

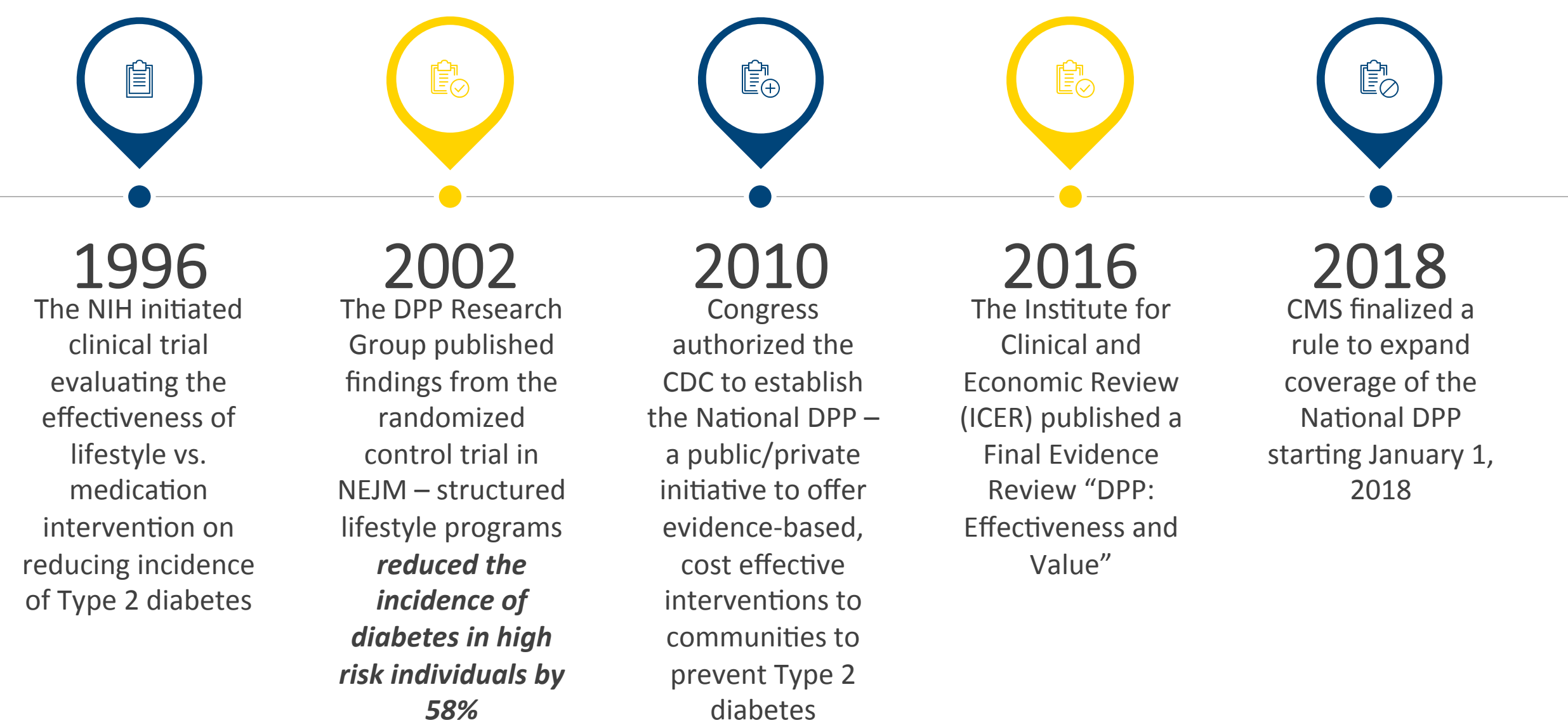


Patient-reported factors associated with improved motivation and retention in a diabetes prevention program hosted within a community pharmacy

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BACKGROUND

Diabetes Prevention Program (DPP):



- Multicenter clinical research study with interventions that involved:
 - Physical activity of at least 150 minutes per week
 - Weight loss of 5 to 7 percent of their body weight
- 10-year follow-up study (Diabetes Prevention Outcomes Study) showed participants were one-third less likely to develop Type 2 diabetes
- According to CDC, 84.1 million adults have prediabetes (33.9%)

Community pharmacy based DPP:

- Pennsylvania Pharmacists Association and PA Department of Health secured a grant to support twelve pharmacies in PA to implement DPP
- Limited literature regarding pharmacy-based weight-loss programs or diabetes prevention programs in the United states
- Limited data on patient motivation and retention within national diabetes prevention programs

OBJECTIVE

To describe the themes from participants in diabetes prevention programs that motivated them to join and why they did or did not attend at least 80% of meetings

Specific Aims

- To gather information from participants across Pennsylvania, who participated in a diabetes prevention program, about what motivated them to attend in the community pharmacy setting and determine what encourages participant retention
- To determine from the Pennsylvania Pharmacists’ Association, based on the pharmacist’s report to the state organization, how many participants achieved the 7% weight loss goal and 80% attendance of the DPP program

METHODS

Design	• Qualitative, cross-sectional, semi-structured phone interviews
Inclusion Criteria	• Patients will be included in the study if they are >18 years old, English speaking, and attended at least 2 diabetes prevention program classes at a community pharmacy
Community Locations	• Community pharmacies participating in the DPP Pennsylvania Pharmacists Association and PA Department of Health grant (12 grocery or independent pharmacies)
Recruitment Strategy	<ul style="list-style-type: none"> Pharmacies with established relationships with patients were mailed flyers to distribute to DPP participants Contained a link for participants to enter name and phone number to consent to a phone interview Participants that completed the interview were offered a \$25 Amazon gift card Interviews were audio recorded and continued until data saturation
Data Analysis	<ul style="list-style-type: none"> Audio-recordings will be transcribed and analyzed for themes Patient demographic data will be analyzed using descriptive statistics Coding scheme was developed based on the three HIMSS domains to identify common themes Research team will meet to discuss content of coded interviews and collectively agree on themes

SEMI-STRUCTURED INTERVIEW QUESTIONS

- Interview questions were constructed from three domains of patient engagement adopted from the Healthcare Information and Management Systems Society (HIMSS)
- Colleagues experienced in qualitative research reviewed the interview questions and they were pilot tested with individuals similar to those that were studied

Table 1. Semi-Structured Interview Questions and HIMSS Patient-Engagement Domain

Domain 1: Informing Patients	<input type="checkbox"/> How did you learn about the diabetes prevention program at your community pharmacy? <input type="checkbox"/> How did you receive information about this program? How did that work for you? <input type="checkbox"/> What ultimately led to your decision to join the diabetes prevention program?
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Table 1 (continued). Semi-Structured Interview Questions and HIMSS Patient-Engagement Domain

Domain 2: Engaging Patients	<input type="checkbox"/> How would you describe your experiences thus far in the program? <input type="checkbox"/> Did you achieve weight loss? <input type="checkbox"/> If yes→What was it about the program that helped you achieve your weight loss? Probe about engagement (i.e. tell me about how the program leader engaged you...). <input type="checkbox"/> If no→ what are your thoughts of what could have been done differently to help you achieve your goal? <input type="checkbox"/> What aspects of this program worked for you? <input type="checkbox"/> What else have you tried to lose weight? <input type="checkbox"/> Did you encounter any barriers to reaching your goals? How did you overcome them? What aspects of the program were valuable in keeping you engaged? (e.g.: cooking classes, nutrition label reading, fitness wearable, social time, nutrition tracker, fitness group, calorie king, etc) <input type="checkbox"/> What thought did you have before the first day that this program has changed?
Domain 3: Empowering Patients	<input type="checkbox"/> How many sessions have you attended vs. how many have been offered? <input type="checkbox"/> On a scale of 1 to 5, 1 being not at all motivated and 5 being highly motivated, can you describe your motivation level with this program? <input type="checkbox"/> There are people who do not complete this program. Why do you think people do not complete the program? <input type="checkbox"/> What are your thoughts on the effect of participating in the DPP as a group setting? <input type="checkbox"/> Probe: Tell me about your experience with the community support aspect?

PRELIMINARY RESULTS

- From February 2019 to March 2019, twenty-four patients, representing nine different community pharmacies across Pennsylvania were interviewed
- There are an additional four interviews scheduled to occur during April 2019
- All interviews have been transcribed and reviewed by two different sources (Nvivo Transcription and a study team member)

REFERENCES

- Pharmacies: Improving health, reducing costs. National Association of Chain Drug Stores website. <https://www.nacds.org/pdfs/pr/2011/PrinciplesOfHealthcare.pdf>. Accessed September 21, 2018.
- 2018 Update-The complexities of physician supply and demand: projections from 2016 to 2030. Association of American Medical Colleges website. https://aamc-black.global.ssl.fastly.net/production/media/filer_public/85/d7/85d7b689-f417-4a4b-97fbec129836829/aaacm_2018_workforce_projections_update_april_11_2018.pdf. Accessed September 21, 2018.
- National diabetes prevention program. Centers for Disease Control and Prevention website. <https://www.cdc.gov/diabetes/prevention/prediabetes-type2/index.html>. Accessed September 21, 2018.
- Diabetes prevention program (DPP). National Institute of Health website. <https://www.niddk.nih.gov/about-niddk/research-wilkes-university-irb-application-2010-revised-march-2015-page-4-areas/diabetes/diabetes-prevention-program-dpp>. Accessed September 21, 2018.
- Expanded medicare diabetes prevention program begins april 1: what physicians should know. Pennsylvania Medical Society website. <https://www.pamedsoc.org/detail/article/medicare-diabetes-prevention-program>. Accessed September 21, 2018.
- Boardman HE, Avery AJ. Effectiveness of a community pharmacy weight management programme. Int J Clin Pharm. 2014;36(4):800-6.
- Giberson S, Yoder S, Lee MP. Improving Patient and Health System Outcomes through Advanced Pharmacy Practice. A Report to the U.S. Surgeon General. Office of the Chief Pharmacist. U.S. Public Health Service. Dec 2011.
- Patient Engagement Framework. Healthcare Information and Management Systems (HIMSS) Foundation website. https://www.himss.org/sites/himssorg/files/HIMSSorg/NEHCLibrary/HIMSSFoundation_Patient_Engagement_Framework.pdf. Accessed September 21, 2018.
- Diabetes Home. Centers for Disease Control and Prevention website. <https://www.cdc.gov/diabetes/data/center/slides.html>. Accessed April 18, 2019.

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