# National Diabetes Prevention Program Virginia Assessment: $Methodology\ Report$

**August 2022** 

# About this Study

On behalf of the Virginia Department of Health and in partnership with the Virginia Center for Diabetes Prevention and Education, the Weldon Cooper Center's Center for Survey Research (CSR) conducted a study to assess National Diabetes Prevention Program Lifestyle Change Programs (DPP) across Virginia with respect to retention, referral, and recruitment. This multiphase study was composed of three separate surveys, with data collection beginning in February 2021 for Phase I and concluding in January 2022 for Phase III.

Questions may be directed to the Center for Survey Research, P.O. Box 400767, Charlottesville Virginia 22904-4767. CSR also may be reached by phone at 434-243-5232 or email at <a href="mailto:surveys@virginia.edu">surveys@virginia.edu</a>.

# I. Retention Survey Methodology

### **About the Study Phase**

Current and past Virginia-based National DPP participants were surveyed to identify barriers and preferences related to enrollment and completion of the program. All communications and data collection were conducted online.

### Sample

The target population was current and past participants in National Diabetes Prevention Programs (National DPPs) in Virginia. Past participants were limited to individuals who had enrolled in a program within the last three years, but they were not required to have completed the program to participate in the survey.

The resulting sample was a non-probability sample. CSR did not directly recruit or communicate with respondents, but instead worked with lifestyle coaches to contact participants by email. Anne Wolf from the Virginia Center for Diabetes Prevention provided the list of lifestyle coaches, which was comprehensive of all active centers in Virginia. From this list, 18 coaches across 12 programs participated in the study. Coaches sent out the initial invitation with the link to the online survey, as well as a reminder and closeout notice. Coaches contacted everyone who was currently in their program or had been in their program within the last 3 years for whom they had appropriate contact information. Because all communications were online, only past and present participants with email addresses on file were contacted.

# **Questionnaire Design**

The questionnaire was created in collaboration between CSR, representatives of VDH, and Anne Wolf from the Virginia Center for Diabetes Education. CSR programmed the survey instrument in Qualtrics and conducted a pretest, where respondents first took the survey online and then were debriefed in a semi-structured interview conducted via phone or video conferencing. Eight individuals from three centers participated in the pretest, including both past and current program participants and lifestyle coaches.

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The questionnaire was divided into four sections: general questions about participation in a National DPP, content and delivery of the program, challenges and success in completion, and demographics. The questionnaire aimed to capture participants' overall satisfaction and experience with the program, the primary barriers to participation and completion, and the factors that aided successful completion. A full copy of the final questionnaire can be found at the end of this report.

### **Data Collection**

Participants completed the survey by following emailed links to the online questionnaire. The survey was available in both English and Spanish, although no respondents utilized the Spanish version. To protect respondents' privacy, the survey was anonymous and survey responses were not connected to personal identifiers. As such, reminders and follow up communication were not filtered by survey completion status.

The production timeline is presented in the table below. Because lifestyle coaches contacted and reminded participants to complete the survey, communication dates were not uniform. As a result, for both the initial invitation and the reminder emails, participants were contacted in two waves. Some coaches immediately contacted their participants, while others did so after a reminder from CSR. Some of the coaches who sent out the invitation email in the first wave subsequently sent the reminder email in the second wave.

CSR provided the coaches with the message text to send to participants, but the coaches were able to personalize the greeting or add a personal message introducing the invitation if they wished. All mailings contained some general information about the survey, a link to take the survey, and contact information for CSR should they have questions. To incentivize participation, 6 participants were randomly chosen among those who completed the survey to receive a \$50 electronic gift card each.

**Table 1: Production Timeline** 

| Distribution | Type  | Date Sent             |
|--------------|-------|-----------------------|
| Invitation   | Email | 2/5/2021 - 2/9/2021   |
|              |       | 2/22/2021             |
| Reminder     | Email | 2/22/2021 – 2/25/2021 |
|              |       | 3/5/2021 - 3/9/2021   |
| Closeout     | Email | 3/15/2021 - 3/18/2021 |

There were 167 usable survey submissions. This does not include participants who attempted to take the survey but were not a current or former participant and were therefore not eligible. Those individuals were not shown the remaining questionnaire but were instead directed to an end screen thanking them for their interest. This also does not include individuals who did not answer beyond the first question.

Because this was an anonymous protocol, we did not use unique links and therefore could not verify that respondents were not taking the survey more than once; however, due to the nature of

the survey's subject matter, we do not expect there to be any incentive for respondents to attempt to record answers to these questions more than once.

Our resulting data was limited by relying on lifestyle coaches for access to current and former program participants. Participants from programs where the lifestyle coach did not agree to participate did not have the opportunity to participate in the survey. Furthermore, we can expect there to always be some degree of unmeasured error associated with any form of public opinion research.

# II. Referral Survey Methodology

### **About the Study Phase**

The purpose of this survey phase was to assess medical providers' awareness and impressions of National Diabetes Prevention Programs and to identify barriers to referral.

This survey employed a mixed-mode, mail-forward design with a delayed invitation to complete the survey online. A subsection of non-respondents were also followed up with by phone. The sample of medical providers was comprised physicians, nurse practitioners, physician assistants, and pharmacists licensed in Virginia.

### **Questionnaire Design**

The conceptual outline for the survey and the subsequent questionnaire was designed in a collaboration between CSR, representatives of VDH, and Anne Wolf from the Virginia Center for Diabetes Education. CSR formatted the questionnaire for paper, programmed the online version in Qualtrics, and conducted a pretest. 6 respondents, 5 physicians and 1 physician assistant, completed the pretest by taking the survey question online with additional questions throughout the survey probing respondents about clarity, additions to questions or answer categories, and for any other feedback. A full copy of the final paper questionnaire can be found at the end of this report.

The questionnaire was divided into five sections: professional background, awareness and impressions of National DPP, questions for those unfamiliar with National DPP, preferences related to referrals, and demographics. The questionnaire aimed to capture familiarity with and opinions of National DPP and identify ways to aid referrals.

### Sampling

The survey employed a probability recruitment methodology. The population of interest for the sample was medical providers currently practicing in Virginia that treat patients with prediabetes or are at risk for developing type 2 diabetes. Providers practicing in the following specialties were included in the population of interest: Cardiovascular diseases, Endocrinology, Family Practice (including geriatric medicine and adolescent/young adult medicine), Gynecology and Obstetrics (including maternal and fetal medicine as well as reproductive endocrinology), Internal Medicine (including geriatric medicine), Nutrition, Poverty Medicine, Preventive Medicine (including occupational/environmental medicine, public health and general preventive medicine), public health, and general practice. This population was divided into four groups of

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interest: physicians, nurse practitioners, physician assistants, and pharmacists. CSR downloaded a list of physicians licensed in Virginia from the Virginia Board of Medicine and purchased lists of Virginia-licensed nurse practitioners and physician assistants from Virginia Interactive. VDH provided a list of Virginia-licensed pharmacists. All four lists contained mailing addresses, and the physician and nurse practitioner lists also contained the providers' specialties. CSR worked with VDH to determine relevant specialties and filtered these two lists accordingly.

In consultation with VDH, CSR developed a stratified sampling plan, which stratified the sample by provider type and high, medium, or low diabetes incidence in their health district. Diabetes incidence was determined using BRFSS 2019 data. See Figure 1 for the distribution of strata across Virginia.

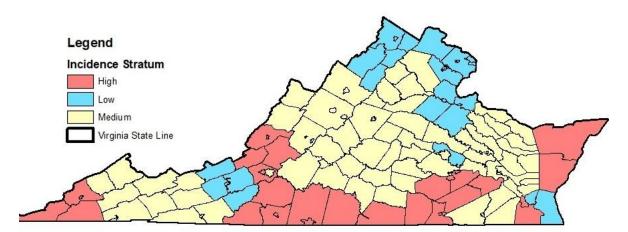


Figure 1: Map of Diabetes Incidence by County

The aim of this stratification was to achieve adequate representation of each provider type as well as represent providers working in areas of varied diabetes incidence. Table 2 provides the number of cases drawn from each provider group across each category of geographic incidence of diabetes to reach the final target sample of 2000 medical providers, and Table 3 provides the percent of the target sample each group represents in the sampling plan. Table 4 provides the sampling rate applied to draw cases from each group within the sampling frame.

| Table    | 2. | Samn     | ling | Plan   | Counts |
|----------|----|----------|------|--------|--------|
| 1 411115 | 4- | 13411111 |      | 1 1411 |        |

|                           | Physicians | Nurse<br>Practitioners | Physician<br>Assistants | Pharmacists | Total |
|---------------------------|------------|------------------------|-------------------------|-------------|-------|
| High diabetes incidence   | 220        | 181                    | 129                     | 116         | 646   |
| Medium diabetes incidence | 227        | 187                    | 133                     | 120         | 667   |
| Low diabetes incidence    | 233        | 192                    | 137                     | 124         | 686   |
| All regions               | 680        | 560                    | 399                     | 360         | 1999  |

**Table 3: Sampling Plan – Percent of Target Sample by Group** 

|                           | Physicians | Nurse<br>Practitioners | Physician<br>Assistants | Pharmacists | Total |
|---------------------------|------------|------------------------|-------------------------|-------------|-------|
| High diabetes incidence   | 11.0%      | 9.1%                   | 6.5%                    | 5.8%        | 32.3% |
| Medium diabetes incidence | 11.4%      | 9.4%                   | 6.7%                    | 6.0%        | 33.4% |
| Low diabetes incidence    | 11.7%      | 9.6%                   | 6.9%                    | 6.2%        | 34.4% |
| All regions               | 34.0%      | 28.0%                  | 20.0%                   | 18.0%       | 100%  |

**Table 4: Sampling Rates** 

|                           | Physicians | Nurse         | Physician  | Pharmacists | Total |
|---------------------------|------------|---------------|------------|-------------|-------|
|                           |            | Practitioners | Assistants |             |       |
| High diabetes incidence   | 25.4%      | 20.5%         | 40.6%      | 10.9%       | 31.3% |
| Medium diabetes incidence | 8.1%       | 7.0%          | 16.0%      | 3.7%        | 10.6% |
| Low diabetes incidence    | 6.5%       | 6.4%          | 10.1%      | 2.9%        | 8.6%  |
| All regions               | 9.4%       | 8.5%          | 15.9%      | 4.2%        | 12.2% |

### **Data Collection**

The survey launched on July 12, 2021 with the mailing of an advance letter to all provider groups. Data collection closed on October 1, 2021. The survey was available in English only. Data collection followed a confidential protocol to facilitate targeted follow-up reminders to non-respondents.

The first contact with all provider groups was the mailed advance letter (signed by Tonya Adiches, the Covering Director in the Division of Prevention and Health Promotion at VDH) on July 12, 2021. This letter was followed by the questionnaire packet, mailed on July 20, 2021. The questionnaire packet included a cover letter (signed by CSR Director Kara Fitzgibbon), questionnaire booklet, and prepaid return envelope. The initial questionnaire mailing also included a \$2 bill as a non-conditional incentive to encourage participation in the survey. A thank you/reminder post card was mailed on August 2, 2021.

On August 19, reminder calling began for non-respondents from the physician group, which were responding to the survey at a lower rate than the other provider groups.

The second questionnaire packet was mailed to non-respondents on August 24, 2021. The second packet included a modified cover letter that included a short url and unique access code to allow participants to complete the survey online. The packet also included the paper questionnaire booklet and a postage-paid return envelope. Data collection closed on October 1, 2021. The full production timeline can be seen below in Table 5.

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**Table 5: Production Timeline** 

| Task  | Date            |
|---|-----------------|
| Mail advance letter                                   | July 12, 2021   |
| Mail first questionnaire packet                       | July 20, 2021   |
| Mail thank you/reminder postcard                      | August 2, 2021  |
| Reminder calling begins for non-responding physicians | August 19, 2021 |
| Mail second questionnaire, web-referral packet        | August 24, 2021 |
| Close data collection                                 | October 1, 2021 |

CSR managed the tracking of responses and performed data entry for all paper completions. Data entry validation was performed on approximately 10% of submitted questionnaires.

### **Survey Response**

In total, 354 survey responses were collected, including both responses by paper questionnaire and online. The breakdown by mode is presented in Table 6 below.

**Table 6: Survey Completes by Mode** 

| Mode of Data Collection | Number of Completions |
|-------------------------|-----------------------|
| Paper                   | 339                   |
| Web                     | 15                    |
| Total                   | 354                   |

Table 7 displays the response counts for geographic region and profession. Of these survey responses, 91 were physicians, 135 were nurse practitioners or other advanced practice nurses, 61 were physician assistants, and 67 were pharmacists. 131 responses came from low prevalence areas, 107 from medium prevalence areas, and 116 came from high prevalence areas. Table 8 displays each group's percentage of the collected responses.

**Table 7: Responses by Profession and Diabetes Prevalence** 

|                           | Physicians | Nurse<br>Practitioners | Physician<br>Assistants | Pharmacists | Total |
|---------------------------|------------|------------------------|-------------------------|-------------|-------|
| High diabetes incidence   | 24         | 40                     | 22                      | 30          | 116   |
| Medium diabetes incidence | 28         | 46                     | 19                      | 14          | 107   |
| Low diabetes incidence    | 39         | 49                     | 20                      | 23          | 131   |
| All regions               | 91         | 135                    | 61                      | 67          | 354   |

Table 8: Percentage of Responses by Profession and Diabetes Prevalence

|                           | Physicians | Nurse<br>Practitioners | Physician<br>Assistants | Pharmacists | Total |
|---------------------------|------------|------------------------|-------------------------|-------------|-------|
| High diabetes incidence   | 6.8%       | 11.3%                  | 6.2%                    | 8.5%        | 32.8% |
| Medium diabetes incidence | 7.9%       | 13.0%                  | 5.4%                    | 4.0%        | 30.2% |
| Low diabetes incidence    | 11.0%      | 13.8%                  | 5.6%                    | 6.5%        | 37%   |
| All regions               | 25.7%      | 38.1%                  | 17.2%                   | 18.9%       | 100%  |

### Response Rate

Following the American Association for Public Opinion Research (AAPOR) disposition codes and response rate calculations, the estimated response rate (RR3) is 19.8%. Table 9 presents the counts of final dispositions for the sampled providers using AAPOR disposition codes.

**Table 9: Sample Dispositions** 

| AAPOR Code | AAPOR Disposition            | Counts | Percent |
|------------|------------------------------|--------|---------|
| 1.1000     | Complete                     | 354    | 17.7%   |
| 1.2000     | Partial                      | 0      | 0%      |
| 2.1100     | Opt-out                      | 10     | 0.5%    |
| 2.2000     | Attempted by phone           | 450    | 22.5%   |
| 2.3000     | Bad mailing address          | 47     | 2.4%    |
| 3.1000     | Unknown eligibility          | 896    | 44.8%   |
| 3.2500     | No valid contact information | 138    | 6.9%    |
| 4.1000     | Does not qualify             | 104    | 5.2%    |
|            | Total                        | 1999   | 100%    |

There were 354 completions of the questionnaire. 10 individuals opted-out of the survey. 450 individuals were attempted by phone at a valid phone number. Mailed questionnaires for 47 individuals had bad addresses, but they were subsequently contacted by phone. 138 individuals in the sample had both mailing address and phone numbers that were not valid and therefore could not be reached. 896 individuals were of unknown eligibility; they received the mailed questionnaire but were not called. Finally, 104 individuals did not qualify for the survey, which included respondents who were not currently practicing healthcare in Virginia and respondents who answered that their patient population does not contain people with type 2 diabetes or those at risk for developing type 2 diabetes or prediabetes.

Table 10 illustrates the impact that reminder calling had on the response rate of the physician sample group, showing how response rates across all four groups increased from the first packet to the close of data collection. Calling for this group began on August 19, 2021. At that time, the approximate response rate for physicians was just 7.2%, much lower than the other provider groups. With reminder calling, the response rate was increased by 87.4% to 13.5%. This

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response rate percent increase was much higher than for the other provider groups, which were not contacted by phone.

Table 10: Increase in Response Rate from First Packet to Close of Data Collection<sup>1</sup>

| Sample Group         | Response Rate     |                     | Percent Increase in   |
|----------------------|-------------------|---------------------|-----------------------|
|                      | from First Packet | Final Response Rate | Response Rate from    |
|                      | (8-19-21)         |                     | First Packet to Final |
| Physicians           | 7.2%              | 13.5%               | 87.4%                 |
| Nurse Practitioners  | 15.7%             | 23.8%               | 51.5%                 |
| Physician Assistants | 10.3%             | 15.5%               | 50.8%                 |
| Pharmacists          | 12.8%             | 18.6%               | 45.6%                 |

The margin of error due to sampling is  $\pm$  5.0%. While we incorporated a pretest into the development of the instrument, the possibility of some level of measurement error remains. Additionally, while we have calculated and reported sampling error for this study, nonresponse bias was not examined and may provide an additional source of error in the results.

# **III. Recruitment Survey Methods Report**

### **About the Survey Phase**

The purpose of this survey phase is to better understand the current health behaviors and communication preferences of Virginia residents who are at risk of developing type 2 diabetes, as well as their awareness, impressions of, and interest in National Diabetes Prevention Programs. This survey employed a web-based design using an online survey panel.

# **Questionnaire Design**

The questionnaire was created in collaboration between CSR, representatives of VDH, and Anne Wolf from the Virginia Center for Diabetes Education, and CSR programmed the instrument online in Qualtrics. A full copy of the final questionnaire can be found at the end of this report.

Following an eligibility screening, the questionnaire is divided into three sections. The first probes respondents' communication and health information preferences, including asking about regularly used media, sources of health information, concern about diabetes, and interest in lifestyle changes. The following section asks whether they have previously heard of National Diabetes Prevention Programs, following up on where they had heard about it and general impressions for those who were already familiar with the program. After being told about various aspects of the program, all respondents were asked about the appeal of different program features, challenges to participation, and their interest in learning more about or joining a program. In the final section, further demographic information was collected from respondents.

<sup>&</sup>lt;sup>1</sup> The response rates reported in this table are calculated as RR1: completes over sampled.

<sup>&</sup>lt;sup>2</sup> The reported margin of error incorporates the finite population correction of 0.96.

### Sample

The population of interest for this survey is Virginians at risk for developing type 2 diabetes. A non-probability sample was obtained from the online commercial sample aggregator, Lucid, who contacted potential participants and directed them to the online survey.

To be eligible for the study, respondents were required to be Virginia residents ages 18 to 75, must not have been diagnosed with type 1 or type 2 diabetes, must not have previously enrolled in a National Diabetes Prevention Program, and must have at least one diabetes risk factor of interest. The inclusion criteria risk factors were respondent has previously been diagnosed with gestational diabetes, respondent has been diagnosed with prediabetes or told by a healthcare professional that their blood glucose levels are higher than normal, respondent has been told by a healthcare professional that they are at risk for type 2 diabetes, or respondent's BMI is greater than or equal to 25.

CSR requested quotas on several key demographics to ensure adequate representation. Aiming for a total of 800 completions, the desired survey quotas were completions from a minimum of 320 men and maximum of 480 women, 200 African Americans, 150 Hispanics, and 450 from all other races. Additionally, there were desired quotas on geographic localities based on incidence of diabetes in the population: 240 responses from high incidence areas, 260 from medium incidence, and 300 from low incidence. All of these desired quotas are displayed in Table 11.

**Table 11: Sample Quotas by Select Demographic Characteristics** 

|                     | Desired completes | Percent of desired sample | Percent of population <sup>3</sup> |
|---------------------|-------------------|---------------------------|------------------------------------|
| Gender:             |                   |                           |                                    |
| Men                 | 320               | 40%                       | 44.7%                              |
| Women               | 480               | 60%                       | 55.3%                              |
| Race/ethnicity:     |                   |                           |                                    |
| African Americans   | 200               | 25%                       | 23.6%                              |
| Hispanics           | 150               | 18.8%                     | 3.6%                               |
| All other races     | 450               | 56.3%                     | 72.8%                              |
| Diabetes incidence: |                   |                           |                                    |
| High                | 240               | 30%                       | 13%                                |
| Medium              | 260               | 32.5%                     | 36%                                |
| Low                 | 300               | 37.5%                     | 51%                                |

### **Data Collection**

A soft launch of the online survey to test eligibility screeners began on December 17, 2021. Full production launched December 21, 2021. Data collection closed January 19, 2022. The survey

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<sup>&</sup>lt;sup>3</sup> Gender and race/ethnicity data obtained from <a href="https://www.cdc.gov/brfss/brfssprevalence/">https://www.cdc.gov/brfss/brfssprevalence/</a>. Calculations are based on answers to "Have you ever been told by a doctor that you have diabetes? (Crude Prevalence)", under chronic health indicators (diabetes specified) in Virginia in 2020. Geographic areas were categorized as low, medium, or high in diabetes incidence based on 2019 BRFSS data for Virginia health districts.

was available in both English and Spanish, and 3 responses were from the Spanish language questionnaire. Because participants in the study came from the panel vendor, data collection followed an anonymous protocol. No identifying information was ever shared with CSR. Survey participants were paid a small fee as an incentive for completing the survey, which was distributed by the panel vendor.

### **Survey Response**

In total, 835 usable responses were collected from the online survey, including 753 completes and 82 partially complete responses. 281 responses were men and 546 were women, 213 were African Americans, 59 were Hispanic, and 552 came from other races. The geographic distribution of responses were 303 responses from areas with low incidence of diabetes in the population, 315 from medium incidence areas, and 136 from high incidence areas. These counts for the most part do not include partially complete responses, most of whom did not provide a zip code and therefore could not be geographically categorized. See Table 12 for the full table of responses by group.

**Table 12: Response by Select Demographic Characteristics** 

|                     | Completes obtained | Percent of completes |
|---------------------|--------------------|----------------------|
| Gender:             |                    |                      |
| Men                 | 281                | 34.0%                |
| Women               | 546                | 66.0%                |
| Race/ethnicity:     |                    |                      |
| African Americans   | 213                | 25.8%                |
| Hispanics           | 59                 | 7.2%                 |
| All other races     | 552                | 67%                  |
| Diabetes incidence: |                    |                      |
| High                | 136                | 18.0%                |
| Medium              | 315                | 41.8%                |
| Low                 | 303                | 40.2%                |

Data were cleaned by removing responses of participants who were not eligible to take part in the survey, partial responses where only the eligibility screening questions were answered, or who provided zip codes outside of Virginia. Additionally, after manual review, responses were dropped for speeding or with nonsensical write in responses, indicating either bad faith respondents or bots.

Because the population of interest for this study is Virginia residents at risk of developing type 2 diabetes, we elected to use an online panel to reach this specific population. The tradeoff, however, is that we do not know how many panel members were invited to participate, nor we do we know which responding panel members were recruited by probably vs. non-probability methods. We are therefore unable to calculate a response rate or margin of error and must be cautious in drawing statistical inference from the survey findings of this study phase.

# I. Retention Study Phase

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# National Diabetes Prevention Programs in Virginia Survey of Current and Past Participants

The University of Virginia Center for Survey Research is conducting this survey in partnership with the Virginia Department of Health (VDH) and Virginia Center for Diabetes Prevention and Education. Thank you for taking the time to complete this questionnaire that will help us to better understand the experiences of participants in National Diabetes Prevention Programs (DPP) across Virginia. Your perspective is very important and we appreciate your participation in this survey.

**This survey's purpose**: We want to understand what factors help and challenge participation in National DPPs in Virginia and assess the usefulness of programs' content, structure, and implementation.

#### Your responses will be anonymous

- ➤ Your responses are completely anonymous. Your survey responses are not and cannot be connected to your personal information.
- Neither VDH nor your National DPP will know if you participated in the survey.

#### **General instructions**

- > You can decline to take part in the survey or skip any questions you do not wish to answer.
- As you progress through the questionnaire, you can use the back button to review previous questions/answers.
- ➤ Because the survey is anonymous and your name is not linked to your responses, the research team will be unable to withdraw your participation once you submit your survey response.

#### How long will it take?

> The survey should take about 15 minutes to complete.

#### Who can participate?

- Any individual who has participated in or is currently enrolled in a National Diabetes Prevention Program in Virginia.
- ➤ Past participants need to have been enrolled in a Virginia National DPP within the last 3 years. Completion of the program is not required to participate in this survey.

For more information: Center for Survey Research: surveys3@virginia.edu, 434-243-5232

Your participation in this survey is voluntary. As a thank you for participation, all survey respondents will be entered into a drawing to win one of six \$50 gift cards. There are no known risks associated with participating. However, your individual cooperation is very important to the success of this study and is greatly appreciated! We thank you for your time.

This survey has been approved by the University of Virginia's Institutional Review Board for the Social and Behavioral Sciences (Project #3936). Questions or concerns? Contact Tonya R. Moon, Ph.D. Chair, Institutional Review Board for the Social and Behavioral Sciences at (434) 924-5999 or irbsbshelp@virginia.edu.

# A. Section 1: General questions about participation

| 1 Cu          | rrently enrolled  |
|---------------|---|
|               | mer participant, completed the program  |
|               | mer participant, did not complete the program   |
| 4 No          | ne of the above   |
| yo            | a. ( <b>IF A1= "None of the above")</b> We appreciate your interest in this survey, but since a are not a current or past participant of a National DPP in Virginia, you are not eligible to applete the survey. Thank you for your time. <b>[SKIP TO END SURVEY]</b> |
| A2. Wh        | en did you start the program? Please enter the month and year:  |
| A3. (IF year: | A1= Former participant) When did you end the program? Please enter the month and  |
|               | w did you hear about National DPP? Select all that apply.   |
|               | A doctor or other healthcare provider   |
|               | Insurance provider  |
|               | Friend or family member   |
|               | Employer or coworker  |
|               | Community or religious center   |
|               | Social media  |
|               | Internet search   |
|               | Somewhere else (please specify):  |
|               | a. (If A4 = "Internet search") What keywords did you search for when you learned out National DPP?  |
|               | at were your main motivations for joining a National DPP? Select all that apply.  |
|               | ning note: Randomize order of answer choices]   |
|               | To lose weight  |
|               | To form healthier eating habits   |
|               | To form better exercise habits To reduce risk of type 2 diabetes  |
|               | To reduce risk of type 2 diabetes To develop better stress management techniques  |
|               | , , , , , , , , , , , , , , , , , , ,   |
|               | To meet people or find social support To improve my quality of life   |
|               |   |
|               | To improve my long-term health for myself and/or my family To support a friend or family member in the group  |
|               | Something else (please specify):  |
|               | Someting cloc (picase specify).   |

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|     | Did you receive information about the program from any of the following sources before colling in the program? Select all that apply.                                | е             |
|-----|--|---------------|
|     | Attending a "Session Zero" hosted by a lifestyle coach   |               |
|     | Attending an informal information session held by an employer, healthcare provider, or another source  | r             |
|     | ☐ First class doubled as information session for me  |               |
|     | ☐ Received one-on-one information from a lifestyle coach   |               |
|     | ☐ Received one-on-one information from a healthcare provider   |               |
|     | ☐ Something else (please specify):   |               |
|     | □ None of the above  |               |
| r.  | ☐ Don't know   |               |
|     | A6a. (If A6 = anything but "None of the above" or "Don't know") How important was gathering that information to your decision to enroll in the program?              |               |
|     | 1. Very important  |               |
|     | 2. Somewhat important  |               |
|     | 3. Slightly important  |               |
|     | <ul><li>4. Not at all important</li><li>5. Not sure</li></ul>  |               |
|     | 3. Not sure  | urch          |
| A7. | Did you already know any of the other participants in your program? Select all that app  | ly.           |
|     | ☐ Yes, I joined my program with a family member or friend.   | <i>ppl</i> y. |
|     | Yes, I already knew some of the other participants in my program (e.g. coworkers, chu  | rch           |
|     | members, etc.).  |               |
|     | □ No, I did not know any of the other participants when I began the program.   |               |
|     | Which statement best characterizes your attendance while in a DPP? If you are still colled, report on your attendance thus far for the sessions that have been held. |               |
| 1   | I attended every or almost every session held by my lifestyle coach.   |               |
| 2   | I attended most sessions.  |               |
| 3   | I attended at least half of the sessions.  |               |
| 4   | I attended less than half of the sessions.   |               |
| 5   | Don't know   |               |
|     | . Including yourself, approximately how many participants were in your program when inted?   | t             |
|     |  |               |
|     |  |               |
|     | 11-15  |               |
| 4   | 16-20  |               |
|     | More than 20   |               |
| 6   | Don't know   |               |
| A10 | 0. Did any participants in your program leave prior to completing the program?   |               |
|     | Yes  |               |
| 2   | No   |               |
| 3   | Don't know   |               |

# A10a. (If A10 = "Yes") Approximately how many participants in your program left without completing it?

- 1. 1-2
- 2. 3-4
- 3. 5-7
- 4. 8 or more
- 5. Don't know

#### A11. Have you ever been told by a doctor that you have prediabetes?

- 1 Yes
- 2 No
- 3 Prefer not to say

A11a. (IF A11 = "Yes") Were you told that you have prediabetes prior to your enrollment in the National DPP?

- 1. Yes
- 2. No
- 3. Don't know

A11b. (IF A11 = "Yes") Do you currently have prediabetes?

- 1. Yes
- 2. No, my blood sugar level has improved, and I no longer have prediabetes
- 3. No, I have been diagnosed with type 2 diabetes
- 4. Don't know
- 5. Prefer not to say

# A12. How concerned were you prior to enrolling in a National DPP about the risk of developing type 2 diabetes?

- 1 Very concerned
- 2 Moderately concerned
- 3 A little concerned
- 4 Not at all concerned
- 5 Don't know / Can't recall

# A13. *Prior* to enrolling in a National DPP, did you pursue other strategies to reduce the risk of developing type 2 diabetes?

- 1 Yes
- 2 No

A13a. (If A13 = "Yes") What other strategies did you pursue? Select all that apply.

[Programming note: randomize answer choices]

| Metformin or other drugs used to treat prediabetes
| Worked individually with a registered dietician
| Dietary changes
| Increased physical activity
| Another diabetes prevention program that was not National DPP
| Weight loss program not specific to diabetes prevention (e.g. Weight Watchers)
| Something else (please specify):

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|            | 14. (If former participant) About how much weight, if any, did you lose while you were in the cogram?Pounds         |
|------------|---|
|            | 15. (If current participant) About how much weight, if any, have you lost in the program so r?Pounds                |
| B. S       | Section 2: Content and delivery of the program  |
| <b>B</b> 1 | 1. What was/is the delivery format of your program?   |
|            | 1 In-person   |
|            | 2 Virtual   |
|            | 3 Combination of in-person and virtual  |
| 4          | 4 Other (please specify)  |
|            | 2. (If A2 between March 2019 AND March 2020) Did the delivery format of your program nange in response to COVID-19? |
|            | 1 Yes   |
|            | 2 No  |
|            | Not applicable, I participated prior to COVID-19  |
|            | B2a. (If B2 = "Yes") How did the delivery format change? Select all that apply.                                     |
|            | ☐ Moved to an all virtual format  |
|            | ☐ Adopted a hybrid format (some in-person, some virtual)  |
|            | ☐ Other changes (please specify):   |
|            | 3. If you could have picked the delivery format for your program, which format would you ave chosen?                |
|            | 1 In-person   |
|            | 2 Virtual   |
|            | 3 Combination of in-person and virtual  |
| 4          | 4 Other (please specify)  |
| <b>B</b> 4 | 4. In the space below, please explain why you would have chosen that delivery format.                               |
|            |   |
|            |   |

| <b>B5.</b> | How   | was your National DPP participation paid for?  |
|------------|-------|--|
|            |       | Out of pocket  |
|            |       | Insurance (e.g., private insurance, Medicare, Medicaid, VA, etc.)  |
|            |       | FSA/HSA  |
|            |       | Employer paid  |
|            |       | Scholarship  |
|            |       | Program was free of charge   |
|            |       | Other (please specify):  |
| <b>B6.</b> | How   | useful have you found the content of the program and the information provided?                                 |
| 1          | Very  | useful   |
| 2          | Som   | ewhat useful   |
| 3          | Sligl | ntly useful  |
| 4          | Not   | useful at all  |
|            |       | (IF B6 = "Slightly useful" or more) Specifically what content from the program have found most useful?         |
|            |       |  |
|            |       |  |
|            |       |  |
|            |       |  |
| <b>B7.</b> | How   | comfortable did you/do you feel with your lifestyle coach?   |
| 1          | •     | comfortable  |
| 2          |       | ewhat comfortable  |
| 3          | Neit  | her comfortable nor uncomfortable  |
| 4          | Som   | ewhat uncomfortable  |
| 5          | Very  | uncomfortable  |
| <b>B8.</b> | How   | comfortable did you/do you feel with the other participants in the program?                                    |
| 1          | Very  | comfortable  |
| 2          |       | ewhat comfortable  |
| 3          | Neit  | her comfortable nor uncomfortable  |
| 4          | Som   | ewhat uncomfortable  |
| 5          | Very  | uncomfortable  |
|            |       | e in the program, approximately how often did you/do you interact directly with your oach outside of meetings? |
| 1          | Mul   | tiple times a week   |
| 2          |       | ut once a week   |
| 3          | A fe  | w times a month  |
| 4          | Abo   | ut once a month  |
| 5          | Less  | than once a month or not at all  |

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# B10. While in the program, approximately how often did you/do you interact directly with other participants *outside of meetings*?

- 1 Multiple times a week
- 2 About once a week
- 3 A few times a month
- 4 About once a month
- 5 Less than once a month or not at all

# B11. Overall, how satisfied or dissatisfied are you with the level of support you received from the lifestyle coach?

- 1 Very satisfied
- 2 Somewhat satisfied
- 3 Neither satisfied nor dissatisfied
- 4 Somewhat dissatisfied
- 5 Very dissatisfied

| B11a. (IF B11= "Somewhat dissatisfied" or "Very dissatisfied") You indicated you are  |      |
|---|------|
| dissatisfied with the support provided by your lifestyle coach. Specifically what would have liked your lifestyle coach to have done to provide greater support to you? |      |
| B11b. (IF B11= "Somewhat satisfied" or "Very satisfied") You indicated you are satis  | fied |
| with the support provided by your lifestyle coach. How did your lifestyle coach support during the program?   |      |
|   |      |

# B12. Overall, how satisfied or dissatisfied are you with the level of support you received from the other participants in the program?

- 1 Very satisfied
- 2 Somewhat satisfied
- 3 Neither satisfied nor dissatisfied
- 4 Somewhat dissatisfied
- 5 Very dissatisfied

| B12a. (If B12 = "Somewhat dissatisfied" or "Very dissatisfied") You indicated you are dissatisfied with the support provided by your fellow program participants. Specifically what would you have liked other participants to have done to provide greater support to you? |
|---|
|   |

| B12b. (IF B12= "Somewhat satisfied" or "Very satisfied") You indicated you are satisfied with the support provided by your fellow program participants. How did the other participants support you during the program? |
|--|
|  |

### B13. To what extent has participation in the program helped you with each of the following?

|  | Not at all | Very little | Somewhat | Quite a bit | A great<br>deal | Not<br>applicable/<br>Don't<br>know |
|--|------------|-------------|----------|-------------|-----------------|-------------------------------------|
| a. Healthier eating habits                         | 1          | 2           | 3        | 4           | 5               | 9                                   |
| b. Regular physical activity                       | 1          | 2           | 3        | 4           | 5               | 9                                   |
| c. Weight loss/<br>maintaining a healthy<br>weight | 1          | 2           | 3        | 4           | 5               | 9                                   |
| d. Improved blood sugar/A1C                        | 1          | 2           | 3        | 4           | 5               | 9                                   |
| e. Understanding and listening to your body        | 1          | 2           | 3        | 4           | 5               | 9                                   |
| f. Goal setting and self-<br>accountability        | 1          | 2           | 3        | 4           | 5               | 9                                   |
| g. Stress management                               | 1          | 2           | 3        | 4           | 5               | 9                                   |
| h. Mental health                                   | 1          | 2           | 3        | 4           | 5               | 9                                   |
| i. Meeting other people and making friends         | 1          | 2           | 3        | 4           | 5               | 9                                   |

| B14. In th | he space below, please describe any other ways that participation in National DPP has |
|------------|---|
| helped yo  | ou.   |
|            |   |
|            |   |
|            |   |
|            |   |

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B15. (Former participants only) To what extent have you been able to *maintain* each of the following since leaving the program?

|  | Not at all | Very little | Somewhat | Quite a bit | A great<br>deal | Don't<br>know/Not<br>applicable |
|--|------------|-------------|----------|-------------|-----------------|---------------------------------|
| a. Healthy eating habits                                   | 1          | 2           | 3        | 4           | 5               | 9                               |
| b. Regular physical activity                               | 1          | 2           | 3        | 4           | 5               | 9                               |
| c. Managing your weight                                    | 1          | 2           | 3        | 4           | 5               | 9                               |
| d. Improved blood sugar<br>/ A1C                           | 1          | 2           | 3        | 4           | 5               | 9                               |
| e. Listening to your body                                  | 1          | 2           | 3        | 4           | 5               | 9                               |
| f. Goal setting and self-<br>accountability                | 1          | 2           | 3        | 4           | 5               | 9                               |
| g. Stress management                                       | 1          | 2           | 3        | 4           | 5               | 9                               |
| h. Maintaining mental health                               | 1          | 2           | 3        | 4           | 5               | 9                               |
| Maintaining social     activities / avoiding     isolation | 1          | 2           | 3        | 4           | 5               | 9                               |

|   | How would you rate your overall experience in National DPP?                     |
|---|---|
|   | Excellent   |
|   | Good<br>Fair  |
|   | Poor  |
| 8 | How likely would you be to recommend National DPP to a friend or family member? |
|   | Extremely likely  |
|   | Very likely   |
|   | Moderately likely   |
|   | Slightly likely   |
|   | Not at all likely   |
|   | Not sure  |

| B18b. (IF B18 = "Extremely likely" or "Very likely") What specifically about National DPP makes you likely to recommend the program? |          |
|--|----------|
|  | <u> </u> |

### C. Section 3: Challenges and Success in Completion of a National DPP

We'd now like to learn about any specific challenges or successes you experienced in your participation with National DPP.

C1. To what extent were/are the following items a challenge to your participation in or completion of your program? You may select "Not applicable" if the item was not relevant to your experience (e.g., transportation to/from meetings when meetings were virtual). [programming note: Randomize order of items]

|  | Not at all a challenge | Slightly | Somewhat | Quite a bit | A significant challenge | Not<br>applicable<br>/Don't<br>know |
|--|------------------------|----------|----------|-------------|-------------------------|-------------------------------------|
| a. Cost of participation                                 | 1                      | 2        | 3        | 4           | 5                       | 9                                   |
| b. Lack of transportation to/from meetings               | 1                      | 2        | 3        | 4           | 5                       | 9                                   |
| c. Inconvenient location of meetings                     | 1                      | 2        | 3        | 4           | 5                       | 9                                   |
| d. Inconvenient meeting time                             | 1                      | 2        | 3        | 4           | 5                       | 9                                   |
| e. Duration of commitment (year too long)                | 1                      | 2        | 3        | 4           | 5                       | 9                                   |
| f. Frequency of meetings – too often                     | 1                      | 2        | 3        | 4           | 5                       | 9                                   |
| g. Frequency of<br>meetings – not often<br>enough        | 1                      | 2        | 3        | 4           | 5                       | 9                                   |
| h. COVID<br>restrictions/resulting<br>changes to program | 1                      | 2        | 3        | 4           | 5                       | 9                                   |
| i. Your own isolation due to COVID                       | 1                      | 2        | 3        | 4           | 5                       | 9                                   |
| j. Lacking support from family or friends                | 1                      | 2        | 3        | 4           | 5                       | 9                                   |

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| k. Not seeing results quickly enough                                       | 1 | 2 | 3 | 4 | 5 | 9 |
|--|---|---|---|---|---|---|
| 1. Don't like group<br>setting / too personal                              | 1 | 2 | 3 | 4 | 5 | 9 |
| m. Internet connection<br>(unavailable or<br>unstable/ slow<br>connection) | 1 | 2 | 3 | 4 | 5 | 9 |

| you         |                    | e space below, please describe any other challenges you have experienced related to icipation in the program.  |
|-------------|--------------------|--|
|             |                    |  |
|             |                    |  |
|             |                    | 31= "In-person or combination(hybrid)") On average, approximately how long did take you to commute <i>roundtrip</i> to the meeting location?             |
| 1           | Less               | than 10 minutes  |
| 2           | 10-20              | ) minutes  |
| 3           | 21-40              | ) minutes  |
| 4           | 41-6               | ) minutes  |
| 5           | Over               | an hour  |
| 1<br>2<br>3 | Yes<br>No<br>Not s | sure   |
|             | C4a.               |  |
| ·           |                    | (IF C4 = "YES") Specifically what made the meeting location conducive?   |
|             |                    | (IF C4 = "YES") Specifically what made the meeting location conducive?   |
|             | C4b.               | (IF C4 = "YES") Specifically what made the meeting location conducive?  (IF C4 = "NO") Specifically what made the meeting location <i>not</i> conducive? |

C5. (If successfully completed) To what extent did each of the following contribute to your success in completing the program? [Randomize items]

|  | No<br>contribution | A little | Somewhat | Quite a bit | Significant contribution | Don't<br>know/Not<br>applicable |
|--|--------------------|----------|----------|-------------|--------------------------|---------------------------------|
| a. Strong desire to be healthier                                 | 1                  | 2        | 3        | 4           | 5                        | 9                               |
| b. Seeing weight loss results                                    | 1                  | 2        | 3        | 4           | 5                        | 9                               |
| c. Seeing improved health status                                 | 1                  | 2        | 3        | 4           | 5                        | 9                               |
| d. Receiving positive<br>feedback from<br>doctor/health provider | 1                  | 2        | 3        | 4           | 5                        | 9                               |
| e. Generally feeling better                                      | 1                  | 2        | 3        | 4           | 5                        | 9                               |
| f. Enjoyed learning new information                              | 1                  | 2        | 3        | 4           | 5                        | 9                               |
| g. Enjoyed the meetings/had fun                                  | 1                  | 2        | 3        | 4           | 5                        | 9                               |
| h. Relationship with lifestyle coach                             | 1                  | 2        | 3        | 4           | 5                        | 9                               |
| i. Relationships with other participants                         | 1                  | 2        | 3        | 4           | 5                        | 9                               |
| j. Support from family and friends                               | 1                  | 2        | 3        | 4           | 5                        | 9                               |
| k. Accountability to the group in implementing lifestyle changes | 1                  | 2        | 3        | 4           | 5                        | 9                               |

| •    | f relationship to lifestyle coach selected as somewhat, quite a bit, or significant oution) What was it about your lifestyle coach that made them contribute to your s? |
|------|---|
| <br> |   |
|      | pleted) In the space below, please describe any other factors that contributed to yompleting the program:   |
|      |   |

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|   | (If co    | it?   |
|---|-----------|---|
| 1<br>2                                  | Yes<br>No |   |
|   | C7a.      | (IF C7 = "YES") Why did you think that you might not complete the program?  |
| *************************************** | C7b.      | (IF C7 = "YES") What helped you stay in the program despite thinking you might not h?   |
| C8.                                     |           | copped out) Approximately how long were you in the program before leaving?  |
| 1                                       |           | than 1 month  |
| 2                                       |           | 3 months  |
| 3                                       |           | 6 months  |
| 4                                       | 7 to      | 8 months  |
| 5                                       | More      | e than 8 months   |
| 6                                       | Not       | sure/Can't recall   |
|   |           | ropped out) Which of the following options best describe the primary reason(s) you left ram? Select all that apply. [Randomize order of answer choices] |
|   |           | I was not seeing results.   |
|   | u         | I could not afford to continue in the program.  |
|   |           | The program was too much of a time commitment.  |
|   |           | Logistical challenges (transportation, meeting location, childcare, etc.)   |
|   |           | I did not like the content of the program.  I did not like the format of the program (online, in-person, or hybrid).                                    |
|   |           | I did not like the group setting.   |
|   | _         | I did not like my lifestyle coach.  |
|   | _         | Lack of support from family or friends.   |
|   |           | Program required too much of an adjustment to my lifestyle.   |
|   |           | Someone I joined with or became friends with in my program dropped out.   |
|   |           | Changes or personal precautions due to COVID-19 made program less effective or harder to participate in.  |
|   |           | Something else (please specify):  |

|  | If dropped out) Is there anything that could have been done that would have encouraged ped you to stay in the program?   |
|--|--|
|  |  |
|  |  |
|  |  |
| C11. (   | If dropped out) Would you consider re-enrolling in a National DPP at some point in the ?   |
| 1 Y  | Yes The state of t |
| 2 N  | lo .   |
| 3 U  | Insure   |
| C12. V   | What changes, if any, would you like to see National DPP make?   |
|  |  |
| C13. V   | What do you think it takes to be successful in completing the program?   |
| _  |  |
|  |  |
| _  |  |
|  | What advice would you give to someone thinking about enrolling in National DPP or just ng the program?   |
|  |  |
|  |  |
|  |  |
| Sect   | tion 4: Demographics   |
| e have on the second se | just a few final questions about you. As a reminder, all of your responses are completely us. These data are collected for analysis purposes only. As a reminder, you may skip any you do not wish to answer.  |
| D1. In   | what year were you born?   |
| D2. In   | cluding yourself, how many people live in your household?  |
|  | ow many children under 18 years of age do you have living in your household? If none, enter 0  |

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# D4. Which one of these comes closest to your own feelings about your household's income these days?

- 1 Living comfortably on present income
- 2 Getting by on present income
- 3 Finding it difficult to get by on present income
- 4 Finding it very difficult to get by on present income
- 5 Prefer not to say

| D5. | In | which | region | of | Virginia | do vou | live? |
|-----|----|-------|--------|----|----------|--------|-------|
|     |    |       |        |    |          |        |       |

- 1 Central
- 2 Eastern
- 3 Hampton Roads
- 4 Northern
- 5 Southside
- 6 Southwest
- 7 Valley
- 8 West Central
- 9 Not sure (please characterize your region in your own words)

### D6. In which region of Virginia is your DPP located?

- 1 Central
- 2 Eastern
- 3 Hampton Roads
- 4 Northern
- 5 Southside
- 6 Southwest
- 7 Valley
- 8 West Central
- 9 Not sure (please characterize the region in your own words)

### D7. How would you describe the area in which you live?

- 1 Urban
- 2 Suburban
- 3 Small town
- 4 Rural
- 5 Other (please specify)

# D8. Approximately how far away (in minutes) from your home is the nearest store with fresh fruits and vegetables? \_\_\_\_\_ minutes away

### D9. What is your marital status?

- 1 Married
- 2 Living as married
- 3 Divorced
- 4 Widowed
- 5 Separated
- 6 Single, never been married

| <b>D10</b> | . Hov | w do you describe yourself?   |  |  |  |  |  |  |  |
|------------|-------|---|--|--|--|--|--|--|--|
| 1          | Man   |   |  |  |  |  |  |  |  |
|            |       | Voman   |  |  |  |  |  |  |  |
|            |       | -binary   |  |  |  |  |  |  |  |
|            |       | er to provide own description:  |  |  |  |  |  |  |  |
| 5          | Pref  | er not to say   |  |  |  |  |  |  |  |
| D11        | . Abo | out how tall are you without shoes? Feet Inches   |  |  |  |  |  |  |  |
| D12        | . Abo | out how much do you currently weigh without shoes?Pounds                                      |  |  |  |  |  |  |  |
| D13        | . Wh  | at is the highest level of education you completed?   |  |  |  |  |  |  |  |
|            |       | s than high school diploma  |  |  |  |  |  |  |  |
|            | _     | n school graduate or GED  |  |  |  |  |  |  |  |
| 3          |       | ne college but no degree  |  |  |  |  |  |  |  |
|            |       | ociates Degree (for example: AA, AS) or certificate in career or technical education          |  |  |  |  |  |  |  |
|            |       | helor's Degree (for example: BA, BS) ne graduate work   |  |  |  |  |  |  |  |
| 6<br>7     |       | ter's, Professional or Doctoral degree (for example: MA, MSW, MD, PhD)                        |  |  |  |  |  |  |  |
|            |       | er not to say   |  |  |  |  |  |  |  |
| Ü          | 1101  | of not to say   |  |  |  |  |  |  |  |
| D14        | . Wh  | ich of the following best describes you? Select all that apply.                               |  |  |  |  |  |  |  |
|            |       | Working full-time (35 hours/week or more)   |  |  |  |  |  |  |  |
|            |       | Working part-time   |  |  |  |  |  |  |  |
|            |       | Working self-employed   |  |  |  |  |  |  |  |
|            |       | Unemployed  |  |  |  |  |  |  |  |
|            |       | Stay at home parent or homemaker  |  |  |  |  |  |  |  |
|            |       | Retired   |  |  |  |  |  |  |  |
|            |       | Student Disabled  |  |  |  |  |  |  |  |
|            |       | Other (please describe):  |  |  |  |  |  |  |  |
|            | _     | Other (please describe).  |  |  |  |  |  |  |  |
| D15        | . Wit | th which of the following racial or ethnic categories do you identify? Select all that apply. |  |  |  |  |  |  |  |
|            |       | American Indian or Alaska Native  |  |  |  |  |  |  |  |
|            |       | Asian   |  |  |  |  |  |  |  |
|            |       | Black or African American   |  |  |  |  |  |  |  |
|            |       | Hispanic or Latinx  |  |  |  |  |  |  |  |
|            |       | Native Hawaiian or other Pacific Islander   |  |  |  |  |  |  |  |
|            |       | White or Caucasian  |  |  |  |  |  |  |  |
|            |       | Category not listed (Please describe):  |  |  |  |  |  |  |  |
|            |       | Prefer not to answer  |  |  |  |  |  |  |  |

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# D16. Which of the following income categories most closely matches your total annual household income from all sources earned in the past year?

- 1 Less than \$10,000
- 2 \$10,000 \$14,999
- 3 \$15,000 \$24,999
- 4 \$25,000 \$49,999
- 5 \$50,000 \$74,999
- 6 \$75,000 \$99,999
- 7 \$100,000 \$149,999
- 8 \$150,000 and higher
- 9 Don't know
- 10 Prefer not to say

Thank you for your help in taking the time to complete this questionnaire and share your experience. We greatly value your response.

# II. Referral Study Phase

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# Diabetes Prevention Efforts in Virginia Survey of Medical Providers

In partnership with the Virginia Department of Health (VDH), the University of Virginia Center for Survey Research is conducting this survey. Thank you for taking the time to complete this questionnaire that will help us to better understand the perspectives of medical providers across Virginia. **Your perspective is very important and we appreciate your time.** 

The survey's purpose: To better understand medical providers' treatment strategies for patients diagnosed with prediabetes or those considered at risk for type 2 diabetes. Additionally, we would like to assess the level of awareness and opinions of providers regarding the National Diabetes Prevention Program (DPP).

#### Who can participate?

Any medical provider who currently practices in Virginia and treats patients who have prediabetes or are at risk for developing type 2 diabetes.

### How long will it take?

➤ The survey should take about 15 minutes to complete.

#### **General instructions**

- > Circle the number of your response to the question or check the boxes that apply.
- When you finish answering the questions, put your survey in the prepaid envelope provided and drop it in any mailbox. **No postage is required.**

### Your responses will be confidential

- Your name or contact information will not be linked to your survey responses following data collection. Your information and participation status will only be used during data collection for targeted reminders about this survey from the Center for Survey Research.
- Only de-identified and aggregated results of this survey will be shared with the Virginia Department of Health.

#### Voluntary participation

Your participation in this survey is completely voluntary, and you may skip any questions you do not wish to answer.

#### **Payment**

- As a small thank you for participation, we have enclosed a \$2 bill in the initial mailing.
- You may keep this payment even if you choose not to return the questionnaire.

#### Risks

There are no known risks associated with participating in this study.

#### **Benefits**

> There are no direct benefits to you for participating in this research study. Your responses will be used in efforts to improve provider awareness of National DPP programs across Virginia, address barriers to referral, and reach more individuals who could potentially benefit from these programs.

#### Use of data

Responses from this survey will be stored and analyzed by the Center for Survey Research and reported in aggregate to the Virginia Department of Health, who will potentially use this information to make adjustments to administration of National DPPs across Virginia.

- ➤ Only the research team at CSR will have access to the data, which will be retained in a secure manner for five years and then destroyed.
- > Reports of summarized aggregated results as well as methodology may be publicly available.

#### Withdrawal from the study

- You can withdraw from the study until the close of data collection. There are no penalties for withdrawal.
- ➤ Please contact the research team if you wish to do so after mailing in your questionnaire and your data will be removed from analysis.

### For more information, contact:

Kara Fitzgibbon

Center for Survey Research, PO BOX 400767

University of Virginia, Charlottesville VA 22903

Phone: 434-243-5232. Email: surveys3@virginia.edu

To obtain more information about this study, ask questions about the research procedures, express concerns about your participation, or report illness, injury or other problems, please contact:

Tonya R. Moon, Ph.D.

Chair, Institutional Review Board for the Social and Behavioral Sciences

One Morton Dr Suite 500

University of Virginia, P.O. Box 800392

Charlottesville, VA 22908-0392 Telephone: (434) 924-5999 Email: irbsbshelp@virginia.edu

Website: https://research.virginia.edu/irb-sbs

Website for Research Participants: https://research.virginia.edu/research-participants

UVA IRB-SBS #3936

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# A. Section 1: Professional background

| AI.        | Which of the following best matches your professional role?  |
|------------|--|
| 1          | DO   |
| 2          | MD   |
| 3          | Nurse Practitioner or other Advanced Practice Nurse  |
| 4          | Pharmacist   |
| 5          | Physician Assistant  |
| 6          | Other, please specify:   |
| A2.        | Are you currently practicing healthcare in Virginia?   |
| 1          | Yes  |
| 2_         | No   |
| <b></b>    | A2a. (If No) We appreciate your interest in the survey, but we are only surveying Virginia-based actively practicing healthcare providers. Please stop here and return the survey in the enclosed envelope. Thank you for your time.       |
|            | Does your patient population contain people with type 2 diabetes and/or those at risk for eloping type 2 diabetes or prediabetes?  |
| 1          | Yes  |
| <b>—</b> 2 | No   |
|            | A3a. ( <b>If No</b> ) We appreciate your interest in the survey, but we are surveying healthcare providers about their treatment of prediabetes. Please stop here and return the survey in the enclosed envelope. Thank you for your time. |
| A4.        | How many years have you been practicing as a healthcare professional?  |
| 1          | 0-5 years  |
| 2          | 6-10 years   |
| 3          | 11 – 15 years  |
| 4          | 16-20 years  |
| 5          | > 20 years   |
| A5.        | What specialty best describes your current primary practice?   |
| 1          | Endocrinology  |
| 2          | Family Medicine  |
| 3          | General Practice   |
| 4          | Hospitalist  |
| 5          | Internal Medicine  |
| 6          | Obstetrics/Gynecology  |
| 7          | Pharmacy   |
| 8          | Something else, please specify:  |
|            |  |

When prompted by the patient

Not applicable

|             | In yo                      | our best estimation, approximately what percentage of your current patients have type 2  |  |  |  |  |
|-------------|----------------------------|--|--|--|--|--|
| 1           | Less                       | than 5%  |  |  |  |  |
| 2           | 5% -                       | . 9%   |  |  |  |  |
| 3           | 10%                        | - 14%  |  |  |  |  |
| 4           | 15%                        | - 19%  |  |  |  |  |
| 5           | 20%                        | - 29%  |  |  |  |  |
| 6           | 30%                        | - 39%  |  |  |  |  |
| 7           | 40%                        | or more  |  |  |  |  |
| 8           | Not                        | sure   |  |  |  |  |
|             |                            | our best estimation, approximately what percentage of your current patients have tes or seem at risk for type 2 diabetes?                  |  |  |  |  |
| 1           | Less                       | than 10%   |  |  |  |  |
| 2           | 10%                        | - 19%  |  |  |  |  |
| 3           | 20%                        | - 29%  |  |  |  |  |
| 4           | 30%                        | - 39%  |  |  |  |  |
| 5           | 40%                        | - 49%  |  |  |  |  |
|             |                            | or more  |  |  |  |  |
| 7           | Not                        | sure   |  |  |  |  |
| A8.<br>risk |                            | frequently do you screen for diabetes or prediabetes <u>among your patients who seem at</u>  |  |  |  |  |
| 1           | Mor                        | e than once a year   |  |  |  |  |
| 2           | Eve                        | y year   |  |  |  |  |
| 3           | Eve                        | ry 2 years   |  |  |  |  |
| 4           | Eve                        | y 3 years  |  |  |  |  |
| 5           | Eve                        | y 4 years  |  |  |  |  |
| 6           | Eve                        | y 5 years  |  |  |  |  |
| 7           | Greater than every 5 years |  |  |  |  |  |
| 8           | Not                        | applicable   |  |  |  |  |
|             |                            | n do you typically discuss prediabetes or the risk of developing type 2 diabetes with ents who seem at risk? Please select all that apply. |  |  |  |  |
|             |                            | Every visit  |  |  |  |  |
|             |                            | Following screening/lab results  |  |  |  |  |
|             |                            | When discussing related metabolic disorders (e.g., obesity, hypertension, etc.)  |  |  |  |  |

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Something else (please specify):

| A10. Which of the following describes your approach to educating patients on the risks of type 2 diabetes? <i>Please select all that apply.</i> |  |  |
|---|--|--|
|   | Discuss lifestyle and health risk factors with patient   |  |
|   | Provide patient informational brochure or printout created by my practice or facility                      |  |
|   | Provide patient informational brochure or printout created by an external source                           |  |
|   | Refer patient to a diabetes education program  |  |
|   | Refer patient to another healthcare provider/specialist (e.g., clinical pharmacist, endocrinologist, etc.) |  |
|   | E 1 7/   |  |
|   | I don't speak with my patients about the risk of developing type 2 diabetes                                |  |
|   | Not applicable   |  |
| A11. What strategies do you suggest to your patients for prediabetes management? Please select all that apply.                                  |  |  |
|   | Metformin or other drugs used to treat prediabetes   |  |
|   | Dietary changes  |  |
|   | Increased physical activity  |  |
|   | Weight loss program not specific to diabetes prevention (e.g. Weight Watchers)                             |  |
|   | National Diabetes Prevention Programs (National DPP)   |  |
|   | Diabetes prevention program other than National DPP  |  |
|   | Other (please specify)   |  |
|   | I do not suggest treatments for prediabetes  |  |
|   |  |  |

### B. Awareness and impressions of National DPP Lifestyle Change Program

The National Diabetes Prevention Program is an evidence-based lifestyle change program. The Centers for Disease Control and Prevention manages the National DPP curriculum, sets the program standards, and oversees the certification of programs.

These programs are facilitated by a trained lifestyle coach, with regular meetings convened over the course of a year. With the intent to prevent or delay type 2 diabetes, the program teaches participants to make lasting lifestyle changes, including eating healthier, adding daily physical activity, and improving coping skills. Participation in National DPP is a covered benefit in many insurance plans as well as Medicaid. To learn more, visit <a href="www.cdc.gov/diabetes/prevention">www.cdc.gov/diabetes/prevention</a>.

# **B1.** Have you heard about the National Diabetes Prevention Program Lifestyle Change Program (National DPP) before today?

- 1 Yes
- 2 No [Please now skip to Section 0, page 27]

#### **B2.** (If B1=Yes) How familiar are you with National DPP?

- 1 Very familiar
- 2 Somewhat familiar
- 3 A little familiar

| В3.        | (If B1=              | Yes) Where have you heard about National DPP? Please select all that apply.   |  |  |
|------------|----------------------|---|--|--|
|            | <b>□</b> C           | olleagues/others at my institution  |  |  |
|            |                      | ablished peer-reviewed articles on National DPP or DPP Research Trial   |  |  |
|            |                      | ofessional conferences  |  |  |
|            | □ P <sub>1</sub>     | ofessional associations (e.g., American Medical Association)  |  |  |
|            |                      | formational materials sent to my office/institution   |  |  |
|            |                      | ational DPP representative/coach came to my office/institution  |  |  |
|            |                      | omewhere else (please specify):   |  |  |
|            |                      | ot sure   |  |  |
|            | (If B1=`ype 2 dia    | Yes) What is your impression of the effectiveness of National DPPs in the prevention abetes?  |  |  |
|            | -                    | Very effective  |  |  |
| 2          | •                    |   |  |  |
| 3          |                      |   |  |  |
|            | Not at all effective |   |  |  |
| 5          |                      |   |  |  |
|            |                      | Yes) Have you ever talked to a patient about National DPP and/or shared al materials on the program?  |  |  |
| 1          | Yes                  |   |  |  |
| 2          | No                   |   |  |  |
| <b>B6.</b> | (If B1=              | Yes) Have you ever referred a patient to a National DPP?  |  |  |
| <b>—</b> 1 | Yes                  |   |  |  |
| 2          | No                   |   |  |  |
| <b>L</b>   |                      | f <b>B6=Yes</b> ) Among your patients diagnosed with prediabetes or at risk for type 2 s, what proportion do you tend to refer to National DPP? |  |  |
| ,          | 6                    | All or nearly all   |  |  |
|            | 7.                   | Most  |  |  |
|            | 8                    | Some  |  |  |
|            | 9.                   | Very few  |  |  |
|            |                      |   |  |  |

Please now skip to Section D, on page 28.

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### C. New to National DPP Lifestyle Change Program

The questions in this section are designed for providers who are unfamiliar with National DPP (B1= No). If you have previously heard of National DPP, please skip ahead to Section D, page 28.

Since you are unfamiliar with National DPP, we would like to share some information on demonstrated outcomes of the program. In a controlled clinical trial of adults at high risk for type 2 diabetes across 27 clinical centers around the U.S., it was found that participation in an intensive lifestyle intervention program ("DPP Research Trial") decreased the incidence of diabetes among participants by 58%. Further, the program's effectiveness in decreasing the incidence of diabetes surpassed that of participants who were only administered Metformin (which had a 31% decrease in incidence). Subsequent research has shown that the DPP research program can be translated into the community ("National DPP") with comparable effectiveness.<sup>2</sup>

# C1. How compelling do you find these statistics in demonstrating the utility of National DPP lifestyle programs as a strategy to prevent type 2 diabetes?

- 1 Very compelling
- 2 Somewhat compelling
- 3 Slightly compelling
- 4 Not at all compelling
- 5 Not sure

| C1a. ( <b>If C1= Not at all compelling</b> ) What additional information and/or outcomes would you need to consider the above research findings more compelling? |  |
|--|--|
|  |  |

# C2. Based on the information described so far, to what extent do you think National DPP would be a viable strategy for diabetes prevention among your patients?

- 1 Very viable
- 2 Somewhat viable
- 3 Slightly viable
- 4 Not at all viable
- 5 Not sure

<sup>&</sup>lt;sup>1</sup> Knowler WC, Barrett-Connor E, Fowler SE, et al. Reduction in the incidence of type 2 diabetes with lifestyle intervention or metformin. The New England Journal of Medicine. 2002;346(6):393–403.

<sup>&</sup>lt;sup>2</sup> Pronk NP, Remington PL et al. Combined Diet and Physical Activity Promotion Programs for Prevention of Diabetes: Community Preventive Services Task Force Recommendation Statement. Ann Intern Med. 2015;163:465-468.

| who | ether          | at additional information about National DPP would you want to know before deciding or not to incorporate National DPP as a possible strategy in diabetes prevention ons with your patients? Please select all that apply.  |
|-----|----------------|---|
|     |                | Structure and format of program   |
|     | _              | Program's curriculum  |
|     | _              | Program eligibility requirements  |
|     |                | Location of local program   |
|     |                | Cost without insurance  |
|     |                |   |
|     |                | Likelihood of insurance coverage  |
|     |                | Program completion rates  Participants' health outcomes following magnets   |
|     |                | Participants' health outcomes following program   |
|     |                | Process for making referrals  |
|     |                | Something else (please specify):  |
| C4. | How            | likely are you to look further into National DPP?   |
| 1   | Ver            | y likely  |
| 2   | Son            | newhat likely   |
| 3   | Slig           | htly likely   |
| 4   | Not            | at all likely   |
| 5   | Not            | sure  |
|     |                | ch of the following, if any, are barriers to referring your patients to National DPP?  elect all that apply.  I have limited familiarity with National DPP  I am unaware of the local availability of National DPP programs |
|     |                | · · · · · · · · · · · · · · · · · · ·   |
|     |                | There are not in-person National DPP programs located in the area where I practice  |
|     |                | Unsure of how to refer a patient to a National DPP  |
|     |                | Find National DPP referral process cumbersome   |
|     |                | Concerns about cost for patients  |
|     |                | Concerns about length of commitment for patients  |
|     |                | Doubts about program effectiveness  |
|     |                | Prefer different prediabetes management strategy  |
|     |                | Not all patients are being screened for prediabetes   |
|     |                | My focus is on treatment rather than prevention   |
|     |                | Patients are unwilling/resistant to implement lifestyle change  |
|     |                | Patients are not interested in discussing prediabetes or diabetes preventative measures   |
|     |                | Something else (please specify):  |
|     |                | None of the above   |
|     | Is yo<br>diabe | our EHR/EMR set up to facilitate a referral to your local National DPP for patients with etes?  |
| 1   | Yes            |   |
| 2   | No             |   |
| 3   |                | i't know  |
| 4   |                | not use EHR/EMR   |

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|         | It types of information about National DPP do you think are most important to share lical providers as they assess if/when to make referrals? Please select all that apply. |
|---------|---|
|         | Findings from clinical trials/peer-reviewed research on National DPP  |
|         | Participant testimonials  |
|         | National DPP curriculum   |
|         | Guidance on referral process  |
|         | Rates of retention/attrition  |
|         | General information on structure and format of program  |
|         | Cost, typical coverage, and financial aid options for program   |
|         | Information on program eligibility  |
|         | Location and contact information for in-person National DPP programs in my area   |
|         | Contact information for National DPP programs offered online  |
|         | Something else (please specify):  |
|         | Not sure – not familiar enough with program or referral criteria  |
|         | t do you think is the best way to share information and spread awareness about DPP among healthcare providers in Virginia? Please select all that apply.                    |
|         | State/regional professional association meetings  |
|         | State/regional professional newsletter  |
|         | Information booth at trade shows/conferences  |
|         | Managed Care Organizations provider letters   |
|         | Word of mouth from other providers  |
|         | National DPP representative/coach provide information sessions at practice/clinics  |
|         | Direct mailings or distribute informational brochures to providers  |
|         | Something else (please specify):  |
| D5. Wha | t, if anything, would increase your likelihood of referring a patient to National DPP?  |
|         |   |
|         |   |
|         |   |
| D6. Wha | t, if anything, could be done to make it easier for you to make referrals to National   |
|         |   |
|         |   |
|         |   |
|         |   |
|         |   |

### E. Closing demographics

We have just a few final questions for you. As a reminder, all of your responses are confidential. These data are collected for analysis purposes only. You may skip any questions you do not wish to answer.

|      | Which of the following best describes the facility type where you primarily see patients?  |
|------|--|
| Plea | ase select all that apply.   |
|      | Clinic   |
|      | ☐ Hospital   |
|      | Academic center  |
|      | □ Pharmacy   |
|      | Non-medical institution-based (e.g., school health, prison health, etc.)   |
|      | ☐ Telemedicine   |
|      | Other (please describe):   |
| E2.  | What is the 5-digit zip code of your facility?   |
| E3.  | In which region of Virginia do you work?   |
| 1    | Central  |
| 2    | Eastern  |
| 3    | Hampton Roads  |
| 4    | Northern   |
| 5    | Southside  |
| 6    |  |
| 7    | · · · · · <b>·</b>   |
| 8    | West Central   |
| 9    | Not sure (please characterize region in your own words)  |
| E4.  | How would you describe the area in which you work?   |
| 1    | Urban  |
| 2    | Suburban   |
| 3    | Small town   |
| 4    | Rural  |
| 5    | Other (please specify)   |
|      | In the past year, approximately how many of your patients faced out-of-pocket healthcare ts that were a significant barrier to their care? |
| 1    | All or most of my patients   |
| 2    | Many of my patients  |
| 3    | Some of my patients  |
| 4    | Few of my patients   |
| 5    | None of my patients  |
| 6    | Don't know   |

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| <b>E6.</b> | How   | do you describe yourself?  |
|------------|-------|--|
| 1          | Man   |  |
| 2          | Won   | nan  |
| 3          | Non-  | binary   |
| 4          | Prefe | er to provide own description:   |
| 5          | Prefe | er not to say  |
| E7.        | Pleas | e select the age range that corresponds to your age.                                       |
| 1          | Unde  | er 30  |
| 2          | 30-3  | 9  |
| 3          | 40-49 | 9  |
| 4          | 50-59 | 9  |
| 5          | 60-6  | 9  |
| 6          | 70+   |  |
| 7          | Prefe | er not to say  |
| E8.        | With  | which of the following racial or ethnic categories do you identify? Please select all that |
| app        | _     |  |
|            |       | American Indian or Alaska Native   |
|            |       | Asian  |
|            |       | Black or African American  |
|            |       | Hispanic or Latinx   |
|            |       | Native Hawaiian or other Pacific Islander  |
|            |       | White or Caucasian   |
|            |       | Category not listed (please describe):   |
|            |       | Prefer not to answer   |

Thank you very much for taking the time to complete this survey. Your responses are valued and very much appreciated!

If you would like to learn more about National DPP, visit <a href="https://www.cdc.gov/diabetes/prevention">www.cdc.gov/diabetes/prevention</a>.

### No postage is required to mail back this questionnaire.

Please use the envelope provided.

### Lost your envelope?

Please return the questionnaire to us at:

Center for Survey Research
University of Virginia
P.O. Box 400767
Charlottesville, VA 22904-4767

[CSRID]

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# III. Recruitment Study Phase

### Virginia Resident Health Behaviors and Preferences Survey

Thank you for taking the time to complete this questionnaire that will help us to better understand the health behaviors and perspectives of Virginia residents. In partnership with the Virginia Department of Health (VDH), the University of Virginia Center for Survey Research is conducting this survey. **Your perspective is very important and we appreciate your time.** 

**The survey's purpose:** To better understand Virginia residents' current health behaviors and priorities, communication preferences, and perspectives surrounding type 2 diabetes and preventative strategies.

#### Who can participate?

➤ Participants must live in Virginia, be between the ages of 18 and 75, and have never been diagnosed with type 1 or type 2 diabetes.

#### Your responses will be anonymous

- ➤ Your responses are completely anonymous. Your survey responses are not and cannot be connected to your personal information.
- > VDH will not know if you participated in the survey.

#### **General instructions**

- You can decline to take part in the survey or skip any questions you do not wish to answer except for eligibility questions.
- As you progress through the questionnaire, you can use the back button to review previous questions/answers.
- ➤ Because the survey is anonymous and your name is not linked to your responses, the research team will be unable to withdraw your participation once you submit your survey response.

#### How long will it take?

The survey should take about 15 minutes to complete.

#### **Risks and Benefits**

- There are no known risks associated with participating in this study.
- There are no direct benefits to you for participating in this research study. Your responses will be used in efforts to improve diabetes prevention practices across Virginia and ultimately decrease the rates of diabetes in the state.

For more information, contact: Center for Survey Research, <a href="mailto:surveys3@virginia.edu">surveys3@virginia.edu</a>, 434-243-5232

This survey has been approved by the University of Virginia's Institutional Review Board for the Social and Behavioral Sciences (Project #3936). To obtain more information about this study, ask questions about the research procedures, express concerns about your participation, or report illness, injury or other problems, please contact:

Tonya R. Moon, Ph.D.

Chair, Institutional Review Board for the Social and Behavioral Sciences

One Morton Dr Suite 500

University of Virginia, P.O. Box 800392

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### A. Eligibility Screening

| A1.            | How    | do | vou | des | cribe | yoursel | f? |
|----------------|--------|----|-----|-----|-------|---------|----|
| 7 <b>3 4</b> • | 110 11 | uo | you | ucs |       | yourse  |    |

- 1 Man
- 2 Woman
- 3 Non-binary
- 4 I describe myself as:
- 5 Prefer not to say

# A2. Have you ever been told by a doctor or other healthcare professional that you have diabetes (type 1 or type 2)? Please do *not* include a gestational diabetes diagnosis (diabetes during pregnancy) when answering this question.

- 1 Yes [EXCLUDED]
- 2 No

A2a. (**If A2=yes**) We appreciate your interest in the survey, but we are only surveying individuals who have not received a type 1 or type 2 diabetes diagnosis. Thank you for your time.

*Note:* If you had gestational diabetes but were *not* diagnosed with Type I or Type II diabetes before or after your pregnancy, then you are still eligible to take this survey. Please go back to the previous question and answer 'no' if this is the case for you.

# A3. Have you ever enrolled in a National Diabetes Prevention Program Lifestyle Change Program (commonly referred to as National DPP)?

- 1 Yes [EXCLUDED]
- 2 No

A3a. (**If A3=yes**) We appreciate your interest in the survey, but we are only surveying individuals who have not previously enrolled in a National Diabetes Prevention Program. Thank you for your time.

### A4. (If A1 is <u>not</u> man) During a pregnancy, have you ever been diagnosed with gestational diabetes?

- 1 Yes
- 2 No
- 3 Not applicable

# A5. Have you ever been told by a doctor or other healthcare professional that you have prediabetes or that your blood glucose levels are higher than normal?

- 1 Yes
- 2 No
- 3 Not sure

## A6. Has a doctor or other healthcare professional ever told you that you are at risk for developing type 2 diabetes?

- 1 Yes
- 2 No
- 3 Not sure

| <b>A7. Ab</b>                                  | out how tall are you without shoes? Feet Inches   |
|--|---|
| A8. Ab   | out how much do you weigh without shoes? Pounds   |
| [[[IF ONE<br>SURVEY:                           | OR MORE OF FOLLOWING CONDITIONS MET, PARTICIPANT ELIGIBLE FOR   |
| • Ye   | es to gestational diabetes (A4)<br>es to prediabetes diagnosis (A5)   |
|  | es to at risk of diabetes (A6)  MI greater than or equal to 25 (Calculation from A7 and A8) ]]]   |
|  | munication and Health Information Preferences   |
| Thank you<br>We'd like<br>to health in         | for answering those questions to determine if you were eligible to participate in the survey. to start by asking about your communication preferences generally and then specifically related aformation.   |
| Thank you We'd like to health in <b>B1. Wh</b> | for answering those questions to determine if you were eligible to participate in the survey. to start by asking about your communication preferences generally and then specifically related information. <b>nat types of media do you use on a regular basis?</b> <i>Please select all that apply.</i>  |
| Thank you We'd like to health in B1. Wh        | for answering those questions to determine if you were eligible to participate in the survey. to start by asking about your communication preferences generally and then specifically related aformation.   |
| Thank you We'd like to health in B1. Wh        | for answering those questions to determine if you were eligible to participate in the survey. to start by asking about your communication preferences generally and then specifically related and at types of media do you use on a regular basis? Please select all that apply.  Facebook  |
| Thank you We'd like to health in B1. Wh        | for answering those questions to determine if you were eligible to participate in the survey. to start by asking about your communication preferences generally and then specifically related aformation. <b>nat types of media do you use on a regular basis?</b> Please select all that apply.  Facebook Twitter Instagram TikTok   |
| Thank you We'd like to health in B1. Wh        | for answering those questions to determine if you were eligible to participate in the survey. to start by asking about your communication preferences generally and then specifically related aformation. <b>nat types of media do you use on a regular basis?</b> Please select all that apply.  Facebook Twitter Instagram TikTok Television – broadcast  |
| Thank you We'd like to health in B1. Wh        | for answering those questions to determine if you were eligible to participate in the survey. to start by asking about your communication preferences generally and then specifically related information. <b>nat types of media do you use on a regular basis?</b> <i>Please select all that apply.</i> Facebook Twitter Instagram TikTok Television – broadcast Television – streaming  |
| Thank you We'd like to health in B1. Wh        | for answering those questions to determine if you were eligible to participate in the survey. to start by asking about your communication preferences generally and then specifically related aformation.  **Part types of media do you use on a regular basis? **Please select all that apply.**  Facebook Twitter  Instagram TikTok Television – broadcast Television – streaming Print journalism – newspapers or magazines  |
| Thank you We'd like to health in B1. Wh        | for answering those questions to determine if you were eligible to participate in the survey. to start by asking about your communication preferences generally and then specifically related aformation.  **nat types of media do you use on a regular basis? **Please select all that apply.**  Facebook Twitter  Instagram TikTok Television – broadcast Television – streaming Print journalism – newspapers or magazines Online journalism                                   |
| Thank you We'd like to health in B1. Wh        | for answering those questions to determine if you were eligible to participate in the survey. to start by asking about your communication preferences generally and then specifically related aformation.  **nat types of media do you use on a regular basis? **Please select all that apply.**  Facebook  Twitter  Instagram  TikTok  Television – broadcast  Television – streaming  Print journalism – newspapers or magazines  Online journalism  Radio – local or satellite |
| Thank you We'd like to health in B1. Wh        | for answering those questions to determine if you were eligible to participate in the survey. to start by asking about your communication preferences generally and then specifically related aformation.  **nat types of media do you use on a regular basis? **Please select all that apply.**  Facebook  Twitter  Instagram  TikTok  Television – broadcast  Television – streaming  Print journalism – newspapers or magazines  Online journalism                             |

downloadable image.



- 1 Very comfortable
- 2 Somewhat comfortable
- 3 Slightly comfortable
- 4 Not at all comfortable
- 5 I've never heard of QR codes

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| <b>B3.</b> | Where do you typically get your health or medical information? Please select all that apply.  |
|------------|---|
|            | ☐ My doctor or other healthcare provider  |
|            | ☐ Friends and family  |
|            | ☐ Print or online news  |
|            | ☐ Television news or programs   |
|            | ☐ Radio – local or satellite  |
|            | □ Podcasts  |
|            | □ Blogs   |
|            | ☐ Social media  |
|            | ☐ Health/lifestyle apps   |
|            | ☐ From searching online   |
|            | □ Books   |
|            | ☐ Articles in medical journals  |
|            | ☐ Brochures, pamphlets, etc.  |
|            | ☐ Somewhere else (please specify):  |
|            | Who do you consider a trusted source when it comes to health information? Please select an apply.  My doctor or other healthcare provider Pharmacist Friends and family Healthcare or public health experts in the news or public discourse Federal health agencies (e.g., the Centers for Disease Control and Prevention (CDC)) The Virginia Department of Health (VDH) My local health district My faith leader Public figures and accounts I follow on social media Someone else (please specify): |
|            | How often do you get an annual physical or wellness exam by your primary healthcare ider?   |
| 1          | I get a physical or wellness exam every year or almost every year.  |
| 2          | I get a physical or wellness exam every few years.  |
| 3          | I have not had a physical or wellness exam in 5 or more years.  |
| 4          | Not sure  |
| 5          | Prefer not to answer  |

**B6.** Please rate each of the following health and lifestyle changes in terms of your interest in them in your own life. If you already feel your current status of the item is healthy and therefore your desire is to maintain your current level, please select that corresponding answer choice.

|                               | Very<br>interested | Somewhat interested | Slightly<br>interested | Not at all interested | Maintain<br>current<br>status | Not sure/<br>Prefer not<br>to answer |
|-------------------------------|--------------------|---------------------|------------------------|-----------------------|-------------------------------|--------------------------------------|
| a. Lose weight                | 1                  | 2                   | 3                      | 4                     | 8                             | 9                                    |
| b. Improve diet               | 1                  | 2                   | 3                      | 4                     | 8                             | 9                                    |
| c. Increase physical activity | 1                  | 2                   | 3                      | 4                     | 8                             | 9                                    |
| d. Lower risk of diabetes     | 1                  | 2                   | 3                      | 4                     | 8                             | 9                                    |
| e. Improve stress management  | 1                  | 2                   | 3                      | 4                     | 8                             | 9                                    |
| f. Improve mental health      | 1                  | 2                   | 3                      | 4                     | 8                             | 9                                    |
| g. Increase social support    | 1                  | 2                   | 3                      | 4                     | 8                             | 9                                    |
| h. Feel healthier             | 1                  | 2                   | 3                      | 4                     | 8                             | 9                                    |

#### B7. How concerned are you about your risk of developing type 2 diabetes?

- 1 Very concerned
- 2 Moderately concerned
- 3 A little concerned
- 4 Not at all concerned
- 5 Not sure

| B8. Hav  | ye you pursued any of the following strategies to reduce the risk of developing type 2 |
|----------|--|
| diabetes | s? Please select all that apply.   |
|          | Taking Metformin (a prescription drug)   |
|          | Dietary changes  |
|          | Regular physical activity  |
|          | Group fitness program  |
|          | Weight loss program (e.g., Weight Watchers)  |
|          | Diabetes prevention program  |
|          | Something else (please specify):   |
|          | Not applicable/not trying to reduce risk   |

### C. Awareness and Impressions of National DPP Lifestyle Change Program

We'd now like to ask about your awareness and impressions of a specific diabetes prevention program.

C1. Before today, had you ever heard of the National Diabetes Prevention Program, commonly referred to as National DPP?

- 1 Yes
- 2 No [Skip to C2 text]
- 3 Not sure [Skip to C2 text]

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| . ( ' | C1=yes) Where have you heard about National DPP? Please select all that apply.  |
|-------|---|
|       | Healthcare provider   |
|       | Insurance provider  |
|       | Friend, family member, coworker, or other acquaintance  |
|       | At work or through HR   |
|       | At church/religious community   |
|       | At a community center   |
|       | Informational flyers or posters   |
|       | Newspaper advertisement   |
|       | Social media  |
|       | Internet search results   |
|       | Somewhere else, please specify:   |
|       | Can't recall  |
|       |   |
|       |   |
|       | . (If C1a=Healthcare provider) Did the healthcare provider who told you about onal DPP recommend you participate in the program?  Yes  No |
| 2.    | onal DPP recommend you participate in the program? Yes  |
| 2.    | onal DPP recommend you participate in the program?  Yes No  |
| 2.    | onal DPP recommend you participate in the program?  Yes No  |
| 2.    | onal DPP recommend you participate in the program?  Yes No  |

C1e. (If C1=yes) Based on what you've heard about National DPP, how would you characterize your impressions of the program?

- 1. Mostly positive
- 2. Somewhat positive
- 3. Somewhat negative
- 4. Mostly negative
- 5. Mixed I've heard both positive and negative
- 6. Have not heard enough to say

(IF C1=YES) Thank you for answering those questions. We'll now tell you a bit more about National DPP in case you didn't already know the following information.

The National Diabetes Prevention Program (National DPP) Lifestyle Change Program is a CDC-recognized program that is clinically proven to prevent or delay type 2 diabetes. As part of a group in their local community, National DPP participants work with a trained lifestyle coach in a year-long program to learn the skills needed to make lasting lifestyle changes. Participants learn to eat healthy, add or increase physical activity, manage stress, stay motivated, and solve problems that can get in the way of healthy changes. The program consists of regular meetings over the course of a year, and participation in National DPP is a covered benefit in many insurance plans as well as Medicare. There are currently over 30 programs offered across Virginia, with programs delivered in a variety of formats, including in-person, virtually, and in a combination of the two. To learn more, visit <a href="www.cdc.gov/diabetes/prevention/people-at-risk.html">www.cdc.gov/diabetes/prevention/people-at-risk.html</a>.

C2. Below are a list of some program features and information about National DPP. For each item, please rate how appealing of a feature you consider the piece of information.

|   | Very<br>appealing | Somewhat appealing | Slightly<br>appealing | Not at all appealing | Not sure/<br>Not<br>applicable |
|---|-------------------|--------------------|-----------------------|----------------------|--------------------------------|
| a. Content is designed around<br>improving general health   | 1                 | 2                  | 3                     | 4                    | 9                              |
| b. Content is designed around reducing risk of developing diabetes                                | 1                 | 2                  | 3                     | 4                    | 9                              |
| c. Participants learn about nutrition and healthy eating  | 1                 | 2                  | 3                     | 4                    | 9                              |
| d. Participants learn how to improve fitness and gain tips for a more active lifestyle            | 1                 | 2                  | 3                     | 4                    | 9                              |
| e. Participants learn stress<br>management and coping skills                                      | 1                 | 2                  | 3                     | 4                    | 9                              |
| f. Virtual-only programs are available  | 1                 | 2                  | 3                     | 4                    | 9                              |
| g. Hybrid programs, with a mix of virtual and in-person meetings, are available                   | 1                 | 2                  | 3                     | 4                    | 9                              |
| h. You can join without physician referral  | 1                 | 2                  | 3                     | 4                    | 9                              |
| Program cost is often covered by insurance providers, Medicare, and some employers                | 1                 | 2                  | 3                     | 4                    | 9                              |
| j. Program requires year-long<br>commitment to create lasting<br>lifestyle change                 | 1                 | 2                  | 3                     | 4                    | 9                              |
| k. The program is group-based   | 1                 | 2                  | 3                     | 4                    | 9                              |
| Interested participants can attend information sessions with a lifestyle coach prior to enrolling | 1                 | 2                  | 3                     | 4                    | 9                              |
| m. The program can cut participants' risk of developing type 2 diabetes by 58%                    | 1                 | 2                  | 3                     | 4                    | 9                              |

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| pers               | National DPP in Virginia has been successfully delivered with meetings occurring fully inson, fully virtually, and in a combination of in-person and virtual. Which delivery format do think you would prefer?  |
|--------------------|---|
| 1                  | In-person meetings  |
| 2                  | Virtual meetings where the whole group gets together at the same time using a video platform  |
| 2                  | (e.g., Zoom)  |
| 3                  | Combination format where class members can choose to either attend in person or virtually for each class  |
| 4                  | Something else (please specify)   |
| 5                  | Not sure  |
|                    |   |
|                    | C3a. (IF C3 IS NOT "Not sure") In the space below, please explain why you chose that delivery format.   |
|                    |   |
| in N<br>par<br>poc | Most insurance programs, including Medicare, cover some or all of the cost of participating Vational DPP. Additionally, some large employers in Virginia offer free program ticipation to their employees. For participants without coverage, however, average out of ket costs for the program are around \$400-\$500 total. If your participation wasn't covered incially, how much of a challenge would cost be to your participation? |
| 1                  | A significant challenge   |
| 2                  | Somewhat  |
| 3                  | Slightly  |
| 4                  | Not at all a challenge  |
| 5                  | Not sure  |
| to le              | National DPP is a year-long program of at least 22 sessions. This allows participants not only earn about lifestyle changes that reduce the risk of diabetes but also how to apply those nges for long-term success, all in a supportive environment. How much of a challenge would year-long time commitment be to your participation?   |
| 1                  | A significant challenge   |
| 2                  | Somewhat  |
| 3                  | Slightly  |
| 4                  | Not at all a challenge  |
| 5                  | Not sure  |
|                    | In the space below, please describe any other challenges or concerns you may have about ticipation in National DPP.   |
|                    |   |
|                    |   |

| C7. How helpful do you think that a lifestyle change | e program like National DPP could be in |
|--|---|
| helping you make lasting healthy changes?            |   |

| 1 2         | •           | helpful<br>ewhat helpful  |  |  |  |
|-------------|-------------|---|--|--|--|
| 3           | Sligh       | tly helpful   |  |  |  |
| 4           | Not a       | at all helpful  |  |  |  |
| 5 Not sure  |             |   |  |  |  |
|             |             | (If 0=Slightly OR Not at all) Why do you think National DPP may not be able to help uccessfully implement lifestyle changes?  |  |  |  |
| ·           | -<br>-<br>- |   |  |  |  |
|             |             | (If 0=Very or Somewhat) What specifically about National DPP do you think would you successfully implement lifestyle changes? |  |  |  |
|             |             |   |  |  |  |
| C <b>8.</b> | On a        | scale of 1 to 10, how interested are you in joining a National DPP?   |  |  |  |
| 1           | 1 - N       | ot at all interested  |  |  |  |
| 2           | 2           |   |  |  |  |
| 3           | 3           |   |  |  |  |
| 4           | 4           |   |  |  |  |
| 5           | 5           |   |  |  |  |
| 6           | 6           |   |  |  |  |
| 7           | 7           |   |  |  |  |
| 8           | 8           |   |  |  |  |
| 9           | 9           |   |  |  |  |
| 10          | 10 –        | Extremely interested  |  |  |  |
|             | C8a.        | (If C8=1 or 2) Why are you not interested in National DPP?  |  |  |  |

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| C9. On a scale of 1 to 10, how likely are you to look further into National DPP?  |
|---|
| 1 1 − Not at all likely   |
| 2 2   |
| 3 3   |
| 4 4   |
| 5 5   |
| 6 6   |
| 7 7   |
| 8 8   |
| 9 9   |
| 10 10 – Extremely likely  |
| C10. What additional information about National DPP would you want to know more about? Please select all that apply.  |
| ☐ Participant success rates   |
| Participant testimonials  |
| ☐ Curriculum of the program   |
| ☐ Location of the nearest program   |
| ☐ Structure of the meetings   |
| ☐ Role of the lifestyle coaches   |
| ☐ Program cost, payment options, and insurance coverage   |
| General health risks related to prediabetes and type 2 diabetes   |
| ☐ Eligibility for the program   |
| ☐ Something else (please specify):  |
| C11. What do you think is the best way to share information about National DPP so more Virginia residents can learn about the program? <i>Please select all that apply.</i> |
| Newspaper ads   |
| Radio ads   |
| □ Local TV station commercials  |
| □ Social media  |
| ☐ Targeted online ads   |
| Posters/flyers around town (e.g., at pharmacies, grocery stores, community centers, etc.)   |
| ☐ Through local healthcare providers  |
| Through local community or faith leaders  |
| ☐ Through employers   |
| ☐ Through insurance providers   |
| ☐ Something else (please specify):  |
|   |

Urban
 Suburban
 Small town
 Rural

### **D. Closing Demographics**

Thank you for your thoughtful responses. We have just a few final questions about you. As a reminder, all responses will be handled confidentially, and only aggregated responses will be reported.

| D1         | . What is the primary source of your current healthcare coverage?  |
|------------|--|
|            | <u> </u>   |
| 1          | A plan purchased through my employer or union (including plans purchased through a family member's employer) |
| 2          | A plan that you or another family member buys on your own  |
| 3          | Medicare   |
| 4          | Medicaid or other state program  |
| 5          | TRICARE, VA, or Military   |
| 6          | Some other source (please specify):  |
| 7          | I don't currently have any healthcare coverage   |
| <b>D2.</b> | Has your biological mother, father, or a sibling ever been diagnosed with type 2 diabetes?                   |
| 1          | Yes  |
| 2          | No   |
| 3          | Don't know   |
|            | Have you ever been told by a doctor or other healthcare professional that you have ertension?                |
| 1          | Yes  |
| 2          | No   |
| 3          | Don't know   |
| D4.        | In what year were you born?  |
| D5.        | What is your marital status?   |
| 1          | Married  |
| 2          | Living as married  |
| 3          | Divorced   |
| 4          | Widowed  |
| 5          | Separated  |
| 6          | Single, never been married   |
| <b>D6.</b> | How many children under 18 years of age do you have living in your household? If none,                       |
| plea       | se enter 0   |
| D7.        | What is your 5 digit zip code?   |
| D8.        | How would you describe the area in which you live?   |

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5 Other (please specify) \_\_\_\_\_

### D9. What is the highest level of education you completed?

- 1 Less than high school diploma
- 2 High school graduate or GED
- 3 Some college but no degree
- 4 Associates Degree (for example: AA, AS) or certificate in career or technical education
- 5 Bachelor's Degree (for example: BA, BS)
- 6 Some graduate work
- 7 Master's, Professional or Doctoral degree (for example: MA, MSW, MD, PhD)
- 8 Prefer not to say

| D10. | Which | of the | following | best de | scribes | you? | Select | all that | apply. |
|------|-------|--------|-----------|---------|---------|------|--------|----------|--------|
|------|-------|--------|-----------|---------|---------|------|--------|----------|--------|

|        | Working full-time (35 hours/week or more)   |  |  |  |  |  |
|--------|---|--|--|--|--|--|
|        | Working part-time   |  |  |  |  |  |
|        | Working self-employed   |  |  |  |  |  |
|        | Unemployed  |  |  |  |  |  |
|        | Stay at home parent or homemaker  |  |  |  |  |  |
|        | Retired   |  |  |  |  |  |
|        | Student   |  |  |  |  |  |
|        | Disabled  |  |  |  |  |  |
|        | Other (please describe):  |  |  |  |  |  |
| D11. W | hich of the following categories best describe you? Please select all that apply. |  |  |  |  |  |
|        | American Indian or Alaska Native  |  |  |  |  |  |
|        | Asian   |  |  |  |  |  |
|        | Black or African American   |  |  |  |  |  |
|        | Hispanic or Latinx  |  |  |  |  |  |
|        | Middle Eastern or North African   |  |  |  |  |  |
|        | Native Hawaiian or other Pacific Islander   |  |  |  |  |  |
|        | White   |  |  |  |  |  |
|        | I describe myself as:   |  |  |  |  |  |
|        | Prefer not to answer  |  |  |  |  |  |

# D12. Which of the following comes closest to your own feelings about your household's income these days?

- 1 Living comfortably on present income
- 2 Getting by on present income
- 3 Finding it difficult to get by on present income
- 4 Finding it very difficult to get by on present income
- 5 Prefer not to say

D13. Which of the following income categories most closely matches your total annual household income from all sources earned in the past year?

- 1 Less than \$15,000
- 2 \$15,000 \$24,999
- 3 \$25,000 \$49,999
- 4 \$50,000 \$74,999
- 5 \$75,000 \$99,999
- 6 \$100,000 \$149,999
- 7 \$150,000 and higher
- 8 Don't know
- 9 Prefer not to say

Thank you very much for taking the time to complete this survey. Your responses are valued and very much appreciated!

If you would like to learn more about National DPP, visit www.cdc.gov/diabetes/prevention/people-at-risk.html.

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