MEDICAL DEVICES & DIAGNOSTICS PULSE SURVEY DIABETES

April 2020





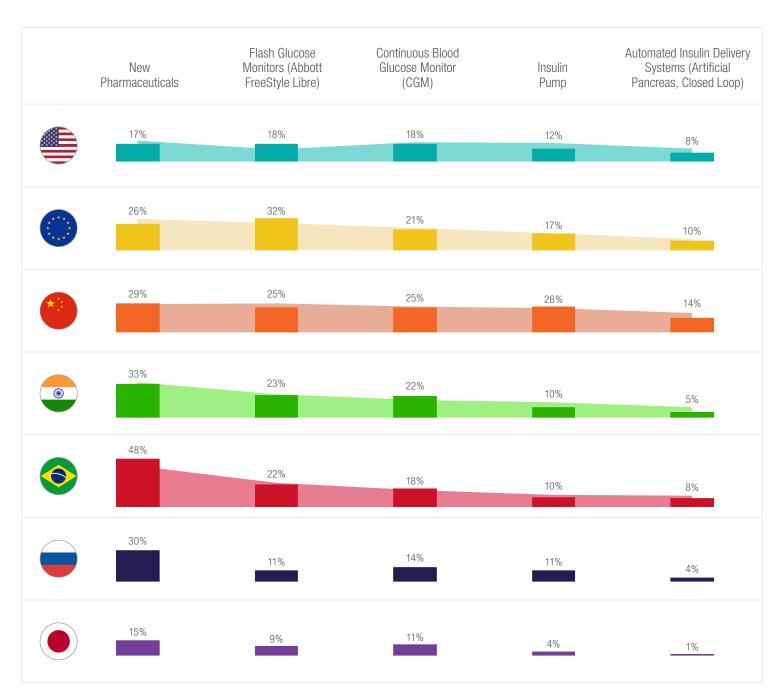


● USA ● EUROPE ● CHINA ● INDIA ● BRAZIL ● RUSSIA ● JAPAN

To what extent are patients requesting information on specific treatments/technologies?

New pharmaceuticals are still the most asked about topic from diabetes patients in all markets apart from Europe. Flash Glucose Monitors are also widely asked about especially in Europe (especially so in France and Italy), much less so in Russia and Japan.

> % patients in 2018 % patients in 2020







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What are patients' biggest concerns?

Damage caused by diabetes is the highest patient concern in most countries followed by high blood glucose, then fear of getting worse — all especially so in Japan. India has the highest reported fear of needles (higher than the fear of getting worse or damage caused by diabetes) and USA the highest concern about losing weight.

Showing % of endocrinologists who rated concerns as top 3







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Which tasks are most important for the diabetes nurse?

Delivering education on device use, disease and complications as well as lifestyle advice are seen as the most crucial roles of the nurse. In China and Russia, they are also relied on for admin duties and in India for logistical organisation. They are not expected to make treatment recommendations.

Showing % of endocrinologists rating 6 or 7 out of 7

Most important		0%	20%	40%	60%	80%	100%
4	Education: how to use devices						
	Education: diabetes disease						
	Lifestyle advice (diet/exercise)						
	Education: complications & damage						
	Admin duties: patient records						
	Logistical organization						
	Making clinical workflow efficient		•		• •		
	Recommendations on model of BGM						
	Recommendations on treatment						

How Important are attributes when evaluating BGM brand?

Accuracy measured by proximity to lab results is the most important feature, followed by cost of strips, especially in India and Russia. False positive rates are important in all markets, except Japan, and reuse of strips is most important in India. Look and feel of the device is the least important attribute.

Showing % of endocrinologists rating 6 or 7 out of 7 Most important

t important		0%	20%	40%	60%	80%	100%
	Accuracy: proximity to lab results						
	Cost of test strips						
	Usability: ease of patient use						
	Accuracy: false positive rates				•		
	Features: reuse same strip if not enough blood						
	Quality: reputation of manuf.		•	•			
	Features: visual indicators high/low/OK)	
	Digital apps: sync with device to track data						
	Quality: country of manufacture		• •				
	Look & feel: unique/sleek design						

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Which are the most recommended blood glucose meter brands?

Overall, the most recommended brand is Accu-Check from Roche, particularly in Brazil and India, and this has dropped significantly in Europe in favor of increasing recommendations of Freestyle Libre, which is also the most highly recommended brand in Japan. OneTouch by J&J is most highly recommended in USA and Russia. USA has the lowest rate of specific brand recommendation from endocrinologists.

*% of respondents who recommend a brand of blood glucose meter at all





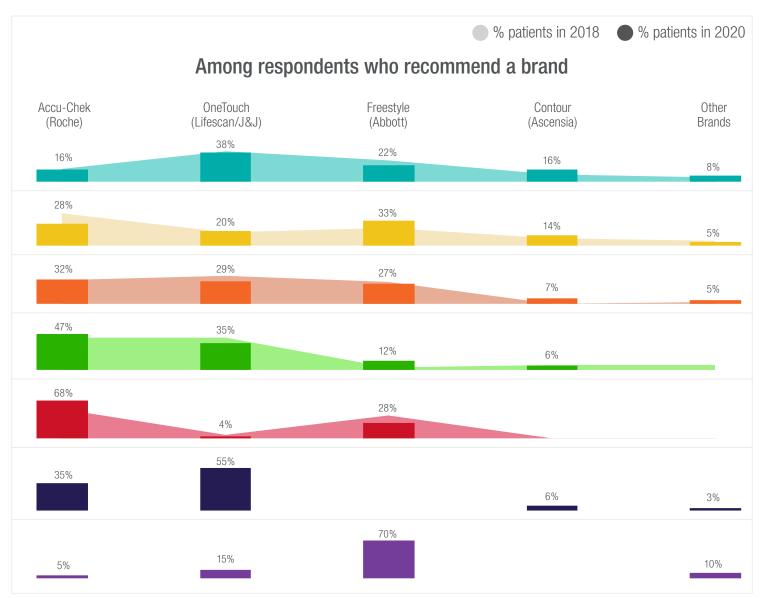












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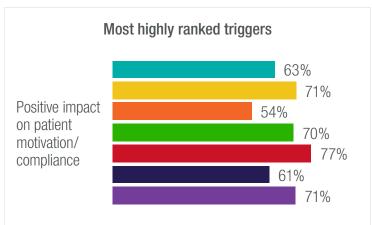


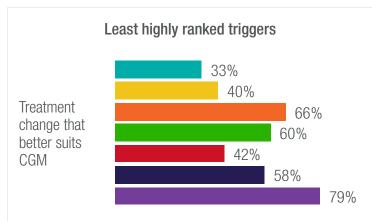
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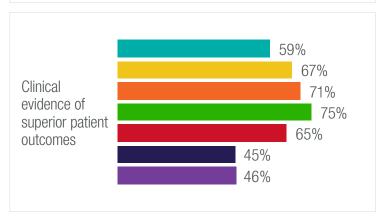
Which are the most common triggers to prescribe CGM?

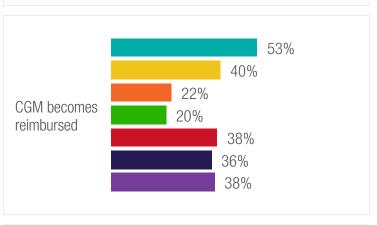
Positive impact on compliance is most compelling to prescribe CGM, followed by clinical evidence of superior outcomes, then quality of data and insights. However, in Japan and China, a treatment change that better suits CGM is also a common trigger. Patient request is relatively rare, except in Russia and Japan.

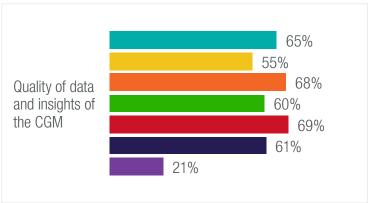
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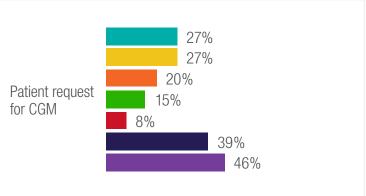














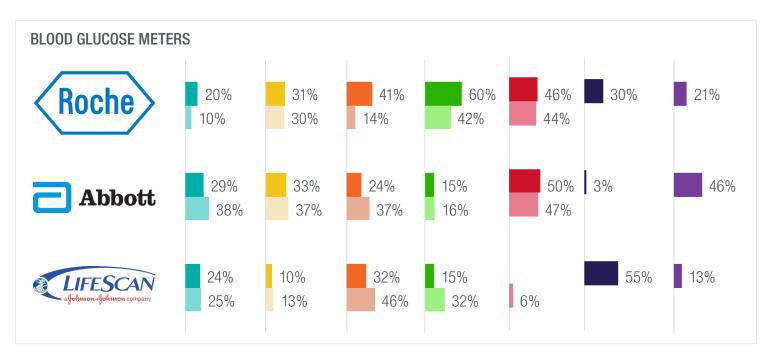


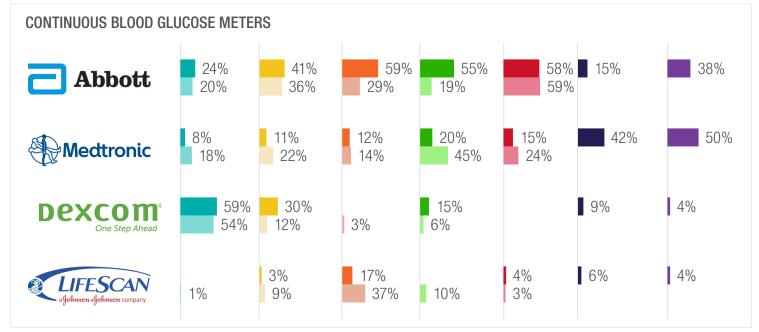
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Who is the most innovative manufacturer in Diabetes? (Blood Glucose Meters)

Roche is increasingly being viewed as the most innovative in the BGM sector along side Abbott then J&J. Abbott leads the way for CGM with some competition from Medtronic in Russia & Japan and Dexcom in USA and EU.

% endocrinologists in 2018
% endocrinologists in 2020







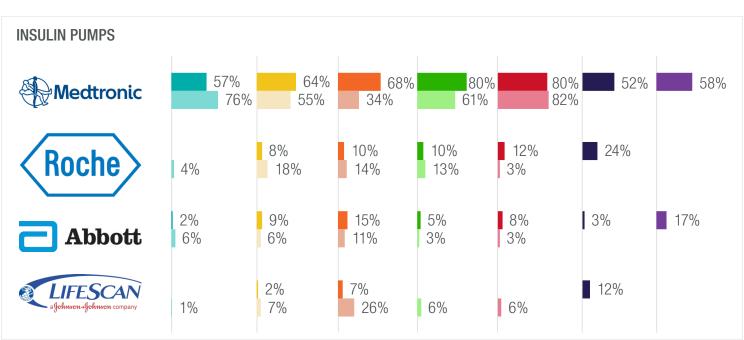


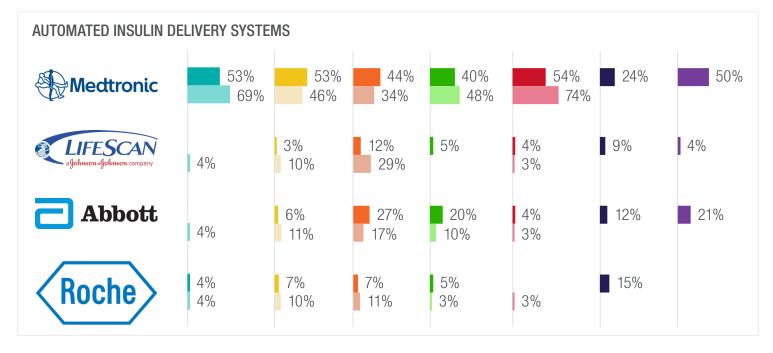
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Who is the most innovative manufacturer in Diabetes? (Insulin Delivery)

Medtronic still dominates the field in insulin pump and automated insulin delivery systems.







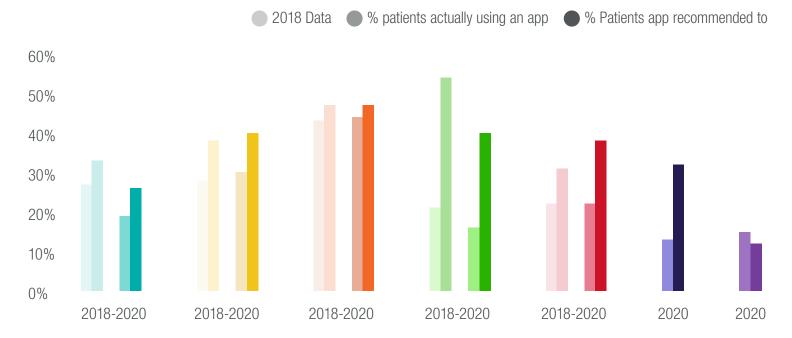






How many patients do endocrinologists recommend to use an app vs. how many actually use an app?

China still has the highest proportion of patients getting app recommendations and also using apps to manage diabetes. Despite high recommendation levels, the uptake in India is amongst the lowest – alongside Russia and Japan. Recommendation and use has grown slightly in Europe and Brazil but has decreased in USA and India.



Additional insights

- It is an established fact that diabetes is a complex disease to manage, as many factors impact outcomes. The growing use of CGMs and digital health solutions will continue to increase, particularly in diabetes, as the ability to provide insights on each of those factors will help determine most effective solutions, which leads to better disease management at both the individual and population health levels.
- Given the current COVID-19 situation, digital health is on the verge of a breakthrough. The use of digital health solutions, particularly telemedicine and remote patient monitoring, will necessitate healthcare providers to become more comfortable with available technologies. At present, this is especially true as they manage their high-risk patients, including those with diabetes. After the COVID-19 situation settles, the push to use digital health solutions can lead to a shorter adoption cycle of future technologies including those used for diabetes, assuming certain limitations (e.g. security, interoperability, etc.) are addressed.
- One thing to keep in mind is as more data become available, it is important to understand the needs of different end users.

 Those using diabetes data to analyse population health will need very granular data whereas healthcare professionals treating patients will need trends and insights that they can easily share with their patients on an individual level.

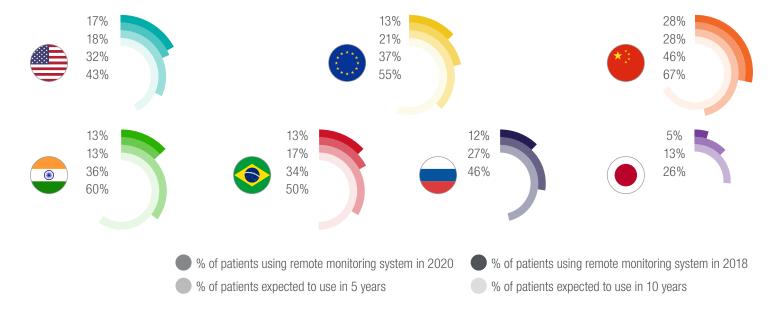




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How many patients are using remote monitoring systems past, present and future?

The proportion of patients who are using remote monitoring systems are rapidly increasing and are expected to continue to do so especially in China, Europe and India. Lowest previous, current and expected future uptake is in Japan.



How impactful are digital applications for diabetes?

Data tracking and pattern detection and medication compliance are the most impactful benefits more so in Russia, India and China and least so in Japan. Exercise and nutrition advice have the lowest relative impact, perhaps as other apps are also used for these purposes.

Showing % of endocrinologists rating 6 or 7 out of 7

Most important		0%	20%	40%	60%	80%	100%
	Data tracking & pattern detection						
	Compliance to medication						
	Multi-data analysis						
	Patient engagement						
	Compliance to BGM use						
	Communication with Doctors						
	Medication reminders						
	Disease education						
	Nutrition advice						
	Exercise advice		(1				

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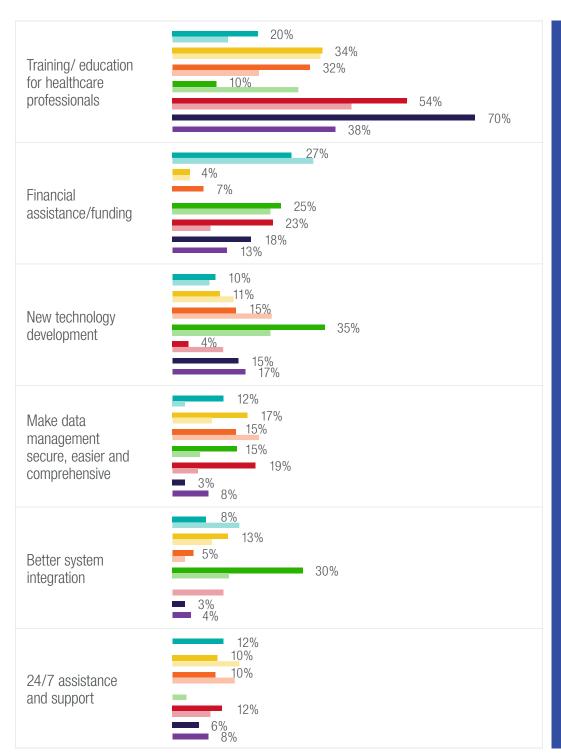




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What additional support should diabetes device manufacturers provide to physicians?

% patients in 2018
% patients in 2020



Key findings: Training/ education for HCPs is still the most important support, especially in Russia and Brazil. New technology development is widely welcomed, especially in India.

Training/education for HCPs:

 Educational resources for professionals – on software, data, device

Financial assistance/funding:

- Lower cost of test strips/device or make it free
- Rebates, coupons, financial support

New technology development:

- Improve accuracy of results
- Extra features, i.e. recommend insulin dosage

Make data management secure, easier and comprehensive:

- Integration of data from different devices into one platform
- More complete/quality data

Better system integration:

• System compatibility with other programs i.e. phone apps

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From strategic research & consulting through commercial execution



For more information on MD&D market research and data from this survey, please contact us at:

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Operating in over 50 countries, our 1000+ healthcare experts support key business decisions for our clients throughout the commercial lifecycle – from early-stage strategy, through to product launch and performance optimisation. We do this through a uniquely integrated combination of therapeutic, market, analytical and commercial expertise, as well as gold standard, proprietary real-world evidence.



Early Development

Market mapping/ landscaping

- Assessment of unmet needs
- Regulatory environment
- Competitor landscape
- Current practice
- Patient pathways

Opportunity assessment & Identification

- Market sizing & forecasting
- Market segmentation



Late development

New product design & development

- Innovation workshops with R&D, marketing & customers to generate new ideas
- Fine-tuning existing concepts

Concept testing

- Pricing & value assessment
- Human factors/ usability testing
- Conjoint analysis of best features/value per feature



Launch

Launch strategy

- Message/positioning testing
- Price optimisation
- Value proposition/story refinement
- Engagement strategies
- Preferred marketing channels
- Target identification



Post-launch

Brand health tracking

- Advertising and messaging effectiveness
- Brand equity
- Sales force effectiveness
- Awareness & usage

Customer experience/ satisfaction

- Customer loyalty
- Value optimisation strategies



Portfolio management

Next-gen/upgrade strategies

- Assessment of unmet needs
- Identification of gaps in a portfolio

Portfolio (merger) management

- Optimisation of existing portfolio
- Risk of cannibalisation of new product design or merging of two company portfolios
- Rebranding effect in case of company mergers



How can SERMO RealTime benefit my business?



- SERMO RealTime (a digital HCP-only rapid research tool) provides a valuable add-on to traditional research methods to gather almost instant and affordable insights in today's fast-paced environment
- SERMO RealTime can be used for multiple purposes, including:
 - refining an upcoming study design
 - supporting ongoing business decisions
 - checking on brand messaging and/or visuals
 - tracking market trends
 - analysing general sentiment pre-and post-campaign
 - supporting a workshop discussion

How does it work?

- Questionnaires can be scripted & launched in 24-48 hrs (upper band for translations)
- Depending on the target sample respondent & size, surveys can be in field for 1-5 days **76% of all pulse surveys complete** in under 5 hours
- Questions are fielded online to a global panel of 1.8 million HCPs, covering 40+ specialities from 30 countries, including: US, Europe (15 markets), Mexico, Brazil, Argentina, Turkey, Russia and APAC (seven markets)
- Target lists can also be uploaded and panel matched
- Raw data is provided instantly in Excel, and in one to three days in PowerPoint
- Surveys can have up to 10 questions with two optional screener questions

SERMO – A leading global social network for physicians, where close to 800,000 fully-verified and licensed physicians from more than 150 countries talk real-world medicine, review what peers think of different treatment options-including ratings and comments on prescription drugs-collectively solve cases, respond to healthcare polls and earn honorarium from surveys. In 17 years, SERMO has become the world's largest healthcare professional (HCP) polling company. The SERMO research network is comprised of 1.8 million HCPs and includes 40 percent of the US physician population. Most of the 700,000 surveys SERMO conducts annually are among specialist physicians – over 70 percent of physician members are specialists.

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