



# Evaluation of the Pan American Health Organization Technical Cooperation in Noncommunicable Disease Prevention and Control in the Americas

Volume I Final Report

**PAHO**



Pan American  
Health  
Organization



World Health  
Organization  
Regional Office for the Americas

# Evaluation of the Pan American Health Organization Technical Cooperation in Noncommunicable Disease Prevention and Control in the Americas

**Volume I** Final Report

Washington, D.C., 2023

ISBN: 978-92-75-127735 (PDF)

ISBN: 978-92-75-127742 (Print version)

© Pan American Health Organization, 2023

Some rights reserved. This work is available under the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 IGO license (CC BY-NC-SA 3.0 IGO).



Under the terms of this license, this work may be copied, redistributed, and adapted for non-commercial purposes, provided the new work is issued using the same or equivalent Creative Commons license and it is appropriately cited, as indicated below. In any use of this work, there should be no suggestion that the Pan American Health Organization (PAHO) endorses any specific organization, product, or service. Use of the PAHO logo is not permitted.

**Adaptations:** If this work is adapted, the following disclaimer should be added along with the suggested citation: "This is an adaptation of an original work by the Pan American Health Organization (PAHO). Views and opinions expressed in the adaptation are the sole responsibility of the author(s) of the adaptation and are not endorsed by PAHO."

**Translations:** If this work is translated, the following disclaimer should be added along with the suggested citation: "This translation was not created by the Pan American Health Organization (PAHO). PAHO is not responsible for the content or accuracy of this translation."

**Suggested citation:** Pan American Health Organization. Evaluation of the Pan American Health Organization Technical Cooperation in Noncommunicable Disease Prevention and Control in the Americas. Volume I. Final Report. Washington, D.C.: PAHO; 2023. Available from: <https://doi.org/10.37774/9789275127735>

**Cataloguing-in-Publication (CIP) data:** Available at <http://iris.paho.org>.

**Sales, rights, and licensing:** To purchase PAHO publications, email: [sales@paho.org](mailto:sales@paho.org). To submit requests for commercial use and queries on rights and licensing, visit: <https://www.paho.org/en/publications/permissions-and-licensing>.

**Third-party materials:** If material that is attributed to a third party, such as tables, figures, or images, is reused from this work, it is the user's responsibility to determine whether permission is needed for that reuse and to obtain permission from the copyright holder. The risk of claims resulting from infringement of any third-party-owned material or component from this work rests solely with the user.

**General disclaimers:** The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of PAHO concerning the legal status of any country, territory, city, or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by PAHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

All reasonable precautions have been taken by PAHO to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall PAHO be liable for damages arising from its use.

The opinions expressed in this report are those of the external evaluation team and do not necessarily reflect those of the Pan American Health Organization (PAHO). Responsibility for the opinions expressed in this report rests solely with the authors. Publication of this document and the opinions expressed within does not imply endorsement by PAHO.

PBE/2023

## Contents

|  |           |
|--|-----------|
| Acknowledgments.....   | vii       |
| Abbreviations and acronyms.....  | viii      |
| Executive summary.....   | x         |
| <b>Introduction and background.....</b>                                  | <b>1</b>  |
| <b>Methods.....</b>  | <b>5</b>  |
| <b>Comparisons with the mid-point evaluation of the WHO NCD GAP.....</b> | <b>9</b>  |
| <b>Findings.....</b>   | <b>15</b> |
| Relevance.....   | 16        |
| Coherence.....   | 23        |
| Coordination.....  | 26        |
| Effectiveness.....   | 31        |
| Efficiency.....  | 50        |
| Sustainability.....  | 54        |
| Gender equality, equity, and human rights.....                           | 58        |
| COVID-19.....  | 67        |
| Reflections on the PAHO NCD technical cooperation theory of change.....  | 75        |
| <b>Conclusions and recommendations.....</b>                              | <b>78</b> |
| References.....  | 87        |

Annexes are presented as Volume II of this report: Pan American Health Organization. Evaluation of the Pan American Health Organization Technical Cooperation in Noncommunicable Disease Prevention and Control in the Americas. Volume II Annexes. Washington, D.C.: PAHO; 2023. Available from: <https://iris.paho.org/handle/10665.2/57826>.

- Annex 1.** Terms of reference
- Annex 2.** People interviewed and consulted
- Annex 3.** Documents reviewed
- Annex 4.** Detailed methodology
- Annex 5.** Evaluation matrix
- Annex 6.** Data collection tools
- Annex 7.** Theory of change

## List of figures

|                   |  |    |
|-------------------|--|----|
| <b>Figure 1.</b>  | Average percentage of Plan of Action indicators achieved at baseline and in 2016 and average percentage point improvement between baseline and 2016, overall and by country HDI group and subregion  | 34 |
| <b>Figure 2.</b>  | Mean implementation scores 2015 to 2022, overall and by country HDI group and subregion  | 34 |
| <b>Figure 3.</b>  | Comparison of implementation scores (%) for two tobacco control indicators in the global NCD progress monitoring set, 2015 to 2022, overall and by country HDI group and subregion   | 36 |
| <b>Figure 4.</b>  | Surveillance score 2022 (%) overall, by HDI group, and by subregion  | 39 |
| <b>Figure 5.</b>  | Ratings by PAHO staff in 14 Member States and government representatives in 10 Member States   | 41 |
| <b>Figure 6.</b>  | Comparison of reported reductions on the level of raised blood pressure from 2015 to 2019 and reported percentage coverage of the HEARTS program   | 45 |
| <b>Figure 7.</b>  | Comparison of outcome scores with 2022 NCD performance scores  | 46 |
| <b>Figure 8.</b>  | PAHO report to 2019 Directing Council on the NCD impact indicator  | 47 |
| <b>Figure 9.</b>  | Slide from presentation to PAHO's Senior Advisory Group in November 2022   | 47 |
| <b>Figure 10.</b> | Pahola has been developed as a digital health specialist on alcohol use  | 49 |
| <b>Figure 11.</b> | Comparison of the cost per capita per percentage point improvement in NCD performance score and the improvement in NCD performance score from 2015 to 2022   | 51 |
| <b>Figure 12.</b> | Funds received for NCD and their risk factors: PAHO Program Budget (2016 to 2021)  | 54 |
| <b>Figure 13.</b> | Premature NCD mortality: trends and projections toward SDG 3.4 target  | 58 |
| <b>Figure 14.</b> | Global prevalence of current tobacco use in adults by sex and WHO region in 2020   | 59 |
| <b>Figure 15.</b> | Member States' NCD performance score 2022 (%) compared to HDI  | 63 |
| <b>Figure 16.</b> | Top 20 causes of years lived with disability (YLDs), Region of the Americas, both sexes, all ages, 2019 (25)   | 66 |
| <b>Figure 17.</b> | Average percentage performance score for Member States having implemented at least one recent national public awareness and motivational communication for physical activity including mass media campaigns for physical activity behavior change – overall and by HDI group and subregion | 69 |
| <b>Figure 18.</b> | Regional framework for NCD prevention and control  | 75 |
| <b>Figure 19.</b> | Reconstructed theory of change for the NCD Plan of Action  | 76 |
| <b>Figure 20.</b> | What evidence has the evaluation identified related to causal chains proposed in the theory of change?   | 77 |

## List of tables

|                 |  |    |
|-----------------|--|----|
| <b>Table 1.</b> | Comparison of indicators in PAHO's NCD Plan of Action, PAHO's Strategic Plan, PAHO's Program Budget, the Global Progress Monitoring Indicator Set, and the Global Monitoring Framework | 11 |
| <b>Table 2.</b> | Summary of progress on NCD Plan of Action reported to the Directing Council in 2019  | 31 |
| <b>Table 3.</b> | Percentage of Member States that achieved targets for particular Plan of Action indicators at baseline, in 2016 and in 2019  | 33 |
| <b>Table 4.</b> | Amount budgeted, financed, and spent over three biennia through PAHO Country Offices on NCDs, communicable diseases, and overall   | 50 |

## List of boxes

|               |   |    |
|---------------|---|----|
| <b>Box 1.</b> | PAHO's support on NCD risk factors: country examples  | 19 |
| <b>Box 2.</b> | Experiences of PAHO working subnationally in decentralized health systems: country examples             | 20 |
| <b>Box 3.</b> | Examples of PAHO partnering civil society to address NCD risk factors                                   | 30 |
| <b>Box 4.</b> | Factors which have facilitated the effectiveness of PAHO's technical cooperation on NCDs                | 42 |
| <b>Box 5.</b> | Factors that have hindered the effectiveness of PAHO's technical cooperation on NCDs                    | 43 |
| <b>Box 6.</b> | Examples of PAHO technical cooperation during COVID-19  | 70 |
| <b>Box 7.</b> | Experiences of PAHO technical cooperation during COVID-19 from the evaluation's three deep dives        | 70 |
| <b>Box 8.</b> | Countries experiencing protracted emergencies require a targeted approach to NCDs: the example of Haiti | 73 |

## Acknowledgments

The external evaluation team was made up of the following members: Roger Drew, Team Leader; Florianne Gaillardin, Senior Evaluator/Deputy Team Leader; Esther Rouleau, Senior Evaluator/Internal Quality Assurance (Methodology); Ramsés Muñoz, Research Assistant/Data Analyst; Kemly Camacho, National Consultant (Costa Rica); Francisco Riera, National Consultant (Paraguay); Simone Leid, National Consultant (Trinidad and Tobago).

The external evaluation team would like to thank all those who contributed to the evaluation, especially those people who agreed to be interviewed or who completed a questionnaire. Particular thanks are due to staff of the Pan American Health Organization (PAHO) Department of Planning, Budget, and Evaluation (PBE) for their guidance and support throughout the evaluation process. Noteworthy individuals include Rony Maza, Director of PBE; Roberto La Rovere, Senior Advisor for Evaluation, Evaluation Manager, and Internal Quality Assurance and Coordination; Guillermo Mendoza, Public Health and Evaluation Senior Advisor and Consultant; Travis High, Planning and Performance Monitoring and Assessment Specialist; Francia Betanzos, Administrative Assistant; and Jonathan Lara, Evaluation Intern.

Also, the external evaluation team would like to thank staff of the PAHO Department of Noncommunicable Diseases and Mental Health (NMH) for their cooperation with the evaluation. Those the team would particularly like to thank include Anselm Hennis, Director, NMH; Silvana Luciani, Unit Chief, Noncommunicable Diseases; Leendert Nederveen, Advisor, Food, Nutrition and Physical Activity in Schools; Roberta Caixeta, Advisor, Noncommunicable Diseases Surveillance, Prevention, and Control; Natalia Parra and Carolina Chavez Cortes, PAHO International Consultants.

Finally, the external team would especially like to thank all those who made possible the “deep dives,” in Costa Rica, Paraguay, and Trinidad and Tobago. This includes, in particular, PAHO/WHO Representatives in those countries and other PAHO staff, particularly NCD advisors. Special thanks go to Jorge Victoria, Advisor, Disease Prevention and Control, and María Chacón, PAHO National Consultant in Costa Rica; Marcelo Korc, PAHO/WHO Representative, and Jorge Galeano, Technical Officer, Health Emergencies, in Paraguay; and Erica Wheeler, PAHO/WHO Representative, and Michelle Harris, Advisor, Noncommunicable Diseases and Mental Health, in Trinidad and Tobago.

## Abbreviations and acronyms

|                 |   |
|-----------------|---|
| <b>AFR</b>      | WHO African Region  |
| <b>CAR</b>      | Caribbean   |
| <b>CARICOM</b>  | Caribbean Community   |
| <b>CARMEN</b>   | Collaborative Actions for Risk Factor Prevention and Effective Management of Noncommunicable Diseases |
| <b>CDC</b>      | United States Centers for Disease Control and Prevention  |
| <b>CDE</b>      | Communicable Diseases, Prevention, Control and Elimination  |
| <b>CEN</b>      | Central America   |
| <b>CKD</b>      | chronic kidney disease  |
| <b>COVID-19</b> | coronavirus disease 2019  |
| <b>CSC</b>      | Country and Subregional Coordination  |
| <b>CSO</b>      | civil society organization  |
| <b>DALY</b>     | disability-adjusted life year   |
| <b>EG</b>       | Equity, Gender, Human Rights and Cultural Diversity   |
| <b>EIH</b>      | Evidence and Intelligence for Action in Health  |
| <b>EMR</b>      | WHO Eastern Mediterranean Region  |
| <b>ENLACE</b>   | ENLACE Data Portal on Noncommunicable Diseases, Mental Health and External Causes                     |
| <b>ERP</b>      | External Relations, Partnerships, and Resource Mobilization   |
| <b>EUR</b>      | WHO European Region   |
| <b>EURO</b>     | WHO Regional Office for Europe  |
| <b>FCTC</b>     | Framework Convention on Tobacco Control   |
| <b>FENSA</b>    | Framework of Engagement with Non-State Actors   |
| <b>GAP</b>      | Global Action Plan  |
| <b>GBO</b>      | Governing Bodies  |
| <b>GNI</b>      | gross national income   |
| <b>HDI</b>      | Human Development Index   |
| <b>HEARTS</b>   | technical package to promote cardiovascular health  |
| <b>HL</b>       | Life Course   |
| <b>HPV</b>      | human papillomavirus  |
| <b>HSS</b>      | Health Systems and Services   |
| <b>IDB</b>      | Inter-American Development Bank (also known as IADB)  |
| <b>IT</b>       | Information Technology  |
| <b>LEG</b>      | Office of the Legal Counsel   |
| <b>MERCOSUR</b> | Southern Common Market  |

|               |   |
|---------------|---|
| <b>NCD</b>    | noncommunicable diseases                                  |
| <b>NMH</b>    | Department of Noncommunicable Diseases and Mental Health  |
| <b>NOR</b>    | North America   |
| <b>OAS</b>    | Organization of American States                           |
| <b>PAHO</b>   | Pan American Health Organization                          |
| <b>PBE</b>    | Department of Planning, Budget, and Evaluation            |
| <b>PHE</b>    | Health Emergencies  |
| <b>POA</b>    | plan of action  |
| <b>PRO</b>    | Procurement and Supply Management                         |
| <b>SDG</b>    | Sustainable Development Goal                              |
| <b>SEAR</b>   | WHO South-East Asia Region                                |
| <b>SAM</b>    | South America   |
| <b>STEPS</b>  | The WHO STEPwise Approach to NCD Risk Factor Surveillance |
| <b>UN</b>     | United Nations  |
| <b>UNCT</b>   | United Nations Country Team                               |
| <b>UNDP</b>   | United Nations Development Programme                      |
| <b>UNIATF</b> | United Nations Interagency Task Force on NCDs             |
| <b>UNICEF</b> | United Nations Children's Fund                            |
| <b>WHO</b>    | World Health Organization                                 |
| <b>WPR</b>    | WHO Western Pacific Region                                |
| <b>YLD</b>    | years lived with disability                               |

## Executive summary

This is the final report of the Evaluation of the Pan American Health Organization (PAHO) Technical Cooperation in Noncommunicable Disease (NCD) Prevention and Control in the Americas. PAHO's work in this area is coordinated by the Department of Noncommunicable Diseases and Mental Health (NMH), guided by the Plan of Action (POA) for the Prevention and Control of Noncommunicable Diseases in the Americas 2013-2019. After the conclusion of the plan, in 2020, a final report was presented to PAHO's Directing Council. To date, no new plan has yet been adopted. However, access to services and risk factors for NCDs are reflected as outcomes in PAHO's Strategic Plan 2020-2025. The period since the POA ended has been characterized by the COVID-19 pandemic, and a focus on this was included in the evaluation. In addition, this evaluation was coordinated with another evaluation focused on PAHO's response to COVID-19.

The overall purpose of the evaluation was to determine the level of results attainment and performance for NCD prevention and control. The evaluation's three objectives included documenting key achievements and challenges, examining enabling and limiting factors, and providing lessons learned and evidence-based recommendations. The scope of the evaluation was determined by the scope of the POA and covered the period from 2013 and the Region of the Americas including the subregions of the Caribbean, Central America, and South America.

The evaluation was conducted from July 2022 to March 2023 using a mixed methods approach. Existing indicator data were reviewed and analyzed. Primary data were collected through key informant interviews and surveys of non-State actors in official relations with PAHO and PAHO Collaborating Centers. A total of 231 key informants were interviewed including in "deep dives" conducted in three countries: Costa Rica, Paraguay, and Trinidad and Tobago. Each deep dive was conducted by a two-person team made up of one of the members of the evaluation core team and an in-country consultant. These deep dives allowed a wider range of key informants to be interviewed in these countries than in others. Analysis of findings was conducted by the core team through meetings and reviewing and commenting on draft sections. Different core team members took responsibility for particular sections of the report.

While the evaluation had some similarities to and built on lessons learned from the mid-point evaluation of the World Health Organization (WHO) Global Action Plan for the Prevention and Control of Noncommunicable Diseases (NCD GAP), there were also differences recognizing the unique context of the Region. Issues with timing meant that this evaluation had much more experience of COVID-19 and responses to it. In addition, this evaluation was conducted after the POA had ended rather than at the mid-point of the NCD GAP as with that evaluation.

The POA was, and remains, highly relevant given the Region's NCD-related morbidity and mortality. In addition, given that few, if any, countries are on track to reach the agreed target for reducing premature mortality due to NCDs, the POA remains of critical relevance. However, there are concerns that implementation progress has been modest and more might be achieved if the POA were more focused and operational; for example, concentrating on how countries might make progress toward achieving identified "best buys." However, there are concerns that the POA focused on four disease groups and four risk factors ("four by four approach") and that some important areas, such as chronic kidney disease, were overlooked. Also, the POA was developed around 10 years ago and the global and regional NCD agenda has moved on since then, including adopting a "five by five" approach to NCDs which also includes mental health and air pollution. In addition, there is now greater focus on climate change and the need for greater resilience in the face of epidemics. Incorporating such factors would increase the POA's relevance. Respondents consider that PAHO's technical cooperation is extremely relevant and well-tailored to country needs and priorities. However, while PAHO Country Offices see this particularly in terms of leadership and the normative guidance PAHO provides, Member State representatives highlighted that they saw their engagement with PAHO as a real and valued partnership. They also valued technical cooperation in the area of resource mobilization. The importance of this may not yet have been fully recognized by PAHO, for example, in its typology of technical cooperation.

PAHO is seen as being able to provide and support highly technical interventions across the four disease groups and the four risk factors specified in the POA. However, there are concerns that synergies across and between these areas are not yet being maximized, for example, in relation to economic interventions on several risk factors. There is good engagement with other areas of NMH, for example, mental health, and with other departments of PAHO, particularly, Legal and Health Systems Strengthening. However, there are concerns about instances of suboptimal coherence between PAHO and WHO headquarters, for example, in relation to respective roles and provision of technical assistance at the country level.

PAHO has excellent and longstanding working relationships with Member State governments, in general, and with ministries of health in particular. PAHO is seen as a trusted, reliable, and valued partner. However, progress in supporting ministries of health to multisectoral work – with other government departments and with non-State actors – is more mixed. While there are examples of functioning multisectoral mechanisms in some countries, supporting the development of these has not been a specific priority for PAHO, and progress in this area is not tracked very systematically. Although there are examples of PAHO working effectively with other intergovernmental bodies and some non-State actors, e.g. civil society, these efforts are not sufficiently intentional and systematic. Many of the risk factors relate to products where commercial interests and public health concerns conflict. Success in countering these commercial interests has

been limited except in a few areas as reflected in some areas of tobacco control. There are also concerns about whether United Nations agencies have a coordinated approach to commercial determinants of health and conflict of interest, particularly at the country level. PAHO has often played an advocacy role with other United Nations agencies on these issues favoring a clear approach as outlined in the Framework of Engagement with Non-State Actors (FENSA). Opportunities to work collaboratively with private sector organizations where commercial interests and public health concerns overlap – for example, sports firms and actions to address physical inactivity – have largely not been taken.

Based on a target-based report submitted to PAHO’s Directing Council in 2020, it would appear that the Plan of Action had been implemented effectively. Of 30 targets, almost two-thirds (18, 60%) had been achieved or exceeded. However, this still meant that, for all but four indicators, the expected targets were achieved in less than half of Member States (see Table S1). In most cases, progress has been modest with two exceptions, HPV vaccination and availability of mortality data, where progress had been very good. Using a performance score<sup>1</sup> developed by the evaluation team, it is clear that slow but steady progress was made from 2015 to 2019 in implementing measures to address NCDs; however, there has been regression since then, presumably due to COVID-19 (see Figure S1). Progress has been mixed across particular lines of action, with notable achievements on restricting smoking in public places and in introducing plain packaging for tobacco products, but with much less progress on other areas of tobacco control and on other risk factors, such as the harmful use of alcohol. Progress on public awareness programs for physical activity has been particularly hard hit by the COVID-19 pandemic.

It is challenging to assess the contribution made by PAHO’s technical cooperation on NCDs, as this is not systematically measured or tracked. The evaluation explored ways of doing this including asking in-country PAHO staff and Member State representatives to rate PAHO’s technical cooperation in eight areas.

<sup>1</sup> This approach is based on a published method. Methodological details are provided in Annex 4, in: Pan American Health Organization. Evaluation of the Pan American Health Organization Technical Cooperation in Noncommunicable Disease Prevention and Control in the Americas. Volume II Annexes. Washington, D.C.: PAHO; 2023. Available from: <https://iris.paho.org/handle/10665.2/57826>.

**Table S1. Percentage of Member States that achieved targets for particular Plan of Action indicators at baseline, in 2016, and in 2019.**

| No.    | Indicator summary   | Baseline | 2016 | 2019 |
|--------|---|----------|------|------|
| 1.1.1  | Multisectoral NCD prevention policies, frameworks and actions                       | 14       | 31   | 49   |
| 1.2.1  | National multisectoral plan and/or actions for NCD prevention and control           | 37       | 54   | 54   |
| 1.3.1  | National social protection health schemes that address NCD interventions            | 20       |      | 34   |
| 2.1.1* | Reducing prevalence of current tobacco use  |          |      | 26   |
| 2.2.1* | Reducing harmful use of alcohol   |          |      | 29   |
| 2.3.1* | Policies to prevent marketing of unhealthy foods/nonalcoholic beverages to children | 6        | 20   | 23   |
| 2.3.2* | Policies to limit saturated fats and virtually eliminate trans fats                 | 17       | 26   | 34   |
| 2.3.3* | Reducing salt/sodium consumption  |          |      |      |
| 2.4.1* | Reducing prevalence of insufficient adult physical activity                         |          |      | 37   |
| 2.4.2* | Reducing prevalence of insufficient physical activity among adolescents             |          |      | 20   |
| 3.1.1  | Implementation of a model of integrated management for NCDs                         | 26       | 49   | 49   |
| 3.2.1* | Available and affordable basic technologies and essential medicines for NCDs        | 20       | 51   | 46   |
| 3.2.2  | Access to palliative care   | 0        |      | 37   |
| 3.2.3  | Use of PAHO Strategic Fund and Revolving Fund and/or other cost-saving mechanisms   |          |      | 9    |
| 3.2.4  | Official commission that selects NCD medicines and technologies                     | 17       |      | 46   |
| 3.2.5  | Treatment options for patients affected by chronic kidney disease                   | 11       | 26   | 31   |
| 3.3.1* | Levels of raised blood glucose/diabetes   | 3        |      | 3    |
| 3.3.2* | Levels of adult obesity   | 0        |      | 0    |
| 3.3.3* | Levels of adolescent overweight and obesity   | 0        |      | 0    |
| 3.3.4* | People receiving drug therapy and counseling to prevent heart attacks and strokes   | 11       |      | 20   |
| 3.3.5* | Prevalence of raised blood pressure   |          |      | 6    |
| 3.3.6* | Cervical cancer screening coverage  | 14       | 20   | 14   |
| 3.3.7  | Breast cancer screening coverage  | 11       | 20   | 26   |
| 3.3.8* | HPV vaccination   | 23       | 54   | 100  |
| 4.1.2  | Mortality data  | 29       | 57   | 66   |
| 4.1.3* | Cancer incidence data   | 31       | 46   | 54   |
| 4.1.4* | Population surveys  | 20       |      | 34   |
| 4.2.1  | Regular reports on NCDs and risk factors  | 26       | 57   | 49   |
| 4.2.2  | Research  | 26       | 29   | 34   |

Note: Color codes show level of performance – dark green if >80%, light green if 60–79%, yellow if 40–59%, and amber if <40%. Gray indicates no data.

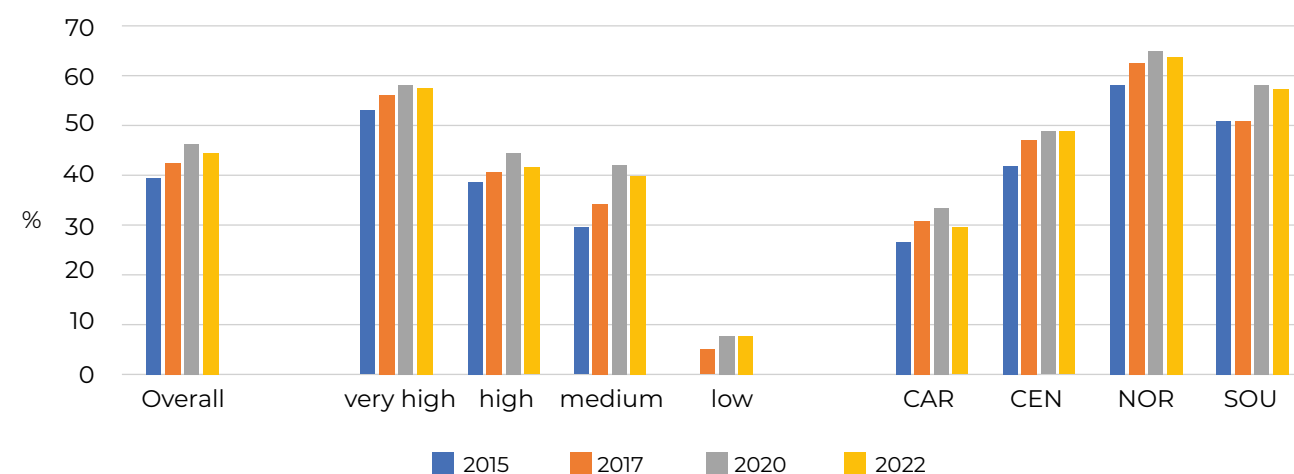
The evaluation sought both qualitative and quantitative evidence to support or refute the hypothesized causal pathways contained in the theory of change relating to the NCD POA (see Figure S2). Quantitative evidence included statistically significant associations between (i) performance on NCD (output) indicators in the PAHO Program Budget and (outcome) indicators in the PAHO Strategic Plan; (ii) NCD performance score and three outcomes on which data were available: tobacco use, preventive treatment for cardiovascular disease, and hypertension prevalence; and (iii) a statistical association between implementation of the HEARTS program at scale and national-level reductions



in hypertension.<sup>2</sup> While these findings are not definitive in their own right, they are in line with qualitative findings of the evaluation and other evidence.

Although PAHO reported to its Directing Council in 2019 that the target for reducing premature mortality from NCDs had been achieved, this was based on a regional average. At that time, none of the PAHO Member States were on track to achieve their targets, and the situation has likely worsened as a result of COVID-19. This current situation is fully recognized by PAHO in recent reports and presentations. PAHO has supported a range of innovative measures related to NCDs, including the innovative use of technology and of economic measures to tackle NCD risk factors.

**Figure S1. Mean implementation scores, 2015 to 2022: overall and by country HDI group and subregion**



Note: CAR, Caribbean; CEN, Central America; NOR, North America; SAM, South America.

PAHO does not currently actively track or measure the efficiency of its work on NCDs. There is evidence from the evaluation that, when PAHO has financial resources for NCDs, it has been able to use them. However, there have been challenges in raising those resources. Increasing dependency on earmarked, project-based funding may have a negative effect on PAHO's efficiency, particularly allocative efficiency. There is qualitative evidence of PAHO achieving a great deal with relatively limited resources, and this is because of the way PAHO works: in partnership with others and by embedding actions in national government responses rather than developing parallel projects.

PAHO has a long history of engagement on NCDs in the Region, and so Member States expect PAHO's involvement to be sustained in the future. However, the availability of financing for PAHO to work on NCDs is limited, with high levels of dependency on a few funders, such as Bloomberg. PAHO's overall approach, of working through governments, is intrinsically sustainable because it does not depend on building and sustaining parallel project structures. Some of PAHO's specific approaches – for example, virtual training,

training of trainers – are considered to be strong in terms of sustainability. However, there are questions about other approaches, such as relying on multiple, topic-specific, externally funded surveys rather than strengthening national surveillance systems with a small subset of indicators on each topic.

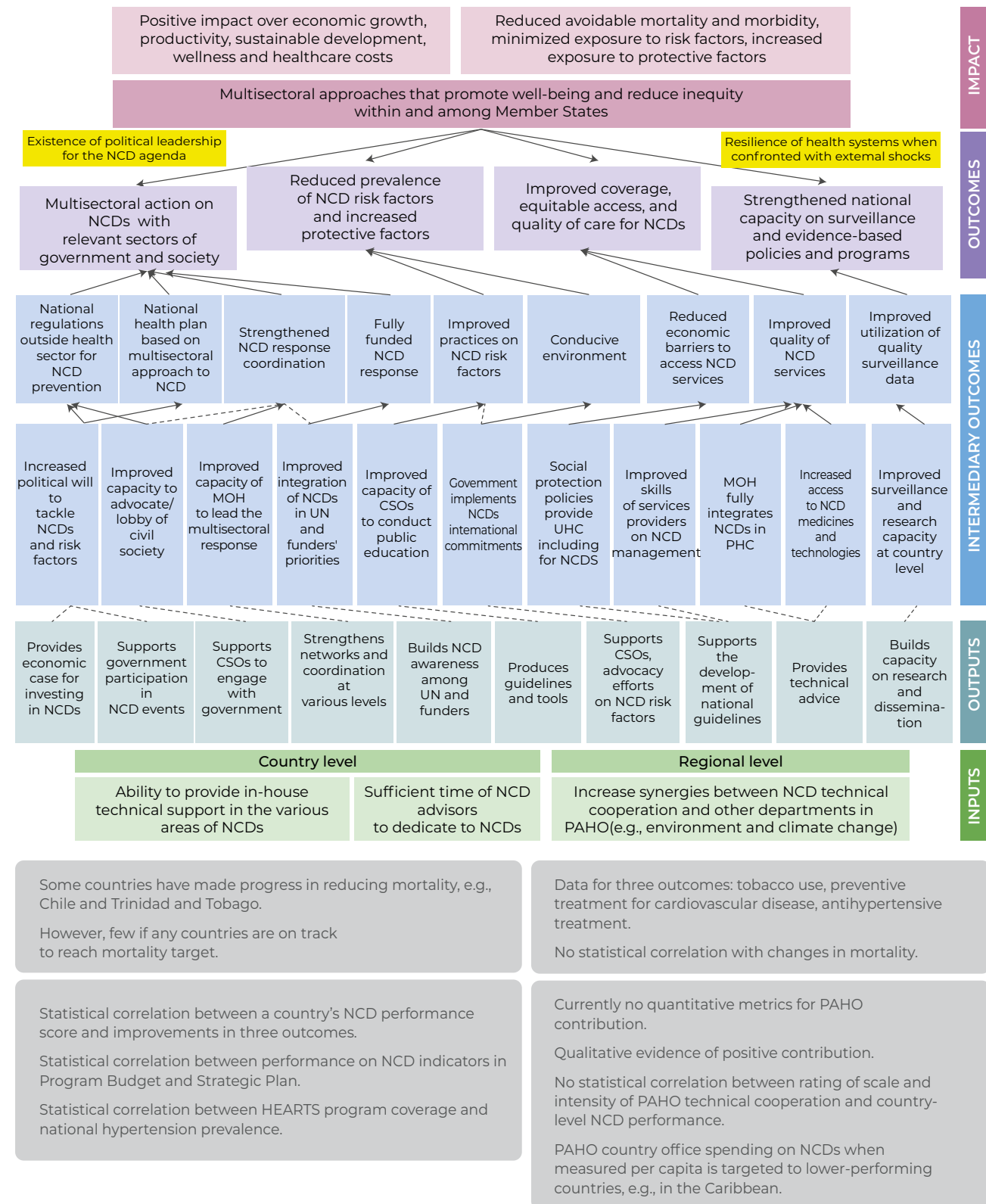
To date, the gender equality, equity, and human rights agenda has not been particularly well integrated into NCDs despite relevant expertise in PAHO at the regional level. Data are mostly disaggregated by gender but, to date, this has largely taken a binary approach. There has been less focus on gender in terms of risk factors. There are several equity issues of relevance to NCDs with many groups disproportionately affected because of poverty, ethnicity, migration status, language, age, and disability. In addition, there is a clustering of vulnerabilities in some populations. Opportunities to better integrate disability into the NCD agenda have largely not been taken.

Since 2020, the COVID-19 pandemic has affected NCDs in a number of ways. First, people with NCDs were disproportionately affected by COVID-19, and there is some evidence that COVID-19 may be contributing to some NCDs, for example, chronic respiratory disease. Provision of NCD services was disrupted, but the extent to which this happened varied markedly by country context, in general, and the nature of health systems in particular. Some countries responded positively and imaginatively to maintain NCD services in the face of COVID-19; for example, by expanding community-based services and by increasing the period for which medications are provided. The acceleration of the shift to virtual means for activities – such as in training and meetings – has had positive benefits in terms of reach and unit costs. Now, given the focus on economic recovery, there are opportunities and challenges, particularly related to economic measures to address NCDs. There is now more focus on linking the NCD agenda to the resilience of populations against infectious diseases. However, this has not yet been used particularly effectively for resource mobilization in contrast to other areas (mental health) where this has translated into resource mobilization successes.

As part of the evaluation, the team worked with NMH to review and revise the theory of change for the NCD POA. An initial two-part workshop was held during the design phase. A follow-up workshop was held after completion of the data collection phase to further review the theory of change in the light of evaluation findings and evidence. Based on this, the evaluation team co-facilitated a final workshop in April 2023 to support NMH's planning process. A brief summary of relevant evidence in relation to different levels of the theory of change is presented in Figure S2.

<sup>2</sup> There is much more detail about the methodological approaches used and caveats/limitations of the data on which these findings are made in the main body of the report and in Annex 4, in: Pan American Health Organization. Evaluation of the Pan American Health Organization Technical Cooperation in Noncommunicable Disease Prevention and Control in the Americas. Volume II Annexes. Washington, D.C.: PAHO; 2023. Available from: <https://iris.paho.org/handle/10665.2/57826>.

**Figure S2.** What evidence has the evaluation identified related to causal chains proposed in the theory of change?



## Conclusions

### Relevance

PAHO's work on NCDs remains extremely relevant to the Region, but it is based on a POA that is now 10 years old. Based on the evaluation's findings, the evaluation team have identified a number of options for addressing this. These include:

- Extending the end date of the POA, i.e., roll it over. This was done by WHO for the NCD GAP with updated targets. PAHO's POA already has targets for 2025. However, many things have changed in the last 10 years, including lessons learned from COVID-19 and a broadening of the NCD agenda to include mental health and air pollution.
- Operating under the NCD GAP rather than developing a new regional POA. While this would be the simplest option, as the NCD GAP has already been extended, it would not reflect important contextual factors of the Region.
- Developing a more focused POA that is more operational in nature, and which focuses even more on the best buys that are feasible to implement and where PAHO can provide support.
- Developing an updated NCD POA which is broadly similar to the current one.
- Developing regional policies or strategies related to NCDs as they affect particular populations.

If any form of new POA is developed, PAHO will need to decide on its scope; for example, whether it is more focused on identified best buys or whether it is expanded to include other areas, perhaps more NCDs, mental health, and air pollution. In general, the findings of the evaluation support the development of NCD policies, strategies, and POAs which are comprehensive and inclusive, in terms of disease groups and risk factors, rather than policies, strategies, or POAs which focus on individual disease groups or risk factors.

The recommendation below is based on the findings of the evaluation, discussions with PAHO based on the options identified above, and the recognition that PAHO is at liberty to develop regional policies, strategies, and POAs that reflect the particularities and specificities of the regional context.

Support provided by PAHO has been highly relevant and is valued by Member States. However, it might be helpful to focus more on those areas particularly valued by Member States, such as working in partnership and providing support to mobilize resources.

### Coherence

While the POA's focus on four disease groups and four risk factors has resulted in highly technical interventions in these areas, there are a number of areas where there could be greater coherence. These include across and between the four disease groups and four risk factors and more broadly with departments of PAHO and WHO.

### Coordination

PAHO has coordinated extremely well on responses to NCDs with Member State governments, in general, and ministries of health in particular. However, experiences of ministries of health working to build effective multisectoral responses to NCDs are mixed. PAHO has not focused specifically on supporting countries in this area or on measuring and reporting progress. While there are examples of PAHO working constructively with some intergovernmental bodies and non-State actors, this has been less intentional and systematic than work with governments. There are specific concerns about different approaches and standards regarding relationships with industry and conflict of interest among different intergovernmental partners.

### Effectiveness

While PAHO reports indicate that the POA has been implemented relatively effectively, this is based on targets achieved. When progress is considered in terms of the percentage of Member States achieving a particular target, progress has been relatively modest, with a demonstrable setback in 2020–2021 because of the COVID-19 pandemic. It is very difficult to assess the contribution made to the POA by PAHO (or by intergovernmental bodies or non-State actors) in the absence of any measures for these. While reports on progress against the POA focus a great deal on what has been achieved in and by Member States, there is almost nothing on what PAHO, intergovernmental bodies, or non-State actors have contributed. While there is evidence from the evaluation that NCD measures implemented by countries are contributing to NCD outcomes, there is currently no evidence that these improved outcomes are leading to improved impact, for example, in terms of reduced premature mortality due to NCDs. It is of particular concern that targets for reducing premature mortality due to NCDs are extremely unlikely to be met.

### Efficiency

There were many positive reports to the evaluation of PAHO working efficiently in relation to NCDs, achieved by working in partnership with others and by supporting responses which are embedded in national government responses rather than developing parallel projects. It is concerning that PAHO does not currently measure or report on the efficiency of its support to NCD responses in the Region and therefore finds it difficult to answer questions about its efficiency.

### Sustainability

PAHO has a long track record of work in the Region and is seen as a trusted partner. In this regard, it is likely that PAHO and its work will be sustained. But, in relation to work on NCDs specifically, reliance on a small number of funders is potentially a threat to sustainability. While there are examples of PAHO work which are likely to be sustainable, including virtual models of training, there are others which are likely to be less so; for example, multiple, topic-specific, externally funded surveys.

### Gender equality, equity, and human rights

Gender has been well integrated in surveillance and research on NCDs. However, gender-diverse people are not considered in binary sex-disaggregation. Member States have faced challenges in addressing the tobacco and alcohol industries' emerging marketing practices targeting girls and adolescents to renew their client base. Although PAHO has good expertise at regional level on gender, interculturality, and social determinants of health, the team does not have sufficient capacity to respond to all countries' needs on addressing equity issues in NCDs, as those require a highly tailored approach. Issues of ethnicity and interculturality are of special relevance in the Region. There are missed opportunities to use human rights instruments to advance the NCD agenda. In particular, there has been limited collaboration between WHO headquarters and PAHO's legal team. Collaboration with civil society has been helpful, but there is a lack of a coordination platform to better engage with stakeholders working on child rights, gender equality, cultural rights, and environmental rights on NCD-related issues. The current disease-based framework for NCDs has hindered the inclusion of impairments experienced by people living with NCDs as well as the integration of rehabilitation services in the continuum of care for NCDs.

### COVID-19

Initiatives developed during the pandemic on sustaining continuity of care for NCDs may provide useful lessons learned, from both positive and negative experiences, to inform the design of NCD services in the COVID-19 recovery period and to help prepare health systems for future shocks. Mental health has been well prioritized during the pandemic. However, similar awareness and resources to address the link between NCDs and COVID-19 seem to have not yet materialized to the same extent. Beyond COVID-19, countries in the Region have faced different types of emergencies that have disrupted both health services and progress on NCD policies.

## Recommendations

The following table presents 12 recommendations, which propose specific actions to guide their implementation. Recommendations are targeted at users who are responsible for their implementation, and also identify the level of priority for completion. Priorities are immediate, short-term, and long-term. While these timeframes are not rigid, immediate is envisaged as within six months, short-term within one year, and long-term within two years.

| # | RECOMMENDATION   | HOW (suggested lines of action)  | BY WHOM   | PRIORITY  |
|---|--|--|---|-----------|
| 1 | <p><b>PAHO to update policy and strategy considering the current context, situation, and needs and better align with the GAP, ensuring that actions:</b></p> <p><b>*Connected to conclusion on Relevance</b></p> | <ul style="list-style-type: none"> <li>• Are complementary to the GAP and aligned to its monitoring and evaluation framework.</li> <li>• Include measures/metrics to assess the contribution of PAHO intergovernmental partners and non-State actors. PAHO to consider using a grid to assess the extent of different technical cooperation modalities in different countries. This could be scored regionally by NMH in addition to being scored by PAHO country office staff and Ministry of Health representatives. Other metrics could be measured to reflect specific actions in any future POA.</li> <li>• Use a health systems approach framed around primary health care and universal health coverage which recognizes the importance of resilience of health systems particularly in the face of emergencies and humanitarian crises.</li> <li>• Are developed in a participatory manner with involvement of Member States, intergovernmental partners, and non-State actors, including civil society.</li> <li>• Are based on country-level situation analyses focused on identifying and addressing unmet needs/gaps.</li> </ul> | <p>Lead: NMH</p> <p>Collaboration: CSC, ERP, GBO, HSS, PHE, PAHO Country Offices</p> <p>Member States</p> | Immediate |

| # | RECOMMENDATION   | HOW (suggested lines of action)  | BY WHOM  | PRIORITY   |
|---|--|--|--|------------|
| 2 | <p><b>PAHO to take steps to maximize coherence of its work on NCDs</b></p> <p><b>*Connected to conclusion on Coherence</b></p>         | <ul style="list-style-type: none"> <li>• Finding ways in which those working on particular disease groups and risk factors can work together, e.g., in relation to strengthening health systems for disease groups and economic measures to address multiple risk factors.</li> <li>• Further enhancing coherence between different parts of NMH, e.g., those working on NCDs and mental health.</li> <li>• Given the 5x5 approach to NCDs, PAHO to be coherent in ensuring linkages between work on air pollution specifically and climate change more generally, within and beyond the Organization; for example, with other United Nations agencies.</li> <li>• Further enhancing coherence between NMH and other parts of PAHO, such as HSS, Health Promotion, Life Course, and Environmental Health.</li> <li>• Further enhance coherence between regional, subregional, and Country Offices.</li> <li>• PAHO and WHO finding ways to make their engagement more coherent and to build synergies, particularly in terms of supporting Member States.</li> </ul>   | <p>Lead: NMH</p> <p>Collaboration: CSC, DHE, EIH, HSS, PBE</p>   | Immediate  |
| 3 | <p><b>PAHO to enhance coordination with actors beyond ministries of health</b></p> <p><b>*Connected to conclusion on Coherence</b></p> | <ul style="list-style-type: none"> <li>• To place more emphasis on supporting ministries of health to effectively coordinate a multisectoral response to NCDs across and beyond government.</li> <li>• To identify ways to work more intentionally and systematically with intergovernmental bodies and non-State actors, particularly civil society organizations, including developing a regional network or informal platform on NCDs.</li> <li>• To do the above as part of a whole-of-organization approach, which needs to be developed and defined.</li> <li>• To engage with United Nations agencies at global (through UNIATF), regional, and country/ UNCT level including on defining roles and responsibilities based on comparative advantage and leading adoption of a common position on managing conflict of interest in relation to commercial determinants of health.</li> <li>• At the country level, to identify areas of common agenda with other intergovernmental partners and to work with the UN Resident Coordinator to identify the best way of incorporating and prioritizing work on NCDs, including in the UNCT, Common Country Assessments, UN Sustainable Development Cooperation Frameworks, and humanitarian clusters (where applicable).</li> <li>• To identify areas where PAHO can work constructively with the private sector; that is, where public health concerns and commercial imperatives are not in conflict – e.g., promotion of physical activity.</li> </ul> | <p>Lead: NMH</p> <p>Collaboration: CSC, DHE, ERP, HSS, LEG, PAHO Country Offices</p> <p>UNCT/civil society</p> | Short-term |

| # | RECOMMENDATION   | HOW (suggested lines of action)  | BY WHOM   | PRIORITY   |
|---|--|--|---|------------|
| 4 | <p><b>PAHO Secretariat and Member States to identify ways in which progress on addressing NCDs can be accelerated dramatically</b></p> <p><b>*Connected to conclusion on Effectiveness</b></p> | <p>This will be needed if there is to be any prospect of countries meeting mortality targets. Key elements to include:</p> <ul style="list-style-type: none"> <li>• Massive expansion of human and financial resources</li> <li>• Scaling up effective programs</li> <li>• Working increasingly with others</li> <li>• Measuring and reporting progress candidly.</li> </ul>   | <p>Lead: NMH</p> <p>Collaboration: EIH, ERP, PBE</p>                                  | Immediate  |
| 5 | <p><b>PAHO to identify ways to strengthen progress on multisectoral action in countries</b></p> <p><b>*Connected to conclusion on Effectiveness</b></p>  | <ul style="list-style-type: none"> <li>• Establish, revitalize, and strengthen national NCD coordination mechanisms by supporting and strengthening Ministry of Health capacity to lead these.</li> <li>• Encourage learning about what works in multisectoral coordination for NCDs by sharing experiences across and beyond the Region, including by developing a regional platform where CSOs/Collaborating Centers and other country actors can engage more informally to discuss country experiences and needs.</li> <li>• Ensure that the indicator on the existence and functioning of such mechanisms is included in relevant indicator sets and progress reports.</li> <li>• Strengthen PAHO capacity to support multisectoral collaboration, particularly in Country Offices.</li> </ul>   | <p>Lead: NMH</p> <p>Collaboration: CSC, PAHO Country Offices</p> <p>Member States</p> | Immediate  |
| 6 | <p><b>PAHO to identify ways to strengthen work on NCD risk factors</b></p> <p><b>*Connected to conclusion on Effectiveness</b></p>   | <ul style="list-style-type: none"> <li>• Maintain focus on addressing structural and environmental determinants of health guided by the “best buys” for those risk factors where this is already done; i.e., tobacco use, harmful use of alcohol, and unhealthy diet.</li> <li>• Emphasize common and innovative approaches on commercial determinants of health, strengthening alignment at the subregional level.</li> <li>• Place greater emphasis on addressing physical activity through structural programs (urban planning, schools) including linkages to environmental determinants of health and not relying solely on individual behavior change.</li> <li>• Expand links to work focused on addressing air pollution.</li> <li>• Prioritizing action in countries based on analysis of where progress on risk factors has been most limited. This will likely vary from country to country.</li> </ul> | <p>Lead: NMH</p> <p>Collaboration: DHE, HSS, PAHO Country Offices</p>                 | Short-term |

| # | RECOMMENDATION  | HOW (suggested lines of action)  | BY WHOM  | PRIORITY   |
|---|---|--|--|------------|
| 7 | <p><b>PAHO to identify ways to strengthen work on main NCD groups</b></p> <p><b>*Connected to conclusion on Effectiveness</b></p>   | <ul style="list-style-type: none"> <li>• Adopt a life course, patient-centered approach to NCD care focusing on synergies between different disease groups at the service delivery level.</li> <li>• Identify ways of including more elements relating to rehabilitation and disability.</li> <li>• Identify ways in which work on NCDs and mental health can be linked and connected.</li> <li>• Develop and support models of care for people with NCDs in emergency settings.</li> <li>• Better understand the barriers to country utilization of the PAHO Strategic Fund for essential NCD medicines, and work with countries to address the barriers and utilize the Fund to expand access to NCD medicines.</li> </ul> | <p>Lead: NMH</p> <p>Collaboration: CSC, HSS, PHE, PAHO Country Offices</p> | Short-term |
| 8 | <p><b>PAHO to identify ways to further strengthen NCD surveillance, monitoring and evaluation</b></p> <p><b>*Connected to conclusion on Effectiveness</b></p>                                   | <ul style="list-style-type: none"> <li>• Ensure that the POA's indicator framework is simplified by aligning more closely to global NCD monitoring.</li> <li>• Further emphasize integrating NCD surveillance into existing national systems, including a shift away from multiple thematic surveys to including a set of key questions in broader data collection processes.</li> <li>• Ensure any future POAs are independently evaluated at their mid-point and at the end.</li> <li>• Commission research to better understand gender equality, equity, and human rights issues in relation to NCDs.</li> </ul>  | <p>Lead: NMH</p> <p>Collaboration: DHE, EIH, PBE, PAHO Country Offices</p> | Immediate  |
| 9 | <p><b>PAHO to develop metrics through which it can measure and assess the efficiency of its support to NCD responses in the Region</b></p> <p><b>*Connected to conclusion on Efficiency</b></p> | <ul style="list-style-type: none"> <li>• Convene working group to identify ways of measuring efficiency of PAHO's work on NCDs. This measurement could include both quantitative and qualitative elements.</li> <li>• Develop description and manual/guidelines for monitoring efficiency indicator(s).</li> <li>• Test indicators and roll out their use.</li> </ul>  | <p>Lead: PBE</p> <p>Collaboration: NMH</p>                                 | Long-term  |

| #  | RECOMMENDATION   | HOW (suggested lines of action)  | BY WHOM  | PRIORITY   |
|----|--|--|--|------------|
| 10 | <p><b>Member States and PAHO Secretariat to identify ways to enhance the sustainability of its work on NCDs</b></p> <p><b>*Connected to conclusion on Sustainability</b></p>   | <ul style="list-style-type: none"> <li>Place greater emphasis on resource mobilization as a key element of technical cooperation on NCDs, including at the country level.</li> <li>Broaden the funder base for work on NCDs, including by collaborating more closely with WHO NCD on fundraising strategies for the NCD agenda (e.g., follow-up work on investment case) and ensuring equitable distribution of NCD funding to the Region.</li> <li>Review the ways PAHO works through a sustainability lens; i.e., identifying interventions which are potentially more and less sustainable.</li> <li>Explore linkages of NCD agendas to health system resilience and pandemic preparedness, as well as climate change.</li> </ul>   | <p>Lead: ERP</p> <p>Collaboration: CSC, GBO, NMH, PBE, PAHO Country Offices</p> <p>Member States</p> | Immediate  |
| 11 | <p><b>PAHO to provide evidence and leverage collaborations to advance the gender equality, equity, and human rights agenda in NCDs</b></p> <p><b>*Connected to conclusion on Gender Equality, Equity, and Human Rights</b></p> | <ul style="list-style-type: none"> <li>Develop, as part of the PAHO NCD data portal, a section to disseminate existing NCD data with an analysis of gender, equity, and human rights.</li> <li>Support research and disseminating evidence on how to integrate gender and equity analysis in the NCD agenda, in particular on specific issues faced by gender-diverse people and on addressing strategies of the industry to market unhealthy commodities targeting women, girls, and adolescents.</li> <li>Develop a network to support PAHO's work at the country level on gender and human rights in the NCD agenda, in collaboration with CSOs working on child rights, cultural or environmental rights, as well as with social determinants of health and health equity experts.</li> <li>Improve collaborations with WHO human rights legal advice to leverage global expertise to advance the NCD agenda regionally, while improving the contribution of the Region to the global NCD agenda.</li> <li>Integrate rehabilitation services within the continuum of care for NCDs and fostering disability inclusion through a patient-centered, health systems approach to NCD services delivery.</li> </ul> | <p>Lead: DHE</p> <p>Collaboration: CSC, EIH, LEG, NMH, PAHO Country Offices</p>                      | Short-term |

| #  | RECOMMENDATION  | HOW (suggested lines of action)   | BY WHOM   | PRIORITY   |
|----|---|---|---|------------|
| 12 | <p><b>PAHO's technical cooperation on NCDs to take into account lessons learned from COVID-19 and ensure that NCDs programs contribute to population's and health systems' resilience in the face of emergencies and humanitarian crises</b></p> <p><b>*Connected to conclusion on COVID-19</b></p> | <ul style="list-style-type: none"> <li>Ensuring that NCDs are included in PAHO's reporting to Member States on the lessons from the COVID-19 pandemic.</li> <li>Documenting and discussing initiatives arising from COVID-19 experience such as resorting to e-health, developing the role of community level services in chronic care, using virtual modalities for trainings, and prioritizing continuity of cardiovascular disease detection during emergencies.</li> <li>Recasting the NCD agenda in terms of how to better prepare health systems to face external shocks, including in terms of improving population's resilience to communicable diseases and including linkages to environmental health.</li> <li>Dedicating resources, evidence, and technical support to advance the NCD agenda in emergency contexts.</li> </ul> | <p>Lead: PHE</p> <p>Collaboration: CSC, NMH, PAHO Country Offices</p> | Short-term |

Note: CSC, Country and Subregional Coordination; DHE, Social and Environmental Determinants for Health Equity; EIH, Evidence and Intelligence for Action in Health; ERP, External Relations, Partnerships, and Resource Mobilization; GBO, Governing Bodies; HSS, Health Systems and Services; LEG, Office of the Legal Counsel; NMH, Noncommunicable Diseases and Mental Health; PBE, Planning, Budget, and Evaluation; UNCT, United Nations Country Team.

# Introduction and background



# Introduction and background

This is the final report of the Evaluation of the Pan American Health Organization (PAHO) Technical Cooperation in Noncommunicable Disease (NCD) Prevention and Control in the Americas. It is organized into the following sections: this introduction; details of methods; comparisons with the mid-point evaluation of the World Health Organization (WHO) NCD Global Action Plan (GAP); findings; and conclusions and recommendations. The Findings section is structured around the evaluation's main questions. The report includes seven annexes as a separate Volume II: (1) the terms of reference; (2) details of people interviewed and consulted; (3) details of documents reviewed; (4) a detailed methodological annex; (5) the evaluation matrix; (6) data collection tools; and (7) details of the Plan of Action's (POA) theory of change.

The activities of PAHO NCD technical cooperation are coordinated and implemented by the Department of Noncommunicable Diseases and Mental Health (NMH). The Department's work is guided by the Plan of Action for the Prevention and Control of Noncommunicable Diseases in the Americas 2013–2019 (POA) (1), which is aligned to the WHO NCD GAP (2) and the global NCD monitoring framework, including its 25 indicators and nine targets.<sup>1</sup> The POA has four strategic lines of action: multisectoral policies and partnerships for NCD prevention and control; NCD risk and protective factors; health system response to NCDs and risk factors; and NCD surveillance and research.

Each strategic line of action has several specific objectives (2–4) and each objective has between one and eight indicators which are to be used to monitor progress. Each strategic line of action identifies actions for the Pan American Sanitary Bureau,<sup>2</sup> Member States, intergovernmental partners, and non-State actors.

The POA concluded in 2019 and a final report (3) was presented to PAHO's Directing Council in 2020. However, the POA remains relevant, not least because it also includes targets for 2025, in addition to those for 2019. Access to services and risk factors for NCDs are included as outcomes (5 and 13, respectively) in PAHO's Strategic Plan 2020–2025 (4) and in PAHO's Program Budget 2022–2023 (5). Both outcomes are in the high priority tier.

The years following the formal end of the POA have been marked by the COVID-19 pandemic. This is an important contextual factor for the evaluation. PAHO was evaluating its response to COVID-19 at the same time as this evaluation.

Although NMH proposed a new NCD POA up to 2030, this proposal was not taken forward because of concerns of introducing too many disease-specific plans of action during the COVID-19 pandemic. Currently, NMH are working on a proposal for a POA on the specific needs of adolescents, children, and youth relating to NCDs.

Although the POA included plans for evaluations in 2017 (mid-term) and 2020 (final), formal, external, and independent evaluations were not conducted, although a mid-term review was reported to the Directing Council in 2016 (6), in addition to the final report. As well as the overarching NCD POA, there are/were also specific plans of action for tobacco control (7), the elimination of industrially produced trans-fatty acids (8), the prevention of obesity in children and adolescents (9), and cervical cancer prevention (10).<sup>3</sup> While there are reported to be reviews/evaluations of these plans of action available, these are all internal reviews reported to PAHO's Directing Council. This current evaluation is built on the mid-point evaluation of the implementation of the WHO Global Action Plan for the Prevention and Control of Noncommunicable Diseases 2013–2020 (NCD GAP) (11). However, it also differs from the mid-point evaluation.

The overall purpose of the Evaluation of the PAHO Technical Cooperation in NCD Prevention and Control in the Americas was to determine the level of results attainment and performance for NCD prevention and control (see Annex 1 in Volume II). The evaluation assessed relevance, coherence, coordination, effectiveness, efficiency, and sustainability of PAHO's NCD technical cooperation (policy guidance, support, and tools). It also assessed three cross-cutting themes: gender, equity, and human rights; and COVID-19. The evaluation included a focus on both accountability and learning.

The evaluation's objectives were to: (1) assess PAHO's implementation of NCD technical cooperation and document key achievements as well as challenges, gaps, and areas for improvement; (2) examine key enabling and limiting internal and external factors that affected PAHO's technical cooperation at all three levels of the Organization,<sup>4</sup> and achievements and gaps including implications for how PAHO delivered its regular NCD technical cooperation during 2020 and 2021 in the context of the COVID-19 pandemic response; and (3) provide lessons learned and evidence-based recommendations to strengthen NCD technical cooperation while building a resilient recovery after the COVID-19 pandemic.

<sup>1</sup> For a review of NCD global and regional resolutions from 2000 to date, see Hennis A. Analysis of PAHO's 25-Year Program of Work. PowerPoint Presentation to the Senior Advisory Group, November 2022.

<sup>2</sup> PAHO's Secretariat.

<sup>3</sup> Of these four plans, the time period of two has already elapsed: tobacco (2022) and childhood obesity (2019). Two remain current: trans-fatty acids (to 2025) and cervical cancer (to 2030).

<sup>4</sup> Regional, subregional, and country.



In terms of scope, the evaluation focused on PAHO's technical cooperation<sup>5</sup> and specifically on the four lines of action of the regional NCD POA as specified in the terms of reference (see Annex 1 in Volume II). This means that the retrospective part of the evaluation was based on a so-called “four-by-four” approach to NCDs.<sup>6</sup> However, given the current context, the evaluation's forward-looking elements consider a “five-by-five” approach, including mental health and air pollution. The evaluation mainly covered the period 2013–2021.<sup>7</sup> The geographical scope of the evaluation was the Region of the Americas including the three subregions of Mexico and Central America, South America, and the Caribbean.<sup>8</sup> The evaluation had a mainly strategic focus and did not explicitly include a focus on evaluating impact.<sup>9</sup>

Expected users and uses of the evaluation are identified in the terms of reference (see Annex 1 in Volume II). Principal users are PAHO's senior managers and staff working on NCDs across the Organization's three levels. Others who might use the evaluation include PAHO Member States, PAHO's international and intergovernmental partners, and non-State actors. Uses include improving implementation of the current POA, inputting findings into any future POA, and, in general, to improve future work.

<sup>5</sup> Based on a concept note on technical cooperation in human resources for health (12), technical cooperation is understood as a “two-way learning and production process in which all parts contribute to the achievement of a predetermined goal while mutually benefiting from the achievements. In the case of PAHO's technical cooperation, the contributions of the Member States are recognized in the implementation of activities carried out as part of the respective technical programs.”

<sup>6</sup> Focused on four disease groups – cardiovascular disease, chronic respiratory disease, cancer, and diabetes – and four risk factors – tobacco use, the harmful use of alcohol, unhealthy diet, and physical inactivity.

<sup>7</sup> As specified in the terms of reference (see Annex 1: Pan American Health Organization. Evaluation of the Pan American Health Organization Technical Cooperation in Noncommunicable Disease Prevention and Control in the Americas. Volume II Annexes. Washington, D.C.: PAHO; 2023. Available from: <https://iris.paho.org/handle/10665.2/57826>). However, as the evaluation took place toward the end of 2022, some respondents referred to things which had happened in 2022 and these were included in the evaluation's findings.

<sup>8</sup> The definition of subregions is not particularly fixed and may vary by context and purpose. For the purpose of this evaluation, the subregions were considered to be composed of Member States as follows:

- Central America – Costa Rica; Cuba; Dominican Republic; El Salvador; Guatemala; Honduras; Mexico; Nicaragua; and Panama.
- South America – Argentina; Bolivia (Plurinational State of); Brazil; Chile; Colombia; Ecuador; Paraguay; Peru; Uruguay; and Venezuela (Bolivarian Republic of).
- Caribbean – Antigua and Barbuda; Bahamas; Barbados; Belize; Dominica; Grenada; Guyana; Haiti; Jamaica; Saint Kitts and Nevis; Saint Lucia; Saint Vincent and the Grenadines; Suriname; and Trinidad and Tobago.

<sup>9</sup> However, some of the evaluation sub-questions, particularly “How is PAHO's technical cooperation contributing to the achievement of the NCD impact indicators in the PAHO Strategic Plan?” and “To what extent will the NCD impact indicators in PAHO's Strategic Plan 2020–2025 be achieved?” required some assessment of contribution to outcomes and impact.



## Methods

## Methods

Expectations of the evaluation in terms of approach and methods are explained in the terms of reference (see Annex 1 in Volume II). The evaluation team indicated how it would meet those expectations in an inception report produced in October 2022. This section briefly describes the methods followed, with more details provided in Annex 4 in Volume II.

The evaluation was divided into four phases: inception, desk review, primary data collection, and analysis and reporting. While the original intention was that these phases would be consecutive, some phases were overlapping as a result of contracting delays and the need to report emerging findings by the end of November 2022.

### Inception phase

The inception phase ran from July to October 2022. It involved participatory workshops to review and revise the POA's theory of change (see Annex 7 in Volume II), carrying out a small number of interviews and meetings, and receiving and reviewing many documents. During the inception phase, the evaluation questions were simplified, and a number of other small modifications were made to the evaluation's terms of reference. Stakeholders to be interviewed and surveyed were identified. Three countries were selected for "deep dives" based on an agreed set of criteria. An evaluation matrix and data collection tools were developed. For more details, see Annex 4 in Volume II.

### Desk review phase

The desk review phase sought to identify, from available documents, evidence of progress in implementing the POA. There was a particular focus on quantitative indicator data. All the indicators identified relate specifically to actions of Member States. The evaluation team conducted a rating exercise with in-country respondents to try to assess the scale and intensity of PAHO's contribution to different types of technical cooperation. In addition, findings from the desk review were presented to PAHO departments of Planning, Budget, and Evaluation (PBE) and NMH. Due to the time issues identified above, the desk review phase ran almost concurrently with the inception phase, with the report of the desk review produced at the end of October 2022. However, further work processing and analyzing quantitative data continued into the evaluation's primary data collection phase. For more details, see Annex 4 in Volume II.

### Primary data collection phase

In addition to documents received and identified during inception, further documents were obtained during the primary data collection phase. Documents specifically referred to in the report are listed in the References section at the end of this document. All documents are listed in Annex 3 in Volume II. A total of 231 key informants were interviewed in the primary data collection phase of the evaluation.<sup>10</sup> This figure includes interviews conducted as part of the deep dives in three countries: Costa Rica, Paraguay, and Trinidad and Tobago. Survey responses were received from 14 organizations (non-State actors in official relations with PAHO and Collaborating Centers). For more details, see Annex 4 in Volume II.

### Analysis and reporting phase

Ideally, this phase would have started only when primary data collection had been concluded. However, delays in data collection meant that this was not fully possible. Some quantitative analysis was conducted as part of the desk review phase. This analysis was combined with some analysis from documents and the surveys and early preliminary analysis of interview data to prepare a short report and presentation of emerging findings as required. This was presented to PBE on 1 December 2022. Further analysis was conducted using Dedoose excerpts of interview notes, documents identified for the evaluation, the report of the desk review, reports of deep dives, and the survey report. A team meeting was held over two days on 3 and 4 January 2023 to discuss findings, conclusions, and recommendations. For more details, see Annex 4 in Volume II. A further theory of change workshop was held with NMH on 1 February 2023 to update the version developed during the inception phase. This was followed by a final workshop cofacilitated by NMH and the evaluation team. This discussed the department's contribution in more detail in preparation of their planning process (see Annex 7 in Volume II).

### Similarities to and variations from the WHO NCD GAP evaluation

While there were some similarities between the methods used for this evaluation and the mid-point evaluation of the WHO NCD GAP, there were also some marked variations. Examples include: participatory work done on the theory of change; having a distinct data review phase; having a greater focus on countries, including for deep dives; having access to HEARTS program data, some impact and outcome data, and a further round of progress data; rating of PAHO contribution to technical cooperation by PAHO Country Offices and government representatives of Member States; comparing countries based on Human Development Index (HDI) not gross national income (GNI); being able to make comparisons at subregional level; and use of Dedoose software for qualitative analysis. For more details, see Annex 4 in Volume II.

<sup>10</sup> For a list of key informants see Annex 2, and for a detailed breakdown see Annex 4, in: Pan American Health Organization. Evaluation of the Pan American Health Organization Technical Cooperation in Noncommunicable Disease Prevention and Control in the Americas. Volume II Annexes. Washington, D.C.: PAHO; 2023. Available from: <https://iris.paho.org/handle/10665.2/57826>.

## Limitations

In common with other evaluations of this nature, the evaluation had some limitations. These are briefly mentioned here with more details in Annex 4 in Volume II. The time available was much more limited than expected. In particular, having to approach in-country stakeholders through the PAHO/WHO Representatives was a relatively slow process. Concerns about the core team conducting deep dives remotely were effectively mitigated by having in-country consultants in place in Costa Rica, Paraguay, and Trinidad and Tobago.

There were some limitations related to availability of quantitative data, particularly that no such data are tracked for any actors other than Member States. Specific limitations related to quantitative indicators for Member States are presented in Annex 4 in Volume II.

Despite the limitations outlined here, the evaluation team considers that the evaluation was a robust process that maximizes the strength of evidence gathered and the validity of interpretation as reflected in the evaluation's findings, conclusions, and recommendations.



**Comparisons with the  
mid-point evaluation  
of the WHO NCD GAP**

## Comparisons with the mid-point evaluation of the WHO NCD GAP

This section briefly compares this evaluation with the mid-point evaluation of the WHO NCD GAP, which two members of the evaluation team completed in 2020. Differences in method are briefly mentioned in the Methods section with more detail in Annex 4 in Volume II.

PAHO's NCD Regional POA and WHO's NCD GAP have some similarities. In terms of their design, both plans adopted the "four-by-four" strategic framework on risk factors and diseases. Both plans outline actions for Member States, WHO or PAHO, and other actors such as non-State actors and intergovernmental bodies, although both only track indicators relating to Member States' performance.

While there is overlap between indicators tracked globally and those tracked regionally (see Table 1), there are some differences between how indicators are defined and measured across different sets. Of the 30 POA indicators, almost three-quarters (22 indicators, 73%) appear in one of the other identified indicator sets. Of these, 18 (60%) are in the Global Monitoring Framework, 13 (43%) are in the PAHO Strategic Plan, 9 (30%) are in the PAHO Program Budget, and 9 (30%) are in the global progress monitoring indicator set.<sup>11</sup>

**Table 1.** Comparison of indicators in PAHO's NCD Plan of Action, PAHO's Strategic Plan, PAHO's Program Budget, the Global Progress Monitoring Indicator Set, and the Global Monitoring Framework

| PAHO NCD Plan of Action | PAHO Strategic Plan                | PAHO Program Budget | Global Progress Monitoring Indicators | Global Monitoring Framework |
|-------------------------|------------------------------------|---------------------|---------------------------------------|-----------------------------|
| 1.1.1                   |                                    |                     |                                       |                             |
| 1.2.1                   |                                    |                     | 4                                     |                             |
| 1.3.1                   |                                    |                     |                                       |                             |
| 2.1.1                   | Outcome 13a                        |                     |                                       | 10                          |
| 2.2.1                   | Outcome 13b                        | 13.1.a              | 6a-c                                  | 3                           |
| 2.3.1                   |                                    | 13.1.e              | 7c                                    | 23                          |
| 2.3.2                   | Outcome 13d                        | 13.1.f              | 7b                                    | 21                          |
| 2.3.3                   | Outcome 13c                        | 13.1.c              | 7a                                    | 8                           |
| 2.4.1                   | Outcome 13e                        | 13.1.b              |                                       | 7                           |
| 2.4.2                   |                                    |                     |                                       | 6                           |
| 3.1.1                   |                                    | 5.1.a               | 9                                     |                             |
| 3.2.1                   |                                    |                     |                                       | 19                          |
| 3.2.2 <sup>14</sup>     | Outcome 5d                         |                     |                                       | 20                          |
| 3.2.3                   |                                    |                     |                                       |                             |
| 3.2.4                   |                                    |                     |                                       |                             |
| 3.2.5                   |                                    |                     |                                       |                             |
| 3.3.1                   | Outcome 5a                         |                     |                                       | 12                          |
| 3.3.2                   |                                    |                     |                                       | 14                          |
| 3.3.3                   |                                    |                     |                                       | 13                          |
| 3.3.4                   |                                    |                     | 10                                    | 18                          |
| 3.3.5                   | Outcome 5b                         |                     |                                       | 11                          |
| 3.3.6                   | Outcome 5c                         |                     |                                       | 25                          |
| 3.3.7                   |                                    |                     |                                       |                             |
| 3.3.8                   |                                    |                     |                                       | 22                          |
| 4.1.1                   | Impact #9                          |                     |                                       | 1                           |
| 4.1.2                   | Some similarities to Outcome 5e... | ...and to 5.2.a     | 2                                     |                             |
| 4.1.3                   |                                    |                     |                                       | 2                           |
| 4.1.4                   |                                    |                     | 3                                     |                             |
| 4.2.1                   |                                    |                     |                                       |                             |
| 4.2.2                   |                                    |                     |                                       |                             |
|                         |                                    | 13.1.d              |                                       |                             |
|                         |                                    | 13.1.g              | 5a-e                                  |                             |
|                         |                                    |                     | 1                                     |                             |
|                         |                                    |                     | 7d                                    |                             |
|                         |                                    |                     | 8                                     |                             |
|                         |                                    |                     |                                       | 4                           |
|                         |                                    |                     |                                       | 5                           |
|                         |                                    |                     |                                       | 9                           |
|                         |                                    |                     |                                       | 15                          |
|                         |                                    |                     |                                       | 16                          |
|                         |                                    |                     |                                       | 17                          |
|                         |                                    |                     |                                       | 24                          |

<sup>11</sup> For the purpose of this analysis, similar indicators are counted. The percentages are >100% as an indicator may appear in more than one other indicator set.

As the WHO NCD GAP and the PAHO Regional POA on NCDs were published around the same time, in 2013, they both face similar issues in terms of their continued relevance to the current context and the way the NCD agenda has evolved regionally and globally since they were published. While “best buys” and other recommended interventions remain relevant both regionally and globally, neither the GAP nor the Regional POA capture emerging areas that are associated with NCDs, including mental health and air pollution. Another issue that is common to both plans is the tension between the need to focus efforts on key diseases and risk factors that cause the bulk of NCD-related morbidity and mortality and the need to take into account other chronic conditions such as kidney disease or dementia, and other risk factors such as environmental risk factors.

Despite these similarities, there are also marked differences. First, this evaluation was able to draw lessons, and implement several adaptations, building on the experience of the NCD GAP evaluation. For example, the evaluation team decided to conduct a data review prior to primary data collection, as the evaluation team had identified that this phase would have been beneficial to guide data collection for the NCD GAP evaluation. The data review provided useful background to inform discussions with respondents. Another key learning from the GAP evaluation was that it would be helpful to have a way to assess PAHO’s contribution to the POA in the absence of specific indicators. During the inception phase of the evaluation, the team discussed different ways to do this with NMH staff; for example, measuring the intensity of PAHO’s effort through the level of investment in NCDs. Another approach was to develop a grid for PAHO country office staff and counterparts in the Ministry of Health to rate the scale and intensity of PAHO’s support as low, medium, or high on eight categories of technical cooperation: leadership, partnerships and multisectoral approach, normative guidance, policy options, institutional capacity development, research and knowledge generation, surveillance, and resource mobilization. Finally, given the large amount of primary data collected during the evaluation, the team decided to use the Dedoose software to support qualitative data analysis.

There were also aspects of the PAHO NCD technical cooperation evaluation that were specific to the Regional POA on NCDs. First, and most importantly, the evaluation considered several aspects of the unique and specific context of the Region of the Americas, including, for example, a diversity of health systems with varying degrees of centralization and decentralization and different ways of provision through private and public providers of health care. There were also thematic issues that were very specific to the context of the Region, such as the impact of the Venezuela crisis-related migration on health systems and issues of ethnicity and access to care for indigenous and remote communities, which had not featured so prominently in the NCD GAP evaluation. Finally, PAHO’s organizational setup differs from WHO’s. In WHO, the work on NCDs is coordinated by the NCD Unit, with a separate Unit on Mental Health and Substance Use within the Division of Universal Health Coverage/Communicable and Noncommunicable Diseases. Nutrition is catered for by the Nutrition and Food Safety Unit under the Division of Universal Health Coverage/Healthier Populations. The Gender, Equity and Human Rights Unit, under the Director-General’s Office, deals with those cross-cutting areas.

In PAHO, the NMH department integrates both NCDs and mental health thematic areas and includes food and nutrition. The thematic areas of gender, equity, and human rights are covered by the Equity, Gender, Human Rights and Cultural Diversity Unit.

Additionally, because of the regional focus, the evaluation was able to consider different country contexts specifically and with more depth, gaining access to country-level stakeholders from PAHO Country Offices as well as ministries of health. In particular, through deep dives in three countries, a much broader sample of respondents was reached. The regional focus also allowed the evaluation to conduct subregional analysis on indicators and to highlight specificities of subregions in relation to the NCD response. This contrasted with the global evaluation, which was only able to consider WHO regions as a whole. There were also specificities linked to the design of the Regional POA on NCDs. The POA included a logic model that served as a basis for the evaluation team to support the NMH team to develop a revised theory of change model for the program. This informed the evaluation design, notably the grid to assess the intensity of PAHO’s technical cooperation on NCDs, which could also be used to support the design of the program going forward by ensuring that all the main change pathways of the PAHO NCD program are considered. The PAHO NCD technical cooperation evaluation also benefited from more quantitative data sets, notably programmatic data from the HEARTS program. The analysis of indicator data used a slightly different methodology, using the Human Development Index (HDI) as a key variable for analysis rather than the Gross National Income (GNI). In the Region, the World Bank income groups were not particularly useful to categorize countries.

Another key difference with the NCD GAP evaluation was in terms of the timing of the evaluations. Since more time had elapsed since the beginning of the plan, the analysis in this evaluation benefited from an additional round of data collection in 2022. With more hindsight on the COVID-19 pandemic, the analysis of the interactions between the pandemic and the NCD agenda could be explored more fully in this evaluation. In addition, this was a final evaluation while the NCD GAP evaluation was designed as a mid-point evaluation, focusing on the implementation of the plan. So, this evaluation was able to look more at contribution to impact and other strategic issues.



## Findings

# Findings

The evaluation's findings are structured around the evaluation's questions (see Annex 5 in Volume II), including the following sections: relevance, coherence, coordination, effectiveness, efficiency, sustainability, COVID-19, and gender equality, equity, and human rights.

## Relevance

### Relevance of the NCD agenda regionally

NCDs are a highly relevant public health and development issue in the Region of the Americas. In 2019, cardiovascular diseases, cancer, diabetes, and chronic respiratory diseases were the leading causes of death, responsible for approximately 80% of all deaths in the Region (13). Based on NMH reports and findings of this evaluation, countries in the Region are not on track to meet global targets on NCDs. NCDs are also highly relevant as a vulnerability factor for other conditions. NCDs and their risk factors have been associated with higher risk of contracting COVID-19 as well as developing a severe form of the disease (14).

NCDs are also relevant to the broader development agenda given their associated economic burden. NCDs lead to high treatment costs that affect both the health system and households. They also have an indirect economic burden through productivity losses via premature mortality and affecting productivity of persons living with NCDs. This has been documented at the country level by the PAHO Economics of NCD team through various investment cases. At the regional level, data are scarce in relation to the combined cost of NCDs. At the global level, an investment case by WHO asserted that implementing the best buys globally would yield USD 350 billion in economic growth by 2030 (15).

Various international commitments reflect the priority given to those diseases, such as the High-Level Meeting on NCDs convened by the United Nations General Assembly in 2011. This has not, however, translated into levels of financial investment, in particular in comparison to communicable diseases. Globally, about 2% of health expenditures are specifically dedicated to NCDs, while they cause nearly half of premature deaths (15). This shows the relevance and importance of proactively driving the NCD agenda and helping countries prioritize NCDs within the agendas of developing primary health care and achieving Universal Health Coverage.

### Relevance of the Regional Plan of Action

The priorities of the Regional POA are aligned to a "four-by-four" framework<sup>12</sup> for risk factors and diseases as outlined in the GAP on NCDs (2) and its "best buys" (16). In the regional context, this framework has proved highly relevant to key public health issues. For example, cardiovascular diseases, which are prioritized in both the POA and the HEARTS program,

remain the leading cause of disease burden in the Region of the Americas. Age-standardized cardiovascular disease death rates vary substantially from a high in Haiti (428.7 deaths per 100 000 population) to a low in Peru (73.5 deaths per 100 000) (17). The prioritized risk factors are also highly relevant regionally. For example, in 2016 the estimated prevalence of obesity in adults was 28% (26% in men and 31% in women) in the Americas, the highest among all WHO regions (18). In children and adolescents, overweight and obesity reached "epidemic proportions" according to PAHO's Plan of Action for the Prevention of Obesity in Children and Adolescents (2014–2019) (9), with an estimated 20% to 25% of under 19 years old affected by overweight and obesity at the time.

These priorities are well-reflected in country national health plans in the Region, such as Bolivia's ten-year health plan, the National Health Plan of Suriname, or Uruguay's National Health Goals, which largely align to the POA's framework regarding NCDs. However, since the Regional POA expired in 2019 and the NCD GAP has been extended to 2030 with updated targets, countries tend to define their targets based on the GAP. This challenges the need for having a multiplicity of indicator sets (see Table 1) rather than just referring to global indicators. While the argument for having separate regional indicators is that they are needed to reflect the specificities of regional context, this argument is undermined because data availability for these indicators is often poor and there is risk of confusion arising because of the multiplicity of indicators and indicator sets. Respondents from Ministries of Health, PAHO, and WHO highlighted that some indicators tended to be collected primarily for reporting purposes and that the NCD monitoring framework would benefit from being more streamlined to concentrate efforts on analysis of data rather than reporting to different frameworks.

In addition, the NCD agenda has evolved since the Regional POA was published in 2013, especially its scope. In particular, the areas of mental health and air pollution have been integrated into the NCD agenda globally in what is now termed "five-by-five." Given the breadth of the NCD field, the focus on the "four-by-four" framework<sup>13</sup> and best buys has helped concentrate efforts and limited resources on areas of most added value. However, some Ministry of Health respondents considered that this framework was too restrictive and compartmentalized. However, other respondents considered that, given relatively limited progress to date, there might be a need for greater, not less, focus.

Regionally, the area of mental health has become more prominent with the COVID-19 pandemic. Ministry of Health and PAHO respondents called for more practical guidance on how to integrate mental health and NCDs in service delivery and how to ensure that the two agendas do not progress in parallel, but are instead integrated in primary health care through a health systems approach, including ensuring that staff in primary care have skills and capacity in relation to both NCDs and mental health.

It is estimated that air pollution kills around 6.7 million to 7 million people globally per year (19, 20), which is close to the number of more than 8 million per year killed by tobacco (21). Based on 2016 data (22), the mean concentration of fine particulate matter in the Region was almost twice the recommended levels in WHO air quality guidance (23). However, air

<sup>12</sup> See footnote 6.

<sup>13</sup> See footnote 6.

pollution was emphasized less by respondents, but this could reflect respondent selection with few key informants from the area of environmental health, which is now largely handled separately from NCD risk factors. Nevertheless, contributions gathered on this topic included a stakeholder from a funding agency that highlighted their interest in seeing more integration between the NCD agenda and environmental health. There was also progress reported in Trinidad and Tobago, as the country endorsed the Caribbean Action Plan on Health and Climate Change (2019–2023) (24) and implemented a project on integrating air pollution and short-lived climate pollutants mitigation actions with support from PAHO and funded by the Climate and Clean Air Coalition. Overall, however, there has been insufficient research and data regarding the relevance of this risk factor to the NCD agenda in the Region.

Some Ministry of Health and PAHO respondents also considered that the regional NCD agenda – as articulated in a POA – should include high-burden chronic diseases such as chronic kidney disease and dementia. Road traffic crashes are also an area of growing interest that countries have sometimes integrated within the NCD agenda. In line with the current mandate of the NMH department, the ENLACE portal (25) includes data on issues of mental health and neurological conditions, air pollution, and violence and injuries alongside the diseases and risk factors considered in the regional POA.

These different priorities highlight the need to strike a balance between focusing on interventions with maximal impact and adopting a holistic approach that “leaves no-one behind.” Some respondents considered that PAHO’s work on NCDs had focused too much on vertical programs and not enough on building synergies between disease areas and risk factors in a health systems approach.

According to the Regional POA, PAHO planned to develop a new NCD Plan of Action for 2021–2025, aligned to the global milestones of 2025. However, even though progress has been relatively modest, and the Region is not on track to reach global targets for 2025 and 2030, a follow-up plan was not agreed. This was due, at least in part, to the onset of COVID-19 disrupting its adoption. This raises questions regarding the future shape of the NCD agenda in the Region. Currently, it is based on a regional POA that has ended, and which was developed more than 10 years ago. Given the need to accelerate progress to close the gap with global NCD targets and the context of “building back better” after COVID-19, PAHO respondents called for a document to chart the way forward on NCDs regionally, although it may take a different form than just being an updated version of the previous POA. According to a respondent from a funding agency, this may also mean rethinking the role of NCDs in populations’ resilience to communicable diseases and other shocks, and on how to strengthen health systems to be able to offer continuity of care to chronic patients in face of external shocks. Currently, there is a rather “stop and go” approach to addressing NCDs, as each time another health priority comes up those diseases get deprioritized, leading to underinvestment in this area.

### Relevance of PAHO’s technical cooperation

PAHO’s technical cooperation has been highly relevant to the global NCD agenda, helping translate major international initiatives to the regional level. The HEARTS initiative has been rolled out in 26 countries in the Region. According to a WHO respondent, the scale-up of the HEARTS initiative in the Region has been a major success globally for the NCD agenda. PAHO’s support has also been decisive on food policies and the fight against obesity, and the development of front-of-package labeling at the subregional and country level in Latin America (see Box 1).

#### Box 1. PAHO’s support on NCD risk factors: country examples

In Argentina, PAHO has supported a multiyear World Bank-funded program on NCDs, which has allowed the continuity of policy processes in a context of radical political change. The process culminated in a law promoting healthy eating, regulating front-of-package labeling and other measures to limit excesses in sugars, sodium, and saturated fats according to PAHO criteria (26).

PAHO also supported Trinidad and Tobago in the fight against obesity, helping develop National School Nutrition Standards, funding a supermarket survey to determine the sodium content in processed and ultra-processed packaged food products, and supporting the Baby-friendly Hospital Initiative to improve breastfeeding. Following these efforts, Trinidad and Tobago has been identified as a frontrunner country to participate in the WHO Accelerated Plan to Stop Obesity.

On the tobacco control agenda, PAHO has played an instrumental role in Uruguay, supporting the country to host the NCD World Conference in 2017, hosted by the country’s President (27).

PAHO also has a high value-added through its specialist technical capacity relevant to NCDs. The legal department has conducted an analysis at the regional level to understand what laws work best on NCDs, and supported Ministries of Health in drafting legislation that is not only sound from a technical, health standards point of view but also impactful from a legal standpoint. This legislative support is relevant in countries where Ministries of Health may not have internal legal advice to support them on the drafting of legal frameworks. PAHO has also played a key role in supporting countries on procurement of essential drugs and commodities for NCD treatment and care services. The Procurement and Supply Management Department (PRO) works with Member States to understand gaps and transition plans for treatment protocols, to shape market demand. They then work on forecasting demand and support Member States to access better-priced medicines and medical devices. So far, this support has been limited to hypertension and breast and pediatric cancers and has not yet addressed cholesterol control and diabetes commodities.



At the country level, Ministry of Health, civil society, and academic respondents considered PAHO to be the main partner on the NCD agenda, especially since many countries in the Region are upper-middle-income and high-income countries where these issues do not attract much external support. Ministry of Health respondents report that there is a high degree of trust in PAHO.<sup>14</sup> One respondent from a Ministry of Health commented, “PAHO is a partner in health and development. They assist with program development and strategic planning, as countries adopt approaches that PAHO has developed. They help maintain gains, responding to unmet needs. They have an extremely important role. We rely on PAHO to help us chart the way forward.” PAHO works in an integrated manner with Ministries of Health, facilitated by the fact that, in some instances, the technical focal point has had previous work experience within the institution. Country Offices have a very good grasp of the functioning of the Ministry of Health, including of political dimensions. In countries with a decentralized health system, PAHO may work with different levels as relevant to achieve progress (see Box 2).

**Box 2. Experiences of PAHO working subnationally in decentralized health systems: country examples.**

In Argentina, PAHO has supported the Healthy Municipalities program, gathering around 2000 municipalities as part of a federal network to address NCDs and risk factors. They strengthened capacity at the provincial and municipal level, working through the national level to develop agreements with the provinces. A Ministry of Health respondent commented that “PAHO is very respectful of sovereignty and understands subnational roles.”

In Costa Rica, PAHO is working with the regional authorities in the Pacific North region on chronic renal diseases, which is where there is highest incidence in the country.

In Trinidad and Tobago, PAHO was able to collaborate with decentralized structures, the Regional Health Authorities, to accelerate the implementation of the HEARTS initiative.

PAHO’s technical cooperation on NCDs is highly tailored to different country contexts. Although there may not be a fully developed conceptual framework articulating this, PAHO employs a different mix of approaches depending on the context in which it operates. The evaluation has distinguished eight categories of technical cooperation in NCDs: leadership; partnerships and multisectoral approach; normative guidance; policy options; institutional capacity development; research and knowledge generation; surveillance; and resource mobilization. In countries with highly developed health systems, PAHO’s role is seen more as setting standards and supporting continuity of policies.

<sup>14</sup> This issue is covered here because it speaks to the relevance of PAHO technical cooperation from the perspective of national government. The same issues are discussed in earlier in text because they are important in terms of how PAHO coordinates with national governments.

In other settings, for example where health systems face emergencies, PAHO’s cooperation may shift to more hands-on, concrete support to address the pressing needs of the health system; for example, ensuring continuity of care for chronic patients during COVID-19. However, some Ministry of Health respondents considered that technical packages from global initiatives were sometimes pushed onto countries in a rigid, vertical manner. This was mentioned, in particular, in relation to the HEARTS program, in countries that already have strong health and surveillance systems which would favor a health systems approach rather than a disease-based one.

In terms of prioritization, PAHO plans its technical cooperation based on requests from Member States. The Organization employs a specific process to prioritize its resources, the PAHO-adapted Hanlon method (28), which uses an equation to inform the prioritization of its Strategic Plan. Using this method, NCD priorities are determined collaboratively between Ministries of Health and PAHO at the country level to ensure alignment with national priorities. However, this process does not systematically involve consultations beyond Ministries of Health. In this respect, respondents from civil society and other external partners expressed concerns that PAHO’s special relationship with Member States at times affected the ability of the Organization to criticize government decisions; for example, on questions of health equity or on political decisions that might affect progress on the NCD agenda. PAHO has attempted to find ways to mitigate this at the country level; for example, promoting international standards and evidence-based best practices, finding allies within Ministries of Health, or working with civil society organizations (CSO), providing them with evidence to promote the NCD agenda and advocate on key issues. Civil society and PAHO respondents considered that this latter approach was not being used sufficiently. Civil society respondents reported that PAHO did not support and facilitate enough platforms where CSOs could be engaged, have their capacity built, and support advocacy efforts on commercial determinants of health.

In terms of striking a balance between being country-led and promoting global initiatives and goals, PAHO is seen as having a steering/leadership role at the regional level and advocating with countries on the prioritization of relevant issues, where evidence shows that there would be a high value-added in investing. In this respect, PAHO’s technical cooperation is highly relevant on NCD risk factors and addressing commercial determinants of health, specialist areas where the Organization has strong technical capacity. Ministries of Health may not prioritize these areas in their requests for technical assistance as, in some contexts, they may tend to focus on the biomedical aspects of health and healthcare provision. One such example is alcohol. According to one respondent, with the onset of COVID-19, demands from Member States on alcohol dwindled as they became more focused on mental health and substance abuse issues. As a result, initiatives on reducing alcohol use may continue only from the momentum of work initiated previously. One respondent ventured that the lack of interest in alcohol may come from an attitudinal, cultural issue: “Alcohol is not defined as a public health issue for countries, it is normalized. Alcohol problems are not taken seriously enough to be measured, so evidence of effective interventions is few.” Another factor hindering progress on alcohol is that, in keeping with the vision promoted by the alcohol industry, alcohol abuse is seen as an individual, behavioral issue to be addressed through campaigns aimed

at behavior change to avoid excessive consumption. To date, PAHO has considered that this approach to alcohol, and risk factors in general, was unlikely to yield results given the resources and influence that the industry can leverage to promote consumption. This is a view strongly supported by external experts interviewed for this evaluation. Instead, in keeping with the best buys, PAHO has promoted regulatory measures to control supply (through regulating distribution) and demand (through taxation).<sup>15</sup> A respondent from a Ministry of Health also called on PAHO to do more to advocate for the prioritization of alcohol and to raise awareness among decision-makers outside the Ministry of Health, including by supporting NGOs to put pressure on government actors to take action.

There are some concerns that countries do not always know the areas of NCDs that PAHO intended to work in and prioritize. For example, one respondent commented, “The challenge is that we don’t have a clear sense of what are the priorities of NMH. We don’t have clarity of where the NMH plans focus in terms of countries and thematic areas. We could better work in tandem with them if we knew what specific areas they intend to work on.”

<sup>15</sup> However, given the relatively limited progress in addressing harmful use of alcohol to date, PAHO is considering shifting its focus more to individual behavior change. While this might have some benefit in terms of building support for the structural changes needed, evidence is lacking as to the effectiveness of such measures alone. Expert respondents expressed concern that this change would be seen as giving in to industry pressures and a strong voice on this topic would be lost.

## Coherence<sup>16</sup>

### *Coherence of the NCD agenda*

The POA is based on the “four-by-four” framework<sup>17</sup> of risk factors and diseases. While this framework has been useful to help prioritize the NCD response, it poses a number of issues in relation to coherence. Having a thematic-based structure can hinder the cross-fertilization and linkages between the different parts of the framework; i.e., across risk factors and diseases. Addressing them individually may have contributed to the uneven progression of different risk factors. For example, the tobacco control agenda has benefited from more resources and attention than other risk factors. One civil society respondent noted that PAHO’s alcohol control program was very active but seemed disconnected from PAHO’s other NCD work: “It was not felt that it was an effort by the Organization, more an individual effort. There was not much coherence. There is a lack of funding for the alcohol risk factor, which does not correspond to the importance of the risk factor, it is completely unbalanced.”

To date, PAHO has not approached risk factors transversally, that is, emphasizing common approaches across different risk factors. For example, PAHO respondents considered that there were opportunities to strengthen coherence between the risk factors linked to commercial determinants of health,<sup>18</sup> which require similar types of interventions in terms of distribution and marketing regulations or taxation measures. This is further justified because the alcohol industry has mimicked tobacco industry strategies (29).

### *Coherence of the NCD agenda with the broader NMH mandate*

Organizing programmatic intervention around four disease groups may hamper a more patient-centered approach. The NMH department is already structured around a broader scope than the POA, and this reflects more recent evolutions of the NCD agenda. Beyond NCDs and their risk factors, mental health and neurological disorders, malnutrition, and violence and injuries also fall under the remit of the NMH department.

In particular, mental health has been an area of growing interest with the onset of the COVID-19 pandemic, given the far-reaching consequences of the pandemic and associated lockdown measures on mental health disorders. According to PAHO and Ministry of Health respondents, mental health is not yet well-linked to the NCD agenda, in particular in terms of achieving coherence and integration in service delivery.

Rehabilitation forms an important part of care for people with NCDs, whether after an acute episode such as a stroke or after the development, over the longer term, of an impairment induced by NCDs. Integrating disability inclusion aspects into healthcare provision is also highly relevant given that many NCD patients also live with a disability.

<sup>16</sup> In compiling the evaluation’s findings, the team encountered some overlap between coherence and coordination. To address this, issues that might be considered external coherence are covered under coordination. This section is limited to coherence within PAHO including the relationship between PAHO and WHO.

<sup>17</sup> See footnote 6.

<sup>18</sup> Tobacco use, harmful use of alcohol, and unhealthy diet.

Some respondents considered that a future iteration of the POA should include consideration of those aspects through a patient-centered approach, as they are currently not well integrated at service-delivery level.

Vertical, disease-based approaches can also be at odds with the way country health systems are organized, an issue that has been raised, in particular, in relation to the HEARTS program. One Ministry of Health respondent commented, “Sometimes these packages are too rigid. The technical cooperation has watertight segments and the financing channels have more to do with PAHO’s internal processes than the operational reality of countries.” So, while there is need to focus efforts on reducing the burden of major causes of mortality, such as the four disease groups identified in the POA, the current approach may not currently be patient-centered and health systems-focused enough.

### **Coherence of NCD technical cooperation with other PAHO programs**

Interprogrammatic work between the NMH department and other programmatic areas in PAHO varies. Respondents report that there is increasing integration of funding streams for health systems strengthening and NCD technical cooperation; for example, on community involvement or on the Strategic Fund to procure essential medicines and medical equipment. There is also good collaboration with the legal department, which works alongside the NMH department to review legal frameworks from both a technical and legal perspective. However, several stakeholders mention that there could be more systematic collaborations with Health Promotion and Life Course to address NCDs from a social determinants of health and environmental health perspective. In this regard, PAHO stakeholders noted a lack of internal planning to support collaborations across departments. Respondents from other departments noted they were unaware of NMH priorities over the medium term. A key hindering factor to cross-departmental collaboration may be competition for resources, where departments seek funding for their areas versus considering the Organization’s priorities as a whole. In this respect, there appears to be a lack of coherence between the prioritization of NCDs in discourse and the resources allocated to this area. For example, some countries do not have NCD focal points in place, and, where these focal points do exist, some of these positions may be project-based only.

### **Coherence of PAHO headquarters and Country Offices**

While there were many examples of PAHO Country Offices commenting positively on support they received from PAHO headquarters, there were also some examples of PAHO headquarters communicating directly with a Member State and/or implementing activities without informing the country office. This led to some complaints that Country Offices did not always know what PAHO headquarters was doing. This could affect the coherence of work, as it may mean that Country Offices and PAHO headquarters do not always complement what the other is doing.

### **Coherence of PAHO and WHO NCD technical cooperation**

Both WHO and PAHO respondents reported satisfactory experiences in collaborating on NCDs, but they also raised issues of alignment in relation to defining respective roles and channels for sharing information.

WHO respondents commented positively on the work accomplished by PAHO on NCDs, highlighting key achievements such as the implementation of STEPS surveys and the rollout of the HEARTS program across the Region. PAHO is considered at the forefront of the commercial determinants agenda and on economics of NCDs. There are also areas of good collaboration with WHO; for example, on economics of NCDs or health promotion, areas where both PAHO and WHO staff have reported regular communication and exchanges.

However, WHO respondents reported a lack of coherence and communication in some instances. Sometimes, WHO staff perceived that efforts were being made to keep WHO headquarters at arm’s length to avoid interference, especially at the country level. Several WHO respondents indicated they did not know what PAHO was doing on NCDs. Some of these issues may be exacerbated because PAHO is structurally a separate organization from WHO. For example, one WHO respondent commented, “When we request separate meetings with PAHO it is easy to get access, but it is a structural issue, we do not have access to the information on what they do, for example through the Global Management System.” This sometimes results in lost opportunities, as WHO respondents report having more active collaboration with other regions on NCDs, including in terms of channeling resources. In addition, opportunities for the global NCD agenda to benefit from PAHO’s experience may not be maximized. One specific concern raised was that not enough feature stories were coming from PAHO to be showcased at the global level, both on innovation and scale-up of NCD services.

When probed, PAHO respondents did not report communication issues with WHO, tending, instead, to consider them as a separate entity, emphasizing the specificity of PAHO’s processes. PAHO respondents also highlighted areas where there may be a different approach from WHO; for example, on front-of-package labeling<sup>19</sup> and on sodium reduction.<sup>20</sup> On these issues, PAHO respondents considered that the Region was ahead of WHO and so were happy to follow their own separate path.<sup>21</sup>

External stakeholders also noted some lack of coherence between WHO and PAHO, calling for more alignment on the NCD agenda. A respondent from a funding partner commented, “WHO compiles case studies on multisectoral action, are there some examples from PAHO? It is hard to see how WHO and PAHO work together, the role of PAHO in WHO initiatives. Sometimes we are not sure whether to engage through PAHO or through WHO.”

<sup>19</sup> Use of octagons in PAHO versus NUTRISCORE, by EURO.

<sup>20</sup> Where PAHO has continued to develop its own lower reduction targets independently from the WHO global benchmark.

<sup>21</sup> A similar point was made in relation to conflict-of-interest management.

## Coordination

### Coordination with governments

PAHO has had extremely strong collaboration with Ministries of Health, who are PAHO's main national counterparts. PAHO staff explained that key cooperation priorities are established jointly with the Ministry of Health every five years through the Country Cooperation Strategy (CCS). This strategy is then operationalized through joint Biennial Work Plans, which provide details on key activities to be implemented. Consulted Member States commented that PAHO is a highly trusted partner of Ministries of Health,<sup>22</sup> with strong coordination and communication between the two. Some interviewees further noted that PAHO country office staff are often former Ministry of Health employees, further strengthening the relationship between the two entities. However, respondents indicated that high levels of rotation of NCD technical focal points in ministries have adversely affected coordination.

Government-wide coordination beyond the health sector varies by country. Evidence from deep dives and interviews suggests that coordination is stronger in countries with well-established national coordination mechanisms on NCDs, with clear workplans and targets. For example, in Costa Rica, the National Commission on NCDs convenes multiple ministries and is responsible for overseeing the implementation of the National Strategy on NCDs, developed with PAHO support. Such has also been the case in Barbados, El Salvador, and Saint Lucia, among other countries.<sup>23</sup> However, this is not the case in all countries. Overall, less than half of Member States in the Region (17 of 35, 49%) reported a functioning national multisectoral mechanism for NCDs in 2020, and this fell to only just over one-third in 2022 (13 of 35, 37%).<sup>24</sup> For example, in Trinidad and Tobago there is no national coordinator on NCDs and coordination among ministries has been weak. At times, PAHO has had to take on the coordinator role of various technical committees – cancer, HEARTS – to ensure that they are sharing information.

There is some evidence that PAHO has engaged with ministries beyond the health sector, although multisectoral engagement remains weak and unsystematic. In Trinidad and Tobago, PAHO engaged with the Ministry of Health and the Environmental Management Authority on air pollution. There is also evidence of some collaboration with the education sector – for example, on healthy eating in Panama – although such collaboration remains an area for improvement, especially to address physical activity. PAHO has, to some extent, engaged with ministries of finance and economy through their work on taxation

<sup>22</sup> This issue is covered here because it speaks to how PAHO coordinates with national governments. The same issues are discussed earlier in the text because they are important in terms of the relevance of PAHO technical cooperation as perceived by national government.

<sup>23</sup> Based on data reported to WHO (30), Barbados reported having such a mechanism in place in 2015, 2017, 2019, and 2021. Costa Rica reported such a mechanism in place in each of these years except 2017. El Salvador reported having such a mechanism in place since 2019. Saint Lucia reported having such a mechanism in place until 2019 but not in 2021.

<sup>24</sup> Three countries of the Region reported having such a mechanism in place for each of four reporting rounds (2015, 2017, 2019, and 2021), namely Barbados, Grenada, and the United States of America. More than one-third (13 of 35, 37%) of countries of the Region reported having such a mechanism in place for none of these four rounds, namely Antigua and Barbuda, Belize, Bolivia (Plurinational State of), Dominica, Honduras, Nicaragua, Paraguay, Peru, Saint Kitts and Nevis, Suriname, Trinidad and Tobago, Uruguay, and Venezuela (Bolivarian Republic of).

and investment cases. However, collaboration with these ministries remains sporadic and limited overall, reflecting weakness and lack of capacity in this area in both PAHO and ministries of health. Neither PAHO nor ministries of health have been particularly strong at engaging with other ministries on issues of importance to them in ways they can relate to. For example, interviewees suggested that in countries where a large proportion of national income comes from tobacco or alcohol, work is needed to identify ways in which production may be diversified.

### Coordination with intergovernmental partners

PAHO engages in some strategic partnerships on NCDs with multilateral organizations, but, overall, this collaboration remains ad hoc. In 2017, PAHO entered a strategic partnership with the Organization of American States (OAS) Department of Human Development, Education, and Employment to address interlinkages between education and the health sectors, with a focus on the prevention of NCDs through healthy school environments. Interviews indicate that this is a major achievement, as this is the first time that the health and education sectors have engaged formally at a high level to address this issue.<sup>25</sup>

There is also some evidence of collaboration with international financial institutions (IFIs). For example, the Inter-American Development Bank (IDB) is working jointly with PAHO on telemedicine pilots in El Salvador and Suriname. Discussions are ongoing for IDB to finance the scaling up of telehealth in other countries. In Trinidad and Tobago, the Government recently launched TT Moves, which is expected to be funded through an IDB loan. In addition, the World Bank has funded governments to do work related to NCDs including STEPS surveys in Antigua and Barbuda and Saint Lucia. However, collaboration remains limited overall, and there are missed opportunities for PAHO to further collaborate with IDB on NCDs from a Chronic Care Model perspective, which is strongly supported by IDB, and more generally on economic interventions on NCD risk factors.

Collaboration with United Nations agencies has been limited. Interviews indicate that some United Nations agencies have started working on NCDs in recent years, although they are not yet high on their agenda. United Nations Development Programme (UNDP) started working on NCDs in Latin America, focusing mostly on investment cases and mental health. Interviewees indicated that the relationship between UNDP and PAHO on NCDs in the Region has strengthened in recent years, but the degree of coordination at the country level varies. PAHO and UNDP have conducted investment cases on tobacco jointly in Costa Rica, El Salvador, and Suriname and are currently conducting one in Panama. Investment cases on NCDs were also conducted in Guyana, Jamaica, Peru, and

<sup>25</sup> Every three years, PAHO and OAS convene ministries of health and education in the Region to establish an agenda and workplan, and PAHO/OAS meet approximately three to four times per year to coordinate implementation. During the 2019 and 2022 workplan, PAHO and OAS conducted three intersectoral dialogs promoting healthy eating and physical activity in school settings, in which high-level officials from more than 20 countries in the Region attended to share lessons and good practice (31). In October 2022, OAS and PAHO launched the Inter-American Program on Healthy Food and Physical Activity Policies in School Environments (2022–2025) (32). Through South–South cooperation, technical assistance, and capacity-building, the program seeks to address three key areas: 1) availability of healthy and nutritious food in school environments; 2) promotion of physical activity; and 3) action framework for the development and implementation of public food procurement and service policies for a healthy diet.

Suriname. According to interviewees, the division of labor between both organizations is clear, with PAHO leading on NCD investment cases and UNDP leading on tobacco investment cases. PAHO and UNDP also collaborate to some extent in the area of mental health. In addition, PAHO collaborates to some extent with UNICEF. For example, it implements the UNICEF and WHO Joint Programme on Mental Health and Psychosocial Well-being and Development of Children and Adolescents, which benefits Colombia and Guyana. There has also been one-off collaboration on the development of publications or events; for example, on obesity and nutrition. Interviews indicate that NCDs are not yet very high on the agenda of other United Nations agencies working in the Region.

A key factor that has also limited collaboration on NCDs is the lack of formal coordination mechanisms. At the global level, the United Nations Inter-Agency Task Force on the Prevention and Control of NCDs (UNIATF) is a platform for cooperation among United Nations organizations to support governments to address NCDs and mental health. However, such a coordination mechanism does not exist at the regional level despite attempts to create one in 2015. In addition, there is no thematic working group on NCDs at the country level, which also hinders United Nations coordination on NCDs. Overall, interviewees suggested that PAHO does not yet completely fulfill its leadership role on NCDs in the United Nations Country Team (UNCT).

Engagement of United Nations agencies with industry and the potential conflict of interest arising from that are key areas of concern for PAHO. Given PAHO's leading role on the NCD risk factors agenda, the Organization has taken a strong stance on limiting engagement with industries affecting commercial determinants of health and countering their strategies to present themselves as development and health partners. PAHO's position is of strictly limiting interactions with tobacco companies in accordance with the WHO Framework Convention on Tobacco Control (33). PAHO considers that the setting and negotiating of public health policy standards should also not be discussed with concerned alcohol and food companies, as the practices of these companies are directly at odds with the objectives of the NCD agenda; for example, on reduction of obesity or promotion of breastfeeding. However, it is possible to engage with them on how to implement standards regarding the production and the quality of products; for example, on how to implement sodium reduction measures.

United Nations agencies appear to hold diverse positions on this issue. PAHO respondents provided various examples of situations where other United Nations agencies received funding and sponsorships from alcohol and major food companies or participated in negotiations with them. UNIATF has also documented some of these issues in relation to alcohol (34). PAHO often takes on an advocacy role in this context, providing evidence and dissuading other United Nations agencies from entering situations of potential conflict of interest. Nevertheless, several interviewees indicated that PAHO is not doing enough to address issues of conflict of interest within the United Nations.

These situations often arise at the country level. According to PAHO respondents, conflict of interest management depends on each country representative, sometimes leading to tensions among agencies. Respondents have also highlighted the need

for Member States to have stronger guidance and technical support from the United Nations system on managing conflict of interest and on engaging with industry. One PAHO respondent commented, "For the 'obesity acceleration plan'<sup>26</sup> or the Global Diabetes Compact (35), there is need for an approach to the identification and management of conflict of interest. PAHO needs to help countries with clearer guidelines to manage conflict of interest, to bring it down to the level of the ministries." This lack of support can adversely affect coherence in the approach taken to risk factors by countries. One respondent described in relation to front-of-package labeling, "Within MERCOSUR, front-of-package labeling could not be harmonized. There are trade implications to front-of-package labeling. If there are different standards in Brazil, Uruguay, Paraguay, Argentina, traders have to re-label food products for export. But the industry made such a mess, instigating from all sides, including from international organizations. Harmonizing front-of-package labeling has already left the orbit of negotiation, I don't even know if it can be talked about again."

Respondents called for PAHO to take more of a leading role on strengthening a common approach in the United Nations system at the regional level on conflict-of-interest issues, "PAHO has the responsibility to raise the issue of conflict of interest in the UN. You cannot, as a UN agency, receive money from Coca Cola. It is a company that is boycotting the implementation of effective policies against child obesity. The issue is not that they sell their products, but that they actively lobby governments. PAHO has a role there." Respondents identified potential alliances in this respect, for example with the World Bank on the issue of taxation, with United Nations Environment Programme (UNEP) on environmental health determinants, or with the Inter-American Commission on Human Rights. However, in order for PAHO to play this role at the United Nations level, there would be a need for a common platform and agreement at that level, so that these issues do not need to be resolved on a case-by-case basis at the country level.

### *Coordination with non-State actors*

Partnerships are considered central to advance work at the community level or to push an agenda forward. Interviewees explained that it is sometimes difficult for PAHO to do this, especially when industries are involved, given its close relationships with national governments. PAHO has been successful at utilizing CSOs' advocacy capacity to progress the NCD risk factor agenda. In particular, according to both PAHO and CSO respondents, PAHO has encouraged coalition-building and created the space for CSOs to participate in conferences and make strong statements on conflict of interest and industry interference. PAHO also provides evidence to CSOs to inform their advocacy efforts; for example, on the effectiveness of using octagons in front-of-package labeling. According to a CSO respondent, this "allows PAHO to say things that they would not normally say." However, while there are several examples of collaboration with civil society (see Box 3), interviewees indicated that this collaboration was not yet very systematic.

<sup>26</sup> WHO's Acceleration Plan to Support Member States in Implementing the Recommendations for the Prevention and Management of Obesity over the Life Course (see [36]).

**Box 3. Examples of PAHO partnering with civil society to address NCD risk factors**

In Colombia, the role of civil society, which adopted the strategy “No Comas Más Mentiras” (“Don’t Eat More Lies”), was fundamental in advocating to the population on the harmful effects of sodium, sugar, and saturated fat. The population itself then exerted pressure on the Government to adopt, in 2022, a resolution on front-of-package labeling.

CSOs also have the capacity to reach out beyond the health sector and to engage key stakeholders such as ministries of trade and finance on issues of NCD risk factors. For example, the Healthy Caribbean Coalition has produced several sectoral briefs based on evidence provided by the Economics of NCDs team, e.g., for ministries of finance “towards a 100% smoke free Caribbean” (37).

PAHO has also effectively supported regional networks and coalitions working on NCDs. For example, PAHO has worked in close collaboration with the Healthy Caribbean Coalition, an alliance of more than 100 CSOs that supports the implementation of programs aimed at reducing morbidity and mortality associated with NCDs (38). In addition, PAHO has also engaged with the Caribbean Public Health Law Forum, building their capacities on the use of legislation in the response to NCDs. However, interviewees indicated that PAHO’s coordinating role with CSOs, academia, and collaborating centers at the regional level remains underdeveloped. PAHO could do more to take advantage of existing regional platforms to advocate for NCDs. In addition, some respondents called for PAHO to take the lead on setting up a platform to promote good practices in the Region and to raise the profile of civil society in global negotiations. Such an informal exchange platform existed in the past – the CARMEN network (39) – but this became inactive. Opportunities for meeting remotely, which have arisen particularly since the COVID-19 pandemic, have been used by PAHO in other areas – virtual training – but have not yet been used to reconvene such a network by holding shorter, more regular, virtual round table sessions.

Partnerships with non-State actors are managed under the Framework of Engagement with Non-State Actors (FENSA), which establishes strict rules and policies. These include the requirement for PAHO to conduct due diligence checks before engaging with non-State actors to ensure they are not subject to private sector influence. According to interviews, FENSA has been effective in protecting PAHO from conflicts of interest, particularly regarding accepting funding from industry. However, interviews with PAHO staff indicated that the high transaction costs for CSOs, because of the FENSA due diligence processes, are often a deterrent to partnering with PAHO. Concerns were raised that the FENSA framework does not distinguish between different types of non-State actors, such as civil society and the private sector.

Partnerships with the private sector are very limited. PAHO staff confirmed that conflicts of interest often prevent PAHO from engaging in such partnerships, particularly with tobacco, alcohol, and food companies. Largely, this clarity of stance was welcomed by respondents. Interviewees described the relationship with these companies as very tense given their opposing interests. However, while this is understandable, partnerships with the private sector remain underexplored overall, particularly in areas where commercial and public health interests overlap, for example, sports companies and physical activity and healthy eating.

**Effectiveness**

*Overall*

PAHO understands technical cooperation on NCDs as a two-way process between PAHO and Member States.<sup>27</sup> Given this, it is unsurprising that PAHO assesses effectiveness of its technical cooperation on NCDs through indicators measured at the Member State level.<sup>28</sup> Based on indicators in the POA, PAHO submitted progress reports to the Directing Council in 2016 (6) and 2019 (3). Table 2 summarizes the 2019 report which considered that, of 30 targets, 13 (43%) had been exceeded, 5 (17%) had been achieved, 3 (10%) had been partially achieved, 8 (27%) had not been achieved, and 1 (3%) had no data available.

**Table 2. Summary of progress on NCD Plan of Action reported to the Directing Council in 2019<sup>29</sup>**

| No.    | Indicator summary   | 2019 report                 |
|--------|---|-----------------------------|
| 1.1.1  | Multisectoral NCD prevention policies, frameworks, and actions                      | Achieved [17] <sup>30</sup> |
| 1.2.1  | National multisectoral plan and/or actions for NCD prevention and control           | Not achieved [19]           |
| 1.3.1  | National social protection health scheme that addresses NCD interventions           | Not achieved [12]           |
| 2.1.1* | Reducing prevalence of current tobacco use  | Not achieved [9 on track]   |
| 2.2.1* | Reducing harmful use of alcohol   | Exceeded [10]               |
| 2.3.1* | Policies to prevent marketing of unhealthy foods/nonalcoholic beverages to children | Achieved [8]                |
| 2.3.2* | Policies to limit saturated fats and virtually eliminate trans fats                 | Achieved [12]               |
| 2.3.3* | Reducing salt/sodium consumption  | No data                     |
| 2.4.1* | Reducing prevalence of insufficient adult physical activity                         | Exceeded [13]               |
| 2.4.2* | Reducing prevalence of insufficient physical activity among adolescents             | Exceeded [7]                |
| 3.1.1  | Implementation of a model of integrated management for NCDs                         | Exceeded [17]               |
| 3.2.1* | Available and affordable, basic technologies and essential medicines for NCDs       | Partially achieved [16]     |
| 3.2.2  | Access to palliative care   | Exceeded [13]               |
| 3.2.3  | Use of PAHO Strategic Fund and Revolving Fund and/or other cost-saving mechanism    | Partially achieved [3]      |
| 3.2.4  | Official commission that selects NCD medicines and technologies                     | Exceeded [16]               |
| 3.2.5  | Treatment options for patients affected by chronic kidney disease                   | Exceeded [11]               |

(Continued)

<sup>27</sup> Based on a concept note on technical cooperation in human resources for health (12), technical cooperation is understood as a “two-way learning and production process in which all parts contribute to the achievement of a predetermined goal while mutually benefiting from the achievements. In the case of PAHO’s technical cooperation, the contributions of the Member States are recognized in the implementation of activities carried out as part of the respective technical programs.”

<sup>28</sup> There are a number of indicator sets of relevance including those in the POA itself, NCD indicators in the PAHO Strategic Plan and Program Budget, and global NCD indicator sets including NCD progress monitoring indicators and the Global Monitoring Framework. These indicators are discussed in much more detail in Annex 4, in: Pan American Health Organization. Evaluation of the Pan American Health Organization Technical Cooperation in Noncommunicable Disease Prevention and Control in the Americas. Volume II Annexes. Washington, D.C.: PAHO; 2023. Available from: <https://iris.paho.org/handle/10665.2/57826>.

<sup>29</sup> Indicators marked with \* are indicated in PAHO reports as also appearing in the Global Monitoring Framework. In addition, indicator 3.2.2 also appears to be included in the Global Monitoring Framework but it is not marked with an asterisk. However, indicator 4.1.4 is marked with an asterisk but does not appear to be included in the Global Monitoring Framework. Overall, 18 of 30 POA indicators (60%) also appear in the Global Monitoring Framework.

<sup>30</sup> The number in brackets indicates the number of Member States that were considered to have met a particular indicator target.

Table 2. (continued)

|        |   |                         |
|--------|---|-------------------------|
| 3.3.1* | Levels of raised blood glucose/diabetes   | Not achieved [1]        |
| 3.3.2* | Level of adult obesity  | Not achieved [0]        |
| 3.3.3* | Levels of adolescent overweight and obesity                                       | Not achieved [0]        |
| 3.3.4* | People receiving drug therapy and counseling to prevent heart attacks and strokes | Exceeded [7]            |
| 3.3.5* | Prevalence of raised blood pressure   | Exceeded [2 on track]   |
| 3.3.6* | Cervical cancer screening coverage  | Not achieved [5]        |
| 3.3.7  | Breast cancer screening coverage  | Achieved [9]            |
| 3.3.8* | HPV vaccination   | Exceeded [35]           |
| 4.1.1* | Reduction in premature mortality  | Achieved                |
| 4.1.2  | Mortality data  | Exceeded [23]           |
| 4.1.3* | Cancer incidence data   | Exceeded [19]           |
| 4.1.4* | Population surveys  | Not achieved [12]       |
| 4.2.1  | Regular reports on NCDs and risk factors  | Exceeded [17]           |
| 4.2.2  | Research  | Partially achieved [12] |

However, while this analysis may be useful in showing the level of progress in terms of expected targets, it does not give a clear picture of absolute level of performance: how many, and what percentage of, Member States are achieving particular indicators. Table 3 presents this analysis. This shows a less positive picture. While there has been modest progress on many indicators, most indicators are only being achieved by less than half the Member States of the Region. There are two notable exceptions – HPV vaccination<sup>31</sup> and the availability of mortality data – where progress has been much more substantive. Across all indicators, between 2010 and 2016, progress was seen in Member States with different levels of HDI and across each of the subregions of the Caribbean, Central America, and South America (see Figure 1).<sup>32</sup>

<sup>31</sup> Although PAHO notes that only two countries have reached coverage of >80% (40). In addition, 30 countries have a screening program for cervical cancer although few countries have reached the coverage target of 70% (40).

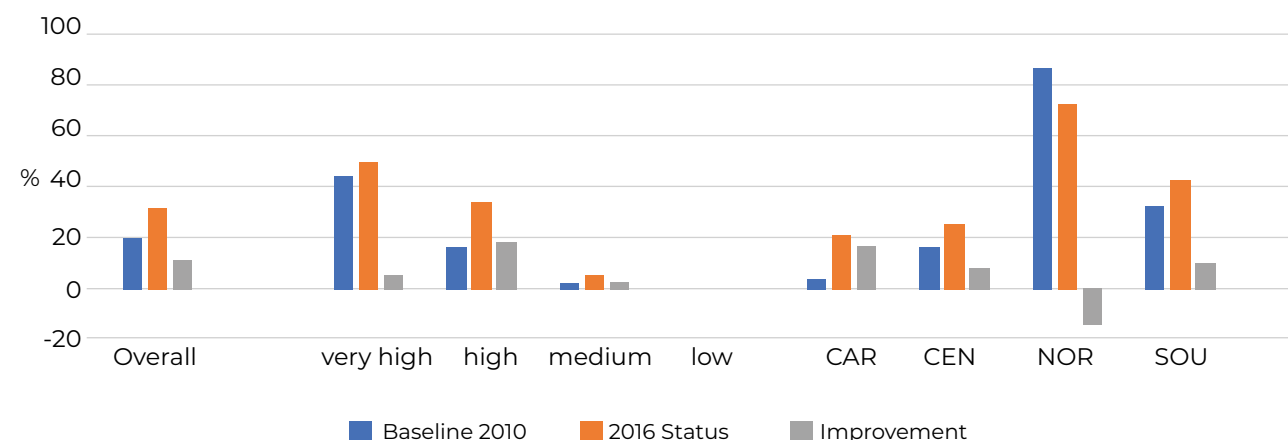
<sup>32</sup> The evaluation team were unable to extend this analysis to 2019, as the 2019 progress report did not give details for particular Member States (see [3]) and this information has not yet been supplied.

Table 3. Percentage of Member States that achieved targets for particular Plan of Action indicators at baseline, in 2016, and in 2019

| No.    | Indicator summary   | Baseline | 2016 | 2019 |
|--------|---|----------|------|------|
| 1.1.1  | Multisectoral NCD prevention policies, frameworks, and actions                      | 14       | 31   | 49   |
| 1.2.1  | National multisectoral plan and/or actions for NCD prevention and control           | 37       | 54   | 54   |
| 1.3.1  | National social protection health schemes that address NCD interventions            | 20       |      | 34   |
| 2.1.1* | Reducing prevalence of current tobacco use  |          |      | 26   |
| 2.2.1* | Reducing harmful use of alcohol   |          |      | 29   |
| 2.3.1* | Policies to prevent marketing of unhealthy foods/nonalcoholic beverages to children | 6        | 20   | 23   |
| 2.3.2* | Policies to limit saturated fats and virtually eliminate trans fats                 | 17       | 26   | 34   |
| 2.3.3* | Reducing salt/sodium consumption  |          |      |      |
| 2.4.1* | Reducing prevalence of insufficient adult physical activity                         |          |      | 37   |
| 2.4.2* | Reducing prevalence of insufficient physical activity among adolescents             |          |      | 20   |
| 3.1.1  | Implementation of a model of integrated management for NCDs                         | 26       | 49   | 49   |
| 3.2.1* | Available and affordable, basic technologies and essential medicines for NCDs       | 20       | 51   | 46   |
| 3.2.2  | Access to palliative care   | 0        |      | 37   |
| 3.2.3  | Use of PAHO Strategic Fund and Revolving Fund and/or other cost-saving mechanisms   |          |      | 9    |
| 3.2.4  | Official commission that selects NCD medicines and technologies                     | 17       |      | 46   |
| 3.2.5  | Treatment options for patients affected by chronic kidney disease                   | 11       | 26   | 31   |
| 3.3.1* | Levels of raised blood glucose/diabetes   | 3        |      | 3    |
| 3.3.2* | Level of adult obesity  | 0        |      | 0    |
| 3.3.3* | Levels of adolescent overweight and obesity   | 0        |      | 0    |
| 3.3.4* | People receiving drug therapy and counseling to prevent heart attacks and strokes   | 11       |      | 20   |
| 3.3.5* | Prevalence of raised blood pressure   |          |      | 6    |
| 3.3.6* | Cervical cancer screening coverage  | 14       | 20   | 14   |
| 3.3.7  | Breast cancer screening coverage  | 11       | 20   | 26   |
| 3.3.8* | HPV vaccination   | 23       | 54   | 100  |
| 4.1.2  | Mortality data  | 29       | 57   | 66   |
| 4.1.3* | Cancer incidence data   | 31       | 46   | 54   |
| 4.1.4* | Population surveys  | 20       |      | 34   |
| 4.2.1  | Regular reports on NCDs and risk factors  | 26       | 57   | 49   |
| 4.2.2  | Research  | 26       | 29   | 34   |

Note: Color codes show level of performance: dark green if >80%, light green if 60–79%, yellow if 40–59% and amber if <40%. Gray indicates no data.

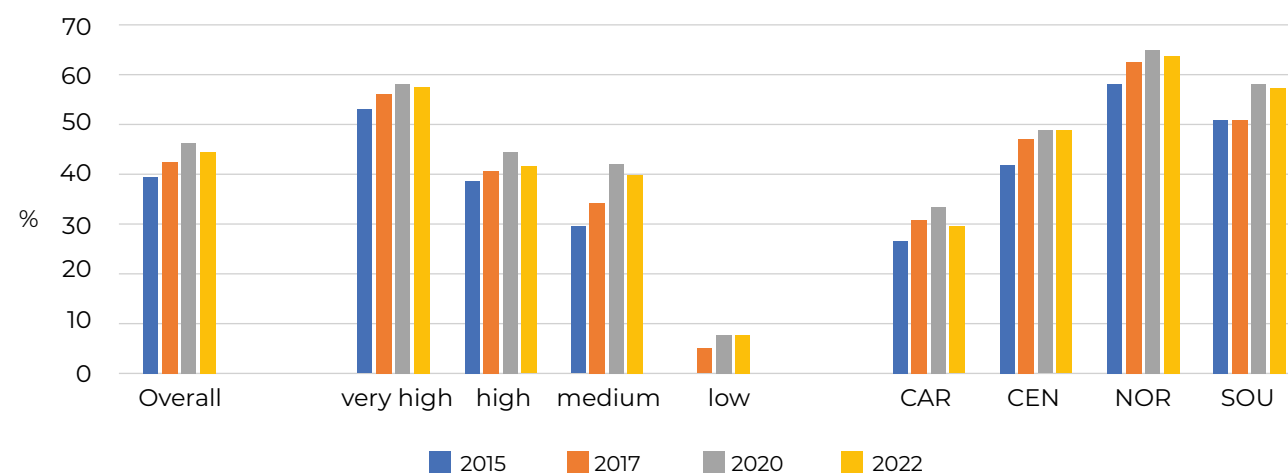
**Figure 1.** Average percentage of Plan of Action indicators achieved at baseline and in 2016 and average percentage point improvement between baseline and 2016, overall and by country HDI group and subregion



Note: CAR, Caribbean; CEN, Central America; NOR, North America; SOU, South America.

A similar trend is seen when looking at an overall performance score based on the global NCD progress monitoring indicators (see Figure 2).<sup>33</sup> This shows a modest,<sup>34</sup> but steady, improvement in score from 2015 to 2020, with some worsening of performance from 2020 to 2022 (see section on COVID-19). Similar patterns are seen across most HDI groups and subregions.

**Figure 2.** Mean implementation scores 2015 to 2022, overall and by country HDI group and subregion



Note: CAR, Caribbean; CEN, Central America; NOR, North America; SOU, South America.

<sup>33</sup> For details of how this score is calculated, please see Annex 4 in Volume II. Data are available for four time points: 2015, 2017, 2020, and 2022. Some caution is needed in comparing across these time points as there was some change in indicator definitions over time. But, in general, the criteria for considering an indicator achieved became more stringent and so any improvement seen is likely to be genuine, perhaps understated. There was little if any change in indicators between 2020 and 2022.

<sup>34</sup> This progress has also been described as limited (40).

## Specific lines of action

The next four sections briefly consider the effectiveness of individual lines of action outlined in the POA.

### Line of Action 1: Multisectoral policies and partnerships

In 2019, around half of Member States were considered to have achieved the indicators on multisectoral NCD prevention policies, frameworks, and actions (49%) and on national multisectoral plans and/or actions for NCD prevention and control (54%). Both indicators showed improvement from baseline (up from 14% and 37%, respectively – see Table 3). The indicator on this in the global NCD progress monitoring set<sup>35</sup> showed an improved score from 2015 (53%) to 2017 (64%), but this declined from that point to 60% in 2020 and 56% in 2022.

None of the indicator sets identified have a measure concerning the existence and functioning of a national multisectoral commission, agency, or mechanism for NCDs.<sup>36</sup> However, Member States do report on such an indicator to WHO as part of the NCD Progress Monitoring process (41). Data for this indicator are available through the Global Health Observatory (42). In 2015, just over one-quarter of Member States in the Region (9, 26%) had such a multisectoral structure. This rose to 13 (37%) in 2017 and 17 (49%) in 2020 but it declined back to 13 (37%) in 2022.

While there was some modest progress on this line of action, there is evidence that this progress is being lost. This loss has occurred particularly since the COVID-19 pandemic, but there was evidence of loss in some areas before this. Currently, only just over half (54%) of Member States have an operational multisectoral national strategy action plan that integrates the main NCDs and their shared risk factors, and only just over one-third (37%) have a national multisectoral commission, agency, or mechanism for NCDs.

### Line of Action 2: NCD risk factors and preventive factors

Based on responses from both interviews and the surveys, PAHO's technical cooperation has been most effective in relation to tobacco use and less so on other risk factors.

On tobacco control, most progress has been made in terms of restricting smoking in public places and in introducing plain packaging for tobacco products. For example, in 2015, less than half of Member States in the Region had fully achieved the relevant global

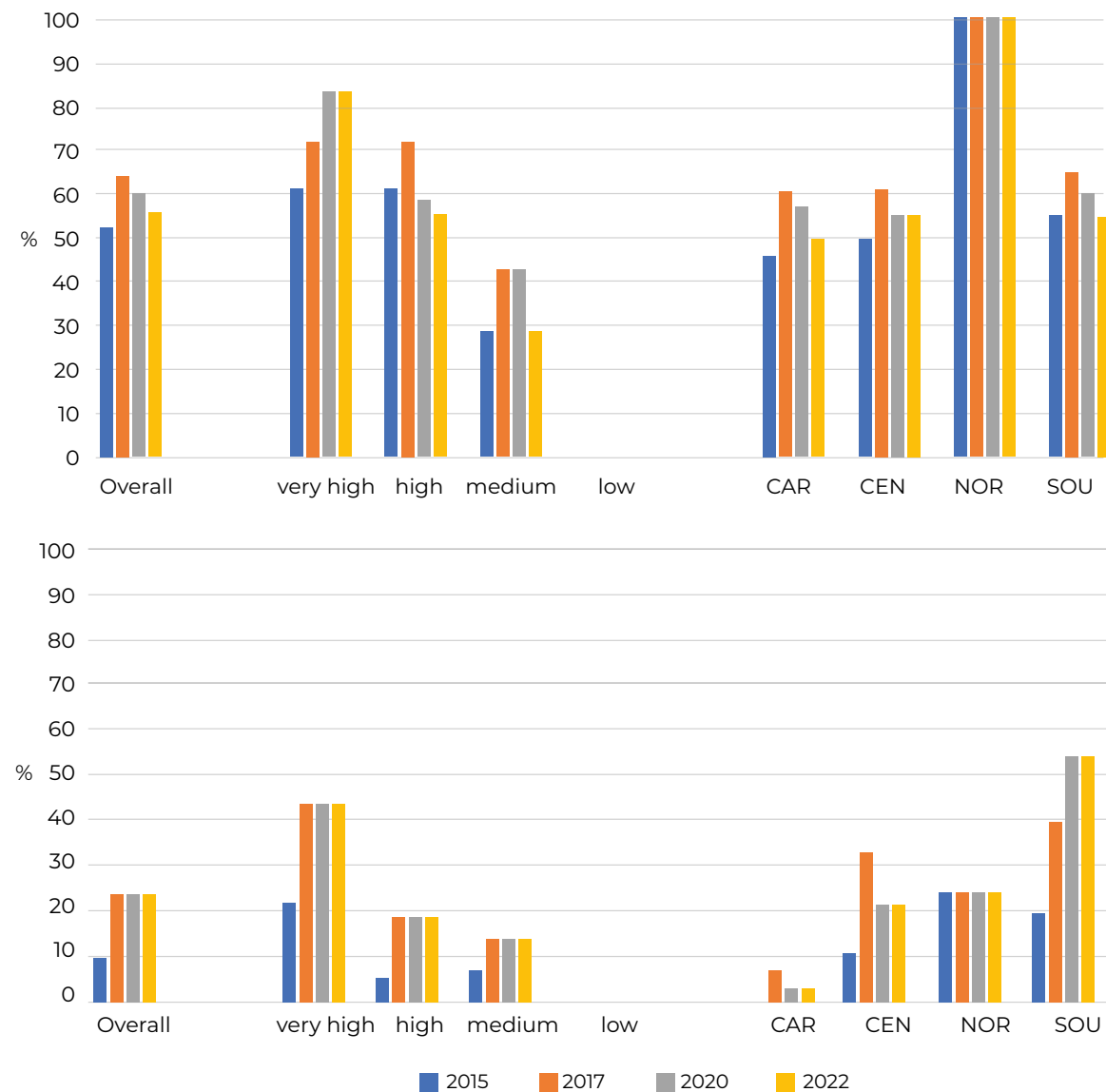
<sup>35</sup> Member State has an operational multisectoral national strategy/action plan that integrates the main NCDs and their shared risk factors.

<sup>36</sup> And PAHO did not report on such an indicator to the Directing Council in 2019, for example.



NCD progress monitoring indicators<sup>37</sup> but this had risen to around two-thirds by 2022.<sup>38</sup> Particular progress has been made on this in South America (see Figure 3). Much less progress has been made on other elements of tobacco control. For example, fewer than 10% of countries have fully implemented measures to reduce affordability by increasing excise taxes and prices on tobacco products (see also Figure 3).

**Figure 3. Comparison of implementation scores (%) for two tobacco control indicators in the global NCD progress monitoring set, 2015 to 2022, overall and by country HDI group and subregion**



Note: Inset is a map (40) which shows that the entirety of South America has smoke-free public places. CAR, Caribbean; CEN, Central America; NOR, North America; SOU, South America.

<sup>37</sup> 49% for 5b – Eliminate exposure to second-hand tobacco smoke in all indoor workplaces, public places, and public transport; and 43% for 5c – Implement plain/standardized packaging and/or large graphic health warnings on all tobacco packages.

<sup>38</sup> 69% for 5b – Eliminate exposure to second-hand tobacco smoke in all indoor workplaces, public places, and public transport; and 63% for 5c – Implement plain/standardized packaging and/or large graphic health warnings on all tobacco packages.



**Protect people from tobacco smoke, 2021  
Implementation of Article 8  
of the WHO FCTC in the  
Region of the Americas**

- All indoor public places and workplaces and public transport are completely smoke-free (or at least 90% of the population covered by subnational legislation)
- Six to seven public places and workplaces completely smoke-free
- Three to five public places and workplaces completely smoke-free
- Up to two places and workplaces completely smoke-free

Almost no progress has been made on implementing the three measures to reduce the harmful use of alcohol that are tracked by the global NCD progress monitoring indicator set.<sup>39</sup> For example, only 6% of Member States are considered to have fully achieved the indicator on restricting exposure to alcohol advertising, and this figure has not changed from 2015. Therefore, it is understandable that there has been little, if any, reduction in the harmful use of alcohol in the Region since 2000 (40). These findings conflict with what was reported to the PAHO Directing Council in 2019 (see Table 2). In that report, targets on reducing harmful alcohol use were reported to have been exceeded, and targets on reducing tobacco prevalence were reported as not achieved.

Additionally, there has been little progress on the indicators of harmful diet that are tracked by the global NCD progress monitoring indicator set.<sup>40</sup> Perhaps the only areas where there may have been progress is on marketing of foods and nonalcoholic beverages to children. While, in 2015, less than one in five (17%) Member States were following WHO recommendations, this had risen to over a third (34%) by 2022. However, this still means that almost two-thirds of Member States are not following these recommendations. There has also been progress on introducing front-of-package labeling in some countries including the use of warning labels (40).<sup>41</sup> Furthermore, it is reported that 21 Member States have imposed some form of excise tax on sugar-sweetened beverages (43).

<sup>39</sup> Restrictions in physical availability, restrictions on exposure to advertising, and increasing excise taxes.

<sup>40</sup> On salt/sodium consumption, saturated and trans fats, marketing of foods and nonalcoholic beverages to children and implementing the International Code on Marketing of Breast-milk Substitutes. Indeed, there may have been some regression on some indicators including the last one. While in 2015 almost half of Member States (49%) were considered to be fully implementing this code, the figure was only 6% in 2022.

<sup>41</sup> In Argentina, Chile, Colombia, Mexico, Peru, and Uruguay.

While Member States have been doing relatively well in terms of public awareness programs for physical activity, progress on this indicator has been particularly badly hit by the COVID-19 pandemic. For example, in 2020, almost three-quarters (71%) of Member States reported that they had implemented at least one national public awareness program for physical activity. However, in 2022 this figure was just over one-third (37%).

### Line of Action 3: Health system response to NCDs and risk factors

Based on responses from both interviews and the surveys, PAHO's technical cooperation has been most effective in relation to cardiovascular disease, diabetes, cancer, and less so on chronic respiratory disease.

Member States have made good progress in terms of having evidence-based national guidelines, protocols, and/or standards for the management of major NCDs through a primary care approach, recognized or approved by government or competent authorities. For example, in 2015, only one-fifth (20%) of Member States had fully achieved this, but this had risen to almost half (49%) by 2020, and it rose to more than half (57%) in 2022. Less progress has been made in providing drug therapy to prevent heart attacks and strokes. In 2015, only just over one in ten countries (11%) had fully achieved this. Although the number did rise, only just over a quarter of countries (29%) fully achieved this by 2022.

PAHO reports have been provided support to the integration of NCDs into primary care including through supporting national NCD plans, supporting development of investment cases, providing guidance documents, training providers, and sharing country experiences on NCD management. In addition, PAHO has a Strategic Fund for essential medicines<sup>42</sup> and has also supported HEARTS technical package implementation (40).

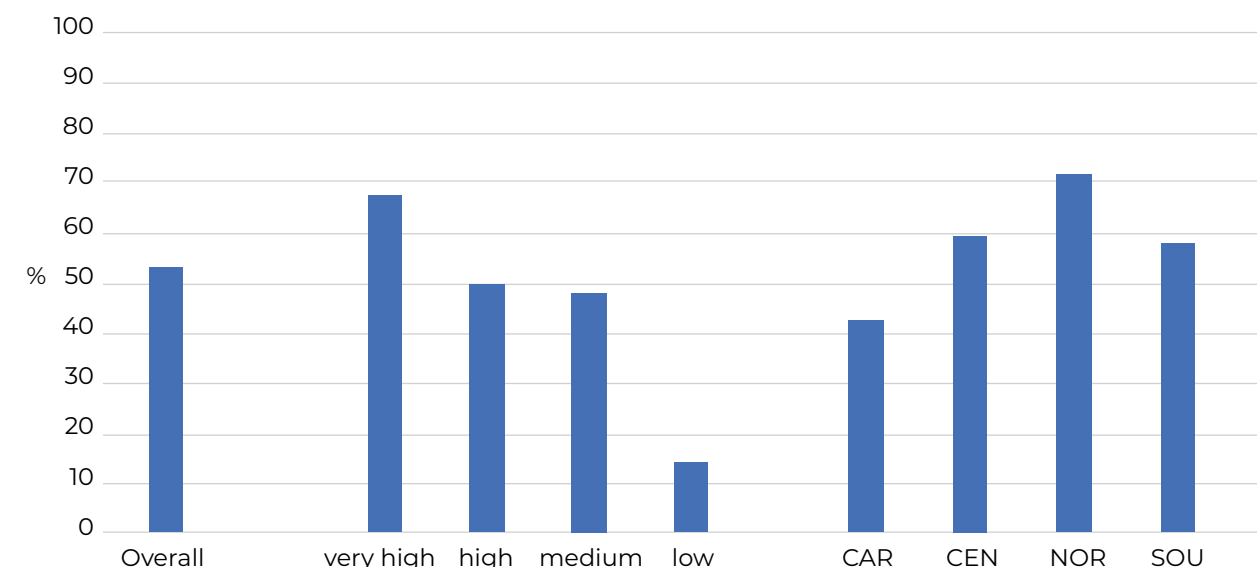
In November 2022, PAHO reported that HEARTS was now being implemented in 24<sup>43</sup> countries, covering more than 2000 primary health centers and 5.6 million people (40). Several Ministry of Health respondents valued the HEARTS packages, as they had assisted better organization of the health system to improve service delivery while also decreasing the burden on doctors by encouraging patients to “take their health in their own hands.” However, respondents also identified practical difficulties associated with the implementation of HEARTS, largely related to procurement and supply management. There were difficulties in procuring and maintaining blood pressure monitors and the combination pill was not always available. Concerns were also raised in relation to HEARTS being a disease-specific intervention rather than one which strengthens health systems as a whole across a range of diseases. Where HEARTS has worked well – for example, Mexico (see Figure 6) – it has not been viewed as an initiative to be implemented in a few localities. Rather, it was adopted as a national policy with funding and accountability tied to it.

### Line of Action 4: NCD surveillance and research

Member States have experienced mixed results here. As mentioned above, there has been good progress on generating mortality data. Based on the indicator in the global NCD progress monitoring indicator set, more than two-thirds of countries (69%) had fully achieved this in 2022 as compared to just over half (57%) in 2015. On the other hand, less than one in five countries (14%) have fully implemented the indicator of having a STEPS survey or equivalent every five years. Indeed, this has somewhat worsened from 2015 (26%).

PAHO has calculated a surveillance score (40) which, for each country, records achievements against seven indicators: NCD targets, mortality data, household surveys, school-based surveys, cancer registries, NCD hospital register, and NCD primary health care register. In 2022, although 24 Member States had mortality data available, only two had an NCD hospital register, and only three had an NCD primary health care register. Converting the score into a percentage,<sup>44</sup> it is clear that countries with higher HDI are doing better on surveillance than those with lower HDI, and countries in the Caribbean are not performing as well as those in other subregions in terms of NCD surveillance (see Figure 4).

Figure 4. Surveillance score 2022 (%) overall, by HDI group, and by subregion



Source: Data from Hennis A. Analysis of PAHO's 25-Year Program of Work. PowerPoint Presentation to the Senior Advisory Group, November 2022.

Note: CAR, Caribbean; CEN, Central America; NOR, North America; SOU, South America.

<sup>42</sup> Based on the Strategic Fund's 2021 report (44), 34 Member States and territories have participated in the Fund although not all these have used the Fund to access NCD medicines. Indeed, the three country testimonials in the report (Brazil, Colombia, and Ecuador) all accessed medicines for communicable diseases through the Fund. However, the Fund has supported the HEARTS initiative and has also worked to improve the affordability of quality-assured medicines for hypertension and the availability and accessibility of cancer treatments.

<sup>43</sup> This figure was reported in November 2022, but it is now reported to be 26.

<sup>44</sup> Using our scoring method, which gives half the fully achieved score for partially achieved status.

### Which activities are most effective?

In 2017, WHO published a set of “best buys” for tackling NCDs (45). PAHO produced a short summary brochure/flyer of the best buys document (16). Many of the best buys rely on fostering the use of economic tools, such as taxation, to reduce the burden of NCDs. PAHO has considerable expertise in terms of understanding the economic dimensions of NCDs and has done extensive work in this area (40).

However, it does not necessarily follow that those interventions which have been shown to be most effective are implemented most effectively. Clearly, having a binding treaty in place, such as the Framework Convention on Tobacco Control (FCTC), is helpful. However, even with this in place, some tobacco best buys have been implemented more effectively than others. Where measures are seen by relevant industry and national governments as having negative commercial and/or trade/economic consequences, these have been implemented less effectively, such as in elements of tobacco control, measures to reduce the harmful use of alcohol, and measures to address unhealthy diet. While the response of industry is understandable, the response of national governments may be based on a false dichotomy between health and economic benefits rather than considering fully the economic benefits of proposed public health interventions. This is an area where PAHO has done work on investment cases. Despite this, there has been little if any progress in some areas, such as on harmful use of alcohol. This has led some in PAHO to question whether it might not be better to work in ways where there would be fewer commercial or economic objections (public education on the harmful use of alcohol). However, available evidence indicates that such measures are less effective than identified best buys, although education on the harmful use of alcohol may be helpful in building support for implementation of the best buys (measures to control the availability and affordability of alcohol).

While it is certainly true that commercial interests have hindered the implementation of some key measures, these are unlikely to be the only factors determining effectiveness. Otherwise, most progress might be expected to have been seen in areas where commercial and public health interests overlap; for example, in promoting physical activity. However, this is not yet the case. PAHO and ministries of health do not yet seem to have found ways of working with the private sector in areas where interests are similar, e.g., in promoting physical activity.

Finally, in terms of treatment and management of NCDs, approaches that work through national health systems to deliver services at scale, like the HEARTS program, have proved most effective. Such programs are most effective where the health system has high levels of efficacy and equity.

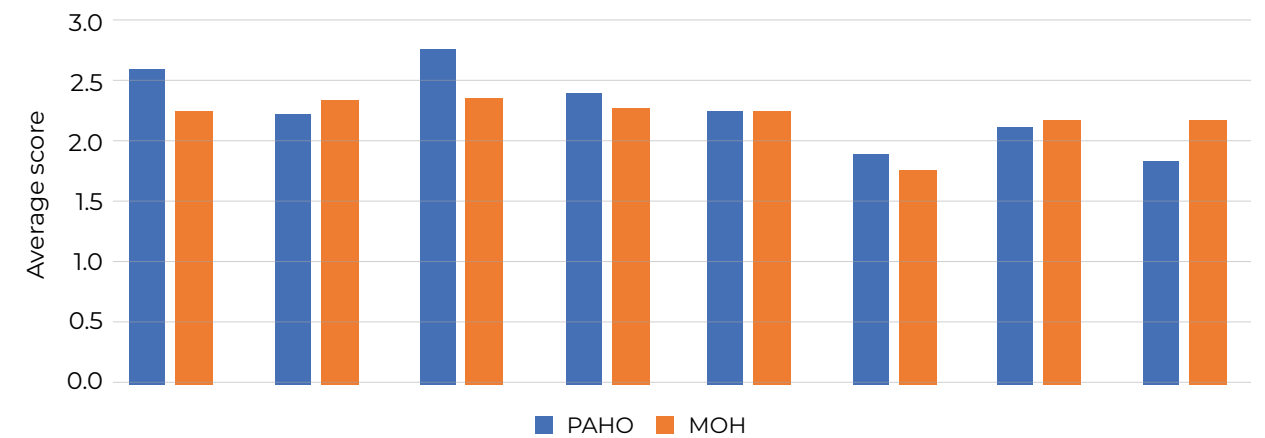
### What has PAHO contributed?

One of the challenges facing the evaluation in seeking to answer this question is that all the indicators related to technical cooperation on NCDs relate to Member States’ actions and outcomes. Therefore, in the absence of any measurements, it is difficult to analyze what PAHO has contributed.<sup>45</sup> To address this, the evaluation team invited PAHO staff and Member State

<sup>45</sup> The same challenge is faced for intergovernmental bodies and non-State actors. These matters are covered under the section on

representatives in country to rate PAHO’s contribution in eight areas of technical cooperation.<sup>46</sup> In general, PAHO staff rated PAHO’s contribution to NCD technical cooperation higher than government representatives did. However, the differences were small. In addition, such differences did not occur in some areas (partnership, sustainable institutional capacity development, monitoring and addressing health trends, and resource mobilization). In general, PAHO staff rated PAHO’s contribution highest in areas of normative guidance and leadership; whereas government representatives rated PAHO’s technical cooperation highest in terms of partnership and normative guidance. PAHO staff rated PAHO’s technical cooperation lowest in terms of resource mobilization; whereas government representatives rated PAHO’s technical cooperation lowest in terms of research and knowledge generation (see Figure 5).

Figure 5. Ratings by PAHO staff in 14 Member States and government representatives in 10 Member States



coordination.

<sup>46</sup> More details of precisely how this was done and what other measures were considered are included in Annex 4, in: Pan American Health Organization. Evaluation of the Pan American Health Organization Technical Cooperation in Noncommunicable Disease Prevention and Control in the Americas. Volume II Annexes. Washington, D.C.: PAHO; 2023. Available from: <https://iris.paho.org/handle/10665.2/57826>.

## Facilitators

There are a number of factors which have facilitated the effectiveness of PAHO's technical cooperation on NCDs (see Box 4).

### Box 4. Factors which have facilitated the effectiveness of PAHO's technical cooperation on NCDs

Because many of the issues related to NCD risk factors are contentious politically and commercially, legislative frameworks and treaties have been important in allowing progress to be made and to withstand legal challenges from industry. A key example is FCTC, which has underpinned the progress made in some areas of tobacco control, e.g., on smokefree environments and on plain packaging. Where such legislative frameworks are absent – e.g., harmful effects of alcohol and unhealthy diet – less progress has been made.

Given that many actions to address NCD risk factors require actions beyond the health sector by other ministries and non-State actors, effective multisectoral coordination and working has been crucial for making progress regarding NCDs, for example, in Costa Rica and Saint Lucia.

Countries are faced with a multiplicity of options in terms of how to address NCDs. Clear technical advice from PAHO on the most effective interventions in particular areas of work on NCDs and their risk factors has enabled governments to focus scarce resources on those areas likely to have most impact. The WHO/PAHO publication of NCD best buys was particularly important in that regard.

Ultimately, whether PAHO technical cooperation results in progress on NCDs in a particular country depends on the commitment and capacity of that country's government to responses to NCDs. Similarly, PAHO's ability to provide effective technical cooperation depends on its own capacity in particular areas including, in particular, in Country Offices. In areas where PAHO's capacity has been good, particular progress has been made, e.g., on economic responses to NCDs.

## Barriers

Similarly, there are several factors that have hindered the effectiveness of PAHO's technical cooperation on NCDs (see Box 5).

In addition, it is reported that there are hindrances which affect particular populations or settings. For example, there may be language barriers to accessing information and materials for particular languages, such as in Dutch-speaking countries and territories and for specific population groups, or Spanish-speaking migrants in English-speaking countries. Also, respondents comment that territories which are not a Member State of PAHO in their own right may not benefit from as much support as Member States. PAHO does seek to address this, and there may be legitimate reasons for this; for example, where French departments receive considerable support from France. Nevertheless, there are points where territories are treated differently from Member States; such as in the systematic monitoring and reporting of progress made.

### Box 5. Factors that have hindered the effectiveness of PAHO's technical cooperation on NCDs

While there are concerns that countries sometimes lack political commitment to responses to NCDs, the reality is that governments are often confronted by competing priorities both within and beyond the health sector. In particular, where there are emergencies, such as COVID-19, these may result in human and financial resources being diverted away from NCDs.

Other major factors affecting political commitment in countries are political instability, upheaval, and change which can result in progress made being halted and even reversed.

Relatively limited levels of funding available for NCD responses, both from Member States and from external funders, have hindered progress on responses to NCDs and their risk factors. It is important to stress that this and other factors do not act in isolation, but they are linked to each other. For example, competing political priorities is a key factor behind why funding for NCD responses has been limited.

In particular areas of work related to NCD risk factors, commercial interests of private companies and industries conflict with public health interests as championed by PAHO. These areas are particularly tobacco use, harmful use of alcohol, and unhealthy diet. In these areas, direct and indirect interference by industries who consider that their commercial interests could be affected by effective public health measures has hindered progress on NCD responses.

While there are specific issues relating to individual NCDs and risk factors, there are also common and shared issues, such as people with NCDs relying on access to the same health services as those with other diseases and NCD risk factors affected by common commercial determinant. "Silo working," which occurs within health and NCDs when those working on particular diseases and risk factors fail to interact with, and learn from, others working on different NCDs and risk factors, has hindered progress on these common and shared issues.

Some of the most effective measures to address NCD risk factors may be politically difficult to introduce because they clash with the commercial interests of important industries. This may lead to focusing on measures that are easier to introduce – e.g., public education and behaviour change messaging – but which are less effective than established best buys. Doing this has hindered progress.

Because of the nature of NCD responses and PAHO's technical cooperation in these, there is a high level of dependency on human resource capacity both in PAHO and in ministries of health. Staff rotation and turnover adversely affect this capacity. There has been a particular issue during the COVID-19 pandemic, which is also faced in other emergency settings, of NCD staff being deployed elsewhere to support an emergency response. Inadequate human resource capacity and reductions in that capacity have hindered NCD responses.

### Progress to impact

One advantage of having a clear theory of change for the Plan of Action (see Annex 7 in Volume II) is that it should be possible to test and collect evidence as to the extent to which particular inputs are contributing to outputs, outputs to outcomes, and outcomes to impact as expected in the identified causal pathways. The evaluation team sought to do this using both qualitative and quantitative methods.<sup>47</sup>

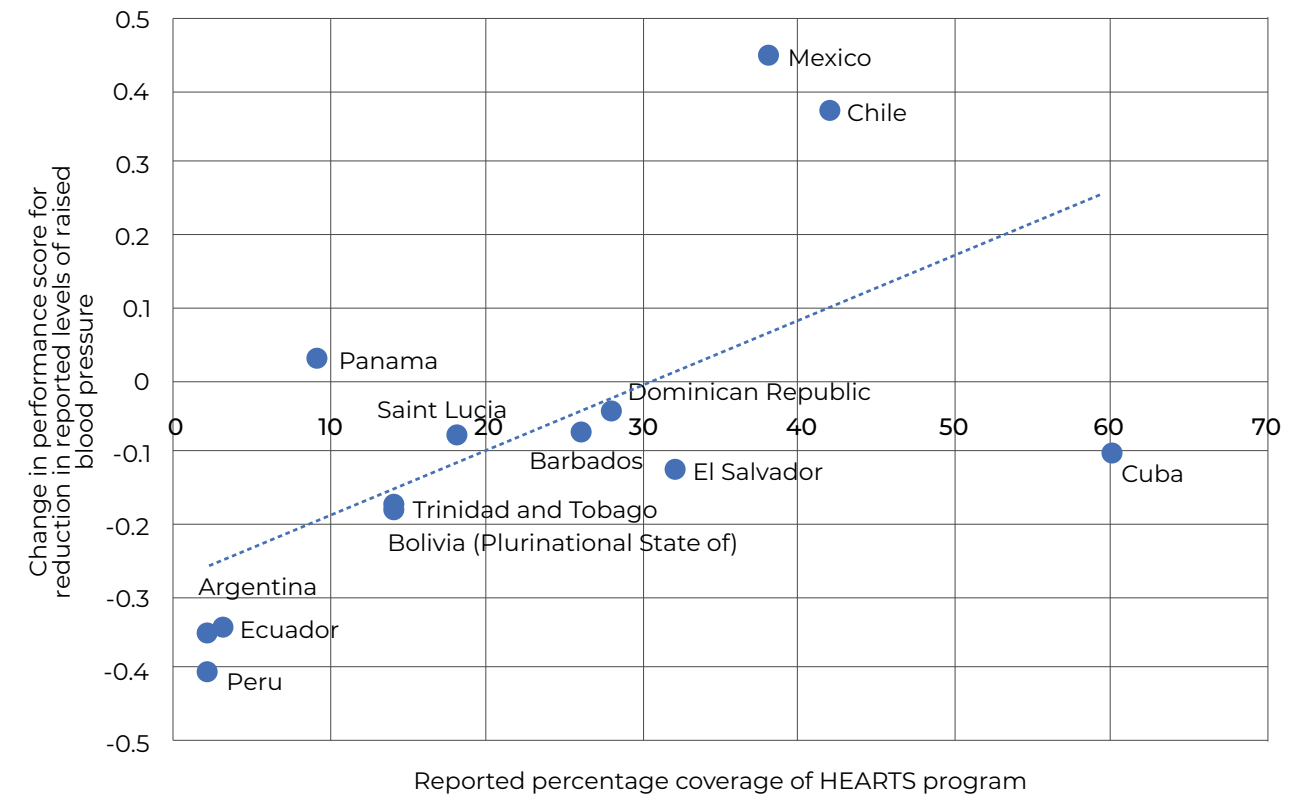
As part of this overall approach, the evaluation team explored whether there was any statistically significant association between PAHO staff ratings of PAHO technical cooperation and Member States, performance on identified NCD indicators.<sup>48</sup> However, no such association could be established. This does not necessarily mean there is no link. Certainly, respondents consider that PAHO support is contributing to progress of NCD responses in many countries. However, one problem is the lack of a reliable way of assessing the scale and intensity of PAHO support in particular geographical and technical areas. The rating of technical cooperation conducted for the evaluation is fairly subjective and does not show much variation between countries.

It might be more realistic to try to establish a potentially causal contribution from one specific input/activity to a specific outcome. Such an association does exist in relation to the HEARTS program. Reported levels of coverage of that program are statistically significantly associated ( $p = 0.02$ ) with national prevalence of hypertension (see Figure 6). This could be considered evidence for the following causal chain: where PAHO supports governments to introduce the HEARTS program and it is then implemented at high levels of coverage, this will contribute to a reduction in population prevalence of hypertension.

<sup>47</sup> For more details of methods used, please see Annex 4, in: Pan American Health Organization. Evaluation of the Pan American Health Organization Technical Cooperation in Noncommunicable Disease Prevention and Control in the Americas. Volume II Annexes. Washington, D.C.: PAHO; 2023. Available from: <https://iris.paho.org/handle/10665.2/57826>.

<sup>48</sup> Both the absolute level of performance and the improvement in performance from 2015 to 2022.

**Figure 6.** Comparison of reported reductions on the level of raised blood pressure from 2015 to 2019<sup>49</sup> and reported percentage coverage of the HEARTS program



There is also evidence that if Member States implement recommended actions on NCDs and risk factors, this will contribute to improved outcomes. For example, there is a statistically significant association ( $p < 0.001$ ) between performance on NCD (output) indicators in the PAHO Program Budget and (outcome) indicators in the PAHO Strategic Plan.<sup>50</sup> Similarly, this evaluation finds a statistically significant association ( $p < 0.001$ ) between Member States' performance on NCDs and a combined score based on three outcome indicators (see Figure 7).<sup>51</sup> While these findings are not definitive in their own right, they do provide supportive evidence for the causal links between outputs and outcomes identified in the theory of change. This evidence is in line with qualitative evidence gathered by the evaluation and other evidence outside this particular evaluation.

However, while there is an association between progress on the three outcomes identified and changes in NCD premature mortality, this association is not statistically significant

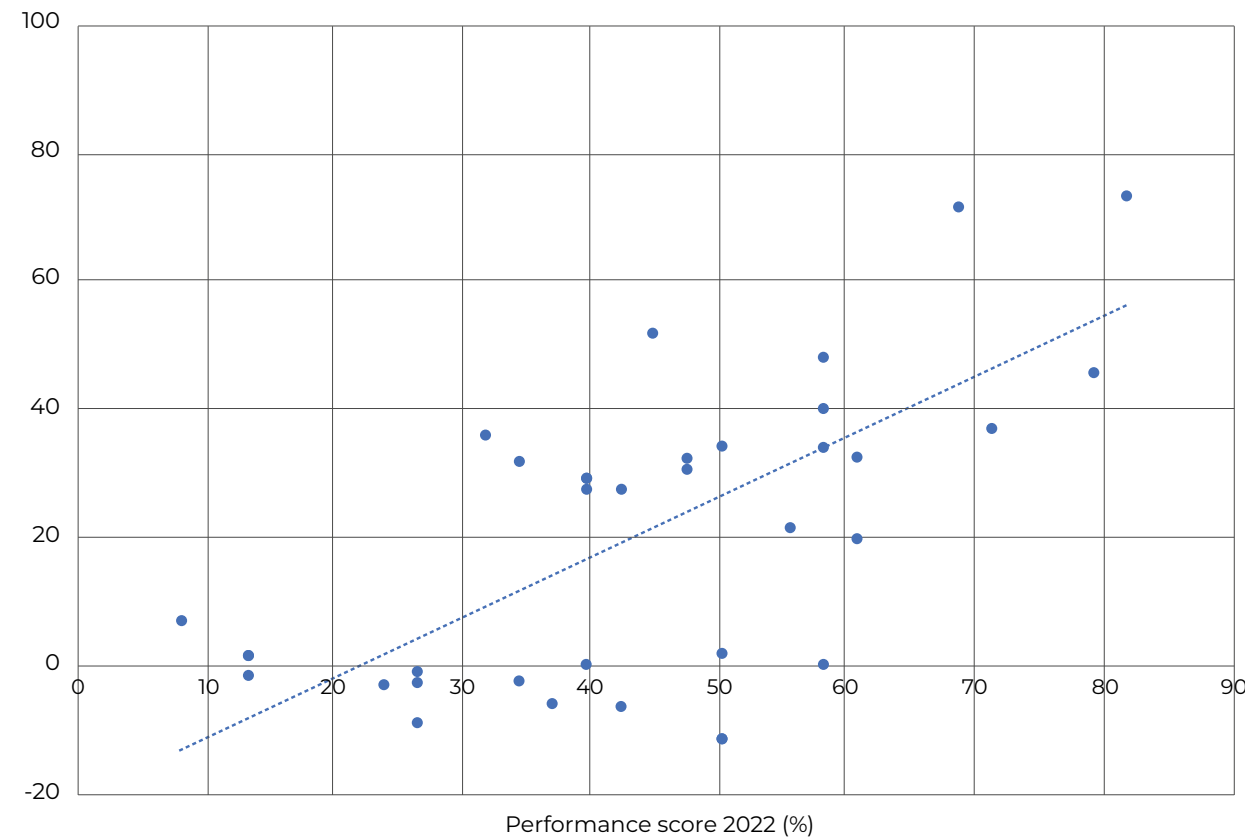
<sup>49</sup> Based on indicator 3.3.5 in the POA. The score is obtained by dividing the percentage reduction seen by the target of 10%. This means that a country that saw a 5% reduction in figures reported against this indicator would obtain a score of 0.5; i.e., half the target achieved. Under this score, negative scores reflect a rise in figures reported.

<sup>50</sup> For more detail of the methods used and the caveats/limitations associated with the data used, please see Annex 4, in: Pan American Health Organization. Evaluation of the Pan American Health Organization Technical Cooperation in Noncommunicable Disease Prevention and Control in the Americas. Volume II Annexes. Washington, D.C.: PAHO; 2023. Available from: <https://iris.paho.org/handle/10665.2/57826>.

<sup>51</sup> The outcomes relate to tobacco use, preventive treatment for cardiovascular disease, and antihypertension treatment. More details are in Annex 4, in: Pan American Health Organization. Evaluation of the Pan American Health Organization Technical Cooperation in Noncommunicable Disease Prevention and Control in the Americas. Volume II Annexes. Washington, D.C.: PAHO; 2023. Available from: <https://iris.paho.org/handle/10665.2/57826>.

(p = 0.18). The findings described in this section are illustrated in comparison to the POA's revised theory of change. There are many possible explanations for this. The most likely is that any changes in premature mortality are unlikely due to these three outcomes only. However, these are the ones for which PAHO has data that can be analyzed. The evaluation team is not aware of any evidence that shows which outcomes may be most important in ensuring progress toward the mortality target. It may be possible to identify those outcomes from an analysis of countries that have made most progress toward achieving this target.

Figure 7. Comparison of outcome scores with 2022 NCD performance scores



In terms of whether the impact target of a 25% reduction in premature mortality will be achieved by 2025, PAHO reported to the Directing Council in 2019 that the target had been achieved (see Figure 8).<sup>52</sup> However, this was based on a regional mortality rate. At that time, based on calculations for the evaluation, no country had reduced the unconditional probability of dying from four NCDs between ages 30 and 70 by 15%. Indeed, in seven countries, the unconditional probability of dying was worse in 2019 than

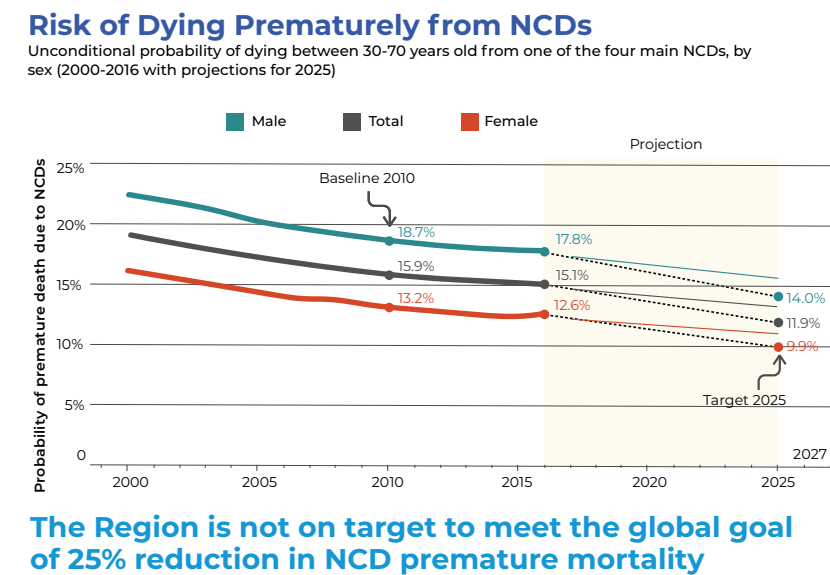
52 It appears that this was an interim target of a reduction of 15%.

2015. The probability had reduced by more than 10% in only four countries,<sup>53</sup> and in at least one of those countries there are concerns about accuracy of mortality figures. Based on this, it seems likely that the impact target in the PAHO Strategic Plan and in the SDGs will be missed. This conclusion has also been reached by PAHO's NMH department (see Figure 9).<sup>54</sup>

Figure 8. PAHO report to 2019 Directing Council on the NCD impact indicator

| Objective 4.I: Improve the quality and breadth of NCD and risk factor surveillance systems to include information on socioeconomic and occupational status   |   |
|--|---|
| Indicator, baseline, and target  | Status  |
| <b>4.1.1</b> A 15% reduction in premature mortality from the four leading NCDs by 2019 and a 25% reduction by 2025<br>Baseline (2012): 324.6 deaths per 100,000 population<br>Target (2019): 280 deaths per 100,000 population | This target has been achieved.<br>Estimated premature NCD mortality is 288 deaths per 100,000 population. |

Figure 9. Slide from presentation to PAHO's Senior Advisory Group in November 2022



**What needs to be done differently?**

While this question is mainly answered in the Conclusions and recommendations section of this report, four key principles are identified here in relation to PAHO's technical cooperation. Given that the progress made has been fairly limited, there is a need to rapidly accelerate responses to NCDs across the countries of the Region. To do this will require:

53 Chile (13.8%), Dominican Republic (11.2%), Honduras (11.8%), and Trinidad and Tobago (11.4%).

54 This conclusion is based on figures and a publication in 2019 (13). It is therefore difficult to understand why a very different conclusion was presented to the Directing Council in 2019.

- Massively expanded resources. This will largely be the responsibility of Member States, but the PAHO Secretariat can contribute here by focusing more explicitly on the importance of resource mobilization and identifying more effective ways of doing this; for example, by linking more effectively to the building resilience agenda.
- Scaled-up effective programs. The PAHO/WHO best buys continue to provide a good guide to where resources can be most effectively invested to make a difference. However, there is a need to pursue and implement these much more intensively and, where relevant, at scale.
- Working increasingly with others. While PAHO and ministries of health have a long history of working well together, both have been less effective at working with others, including other ministries and non-State actors. Many of the most effective interventions on NCDs and their risk factors require actions beyond the health sector. Countries that have done well in such areas have had effective multisectoral coordination, but this has been the exception rather than the norm. PAHO could do more to support these mechanisms, including tracking and reporting progress. For NCD care and treatment, there needs to be a shift away from vertical, disease-specific programs to ones focused on primary health care and universal health coverage. The success of universal health coverage and primary health care can increasingly be judged in the Region in terms of how effectively they provide care and treatment for people with NCDs.
- Measuring and reporting progress candidly. While it is understandable that PAHO may wish to issue positive reports of progress made, e.g., against targets, such reports, e.g. as given to the Directing Council in 2019, may have contributed to a false sense of security in terms of progress made on NCDs across the Region. A more candid report – , e.g. , that few targets have been reached by more than half of Member States and targets for NCD-related mortality are unlikely to be met – might contribute to a greater sense of priority and urgency when responding to NCDs. In addition to measuring Member State progress, it would also be able to have credible measures of PAHO contribution to technical cooperation and efficiency.

### Unintended results

There are concerns that positive policy measures may have unintended results and consequences. It is important to monitor the extent to which such consequences happen; for example, salt reduction measures leading to an increase in monosodium glutamate or potassium chloride (46). Unintended consequences related to taxation on sugar-sweetened beverages may include switching to other unhealthy foods that are not taxed, disproportionate effects on the poor, tax avoidance measures including buying from illicit or cross-border sources, and economic effects; for example, job losses (47). While these concerns are often overstated to resist introduction of such taxes, further research is needed to understand the extent to which different designs for taxation of sugar-sweetened beverages might have unintended consequences (43). Unintended consequences that have occurred when tobacco control measures are introduced include

increased consumption of tobacco from illicit sources. In many cases, these unintended consequences occur because of deliberate actions by the tobacco industry, which employs specific measures to undermine tax increases (48). The FCTC itself recognizes that unintended consequences can occur; as a result of health warnings. It advocated the pre-market testing of these to identify unintended effects (33).

While there may be concerns that taxation on unhealthy products may be regressive in terms of affecting poorer people disproportionately, there is also evidence, from alcohol taxation, that such taxes can benefit the health of poorer people more because of the alcohol harm paradox whereby poorer people are harmed more by the same amount of alcohol as compared to richer people.

In addition, there may sometimes be unintended conflicts between different health programs; such as those focused on salt reduction and those involved in salt iodization (49).

### Innovations

There have been a number of innovations and innovative practices that have been implemented by or supported by PAHO since the POA was introduced. Some of these relate to the use of technology and include:

- Using funding for responses to COVID-19 to fund telemedicine pilots.
- The shift to more virtual and remote forms of training and learning. This shift was accelerated in response to the COVID-19 pandemic.
- The use of artificial intelligence to create Pahola, a digital health specialist on alcohol use (50) (see Figure 10).

Figure 10. Pahola has been developed as a digital health specialist on alcohol use



Others relate to innovative use of economic measures to tackle NCD risk factors, particularly the use of taxation to address tobacco use, the harmful use of alcohol, and some aspects of an unhealthy diet, such as sugar-sweetened beverages. A particularly innovative element has been the use of resources raised from taxation to invest in aspects of public health.

There were also a number of innovations related to COVID-19 and responses to it.

## Efficiency

### Measuring efficiency

PAHO currently has no way of measuring or assessing the efficiency of its work in general or specifically on NCDs. Based on financial data supplied,<sup>55</sup> it is possible to look at how efficiently or effectively PAHO has been able to ensure that amounts budgeted are available/financed. Table 4 shows that PAHO has been less efficient and effective in financing NCDs than its overall budget or other areas, such as communicable diseases. Over the three biennia, only 70% of the NCD budget was financed as compared to 103% of the communicable diseases budget and 88% of the overall PAHO budget. However, there has been a slight improvement from 2016–2017 (67%) to 2020–2021 (73%).<sup>56</sup> Once financed, the efficiency of spending the money is similar for NCDs (97%), communicable diseases (97%), and overall (96%).<sup>57</sup>

**Table 4.** Amount budgeted, financed, and spent over three biennia through PAHO Country Offices on NCDs, communicable diseases, and overall

|              | 2016–2017    |              |              | 2018–2019    |              |              | 2020–2021    |              |              | Total        |              |              |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|              | Bud          | Fin          | Exp          | Bud          | Fin          | Exp          | Bud          | Fin          | Exp          | Bud          | Fin          | Exp          |
| NCD          | 24.5         | 16.3         | 15.4         | 24.0         | 17.3         | 17.1         | 12.2         | 8.9          | 8.5          | 60.6         | 42.5         | 41.0         |
| %            |              | 67           | 94           |              | 72           | 99           |              | 73           | 96           |              | 70           | 97           |
| Comm         | 31.5         | 34.2         | 33.5         | 42.8         | 42.3         | 41.0         | 31.3         | 32.0         | 30.3         | 105.5        | 108.5        | 104.7        |
| %            |              | 109          | 98           |              | 99           | 97           |              | 102          | 95           |              | 103          | 97           |
| <b>Total</b> | <b>234.1</b> | <b>188.5</b> | <b>184.1</b> | <b>225.2</b> | <b>209.9</b> | <b>204.6</b> | <b>191.2</b> | <b>173.4</b> | <b>160.7</b> | <b>650.4</b> | <b>571.8</b> | <b>549.3</b> |
| %            |              | 81           | 98           |              | 93           | 97           |              | 91           | 93           |              | 88           | 96           |

Note: All figures USD million; comm, communicable diseases; bud, amount budgeted; fin, amount financed; exp, expenditure.

In the absence of an existing metric for efficiency of PAHO's work on NCDs, the evaluation team considered whether the cost per capita for each percentage point improvement in NCD performance score might be taken as a measure of efficiency of PAHO spending. On average, each percentage point improvement in NCD score cost PAHO Country Offices 16 cents<sup>58</sup> with most scores ranging from less than 1 cent<sup>59</sup> to just under 40 cents<sup>60</sup> (see Figure 11). While it might be expected that there would be an association between this measure of efficiency and country capacity/ability to finance, there was no statistically

<sup>55</sup> Spending through Country Offices over three biennia (2016–2017; 2018–2019; 2020–2021).

<sup>56</sup> But the size of the NCD budget halved over that period from around USD 24m in 2016–2017 and 2018–2019 to only USD 12.2m in 2020–2021.

<sup>57</sup> While budget utilization rates are commonly used as measures of efficiency, caution is needed as focusing on these can incentivize behavior focused on getting funds "out the door" regardless of other considerations.

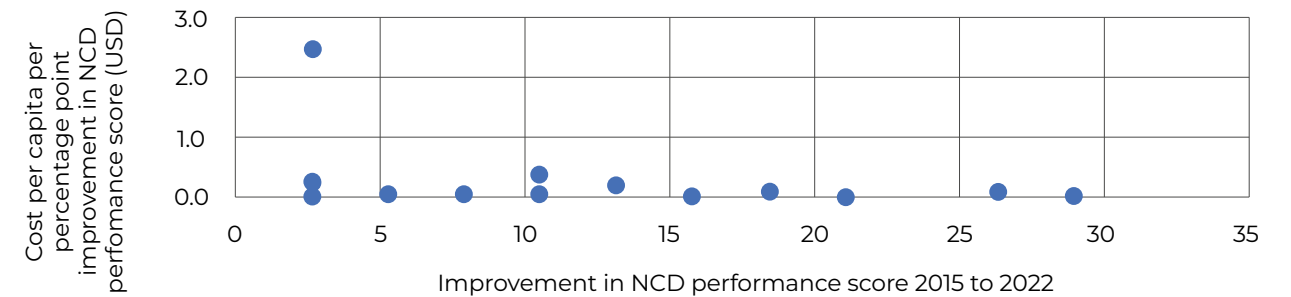
<sup>58</sup> Over three biennia. This is calculated only for those countries that showed an improvement from 2015 to 2022.

<sup>59</sup> In Canada, El Salvador, Haiti, Mexico, Peru, United States of America, Uruguay, and Venezuela (Bolivarian Republic of).

<sup>60</sup> In Saint Vincent and the Grenadines. There was one outlier, Saint Kitts and Nevis, where the cost per capita per percentage point improvement in NCD performance score was USD 2.40.

significant association between this measure and HDI ( $p = 0.71$ ). The cost to PAHO of improving NCD performance scores was lowest in North America (0.1 cents) as compared to 1.4 cents in South America, 2.5 cents in Central America, and 44 cents in the Caribbean.

**Figure 11.** Comparison of the cost per capita per percentage point improvement in NCD performance score and the improvement in NCD performance score from 2015 to 2022



A second possible efficiency measure considered by the evaluation team was the percentage of funding spent at the subregional/country level. Having this as an efficiency measure would be in line with PAHO and WHO priorities to increase resourcing at the country level. In both the 2014–2015 and 2016–2017 biennia, PAHO spent more than half of its NCD finances in subregions or countries (50.6% in 2016–2017 and 54.8% in 2018–2019). This was higher than for communicable diseases, which was less than half in both these biennia (43.2% in 2016–2017 and 38.7% in 2018–2019). However, this percentage fell for NCD financing in 2020–2021 to 41% overall.<sup>61 62</sup>

### Qualitative assessments of efficiency

Qualitatively, when respondents were asked about efficiency, they responded that they considered that PAHO was achieving "a lot with a little". This is achieved partly through the way PAHO works, which is in partnership with others (national governments and working with local academics) to generate national data.<sup>63</sup> In addition, PAHO's approach of embedding responses to NCDs in national governmental health systems and responses is considered more efficient than, for example, establishing new parallel processes or systems. In addition, the approach which is based on promoting primary health care and universal health coverage is inherently more efficient than one which focused more on secondary and tertiary levels of the health system.

However, respondents also gave examples of processes that seemed bureaucratic or inefficient, such as some procurement and human resourcing processes and, for example, getting permission to use the PAHO logo. However, these same respondents

<sup>61</sup> It was particularly low (38.5%) in relation to outcome 5 as compared to outcome 13 (45.2%).

<sup>62</sup> In 2020–2021, the percentage of communicable disease funding spent in subregions or countries was 42.6%, which was very similar to 2016–2017 (43.2%).

<sup>63</sup> This does mean that something which may seem efficient to PAHO may not seem so to a partner, particularly if they are bearing more of the cost.



acknowledged that levels of bureaucracies and inefficiencies were not higher than might be expected in another organization of comparable size. Indeed, some respondents observed that bureaucracies were greater in their own organization. One external respondent explained that while some processes might appear bureaucratic, they were needed to ensure quality, probity, etc. One thing they valued about PAHO was that it does not “cut corners.”<sup>64</sup>

The way PAHO is funded to work on NCDs, with limited core funding and high levels of dependency on a few funders, may influence the agenda that is followed and the priorities that are set and followed. This is sometimes considered as allocative efficiency. Nevertheless, many respondents considered that PAHO had been highly strategic in the way it used funding for NCDs. One example provided was the priority given to virtual training, which was considered highly effective and efficient because of the number of people who could be reached at relatively low cost.

Some respondents considered that some aspects of how human resources are deployed and used in PAHO may promote efficiency. For example, having some basic capacities in country, but then being able to access expert advice through the regional office, was considered an efficient model by some, particularly as they considered it would not be possible to have such a level of expertise in all areas at the country level. However, there were also many who commented that PAHO would be more effective and efficient with greater in-country capacity. A model that was considered to work well was where an international advisor in-country was able to hire a national consultant, allowing the advisor to focus on high-level, more strategic issues. A few respondents commented that PAHO used to have more subregional advisers and that this allowed experts to give tailored support to fewer countries than those covering the entire Region. Many respondents commented that greater cross-area<sup>65</sup> working and learning could further improve efficiency. One area identified as weak relates to knowledge management and, in particular, the loss of institutional memory when staff move within departments or leave PAHO.

Finally, several respondents commented that COVID-19 had shown what is possible in terms of efficient procurement when needed, for example, in an emergency context.

### ***Factors influencing PAHO's ability to mobilize financial and technical support for NCD technical cooperation***

PAHO's NCD technical cooperation is highly dependent on the human resources available. Positive factors include the high levels of specific expertise in particular areas and the expansion of human resource capacity related to NCDs in Country Offices. However, technical support has been less effective in areas with more limited expertise, such as multisectoral collaboration. In addition, disruptions to NCD human resources in Country Offices when they transfer or leave or are pulled into other roles, like responding to emergencies and/or acting for other staff such as PAHO/WHO representatives.

<sup>64</sup> The term “cut corners” means to do something in a substandard way to save money or time.

<sup>65</sup> For example, across risk factors.

PAHO has been less successful in mobilizing financial resources for NCDs. Given that, in the Region, this funding may be expected to come from national governments, competing priorities and political upheaval and crises may have negatively affected this. In addition, these attempts to raise funds are made in the face of high levels of industry interference, which is extremely well financed. Arguments for financing NCDs that rely on pointing out the share of mortality and morbidity caused by NCDs, and other arguments, may be needed. PAHO has taken steps in this direction with the development of investment cases. Opportunities that have presented themselves to raise funds – related to COVID-19 and/or building resilience – have been seized more effectively by mental health than by NCDs.

Finally, COVID-19 and responses to it have had profound effects on financial and technical support for NCDs technical cooperation.

## Sustainability

### Financial sustainability

This section starts by considering whether PAHO's NCD program is financially sustainable. According to data presented in PAHO's budget portal (51), funds received by PAHO for tackling NCDs and their risk factors increased from USD 22.1 million in 2016–2017 to USD 23.7 million in 2018–2019, and to USD 27.5 million in 2020–2021.<sup>66</sup> The amount received from assessed contributions remained more or less constant at USD 10.1 million in 2016–2017, USD 8.6 million in 2018–2019, and USD 10.8 million in 2020–2021. This meant that the proportion received from assessed contributions fell from 46% in 2016–2017 to 39% in 2020–2021 (see Figure 12).<sup>67</sup> These findings could indicate an increasing reliance on voluntary funding – i.e., earmarked, donor funding – which is intrinsically less sustainable than funding from assessed contributions.

Figure 12. Funds received for NCDs and their risk factors: PAHO Program Budget (2016 to 2021)



Note: Figures in USD million. Data from: Pan American Health Organization. The PAHO Program Budget Portal. Washington, D.C.: PAHO; 2022 [cited 7 December 2022]. Available from: <https://open.paho.org/>. AC: Assessed Contributions.

According to PAHO respondents at the regional level, one of the better-resourced areas in the NCD program is tobacco control. However, PAHO and WHO respondents highlighted the dependency of the tobacco control work on funding from a few donors. A particular concern is that funding from a key donor, the Bloomberg Foundation, has been decreasing in the past two-year instalment, with uncertain perspectives of continued funding after 2026. One respondent commented that, “If Bloomberg stops, tobacco control may be very undermined. The possibility of delivering country-tailored support on tobacco taxes is only possible because of donor funding. Bloomberg Foundation fund a huge range of consultants including economists and lawyers, and these positions do not

<sup>66</sup> However, the way spending was classified changed over this period. In 2016–2017 and 2018–2019 there was a separate funding category for NCDs and risk factors. However, in 2020–2021 there were separate funding categories for access to services for NCDs and mental health conditions and risk factors for NCDs. While it is possible to estimate funding for NCDs by combining these elements, this also includes funding for access to services for mental health conditions.

<sup>67</sup> This analysis is based on the assumption that funding received from WHO in 2020–2021 of USD 11.5 million is voluntary funding. This is not completely clear from the budget portal, nor is it clear if similar funding was received from WHO in previous biennia. If it was, it is possible that it was within the category of international organizations.

exist in PAHO.” Given this funding landscape, some respondents have proposed to focus efforts on identifying new funding opportunities to attain the 2030 horizon of the SDGs and attempt to demonstrate value for money of investing in tobacco control measures. Respondents from WHO and PAHO cautioned against the view that tobacco control is a “done deal” in a context of evolving strategies by the industry. They also highlighted the need for scaled-up funding to avoid gains being reversed. Beyond tobacco control, PAHO respondents expressed concerns at the high proportion of earmarked donor funding in the NCD program budget, particularly as this can lead to project management taking precedence over a focus on attaining the strategic objectives of the program.

### Sustainability of approach

A second point on sustainability is whether PAHO has adopted a sustainable approach to NCD technical cooperation. Country respondents from PAHO and ministries of health highlighted the unique nature of the partnership between PAHO and its Member State counterparts. PAHO is a trusted partner of ministries of health, having demonstrated its long-term engagement in countries. One Ministry of Health respondent explained that “PAHO is a stable partner. It is really reliable compared to other organizations, and its support does not waiver based on politics or the COVID-19 pandemic.” A PAHO country-level respondent working on NCDs commented that this trusted relationship helps sustain changes obtained with support from PAHO: “PAHO is a partner for health, and the ministries do not want to damage the relationship. So, people seriously commit to engaging resources, and this makes the program sustainable after it ends.”

PAHO's approach to NCD technical cooperation is well embedded in national health responses. PAHO focuses on building institutional capacity in terms of policies, strategies, plans, and surveillance systems. Given that technical cooperation is based on Member States' requests for support, technical cooperation efforts are well streamlined with national health programs. However, where institutional capacity in ministries of health is particularly weak, PAHO adjusts the way it operates, providing more direct, operational support to its counterparts. For example, PAHO Country Offices have at times funded a consultant to supplement the Ministry of Health's staff workforce to develop key strategic documents on NCDs. While this may appear unsustainable, this flexibility has proved useful in providing catalytic support in times of crisis. In Paraguay, PAHO provided a small grant to procure IT equipment for the Ministry of Health to be able to switch to hold meetings online, which has been highly strategic according to Ministry of Health respondents.

Several PAHO initiatives have contributed to the sustainability of NCD responses in countries. For example:

- In terms of resource mobilization, PAHO's Economics of NCDs team has advocated for increased domestic and donor funding for NCDs in line with the strategy to demonstrate the economic value of investing in NCDs (15) and promote best buys – the menu of most cost-effective and feasible to implement interventions (45). The PAHO team produced context-specific investment cases for treatment and

control of NCDs in Jamaica, Peru, and Suriname, and together with the FCTC Secretariat and UNDP, on investing in tobacco control in Colombia and El Salvador. Taxes on tobacco, alcohol, and sugar-sweetened beverages not only have direct health benefits on reducing affordability of these commodities but can also be earmarked to further fund NCD responses.<sup>68</sup> Nevertheless, PAHO and external respondents commented that there had been a lack of emphasis on resource mobilization in PAHO's technical cooperation on NCDs, even though efforts in this area are highly valued by Member States.<sup>69</sup> In some countries, such as Haiti, respondents noted that while there were many funders active on health issues in the country, they lacked coordination and mobilization mechanisms to prioritize NCDs. They called for PAHO to focus technical cooperation efforts on this area.

- PAHO has also worked to increase the capacity of health systems to provide care and support services for people with NCDs, which is also considered a key sustainability issue. Examples include supporting countries to procure standardized blood pressure monitors through the HEARTS program. Also, through its pooled procurement mechanism called the Strategic Fund (52), PAHO helps ensure availability of essential NCD medicines at a competitive price for countries while providing technical assistance to countries on pharmaceutical supply chain management.

However, there are concerns about the sustainability of some elements of PAHO's work on NCDs. In some contexts, it is reported that the HEARTS program has not been well integrated into a country's existing systems, leading to some level of duplication. Some Ministry of Health respondents commented that the disease-focus of the HEARTS initiative did not fit with a holistic, health system strengthening approach, judging that "systems issues will not be solved by specific actions to strengthen NCD services." Others, however, considered that the systems put in place through HEARTS for managing hypertension had inspired them to adopt good practices for the management of other diseases. For example, these are being expanded to diabetes management as a second phase of the program.

Another concern relates to NCD risk factor-specific surveys. One respondent considered that, "If donor funding for NCDs stopped, countries would not be able to maintain a focus on NCD surveillance as compared to communicable diseases." Indeed, some surveys are funded externally, and the multiplication of topic-specific surveys that countries may not be able to afford to repeat may undermine the sustainability of the NCD surveillance system. PAHO has attempted to address this issue through a phased approach. Surveys such as the Global Youth Tobacco Survey (GYTS) and the Global Adults Tobacco Survey (GATS) may first be fully supported by donor funding, with PAHO supporting the countries in identifying co-funders. In subsequent rounds, PAHO support shifts to providing more technical support and building surveillance tools into national health plans and tobacco control strategies. This approach has been adopted for tobacco surveys in Brazil and

Uruguay and is in process in Argentina and Mexico. Another proposed strategy is to emphasize a small package of basic questions within externally funded thematic surveys on NCDs, which can then be included in any periodic survey to ensure that the country is able to maintain regular data collection on those indicators.

### Factors influencing sustainability

A number of factors may influence the sustainability of PAHO's contribution to NCD technical cooperation. Given the partnership approach of PAHO's technical cooperation, the sustainability of its contribution is highly dependent on the capacity of its key counterpart, the Ministry of Health. In this respect, the situation varies greatly among countries in the Region. The units responsible for NCDs in the ministries are diverse in terms of size and structure. In smaller structures, continuity of work with national counterparts depends largely on having a stable focal point and program in place. In countries affected by political instability, high levels of turnover among Ministry of Health staff may considerably slow down progress on adopting NCD policies. Respondents from PAHO at the country level suggested working with country counterparts in order to streamline NCD work in the Ministry of Health to avoid over-reliance on one person. Another strategy has been to work through subnational authorities, as, in some countries where the health system is highly decentralized, they may have more capacity to develop NCD initiatives than the central government.

Progress on NCDs in the Region slowed between 2020 and 2022 (see Figure 2), possibly related to the advent of the COVID-19 pandemic. Other events, such as changes in government, may also affect the sustainability of progress obtained with the support of PAHO's technical cooperation on NCDs. For example, countries may adopt a law on front-of-package labeling but fail to then put in place the regulations that allow its application. A new government may decide to back down on commitments made by their predecessors; for example, on prohibiting electronic cigarettes.<sup>70</sup> However, it is noteworthy that, even if policy change processes have slowed down in some contexts, PAHO has been able to advocate successfully to avoid regression on progress made to fulfill the right to health, and helped countries maintain policy gains obtained through advocacy and legal advice.

<sup>68</sup> However, this strategy, of earmarking health taxes, may not be legally possible in all the countries of the Region.

<sup>69</sup> See Figure 5. Although resource mobilization is identified as important in the NCD Plan of Action (53), it is not specifically identified by PAHO as an element of technical cooperation (12).

<sup>70</sup> WHO and PAHO are concerned that e-cigarettes are harmful to health and are being used by the tobacco industry to develop nicotine addiction and a smoking habit in young people, with aggressive marketing and flavored products (54, 55).

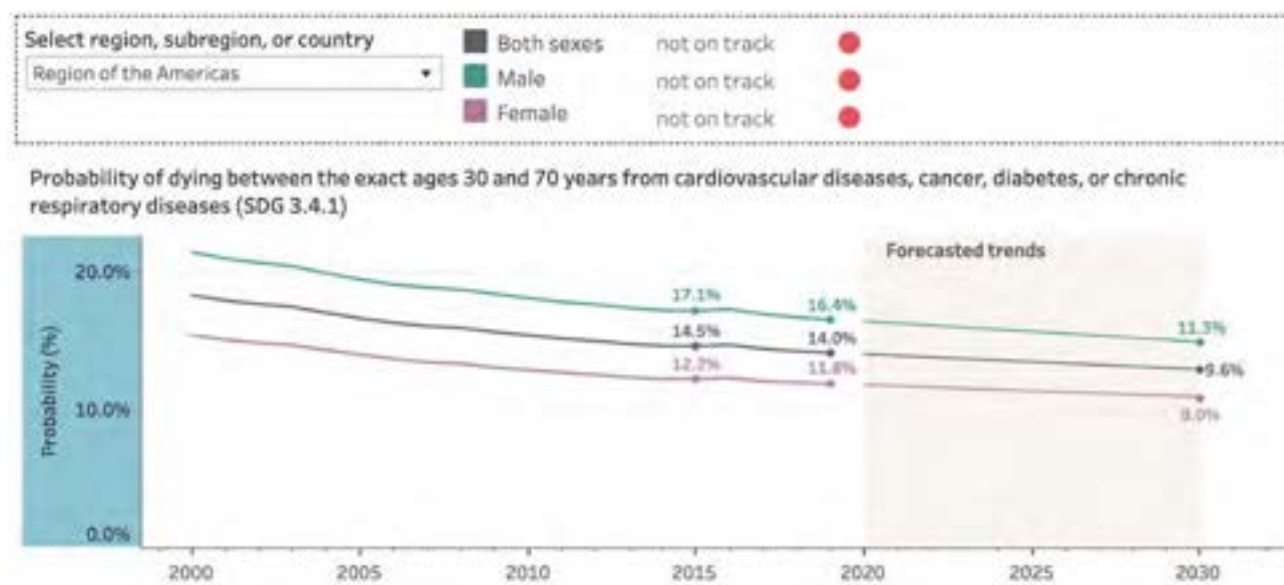
## Gender equality, equity, and human rights

Integrating a gender equality and health equity lens in programming and adopting a disability-inclusive and human rights-based approach are interdependent and cannot be addressed separately. However, each of these thematic areas requires a specific approach, which is why they are presented separately below, while taking into account intersectional aspects.

### Gender equality and NCDs

Gender inequalities are relevant to the field of NCDs, as biological differences, gender roles, and social marginalization expose women and men to different NCD risks. Overall, in the Region of the Americas, and in keeping with global health trends, men are more likely to die from NCDs than women (see Figure 13).

Figure 13. Premature NCD mortality: trends and projections toward SDG 3.4 target

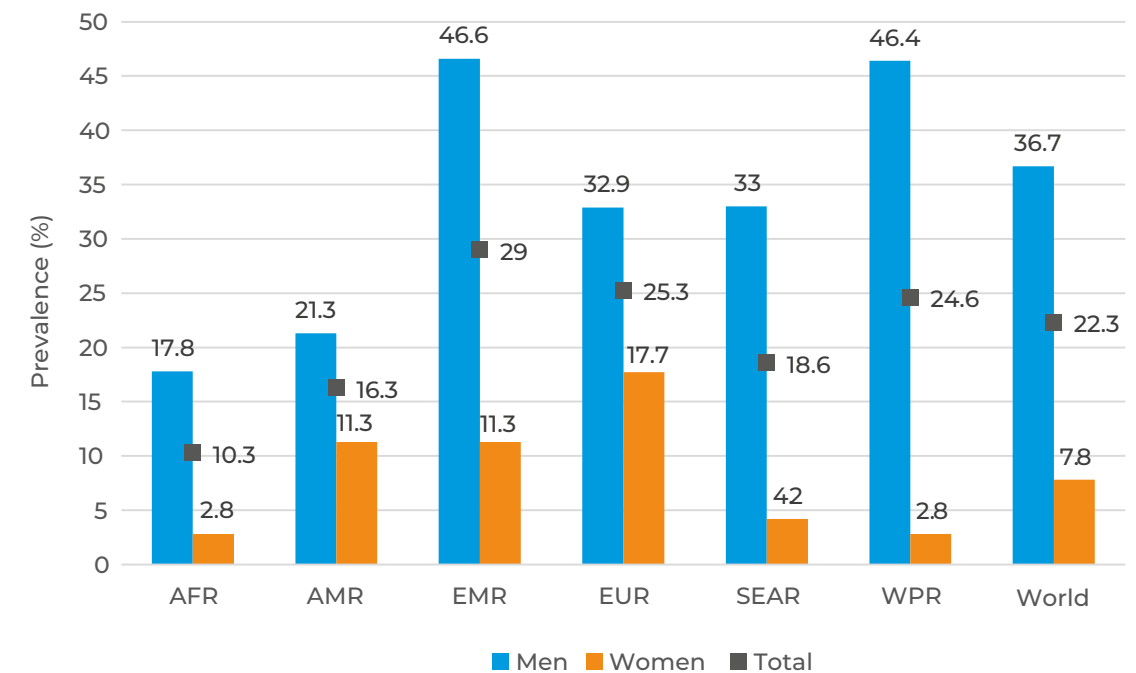


Source: Pan American Health Organization. ENLACE: Data Portal on Noncommunicable Diseases, Mental Health and External Causes. Washington, D.C.: PAHO; 2023 [cited 16 January 2023]. Available from: <https://www.paho.org/en/enlace>.

However, these numbers mask gender differences in risk factors as well as in morbidity and mortality patterns of different NCDs. Data presented in the ENLACE portal on NCDs and their risk factors are fully disaggregated by sex, some indicators also being disaggregated by age group (25).

This shows that smoking is more prevalent among men, who are more likely to die of lung cancer than women as a result. However, the ratio of men to women smokers is lowest in the Region of the Americas among WHO regions (see Figure 14). In 2020, the ratio of men to women smokers was 1.9 (21.3% of men and 11.3% of women) in the Americas, while

Figure 14. Global prevalence of current tobacco use in adults by sex and WHO region in 2020



Source: Pan American Health Organization. Report on Tobacco Control for the Region of the Americas 2022. Washington, D.C.: PAHO; 2022 [cited 16 January 2023]. Available from: <https://iris.paho.org/handle/10665.2/56259>.  
Note: AFR, African Region; AMR, Region of the Americas; EMR, Eastern Mediterranean Region; EUR, European Region; SEAR, South-East Asia Region; WPR, Western Pacific Region.

worldwide it was 4.7 (36.7% of men and 7.8% of women) (56). There are more new smokers among young women, with practically no difference in smoking prevalence between boys and girls aged 11 to 17. Hence, the gender gap is decreasing.

The level of alcohol consumption is higher in men than in women in the Region, at 11.9 liters and 3.5 liters per person, respectively, in 2019 (57). In addition, the harmful effects of alcohol consumption differ for men, women, and children. Men may be more prone to accidents and homicides associated with alcohol use. Men tend to have more harmful patterns of drinking, including heavy episodic drinking, a risk factor associated with sexual violence and intimate partner violence, of which women and children are the primary victims (58).

Women are more at risk of being overweight and obese than men and have higher rates of physical inactivity. In 2016, the estimated prevalence of obesity in adults was of 26% in men and 31% in women in the Region. The prevalence of obesity in adults was higher among women than men in all countries with the exception of Canada (78). Obesity is of particular concern among children and adolescents, as highlighted in the Regional Plan of Action for the Prevention of Obesity in Children and Adolescents (9).

In addition, access to health care for NCDs differs for men and women. Women and girls may cumulate intersecting factors of vulnerability when it comes to accessing treatment and prevention services. Since most of the world's poor are women, they may have less access to resources for health expenditures and less decision-making power over

resource allocation in the household (59). On the other hand, gender stereotypes mean that men have poorer health-seeking behaviors (60). This contributes, for example, to the cardiovascular disease mortality burden, which is higher in men than women. In 2019, the age-standardized rate of cardiovascular disease-related deaths per 100 000 persons was 158.3 among women and 209.4 among men in the Region (17).

Respondents highlighted that there was good availability of gender-disaggregated NCD data in the Region, although gender-diverse people are not well represented in data collection processes. One of the few studies conducted that considers gender diversity was done by the Alcohol Unit of the Ministry of Health of Argentina, regarding alcohol consumption in the transgender population (unpublished study). This study identifies the specific vulnerability of this population to alcohol use and associated health risks; for example, in terms of adherence to HIV treatment for those members of the transgender population with HIV infection.

PAHO's work on gender equality in NCDs is supported by the Equity, Gender, Human Rights and Cultural Diversity Unit. PAHO has adopted a twin-track approach to integrating gender equality within an intersectional approach, with other factors such as age, ethnicity, and culture in its technical cooperation on NCDs. On the one hand, PAHO has dedicated specific technical resources to gender and NCDs including:

- Publications such as an NCDs and gender fact sheet (59) for International Women's Day in 2012;
- Supporting urban planning to improve physical activity levels among women, such as the campaign to promote cycling for women in Bogotá, Colombia, within the Global Project on Urban Governance for Health (61);
- Producing a webinar on Addressing Men's Health and Masculinities in the Americas in 2022 (62).

On the other hand, PAHO has mainstreamed gender equality across its technical cooperation work with Member States on NCDs. Gender considerations are especially well integrated in NCD management and surveillance. For example, the HEARTS technical packages support countries to collect and analyze sex-disaggregated data on NCDs. In NCD prevention and control services, PAHO's technical cooperation has addressed gender-specific issues; for example, participating in the Global Initiative on the Elimination of Cervical Cancer (63).

Among those interviewed, more female than male respondents (19 vs. 8) commented on the extent to which PAHO's technical cooperation contributed to gender equality, but there were no notable differences in the expressed views of women and men on this topic. Among survey respondents, half (7 out of 14) did not express a view on whether PAHO's technical cooperation had effectively contributed to addressing gender equality in NCDs. Women were more likely to express an opinion than men.<sup>71</sup> Of the seven who expressed an opinion, only three agreed or strongly agreed with the statement, and these were all women.

Interview respondents from PAHO as well as from CSOs reported that PAHO could do

<sup>71</sup> Five of eight women (63%) and two of six men (33%).

more on integrating gender issues, particularly to support Member States to counter the tobacco and alcohol industries' strategies to exploit gender differences to conquer new markets or renew their client base. Such strategies include the industry targeting young people, and especially young women, in marketing; for example, by proposing fruit-flavored tobacco products. These strategies have been emulated by the alcohol industry, as documented by the NCD Alliance (29). Civil society seems to have been at the forefront of these issues. For example, the Healthy Caribbean Alliance has led a campaign on women and alcohol in the Caribbean, and others have participated in the "Don't Pink My Drink" campaign (64). Respondents highlighted opportunities for PAHO to provide more evidence on gender inequality issues in NCDs, to provide technical resources on addressing tobacco and alcohol consumption in young and adolescent boys and girls, to share good practices among Member States, and to collaborate with CSOs to advocate for policy change to counter the tobacco and alcohol industries' strategies.

### Human rights implications for the NCD response

Various international human rights instruments are relevant to NCDs and their risk factors. First, the right to health is enshrined in various international human rights commitments such as WHO's Constitution (65), the International Declaration of Human Rights (66), and the International Covenant on Economic, Social and Cultural Rights (67). Therefore, measures to address NCDs have been promoted based on human rights considerations. The Committee on Economic, Social and Cultural Rights in its General Comment 24 (68), noted that State parties should consider measures such as restricting marketing and advertising of certain goods and services in order to protect public health, such as of tobacco products, in line with the Framework Convention on Tobacco Control, and of breast-milk substitutes, in accordance with the 1981 International Code of Marketing of Breast-milk Substitutes and subsequent resolutions of the World Health Assembly. The UN Special Rapporteur on the right to health also issued a statement in July 2020 on the adoption of front-of-package warning labeling in relation to the right to health (69).

In addition, rights of the child, as stated in the United Nations Convention on the Rights of the Child (70), also have implications related to NCDs. For example, the general comment No. 16 on state obligations regarding the impact of the business sector on children's rights (71) states that, "A State will be in breach of its obligations under the Convention where it fails to respect, protect and fulfil children's rights in relation to business activities and operations that impact on children." The FCTC Secretariat has also highlighted the human rights implications of the widespread use of child labor by the tobacco industry.

Three-quarters of respondents to the survey that expressed an opinion (6 out of 8, 75%) agreed or strongly agreed that PAHO's technical cooperation had adopted a human rights-based approach in its work on NCDs.<sup>72</sup> PAHO's legal department has provided technical support to Member States to address the human rights implications of NCDs and on how to use human rights instruments as part of their strategy to reduce risk

<sup>72</sup> Fourteen responses were received to this survey from non-State actors (8) and Collaborating Centers (6). Six respondents did not answer this question. Two respondents, both from non-State actors, neither agreed nor disagreed with this statement.

factors. For example, PAHO provided legal advice to Member States on countering industries' strategy to dispute regulatory measures in the courts. In this respect, PAHO's legal department has successfully made the case to promote the right to health versus the right to trade. It used human rights arguments to avoid regression on progress made to fulfill the right to health to protect advances obtained in addressing NCD risk factors. PAHO also provided legal advice to Member States and courts on the restriction of tobacco advertising in Colombia, Peru, and Uruguay, and on a resolution in Chile regarding the use of black octagons on junk food. PAHO also conducted a webinar for the Caribbean Region (72) discussing the relevance of the statement of the UN Special Rapporteur on the right to health on front-of-package warning labeling for the process of developing a front-of-package warning labeling standard at the level of CARICOM. In the FCTC, PAHO advocated using national and international legislation on the rights of the child, on racial discrimination, and on women's rights to counter tobacco industry activities.

However, not enough is currently being done to use human rights instruments fully to support progress on the NCD agenda in the Region. In particular, according to interview respondents from CSOs, PAHO could collaborate more with organizations, such as children's rights NGOs, that are at the forefront on issues of alcohol and violence and secondhand smoking. There is insufficient engagement with the Human Rights Council where the NCD community is not well represented. This means that opportunities are being missed to protect the human right to health, the rights of racial minorities, and to address environmental rights implications associated with practices of the tobacco, alcohol, and junk food industries. In this respect, several respondents from the WHO global NCD program highlighted that limited collaboration between WHO headquarters and PAHO's legal team hindered progress on human rights and NCDs and the ability to capitalize on the experiences of different WHO regions.

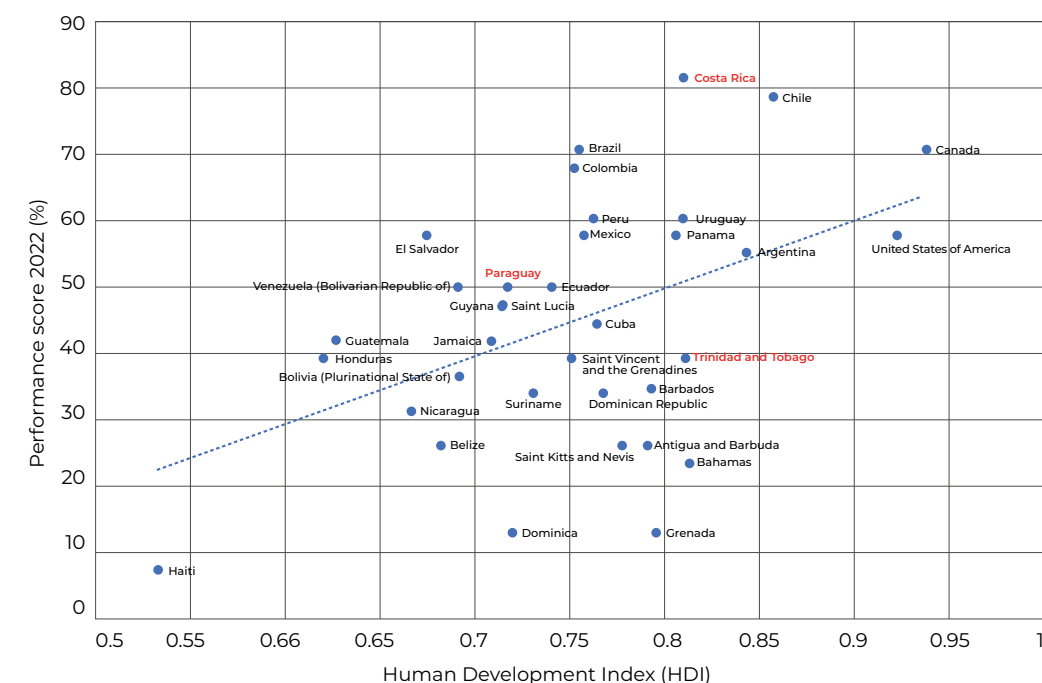
### Health equity and NCDs

There are issues relating to health equity which derive from the Effectiveness section of this report. First, there are differences between subregions in both performance and progress on NCD indicators in the period 2015–2022 (see Figures 1 and 2). Performance scores tended to be highest in North America followed by South America, Central America, and the Caribbean. Respondents identified two main issues in relation to the apparent lower levels of performance on NCDs by Caribbean countries. First, there is a recognition that performance has been weaker in this subregion than in other subregions. However, there may also be measurement issues since surveillance systems are weakest in this subregion (see Figure 4). In addition, not all the measures and indicators may be appropriate in the specific context of small island states. These topics may be in focus in the upcoming Small Island Developing States (SIDS) high-level technical meeting on NCDs and mental health and ministerial conference, which are due to take place in Barbados in 2023 (73).

As identified through the secondary data review carried out for this evaluation, countries' performance on NCD indicators is associated with country income group, level of Human

Development Index (HDI), and the subregion in which the country is located (see Figure 2). For example, there is a statistically significant association ( $p = 0.006$ ) between a country's HDI and its performance on NCD progress indicators based on 2022 data (see Figure 15). However, there are some countries, principally in South America and Central America (such as Brazil, Chile, Colombia, and Costa Rica), that achieved higher levels of performance on NCDs than might be expected based on association with HDI alone. While this could be due to contextual factors specific to those countries, it could be that policies or other modifiable actors are influencing NCD performance independently from a country's level of development.

Figure 15. Member States' NCD performance score 2022 (%) compared to HDI



Note: Countries in red are the evaluation's deep dives.

In addition to inequalities between subregions and countries, there are also equity issues within countries related to health determinants such as gender, poverty, ethnicity, migration, language, age, disability, or exposure to pollution. Vulnerability factors tend to cluster in specific population groups that need to be identified in each country context. The regional POA on NCDs highlights the relevance of such intersectional analysis in order to progress on NCD targets, proposing that PAHO work with interested countries to monitor progress in mitigating the impact of social determinants of health on NCDs and to measure indicators on this as part of the reporting on the NCD POA. However, respondents at the country level considered that there was need for more focus in PAHO's technical cooperation on monitoring health inequalities in NCDs. While some factors are well-captured, such as gender and age, others, such as ethnicity or cultural background, are harder to measure. Where data are available, countries may require technical assistance to produce both country- and regional-level analysis. For example,

STEPS surveys collect data on gender, age, and socioeconomic determinants, but these data are not analyzed systematically. In particular, the influence of poverty on NCD outcomes, using the disaggregation of health data by population quintile, may not be monitored sufficiently by countries.

However, specific issues relating to poverty and NCD risk factors have been documented. For example, the alcohol harm paradox (74) describes how lower socioeconomic status groups consume less alcohol but experience more alcohol-related problems. Another topic of investigation is the double burden of malnutrition, whereby low and middle-income countries in the Region face both high levels of undernutrition and child obesity (75, 76). In some instances, marginalized children and adolescents may experience both stunting, nutrient deficiencies, and obesity due to poor diet. Indigenous people may also have higher exposure to NCD risk factors such as tobacco and alcohol consumption. They may experience specific barriers in accessing health services, linked to geographical situation of remote communities, stigma and discrimination, lack of social and cultural understanding about the particular needs of Indigenous populations and the use of traditional medicine, or language. There is, however, little specific data on NCDs in Indigenous populations. One of the few published studies concerns the prevalence of NCD risk factors in an Indigenous community in Guatemala (77). It identified a much higher prevalence of numerous NCD risk factors than in non-Indigenous communities, including obesity in women, hypertension, hypertriglyceridemia, and metabolic syndrome. Interview respondents from ministries of health, as well as from civil society, called for greater focus from PAHO on promoting country-level research on these issues.

In terms of addressing health inequalities in NCD risk factors and outcomes, while PAHO has supported initiatives locally – for example, in school settings or in partnership with municipalities – this work has been limited in scope. PAHO's technical cooperation has not been able to fulfill all requests coming from Member States. Respondents pointed out the value-added of PAHO in promoting innovative solutions to health inequities. For example, on mitigating socioeconomic vulnerabilities, the Economics of NCDs team supports countries to develop specific measures on taxation to reduce affordability of tobacco and alcohol in order to benefit the health of vulnerable populations. Other equity issues that are not yet receiving sufficient focus include addressing the specific vulnerabilities of young people and addressing NCDs in older populations. Currently, the premature mortality indicator is defined as under 70, rather than under the national average life expectancy, which leaves out the issue of premature mortality of people over 70 years old.

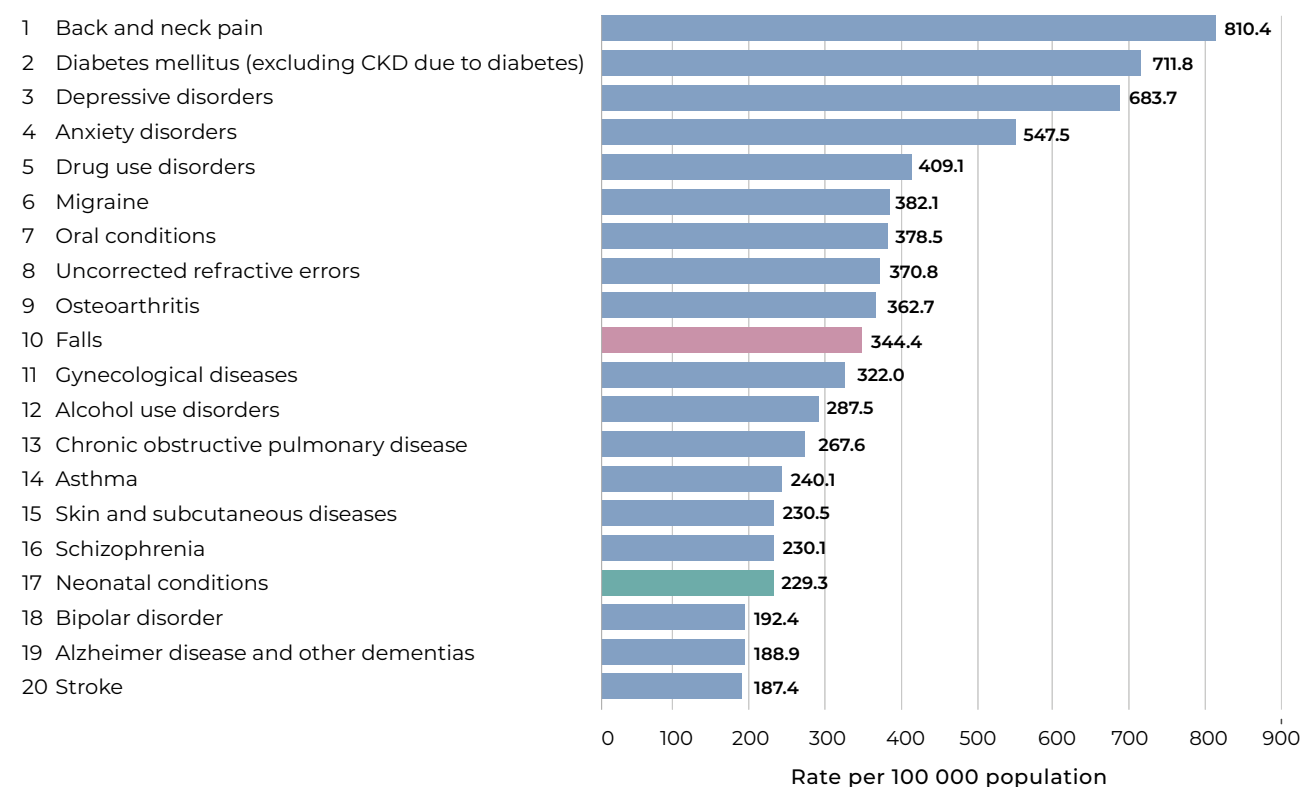
PAHO respondents at the regional level reported that collaboration between the NMH and health determinants units was not sufficiently developed in the health equity area. In addition, according to WHO respondents, capacity in WHO headquarters on health equity and NCDs was not fully utilized to support the NCD agenda regionally. Respondents from PAHO and ministries of health also pointed out limitations in PAHO's capacity to support work on social determinants of health issues in relation to NCDs. Although PAHO has good expertise at the regional level on gender, interculturality, and social determinants of health, the team does not have sufficient capacity to respond to all countries' requests on addressing equity issues and NCDs, which require a highly tailored approach.

## Disability

Interview respondents considered that the NMH department had been at the forefront of adopting a disability-inclusive approach in their work, particularly in terms of making training material, webinars, and other technical resources available in accessible formats, such as a web series fully accessible in sign language (78). However, less has been achieved in terms of taking into account the broader scope of disabilities in those initiatives, including mental health-related disabilities.

However, disability inclusion has not been as well integrated into PAHO's NCD programmatic activities. Disability is not mentioned specifically in the Regional POA on NCDs. Also, NCDs are mentioned only once as a risk factor in PAHO's Plan of Action on Disabilities and Rehabilitation (79). Disability caused by NCDs is not as well-documented and researched as mortality. The ENLACE portal provides data on disability-adjusted life years (DALYs) and years lived with disability (YLDs) disaggregated by sex and age (see Figure 16). Specific data on NCDs and disability are, however, scarce.

**Figure 16.** Top 20 causes of years lived with disability (YLDs), Region of the Americas, both sexes, all ages, 2019



Source: Pan American Health Organization. ENLACE: Data Portal on Noncommunicable Diseases, Mental Health and External Causes. Washington, D.C.: PAHO; 2023 [cited 16 January 2023]. Available from: <https://www.paho.org/en/enlace>.

NCDs are a major cause of impairments which lead to disabilities. Examples include amputations and blindness linked to uncontrolled diabetes and motor control impairments caused by stroke. The World Report on Disability (80) mentions that NCDs were estimated to account for two-thirds (66.5%) of all years lived with disability in low and middle income countries. Many people with disabilities also have a chronic NCD, highlighting the importance of regular access to health care for disabled people.

Some respondents said that focusing solely on mortality as the impact of NCDs and only on four disease groups had led to underestimating the importance of impairments and disabilities experienced by people living with NCDs. They called for a holistic approach for rehabilitation for all people that need it within the continuum of care for NCDs, taking into account the needs of persons with disability at the time of accessing health care. The current disease-based framework for NCDs does not optimally provide for this compared to a more holistic health systems approach.

## COVID-19

### Effect on people with NCDs and services for them

COVID-19 affected people with NCDs and responses to NCDs in several ways. First, people with NCDs, such as cardiovascular diseases, diabetes, or cancer, were disproportionately affected by COVID-19, had a higher risk of developing a severe form of the disease, and were more likely to die from it (see, for example, Chang et al. [81]). Almost all respondents to the survey that expressed an opinion (10 out of 11.91%) agreed or strongly agreed that COVID-19 had particularly affected people with NCDs.<sup>73</sup> In addition, there is emerging evidence that the long-term respiratory consequences of COVID-19 may be contributing to increased levels of chronic respiratory disease and potentially other NCDs (82).

In terms of NCD prevention and control, in general, there was a profound impact on continuity of care for people with NCDs according to a rapid assessment on this topic published by PAHO (83). For example, half (50%) of countries responded that healthcare provision for diabetes had been discontinued. In Chile, a study showed that fewer patients were admitted for cardiovascular diseases, and that those with underlying cardiovascular issues did not have them controlled, leading to a rise in infarcts (84). The main reasons cited for disruption of NCD services included cancellation of elective care services, clinical staff being reassigned to the COVID-19 response, and patients not presenting at health centers (85). Crucially, Ministry of Health staff designated to work on NCD services were largely redirected to work on the COVID-19 response, reducing personnel available to manage people with NCDs. Almost all countries reported that some or all NCD staff were supporting COVID-19 efforts either full time or part time. Prevention, screening, and early detection services were particularly affected. For example, in Argentina cancer screening dropped by 70% in the first year of the pandemic with the risk of consequences that have not yet been detected (86). Almost three-quarters of respondents to the survey that expressed an opinion (8 out of 11, 73%) agreed or strongly agreed that responses to COVID-19 meant that services for NCDs were badly affected.<sup>74</sup>

However, health services were disrupted to different degrees among countries in the Region as they adopted different measures to adapt NCD service delivery to try and maintain continuity of care. In Paraguay, chronic NCD patients received their medicines at home so that they did not have to go out. In many countries in the Region, the length of time covered by repeat prescriptions for stable patients was extended from one to three months. In addition, countries trained and equipped community health workers to conduct outreach to maintain access to treatment for chronic patients. In Peru, the public and private health sectors collaborated effectively to maintain access to essential services during the pandemic. Telehealth strategies became more important as a tool to support social distancing as well as to reduce waiting time for patients. However, there were major gaps, with broadband access available to only around 50% of the population of Latin America and the Caribbean (87).

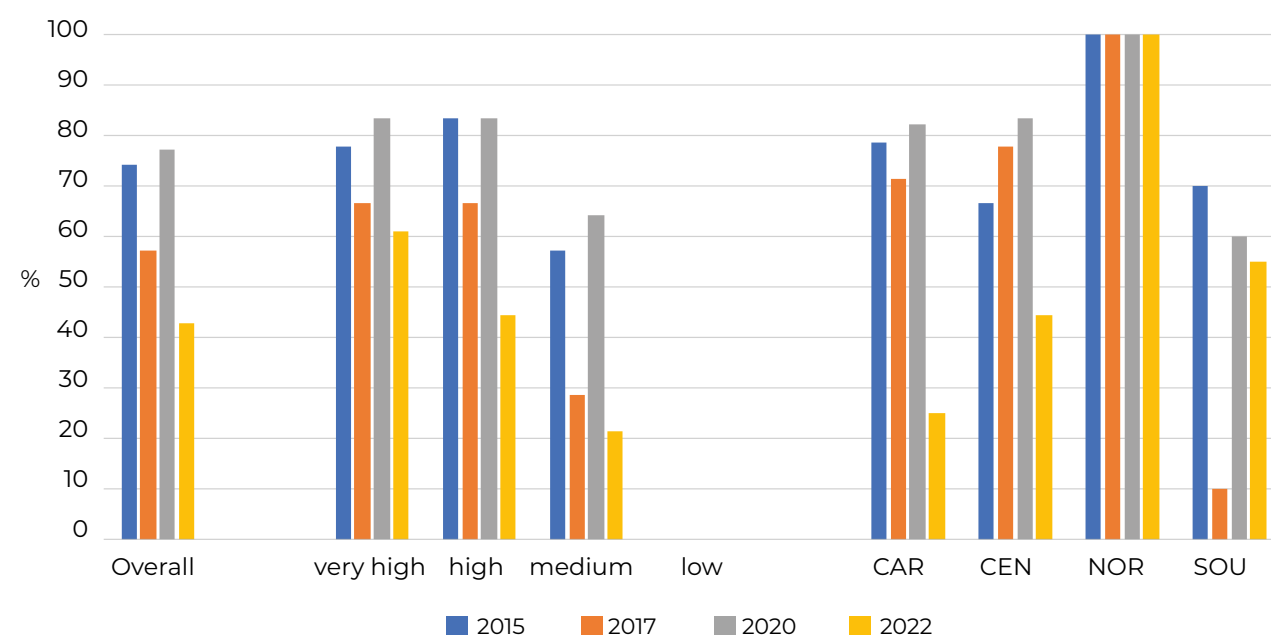
<sup>73</sup> Fourteen responses were received to this survey from non-State actors (8) and Collaborating Centers (6). Three respondents did not answer this question. One respondent from a Collaborating Center neither agreed nor disagreed with this statement.

<sup>74</sup> Fourteen responses were received to this survey from non-State actors (8) and Collaborating Centers (6). Three respondents did not answer this question. Three respondents, one from a Collaborating Center and two from non-State actors, neither agreed nor disagreed with this statement.



Beyond health services disruption, other planned NCD activities were also suspended or postponed due to COVID-19. The activities most frequently reported as suspended were the implementation of NCD surveys, where 16 countries (57%) postponed surveys. Screening people for cancer, diabetes, and other NCDs was also reported as postponed in 12 countries (43%) (83). Respondents from ministries of health reported a de-prioritization of NCDs as efforts and funds were reallocated to the COVID-19 response, resulting in a reduction in the implementation of NCD policies between 2020 and 2022. For example, based on data reported in 2022 (41) performance scores for Member States on the indicator on national communication campaigns to promote physical activity fell from 74% in 2020 to only 43% in 2022 (see Figure 17). A similar pattern is seen across all global NCD progress indicators (see Figure 2). It is likely that this lower performance reflects the COVID-19 pandemic and associated control measures. For indicators reliant on the existence of preestablished policies, if these policies were already in effect before the onset of the COVID-19 pandemic, the indicator would have remained fulfilled, except in cases where policy renewal was postponed.

**Figure 17. Average percentage performance score for Member States having implemented at least one recent national public awareness and motivational communication for physical activity including mass media campaigns for physical activity behavior change – overall and by HDI group and subregion**



Note: CAR, Caribbean; CEN, Central America; NOR, North America; SOU, South America.

### Effects on risk behavior

COVID-19 also affected people's behavior in terms of NCD risk factors. Respondents from ministries of health reported varied effects of COVID-19 and associated social distancing measures. For example, in Argentina, alcohol consumption in the 13-17 age group appeared to decrease because of reduced social interactions with peers, while in adults there was an increase of alcohol consumption as a coping mechanism against stress and isolation. In general, lockdown measures were associated with negative impacts on mental health and on physical activity, leading to increased sedentary behavior. The strategies of the tobacco and alcohol industries evolved with the onset of the pandemic to take advantage of the new context. For example, in some countries alcohol companies distributed bottled water and hydroalcoholic gel to improve their public image as part of their corporate social responsibility strategy, and the tobacco industry promoted misleading information on nicotine consumption as a protective factor against COVID-19 (88). Importantly, distribution of alcohol and tobacco products shifted online, selling directly to the consumers rather than going through regulated distributors. The industry successfully promoted alcohol as an essential product on mental health grounds. In general, access increased as controls were relaxed. This allowed the industry to bypass legal restrictions on marketing and distribution and poses new challenges to regulators to find common solutions regarding the trading of these products at the regional and subregional levels.

### Revealing health inequalities

The COVID-19 pandemic revealed underlying health inequalities associated with NCDs. In the United States of America, Black and Hispanic groups experienced higher rates of COVID-19 and higher associated mortality rates (87). Factors included higher prevalence of comorbidities such as obesity and NCDs. Disruptions of essential health services during the pandemic affected more vulnerable NCD patients. Interview respondents at the country level noted that remote or Indigenous communities had seen their access to health care reduced during the pandemic. For example, access to telemedicine was not possible due to the lack of Internet infrastructure in some areas. In Trinidad and Tobago, morbidity and mortality from cancer was reported to have increased particularly for those of lower economic background who could not access private health care.

### PAHO's technical cooperation on NCDs

In terms of PAHO's technical cooperation on NCDs during the COVID-19 pandemic, some of the initiatives promoted by PAHO to advance the NCD agenda came to a halt with the onset of the COVID-19 pandemic. New interventions or policy development were delayed. Flagship programs like HEARTS were highly affected, with its implementation being suspended in eight countries in the Region. However, PAHO maintained its technical cooperation on NCD care and treatment, and this response was considered proactive and effective by Ministry of Health respondents. Specific interventions were implemented to address the needs of people living with NCDs in relation to COVID-19 (see Box 6). Almost all respondents to the survey that expressed an opinion (10 out of 11.91%) agreed or strongly

agreed that PAHO's technical cooperation had effectively adjusted its support to remain relevant during the COVID-19 pandemic. Examples of PAHO's technical cooperation on NCDs in the face of the COVID-19 pandemic were gathered in the evaluation's three deep dives (see Box 7).

#### **Box 6. Examples of PAHO technical cooperation during COVID-19**

PAHO developed **COVID-19 protocols** for health personnel and for patients with NCDs, e.g., on diabetes (89). They launched a series of webinars, e.g., on respiratory disease and COVID-19 (78).

They also worked with civil society organizations to ensure **access to COVID-19 vaccines** and to **disseminate information**, for example with the Diabetes Association, the Cancer Society, Deaf Foundation, Lupus Foundation, and other organizations working with vulnerable groups.

PAHO also supported **new ways of delivering existing services** to overcome COVID-19 restrictions and support continuity of care for people living with NCDs. For example, in countries such as Peru, PAHO provided logistical support to the Ministry of Health and procured essential equipment to support the development of telemedicine. Through this and similar initiatives in other countries, PAHO has successfully contributed to addressing the digital gap in the Region, providing ministries of health with new digital tools that were used for management of chronic patients.

Finally, PAHO produced **evidence on COVID-19 and NCDs**. At the regional level, PAHO commissioned a number of studies on COVID-19 in relation to NCDs, health inequalities, and gender (83, 87, 90).

#### **Box 7. Experiences of PAHO technical cooperation during COVID-19 from the evaluation's three deep dives**

In **Costa Rica**, PAHO closely accompanied the Government in rolling out COVID-19 vaccination, prioritizing key individuals with chronic diseases who were at higher risk of complications from COVID-19.

In **Paraguay**, the cost of NCD care provision increased because of social distancing measures. Health services resources were redirected to respond to the COVID-19 pandemic. PAHO played a key role in supporting continuity of services for NCD patients, in particular offering logistics support and procuring IT equipment to facilitate the online communications of the Ministry of Health. PAHO also played a leadership role in the coordination of health agencies in the country during the pandemic.

In **Trinidad and Tobago**, a twin-track system was put in place to maintain essential health services alongside the COVID-19 response with support from PAHO. There were, however, delays in care that affected people living with an NCD, who relied on preexisting prescriptions. As in other countries, the community level was mobilized to support continuity of care. For example, PAHO provided the Diabetes Association with funding to do community vaccination outreaches. PAHO also provided guidance and support to the Ministry of Health on COVID-19 and shared information with the public on the virus.

#### **New opportunities and challenges**

A number of new opportunities and challenges arose for work on NCDs as a result of the COVID-19 pandemic. Opportunities include maximizing and sharing successful initiatives to reconnect with NCD patients who had interrupted their treatment during the first year of the pandemic and to catch up on screening and diagnosis of NCD patients. There were also promising initiatives developed during the pandemic that could helpfully modify approaches to NCD prevention and care. For example, some new collaborations were set up between public and private health services providers to ensure coverage of essential services, community health workers were trained via virtual means and equipped to follow up the treatment of chronic patients, and telemedicine approaches were developed which helped reduce waiting time for patients. PAHO has developed important tools in the domain of virtual training, webinars, and other online tools that could potentially allow the Organization to reach out directly to the public with information. More than half of respondents to the survey that expressed an opinion (6 out of 11, 55%) agreed or strongly agreed that efforts to build back better the NCDs programs following COVID-19 will lead to better NCD services.<sup>75</sup> There are also lessons learned from detrimental aspects of the COVID-19 response on NCDs, such as closing the first level of attention for extended periods of time and failing to prioritize the detection of cardiovascular diseases during the pandemic.

#### **Mental health and psychosocial support**

COVID-19 and associated social distancing measures highlighted the importance of mental health and psychosocial support. Awareness of detrimental effects on mental health resulted in increased funding for mental health as part of the COVID-19 response. Requests for technical cooperation on mental health by Member States also increased. This opportunity was well-utilized by the mental health program in PAHO; for example, through the creation of a High-Level Commission on Mental Health and COVID-19 (91) and a virtual training program on the Plan of Action on Mental Health (92). This translated into increased support at the country level too. In Ecuador, the Ministry of Health's Mental Health Plan was updated with support from PAHO, and three experts from the NMH department went to the country to support the community-based mental health reform. However, similar initiatives to raise awareness on the link between NCDs and COVID-19 and increase resources for the NCD agenda as a result seem not to have materialized to the same extent. NCDs remain under-prioritized by funders in the context of the COVID-19 pandemic and its recovery phase.

Yet, the COVID-19 pandemic has shed light on the implications of NCDs for the broader health agenda, including for the resilience of populations and health systems in the face of disease outbreaks, epidemics, and pandemics. Some respondents from funding partners highlighted the need to recast the NCD agenda in terms of how to better prepare

<sup>75</sup> Fourteen responses were received to this survey from non-State actors (8) and Collaborating Centers (6). Three respondents did not answer this question. Five respondents, two from a Collaborating Center and three from non-State actors, neither agreed nor disagreed with this statement.

health systems to face external shocks including linkages to environmental health. One respondent noted that, “Risk factors are not only risk factors for NCDs, they need to be addressed for a healthy life and prevent all sorts of communicable diseases.”

### *Focus on economic recovery from COVID-19*

There are concerns that the current strong focus on economic recovery from the effects of COVID-19 and responses to it could constitute a threat to some aspects of NCD responses, particularly economic measures. There is a risk that the justifiable need to focus on economic recovery could potentially be used as an argument to reverse or stall the introduction of economic measures to address NCD risk factors, such as taxes on sugar-sweetened beverages, alcohol, and tobacco. But these arguments may be based on a false dichotomy, between economic and public health benefits, because these measures also have economic benefits.

### *Other emergencies*

While the COVID-19 pandemic has constituted an unprecedented shock to health systems, other emergencies have affected countries in the Region during the period of the regional NCD POA. In particular, the political crisis in Venezuela, which escalated from 2015, has resulted in more than 7 million Venezuelans migrating outside their country (93). This has presented new challenges in neighboring countries for healthcare delivery for migrants, in general, and for ensuring continuity of care for migrants with chronic illnesses in particular. While countries in the Region have generally granted the right to emergency care to migrants, access to prevention, screening, and treatment for chronic diseases has been uneven. In addition, countries have experienced other natural disasters and political crises that have resulted in protracted emergencies. In such contexts, the framing of the NCD program requires a targeted approach, as illustrated in the example of Haiti (see Box 8).

### **Box 8. Countries experiencing protracted emergencies require a targeted approach to NCDs: the example of Haiti**

Haiti has experienced the most protracted humanitarian crisis in the Region. In the past few years, the country has experienced a political crisis, gang violence, and cholera outbreaks. In this context, the efforts of the Ministry of Health have focused on water and sanitation, the cholera response, and other communicable diseases. Although the Ministry of Health management is responsible for the field of NCDs, and an NCD focal point and program exist, there is no specific unit dedicated to this area. Yet, NCDs have become the main cause of death in Haiti, rising from 47% in 2000 to 65% in 2019. In this respect, Haiti exemplifies the link between a fragile health system and the lack of progress of NCD policies despite the rising burden of NCDs. In the Region, Haiti has the lowest NCD performance score of any Member State. This is unsurprising given that it also has the lowest HDI (see Figure 15).

In this context, the PAHO country office’s technical cooperation on NCDs has focused on key building blocks: the national strategic framework, coordination of the response, and integration of NCD care services into the emergency response. The PAHO country office has played a key role in the adoption of an NCD strategic plan by the Ministry of Health, and the document is now pending validation by other partners.

PAHO has also prioritized the mobilization and coordination of other actors in Haiti to support the Ministry of Health in the NCD response. There are resources for health programs available in Haiti. However, these are not focused on NCDs. One respondent considered that, “There is a significant volume of funding in the country, we must show funders that if we do not treat NCDs, the objectives of other programs will not be achieved.” There are also well-established local actors that work on community health services delivery that could be mobilized on the NCD agenda, such as STOP Accidents working on road safety, Zanmi Lasante that receives CDC funding to work on cervical cancer in the southern region of Haiti, the Haitian Center on Arterial Hypertension, groups working on cancer, as well as international NGOs such as Partners in Health. While a task force on NCDs, uniting national and international actors, had been active in the past, without strong support from the Ministry of Health the meetings have discontinued. The PAHO country office is working to reactivate this task force, but this has not yet happened.

PAHO’s technical cooperation has also focused on integrating NCD management into the emergency response. It has supported the development of a National Breastfeeding Guide, and worked to promote it in emergency situations, together with the Nutrition Unit and in partnership with UNICEF and the World Food Programme. Given the lack of human resources and functioning public health facilities, PAHO has worked with civil society and community partners to support continuity of care for chronic patients. Within its emergency operations, PAHO supported mobile clinics of international NGOs, providing them with means to conduct screenings and medical supplies. PAHO also supported multipurpose community health workers to ensure continuity of care in areas where health facilities were damaged or closed down because of violence.

The PAHO country office faces several challenges in conducting work on NCDs in Haiti. Excluding the area of mental health, which has benefited from increased funding within the COVID-19 response, the NCD area has remained one of the smallest lines of investment.

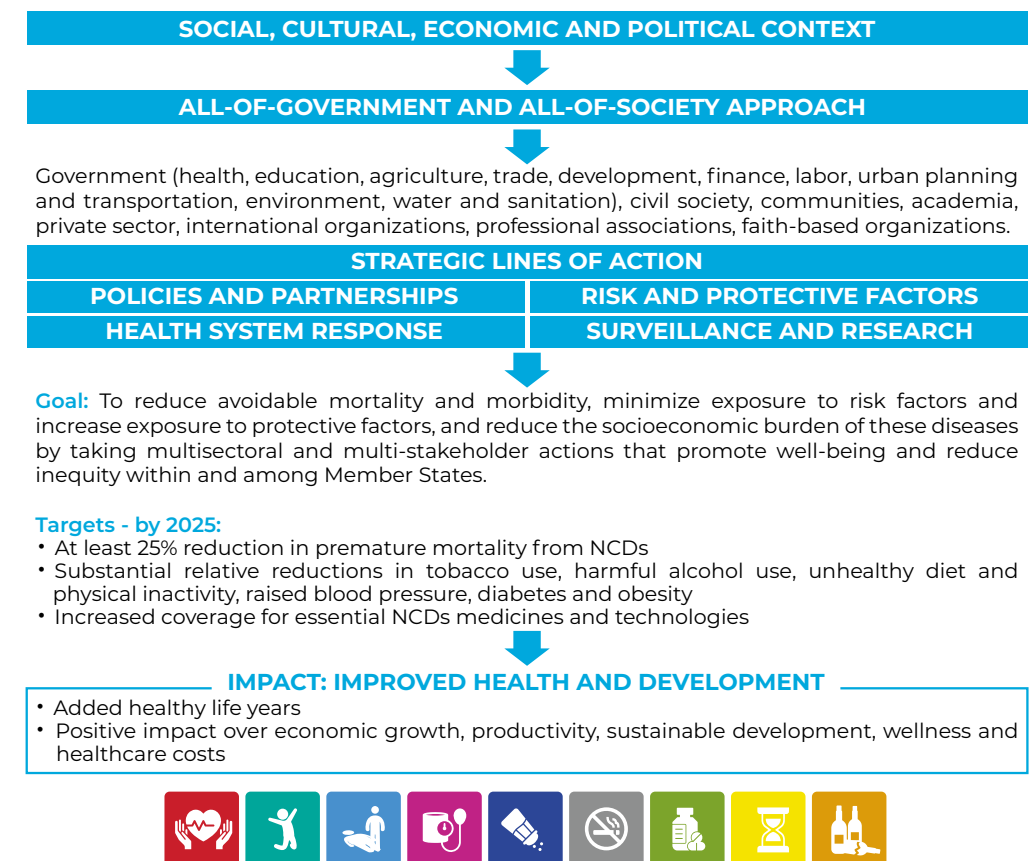
For example, NCD risk factors received only USD 3000 investment in 2021, compared to USD 151 000 for risk factors for communicable diseases. Insecurity has hindered surveillance efforts, and despite the need for more data on NCDs and risk factors, collecting data has been difficult as field visits to clinics were canceled. In 2018, the PAHO country office tried to initiate a survey in schools on NCD risk factors, but they did not succeed in completing the activity due to insecurity. No STEPS survey has been conducted in Haiti, only the Global Youth Tobacco Survey in 2000 and 2005, the results of which are now outdated. The level of support to the PAHO country office in Haiti, in terms of the regular support or experts and technical assistance, is currently insufficient to scale up its work on NCDs and to better integrate NCD policies in the context of Haiti. Crucially, training material, webinars, and events are largely not available in French, which constitutes a barrier for Haitian participants.

## Reflections on the PAHO NCD technical cooperation theory of change

The inception phase of this evaluation included the facilitation of a theory of change development process by the NMH department. This process served several purposes. During the inception phase, it nurtured the evaluation team's understanding of the program, and of how the PAHO NMH team envisaged their role in supporting the strategies outlined in the POA. In addition, the revised theory of change helped guide data collection and analysis to investigate the plausibility of the change pathways described. Finally, it provided the NMH program with an updated change model to support their strategic reflection on the program going forward.

The Regional POA on NCDs included a diagrammatic representation of its approach to achieving expected results and influencing health and development outcomes (see Figure 18). This model served as a starting point to facilitate the discussion of a revised theory of change by NMH.

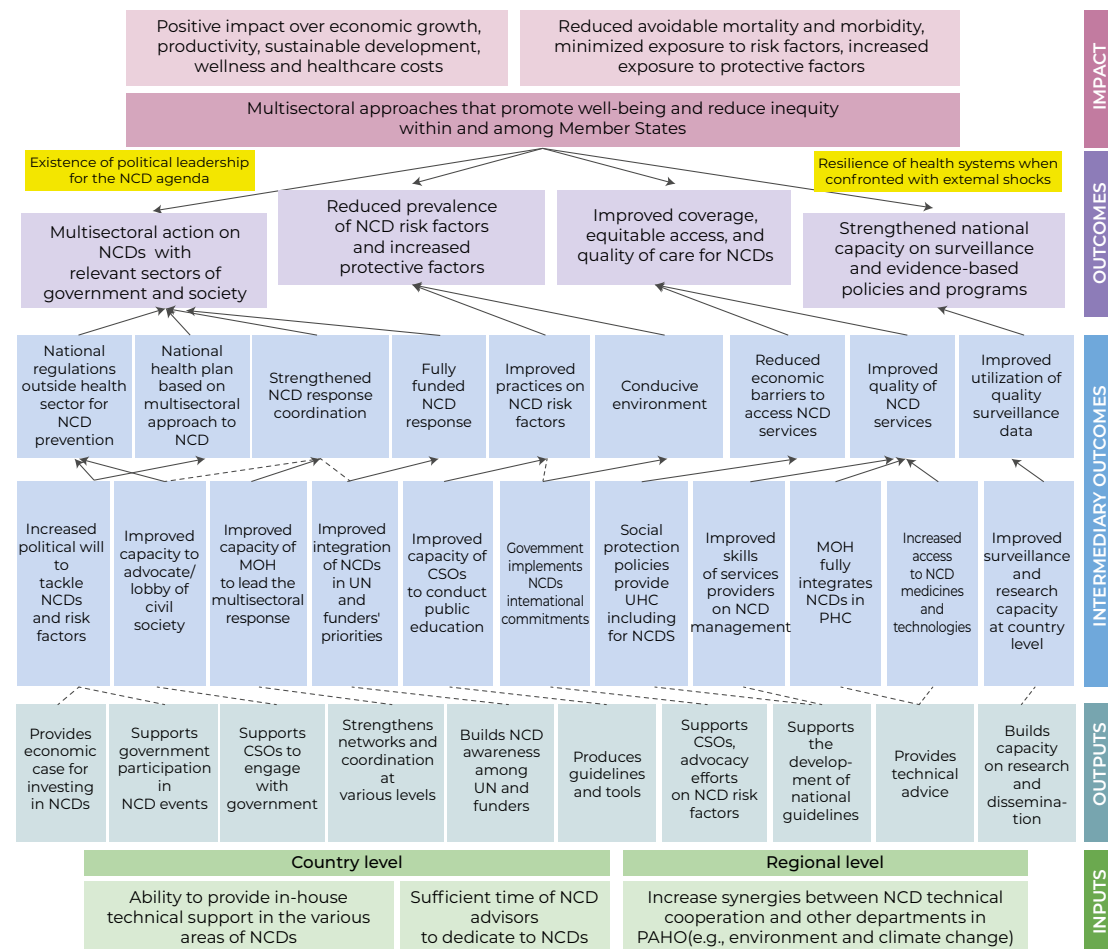
Figure 18. Regional framework for NCD prevention and control



Source: Pan American Health Organization. Plan of Action for the Prevention and Control of Noncommunicable Diseases in the Americas 2013-2019. Washington, D.C.: PAHO; 2014. Available from: <https://iris.paho.org/handle/10665.2/35009>.

Based on the process described above, a reconstructed theory of change was developed (see Figure 19). This identifies causal pathways more clearly, presents a clear problem statement, and makes assumptions more explicit in comparison to the earlier framework/ logic model. For more details, including larger diagrams, see Annex 7 in Volume II.

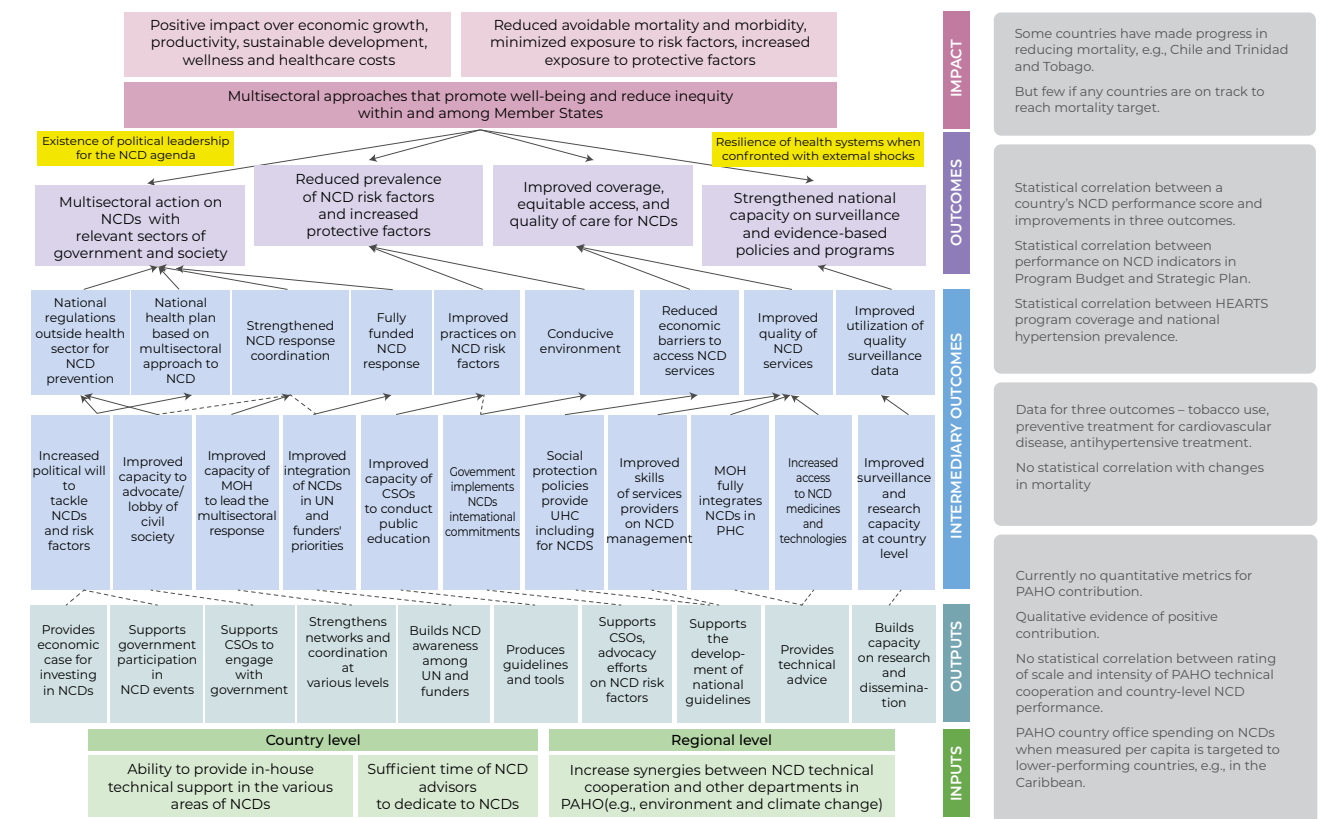
Figure 19. Reconstructed theory of change for the NCD Plan of Action



The evaluation team used the revised theory of change to guide data collection and enquire about the different dimensions of PAHO's technical cooperation with interview respondents, particularly those at the country level. The revised theory of change also helped guide quantitative analysis of data to assess the extent to which evidence supported or challenged the causal pathways and assumptions outlined. Key findings in relation to the causal pathways outlined in the theory of change are presented in Figure 20.<sup>76</sup>

<sup>76</sup> For more detail, see Figures 6 and 7.

Figure 20. What evidence has the evaluation identified related to causal chains proposed in the theory of change?



A follow-up workshop was held with two participants from the NMH department on 1 February 2023 to discuss how evidence emerging from the evaluation might support or diverge from identified causal pathways in the revised theory of change. The session covered a reminder of the theory of change model developed during the inception phase, a presentation of the evidence gathered by the evaluation supporting or diverging from the causal pathways identified in the theory of change, and a facilitated discussion of proposed modifications to the theory of change model and implications for the design of the program in future. The output of this meeting, in addition to providing an up-to-date change model for the program, has been to contribute to identifying areas where the program strategy could be adjusted to better achieve its objectives. Areas emphasized by participants included strengthening national NCD multisectoral mechanisms, better integrating NCD prevention and treatment services into a primary health care approach and increasing support for NCDs by exploring linkages to other public health issues such as COVID-19 recovery, pandemic preparedness, and environmental health.

This work was the basis of a final workshop as part of preparing the NMH planning process. This workshop took place on 25 April 2023 and was co-facilitated by NMH and the evaluation team in English and Spanish. It examined in more detail NMH's contribution to each line of action in future. NCD focal points in countries were invited to participate. The workshop included a presentation of the theory of change model, followed by group work on each of the following areas: risk factors, NCD management, and surveillance.

## Conclusions and recommendations

The conclusions and recommendations in this section derive from the findings in the previous section. Each recommendation is presented in a table which includes details of how this might be carried out, by whom, and with what level of priority. Priorities are immediate, short-term, and long-term. While these timeframes are not rigid, immediate is envisaged as within six months, short-term within one year, and long-term within two years.

### Relevance

PAHO's work on NCDs remains extremely relevant to the Region but it is based on a POA that is now 10 years old. Based on the evaluation's findings, the evaluation team have identified a number of options for addressing this. These include:

- Extending the end date of the POA; i.e., roll it over. This was done by WHO for the NCD Global Action Plan (GAP) with updated targets. PAHO's POA already has targets for 2025. However, many things have changed in the last 10 years, including lessons learned from COVID-19 and a broadening of the NCD agenda to include mental health and air pollution.
- Operating under the NCD GAP, rather than developing a new regional POA. While this would be the simplest option, as the NCD GAP has already been extended, it would not reflect important contextual factors of the Region.
- Developing a more focused POA, which is more operational in nature, and which focuses even more on the best buys, which are feasible to implement and where PAHO can provide support.
- Developing an updated NCD POA which is broadly similar to the current one.
- Developing regional policies or strategies related to NCDs, as they affect particular populations.

If any form of new POA is developed, PAHO will need to decide on its scope; for example, whether it is more focused on identified best buys, or whether it is expanded to include other areas – perhaps more NCDs, mental health, and air pollution. In general, the findings of the evaluation support the development of NCD policies, strategies, and POAs that are comprehensive and inclusive, in terms of disease groups and risk factors, rather than policies, strategies, or POAs that focus on individual disease groups or risk factors.

The recommendation below is based on the findings of the evaluation, discussions with PAHO based on the options identified above, and the recognition that PAHO is at liberty to develop regional policies, strategies, and POAs that reflect the particularities and specificities of the regional context.

Support provided by PAHO has been highly relevant and is valued by Member States. However, it might be helpful to focus more on those areas particularly valued by Member States, such as working in partnership and providing support to mobilize resources.

| # | RECOMMENDATION  | HOW (suggested lines of action)  | BY WHOM   | PRIORITY  |
|---|---|--|---|-----------|
| 1 | <b>PAHO to update policy and strategy considering the current context, situation, and needs and better align with the GAP, ensuring that actions:</b> | <ul style="list-style-type: none"> <li>• Are complementary to the GAP and aligned to its monitoring and evaluation framework.</li> <li>• Include measures/metrics to assess the contribution of PAHO intergovernmental partners and non-State actors. PAHO to consider using a grid to assess the extent of different technical cooperation modalities in different countries. This could be scored regionally by NMH in addition to being scored by PAHO country office staff and Ministry of Health representatives. Other metrics could be measured to reflect specific actions in any future POA.</li> <li>• Use a health systems approach framed around primary health care and universal health coverage which recognizes the importance of resilience of health systems particularly in the face of emergencies and humanitarian crises.</li> <li>• Are developed in a participatory manner with involvement of Member States, intergovernmental partners, and non-State actors, including civil society.</li> <li>• Are based on country-level situation analyses focused on identifying and addressing unmet needs/gaps.</li> </ul> | <p>Lead: NMH</p> <p>Collaboration: CSC, ERP, GBO, HSS, PHE, PAHO Country Offices</p> <p>Member States</p> | Immediate |

## Coherence

While the POA's focus on four disease groups and four risk factors has resulted in highly technical interventions in these areas, there are a number of areas where there could be greater coherence. These include across and between the four disease groups and four risk factors and more broadly with departments of PAHO and WHO.

| # | RECOMMENDATION  | HOW (suggested lines of action)  | BY WHOM   | PRIORITY  |
|---|---|--|---|-----------|
| 2 | <b>PAHO to take steps to maximize coherence of its work on NCDs</b> | <ul style="list-style-type: none"> <li>Finding ways in which those working on particular disease groups and risk factors can work together, e.g., in relation to strengthening health systems for disease groups and economic measures to address multiple risk factors.</li> <li>Further enhancing coherence between different parts of NMH, e.g., those working on NCDs and mental health.</li> <li>Given the 5x5 approach to NCDs, PAHO to be coherent in ensuring linkages between work on air pollution specifically and climate change more generally, within and beyond the Organization; for example, with other United Nations agencies.</li> <li>Further enhancing coherence between NMH and other parts of PAHO, such as HSS, Health Promotion, Life Course, and Environmental Health.</li> <li>Further enhance coherence between regional, subregional, and Country Offices.</li> <li>PAHO and WHO finding ways to make their engagement more coherent and to build synergies, particularly in terms of supporting Member States.</li> </ul> | Lead: NMH<br><br>Collaboration: CSC, DHE, EIH, HSS, PBE | Immediate |

## Coordination

PAHO has coordinated extremely well on responses to NCDs with Member State governments in general, and ministries of health in particular. However, experiences of ministries of health working to build effective multisectoral responses to NCDs are mixed. PAHO has not focused specifically on supporting countries in this area or on measuring and reporting progress. While there are examples of PAHO working constructively with some intergovernmental bodies and non-State actors, this has been less intentional and systematic than work with governments. There are specific concerns about different approaches and standards regarding relationships with industry and conflict of interest among different intergovernmental partners.

| # | RECOMMENDATION  | HOW (suggested lines of action)   | BY WHOM   | PRIORITY   |
|---|---|---|---|------------|
| 3 | <b>PAHO to enhance coordination with actors beyond ministries of health</b> | <ul style="list-style-type: none"> <li>To place more emphasis on supporting ministries of health to effectively coordinate a multisectoral response to NCDs across and beyond government.</li> <li>To identify ways to work more intentionally and systematically with intergovernmental bodies and non-State actors, particularly civil society organizations, including developing a regional network or informal platform on NCDs.</li> <li>To do the above as part of a whole-of-organization approach, which needs to be developed and defined.</li> <li>To engage with United Nations agencies at global (through UNIATF), regional, and country/UNCT level including on defining roles and responsibilities based on comparative advantage and leading adoption of a common position on managing conflict of interest in relation to commercial determinants of health.</li> <li>At the country level, to identify areas of common agenda with other intergovernmental partners and to work with the UN Resident Coordinator to identify the best way of incorporating and prioritizing work on NCDs, including in the UNCT, Common Country Assessments, UN Sustainable Development Cooperation Frameworks, and humanitarian clusters (where applicable).</li> <li>To identify areas where PAHO can work constructively with the private sector; that is, where public health concerns and commercial imperatives are not in conflict – e.g., promotion of physical activity.</li> </ul> | Lead: NMH<br><br>Collaboration: CSC, DHE, ERP, HSS, LEG, PAHO Country Offices<br><br>UNCT/civil society | Short-term |

## Effectiveness

While PAHO reports indicate that the POA has been implemented relatively effectively, this is based on targets achieved. When progress is considered in terms of the percentage of Member States achieving a particular target, progress has been relatively modest with a demonstrable setback in 2020–2021 because of the COVID-19 pandemic. It is very difficult to assess the contribution made to the POA by PAHO (or by intergovernmental bodies or non-State actors) in the absence of any target measures. While reports on progress against the POA focus a great deal on what has been achieved in and by Member States, there is almost nothing on what PAHO, intergovernmental bodies, or non-State actors have contributed. While there is evidence from the evaluation that NCD measures implemented by countries are contributing to NCD outcomes, there is currently no evidence that these improved outcomes are leading to improved impact, for example, in terms of reduced premature mortality due to NCDs. It is of particular concern that targets for reducing premature mortality due to NCDs are extremely unlikely to be met.

| # | RECOMMENDATION  | HOW (suggested lines of action)   | BY WHOM   | PRIORITY  |
|---|---|---|---|-----------|
| 4 | <b>PAHO Secretariat and Member States to identify ways in which progress on addressing NCDs can be accelerated dramatically</b> | <p>This will be needed if there is to be any prospect of countries meeting mortality targets. Key elements to include:</p> <ul style="list-style-type: none"> <li>• Massive expansion of human and financial resources</li> <li>• Scaling up effective programs</li> <li>• Working increasingly with others</li> <li>• Measuring and reporting progress candidly.</li> </ul>  | <p>Lead: NMH</p> <p>Collaboration: EIH, ERP, PBE</p>                                  | Immediate |
| 5 | <b>PAHO to identify ways to strengthen progress on multisectoral action in countries</b>  | <ul style="list-style-type: none"> <li>• Establish, revitalize, and strengthen national NCD coordination mechanisms by supporting and strengthening Ministry of Health capacity to lead these.</li> <li>• Encourage learning about what works in multisectoral coordination for NCDs by sharing experiences across and beyond the Region including by developing a regional platform where CSOs/Collaborating Centers and other country actors can engage more informally to discuss country experiences and needs.</li> <li>• Ensure that the indicator on the existence and functioning of such mechanisms is included in relevant indicator sets and progress reports.</li> <li>• Strengthen PAHO capacity to support multisectoral collaboration, particularly in Country Offices.</li> </ul> | <p>Lead: NMH</p> <p>Collaboration: CSC, PAHO Country Offices</p> <p>Member States</p> | Immediate |

| # | RECOMMENDATION   | HOW (suggested lines of action)  | BY WHOM  | PRIORITY   |
|---|--|--|--|------------|
| 6 | <b>PAHO to identify ways to strengthen work on NCD risk factors</b>                            | <ul style="list-style-type: none"> <li>• Maintain focus on addressing structural and environmental determinants of health guided by the “best buys” for those risk factors where this is already done; i.e., tobacco use, harmful use of alcohol, and unhealthy diet.</li> <li>• Emphasize common and innovative approaches on commercial determinants of health, strengthening alignment at the subregional level.</li> <li>• Place greater emphasis on addressing physical activity through structural programs (urban planning, schools) including linkages to environmental determinants of health and not relying solely on individual behavior change.</li> <li>• Expand links to work focused on addressing air pollution.</li> <li>• Prioritizing action in countries based on analysis of where progress on risk factors has been most limited. This will likely vary from country to country.</li> </ul> | <p>Lead: NMH</p> <p>Collaboration: DHE, HSS, PAHO Country Offices</p>      | Short-term |
| 7 | <b>PAHO to identify ways to strengthen work on main NCD groups</b>                             | <ul style="list-style-type: none"> <li>• Adopt a life course, patient-centered approach to NCD care focusing on synergies between different disease groups at the service delivery level.</li> <li>• Identify ways of including more elements relating to rehabilitation and disability.</li> <li>• Identify ways in which work on NCDs and mental health can be linked and connected.</li> <li>• Develop and support models of care for people with NCDs in emergency settings.</li> <li>• Better understand the barriers to country utilization of the PAHO Strategic Fund for essential NCD medicines, and work with countries to address the barriers and utilize the Fund to expand access to NCD medicines.</li> </ul>   | <p>Lead: NMH</p> <p>Collaboration: CSC, HSS, PHE, PAHO Country Offices</p> | Short-term |
| 8 | <b>PAHO to identify ways to further strengthen NCD surveillance, monitoring and evaluation</b> | <ul style="list-style-type: none"> <li>• Ensure that the POA’s indicator framework is simplified by aligning more closely to global NCD monitoring.</li> <li>• Further emphasize integrating NCD surveillance into existing national systems, including a shift away from multiple thematic surveys to including a set of key questions in broader data collection processes.</li> <li>• Ensure any future POAs are independently evaluated at their mid-point and at the end.</li> <li>• Commission research to better understand gender equality, equity, and human rights issues in relation to NCDs.</li> </ul>  | <p>Lead: NMH</p> <p>Collaboration: DHE, EIH, PBE, PAHO Country Offices</p> | Immediate  |



## Efficiency

There were many positive reports to the evaluation of PAHO working efficiently in relation to NCDs, achieved by working in partnership with others and by supporting responses which are embedded in national government responses rather than developing parallel projects. It is concerning that PAHO does not currently measure or report on the efficiency of its support to NCD responses in the Region and therefore finds it difficult to answer questions about its efficiency.

| # | RECOMMENDATION  | HOW (suggested lines of action)   | BY WHOM                         | PRIORITY  |
|---|---|---|---------------------------------|-----------|
| 9 | <b>PAHO to develop metrics through which it can measure and assess the efficiency of its support to NCD responses in the Region</b> | <ul style="list-style-type: none"> <li>Convene working group to identify ways of measuring efficiency of PAHO's work on NCDs. This measurement could include both quantitative and qualitative elements.</li> <li>Develop description and manual/guidelines for monitoring efficiency indicator(s).</li> <li>Test indicators and roll out their use.</li> </ul> | Lead: PBE<br>Collaboration: NMH | Long-term |

## Sustainability

PAHO has a long track record of work in the Region and is seen as a trusted partner. In this regard, it is likely that PAHO and its work will be sustained. However, in relation to work on NCDs specifically, reliance on a small number of funders is potentially a threat to sustainability. While there are examples of PAHO work which are likely to be sustainable, including virtual models of training, there are others which are likely to be less so; for example, multiple, topic-specific, externally funded surveys.

| #  | RECOMMENDATION   | HOW (suggested lines of action)  | BY WHOM   | PRIORITY  |
|----|--|--|---|-----------|
| 10 | <b>Member States and PAHO Secretariat to identify ways to enhance the sustainability of its work on NCDs</b> | <ul style="list-style-type: none"> <li>Place greater emphasis on resource mobilization as a key element of technical cooperation on NCDs, including at the country level.</li> <li>Broaden the funder base for work on NCDs, including by collaborating more closely with WHO NCD on fundraising strategies for the NCD agenda (e.g., follow-up work on investment case) and ensuring equitable distribution of NCD funding to the Region.</li> <li>Review the ways PAHO works through a sustainability lens; i.e., identifying interventions which are potentially more and less sustainable.</li> <li>Explore linkages of NCD agendas to health system resilience and pandemic preparedness, as well as climate change.</li> </ul> | Lead: ERP<br>Collaboration: CSC, GBO, NMH, PBE, PAHO Country Offices<br>Member States | Immediate |

## Gender equality, equity, and human rights

Gender has been well integrated in surveillance and research on NCDs. However, gender-diverse people are not considered in binary sex-disaggregation. Member States have faced challenges in addressing the tobacco and alcohol industries' emerging marketing practices targeting girls and adolescents to renew their client base. Although PAHO has good expertise at the regional level on gender, interculturality, and social determinants of health, the team does not have sufficient capacity to respond to all countries' needs on addressing equity issues in NCDs, as those require a highly tailored approach. Issues of ethnicity and interculturality are of special relevance in the Region. There are missed opportunities to use human rights instruments to advance the NCD agenda. In particular, there has been limited collaboration between WHO headquarters and PAHO's legal team. Collaboration with civil society has been helpful, but there is a lack of a coordination platform to better engage with stakeholders working on child rights, gender equality, cultural rights, and environmental rights on NCD-related issues. The current disease-based framework for NCDs has hindered the inclusion of impairments experienced by people living with NCDs as well as the integration of rehabilitation services in the continuum of care for NCDs.

| #  | RECOMMENDATION  | HOW (suggested lines of action)  | BY WHOM  | PRIORITY   |
|----|---|--|--|------------|
| 11 | <b>PAHO to provide evidence and leverage collaborations to advance the gender equality, equity, and human rights agenda in NCDs</b> | <ul style="list-style-type: none"> <li>Develop, as part of the PAHO NCD data portal, a section to disseminate existing NCD data with an analysis of gender, equity, and human rights.</li> <li>Support research and disseminating evidence on how to integrate gender and equity analysis in the NCD agenda, in particular on specific issues faced by gender-diverse people and on addressing strategies of the industry to market unhealthy commodities targeting women, girls, and adolescents.</li> <li>Develop a network to support PAHO's work at the country level on gender and human rights in the NCD agenda, in collaboration with CSOs working on child rights, cultural or environmental rights, as well as with social determinants of health and health equity experts.</li> <li>Improve collaborations with WHO human rights legal advice to leverage global expertise to advance the NCD agenda regionally, while improving the contribution of the Region to the global NCD agenda.</li> <li>Integrate rehabilitation services within the continuum of care for NCDs and fostering disability inclusion through a patient-centered, health systems approach to NCD services delivery.</li> </ul> | Lead: DHE<br>Collaboration: CSC, EIH, LEG, NMH, PAHO Country Offices | Short-term |

## COVID-19

Initiatives developed during the pandemic on sustaining continuity of care for NCDs may provide useful lessons learned, from both positive and negative experiences, to inform the design of NCD services in the COVID-19 recovery period and to help prepare health systems for future shocks. Mental health has been well prioritized during the pandemic. However, similar awareness and resources to address the link between NCDs and COVID-19 seem to have not yet materialized to the same extent. Beyond COVID-19, countries in the Region have faced different types of emergencies that have disrupted both health services and progress on NCD policies.

| #  | RECOMMENDATION  | HOW (suggested lines of action)   | BY WHOM  | PRIORITY   |
|----|---|---|--|------------|
| 12 | <b>PAHO's technical cooperation on NCDs to take into account lessons learned from COVID-19 and ensure that NCDs programs contribute to population's and health systems' resilience in the face of emergencies and humanitarian crises</b> | <ul style="list-style-type: none"> <li>Ensuring that NCDs are included in PAHO's reporting to Member States on the lessons from the COVID-19 pandemic.</li> <li>Documenting and discussing initiatives arising from COVID-19 experience such as resorting to e-health, developing the role of community level services in chronic care, using virtual modalities for trainings, and prioritizing continuity of cardiovascular disease detection during emergencies.</li> <li>Recasting the NCD agenda in terms of how to better prepare health systems to face external shocks, including in terms of improving population's resilience to communicable diseases and including linkages to environmental health.</li> <li>Dedicating resources, evidence, and technical support to advance the NCD agenda in emergency contexts.</li> </ul> | Lead: PHE<br>Collaboration: CSC, NMH, PAHO Country Offices | Short-term |

## References

- Pan American Health Organization. Plan of Action for the Prevention and Control of Noncommunicable Diseases in the Americas 2013-2019. Washington, D.C.: PAHO; 2014. Available from: <https://iris.paho.org/handle/10665.2/35009>
- World Health Organization. Global Action Plan for the Prevention and Control of Noncommunicable Diseases. Geneva: WHO; 2013. Available from: <https://www.who.int/publications/i/item/9789241506236>
- Pan American Health Organization. CD58/INF/6 – Plan of Action for the Prevention and Control of Noncommunicable Diseases: Final Report. Washington, D.C.: PAHO; 2019. Available from: <https://www.paho.org/en/documents/cd58inf6-plan-action-prevention-and-control-noncommunicable-diseases-final-report>
- Pan American Health Organization. Strategic Plan of the Pan American Health Organization 2020-2025: Equity at the Heart of Health. Washington, D.C.: PAHO; 2019. Available from: <https://iris.paho.org/handle/10665.2/52473>
- Pan American Health Organization. Program Budget of the Pan American Health Organization 2022-2023: Protect, Recover and Build Stronger. Washington, D.C.: PAHO; 2022. Available from: <https://iris.paho.org/handle/10665.2/55782>
- Pan American Health Organization. Plan of Action for the Prevention and Control of Noncommunicable Diseases: Midterm Review. Washington, D.C.: PAHO; 2016. Available from: <https://iris.paho.org/bitstream/handle/10665.2/33737/CE158-INF-13-C-e.pdf?sequence=7&isAllowed=y>
- Pan American Health Organization. Strategy and Plan of Action to Strengthen Tobacco Control in the Region of the Americas (2018-2022). Washington, D.C.: PAHO; 2019. Available from: <https://iris.paho.org/handle/10665.2/51574>
- Pan American Health Organization. Plan of Action for the Elimination of Industrially Produced Trans-Fatty Acids 2020-2025. Washington, D.C.: PAHO; 2020. Available from: <https://iris.paho.org/handle/10665.2/51965>
- Pan American Health Organization. Plan of Action for the Prevention of Obesity in Children and Adolescents. Washington, D.C.: PAHO; 2014. Available from: <https://iris.paho.org/handle/10665.2/49138>
- Pan American Health Organization. Resolution CD56.R9: Plan of Action for Cervical Cancer, Prevention and Control 2018-2030. Washington, D.C.: PAHO; 2018. Available from: [https://www3.paho.org/hq/index.php?option=com\\_docman&view=download&alias=46592-cd56-r9-e-poa-cervical-cancer&category\\_slug=56-directing-council-english-9964&Itemid=270&lang=en](https://www3.paho.org/hq/index.php?option=com_docman&view=download&alias=46592-cd56-r9-e-poa-cervical-cancer&category_slug=56-directing-council-english-9964&Itemid=270&lang=en)
- World Health Organization. Mid-point evaluation of the implementation of the WHO global action plan for the prevention and control of noncommunicable diseases 2013-2020 (NCD-GAP). Geneva: WHO; 2020. Available from: [https://cdn.who.int/media/docs/default-source/documents/about-us/evaluation/ncd-gap-final-report.pdf?sfvrsn=55b22b89\\_25&download=true](https://cdn.who.int/media/docs/default-source/documents/about-us/evaluation/ncd-gap-final-report.pdf?sfvrsn=55b22b89_25&download=true)
- Pan American Health Organization. PAHO's Technical Cooperation in Human Resources for Health – a concept note (internal document). Washington, D.C.: PAHO; 2022

13. Pan American Health Organization. NCDs at a Glance: Noncommunicable Disease Mortality and Risk Factor Prevalence in the Americas. Washington, D.C.: PAHO; 2019. Available from: <https://iris.paho.org/handle/10665.2/51696>
14. UN Interagency Task Force on NCDs. COVID-19 and NCF Risk Factors. Geneva: World Health Organization and United Nations Development Programme; 2020. Available from: <https://www.who.int/docs/default-source/ncds/un-interagency-task-force-on-ncds/uniatf-policy-brief-ncds-and-covid-030920-poster.pdf>
15. World Health Organization. Saving Lives, Spending Less: A Strategic Response to Noncommunicable Diseases. Geneva: WHO; 2018. Available from: <https://apps.who.int/iris/handle/10665/272534>
16. Pan American Health Organization. "Best Buys" for the Prevention and Control of NCDs. Washington, D.C.: PAHO; [date unknown]. Available from: [https://www3.paho.org/hq/index.php?option=com\\_content&view=article&id=14418:ncds-graphic-materials-best-buys&Itemid=0&lang=en#gsc.tab=0](https://www3.paho.org/hq/index.php?option=com_content&view=article&id=14418:ncds-graphic-materials-best-buys&Itemid=0&lang=en#gsc.tab=0)
17. Pan American Health Organization. Cardiovascular Disease Burden. Washington, D.C.: PAHO; 2023. Available from: <https://www.paho.org/en/enlace/cardiovascular-disease-burden>.
18. Pan American Health Organization. Overweight and Obesity. Washington, D.C.: PAHO; 2023. Available from: <https://www.paho.org/en/enlace/overweight-and-obesity>
19. World Health Organization. 10 Things to Know About Air Pollution. Geneva: WHO; 2023. Available from: <https://www.who.int/news-room/spotlight/how-air-pollution-is-destroying-our-health/10-things-to-know-about-air-pollution>
20. Rentschler J, Leonova N. Air Pollution Kills – Evidence from a Global Analysis of Exposure and Poverty. World Bank Blogs; 2022 May 18. Available from: <https://blogs.worldbank.org/developmenttalk/air-pollution-kills-evidence-global-analysis-exposure-and-poverty>
21. World Health Organization. Tobacco. Geneva: WHO; 2022. Available from: <https://www.who.int/news-room/fact-sheets/detail/tobacco>
22. Pan American Health Organization. Air Pollution. Washington, D.C.: PAHO; 2023. Available from: <https://www.paho.org/en/enlace/air-pollution>
23. World Health Organization. What are the WHO Air Quality Guidelines?. Geneva: WHO; 2021. Available from: <https://www.who.int/news-room/feature-stories/detail/what-are-the-who-air-quality-guidelines>
24. Pan American Health Organization. Caribbean Action Plan on Health and Climate Change. Washington, D.C.: PAHO; 2019. Available from: <https://iris.paho.org/handle/10665.2/38566>
25. Pan American Health Organization. ENLACE: Data Portal on Noncommunicable Diseases, Mental Health and External Causes. Washington, D.C.: PAHO; 2023. Available from: <https://www.paho.org/en/enlace>
26. Pan American Health Organization. PAHO/WHO Celebrates the Regulation of the Law to Promote Healthy Eating in Argentina. Washington, D.C.: PAHO; 2022. Available from: <https://www.paho.org/en/news/29-3-2022-pahowho-celebrates-regulation-law-promote-healthy-eating-argentina>
27. Pan American Health Organization. WHO Global Conference on NCDs – Montevideo, Uruguay 18-20 October 2017. Washington, D.C.: PAHO; 2017. Available from: [https://www3.paho.org/hq/index.php?option=com\\_content&view=article&id=13807:who-global-conference-on-ncds-montevideo-uruguay-18-20-october-2017&Itemid=0&lang=fr#gsc.tab=0](https://www3.paho.org/hq/index.php?option=com_content&view=article&id=13807:who-global-conference-on-ncds-montevideo-uruguay-18-20-october-2017&Itemid=0&lang=fr#gsc.tab=0)
28. Choi BCK, Maza RA, Mujica OJ; PAHO Strategic Plan Advisory Group, PAHO Technical Team. The Pan American Health Organization-adapted Hanlon Method for Prioritization of Health Programs. Rev Panam Salud Publica. 2019;43:e61. Available from: <https://iris.paho.org/handle/10665.2/51105>
29. Robaina K, Babor T, Pinsky I, Johns P. The Alcohol Industry's Commercial and Political Activities in Latin America and the Caribbean: Implications for Public Health. Geneva: NCD Alliance, Global Alcohol Policy Alliance, Healthy Latin America Coalition, and Healthy Caribbean Coalition; 2020. Available from: [https://ncdalliance.org/sites/default/files/resource\\_files/NCDAlliance\\_Alcohol%20Control%20report%20in%20LAC\\_English\\_0.pdf](https://ncdalliance.org/sites/default/files/resource_files/NCDAlliance_Alcohol%20Control%20report%20in%20LAC_English_0.pdf)
30. World Health Organization. The Global Health Observatory: Existence of a National Multisectoral Commission, Agency or Mechanism for NCDs. Geneva: WHO; 2023. Available from: <https://www.who.int/data/gho/data/indicators/indicator-details/GHO/existence-of-a-national-multisectoral-commission--agency-or-mechanism-for-ncds>
31. Organization of American States. Progress Report on Compliance with the Work Plan of the Inter-American Committee on Education (PTCIE] 2019-2022 and Resolution AG/RES. 2955 (L-O/20) – Operative Paragraphs 21-23/26]: Systematization of Education-Health Intersectoral Dialogues. Ninth Regular Meeting of the Inter-American Committee on Education. 18–19 November 2021. Washington, D.C.: OAS; 2021. Available from: [https://www.oas.org/en/sedi/dhdee/CIE\\_9th\\_Regular\\_Meeting/ENG/8.%20Healthy%20Schools%20Report.docx](https://www.oas.org/en/sedi/dhdee/CIE_9th_Regular_Meeting/ENG/8.%20Healthy%20Schools%20Report.docx)
32. Organization of American States, Pan American Health Organization. The Inter-American Program on Healthy Food and Physical Activity Policies in School Environments. A First Line of Action on Fighting Noncommunicable Diseases in the Americas. Washington, D.C.: OAS and PAHO; 2022. Available from: [https://scm.oas.org/doc\\_public/ENGLISH/HIST\\_23/CIDED00321E02.docx](https://scm.oas.org/doc_public/ENGLISH/HIST_23/CIDED00321E02.docx)
33. World Health Organization. WHO Framework Convention on Tobacco Control: Guidelines for Implementation. Geneva: WHO; 2013. Available from: <https://apps.who.int/iris/handle/10665/80510>
34. World Health Organization, Framework Convention on Tobacco Control Secretariat. UN Agencies and Tobacco Industry Interference: Examples of Good Practice from UN Agencies. Geneva: WHO; 2016. Available from: <https://untobaccocontrol.org/impldb/wp-content/uploads/resources/UN%20agencies%20and%20tobacco%20industry%20interference.pdf>
35. World Health Organization. The WHO Global Diabetes Compact. Geneva: WHO; 2023. Available from: <https://www.who.int/initiatives/the-who-global-diabetes-compact>
36. World Health Organization. Follow-up to the Political Declaration of the Third High-Level Meeting of the General Assembly on the Prevention and Control of Non-Communicable Diseases. Geneva: WHO; 2022. Available from: [https://apps.who.int/gb/ebwha/pdf\\_files/WHA75/A75\\_10Add6-en.pdf](https://apps.who.int/gb/ebwha/pdf_files/WHA75/A75_10Add6-en.pdf)

37. Healthy Caribbean Coalition. Towards a Smoke-Free Caribbean: What Ministries of Finance Need to Know. St Michael, Barbados: HCC; 2022. Available from: <https://www.healthycaribbean.org/wp-content/uploads/2022/05/Towards-a-Smoke-Free-Caribbean-What-Ministries-of-Finance-Need-To-Know-Policy-Brief-May-2022.pdf>
38. Healthy Caribbean Coalition. About the Healthy Caribbean Coalition. St Michael, Barbados: HCC; 2022. Available from: <https://www.healthycaribbean.org/about-the-healthy-caribbean-coalition/>
39. Pan American Health Organization. CARMEN: An Initiative for Integrated Prevention of Noncommunicable Diseases in the Americas. Washington, D.C.: PAHO; 2003. Available from: <https://www.paho.org/carmen/images/CARMEN-General-Overview.pdf>
40. Hennis A. Analysis of PAHO's 25-Year Program of Work. PowerPoint Presentation to the Senior Advisory Group, November 2022. Internal document.
41. World Health Organization. Noncommunicable Diseases Progress Monitor 2022. Geneva: WHO; 2022. Available from: <https://www.who.int/publications/i/item/9789240047761>
42. World Health Organization. Existence of a National Multisectoral Commission, Agency or Mechanism for NCDs. Geneva: WHO; 2022. Available from: <https://www.who.int/data/gho/data/indicators/indicator-details/GHO/existence-of-a-national-multisectoral-commission--agency-or-mechanism-for-ncds>
43. Sandoval RC, Roche M, Belausteguigoitia I, Alvarado M, Galicia L, Gomes FS, et al. Excise taxes on sugar-sweetened beverages in Latin America and the Caribbean. *Rev Panam Salud Publica*. 2021;45:e21. Available from: <https://doi.org/10.26633/RPSP.2021.21>
44. Pan American Health Organization. Strategic Fund: Annual Report 2021: Prioritizing Access to Medicines and Supplies for Health Security and Universal Health. Washington, D.C.: PAHO; 2022. Available from: <https://iris.paho.org/handle/10665.2/56101>
45. World Health Organization. Tackling NCDs: "Best Buys" and Other Recommended Interventions for the Prevention and Control of Noncommunicable Diseases. Geneva: WHO; 2017. Available from: <https://apps.who.int/iris/handle/10665/259232>
46. Pan American Health Organization. WHO/PAHO Technical Advisory Group on Cardiovascular Disease Prevention through Dietary Salt/Sodium Reduction Final Report (internal document) - Phase 3. Washington, D.C.: PAHO; 2021.
47. Pan American Health Organization. Sugar-Sweetened Beverage Taxation in the Region of the Americas. Washington, D.C.: PAHO; 2020. Available from: <https://iris.paho.org/handle/10665.2/53252>
48. World Health Organization. WHO Technical Manual on Tobacco Tax Policy and Administration. Geneva: WHO; 2021. Available from: <https://www.who.int/publications/i/item/9789240019188>
49. Pan American Health Organization. Salt-Smart Americas: A Guide for Country-Level Action. Washington, D.C.: PAHO; 2013. Available from: <https://iris.paho.org/handle/10665.2/51452>
50. Pan American Health Organization. Pahola, PAHO's First Digital Health Specialist on Alcohol Use. Washington, D.C.: PAHO; 2022. Available from: <https://www.paho.org/en/alcohol/pahola>
51. Pan American Health Organization. The PAHO Program Budget Portal. Washington, D.C.: PAHO; 2022. Available from: <https://open.paho.org/>
52. Pan American Health Organization. PAHO Strategic Fund. Washington, D.C.: PAHO; 2023. Available from: <https://www.paho.org/en/paho-strategic-fund>
53. Pan American Health Organization. CD52/7 Plan of Action for the Prevention and Control of Noncommunicable Diseases. Washington, D.C.: PAHO; 2013. Available from: <https://iris.paho.org/handle/10665.2/4400>
54. World Health Organization. E-cigarettes are Harmful to Health. Geneva: WHO; 2020. Available from: <https://www.who.int/news/item/05-02-2020-e-cigarettes-are-harmful-to-health>
55. FTCT Conference of the Parties to the WHO Framework Convention on Tobacco Control. Electronic Nicotine Delivery Systems. Sixth session. Moscow, Russian Federation, 13-18 October 2014. Document FCTC/COP/6/10. Geneva: WHO; 21 July 2014. Available from: [https://apps.who.int/gb/fctc/PDF/cop6/FCTC\\_COP6\\_10-en.pdf?ua=1](https://apps.who.int/gb/fctc/PDF/cop6/FCTC_COP6_10-en.pdf?ua=1)
56. Pan American Health Organization. Report on Tobacco Control for the Region of the Americas 2022. Washington, D.C.: PAHO; 2022. Available from: <https://iris.paho.org/handle/10665.2/56259>
57. Pan American Health Organization. Alcohol Consumption. Washington, D.C.: PAHO; 2023. Available from: <https://www.paho.org/en/enlace/alcohol-consumption>.
58. Pan American Health Organization. Alcohol and Violence Against Women. Washington, D.C.: PAHO; 2022. Available from: <https://iris.paho.org/handle/10665.2/56009>.
59. Pan American Health Organization. Non-communicable Diseases and Gender. Washington, D.C.: PAHO; 2012. Available from: <https://www.paho.org/en/file/31559/download?token=eR3xE009>
60. Pan American Health Organization. Addressing Masculinity and Men's Health to Advance Universal Health. Washington, D.C.: PAHO; 2019. Available from: [https://www3.paho.org/hq/index.php?option=com\\_content&view=article&id=14943:addressing-masculinity-and-men-s-health-to-advance-universal-health&Itemid=0&lang=en#gsc.tab=0](https://www3.paho.org/hq/index.php?option=com_content&view=article&id=14943:addressing-masculinity-and-men-s-health-to-advance-universal-health&Itemid=0&lang=en#gsc.tab=0)

61. Pan American Health Organization. More Women on Bicycles: An Urban Transport Policy in Favor of Health and Equality. Washington, D.C.: PAHO; 2022. Available from: <https://www.paho.org/en/stories/more-women-bicycles-urban-transport-policy-favor-health-and-equality>.
62. Pan American Health Organization. Addressing Men's Health and Masculinities in the Americas. Washington, D.C.: PAHO; 2022. Available from: <https://www.paho.org/en/events/addressing-mens-health-and-masculinities-americas-public-health-imperative>
63. World Health Organization. Global Strategy to Accelerate the Elimination of Cervical Cancer as a Public Health Problem and its Associated Goals and Targets for the Period 2020-2030. Geneva: WHO; 2020. Available from: [https://apps.who.int/gb/ebwha/pdf\\_files/WHA73/A73\\_R2-en.pdf](https://apps.who.int/gb/ebwha/pdf_files/WHA73/A73_R2-en.pdf)
64. Don't Pink My Drink. Facebook Group. 2022. Available from: <https://www.facebook.com/hashtag/dontpinkmydrink/>
65. World Health Organization. Basic Documents Forty-ninth edition. Geneva: WHO; 2020. Available from: [https://apps.who.int/gb/bd/pdf\\_files/BD\\_49th-en.pdf#page=6](https://apps.who.int/gb/bd/pdf_files/BD_49th-en.pdf#page=6)
66. UN General Assembly. Universal Declaration of Human Rights. New York: UN; 1948. Available from: <https://www.un.org/sites/un2.un.org/files/2021/03/udhr.pdf>
67. Office of the High Commissioner for Human Rights. CESCR General Comment No. 14: The Right to the Highest Attainable Standard of Health. [Geneva/New York]: OHCHR; 2000. Available from: <https://www.refworld.org/pdfid/4538838d0.pdf>
68. Office of the High Commissioner for Human Rights. General Comment No. 24 (2017) on State Obligations in the Context of Business Activities. New York: OHCHR; 2017. Available from: <https://www.ohchr.org/en/documents/general-comments-and-recommendations/general-comment-no-24-2017-state-obligations-context>
69. Office of the High Commissioner for Human Rights. Statement by the UN Special Rapporteur on the Right to Health on the Adoption of Front-of-Package Warning Labelling to Tackle NCDs. [Geneva/New York]: OHCHR; 2020. Available from: <https://www.ohchr.org/en/statements/2020/07/statement-un-special-rapporteur-right-health-adoption-front-package-warning>
70. United Nations General Assembly. Convention on the Rights of the Child. New York: UN; 1989. Available from: <https://www.ohchr.org/sites/default/files/crc.pdf>
71. UN Committee on the Rights of the Child. General Comment No. 16 (2013) on State Obligations Regarding the Impact of the Business Sector on Children's Rights. 17 April 2013. Document CRC/GC/16. Available from: <https://www.refworld.org/docid/51ef9cd24.html>
72. Pan American Health Organization. Webinar: The Human Rights Approach to Front-of-Package Labeling in the Caribbean. Washington, D.C.: PAHO; 2020. Available from: <https://www.paho.org/en/events/human-rights-approach-front-package-warning-labeling-caribbean>
73. World Health Organization. SIDS High-Level Technical Meeting on NCDs and Mental Health. Geneva: WHO; 2023. Available from: <https://www.who.int/news-room/events/detail/2023/01/17/default-calendar/sids-high-level-technical-meeting-on-ncds-and-mental-health>
74. Boyd J, Sexton O, Angus C, Meier P, Purshouse RC, Holmes J. Causal Mechanisms Proposed for the Alcohol Harm Paradox. *Addiction*. 2021;117(1):33-56. Available from: <https://onlinelibrary.wiley.com/doi/10.1111/add.15567>
75. World Health Organization. The Double Burden of Malnutrition: Policy Brief. Geneva: WHO; 2017. Available from: <https://www.who.int/publications/i/item/WHO-NMH-NHD-17.3>
76. Galicia L, López de Romaña D, Harding KB, De-Regil LM, Grajeda R. Tackling Malnutrition in Latin America and the Caribbean: Challenges and Opportunities. *Rev Panam Salud Publica*. 2016;40(2):138-146. Available from: <https://iris.paho.org/handle/10665.2/31185>.
77. Chen D, Rivera-Andrade Á, González J, Burt D, Mendoza-Montana C, Patrie J, et al. Prevalence of Risk Factors for Noncommunicable Diseases in an Indigenous Community in Santiago Atitlán, Guatemala. *Rev Panam Salud Publica*. 2017;41:e7. Available from: <https://iris.paho.org/handle/10665.2/33837>
78. Pan American Health Organization. Webinar: Transforming Health Systems Toward Optimal NCD Management. Washington, D.C.: PAHO; 2021. Available from: <https://www.paho.org/en/events/webinar-transforming-health-systems-toward-optimal-ncd-management>
79. Pan American Health Organization. Plan of Action on Disabilities and Rehabilitation. Washington, D.C.: PAHO; 2014. Available from: <https://iris.paho.org/handle/10665.2/7650>
80. World Health Organization, World Bank. World Report on Disability. Geneva: WHO; 2011. Available from: <https://apps.who.int/iris/handle/10665/44575>
81. Chang AY, Cullen MR, Harrington RA, Barry M. The Impact of Novel Coronavirus COVID-19 on Noncommunicable Disease Patients and Health Systems: A Review. *J Int Med*. 2021;289(4):439-537. Available from: <https://onlinelibrary.wiley.com/doi/epdf/10.1111/joim.13184>
82. Fraser E. Persistent pulmonary disease after acute COVID-19. *BMJ*. 2021;373:n1565. Available from: <https://www.bmj.com/content/373/bmj.n1565>
83. Pan American Health Organization. Rapid Assessment of Service Delivery for NCDs During the COVID-19 Pandemic in the Americas. Washington, D.C.: PAHO; 2020. Available from: <https://iris.paho.org/handle/10665.2/52250>
84. Chang S-W, Zitko P, Passi-Solar Á, Danaei G, Margozzini P. Changes in Cardiovascular Mortality in Chile During the COVID-19 Pandemic. *Heart*. 2022;108(21):1716-1721. Available from: <https://heart.bmj.com/content/108/21/1716>
85. Pan American Health Organization. Respiratory Protection Programs in the Context of COVID-19 and Beyond. Washington, D.C.: PAHO; 2022. Available from: <https://www.paho.org/en/events/respiratory-protection-programs-context-covid-19-and-beyond>
86. Luciani S, Agurto I, Caixeta R, Hennis A. Prioritizing Noncommunicable Diseases in the Americas Region in the Era of COVID-19. *Rev Panam Salud Publica*. 2022;46:e83. Available from: <https://iris.paho.org/handle/10665.2/56156>
87. Hennis AJM, Coates A, Del Pino S, Ghidinelli M, De Leon RGP, Bolastig E, et al. COVID-19 and Inequities in the Americas: Lessons Learned and Implications for Essential Health Services. *Rev Panam Salud Publica*. 2021;45:e130. Available from: <https://iris.paho.org/handle/10665.2/55418>
88. Van Westen-Langerweij NA, Meijer E, Meeuwssen EG, Chavannes NH, Willemsen MC, Croes EA. Are Smokers Protected Against SARS-CoV-2 Infection (COVID-19)? The Origins of the Myth. *NPJ Prim Care Respir Med*. 2021;31:10. Available from: <https://doi.org/10.1038/s41533-021-00223-1>

89. Pan American Health Organization. Managing People with Diabetes During the COVID-19 Pandemic: Considerations for Health Providers. Washington, D.C.: PAHO; 2020. Available from: <https://iris.paho.org/handle/10665.2/52260>
90. Pan American Health Organization. Gendered Health Analysis: COVID-19 in the Americas. Washington, D.C.: PAHO; 2021. Available from: <https://iris.paho.org/handle/10665.2/55432>
91. Pan American Health Organization. Virtual Platform for the PAHO High-Level Commission on Mental Health and COVID-19. Washington, D.C.: PAHO; 2023. Available from: <https://mhc.paho.org/en>
92. Pan American Health Organization. Plan of Action on Mental Health 2015-2020. Washington, D.C.: PAHO; 2014. Available from: <https://www.paho.org/en/documents/plan-action-mental-health-2015-2020>
93. United Nations High Commissioner for Refugees. Venezuela Situation. Geneva: UNHCR; 2023. Available from: <https://www.unhcr.org/uk/venezuela-emergency.html>

The overall purpose of the Evaluation of the PAHO Technical Cooperation in Noncommunicable Disease Prevention and Control in the Americas was to determine the level of results attainment and performance for the prevention and control of noncommunicable diseases (NCD) in the Region. The evaluation assessed relevance, coherence, coordination, effectiveness, efficiency, and sustainability of PAHO's NCD technical cooperation (policy guidance, support, and tools). It also assessed three cross-cutting themes: gender equality, equity, and human rights; and COVID-19. The evaluation included a focus on both accountability and learning.

The evaluation's objectives were to assess PAHO's implementation of NCD technical cooperation and document key achievements as well as challenges, gaps, and areas for improvement; examine key enabling and limiting internal and external factors that affected PAHO's technical cooperation at all three levels of the Organization, and achievements and gaps including implications for how PAHO delivered its regular NCD technical cooperation during 2020 and 2021 in the context of the COVID-19 pandemic response; and provide lessons learned and evidence-based recommendations to strengthen NCD technical cooperation while building a resilient recovery after the COVID-19 pandemic.

**PAHO**

[www.paho.org](http://www.paho.org)



Pan American  
Health  
Organization



World Health  
Organization  
Regional Office for the Americas

