PATH is software to help physicians improve outcomes in patients with type 2 diabetes. PATH analyzes millions of potential treatment options in customized patient scenarios to find solutions most likely to succeed.

**Our Approach**

PATH can help physicians meet current and future challenges

- 300% growth in diabetes cases since 1980 and diagnosis rates up 227% \(^1\)
- 46 to 72 million adults potentially affected by 2050 \(^2\)
- Increasing shortage of clinical endocrinologists \(^3\)
- Complexity from new treatment options and insurance industry

**Challenges**

Growing Case Load

The number of U.S. adults with diabetes is estimated to double by 2050. Growth from:

- Aging population
- Demographic trends in high-risk groups
- Increasing life expectancy

Endocrinologist Shortage

The U.S. has half as many board-certified endocrinologists as it needs. Diabetes cases are growing faster than new MDs. Causes:

- Fewer training programs and fellowships
- Lower compensation and reimbursement rates
- Retirement and attrition

Increasing Complexity

- Hard to keep up with >60 common diabetes drugs
- Impossible to analyze >5000 multi-drug options in a moderately complex patient setting
- Even clinically straightforward patient scenarios may have complex insurer pricing that affects the patient's adherence and outcome.

AACE Comprehensive T2D Algorithm

The AACE algorithm prioritizes therapies by balancing a broad spectrum of risks, benefits, and impact on pathophysiology. Key principles include:

- Individualized A1C target based on factors such as age, comorbidities, allergies
- Minimize risk of hypoglycemia and weight gain
- Medication based on efficacy, MOA, administration, adherence, and more

PATH is the first Type 2 Diabetes decision support tool built with the core principles of AACE integrated with core values of patient access in mind.

**Results**

- **Average PATH therapy saves a projected $764/year vs most recent PCP therapy**
- **Projected A1c level of 6.2 vs 7.4 for most recent PCP therapy**
- **Composite risk benefit scoring showed 40.1% better results with PATH vs PCP**

Charts of 200 patients with Type 2 DM with HgbA1c >7 were analysed for patient characteristics and physician’s decision regarding therapy. Primary care physicians were ranked into 3 groups based on the average HgbA1c in their poorly controlled patients. The PATH software was applied to the pre-intervention patient and compared to the decisions made by the physicians.

**Study Outcome Estimates**

- **Balanced, Efficient, Aggressive**
- PATH technology recognizes the total disease state of DM2.
  - Larger # of meds/patient
  - 3.5 for PATH vs 2.2 for PCP
  - Favors weight friendly medications vs. PCP
  - SGLT (46.5% vs 23.5%)
  - GLP1 (19.1% vs. 6.5%)
  - Balances cost and physiology
  - Actos (38.5% vs 5.0%)
  - Side effects consider non-glucose related risks and benefits

**More Information**

Bradley Eilerman MD, MHI
medpeds@gmail.com
Leen Testa
len@tournigplans.com
PATH Website
www.glucosepath.com

**PATH Example Scenarios**

The AACE algorithm is strongest with a clear understanding of pharmacology and diabetes physiology. It may be challenging to use in a fast-paced office environment.

PATH is built on core principles very similar to AACE and designed to run quickly on an office’s existing equipment, including desktop PCs, tablets, and phones.

PATH displays a recommended course of therapy designed to reach a patient-specific A1C target. Among the factors that PATH considers in its recommendation are:

- **Cost**: Patient cost sensitivity, specific insurer coverage, coupons
- **Adherence**: Both historical and estimated future adherence
- **Mechanism of Action**: Complementary MOAs in combination therapies
- **Side effects**: Weight gain risk, hypoglycemia, beta cell preservation, more
- **Intolerances**: Physical, drug, and administration (e.g., injectables)
- **Comorbidities**: Both contraindications and beneficial side effects
- **Simplicity**: Prefers less complex regimens to boost adherence

PATH evaluates millions of therapy combinations against these factors - in about a minute.

PATH displays up to 5 different solutions, the most likely to succeed first, along with pros and cons of each solution.