

# AI-Based Decision Support System for Optimal Diabetes Treatment



RAYAN NICHOLSON

The interface on the monitor includes the following elements:

- endo.digital** logo and user information: Dr. April Smith, ID: 9863498357049582093859.
- DIABETES** section with vital signs:
  - blood pressure: 129/83
  - blood sugar level: 283 mg/dL
  - pulse: 95
- A line graph showing blood sugar levels over time.
- A **SCANNING** section with a facial recognition icon and a 'Dotz Scanner' interface.
- A **ANALYZING DATA ..** section showing a 3D wireframe model of a mobile phone and a stethoscope, with the text **insulin dose = 10 units**.
- A data table with columns for 'NAME', 'AGE', 'SEX', 'STATUS', 'TYPE', 'DATE', and 'TIME'.
- Navigation buttons for SYSTEM, CLOUD, SEARCH, and NETWORK.

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## about DreaMed.

We developed the world's first clinically-proven, FDA cleared, diabetes AI CDSS that significantly increases supply of expert endocrinologists' personalized advice for diabetes patients. Our AI literally emulates expert endocrinologists' personalized recommendations at a fraction of the cost. Our vision is to provide every person with diabetes personalized and expert level care when and where it's needed by applying advanced algorithms and analytics designed by the world's leading endocrinologists to all relevant patient data to deliver holistic treatment plan recommendations at the point of care and in between patient visits.

For more info:

🌐 website link: <https://dreamed-diabetes.com/>

✉ sales email: [sales@dreamed.ai](mailto:sales@dreamed.ai)

## an unacceptable reality.

Only 50% of diabetes patients meet their glucose goals <sup>(1)</sup>

People with diabetes consume massive amounts of system resources

• Medical expense	\$400 + Billion
• Hospital inpatient days	40 + Million
• Physician office visit	200 + Million
• ED visits	16 + Million
• Prescriptions	1 + Billion

Estimated annual resource consumption <sup>(2)</sup>

**20 Million people diagnosed with diabetes do not have access to an endocrinologist** <sup>(3)</sup>

**We close this gap.**

## solution overview.

AI driven clinical decision support system enabling **any** provider of diabetes care to deliver expert level treatment recommendations both in clinic and in between visits.

This platform is clinically proven, FDA cleared, and has been deployed at some of the leading institutions in the world.

The endo.digital platform recommendations are non-inferior to expert physicians (4)

## features and benefits.

A single device agnostic platform that supports the entire care pathway for all your patients

1

Diabetes device and health data uploader

One-stop-shop access to all patient device data

- Blood glucose meters
- Continuous glucose monitors
- Insulin pen/pump
- Meal log
- Physical activity (future)
- EMR inputs (future)

2

AI enhanced decision support

Expert level treatment recommendations in all care settings

- Type 1 pump users
- Type 1 & 2 insulin injections
- Type 2 non-insulin Rx (future)

3

Patient evaluation reports

Meaningful, all in one place, easy to use

- Ambulatory Glucose Profile (AGP), daily report, logbook report
- Insulin therapy recommendations
- Behavior tips
- Rx selection and dosing (future)
- Next treatment steps (future)

4

Patient app

Confidence for self care, remote access to expert care

- Provider approved treatment plans
- Provided initiated insulin bolus calculator
- Events diary

5

Workflow integration

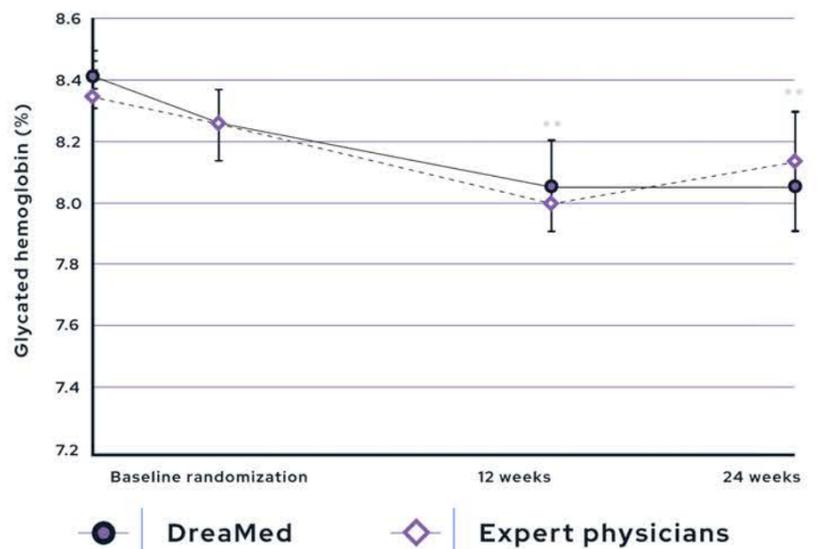
Seamless integration into your existing EMR workflow

- EMR workflow integration
- One click copy to EMR (out of the box)
- Click and send care plan to patient (out of box)

## clinically proven.

Study published September, 2020 in **Nature Medicine** demonstrated endo.digital was non-inferior in efficacy and safety to intensified clinical care provided by trained physicians (N=108) (4)

### Study participants



\*Nimri R et al, Nature Medicine, Vol 26(9), 2020 (N=108 patients)

A 3-month real-world analysis, presented at the **ATTD** in 2021, showed statistically significant clinical outcomes versus baseline (N=66) (5)

- >13% relative increase in target range (P=0.01)
- >13% relative decrease in high glucose values (P<0.01)
- >Significantly lower mean glucose (P<0.01)

## usability outcomes.

AI enhanced decision support is simple, reliable and safe

Physician satisfaction survey (5-scale score, N=18) (5)

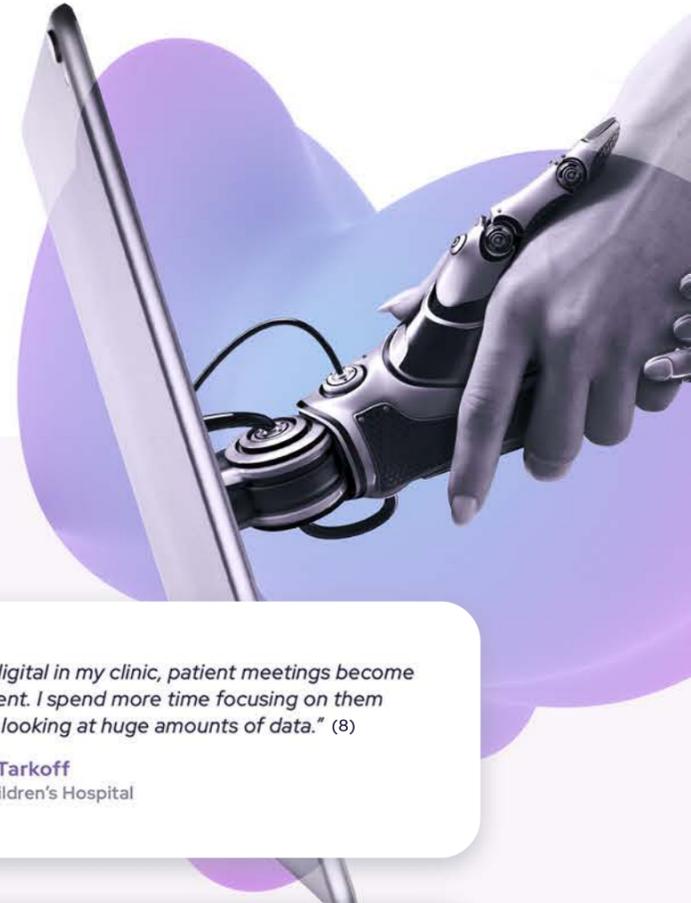


uploading data is much easier and faster

Medical assistant satisfaction survey (5 scale score, N=5) (6)

4 out of 5 medical assistants surveyed agree endo.digital

- Saves time.
- Compatible with more devices compared to previous solutions.
- Streamlines workflow.



## what people say.



*"endo.digital is an algorithm that indeed "thinks" like a diabetes expert." (7)*

Professor Stuart A. Weinzimer  
Yale School of Medicine



*"With endo.digital in my clinic, patient meetings become more efficient. I spend more time focusing on them rather than looking at huge amounts of data." (8)*

Dr. Joshua Tarkoff  
Nicklaus Children's Hospital



*"endo.digital has been a game-changer for my daughter's A1C! The algorithm has empowered us to analyze components available in the basal and bolus settings that seem to have been overlooked for years." (9)*

Dena Mccusker  
Mother of Cameron who is living with T1D

## opportunity for your organization.

Provide all people with diabetes access to expert level care when and where its needed

**Elevate and standardize** care across all patient touchpoints

**Improve A1c** and time in range (4)

**Reduce inpatient** days and ED visits (10)

**Reduce total cost** of care (10)

**Maximize reimbursement** for remote care (11)

\*endo.digital has been previously sold under the name Advisor Pro

1. CDC,National Diabetes Statistics Report,2020

2.Economic Costs of Diabetes in the U.S. in 2017,<https://care.diabetesjournals.org/content/41/5/917>;total resources consumed by patients with a diabetes diagnosis

3.Petersen MP,Diabetes Care,41(5):917-28,2018

4. Nimri R et al,Nature Medicine, 26(9), 2020

5.Nimri R, ATTD conference, 2021

6.Internal data,collected over 5 Medical Assistants from big pedatric endocrinology clinic,who is responsible to upload device data that used the endo.digital platform for 1 month

7.[https://www.healio.com/news/endocrinology/20200921/ai-based-decision-support-tool-optimizes-insulin-use-for-youths-with-type-1-diabetes?fbclid=IwAR3ih6dU-WT8pcx4QNkngUqlz417A9pn9bynwRrS-djDWZ9qTgZ6\\_xDM3hk](https://www.healio.com/news/endocrinology/20200921/ai-based-decision-support-tool-optimizes-insulin-use-for-youths-with-type-1-diabetes?fbclid=IwAR3ih6dU-WT8pcx4QNkngUqlz417A9pn9bynwRrS-djDWZ9qTgZ6_xDM3hk)

8.<https://asweetlife.org/dreamed-uses-ai-to-improve-diabetes-management/>

9.<https://beyondtype1.org/understanding-dreameds-tech/>

10.Whaley CM et al,J Med Econ 22(9),2019,~\$1056 per patient per year reduction in total cost of care for unit reduction in HbA1c.

11. Capturing reimbursement for procedures performed by the providers but currently not billed for in between clinic visits,such as:99453,99454,99457,99458,95251,G2010, G2250.