



**Republic of Zambia**  
**MINISTRY OF HEALTH**



**DATA TO POLICY PROGRAM**  
**SUB-NATIONAL CURRICULUM FOR HEALTHCARE**  
**WORKERS**

## Table of Contents

<b>i. Acknowledgement</b> .....	ii
<b>ii. List of Abbreviations</b> .....	v
<b>1.0 Introduction</b> .....	1
<b>2.0 Program Aim and Focus</b> .....	2
2.1 Program Objectives.....	2
2.2 Expected Outcomes .....	2
<b>3.0 Course Outline</b> .....	2
<b>4.0 Course Format</b> .....	3
<b>5.0 Method of delivery</b> .....	4
<b>6.0 Eligibility Criteria for Participants</b> .....	4
<b>7.0 Requirements for Policy Topics</b> .....	4
<b>8.0 Duration of the Course</b> .....	5
<b>9.0 Method of Assessment</b> .....	5
<b>10.0 Dissemination</b> .....	5
<b>11.0 Detailed Course Content</b> .....	5

## i. Foreword

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The Zambian government is committed to the health mission of providing Zambians with equity of access to quality cost effective health services as close to the family as possible. The government has made notable efforts towards achieving its mission by establishing systems that ensure healthcare delivery is in line with its mission. One notable system is the evidence based policy formulation. In line with the national development strategies, research evidence is recognized as one of the key elements necessary for the development of sound policies. This requires that deliberate efforts towards generation, harvesting, and utilization of evidence from research and program data to inform the policy and decision-making processes are in place. To do this, capacities both for generators of evidence and the users have to be built.

The Zambian government established the National Health Research Authority (NHRA) to provide research oversight in Zambia and to facilitate translation of health research evidence into policy and practice. To facilitate this, the Authority among other things has embarked on capacity building programs for researchers, program officers, and policy makers. As part of its knowledge translation mandate, the NHRA is implementing a National Program called the Data to Policy (D2P) program. This is a capacity building program aimed at equipping researchers and public health officials to harness available research as well as program data to develop policy briefs in which different policy options are formulated and recommended for policy consideration and action. This program has been running for over five years now at the national level and follows a curriculum that was developed by the Blomberg Data for Health program which has been adapted with some content suiting our local context.

This training curriculum is part of the NHRA Knowledge Translation Program under the Data to Policy Unit focusing specifically at the sub-national levels (provinces, districts, and health facilities), in order to respond to evidence needs that address specific local health challenges at those levels. It builds on and complements the National-level D2P training program which focuses on national level research evidence needs and is much wider in scope and longer in duration.

My Ministry is grateful to the Clinton Health Access Initiative (CHAI), which is supporting the Ministry of Health in implementing the People at the Centre (PeaCe) Health program in Eastern and Southern provinces of Zambia with support from the government of Sweden.

Through this program, which has a component of evidence generation and knowledge translation, CHAI supported the NHRA to develop this sub-national D2P training curriculum and will work collaboratively to deliver the training in the two provinces it currently supports. This collaborative effort pilots the implementation of the sub-national D2P training, which the NHRA will roll out to all provinces in the country. I therefore call upon other partners working in all the provinces to rise up to the occasion and support this cause to build the much-needed capacities of healthcare professionals to utilize evidence for decision and policy formulation purposes. It is my sincere hope that this training curriculum will contribute to the creation of a critical mass of health personnel at sub-national levels with capacity in policy briefs development and knowledge translation in general.



Prof. Lackson Kasonka

**Permanent Secretary - Technical Services**

**Ministry of Health**

## ii. Acknowledgements

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This Data to Policy (D2P) training curriculum for healthcare workers at sub-national levels was developed by the National Health Research Authority (NHRA) under the Ministry of Health with support from Clinton Health Access Initiative (CHAI) and the government of Sweden. Further, technical support was provided by expertise from several institutions including the Ministry of Health Eastern and Southern Provincial Offices, the Zambia National Public Health Institute (ZNPPI), Tropical Diseases Research Centre (TDRC), University of Zambia – School of Public Health (UNZA-SoPH) and ZAMBART. This curriculum was adapted from the NHRA national level D2P curriculum that is supported by the Bloomberg Data for Health Initiative through Centres for Disease Control and Prevention Foundation. It has been created with less complex content of epidemiology and economic modelling contextualized for decision-making process at sub-national levels in order to allow the mainstream MoH an opportunity to develop skills in data utilization to inform decisions. We are grateful to all the partners for their great support, without which this curriculum would not have been successfully developed. We wish to express our great appreciation to the MOH leadership for its technical support in the development of this document. Lastly, but not the least, let me express my gratitude to my team in the Department of Research Coordination, Capacity Building and Knowledge Translation, led by Ms. Sandra Chilengi – Sakala for their hard work and dedication to duty. I have no doubt that the curriculum will be delivered successfully and with support from our partners and the Zambian government, we expect this capacity building program to be sustained over a long time.



Prof. Godfrey Biemba

**Director and Chief Executive Officer**  
**National Health Research Authority**

**i. List of Abbreviations**

BIA	Budget Impact Analysis
CEA	Cost-Effectiveness Analysis
CHAI	Clinton Health Access Initiative
D2P	Data to Policy
DHO	District Health Office
IPCHCS	Integrated People-Centered Health Care Services
KT	Knowledge Translation
MoH	Ministry of Health
NHRA	National Health Research Authority
PeaCe	People at the Centre
PHO	Provincial Health Office
Sida	Swedish International Development Agency
TWG	Technical Working Groups
WHO	World Health Organization
ZNPHI	Zambia National Public Health Institute

## 1.0 Introduction

The National Health Research Authority (NHRA) under its mandate for knowledge translation as of 2021, advocates for institutionalization of research in mainstream Ministry of Health (MoH) and partner organizations. Over the years, NHRA has been instrumental in building the capacity of the healthcare professionals to develop policy briefs that inform programming and policy direction in the health sector. The NHRA with support from Bloomberg Data for Health Initiative has been conducting annual Data to Policy (D2P) training with officers from different institutions in the health sector. The D2P program is a capacity building program meant to equip health professionals with the skills to develop evidence-based policy brief writing. The program utilizes evidence from research and existing public health data to package and formulate policy options for policy recommendation and decision making. It combines epidemiology with economic analysis and modelling to be able to develop informatic, policy and technical briefs. This program has been implemented at central level over the past five years, however, this has not been rolled out to sub-national levels that is; provincial, district and health facility level.

With the policy directive of institutionalizing research at the low levels, it places the need to cascade the D2P program as a key next step in utilizing research and health information to provincial, district and health facility levels. In this regard, the MoH through the NHRA continues to foster collaborations with various partners (both private and public) in the health sector in institutionalizing research.

The D2P curriculum for sub-national levels has been developed with support from the Clinton Health Access Initiative (CHAI) and funding from the government of Sweden under the People at the Centre (PeaCe) health program. This curriculum aims to build the healthcare workers at sub-national levels' capacity to develop high-quality policy briefs that will influence decision making at those levels. This curriculum will be piloted in Eastern and Southern province and the NHRA will roll it out to country-wide with support from with support from partners and other stakeholders.

## **2.0 Program Aim and Focus**

The program bridges the gap between public health professionals and policy makers through training of public health professionals in order to communicate effectively to policy makers.

The D2P program teaches participants how to develop health related policy briefs that can address existing priority problems identified by Provincial, District, and facility level staff. All the participants will have a hands-on opportunity to develop these skills through writing a real policy brief during the training.

### **2.1 Program Objectives**

- a) To train health professionals at provincial, district and facility level in formulating policy, informatic and technical briefs that address identified local priority problems.

### **2.2 Expected Outcomes**

By the end of this course, we anticipate that the participants will be:

- a) equipped sub-national health professionals with skills to develop high-quality briefs that will influence decision making;
- b) able to produce a policy brief to address a locally relevant priority health problem.

## **3.0 Course Outline**

This curriculum will be used to deliver the NHRA D2P Training for sub-national levels and will cover a total of 16 modules as outlined below:

1. Zambia knowledge translation story
2. Introduction to data to policy
3. Policy and policy briefs
4. Literature search and Data sources
5. Problem statement and root cause analysis
6. Epidemiologic measures in policy briefs
7. Identification of policy options
8. Stakeholder identification and mapping
9. Framing an economic evaluation
10. Assessing policy options health Impacts



11. Cost analysis
12. Cost effectiveness analysis and Budget-impact analysis (BIA)
13. Sensitivity analysis
14. Effective writing
15. Making and writing recommendations
16. Advocacy strategy and communication

#### **4.0 Course Format**

The course duration will be 16 weeks and may be extended to not more than 6 months. During the 16 weeks of this course, participants will cover a total of 16 modules which will be delivered during the interactive workshops with the facilitators. At the beginning of the training, participants will be made aware of the course objectives, deliverables and assessment modalities. The participants will have weekly sessions with the mentors that will be assigned to each group to discuss the assigned deliverables and assessments. The main sessions and group work will be interactive in nature to allow diverse thinking on each topic.

Participants will be divided into groups that will work collectively to develop the policy briefs that will respond to the requirements on the key topics. These policy briefs will serve as a resource document that will be used to inform the financial consequences of adopting a new intervention. Participants will be encouraged to reach out to their mentors for guidance outside the agreed weekly sessions. Mentors will provide peer feedback throughout the process in the groups and finally on the development of the policy briefs. Participants will further receive guidance and feedback from different stakeholders and Technical Working Groups (TWGs) on their policy briefs.

At the end of the course, each group is expected to have developed a policy brief which they will present at the provincial policy forum. The policy briefs, through the provincial office, will be submitted to the NHRA for onward submission to the central level for notification and seeking approval for the publication and implementation of the recommendations of the policy briefs. Nevertheless, the evidence from the policy briefs, presented at the provincial level, could be used to inform the adoption and development of their protocols and guidelines with authorization from the Provincial Health Office. The policy briefs will be published in the Health Press journal (under the ZNPHI) and will be available on the NHRA website.

## 5.0 Method of delivery

- i. **In-person workshop**- this will involve presentation of modules, group work and end of module quizzes. The approach to be used will be adult learning which is more of mentoring than teaching, in which the participant is self-directed and motivated, focused on achieving goals. These sessions will be interspaced with practical sessions and make participants appreciate that what is being taught is relevant
- ii. **Online**-virtual interactions between mentors and mentees will be done via Zoom, Microsoft teams and other virtual platforms.
- iii. **Telephone conversations** will be used when need be
- iv. Mentees will continue to work on their own at their station of work

## 6.0 Eligibility Criteria for Participants

- a) At least Certificate in a health-related field
- b) Must have at least 2 years' work experience in public health.
- c) Must be an accredited professional.
- d) Must have a recommendation from their supervisor.
- e) Must be a self-starter who requires minimal supervision.
- f) Being in an administrative position is an added advantage.

## 7.0 Requirements for Policy Topics

- a) The topic must be of public health importance and should be well-defined using prevalence rates, incidence rates, or any measure of burden of a disease or condition.
- b) The underlying cause(s) of the health problem should already be well-defined
- c) There must be reliable local data available to illustrate the extent and burden of the problem (should be of public health concern), except in special circumstances.
- d) There must be viable potential solutions to address the problem.

## **8.0 Duration of the Course**

This is a mentorship course to be delivered for a period of 16 weeks (4 months) and where necessary, may be extended to a period not more than 6 months. The course will comprise face-to-face and virtual/online workshops periodically. In between the workshops, the teams will be working with mentors to move the policy briefs along. The program also includes conducting stakeholder engagements at different points to get input and feedback on the policy briefs.

## **9.0 Method of Assessment**

- a) A final policy brief developed
- b) Groups Work and Exercises/Quizzes (score a minimum of 60% in each course module quiz).
- c) Attendance to 80% of all physical and online lessons

## **10.0 Dissemination**

1. Presentation at the Provincial Policy Forum
2. Publication in the Zambia Health Press

## **11.0 Detailed Course Content**

The detailed course content is outlined below:

<b>Topic</b>	<b>Specific Outcome</b>	<b>Learner's Content</b>
<b>1.0 Zambia Knowledge Translation story</b>	1.1 Understand the KT history in Zambia 1.2 Describe the KT strategy in Zambia 1.3 Understand the role and plans of NHRA in KT	1.1 Understanding the KT history in Zambia 1.2 Description of the KT strategy in Zambia 1.3 Understanding the role and plans of NHRA in KT
<b>2.0 Introduction to Data to Policy</b>	2.1 Describe core competencies 2.2 Define a good policy topic 2.3 Understand D2P program process	2.1 Description of core competencies 2.2 Definition of a good policy topic 2.3 Description of the D2P program process
<b>3.0 Policy and Policy Briefs</b>	3.1 Define policy and policy brief 3.2 Describe types of policies 3.3 Explain how policy is formed 3.4 Describe components of a policy brief	3.1 Definition of policy and policy brief 3.2 Description of the types of policies 3.3 Explanation of how policy is formed 3.4 Description of the components of a policy brief
<b>4.0 Literature Search and Other Data Sources</b>	4.1 Identify various sources of data for policy briefs 4.2 Use PubMed to access scientific literature 4.3 Use googlescholar and other sources to access literature and reports 4.4 Use specific terms to refine searches	4.1 Identification sources of data for policy briefs 4.2 Utilisation of: <ul style="list-style-type: none"> <li>• PubMed to access scientific literature</li> <li>• Googlescholar and other sources to access literature and reports</li> <li>• Specific terms to refine searches</li> </ul>

<b>5.0 “Problem statement and root cause analysis”</b>	5.1 Frame a policy topic in terms of the health problem, primary cause, and root causes 5.2 Create a cause/effect ‘fishbone’ diagram to determine the root cause(s) of a problem 5.3 Identify and prioritize modifiable causes as targets of a policy brief 5.4 Describe the key questions you need to address in an effective problem statement	5.1 Description of how the problem is in terms of the primary cause and root causes 5.2 Explanation of why a problem statement is needed 5.3 Explanation of to create the fishbone diagram and identification and prioritizing modifiable causes 4.3 5.4 Description of key questions to address in developing problem statement 5.5 Explanation of how visual displays explain the problem 5.6 Explanation of to create the fishbone diagram and identification and prioritizing modifiable causes
<b>6.0 Epidemiologic measures in policy briefs</b>	6.1 Understand basic health measures to describe individual populations 6.2 Understand basic health measures to compare two or more populations 6.3 Explain most useful measures to tell the story 6.4 Explain measures from public health literature	6.1 Understanding basic health measures to describe individual populations 6.2 Understanding basic health measures to compare two or more populations 6.3 Explaining the most useful measures to tell the story 6.4 Explaining measures from public health literature
<b>7.0 Identify policy option</b>	7.1 Describe the most feasible policy options 7.2 Understand how to develop indicators to assess impact of policies 7.3 Understand how to identify evidence to support options selected	7.1 Describing the most feasible policy options 7.2 Explaining how to develop indicators to assess impact of policies 7.3 Explaining how to identify evidence to support options selected
<b>8.0 Stakeholder identification and mapping</b>	8.1 Explain stakeholder mapping 8.2 Understand how to prioritize and perform stakeholder interviews 8.3 Understand stakeholder analysis	8.1 Explaining stakeholder mapping 8.2 Explaining how to prioritize and perform stakeholder interviews 8.3 Explaining stakeholder analysis

<b>9.0 Framing an Economic Evaluation</b>	9.1 Define economic evaluation. 9.2 Describe how to frame an economic evaluation	9.1 Definition of economic evaluation. 9.2 Description of how to frame an economic evaluation.
<b>10.0 Assessing Policy Options Health Impacts</b>	10.1 Understand how to model and estimate the health impact of a policy option. 10.2 Understand how to construct a decision tree. 10.3 Understand how to Identify the information needed to use the model	10.1 Explaining modelling and estimation of health impact of a policy option. 10.2 Explaining construction of a decision tree. 10.3 Explaining Identification of the information needed to use the model.
<b>11.0 Cost Analysis</b>	11.1 Understand program cost analysis and costs of illness analysis and distinguish between them. 11.2 Understand costing and calculate the costs of your proposed intervention.	11.1 Explaining program cost analysis and costs of illness analysis and distinguish between them. 11.2 Calculation of the costs of your proposed intervention.
<b>12.0 Cost Effectiveness Analysis. Budget-impact analysis (BIA)</b>	12.1 Describe the basics of a cost-effectiveness (CEA) analysis and budget impact analysis (BIA). 12.2 Define CEA & BIA and when to use them use them. 12.3 Describe steps to conduct CEA & BIA 12.4 Understand how to perform basic CEA & BIA; construct CEA & BIA models	12.1 Description the basics of a full economic evaluation. 12.2 Describing the steps to conduct BIA. 12.3 Definition of each type of economic evaluation and when to use them use them. 12.4 Explain how to performance of a basic BIA.

<b>13.0 Sensitivity Analysis</b>	13.1 Understand One way sensitivity Analysis.	13.1 Explain how to conduct one way sensitivity Analysis.
<b>14.0 Effective writing</b>	14.1 Understand how to write for your audience or stakeholder 14.2 Describe a good key message 14.3 Explain what makes a good title 14.4 Provide guiding tips on writing the problem statement 14.5 Understanding how to show a problem simply using visuals 14.6 Provide guiding tips on writing the policy options	14.1 Describing how to write for different stakeholders 14.2 Describing a good key message 14.3 Explaining what makes a good title 14.4 Providing tips on how to write the problem statement 14.5 Explaining how to show a problem simply using visuals 14.6 Providing tips on how to write the problem statement
<b>15.0 Making and writing recommendations</b>	15.1 Describe elements of a good recommendation 15.2 Explain how to select the most effective intervention	15.1 Describing elements of a good recommendation 15.2 Explaining how to select the most effective intervention
<b>16.0 Advocacy strategy and communication with Decision-makers</b>	16.1 Understand policy environment 16.2 Describe ways to advocate for policy change 16.3 Develop an effective elevator pitch	16.1 Explaining policy environment 16.2 Describing ways to advocate for policy change 16.3 Explaining an effective elevator pitch

