The Direction of Diabetes Research: Lessons Since 2013 and Opportunities After 2020

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Background

Prevalence, Incidence
54% Increase by 2030

Cost
53% Increase by 2030

Disparity

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1. Reference 1
2. Reference 2
Purpose

1. Synthesize research aims and describe funding sources of diabetes research since 2013;

2. Inform opportunities for new directions in diabetes research beyond 2020
Records identified through database searching (n = 465)
Records identified through other sources (n = 0)
Records after duplicates removed (n = 465)
Records screened (n = 465)  Records excluded (n = 79)
Full-text articles assessed for eligibility (n = 386)  Full-text articles excluded, with reasons (n = 136)
Studies included in synthesis (n = 250)

Screening
Analytical Process

Qualitative
- Conventional Content Analysis
- Classified into one of five thematic areas

Quantitative
- Funding allocated to each concept
Quantitative Results

**NUMBER OF PROJECTS BY FUNDING SOURCE**

- National Institutes of Health: 138
- Centers for Disease Control: 7
- US Department of Veterans Affairs: 41
- Canadian Institute of Health Research: 14
- National Health and Medical Research Council, Australia: 8
- Agency for Healthcare Research and Quality: 14
- Patient-Centered Outcomes Research Institute: 19
- All others: 9

**FUNDING BY MILLIONS OF DOLLARS**

- National Institutes of Health: 133.6
- American Health Reform Agency (AHRQ): 4.4
- CDC: 4.5
- National Health and Medical Research Council, Australia: 5.8
- CIHR: 5.9
- PCORI: 40.2
- All others: 2.3

*The VA did not provide funding in dollars.*
Total funding 2013-2019: $196,859,863
Investment Disparity

Dollars Invested per Person with Diabetes per Year, 2013-2019

- $6 per person on research in the last five years;
- $9601 per person, per year, on management

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Qualitative Results

The Direction of Diabetes Research
Five Themes from Projects Funded 2013-2019

1. Social Determinants of Diabetes
   - How can we best close the disparities in diabetes incidence and management across socioeconomic statuses?

2. Technology and Diabetes
   - How can we leverage advancements in technology to improve the care of patients with diabetes?

3. Diabetes Management
   - What are innovative ways to improve the management of diabetes by influencing individual behavior?

4. Value-Based Care
   - How did the Affordable Care Act change the incentives and outcomes of diabetes management?

5. Clinical Diabetes
   - In what ways should clinical guidelines change in the context of advancements in practice?
Conclusions and Recommendations

Research has emphasized:
1. Innovating the use of technology to promote self-management of diabetes;
2. The ways that incentives have been shaped by the Affordable Care Act and thus affect diabetes management and access to care;
3. The best practices for clinical guidelines;
4. And the social disparities in diabetes.

Future research should:
1. Focus on engagement in prevention
2. Focus on community and national—as opposed to individual—context in prevention and treatment
3. Investigate increased disparities
References


Thank you!