NOVEL MEDTRONIC TURNING POINT PROGRAM IMPROVES COMPLIANCE AND HBA1C IN AT-RISK PATIENTS WITH TYPE 1 OR TYPE 2 DIABETES

Ohad Cohen, MD, Medtronic, Northridge, CA, USA
Edward Dick, MD, Methodist Healthcare Ministries, San Antonio, TX, USA
Sherwyn Schwartz, MD, Diabetes One Stop, San Antonio, TX, USA
Jennifer Knoulton, RN, Methodist Healthcare Ministries, San Antonio, TX, USA
Chantal McMahon, PhD, Medtronic, Northridge, CA, USA

Introduction

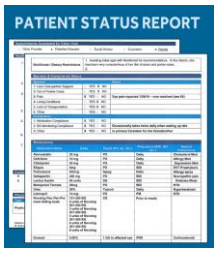
The Medtronic Turning Point (MTP) program is intended to help patients with uncontrolled diabetes by facilitating **patient engagement**, **remote monitoring** and **data-driven interventions**. The pilot program, in partnership with Methodist Health Ministries (San Antonio, TX), utilized **personalized coaching**, **technology** and **advanced analytics** to engage patients, coordinate care, stratify risk and target resources while following the patient's diabetes care plan and extending the physician's reach outside the clinical setting.

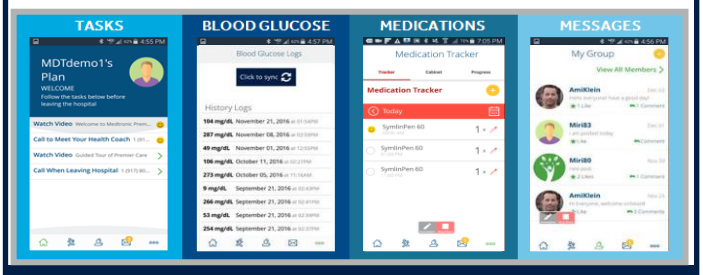
Program Characteristics

Goal Setting + Outcome Tracking:
- Clinical outcome: HbA1C

Patient Support:
- Patient self-management education
- MTP patient mobile application
- BG meter synched to patients' phones
- Reminders & monitoring w/intervention:
  - Blood sugar monitoring
  - Medications + Appointments

HCP Decision Support:
- "Patient Status Report" for PCP
- Clinical decision support algorithms (MDT proprietary)
- CGM (iPro 2®, Medtronic), as needed
- iPro Pattern Snapshot® with simplified insights for PCP





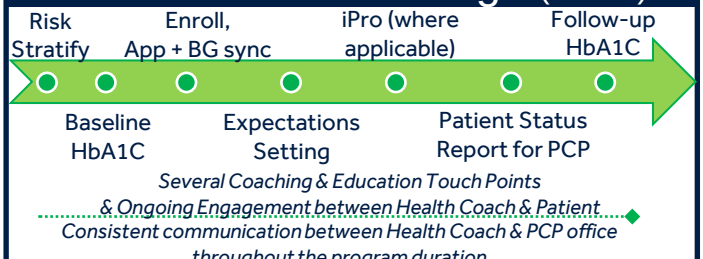
Methods & Pilot Design

Pilot Program Details	Partnership with Methodist Health Ministries
	6 month duration
	50 patients enrolled in pilot
Inclusion Criteria	Uncontrolled type 1 or 2 diabetes (HbA1C ≥ 8.5%)
	Age ≥ 18
	Willing to partake in self-care
Exclusion Criteria	Included terminal illness, cancer, dialysis, organ transplant, psychiatric disorders, drug addiction
Endpoints	HbA1C (Primary)
	Blood sugar monitoring (SMBG)
	Task + educational adherence

50 enrolled → 2 Exclusion, 1 mental, 1 drug use + Rx changes; 9 Dropout/ Unresponsive <30 days; 4 Dropout After 30 days and Before Follow-up A1C → **35 completed**

15 patients exited pilot before 2nd HbA1C

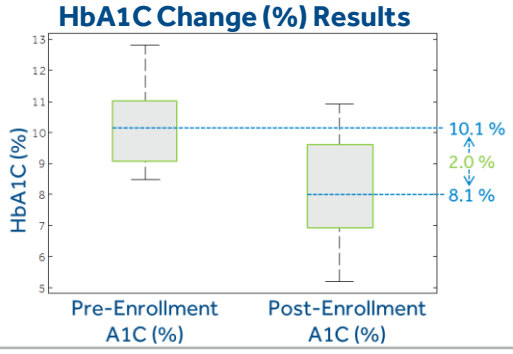
Methods & Pilot Design (contd.)



Pilot Cohort Characteristics (n=35 completed)	Age	51±9 years old
	Gender	29%/71% (M/F)
	Diabetes Type	97% Type 2
	Insulin Users	75%
	Race / Ethnicity	100% Hispanic

Results In Completed Group

HbA1C Change (%) Results



N=35	**Mean ± SD**	**Median [25th- 75th]**
Baseline HbA1C	10.1±1.1%	9.9% [9.2 - 10.9]
Follow-up HbA1C [taken at 5.1±1.8 mo]	8.1±1.5%	7.7% [7.2 – 9.5]
HbA1C Change	-2.0±1.9%	-1.8% [-3.4-0.9]
83% saw improvement in HbA1C (p<0.001)		

Patient Engagement & Adherence Statistics	70%	Program retention
	3.4±2.3	Mean weekly interactions/patient
	4	Mean HP-clinic communication per patient
	80%	Pts viewed educational material
	73%	BG compliance
	1.7±0.8	Mean BG Frequency per day

Conclusions

1. The Medtronic Turning Point pilot program results show a **significant improvement in HbA1C**
2. This comprehensive program uses:
   a) Patient **comprehensive mobile app**, **connected devices & biometric sensors**, **health coach support** & **diabetes education** for the **patient**
   b) Data, insights & decision support for the **PCPs**
3. **Program expansion** to include other health metrics and greater population base

Advanced Technologies and Treatments for Diabetes | February 15-18, 2017 | Paris, France

Medtronic
Further, Together