

Case Study:**endo.digital Demonstrates 90% Clinical Agreement with Endocrinologists' Treatment Decisions****Background**

To evaluate clinical trust in automated insulin dosing recommendations, DreaMed conducted a real world data review comparing the endo.digital recommendations with those made by endocrinologists. The focus was to assess whether endo.digital could reliably match expert clinical decision-making in titrating insulin therapy for people with type one and type two diabetes.

Method

The study analyzed real-world insulin therapy decisions to determine the clinical equivalence between human and smart algorithmic recommendations. For each patient, endo.digital provided structured recommendations that were compared against provider judgment across various insulin components: basal, and bolus including carb ratio, and correction factor. Each value was evaluated independently across morning, afternoon, evening, and night. Clinical agreement was defined as alignment on the direction of insulin adjustment, allowing for a difference in magnitude not exceeding 20%. Categories for comparing the treatment recommendations were used as previously published by Bashan et al.¹

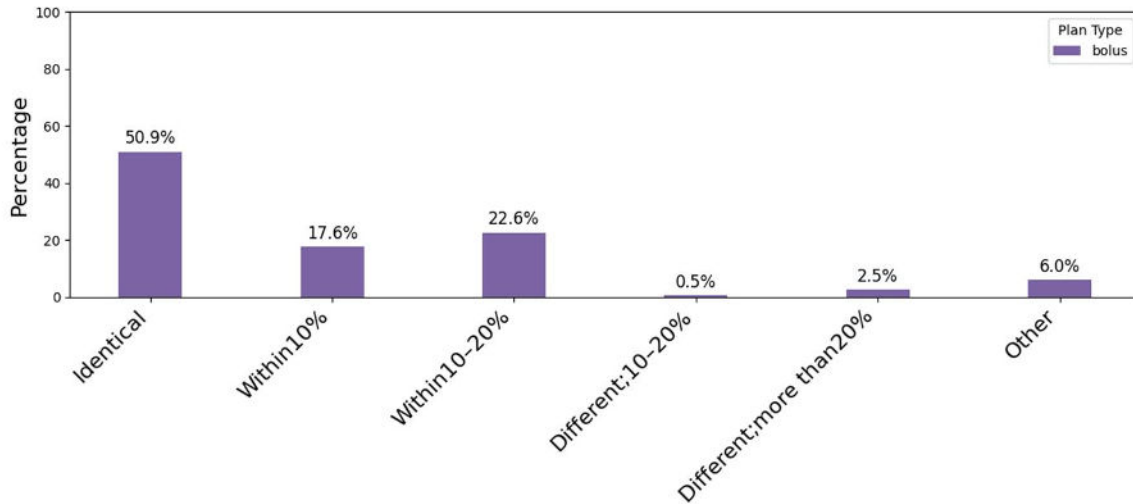
Key Metrics

Metric	Value
Total Recommendations	436
Unique Patients	246
Total Comparisons	7,395

- Each recommendation may include multiple comparisons across insulin types and timepoints
- Unique patient count reflects total individuals reviewed, each counted only once
- These comparisons were separated into basal insulin adjustments and bolus insulin adjustments, with the latter being further divided into carbohydrate ratios and correction factors, each evaluated up to four times daily.

Results:

In total, 90.8% of endo.digital’s recommendations were clinically equivalent to those of endocrinologists.



Provider Agreement Category	Description	% of Total
Identical	Same exact dose recommendation	Included in 90.8%
Within 10%	Provider made a change to the same direction as the algorithm recommended, with up to 10% difference.	Included in 90.8%
Within 10–20%	Provider made a change to the same direction as the algorithm recommended, with 10-20% difference.	Included in 90.8%
Different	Provider and the algorithm recommended changes in the opposite direction of >20%.	3%
Other	All other cases not complying with categories above.	6%

Clinical Interpretation

The study confirms high provider trust in endo.digital. In most cases, endocrinologists approved the recommendations without change, reinforcing the tool’s reliability in supporting insulin dosing decisions. The platform’s ability to break down insulin management into discrete, structured comparisons allows for both transparency and clinical alignment.

Conclusion

endo.digital enables expert-level care at scale. This case study highlights its ability to replicate clinical reasoning, reduce provider workload, and promote confidence in AI-supported diabetes management. With over 7,000 comparisons and a 90%+ approval rate, it is positioned as a transformative tool for diabetes care delivery.

References:

1. Bashan E, Herman WH, Hodish I. Are glucose readings sufficient to adjust insulin dosage? *Diabetes Technol Ther.* 2011 Jan;13(1):85-92. doi: 10.1089/dia.2010.0112. PMID: 21175277.