

# Descriptive analysis of the implementation of the program “Prevention 40 PLUS” in Poland, July 2021–December 2024

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## Abstract

The prevention and early detection of diseases through screening are key public health actions. The program “Prevention 40 PLUS” was a population-based screening program for adults aged 40 and over, available from July 2021 and April 2025. This study provides a descriptive analysis of the implementation of the program in Poland between July 2021 and December 2024. Data for the study were obtained from the National Health Fund through a request for access to public information. Between July 2021 and December 2024, a total of 5,071,360 participants completed the questionnaire available within the program. Between 2023 and 2022, the annual number of participants increased by 302,292 participants, and between 2023 and 2024, an increase of 116,393 participants was noted. Among the participants, 58.6% were women. Over 60% of the participants signed up for the program via the hotline. Over one fifth (21%) of the participants were aged 40–44 years. In general, almost half of the participants (48.1%) were aged 40–54 years. The largest groups of participants of the program lived in Masovia (11.7%) and Greater Poland (10.9%). Less than 5% of the participants lived in the Lubusz or Opolskie voivodeship. Prevention

40 PLUS was well-accepted and over 5 million Poles declared a willingness to participate in this program over its 4-year span.

**Keywords:** prevention; screening; early detection; public health; Prevention 40 PLUS

## Introduction

The prevention and early detection of diseases through screening are key public health actions (Martin-Moreno et al., 2016; Speechley et al., 2017). Population screening programs offer medical examinations for specific diseases to a population of apparently healthy, asymptomatic individuals (Williams, 2022). Most of the population-based screening programs are focused on early detection of various types of cancer (Sheridan et al., 2025). The European Council (2022) recommends European Union (EU) Member States to implement population screening for six cancers: breast, cervical, colorectal, gastric, lung, and prostate. Cervical and colorectal cancer screening programs enjoy the greatest success (Shieh et al., 2016). However, different population screening programs have been implemented worldwide to better address the health needs of local populations (Ebell et al., 2018). Moreover, national screening programs may also better address the sociocultural determinants of health and address the inequalities resulting from these determinants.

On July 1, 2021, a population-based preventive program was introduced in Poland, called Prevention 40 PLUS (Regulation of the Ministry of Health of 14 June 2021 on the pilot program “Prevention 40 PLUS”, 2021). This program provided free preventive screening for all Polish men and women over the age of 40. The aim of the program was to increase the number of people undergoing preventive screening, increase early detection of diseases and disorders, and prevent the development of these diseases (Ministry of Health, 2025). This program was implemented in response to the COVID-19 pandemic and the decrease in the utilization of health services, including preventive services, observed in the first year of the COVID-19 pandemic (Mularczyk-Tomczewska et al., 2022).

Prevention 40 PLUS offered a group of diagnostic tests selected specifically for men and women (Regulation of the Ministry of Health of 14 June 2021 on the pilot program “Prevention 40 PLUS”, 2021). All participants underwent the following assays: peripheral blood count with differential and platelet count; total cholesterol level or lipid profile; blood glucose level; alanine transaminase (AlAT), aspartate transaminase (AspAT), and gamma-glutamyltransferase (GGTP) levels; blood creatinine level; general urine test; blood uric acid level; fecal occult blood – immunochemical method (iFOBT); blood pressure measurement; and anthropometric measures, such as body mass, height, waist circumference, and body mass index (BMI). Moreover, in men, total prostate-specific antigen (PSA) levels were tested (Ministry of Health, 2025).

All insured individuals could participate in the program at publicly funded health service centers. Individuals interested in participating in this program were obligated to fill out the dedicated screening questionnaire, available online at the Patient's Online Account or via a hotline or authorized healthcare facility. In July 2023, it was announced that people over 40 years of age could use the program for a second time if at least 12 months had passed since the previous enrolment. The program ended on April 30, 2025 (Ministry of Health, 2025).

This aim of this study is to provide a descriptive analysis of the implementation of Prevention 40 PLUS in Poland between July 2021 and December 2024.

## Material and Methods

This study is an analysis of data on the program Prevention 40 PLUS, a preventive screening program available within the Polish public healthcare system for all insured persons aged 40 and over (Regulation of the Ministry of Health of 14 June 2021 on the pilot program "Prevention 40 PLUS", 2021). Each participant of the program was required to complete a questionnaire, based on which the diagnostic tests to be offered as part of the program were selected. The questionnaire was available at the Patient's Online Account or via a designated hotline. Once the questionnaire was completed, a referral was generated for tests appropriate for the patient's health risks. This solution was innovative in nature, as it did not require a doctor's visit, facilitating access to basic diagnostics and health prevention in accordance with the list of benefits specified in the regulation (Ministry of Health, 2025).

Completing the questionnaire resulted in a referral for laboratory testing. For the purposes of this analysis, any person who completed the questionnaire and received a referral was considered a program participant. This study did not analyze the percentage of people who, despite completing the questionnaire and receiving a referral, did not undergo laboratory testing (Ministry of Health, 2025).

Data on the implementation of Prevention 40 PLUS were obtained from the National Health Fund through a request for access to public information. The National Health Fund, as a public payer, monitored and supervised the implementation of the publicly financed screening program.

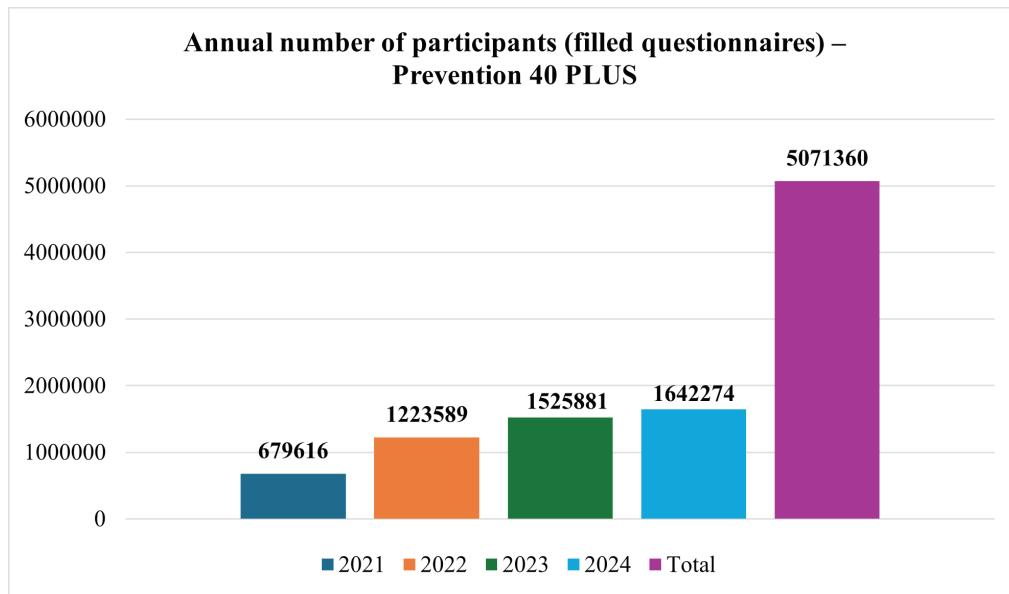
The request for access to anonymized data regarding the implementation of the program encompassed the following data about the participants:

- gender
- age
- provincial branch of the National Health Fund assigned to the participant's place of residence
- changes in the number of participants over time.

In this study, data on questionnaires filled out between July 1, 2021 and December 31, 2024 were analyzed. The data were entered into an electronic database and analyzed using MS Excel.

## Results

Between July 2021 and December 2024, a total of 5,071,360 participants completed the questionnaire connected with the program Prevention 40 PLUS (Figure 1). Between 2023 and 2022, the annual number of participants increased by 302,292 participants, and between 2023 and 2024, an increase of 116,393 participants was noted (Figure 1). Among the participants, 58.6% were women.



**Figure 1.** Annual number of participants (completed questionnaires) of Prevention 40 PLUS, July 2021–December 2024

The monthly number of participants of the program is presented in Table 1. Over 60% of the participants signed up for the program via the hotline. The highest number of monthly participants was observed in March 2023: a total of 176,378 (Table 1).

**Table 1:** Monthly number of participants of the Prevention 40 PLUS program

Month	Total number of questionnaires	Source of questionnaires	
		Patient's Online Account	Hotline
July 2021	134,393	123,785	10,608
August 2021	72,160	58,076	14,084
September 2021	94,411	71,435	22,976
October 2021	141,526	109,336	32,190
November 2021	130,614	94,985	35,629
December 2021	106,512	75,642	30,870
January 2022	66,936	42,039	24,897
February 2022	58,055	31,916	26,139
March 2022	60,185	25,587	34,598
April 2022	71,647	32,513	39,134
May 2022	93,869	34,449	59,420
June 2022	125,632	51,564	74,068
July 2022	87,711	25,998	61,713
August 2022	105,723	30,406	75,317
September 2022	123,670	34,508	89,162
October 2022	136,439	37,779	98,660
November 2022	166,059	44,950	121,109
December 2022	127,663	31,284	96,379
January 2023	121,080	29,657	91,423
February 2023	157,492	44,501	112,991
March 2023	176,378	57,709	118,669
April 2023	112,467	27,587	84,880
May 2023	124,622	26,235	98,387
June 2023	107,954	19,217	88,737
July 2023	116,132	26,260	89,872
August 2023	125,543	28,061	97,482
September 2023	122,087	23,495	98,592
October 2023	130,315	28,473	101,842
November 2023	141,777	31,487	110,290
December 2023	90,034	21,559	68,475
January 2024	132,208	31,471	100,737
February 2024	153,236	33,804	119,432
March 2024	144,359	31,422	112,937

Month	Total number of questionnaires	Source of questionnaires	
		Patient's Online Account	Hotline
April 2024	151,254	30,862	120,392
May 2024	146,920	38,697	108,223
June 2024	174,710	46,575	128,135
July 2024	100,690	21,875	78,815
August 2024	98,782	20,230	78,552
September 2024	104,965	19,449	85,516
October 2024	127,114	27,500	99,614
November 2024	150,199	42,939	107,260
December 2024	157,837	51,529	106,308
<b>Total</b>	<b>5,071,360</b>	<b>1,716,846</b>	<b>3,354,514</b>

Over one fifth (21%) of the participants were individuals aged 40–44 years. The highest interest in the program was among the youngest eligible for the program: almost half of the participants (48.1%) were aged 40–54 years (Table 2).

**Table 2:** Age group of the participants of Prevention 40 PLUS

Age group [years]	Percentage of all participants
40–44	21.0%
45–49	15.3%
50–54	11.8%
55–59	10.5%
60–64	11.4%
65–69	12.3%
70–74	9.2%
75–79	4.7%
80–84	2.2%
85–89	1.1%
90–94	0.4%
95 and over	0.1%

Most of the participants of Prevention 40 PLUS lived in Masovia (11.7%) and Greater Poland (10.9%) (Table 3). Less than 5% of them lived in Lubusz or Opolskie voivodeship.

**Table 3:** Participants of Prevention 40 PLUS by voivodeship

Voivodeship	Percentage of all participants
Masovia	11.7%
Greater Poland	10.9%
Silesia	9.7%
Lublin	9.5%
Subcarpathia	9.2%
Lesser Poland	7.9%
Lower Silesia	6.8%
Pomerania	5.6%
West Pomerania	4.6%
Świętokrzyskie	4.2%
Lodzkie	4.2%
Kuyavia-Pomerania	4.0%
Podlaskie	3.7%
Warmia-Masuria	3.5%
Lubusz	2.6%
Opole	2.0%
missing data	0.8%

## Discussion

This study provides a descriptive analysis of the implementation of the program "Prevention 40 PLUS" in Poland, including data on the participants (July 2021–December 2024). The findings from the study revealed a year-by-year increase in the number of participants. Most of the participants were women and almost half of the participants were aged 40–54 years. The program was utilized most in Masovia, Greater Poland, and Silesia, which are the voivodeships with the highest numbers of residents.

Prevention 40 PLUS was a major population-based screening program implemented in Poland after the COVID-19 pandemic (Ministry of Health, 2025). It was widely promoted on TV and radio, in the press and digital media, and on social media. The program was led by the Ministry of Health and, following several extensions over 5 years, it ended on 30 April 2025.

The study showed that over 5 million Poles aged 40 and over filled out the screening questionnaire, which automatically generated referrals for laboratory tests. This number includes also those who filled out the questionnaire but did not show up for tests, as well as those who participated in the program twice with an interval of at least 12 months.

It is estimated that 12.8 million Poles are aged 40 years and over, so the number of people who participated in Prevention 40 PLUS is encouraging and points to a relatively high interest in screening after the COVID-19 pandemic. Every year, an increase in the number of participants was observed, which suggests growing interest in the program. Monthly differences in the number of participants were observed, which may suggest that in some months people are less likely to undergo preventive screening, such as during the summer or the last month of the year. The findings from this study also indicate the role of a well-organized hotline as a source of health information and enrollment for screening, especially for older adults. Over 60% of the participants signed up for the screening via the hotline. The role of hotlines as a source of information about available healthcare services and a place to register for health services, including preventive services, requires further investigation (Brody et al., 2020).

Most of the participants were women, but this observation is in line with previously published data that this population is more likely to perform screening tests (Mularczyk-Tomczewska et al., 2022). The highest group of participants (almost 50%) were aged 40–54 years, which suggests that the youngest eligible populations were most interested in the health screening. It can be hypothesized that putting the target group for the program (those 40 years and older) in the name of the program had an impact on the youngest eligible group, who felt at high risk and realized that they should perform a screening test (Agrawal et al., 2021). Moreover, this group could be in the best health due to their age and may be the most interested in staying healthy as long as possible, leading them to undergo screening (Chien et al., 2020).

Out of the 16 voivodeships, the percentage of participants in the Prevention 40 PLUS program living in Lublin and West Pomerania was relatively higher than the proportion of the population in these voivodeships to the general population of Poland. However, this observation and regional differences in the utilization of preventive services require further investigation.

The major limitation of this study is the fact that the dataset available for analysis does not allow for identification of those who filled out the questionnaire but did not show up for tests despite receiving a referral. Moreover, those who participated in the program twice could not be identified either. The results of the laboratory tests were not analyzed. This publication included data through December 31, 2024 so as to include a full calendar year. At the time of request for data, it was unknown when the program would end. The program ended on April 31, 2025 and was replaced by the program “My Health,” which includes a similar scope of research but is aimed at people who are 20 years of age and older and is based on different organizational principles.

## Conclusions

The program Prevention 40 PLUS was well-accepted; over 5 million Poles declared a willingness to participate in it over its 4-year span. The highest interest in participating in this population-based screening program was among the youngest eligible age group: 40–54-year-olds. Further analysis should assess the impact of Prevention 40 PLUS on health literacy levels and public attitudes toward preventive screening.

conceptualization: RS, IK; methodology RS; writing – original draft RS, IK; writing – review and editing RS, supervision RS

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