlinRPh

Ability to compare and really analyze data, especially new views such as Time in Range (TIR) are key for me. It's not 2-way yet w/ my clinicians, but hope to get there soonish. KellyRawlings

Ability to “check-in” with patients between visits & identify wins and challenges. People become involved in their care and take action when they know what to do. @lorenadrago

PWD are engaged & using technology to keep track of health status, share data and are active participants in their own care. HCP's should utilize and embrace these digital tools in collaboration with #PWD. @susangweiner

I ask if there was an app that would assist you with one or more aspects of your care, what would it be? What would you want to accomplish? Knowing each person's responses helps HCP choose and use optimal digital health tools. @HopeWarshaw

Bottomline: digital health tools quick and easy to teach and use. Must be ones that truly solve an identified problem the person has with daily management. It must create a positive feedback loop so they'll continue to use it. Creates “stickiness.” @HopeWarshaw

Finding the right digital tech is so personal. Has to start w/ personal reason why. And be discussed during appointments. We look at prescription refills. Soon, digital refills will be part of our conversation, too. @KellyRawlings

Common barriers #PWD have to using digital tools are: which are best to use, which are least burdensome & complicated to use. What #diabetesprotips do you have to address these barriers?

Real time data through digital technologies. #PWD & HCP may focus on a current glucose value rather than analyzing patterns. #diabetesprotip = collaborate w #PWD to identify patterns blood glucose & determine if treatment modifications are needed. @susangweiner

The “all things diabetes” apps, for example, are pretty complicated & take a lot of set up to personalize. Only certain personalities like ongoing interaction w/ a complicated multipurpose app. @KellyRawlings

Identify which tool is the best fit for the patient & explain the value of the tool as well as what actionable steps are required. A trial period followed by an honest discussion of what works & what doesn't. @lorenadrago

Challenges w health literacy/numeracy must be addressed when considering or suggesting digital tools. #diabetesprotips= active #listening and collaborate goal setting are key! @susangweiner

PWD sometimes they need to try a few digital tools to see which ones work best for them. One size does not fit all when it comes to apps for self-care and healthcare. @zsquaredmama

Customize the digital health tools you recommend based on client's life, #diabetes care priorities, interest, willingness. Don't overwhelm with options. Share few pluses and minuses and give recommendations. Assure comfort with use. @HopeWarshaw

Diabetes digital health solutions need to provide a simple interface that seamlessly helps #PWD prevent or optimally manage their diabetes. PWD needs comprehensive user trials & education with diabetes care and education specialist. @StarlinRPh

Ask lots of questions. Drill down to get clarity on the problem(s) the person wants, needs to solve. Listen actively to determine their interest. Let that drive whether you use an app and where to start. @HopeWarshaw

Help client download app so it's ready to use. Have them use it during a visit. Ex: with a restaurant food/nutrition app, have them find two common meals they eat and find the nutrient info. Assure comfort with use. @HopeWarshaw



In our @LifescanDI webinar by Korey Hood, PhD (@hoodkore), he said: “If our goal is to improve health, targeting healthcare won't be enough. We must help people change behaviors and patterns.” How have digital health tools helped your clients do this?

With #PWD I counsel they respond to having more information when they need it, guidance when they ask for it & continued support delivered conveniently & consistently. @StarlinRPh

I've seen behavior change come from the use of CGM. Especially in those w/ type 2 diabetes. When you see in real time what choices/actions have on what you thought was stability, it can be really eye opening. @zsquaredmama

Digital Health solutions like: #CGM, real time blood glucose meters w/ apps, health tracking devices, online platforms & smart phone apps assist the user to keep track & communicate in between team-care visits. @StarlinRPh

In @hoodkore @LifescanDI on-demand webinar on need for greater access to, support with digital health tools <https://t.co/zOcPgXv8Yo>, Hood said people still need education, support, and greater access to digital health tools to see impact on outcomes. @HopeWarshaw

Diabetes Wise is a patient-facing website designed by Korey Hood, PhD, others; to help PWD make decisions about buying and using devices and tools. Here's link: <https://diabeteswise.org/>. @KellyRawlings

When I keep it simple, customize choice of app, help client learn how to use with real life examples, this enhances utilization. Maximizes continued use with integration into their management routine. @HopeWarshaw

Recently I worked with a PWD who monitors his blood glucose & sends text messages to medical team. He learned to adjust & reduce insulin dose. He is more aware of how food & physical activity affect him. @lorenadrago

With data in hand and in black and white (or color) (meaning in front of you), it's easier to work on challenges together and to be on the same side trying to solve problems to improve outcomes. Plus make managing #diabetes easier. @HopeWarshaw

Continue on follow up visits to ask about use of the digital health tools, use the output together to analyze status and management of situations, continuously demonstrate value through active use. @HopeWarshaw



Digital tools are at the intersection of #PWD self-care and HCP-provided healthcare. What #diabetesprotips can you offer to help enable both with digital tools?



A one stop place for curation of #diabetes and lifestyle apps with detailed quality. (Resource is available currently to @AADEdiabetes and Nat'l School Nurse Assoc (@schoolnurse) members. More to come! @HopeWarshaw

I learn a lot from the people I meet. I'm very upfront if it's not an app I've used before and ask them to walk me through how they use and what they gain from using it. @Type2andYouCDE

The webinar from @LifescanDI by Kim Kelly, PharmD was focused on self-discovery particularly in the arena of glucose monitoring. Very good. Worth viewing. Here's the link: <https://www.lifescandiabetesinstitute.com/webinar/practice-management>. @HopeWarshaw

Build a coordinated, whole person-centered system that addresses both medical and non-medical drivers of health. #diabetesprotips = address social determinants of health using real time data! @susangweiner

Have selection criteria. Provide ongoing support and frequent check-ins. Ask: what is in it for the patient? What are the patient's expectations? Set a trial period and then reassess. Teach PWD how to trouble-shoot. @lorenadrado

A resource I've found valuable is "Using Mobile Apps to Manage Diabetes." It's a several page handout from @aadediabetes on their website here: <https://t.co/tl0XbpX1HJ> @HopeWarshaw

Especially w/ long-time patients, long-duration diabetes, ask about use of digital tech and apps. These can open up conversations to help people get out of same-old, same-old self-care, things they're resigned to but don't have to be. @KellyRawlings

I like the TES model – Technology-Enabled Self-Management Feedback Loop developed by Greenwood, et al (@debgreenwood). This model is truly at the intersection of self-care and HCP-provided care. Hear it discussed in this on-demand webinar: <https://www.lifescandiabetesinstitute.com/webinar/technology-and-emerging-science>. @HopeWarshaw

In his on-demand webinar @hoodkore suggests: focus on behavioral patterns, validate people's emotions, teach problem solving and encourage use of digital health tools. @HopeWarshaw

Validating emotions is huge. When people have so much more information about their body and their #diabetes at their fingertips, they need help staying grounded---managing diabetes can be overwhelming for #PWD. @Type2andYouCDE

Embrace, embrace, embrace digital tools! These just may be the little bit of motivation, organization, or support the PWD needs in their management. If you aren't comfortable w/ digital tools, find someone in the office who is. It can only enhance the relationship. @zsquaredmama



@DebGreenwood et al. found effective tech-enabled diabetes self-management education & support (TES) all have 4 components: PWD-generated data, individualized ed, tailored feedback and 2-way communication. What advice do you have for HCPs new to the TES model?

Learn more about the TES model from @debgreenwood in the @LifescanDI on-demand webinar "Diabetes Digital Health to Support Patient Behavior Change." View it here: <https://t.co/ecncNiVRb8>. @HopeWarshaw

Try it yourself. It helps to be able to understand the TES model and the benefits that PWD can have when you see first-hand what the PWD is using. @zsquaredmama

Pay particular attention to aspects that we are less familiar with integrating into our care paradigm: Patient generated Health Data and Two-way Communication. These two aspects can help individualize and progress therapy. @HopeWarshaw

First point: tech-enabled diabetes self-management education & support (TES) is here to STAY! Jump in get your hands on the technology & explore! If you can use your smart phone & post email you can use anything tech-enabled. @StarlinRPh

Be open to the tech the PWD is trying or wants to try. What works for you in the office may be a barrier to the PWD. There isn't just one way to manage diabetes. The same can be said about the use of digital tools in diabetes management. @zsquaredmama

Network with industry representatives to expose yourself to their devices, and apps. Use DANA Tech website if you have access. Pool Diabetes Care & Education Specialists together to host a "Digital Device Petting Zool!" @StarlinRPh

I'm such a fan of tech-enabled #diabetes management education & support. Especially so we can deliver it at all key stages of life w/ diabetes or prediabetes. At diagnosis, when not meeting targets, during complicating factors/events, when access to care changes. @KellyRawlings

There's increased demand for #diabetes care and education services outside of the traditional siloed diabetes self-management education support (DSMES) services. For those new to the space, training needed to integrate these tools & resources into practice. @susangweiner

Support feelings/emotions. PWD have so much more info and data about their diabetes and their bodies that it can be overwhelming. We have to help them with that piece. @Type2andYouCDE



The promise of diabetes digital health includes remote patient monitoring (RPM), virtual coaching, & engaging with PWD clients b/w in-person visits. How much of this promise do you see being realized today?



I definitely hear more HCPs talk about the promise of being able to deliver services using Remote Patient Monitoring (and get coverage for it). Here's a link to a useful article: <https://t.co/CkVuDBHkMG> @HopeWarshaw

What I hear is Medicare is adding even more codes and there may be better coverage in 2020 for delivering services using Remote Patient Monitoring. Learn more from @CMSgov here: <https://t.co/UfyqXdwhZ1> (The 2020 PFS). It's so ideal for #diabetes care @HopeWarshaw

Consider potential barriers around remote monitoring. Person may lack confidence in their ability to properly utilize new #technology. Collaboration on new tech & active listening on the part of the HCP is essential coaching. @susangweiner

The VA in our area uses remote patient monitoring and it is invaluable b/c we are a rural area. Without public transportation many people have a hard time getting to multiple appointments. I really wish this RPM was used more. I think it would help cut down on hospitalizations. @zsqquaredmama

We have to foster extrinsic and intrinsic motivation and value from the experience. Would like to see more "what's in it for me" (as a PWD) instead of just being a less expensive PWD for my health plan or employer. @KellyRawlings

Pharmacists who work with #PWD remotely & communicate need for in person visit/home visit-using smart phone apps & online person-centered platform to close the gap of care & improve communications between PCP visits. @StarlinRPh

Demand will force supply. Few reasons: conveniences, decrease travel time (distance, congestion), comfort using tech (digital natives), capabilities of tech, etc., is going to push Remote Patient Monitoring. Superb model for #diabetes care delivery. @HopeWarshaw

Engaging primary HCP to specialist HCP, not just HCP to patient, via digital is so important! Look at ripple effects of Project Echo (<https://echo.unm.edu/>), getting better care to communities. This is the way we'll get geographic parity in health care. @KellyRawlings

Remote Patient Monitoring (RPM), virtual coaching, & engaging #PWD where they are is an exciting way to deliver diabetes care and education. We are starting to see this in practice. More frequent and timely contact is key to better outcomes! @dawnnoe2

Personally, I think we should change the name Remote Patient Monitoring to Anytime Engagement! @KellyRawlings



@diaTribeNews notes, “Diabetes is screaming for #digitalhealth...the key is limiting burden & cost, providing more valuable data & using data to drive better outcomes.” Thinking outside the box, how can HCPs deliver more optimal diabetes care?

Listen to @debgreenwood @LifescanDI on-demand webinar “Diabetes Digital Health to Support Patient Behavior Change.” View it here: <https://www.lifescandiabetesinstitute.com/webinar/technology-and-emerging-science>. She speaks pointedly to the burdensome daily work of living with #diabetes. @HopeWarshaw

Having the ability to interface/download data from diabetes apps and devices with EHR to maximize effective time with people with diabetes. Nirvana! @lorenadrago

We all want less burden in health care, right? For clinicians, for patients. AI = Augmented intelligence, not artificial. @KellyRawlings

Help people solve what they perceive as their biggest care burden(s). Reminds me of Dr. William Polonsky’s favorite question to ask clients: What bugs you the most about managing #diabetes? Address what bugs a person the most first! Check out this Polonsky @LifescanDI webinar, Engaging the Disengaged here: <https://www.lifescandiabetesinstitute.com/webinar/behavior-change>. @HopeWarshaw

In the UK, they have a digital formulary and apps within their EMR. Just that step demonstrated increased prescriptions of apps by HCPs by 54%. @LaurieannScher

As we move towards value-based care, healthcare systems will use digital health to deliver the right care, at the right time, to the right person. This will improve care & potentially reduce costs. @susangweiner

Minimize therapeutic inertia! Help a client get to their clinical goals as quickly and safely as possible. Become familiar with @amdiabetesasn efforts to Overcoming Therapeutic Inertia. Learn more here: <https://professional.diabetes.org/meeting/other/overcoming-therapeutic-inertia>. @HopeWarshaw

Technology may help #PWD live healthier lives by improving control of their diabetes, engaging them in their self-care & feeling empowered in the process, while always having support system in place. @StarlinRPh

This might be very simplistic but it is as simple to ask, “what do you want” and how long do you want to try this? Also, make sure people know the value of using the tools and what positive impact it will have in their lives. Ongoing support is key. @lorenadrago

It’s critical that as we help to integrate digital health tools into our client’s life/lifestyle that we make sure these reduce burden rather than adding to it. @HopeWarshaw



What excites you the most about the future of #diabetes #digitalhealth tools in the delivery of diabetes care and implementation of self-care?

Excited about the potential of creating collaborative consumer-centric experiences with tools around real human #behavior. We need to embrace technology and digital tools, while always engaging each person as an individual, never as a disease. @susangweiner

The ability to individualize and integrate #diabetes #digitalhealth tools with people and use remote patient monitoring to create an ecosystem that delivers quality outcomes, less patient burden. @HopeWarshaw

Also excited about building digital systems which are consumer-centric. Making sure that these systems are always available, 24/7/365, because people with chronic conditions don't get a day off. @susangweiner

I suggest reading this editorial by David Klonoff and Dr. David Kerr (@godiabeteMD) in Diabetes Technology and Therapeutics Journal. "New Opportunities for Digital Health to Thrive." Here's the link: <https://journals.sagepub.com/doi/full/10.1177/1932296818822215>. @HopeWarshaw

I'm looking forward to when the concept of apps is understood and our focus is "just" on tracking, learning new behaviors, or skills. @LaurieannScher

Digital technologies are interoperable with EHR. This will improve usability for #PWD. Safety to prevent data breach. Increase accuracy of tools. @lorenadrago

There is so much still to explore. Really, really need clinicians to be involved w/ the tech geniuses for innovation. How will YOU use your wisdom & creativity in clinical care to enrich. @KellyRawlings

Technology constantly evolving-by connecting sensors, wearables & apps, it's possible to pool & leverage data innovatively to provide timely interventions for #PWD to be independent & effectively self-manage. @StarlinRPh

Digital health tools that are more user friendly for aging population, accurate and data safe. @lorenadrago

