



Technology-based platforms could potentially improve engagement in diabetes education and health outcomes for people newly diagnosed with T2D.

BACKGROUND



- ~1.4 million new cases of diabetes are diagnosed each year in the United States, and 90-95% have type 2 diabetes (T2D).
- Diabetes self-management is essential for achieving optimal health outcomes.
- Diabetes educational programs equip people with diabetes with the necessary knowledge and skills for self-management.
- <10% of people newly diagnosed (nPWD) with diabetes participate in structured diabetes education in the first year of diagnosis.
- Technology-based platforms could potentially facilitate engagement in diabetes self-management behaviors.

PURPOSE

This study synthesized the current state of evidence on technology-based diabetes education and support programs focusing on nPWD (diagnosed ≤ 12 months).

METHODS

- The study utilized the Arksey and O'Malley framework for scoping reviews.

Table 1: Search strategy and inclusion criteria

Databases Used	Key Terms	Inclusion Criteria
<ul style="list-style-type: none"> PubMed CINAHL PSYCHINFO Cochrane library 	<ul style="list-style-type: none"> Type 2 diabetes Technology Diabetes education, lifestyle intervention Newly-diagnosed 	<ul style="list-style-type: none"> Peer-reviewed articles Studies utilizing technology for diabetes education focusing on nPWD Reports at least a clinical, behavioral or psychosocial outcome.

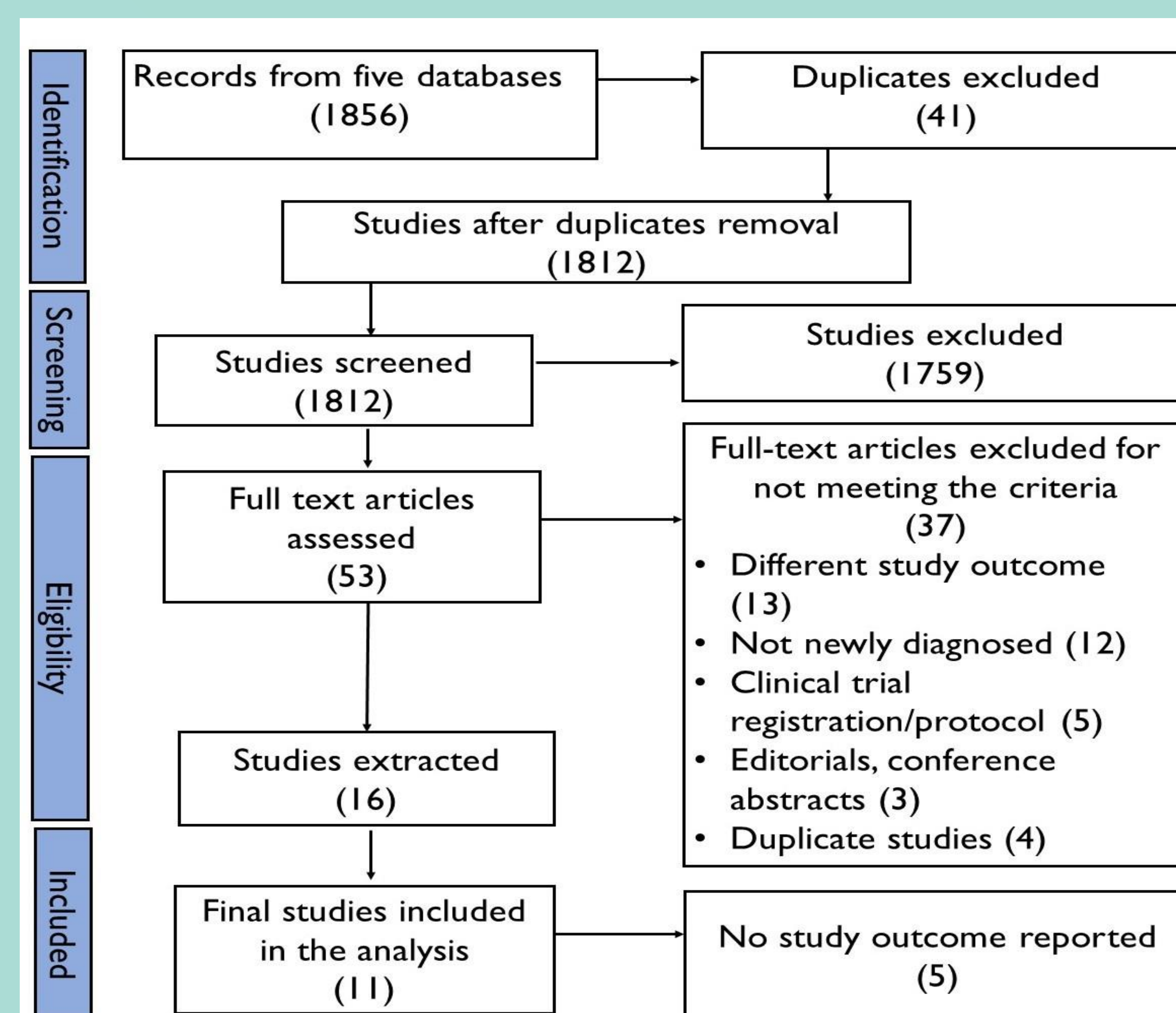


Figure 1: PRISMA diagram showing the study selection process

RESULTS

- 8 out of 11 studies were published in the past five years.
- Studies were widely distributed across 9 countries.
 - China, USA, Korea, Iraq, India, Israel, Canada, UK, and Taiwan.
- All the studies reported significant improvement in primary outcomes

Figure 2: Commonly used technology platforms



Table 2: Study Outcomes

Primary outcomes	No. of studies
A1c	8
Physical activity	1
Quality of life	1
Healthcare engagement	1

Table 3: Purposes of technology-based interventions

Intervention purposes	No. of studies
Blood glucose self-monitoring	3
Promotion of self-management behaviors	3
Patient education	2
Healthcare engagement	2
Patient support	1

CONCLUSION

- Technology-assisted diabetes education and support interventions focusing on nPWD are limited.
- Limitations in technology-based diabetes education and support interventions for nPWD include small sample sizes, less rigorous study designs, and short-term follow-up.

