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HEART DISEASE AWARENESS ENHANCEMENT SYSTEM THROUGH PRISTIN (ROUTINE HEALTH CHECK-UP) AT PT. AMM SITE MHU IN 2026

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ABSTRACT

Background: Risk factors for heart disease are still found among workers at PT Antareja Mahada Makmur (AMM) at the MHU Site. A 2026 health checkup revealed that overweight and dyslipidemia were the two most common diagnoses. Furthermore, a case of Non-ST Elevation Myocardial Infarction (NSTEMI) in one of the workers raised the company's concern about the importance of ongoing health monitoring. As a preventative measure, the company implemented the PRISTIN (Routine Health Checkup) program to monitor health conditions and raise employee awareness of heart disease risk factors.

Method: This study used a Quality Control Circle (QCC) approach with a Plan-Do-Check-Act (PDCA) cycle. The evaluation was conducted on the PRISTIN implementation from March to August 2026. Data were obtained from health checks, attendance records, program achievements, and health campaign evaluations. Descriptive analysis was conducted by comparing the results of program implementation from March to May and June to August 2026.

Results: The PRISTIN program includes routine health checks, simple laboratory tests, health education, and physical activity enhancement activities. Average worker attendance increased from 64.61% in the March–May period to 76.85% in the June–August 2026 period. Program achievement for the Prolanis group increased from 55.81% to 57.78%, Peri-RAHMA from 71.67% to 88.14%, and Prima from 63.75% to 83.91%. The health campaign evaluation showed that 95.05% of workers assessed that the information delivery was successful, 94.48% understood the information provided, and 92.64% felt the impact of the campaign activities.

Conclusion: The PRISTIN program has helped companies increase employee engagement in health checkups and strengthen monitoring of heart disease risk factors. While attendance and program outcomes have improved, implementation still requires improvement, particularly in the follow-up of screening results and ongoing monitoring of employee health.

Keywords: Pristin; Heart Disease; Risk Factors; Health Checkup; Workers.

1 INTRODUCTION

An important aspect of worker protection for initiatives to improve business efficiency is occupational safety and health (OHS). Occupational Safety and Health (OHS) is a concept that can affect both employees and others in the workplace. It is implemented to prevent work-related accidents, fires, explosions, and environmental pollution. Knowledge, understanding, behavior, and awareness of occupational safety and health are still at a relatively low level and are not yet seen as fundamental requirements for workers to improve overall well-being, including work productivity.(1).

Cardiovascular disease remains a major public health concern in many countries due to its high morbidity and mortality burden. In 2021, cardiovascular disease caused approximately 19.4 million deaths worldwide, or approximately one-third of all global deaths.(2). According to the Global Burden of Disease (GBD) 2021, this disease accounts for 26.8% of all global deaths and remains the leading cause of death worldwide.(3). This burden has also not decreased significantly in the most recent period. GBD 2023 analysis of the North Africa and Middle East region shows a decline in age-standardized mortality rates from 1990 to 2019, but the decline was not significant in 2019–2023.(2)Cardiovascular disease is also reported as a major cause of morbidity, mortality, and disability in various countries.(4)Meanwhile, the World Health Organization (WHO) states that more than 17 million people worldwide die from heart and blood vessel disease every year.(5). This high figure indicates that efforts to prevent and control heart disease need to be a priority, including in the workplace.

One way to prevent heart disease is by identifying and controlling risk factors early. Several health conditions, such as overweight, obesity, dyslipidemia, and hypertension, require attention because they are associated with an increased risk of cardiovascular disease. Chooi et al. (2019) explain that obesity is a growing health problem and contributes to the emergence of various metabolic disorders, including dyslipidemia.(6)This condition can be characterized by increased total cholesterol and triglyceride levels and decreased HDL cholesterol levels. An imbalance in the lipid profile can contribute to the development of atherosclerosis, a buildup of plaque in blood vessels that can potentially lead to heart disease and stroke.(6)Therefore, regular health checks and monitoring of risk factors are necessary to identify health conditions and respond to them as needed.

Worker health management is a crucial part of preventing occupational diseases and occupational disease incidents (KAPTK). Companies need not simply conduct initial or periodic health checks; they also need to ensure follow-up on the results. Continuous monitoring is necessary to identify changes in workers' health, provide education, and direct workers with risk factors to receive appropriate treatment. Therefore, workplace health programs need to be designed in a targeted manner and tailored to workers' health conditions.

This problem was also found at PT Antareja Mahada Makmur (AMM) Site MHU. Based on the results of the 2026 Medical Check Up (MCU), several diagnoses were found to be quite common among workers. The three most common diagnoses were overweight (342 cases (34.44%), dyslipidemia (325 cases (32.73%), and hyperuricemia (202 cases (20.34%). In addition, obesity (117 cases (11.78%) and hypertension (43 cases (4.33%) were also found. These findings indicate that there are still workers with health conditions that require further monitoring, particularly related to risk factors for heart disease and metabolic disorders.(7).

Attention to this condition has increased following the occurrence of a heart attack case with a diagnosis of Non-ST Elevation Myocardial Infarction (NSTEMI) in one of the workers at PT AMM Site MHU on July 14, 2026. Based on health check records, the worker had previously undergone MCU on May 30, 2026 with normal electrocardiogram (ECG) and treadmill test results, but was still found to be overweight and dyslipidemia. This incident became one of the company's considerations to increase monitoring of heart disease risk factors, so that follow-up on health check results does not only depend on the implementation of the annual MCU.(7).

In addition to these findings, the results of the evaluation and identification of conditions in the company indicate that health monitoring specifically focused on preventing heart disease has not been optimally implemented. Some of the conditions identified include unhealthy worker lifestyles, limited access to heart disease education, the lack of a health monitoring program specifically oriented towards controlling heart disease risk factors, and suboptimal restrictions on smoking areas. These conditions indicate the need for an improvement program that includes routine health checks, education, increased physical activity, and controlling exposure to cigarette smoke in the workplace.(7).

As an improvement effort, PT AMM Site MHU developed the PRISTIN (Routine Health Checkup) program in 2026. This program is part of an effort to increase worker awareness of heart disease through regular monitoring of health risk factors. The program targets are grouped into three categories: Prolanis, Peri-RAHMA, and Prima, with monitoring objectives tailored to each worker's health condition. Program implementation includes monthly health checkups, providing communication, information, and education (KIE), and regular health condition evaluations. This program is

also supported by health education activities through online and offline media, joint sports activities, and the designation of smoking and smoke-free areas.(7).

The implementation of PRISTIN is expected to increase employee engagement in health screenings, help companies monitor risk factor development, and encourage healthy lifestyles. However, the program's success is not solely measured by the implementation of screenings; it also needs to be evaluated based on employee attendance rates, the achievement of objectives in each monitoring group, and employee responses to health campaign activities. This evaluation is necessary to track the progress of program implementation and serves as a basis for determining improvements to employee health management in the next phase.

Based on the description, this study aims to evaluate the implementation of the PRISTIN program in increasing worker awareness of heart disease and monitoring health risk factors at PT AMM Site MHU in 2026. The evaluation was conducted by reviewing the implementation of routine check-ups, worker attendance rates, achievement of program objectives in the Prolanis, Peri-RAHMA, and Prima groups, as well as the results of health campaigns. The results of the study are expected to provide an overview of the implementation and achievements of the PRISTIN program and become a consideration for companies in developing sustainable worker health management efforts.

2 MATERIALS AND METHODS

This study uses the Quality Control Circle (QCC) approach with the Plan-Do-Check-Action (PDCA) cycle as the basis for implementing improvement activities. The implementation of activities is divided into three stages: preparation, implementation, and evaluation and follow-up. This activity is part of an effort to control heart disease risk factors in workers through the PRISTIN (Routine Health Checkup) program at PT. Anteraja Mahada Makmur (AMM) MHU site in 2026.

2.1 Preparation Stage

The preparation phase begins with identifying employee health conditions through the results of the annual MCU. Employee health data is then examined to identify the most common risk factors. The study revealed that overweight, dyslipidemia, obesity, hyperuricemia, and hypertension were the most common conditions. Furthermore, the incidence of a heart attack diagnosed as Non-ST-Elevation Myocardial Infarction (NSTEMI) on July 14, 2026, was one of the considerations in determining priorities for improving the employee health program.

A causal analysis was then conducted using a human, method, and environmental approach to identify factors contributing to the risk of heart disease in workers. The analysis revealed several dominant causes: unhealthy employee lifestyles, limited access to heart disease education, the lack of a health program specifically focused on heart disease prevention, and suboptimal restrictions on smoking areas. Based on this analysis, researchers developed several alternative improvements, considering the likelihood of success, implementation time, cost, and health impact.

2.2 Implementation Stage

The second stage is implementation, which is the implementation of the improvement plan prepared by the team. The main program implemented is PRISTIN, which is a routine employee health check every month during the program implementation period. The target of the examination is determined based on the grouping of employee health conditions which are then mapped based on their health risk level and divided into three monitoring groups: Prolanis, Peri-RAHMA, and Prima. Prolanis is intended for employees with chronic diseases that require continuous management and monitoring. Peri-RAHMA is a group of employees who require efforts to reduce health risks, especially those related to heart and metabolic diseases. Meanwhile, the Prima group includes employees aged ≥40 years with health conditions that show no or only minor health problems.

The PRISTIN screening includes four activities: anamnesis to determine employee complaints and habits; a physical examination measuring weight, height, and blood pressure; a simple laboratory test covering blood sugar, uric acid, and cholesterol; and providing communication, information, and education (IEC) regarding heart disease and other health issues. The results of the examination are used as the basis for providing education and follow-up according to each employee's condition. Health condition evaluations are also scheduled every three months to monitor the progress of the examination results.

In addition to routine checkups, awareness-raising efforts are carried out through direct heart health education after checkups, as well as through print and digital media. The company also organizes joint sports activities including gymnastics, AMM-MHU Fit Movement (Solo Runners), and table tennis. Other efforts include establishing designated smoking areas and smoke-free zones in several work areas and company facilities. These areas are intended to reduce employee exposure to secondhand smoke.

2.3 Evaluation and Follow-up Stage

Evaluations were conducted by monitoring participant attendance levels monthly and assessing changes in health conditions in each program group. In the Prolanis group, assessments were based on the control of chronic diseases such as hypertension and diabetes mellitus. In the Peri-RAHMA group, assessments were based on a reduction in health risks. In the Prima group, success was determined by the absence or minimal occurrence of health problems during the monitoring period.

The health campaign activities were assessed through a survey of employees. Aspects assessed included accessibility of information delivery, understanding of educational materials, and the impact of the information provided on daily habits. Furthermore, a comparison was made between the operational costs of the PRISTIN program and the estimated potential costs arising from the KAPTK incident.

All collected data was processed and analyzed quantitatively and descriptively. The analysis was conducted by calculating the percentage of examination attendance, program achievement levels, and changes in evaluation results across the two observation periods. These comparisons were used to monitor the progress of PRISTIN implementation and assess the achievement of improvement targets. The evaluation results were then used as considerations in developing program standardization and determining employee health improvement plans for the next phase.

3 RESULTS

The PRISTIN (Routine Health Checkup) program is a health monitoring program developed at PT. AMM Site MHU to increase worker awareness of heart disease risk factors and prevent Occupational Disease Incidents (KAPTK). This program was developed based on the results of a worker health study that showed high levels of heart disease risk factors, particularly overweight, dyslipidemia, obesity, and hypertension.

3.1 Identifying Employee Health Problems

This health awareness raising activity through PRISTIN was carried out at PT. AMM site MHU in 2026. The determination of the activity theme was based on the results of the health check (MCU), employee health records, the results of the previous year's SMKP audit, and the occurrence of heart disease in the company environment.

Based on the MCU results in 2026, the three most common diagnoses found in employees were: overweight (342 cases (34.44%), dyslipidemia (325 cases (32.73%), and hyperuricemia (202 cases (20.34%). These findings indicate a number of health risk factors that require further monitoring, particularly those related to heart and metabolic disease. Attention to this issue increased following a heart attack diagnosed as Non-ST Elevation Myocardial Infarction (NSTEMI) on July 14, 2026.

Based on a document review, the employee previously underwent a medical checkup on May 30, 2026, with normal ECG and treadmill test results. However, he had risk factors for overweight and dyslipidemia. These conditions were considered in developing a more routine and effective health monitoring program.

3.2 Implementation of the PRISTIN Program

This program is implemented as an effort to periodically monitor employee health conditions. Determination of program participants is based on the results of the annual MCU and health risk stratification conducted by the company's medical team. The Prolanis group is intended for workers with chronic diseases and require ongoing health management. The Peri-RAHMA group consists of workers with a certain level of health risk who require risk reduction efforts, while the Prima group consists of workers in relatively good health conditions who still require regular monitoring to maintain their health condition. From March – August 2026, the number of employees registered in each group changed every month and can be seen in table 1.

Based on the data, it can be seen that the Prima group had the largest number of participants compared to the other two groups. This indicates that the majority of workers are still in the healthy or low-risk category, although regular health monitoring is still necessary to prevent future health problems.

The examination is conducted once a month and includes a history taking of employee complaints and habits, a physical examination measuring weight, height, and blood pressure, and simple laboratory tests covering blood sugar, uric acid, and cholesterol. Following the examination, employees receive communication, information, and education (IEC) tailored to their health condition. Evaluation of each employee's examination results is scheduled every three months.

Table 1: Target number of PRISTIN program employees for the period March - August 2026

Group	March	April	May	June	July	August
Prolanis	41	44	43	43	44	45
Fairy-RAHMA	62	62	60	61	59	59
Prima	85	83	80	83	86	87
Total	188	189	183	187	189	191

Source:PRISTIN Implementation Program, 2026(8)

In addition to routine checkups, improvement programs are implemented through personalized heart disease education after the examination and the distribution of pamphlets through online and offline media. PRISTIN evaluation results are also conveyed to relevant departments for follow-up. Efforts to improve employee fitness are supported through group exercise activities, AMM-MHU Fit Movement in the form of Solo Runners, and table tennis. The company also establishes smoking areas and non-smoking areas in several work locations and mess halls.

3.3 PRISTIN Visit Attendance Evaluation Results

Attendance is one indicator used to assess worker engagement in the PRISTIN program. The higher the attendance rate, the greater the program's chances of success in monitoring and controlling health risk factors.

The results of the recapitulation of participant attendance in each program group are shown in Table 2.

Table 2: Percentage of Attendance of PRISTIN Program Participants

Month	Prolanis (%)	Peri-RAHMA (%)	Prime (%)
March	75.61	50.00	60.00
April	63.64	54.84	51.81
May	86.05	68.33	71.25
June	86.05	68.85	79.52
July	75.00	55.93	73.26
August	84.44	88.14	80.46

Source:PRISTIN Implementation Program, 2026(8)

The results show that worker participation rates increased from June to August compared to March to May. The highest attendance rate was 88.14% in August for the Peri-RAHMA group, while the lowest was 51.81% in April for the Prima group. This indicates that after several months of program implementation, workers began to participate more actively in scheduled routine health checkups.

The average number of participant visits also increased as shown in table 3.

Table 3: Average attendance of PRISTIN program

Period	Attendance Percentage
March-May	64.61%
June-August	76.85%

Source: PRISTIN Implementation Program, 2026(8)

An increase of more than 12% shows that the implementation of a scheduled health monitoring system can increase worker participation in routine health check-up activities.

3.4 Evaluation of PRISTIN Goal Achievement

Evaluation of goal achievement was conducted based on different criteria for each program group. In the Prolanis group, success was assessed based on controlled disease conditions. In the Peri-RAHMA group, success was determined by a

decrease of one or more levels in the risk category. Meanwhile, the Prima group was assessed based on the absence or minimal occurrence of health problems during monitoring.

The results of the program achievement evaluation are shown in table 4.

Table 4: Achievement of PRISTIN program objectives

Group	Success Criteria	March-May	June-August
Prolanis	Disease condition is under control	55.81%	57.78%
Fairy-RAHMA	Downgrade of one or more risk categories	71.67%	88.14%
Prima	No or minimal health problems	63.75%	83.91%

Source:PRISTIN Implementation Program, 2026(8)

In the Prolanis group, the number of participants with controlled disease increased by 1.97 points, from 55.81% to 57.78%. The Peri-RAHMA group showed a greater increase, from 71.67% to 88.14%, or 16.47 points. The highest increase occurred in the Prima group, from 63.75% to 83.91%, or 20.16 percentage points. These results indicate that the routine monitoring and health education conducted during the program have an impact on improving workers' health status.

The overall assessment of the PRISTIN Program was conducted by combining the achievements of all participant groups. The evaluation results showed that the program's success rate increased from 64.48% in the March-May period to 79.06% in the June-August period.

Table 5: PRISTIN Program Overall Achievements

Period	Percentage of Achievement
March-May	64.48%
June-August	79.06%

Source:PRISTIN Implementation Program, 2026(8)

This improvement demonstrates that routine health checks (MCU), heart health education, personal consultations, physical activity, and cigarette smoke exposure management contribute to increased employee health awareness. With more employees undergoing checkups and receiving appropriate follow-up, companies can detect heart disease risk factors early, thereby minimizing the potential for cardiovascular disease (KAPTK) events.

3.5 Health Campaign Evaluation Results

Evaluation of the health campaign, specifically related to heart disease, was conducted through a survey of workers. The assessment covered three aspects: information delivery, understanding of the material, and the campaign's impact on daily life.

Table 6: Results of the health campaign evaluation

Assessment Aspects	Results
Information Delivery	95.09%
Understanding of the material	94.48%
Impact of the campaign	92.64%

Source:SHE CARE. MHU site: PT. PUTRA PERKASA ABADI, 2026(7)

The survey results showed that 95.09% of respondents stated that the information provided was well received. The level of understanding of the material provided reached 94.48%, while 92.64% of respondents stated that the health campaign had a positive impact on daily habits. These results indicate that the educational media and health communication activities carried out during the program were able to increase workers' understanding of the risk factors for heart disease and the importance of regular health check-ups. By increasing workers' knowledge and awareness, disease prevention efforts can be implemented earlier, thereby reducing the risk of more serious health problems.

3.6 Evaluation Based on QCDSM Aspects

Evaluation of improvement results was also conducted using five aspects of QCDSM: Quality, Cost, Delivery, Safety, and Morale. The evaluation results based on the presentation document are presented in Table 7.

Table 7: Program evaluation based on QCDSM aspects

Aspect	Results
Quality	Achievement of the goal of controlling heart disease risk increased from 64.48% in March-May to 79.09% in June-August
Cost	There were no emergency costs or compensation incurred by the company due to KAPTK due to heart disease during the evaluation period.
Delivery	PRISTIN attendance was recorded at 63.14% in March-May and 76.52% in June-August. Campaign results showed 95.05% information reach, 94.48% understanding, and 92.64% impact.
Safety	There were no KAPTK caused by heart disease during the evaluation period.
Morale	Employees are considered to be more active in consulting FAR AMM about health issues.

Source:SHE CARE. MHU site: PT. PUTRA PERKASA ABADI, 2026(7)

In terms of costs, PRISTIN's operational costs are recorded at Rp8,850,000 per month or Rp106,200,000 per year. Meanwhile, the estimated cost of the KAPTK incident is listed at Rp210,000,000. Therefore, the document shows a potential cost difference of Rp103,800,000. This figure represents an estimate of potential savings based on a cost comparison, not actual realized savings.

In terms of costs, PRISTIN's operational costs are recorded at Rp8,850,000 per month or Rp106,200,000 per year. Meanwhile, the estimated cost of the KAPTK incident is estimated at Rp210,000,000. Thus, the potential cost difference is calculated at Rp103,800,000, which could result in operational cost savings. Beyond these costs, the presence of KAPTK can increase the indirect costs that the company must bear in dealing with the impacts that occur.

3.7 Standardization and Next Improvement Plan

The standardization phase was carried out through the development, ratification, and dissemination of new standards. However, the presentation document did not detail the content of the standards, so the format and provisions of these standards could not be further explained in the research results. As a follow-up, the team established two subsequent improvement plans: the development of employee health report cards and the development of a Health Management System. The health report cards were planned to serve as a medium for disseminating health records based on MCU results to all employees. Meanwhile, the Health Management System was planned to integrate health program management, including PRISTIN and health report cards, with MCU result verification.

The standardization phase was carried out through the preparation, ratification, and socialization of new standards. Standardization was carried out by creating Work Instructions (IK) to implement standards in the implementation of PRISTIN. As a follow-up, the team established two subsequent improvement plans, namely the preparation of employee health reports and the development of a Health Management System. The health report was planned as a medium for conveying health records based on MCU results to all employees, the goal being that each employee can know the results of their own health checks so that health awareness can be formed. Meanwhile, the Health Management System was planned to integrate the management of health programs, including PRISTIN and health reports, with verification of MCU results carried out by the company's Medical team.

4 DISCUSSION

4.1 Heart Disease Risk Factors as the Basis for PRISTIN Implementation

Cardiovascular disease is a group of disorders of the heart and blood vessels, including coronary heart disease and stroke. Smoking, hypertension, diabetes, abdominal obesity, diet, physical activity, alcohol consumption, blood apolipoproteins, and psychosocial factors contribute to more than 90% of the risk of myocardial infarction in the general population.(9)WHO data states that more than 17 million people worldwide die from heart and blood vessel disease.(10)The World Health Organization estimates that 4.2 million people in Europe died from cardiovascular disease in 2019, representing more than 2 in 5 (42.5%) of all deaths. More than 8 in 10 (82%) of cardiovascular disease deaths in Europe in 2019 were due to heart attacks and strokes.(5).

The 2026 MCU results showed that overweight and dyslipidemia were the two most common diagnoses among employees. These two conditions are a concern in corporate health management because they can be associated with an increased risk of heart disease. Furthermore, the NSTEMI incident on July 14, 2026, demonstrates the importance of ongoing health risk factor monitoring.(7)This is certainly very worrying, as obesity and dyslipidemia are interrelated and can lead to heart disease. According to Chooi et al. (2019), obesity has become a worrying health problem worldwide. The incidence of obesity continues to rise, with the risk of metabolic diseases such as type 2 diabetes also significantly contributing to dyslipidemia.(6).

According to Arief RQ (2023), obese individuals have an unhealthy lipid profile. They tend to have elevated levels of total cholesterol and triglycerides, and decreased levels of HDL (good) cholesterol. This condition creates a favorable environment for the development of atherosclerosis, the buildup of plaque in blood vessels that can lead to heart disease and stroke. Therefore, understanding the factors that influence the high risk of dyslipidemia in obese individuals is crucial for identifying effective preventive measures.(6).

The case also demonstrates that normal test results do not necessarily rule out other health risk factors. The employee who previously experienced NSTEMI had normal EKG and treadmill test results, but was found to be overweight and dyslipidemic. Therefore, health monitoring cannot be limited to annual checkups alone; it requires follow-up on identified conditions and risk factors. The PRISTIN program addresses this need. The program combines routine check-ups, health monitoring, and education tailored to the test results. This approach provides the company with a means to regularly monitor changes in employee health.(7).

4.2 Improving Employee Attendance in the PRISTIN Program

Evaluation results showed an increase in attendance in the Prolanis and Peri-RAHMA groups during the June–August period compared to March–May. The largest increase in both groups occurred in Peri-RAHMA, at 13.25 points. This indicates improved employee engagement in routine check-ups, particularly in groups requiring health risk factor monitoring.(8).

Increased attendance can be an indicator that the program is reaching more employees. Regularly scheduled monthly checkups provide employees with the opportunity to monitor their health and receive education based on the results.

However, increased attendance cannot be interpreted as direct evidence that all heart disease risk factors have been controlled. Attendance only reflects employee participation in screenings, while changes in health condition need to be assessed through examination results and follow-up monitoring. Therefore, these two indicators need to be discussed separately.(7).

4.3 Achievement of Goals in the Prolanis, Peri-RAHMA, and Prima Groups

Improvements in goal achievement were found in all three PRISTIN groups. In the Prolanis group, the percentage of employees with controlled disease increased from 55.81% to 57.78%. This increase was relatively smaller than in the other groups. This indicates that chronic disease control still requires consistent monitoring and follow-up.(7).

In the Peri-RAHMA group, goal achievement increased from 71.67% to 88.14%. This increase reflects the increasing number of employees experiencing a reduction in risk levels based on program criteria. Monitoring through risk categories allows the company to identify groups of employees requiring further attention. Meanwhile, in the Prima group, the percentage of employees experiencing no or only minor health problems increased from 63.75% to 83.91%. These results indicate an increase in the achievement of health monitoring targets in the Prima group.

Overall, PRISTIN's goal achievement increased from 64.48% to 79.09%. However, these results should be understood as changes in achievement based on the program's internal criteria. The data are insufficient to conclude that PRISTIN directly reduces the incidence of heart disease, as the document does not provide causality measures or long-term clinical follow-up data.(8).

Overall, PRISTIN's goal achievement increased from 64.48% to 79.09%. However, these results should be understood as changes in achievement based on the program's internal criteria. These data are not sufficient to conclude that PRISTIN directly reduces the incidence of heart disease; further causal analysis and long-term clinical follow-up data are needed.(8).

The success of this program certainly requires support from various parties, not just management. However, workers must also be involved in its successful implementation. The role of workers is crucial to the success and sustainability of health programs. Active worker participation not only increases the effectiveness of health interventions but also ensures that the program is tailored to diverse local needs and conditions. Worker involvement helps identify and address specific health issues they face, and supports the implementation of more appropriate and sustainable

solutions. With active worker participation, health programs can be more easily adapted and accepted, increasing health awareness, and strengthening skills in health management.(11)

4.4 The Role of Health Education and Campaigns

Coronary Heart Disease (CHD) is a heart dysfunction caused by a lack of blood supply to the heart muscle due to blockage or narrowing of the coronary arteries due to damage to the lining of the blood vessel walls. CHD remains the number one cause of death worldwide among other cardiovascular diseases. Essentially, this disease is a major health problem worldwide, especially in developed countries. One strategy in combating non-communicable diseases (NCDs), especially CHD, is through Health Advocacy, which is an activity carried out to persuade and convince stakeholders or individuals in positions of authority to provide full support for efforts to solve public health problems. This aims to draw the attention of public officials to health issues and make health programs a priority agenda that must be implemented immediately and gain support from various parties.(12).

Furthermore, in general, the role of education and campaigns has been carried out not only specifically for coronary heart disease. Germas is a program designed to educate everyone about non-communicable diseases (NCDs). Interventions such as this are indeed needed to optimize the implementation of Germas through public education on the prevention and control of NCDs and training in early detection of NCDs for the community, especially health cadres, to be able to assess the risk of NCDs in the community through the PTM Posbindu (Non-Communicable Diseases Post).(13).

This aligns with research conducted on the PRISTIN program. Survey results from the health campaign showed that information reach, understanding, and impact of the campaign each exceeded 90%. These findings demonstrate that the educational media used reached a large portion of employees and elicited a positive response. Personalized education after the examination allowed information to be delivered tailored to each employee's individual circumstances. Meanwhile, distributing pamphlets through online and offline media expanded the dissemination of information to employees. These two approaches complement each other, as personalized education focuses more on individual circumstances, while campaign media aims to increase broader awareness.

However, the survey results regarding the campaign's impact are an assessment based on employee responses. These results cannot yet be used to confirm long-term changes in health behavior. To determine the sustainability of the impact, further monitoring of employee health habits and health screening results is necessary.(7).

4.5 Program Evaluation Based on QCDSM ASPECTS

Based on the Quality aspect, the increase in PRISTIN's goal achievement indicates improvements in monitoring and controlling employee health risk factors. However, the program's success still needs to be monitored regularly, especially in the Prolanis group, where the improvement in achievement was relatively smaller.(7).

In terms of Cost, a comparison of the program's operational costs with the estimated costs of KAPTK incidents indicates potential savings. The PRISTIN program is estimated at Rp106,200,000 per year, while the estimated cost of KAPTK incidents is Rp210,000,000. This comparison can be a consideration for companies in supporting prevention programs. However, the difference of Rp103,800,000 cannot yet be stated as actual savings because it is a calculation based on estimated incident costs.

In terms of delivery, increased visit attendance indicates that routine check-ups were increasingly implemented during the evaluation period. The health campaign also demonstrated a high level of information dissemination and understanding. This supports the program's implementation, which focuses not only on check-ups but also on delivering health information.

In terms of safety, no KAPTK (Emergency Workers' Health) incidents were recorded due to heart disease during the evaluation period. This is a positive achievement, but it is not sufficient to prove that all heart disease risks have been controlled. Prevention efforts are still needed through regular checkups and follow-up for employees with risk factors.

In terms of morale, increased employee engagement in consulting with FAR AMM demonstrates a positive response to the company's health management. Employee trust and engagement are crucial to the program's sustainability, as the success of health monitoring is also influenced by employees' willingness to undergo examinations and report their health concerns.(7).

4.6 Sustainability of Health Management Programs and Development

PRISTIN implementation needs to be continued through standardization of examination procedures, recording of results, dissemination of information, and follow-up with employees based on their health category. This is crucial so

that examination results are not merely records but can be used as a basis for decision-making in employee health management.(7).

The plan to develop health report cards and develop a Health Management System is a relevant follow-up to these needs. Health report cards can help employees understand their health status, while an integrated health management system can support ongoing monitoring of MCU results and the implementation of PRISTIN. Thus, the PRISTIN program serves not only as a routine check-up but also as part of the company's efforts to build a clearer employee health monitoring system.(7).

5 CONCLUSION

Based on the results of the implementation and evaluation of the PRISTIN (Routine Health Check-up) program at PT Antareja Mahada Makmur (AMM) Site MHU in 2026, it can be concluded that:

- The PRISTIN program has been implemented through routine health checks that include measuring weight, height, and blood pressure, simple laboratory tests, and providing communication, information, and education (IEC). The program is divided into three monitoring groups: Prolanis, Peri-RAHMA, and Prima, depending on the worker's health condition.
- Worker attendance at routine checkups has increased. Based on a comparison of the March–May and June–August 2026 periods, the overall average attendance rate increased from 64.61% to 76.85%. This increase indicates that worker engagement in health checkups is improving, although attendance has not yet reached the full target.
- Program achievement in each group also increased. The Prolanis group's performance increased from 55.81% to 57.78%, the Peri-RAHMA group's performance increased from 71.67% to 88.14%, and the Prima group's performance increased from 63.75% to 83.91%. These improvements demonstrate progress in achieving the company's established health monitoring targets.
- The health campaign evaluation results showed that 95.05% of workers assessed that the information delivery was effective, 94.48% understood the information provided, and 92.64% felt the impact of the campaign. These results indicate that the educational materials were well-received by workers, although changes in behavior and health conditions still require ongoing monitoring.
- Overall, PRISTIN has become one of the company's efforts to improve employee health monitoring and awareness of heart disease risk factors. To optimize its implementation, the company needs to increase employee attendance, ensure follow-up on examination results, and develop an employee health reporting system integrated with MCU results. This way, health monitoring goes beyond examinations and is accompanied by ongoing risk factor management efforts.

STATEMENTS ON COMPLIANCE WITH ETHICAL STANDARDS

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Disclosure of conflict of interest

The authors declare that there is no conflict of interest regarding the publication of this paper

Statement of informed consent

Formal permission to utilize anonymized secondary data from the 2026 routine health examination program (PRISTIN) was granted by the management of PT Antareja Mahada Makmur, MHU Jobsite. All worker records were de-identified prior to analysis to protect participant privacy and confidentiality in accordance with ethical standards.

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