Application information sheet for Data to Policy (D2P) Programme

Health policies are developed to address *recognised*, *well-defined* problems facing the public. Policies should always be developed in response to data (i) that show clearly that a problem exists, (ii) that show that the problem is of high burden and/or of high public importance, (iii) show that there are modifiable underlying root causes of that problem, and (iv) show that a specific intervention can mitigate that problem. For example, a country might recognise that they have an unacceptable burden of traffic fatalities caused by low use of safety belts, recognise that one root cause is an absence of laws requiring safety belt usage, and wish to develop a policy to instate and enforce laws about wearing safety belts in vehicles.

The Data to Policy programme teaches participants how to develop health-related policies that can address existing priority problems identified by Ministries of Health. Successful applicants will have a hands-on opportunity to develop these skills through writing a real policy brief during the training. Applicants must submit a policy proposal for a public health problem for review and approval. Participants will ideally work in teams of 2-4 persons (one with epidemiological skills, one with programmatic knowledge, and a third with knowledge about how policy is developed and implemented in-country) around a shared policy topic. During the course, proposals will be developed into a complete policy brief. On completion of the course, the policy briefs will be presented to relevant stakeholders at a policy forum event.

While almost any health issue can be addressed with a recommended intervention (policy), certain policy proposals will be more achievable than others during the short timeline for D2P training. D2P mentors will help participants, during and after proposal development and submission, to ensure that their proposed topic can be developed into a policy brief during the course. Topics that are too broad, too nonspecific, or for which data do not currently exist will not be accepted.

In the context of the D2P training course, health policy is broadly defined to include a wide range of interventions:

· Health-related laws, including:

o Laws enforced by Ministries other than the Ministry of Health (MOH), e.g., cigarette taxes, mandatory seat belt use

o Laws that apply to the health system, e.g., universal health coverage

· Regulations set by the MOH or other Ministries, such as:

o MOH regulations, e.g., changes in health worker training, treatment guidelines

o Regulations set by other Ministries that impact health, e.g., environmental regulations, eligibility for school feeding programmes

· Strategic decision-making for health programmes

o Resource allocation, e.g., increasing the funding allocation for disease prevention activities for a specific high-burden disease or a high-burden geographic area

o Requests to external funders, the Ministry of Finance or National Assemblies for programme funds outside of the existing MOH budget

o Programme planning, e.g., developing new interventions, adapting existing interventions

Ideal participants are mid- to senior-level staff working in Epidemiology, Surveillance, Public Health Programmes, or Policy and Planning Departments. They should be knowledgeable in descriptive epidemiology and data analysis and familiar with the basic literature review process. Requirements for participants and application materials are detailed below.

Requirements for Participants and Topics

I. **Requirements for policy topics:**

a. The public health problem being considered must be well-defined: the prevalence, incidence, or other burden of a disease or condition (including high costs) is typically the health problem. Occasionally, this may also be expressed as a health condition plus a *primary* cause (e.g., high maternal mortality rates (300/100,000) associated with low use of antenatal care – see Example 1 below). Although neural tube defects affect 2.3% of births, it costs the MOH $13.6 million for a cohort over 5 years in a middle-income country.

b. The problem must be a priority issue for the government. Any problem that is not recognised by the government will not have the support needed to move a related policy forward.

c. The underlying, modifiable programme-related cause(s) of the health problem must already be well-defined. Health problems for which the causes are unknown are not appropriate for policy briefs. Applications should not propose investigations of the cause(s) of a health problem.

d. There must be high-quality local data available to document the burden of the problem. 'Burden' can be defined as a high number of cases and/or very costly to the government. There must also be high-quality data to document the causes of the problem. These data can come from national, regional, or international sources such as DHS, STEPS surveys, vital statistics data, HMIS, hospital data, estimated economic data, or others.

e. There must be viable potential solutions to address the problem. These solutions are the actual material of the policy brief itself. Generalised problems for which there are no

viable, practical solutions (such as 'widespread poverty') are not appropriate for this course.

f. The policy issue should be related to the participant's professional expertise and/or daily job responsibilities. Mentors are subject matter experts on policy writing but cannot be experts on all health topics. Therefore, the participants must be well-versed in the health problem of interest and will lead the policy brief into action.

II. **Requirements for participants:**

a. A university degree or advanced training (or equivalent experience) in public health, demography, public policy, or a related field.

b. Ability to analyse data in Microsoft Excel AND/OR at least one statistical software package (STATA, SPSS, SAS, R).

c. Familiarity with Microsoft Word and PowerPoint presentations.

Examples for completing the Google form data fields for D2P proposed topics:

Three examples are provided for reference. It is particularly important to identify the data sources that will provide an evidence base for the burden of the problem and documentation of causes of the problem. **These data source(s) must be accessible during the mentoring and training period.**

Health problem & burden. Provide numbers indicating that this is a significant public health problem or burden to the government. In describing the problem, you should not mention what might be causing the problem; the cause of the problem is listed in the third column. Although the first example mentions "highest among women who did not receive ANC", this information is classifying a subpopulation of women. Your problem could be represented by numbers, like the infection rate, but it would help if you gave an example as to why it is a problem. For example, just telling us the malaria death rate among children is X/100,000 is not good enough. Is it higher than your neighbours'? Is it higher than the WHO recommendation? Remember, a public health problem can be a financial burden to the government, as seen in the third example. You might have to estimate the financial/economic burden using simple calculations of cost or loss of income, etc. **Data that demonstrate the burden of the problem (clearly cite sources).** Provide the data source that identifies the public health problem. This could be your HMIS database, civil registration of vital statistics, a recently published paper, data from a local district, your own calculation backed by data, etc…

Cause(s) of health problem. List possible reasons why the problem exists. Also, try to determine how much/the extent to which the cause contributes to a problem. For example, in 3 below, the lack of folic acid causes 60-70% of neural tube defects. If you cannot find the data now, we will work with you to find the data. At the very minimum, focus on what causes the public health problem.

Data supporting cause(s) of health problem (clearly cite sources). Provide your sources of data, even if it is an expert opinion.

Possible solutions to the problem (policy options that address root causes). We want you to have thought about possible solutions that address the causes of the health problem (the fifth column). During the course we will work with you to expand these proposals and explore other possible interventions.

Health problem & burden	Data that demonstrate burden of problem (clearly cite sources)	Cause(s) of health problem	Data supporting cause(s) of health problem (clearly cite sources)	Possible solutions to the problem (policy options that address root causes)
Ex 1: High rates of maternal mortality. During 2016, maternal mortality rates in Country X were 276/100,000, highest among women who did not receive ANC (~60% of population), and the highest within our region..	1. Country X MCH national data (2016) 2. Country X DHIS survey (2017) 3. Benon *et al*, BMC Maternal and Child Health 2016, Maternal Mortality in Country X	1. Few ANC clinics in much of country 2. Cost of ANC care too high for many women 3. Lack of awareness about association between ANC care and maternal survival	1. Country X MCH behavioral survey (2015) 2. Berhanu *et al* AJTMH (2014) Factors associated with maternal mortality in Country X	1. Mobile ANC care & identification of high-risk mothers for maternal waiting homes 2. Policy for at least one ANC per sub-district 3. "Three visits free" campaign for ANC
Ex 2: Increasing childhood obesity rates (BMI>25) in Country Y during past 15 years. Childhood obesity prevalence increased from 4.5% in 2002 to 8.2% in 2015. Childhood overweight increased from 9.6% in 2002 to 15.6% in 2015. These numbers are above our MDG targets	1. Country Y BRFSS (2017) 2. Statler *et al*, 2016, MMWR, demonstrating increases in childhood obesity in Country Y and neighboring countries	1. Sugary foods cheap and easily available in schools 2. Fruits and vegetables less available 3. Recent removal of physical education (PE) in some schools	Cameron *et al* (2015), Jung *et al* (2012) describes causes in neighboring countries	1. Mandatory offering of afterschool sports programmes in districts without PE class 2. Mandatory offering of fresh fruits and vegetables in school lunches 3. Increased taxes on sugary drinks and snacks
Ex 3: treating a cohort of children with neural tube defects over 5 years costs the government $13.5 million (about $1,800 per child per year, when the	Estimated treatment cost from the largest government hospital	1. Lack of folic acid intake 2. Mothers cannot tolerate the vitamin supplement	1. MRC Vitamin Study Research Group Prevention of neural tube defects: results of the Medical Research Council Vitamin Study.	1. Education 2. Fortifying: a. Sugar b. Maze c. Bread

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country per capital income is $1,500).		3. Lack of knowledge	Lancet. 1991; 338:131–137. A. 2. Wald NJ. Folic acid and the prevention of neural tube defects. Maternal nutrition and pregnancy outcome, vol. 678: Ann NY Acad Sci; 1993. p. 112–29.	