



NEEDS ASSESSMENT FOR HEALTH POLICY AND SYSTEMS RESEARCH CENTRE IN THE CARIBBEAN

This report assesses the need for a Health Policy and Systems Research Centre in the Caribbean

**NEEDS ASSESSMENT FOR HEALTH POLICY AND SYSTEMS
RESEARCH CENTRE IN THE CARIBBEAN**

Table of Contents

1. Background	4
2. Aim	5
3. Objectives.....	5
4. Methodology.....	5
5. Findings	6
5.1 Comparative analysis of the scope and functioning of Caribbean health research centres and international centres for HPSR.....	6
5.2 Capacity to benefit from a Southern Caribbean Centre for HPSR	13
6. Summary of Needs Assessment.....	17
7. Recommendations	17
7.1 Mandate (mission)	17
8. References	21

List of Tables

Table 1 Thematic analysis of the mandates of Caribbean and International Centres.....	6
Table 2 Mission of international centres mapped against research utilisation activities	8
Table 3 List of services provided by Caribbean and international Centres	9
Table 4 List of the types of research conducted by the regional and international Centres	11

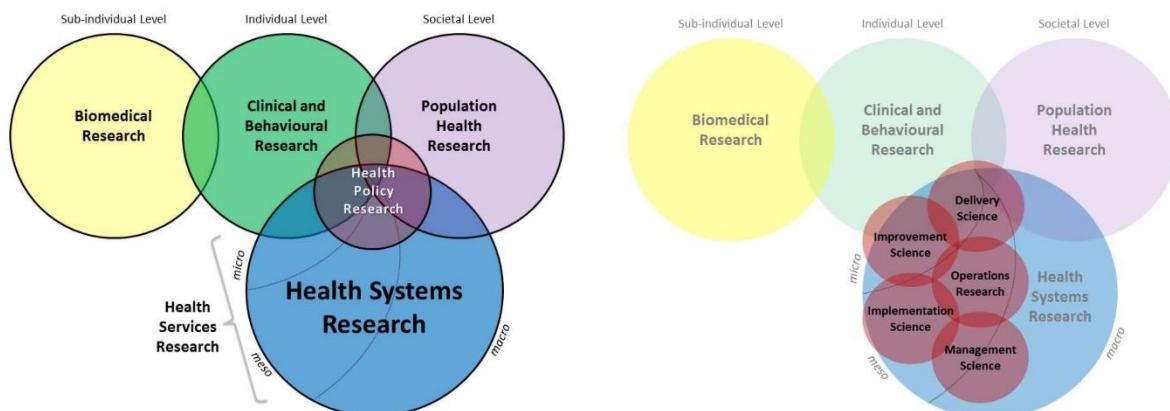
NEEDS ASSESSMENT FOR A HEALTH POLICY AND SYSTEMS RESEARCH CENTRE IN THE CARIBBEAN

1. Background

The report of a fact-finding visit conducted by Michael Clarke in February 2017 (1), recommended the establishment of a Southern Caribbean Centre for Health Systems and Policy Research, to focus on Trinidad and Tobago, Guyana and Suriname. This report suggested a wide range of areas for the Centre's research program, such as, policy impact assessment, with emphasis on non-communicable disease, and obesity; performance evaluation of Health Authorities; research to address the social determinants of health; and research on primary prevention initiatives. Given the wide range of areas suggested, the University of the West Indies (UWI), Faculty of Medical Sciences (FMS), in collaboration with the Ministry of Health (MoH), will host a two-day retreat with key stakeholders, on November 6 – 7 2017, to obtain consensus on the way forward for the establishment of this Centre. A key input document for the retreat is a needs assessment, which should clearly identify the need for such a Centre and define its mandate.

According to the World Health Organization, health policy and systems research (HPSR) is a field of study that seeks to understand and improve how societies organise themselves in achieving collective health goals, and how different actors interact in the policy and implementation processes to contribute to policy outcomes (2). This field of research focuses on health policies—how they are developed, implemented and evaluated, and health systems—what can be done to improve the performance of these systems, with a focus on any or all of the six health systems building blocks: governance, financing, service delivery arrangements, health human resources, information and evidence, and medical products and technologies (3). Figure 1 provides a depiction of the various fields and sub-fields of HPSR. While there is significant overlap between each of the areas, it is important to note that the prime focus of health policy and systems research is not a specific disease or service, but the health system as a whole (4). In short, this field of study seeks to enhance the health policy process and the efficiency and effectiveness of the health system.

Figure 1: Multidisciplinary fields of health research



Source: (5)

A need may be described as a gap between “what is” and “what should be,” in other words, a gap between an actual and an ideal, that is acknowledged by collective values. Need can also be described as ‘the capacity to benefit’. For example, a healthcare need is the capacity of the population to benefit from a healthcare service. In assessing the need for a Southern Caribbean Centre for HPSR, these two perspectives should be borne in mind. A description of the current “what is” situation with respect to health research centres and initiatives in the Caribbean was presented in **Appendix 1 - Desk Review of Current Health Research Centres & Initiatives in the Caribbean**, while a description of international HPSR centres was presented in **Appendix 2 – Review of the scope of international centres for HPSR**. This report will now assess the gap and the benefits to be derived from the establishment of a Southern Caribbean Centre.

2. Aim

The aim of this Needs Assessment Report is to identify feasible areas of operation for the Southern Caribbean Centre, by identifying the gap that such a centre could fill, and the benefits to be derived, by the potential users of the Centres’ products and services.

3. Objectives

- 3.1 To compare the scope and functioning of existing health research centres in the Caribbean, with the scope and functioning of international centres for HPSR;
- 3.2 To document gaps in products and services between the Caribbean centres, and the selected international centres;
- 3.3 To identify the challenges faced in the Caribbean with respect to health system strengthening, policy development, implementation and evaluation;
- 3.4 To identify potential users’ capacity to benefit from the operation of the Centre;
- 3.5 To recommend a mandate and core functions for the Southern Caribbean Centre that will address existing gaps and respond to the needs of potential users.
- 3.6 To provide broad recommendations to inform options for staffing, financing and sustainability.

4. Methodology

To compare the scope and functioning of existing health research centres, with the scope and functioning of international HPSR centres, and to document service gaps, we conducted a comparative analysis of the findings presented in Appendix 1 and Appendix 2.

To identify the challenges faced in the Caribbean with respect to health system strengthening; policy development, implementation and evaluation; and to identify potential users’ statements of perceived need, and their capacity to benefit from HPSR, we:

1. Undertook a desk review of the following documents:
 - Ministry of Health of Trinidad and Tobago, Strategic Plan: Fiscal Years 2012 – 2016 (6)

- Health Vision 2020: A National Health Strategy for Guyana 2013 – 2020 (7)
 - Suriname National Health Sector Plan 2011 – 2018 (8)
 - Caribbean Cooperation in Health (CCH) IV (9)
2. Conducted nine key informant interviews. Two key informant interviews representing research users and seven key informants representing producers.

5. Findings

5.1 Comparative analysis of the scope and functioning of Caribbean health research centres and international centres for HPSR

5.1.1 Comparison of mission statements

Comparison of the mission statements of the 12 institutions reviewed in Appendix 1 and Appendix 2 is provided in Table 1. Thematic analysis (colour-coded) of these statements was conducted. Four themes seem to emerge: (i) production of **high-quality research**; (ii) research to **improve health and well-being**; (iii) **inter or multi-disciplinary research**; and (iv) a cluster of themes related to **translation of research evidence into policy** (Table 1).

Table 1 Thematic analysis of the mandates of Caribbean and International Centres

Name of Institution	Mission statements
Caribbean Institute for Health Research (CAIHR)/TMRI, UWI [CARIBBEAN]	The TMRI exists to conceive and deliver high quality research that addresses regional and global health priorities in order to improve health , enhance wellbeing, and create wealth through this investment in human capital.
Sir Arthur Lewis Institute of Social and Economic Studies (SALISES), UWI [CARIBBEAN]	The mission of the Sir Arthur Lewis Institute of Social and Economic Studies (SALISES) is to undertake high-quality research and graduate teaching in the areas of social and economic development policy, governance and public policy with special reference to small developing countries.
Scientific Research Centre Suriname (SRCS) [CARIBBEAN]	The Research Center aims to answer scientifically relevant clinical research questions, as well as public health issues, by means of groundbreaking research-projects . In our Research Center quality-assured research, interdisciplinary collaboration , and public health issues are among our highest priorities. The Research Center aspires to establish itself as a leader in the field of research as well as the preeminent institute of analysis and investigation in Suriname, as well as in the region
National Centre for Global Health and Medicine (NCGM) [CHINA]	Aiming to realize the world where all the people can equally lead healthy lives, the Bureau of International Health Cooperation provides support around the world, including developing countries, to improve health care using our expertise and contributes to healthier lives of Japanese people by bringing these experiences back to Japan.
Graduate School of Public Health, Seoul National University [SOUTH KOREA]	Dedicated to train current and future public health professionals who contribute to the nation's health and wellbeing through research and practice.

Name of Institution	Mission statements
Windward Islands Research and Education Foundation (WINDREF) [CARIBBEAN]	WINDREF seeks to advance health and sustainable environmental development through multi-disciplinary research and education programs. WINDREF strives for program excellence by promoting collaborative relationships between internationally recognized scholars and regional scientists, and by adhering to the highest ethical and academic standards in the design and conduct of research.
Arizona State University, College of Nursing & Health Innovation [USA]	Establish ASU as a global center for interdisciplinary research , discovery and development by 2020
National Health Development Research Center [CHINA]	A national think-tank providing technical consultancy to health policy-makers . To further strengthen health policy research and better accommodate the needs of health development and reform.
Knowledge to Policy (K2P) Centre, American University of Beirut [LEBANON]	To draw on an unparalleled breadth of synthesized evidence and context-specific knowledge by producing briefs and conducting policy dialogues to impact policy agendas and action
Royal Tropical Institute (KIT) [NETHERLANDS]	To enhance the positive impact of agencies, governments and corporations on sustainable development in low- and middle-income countries. Using the UN's Sustainable Development Goals (SDG's) as a general framework for action, we translate practice into global knowledge and bring global knowledge to inform best practices .
Institute for Health Systems Research [MALAYSIA]	IHSR will conduct HPSR and creatively translate evidence into policy and practice .
McMaster Health Forum, McMaster University [CANADA]	Our mission is to be the group internationally supporting leaders and citizens who want to use the best available research evidence to strengthen health (and social) systems and to get the right programs, services and products to the people who need them.

While the mandate of existing Caribbean Centres appear to emphasise the production of high-quality research to improve health, within a multi-disciplinary perspective, for the international centres, in addition to research production, there appeared to be a deeper emphasis on research utilisation. Their mission statements therefore spoke directly to the need to: i) translate research evidence into policy; ii) link research to the needs of policymakers; iii) synthesise research evidence; and iv) provide support to policymakers through delivery of products and services that directly impacted the policy process (Table 2). This emphasis is not surprising, given that the utility of HPSR is derived from its ability to inform policy and decision making (Box 1) (4), and given that the international

Box 1: Utility of Health Policy and Systems Research

The utility of health policy and systems research derives directly from its ability to inform policy and decision making. If HPSR is conducted in a manner that is remote from policy and decision-making then it is likely to be of limited value. Close involvement of policy and decision makers is required throughout the research process – from identifying research questions, to interpreting data and writing up – in order to ensure the relevance of the final product.

World Health Organization Alliance for Health Policy and Systems Research

centres are designated World Health Organization (WHO) collaborating institutions that support global programs on HPSR.

Table 2 Mission of international centres mapped against research utilisation activities

Activities to support research utilization	Mission statements from international centres
Translation of research evidence into policy	<p>Using the UN's Sustainable Development Goals (SDG's) as a general framework for action, we translate practice into global knowledge and bring global knowledge to inform best practices. –<i>Royal Tropical Institute (KIT)</i></p> <p>IHSR will conduct HPSR and creatively translate evidence into policy and practice. –<i>Institute for Health Systems Research</i></p>
Linking research to the needs of policymakers	<p>A national think-tank providing technical consultancy to health policy-makers. –<i>National Health Development Research Center</i></p> <p>To further strengthen health policy research and better accommodate the needs of health development and reform. –<i>National Health Development Research Center</i></p> <p>Supporting leaders and citizens who want to use the best available research evidence to strengthen health (and social) systems –<i>McMaster Health Forum, McMaster University</i></p>
Synthesis of research evidence	<p>To draw on an unparalleled breadth of synthesized evidence and context-specific knowledge– <i>Knowledge to Policy (K2P) Centre, American University of Beirut</i></p> <p>Supporting leaders and citizens who want to use the best available research evidence to strengthen health (and social) systems –<i>McMaster Health Forum, McMaster University</i></p>
Providing direct support to policymakers by delivering products and services to directly impact the policy process	<p>Producing briefs and conducting policy dialogues to impact policy agendas and action–<i>Knowledge to Policy (K2P) Centre, American University of Beirut</i></p> <p>A national think-tank providing technical consultancy to health policy-makers. –<i>National Health Development Research Center</i></p>

5.1.2 Comparison of scope of services

The list of services provided by Caribbean and international Centres is shown in Table 3. Based on the data extracted from electronic reports and websites, all of the centres are involved in research production, and all, except for SODECO and WINDREF, are also involved in teaching and capacity building. Based on data from online sources, most of the Caribbean centres and several international centres also engage in consultancy services and product dissemination. However, review of online material did not identify any Caribbean centre providing the following services: i) supporting priority setting exercises; ii) convening forums or dialogues; and iii) response services.

Table 3 List of services provided by Caribbean and international Centres

Institution	Functions						
	Research	Training /capacity building	Consultancy services	Production & dissemination of policy briefs & other policy-relevant products	Other services		
					Priority setting	Convene Forums or Dialogues	Response service /Policy advice
Caribbean Institute for Health Research (CAIHR)/TMRI	✓	✓	✓	✓	†	†	†
Centre for Health Economics (HEU)	✓	✓	✓	✓	†	†	†
Sir Arthur Lewis Institute of Social and Economic Studies (SALISES)	✓	✓	✓	✓	†	†	†
Scientific Research Centre Suriname (SRCS)	✓	✓	†	✓	†	†	†
UWI Solutions for Developing Countries (UWI SODECO)	✓	†	✓	✓	†	†	†
Windward Islands Research and Education Foundation (WINDREF)	✓	†	✓	†	†	†	†
National Health Development Research Center	✓	✓	✓	†	✓	†	✓
Centre for Public Policy & Health, Durham University	✓	✓	✓	†	†	†	✓
Knowledge to Policy (K2P) Centre, American University of Beirut	✓	✓	✓	✓	✓	✓	✓
Royal Tropical Institute (KIT)	✓	✓	✓	✓	✓		✓
Graduate School of Public Health, Seoul National University	✓	✓	✓	†	†	†	✓
Institute for Health Systems Research	✓	✓	✓	†	†	†	†
National Centre for Global Health and Medicine (NCGM)	✓	✓	†	†	†	†	†

Institution	Functions						
	Research	Training /capacity building	Consultancy services	Production & dissemination of policy briefs & other policy-relevant products	Other services		
					Priority setting	Convene Forums or Dialogues	Response service /Policy advice
Nuffield Centre for International Health and Development, University of Leeds	✓	✓	✓	✓	†	✓	†
Yonsei University, College of Medicine	✓	✓	†	†	†	†	†
McMaster Health Forum, McMaster University	✓	✓	✓	✓	†	✓	✓
Arizona State University, College of Nursing & Health Innovation	✓	✓	†	†	†	†	†
Federal Research Institute for Health Organization and Informatics of Ministry of Health of the Russian Federation	✓	✓	†	†	†	†	†
Islands and Small States Institute (ISSI), University of Malta	✓	✓	†	†	†	†	†
Catholic University of the Sacred Heart, Institute of Public Health	✓	✓	†	†	†	†	†
University of Miami, Institute for Bioethics and Health Policy	✓	✓	✓	†	†	✓	†

✓ Provided

X Not provided

† Not known

5.1.3 Comparison of the type of research conducted

The various categories of research conducted by regional centres and international centres, based on the data extracted from available electronic reports, are shown in Table 4. All types of research are undertaken by the Caribbean and international centres, however, only one (1) international centre undertakes biomedical research. Two (2) Caribbean centres are currently engaged in health policy research and four Caribbean centres currently execute behavioural health research. Available online data also reveal all centres in the Caribbean, except for SALISES and SODECO, are engaged in health services research.

Table 4 List of the types of research conducted by the regional and international Centres

Institutions	Types of Research					
	Biomedical	Health Services	Health Policy	Clinical	Behavioural	Population Health
Caribbean Institute for Health Research (CAIHR)/TMRI	✓	✓	†	✓	✓	✓
Centre for Health Economics (HEU)	†	✓	✓	†	✓	✓
Sir Arthur Lewis Institute of Social and Economic Studies (SALISES)	†	✓	✓	†	✓	✓
Scientific Research Centre Suriname (SRCS)	✓	✓	✓	✓	✓	✓
UWI Solutions for Developing Countries (UWI SODECO)	✓	†	†	✓	†	†
Windward Islands Research and Education Foundation (WINDREF)	✓	✓	†	✓	✓	✓
National Health Development Research Center	†	✓	✓	✓	†	✓
Centre for Public Policy & Health, Durham University	X	✓	✓	✓	†	✓
Knowledge to Policy (K2P) Centre, American University of Beirut	X	✓	✓	✓	†	✓
Royal Tropical Institute (KIT)	†	✓	✓	✓	✓	✓
Graduate School of Public Health, Seoul National University	X	†	✓	✓	†	†
Institute for Health Systems Research	X	✓	✓	✓	✓	✓
National Centre for Global Health and Medicine (NCGM)	✓	✓	✓	†	✓	✓
Nuffield Centre for International Health and Development, University of Leeds	X	✓	✓	†	†	†

Institutions	Types of Research					
	Biomedical	Health Services	Health Policy	Clinical	Behavioural	Population Health
Yonsei University, College of Medicine	X	✓	✓	✓	†	†
McMaster Health Forum, McMaster University	X	✓	✓	✓	†	✓
Arizona State University, College of Nursing & Health Innovation	†	✓	✓	†	✓	✓
Federal Research Institute for Health Organization and Informatics of Ministry of Health of the Russian Federation	†	†	†	†	†	†
Islands and Small States Institute (ISSI), University of Malta	X	✓	✓	✓	†	†
Catholic University of the Sacred Heart, Institute of Public Health	†	†	†	†	†	†
University of Miami, Institute for Bioethics and Health Policy	†	†	✓	✓	†	✓

✓ Provided

X Not provided

† Not known

5.1.4 Gap Analysis

The findings, presented in Tables 2 and 3 suggest that a clear gap exists in the Caribbean region in the provision of the following types of services: i) supporting priority setting exercises; ii) convening forums or dialogues; and iii) response services. We conclude this because, according to the available online data, no centre in the region appears to be currently providing these services.

The findings presented in Table 4 show that Caribbean centres are active in all aspects of HPSR. However, since the health systems building blocks are quite diverse (governance, financing, service delivery arrangements, health human resources, information and evidence, and medical products and technologies), and because the field of health services research is itself quite varied (covering implementation science, management science, improvement science, operations research and delivery science) research gaps may also exist in some systems areas and research sub-fields. With respect to health policy research, the HEU and the SRCS were the two centres, identified from online sources and during key informant interviews, involved in this type of research. Review of the latest annual reports

from these institutions (10,11) revealed that the focus of their policy research was largely on health financing and HIV, in the case of the HEU, and climate change, human health and the environment, in the case of the SRCS. With respect to behavioural health research, four centres are active in this area: CAIHR, HEU, SRCS and WINDREF. From the latest annual reports, the following are included in the current focus for behavioural research at these institutions: Sickle Cell Disease (challenges and opportunities in youth development; biopsychosocial aspects, depression and suicide), Child Development (Parenting Intervention and Routine Primary Health Care), Substance Abuse (CAIHR). HIV (HEU). Neurotoxicant exposures; palliative care; viral hepatitis and HIV (SRCS). Sports for Health, Addictive Diseases (WINDREF) (10–13). Finally, health services research on various subjects is executed by the Caribbean centres. For example, information from available annual reports indicate that the HEU has been engaged in research on hospital and health program costing; national health accounts; access and use of quality HIV services for key populations; and health services productive management (10), while the SRCS has investigated access to care issues in Suriname, in particular referrals between general physicians and specialists (11).

5.2 Capacity to benefit from a Southern Caribbean Centre for HPSR

5.2.1 Challenges faced by potential users

Review of Strategic Health Plans – Trinidad and Tobago, Guyana, Suriname

The Ministry of Health (MoH) of Trinidad and Tobago, in its Strategic Plan 2012 – 2016 (6), noted that the ineffective use of scarce resources for the health sector jeopardises the country's current and future development. This plan questioned the degree of progress achieved with respect to health sector reform and health care at state-run facilities. It also recognised the need to find sustainable ways to finance public health care. Four strategic priorities for the Ministry were therefore identified for pursuit during the planning period: Health Human Resource Planning & Development; ICT Integration in the Health sector; Continuous Improvement of the Management of the Health Sector; Strengthening the Policy and Legislative Framework. These stated priorities suggest that there is a critical need for health systems research, in particular, in the sub-field of delivery science, management science, operations research and improvement science (Figure 1) to tackle these problems.

The Government of Guyana's Health Vision 2020 (7) included several strategic priorities, goals and objectives for improving the health system in Guyana. Under Governance and Leadership, the Ministry intends to strengthen legislative, institutional, and policy frameworks; to strengthen the capacity of the MoH to lead and steward the health system; and to enable the optimal organisation and management of health resources. Under the strategic information priority area, plans to establish systems, structures, policies, protocols, standards and capacities for improving evidence-based decision-making were outlined. Under service delivery, the implementation of strengthened quality assurance measures was a planned measure. As in the case of Trinidad and Tobago, the MoH of Guyana will also require support in all of the HSR sub-areas—implementation science, improvement science, operations research, management science, delivery science—in order to realise its objectives.

Review of the strategic health plan for Suriname—National Health Sector Plan 2011 – 2018 (8) indicates that the sector in Suriname, as in the other Caribbean countries, suffers from challenges related to rising expectations, increased demands, and inequalities in health access and coverage. To address these issues, the Ministry plans to move towards universal coverage. It also proposes a people-centred approach to service delivery and intends to i) enhance primary health care; ii) integrate health into public policies across sectors (health in all policies); and iii) address human resource, information systems and leadership challenges. The strategic issues faced by the Surinamese health system also signal the need to enhance the relevance of health research being conducted in the region, by carefully focusing it on issues related health system strengthening.

Review of Caribbean Cooperation in Health (IV)

The latest iteration of the Caribbean Cooperation in Health initiative, CCH IV (9), has identified Data and Evidence for Decision Making and Accountability as its fourth Strategic Priority Area. CCH is a regional framework that facilitates coordinated action and collaboration among partners for health in the Caribbean (e.g. relevant Ministries, regional civil society, academia and regional private sector organisations). CCH I was adopted by the Caribbean Community (CARICOM) Health Ministers in 1984 to optimise the utilisation of resources, promote technical cooperation among countries, and develop and secure funding for the implementation of projects in selected priority health areas. Since then, there has been three iterations of the framework.

The current framework notes that health care systems and the public health infrastructure in the region are in urgent need of attention and should be better financed. Health research was identified as one key aspect of the health system capacity that needs to be improved and made more policy-relevant. The limited availability of local evidence to inform policy, practice and programming and to support accountability for results; inadequate use of evidence generated in the Caribbean; and limited avenues for consideration of evidence in national health planning and policy development processes are all recognised as areas of concerns.

Key lines of action were recommended to address Strategic Priority # 4, and to realise the strategic outcome of an enhanced regional capacity to generate and use quality data and evidence for more effective policy, programs and monitoring. These include strengthening production and dissemination of Caribbean research in an ethical framework; increasing and strengthening the cadre of professionals with the capacity to conceptualise, conduct, analyse, disseminate, and translate the findings of various forms of research for health; and increasing the use of evidence, in particular Caribbean indigenous evidence, in national policy, programming planning processes.

CCH IV uses a “Regional Public Goods Approach (RPGs)”, as this allows for the provision of goods and services that require technical and financial resources not available in the individual countries. The framework rationalises that RPGs complement and provide critical inputs or add value to the national

interventions, and countries make greater gains than they would have if acting individually, or at minimum, achieve the gains at lower cost as a result of the economies of scale. The RPGs identified for all the Strategic Priority Areas (including #4) include research and development, evaluation research on which health systems/programs are most effective and shared policy frameworks. Specifically, for Strategic Priority Area # 4, the list of RPGs includes a regional clearinghouse for Caribbean research, and good practices; Caribbean Rapid Response Unit; regional standards for training related to application and use of research, regional forum for democratisation new evidence; and regional cooperation in research (partnerships, communities of practice and networks of researchers, policy makers and other research users).

It is important to note that for each CCH IV Strategic Priority Area, the development and implementation of policy was identified in the key lines of action and regional public goods. The establishment of a Southern Caribbean Centre for Health Policy and Systems Research would be timely and relevant as the centre could play a vital role in enhancing regional capacity to generate and use quality data and evidence for more effective policies.

5.2.2 Statements of perceived need

Understanding of Health Policy and Health Systems Research (HPSR)

When asked to describe their understanding of Health Policy and Systems Research, most key informants focused more on the need for this type of research in the Caribbean in their responses. The improvement of health systems' effectiveness and performance was mentioned a few times. One key informant believed that HPSR includes research related to the way the (health) system is financed, efficiency considerations of the system and resource allocation. Another defined HPSR as research that focuses on people, organisations, players, etc. that contribute to developing health systems as well as the interactions and influences over the system and system performance.

Key informants agreed that there is a need for a centre for HPSR in the Caribbean and that existing centres currently focus on clinical/applied research relevant only to a few countries and not on the translation of evidence and the implementation of policies. One key informant believed that a HPSR centre already exists in the region (Centre for Health Economics) and there may be a need to establish the areas not covered, and duplication/competition avoided.

Definition of Health Policy and Health Systems Research

The majority of key informants were in agreement with the following WHO's definition of HPSR: the field of study that seeks to understand and improve how societies organize themselves in achieving collective health goals, and how different actors interact in the policy and implementation processes to contribute to policy outcomes. i.e. field of study that seeks to enhance the health policy process and the efficiency and effectiveness of the health system. This definition was described as reasonable and workable by one key informant. Others noted that the definition should address issues related to quality such as accessibility and acceptability.

Purpose of Health Systems Research

Key informants agreed that the purpose of health systems research is to improve the understanding and performance of health systems and include all of health services research, most health policy research, and some clinical and population health research. However, the majority of the key informants believed that biomedical research should be included. One key informant noted that there is a place for biomedical research in HPSR; however, another indicated that it must not draw/use up resources compared with the other types of research. It was clear that several key informants viewed biomedical research as critical and complementary to other areas of health systems research needed to improve health outcomes.

Capacity to benefit from Health Policy and Systems Research.

Two key informants, representing research users/policy-makers, agreed that the utility of a Centre for Health Policy and Systems Research will depend upon its ability to inform policy and decision-making. They recognised that the following services (and related products) are important to facilitate policy and decision-making: priority-setting exercises with decision-makers, production and dissemination of policy relevant products, the provision of a response service, the provision of evidence-based policy guidance to decision-makers, hosting of stakeholder forums and the establishment/support of a network that facilitates exchange between researchers, policy makers, and civil society. These key informants also identified the following priority issues, related to the six health systems building blocks that should be addressed by the Centre:

- Leadership and Governance
 - Models for decentralisation based on population distribution, financing, etc.
 - Accountability of health professionals within the health system (clear roles and responsibilities)
- Health Financing
 - Alternative models to free health care system i.e. sustainability
 - Accountability
 - Possible sources of funding and better allocation of resources.
- Service Delivery
 - Standard setting and compliance; Monitoring and Evaluation
 - Quality assurance.
- Health Workforce
 - Planning for Human Resource for Health regarding numbers and competencies
 - Quality assurance mechanisms regarding training and standardisation
- Medical products and technologies
 - User friendly and applicable (treatment) options that is appropriate to setting
 - Quality assurance mechanisms e.g. calibration of equipment, etc.
- Information and Evidence
 - Building research into the health system
 - National Health Management Information Systems
 - Implementation research

6. Summary of Needs Assessment

Our analysis indicates that there is indeed scope for a Centre to increase the production of HPSR in the Caribbean. All key informants, except for one, agreed that there is a need for such a centre. Review of the strategic challenges facing the three countries of interest and CARICOM, also support the requirement for execution of HPSR within all sub-fields (implementation science; improvement science; operations research; management science; delivery science) and to address questions in all six health system areas (governance; financing; service delivery; health human resources; information and evidence; and medical products and technologies). Potential users therefore stand to benefit from the Centre's establishment.

The analysis shows that there is a gap in services in the research uptake area (uptake of research evidence into policy and practice). There is the potential for the Southern Centre to fill this gap and to improve the relevance of the UWI – FMS to Governments, by providing direct support to them, in the form of research utilisation services, such as a response service, convening of deliberative forums, and development and dissemination of briefs and other products intended to impact policy. Providing these services can also assist the CARICOM in their stated quest for a 'regional mechanism for the democratisation of new evidence' and a Caribbean Rapid Response Unit (9).

With respect to the production of research, there appears to be latitude for the Southern Caribbean Centre for HPSR in the field of health policy research; behavioural health research; and health services research since these areas can span the six health systems building blocks and five health services sub-fields. If for example, centres executing behavioural health research, emphasize behaviour change for health professionals, then there will be scope for involvement in behavioural health research that addresses health systems areas other than human resources for health. The Southern Caribbean Centre should therefore seek to create a niche for itself by focusing on specific fields or sub-fields.

7. Recommendations

Given the findings presented in section 6, we recommend the following mandate and list of functions for the Southern Caribbean Centre, to address existing gaps and respond to the needs of potential users:

7.1 Mandate (mission)

The value of the Centre should lie in its unique ability to respond to the research needs of Governments (three in the first instance) and to provide direct support to them. The Centre's main purpose should therefore be to serve as an academic think-tank¹ or research contractor for the Governments of Trinidad

¹ The concept of a think-tank is developed in Start and Hovland (2004) (14). They tend to be policy research institutions, largely funded by government departments and agencies, and their research is intended to address specific concerns of policy makers. Think-tanks tend to operate by proposing change based on research. Their causes tend to be rooted in academic inquiry, and their credibility lies in the objective and scientific approach. As a result, researchers within think tanks are able to see all sides of an argument (14).

and Tobago, Suriname and Guyana. Given this value proposition, the Centre's mission should be centred on the *provision of independent and impartial advice that is founded upon health policy and systems research of the highest standards of academic inquiry*. The core values that should underpin the Centre's research and other activities will naturally emanate from this mission statement.

7.2 Core Functions

The above mandate remains quite broad and could encompass functions spanning many areas. In the interest of efficiency, however, we recommend that the Centre pursue a streamlined scope of operation, and seek to build strong competencies in specific areas, with the ultimate goal of becoming a recognised international leader in the respective fields. In addition to this, care should be taken to ensure that added value is produced, and the Centre does not duplicate, but rather complement existing initiatives in the region and within the UWI system. In this regard, we recommend the following functions and services:

7.2.1 Function 1: Research execution

To deliver a program of health policy and systems research, that is responsive to the needs of the Governments, with specific focus on health policy and health services research. Research areas to be covered should include:

- 1.1 Research on operational issues of specific health programs
- 1.2 Research on the operational and management issues related to the regional health authorities
- 1.3 Implementation strategies for specific products or services
- 1.4 Quality improvement research
- 1.5 Research into the process of health policy making in the Caribbean
- 1.6 Health policy analysis (analysis of policy alternatives affecting the health system or the health of the public)
- 1.7 Health policy impact assessments

In accordance with the value-added approach, we suggest that in pursuing its research agenda, behavioural research, and research on health economics and health financing be omitted, as these areas are well covered by other entities on the St. Augustine campus—the Faculty of Social Sciences and the HEU. Inter-disciplinary collaboration should be pursued, where input from these disciplines is required for the execution of research projects.

7.2.2 Function 2: Service delivery to Governments (policymakers and health system leaders) to support the use of best available research evidence to strengthen health systems

To conduct activities to support health system leaders to utilise research in health decision-making.

- 2.1 Produce and disseminate research syntheses, briefs and other relevant products to impact policy
- 2.2 Provide a response service² for policymakers and health system leaders
- 2.3 Host deliberative forums³ to support health policy and health systems decision making (identify workable solutions to address health system challenges)

7.2.3 Function 3: Provision of technical consultancy services

- 3.1 To provide professional services in any of the areas that fall within the Centre's mandate.

7.2.4 Function 4: Training

- 4.1 Provide capacity building in any of the areas within the Centre's mandate, using cost-effective modes of delivery.

7.3 Developing the Centre's Work Program

The specific topics for research should be defined in collaboration with the three countries and taking into account national plans, regional and international frameworks and targets such as the Sustainable Development Goals. However, to ensure the Centre maintains its relevance to Governments, three key principles should be upheld. Firstly, priority setting exercises⁴ with health-system leaders should be regularly conducted. Secondly, the Centre's program of work should be focused on these identified priorities. Thirdly, the Centre's implementation research agenda should be carefully linked or embedded⁵

² Rapid response units or services are intended to meet policymakers' needs for research evidence about the health systems issues they face. They operate as structured services, which receive and respond to urgent requests for research evidence from policy and decision-makers. This service tends to benefit top level policy and decision makers at Ministries of Health, districts or local health authorities. Pioneered in low-income countries, this type of service has been found to be a feasible and acceptable means of providing support to health system leaders. (12,17).

³ Deliberative dialogues can be used as a mechanism for knowledge translation and exchange to support health policy and health systems decision making. The objectives of these fora extend beyond that of customary consultations, workshops or seminars. They seek to engage participants in a deliberation about health system problems, using synthesised research evidence as an input into the deliberation. The dialogue is intended to capture contextual information, tacit knowledge, views and experiences, of the participants to identify workable solutions to address the health system challenge. (15,16)

⁴ Priority-setting processes seek to ensure that research and efforts to link research to action are highly relevant to the needs of potential users. These processes engage potential users in exercises to identify the priority areas in which research should be conducted, or for which efforts to link research to action should gain attention (12). Priority setting should be credibly set and should be inclusive, should incorporate an explicit process and criteria for determining priorities, a communications strategy and a monitoring and evaluation plan (13,14).

⁵ Embedded research is research conducted in partnership with policy-makers and implementers, integrated in different health system settings and considers context-specific factors that can ensure greater relevance of findings in decision-making. Because implementation research is conducted in real world settings, it is important to ensure that these research questions originate from practitioners, rather than topics researchers themselves may suggest. Collaboration between researchers, implementers and policy-makers has been shown to improve the uptake of health systems research (15).

in decision-making. This means that research questions should originate from policymakers, practitioners and those working in health services.

These principles should not constrain the Centre from pursuing projects or delivering services to other Governments, or other institutions, if its resources so allow.

7.4 Staffing

It is not possible to recommend a specific staffing structure for the Centre, as this will depend upon the volume of work to be delivered. Generally speaking, however, three categories of staff will be required: (i) At the Leadership level, a Director and possibly a Deputy Director. (ii) At the technical level, Research Fellows/Research Associates to serve as Scientific Leads for research and Scientific Leads for knowledge translation and exchange. It may be beneficial to consider in this category, persons with a mix of skills so that they can assume cross-functional roles. This may reduce operational cost. (ii) Administrative and support personnel.

7.5 Financing

Sources of financing for the Centre could originate from the following sources:

- The UWI - This could possibly support the Centre's administrative expenses and some core positions
- Allocations from Governments of the three countries - If these Governments accept the value proposed from the establishment of the Centre, they should be willing to make annual budgetary commitments to ensure delivery of services.
- Research Grants
- Consultancy Fees
- Grants from Development Institutions

7.6 Sustainability strategies

We suggest twinning with a leading institution(s) that has a similar mandate, as a strategy to ensure growth and sustainability of the Centre. In this way, projects could be pursued in partnership. In-kind resources to support ongoing activities and opportunities for staff development could also be realised.

8. References

1. Clarke M. A Public Health Research Agenda for Equity in Trinidad and Tobago. 2017 Feb.
2. Gilson L, Alliance for Health Policy and Systems Research, World Health Organization. Health policy and systems research: a methodology reader [Internet]. Geneva, Switzerland: Alliance for Health Policy and Systems Research : World Health Organization; 2012 [cited 2017 Sep 26]. Available from: http://www.who.int/alliance-hpsr/resources/alliancehpsr_reader.pdf
3. Remme JHF, Adam T, Becerra-Posada F, D'Arcangues C, Devlin M, Gardner C, et al. Defining research to improve health systems. PLoS Med. 2010 Nov 16;7(11):e1001000.
4. World Health Organization, Alliance for Health Policy and Systems Research. What is Health Policy and Systems Research and why does it matter [Internet]. 2007 Jun. Available from: <http://www.who.int/entity/alliance-hpsr/resources/Alliance%20HPSR%20-%20Briefing%20Note%201.pdf?ua=1>
5. Hoffman S, Røttingen J, Bennett S, Lavis JN, Edge J, Frenk J. Background Paper on Conceptual Issues Related to Health Systems Research to Inform a WHO Global Strategy on Health Systems Research [Internet]. 2012 Feb. Available from: http://www.who.int/alliance-hpsr/alliancehpsr_backgroundpaperhsrstrat1.pdf
6. Ministry of Health, Trinidad and Tobago. Ministry of Health of Trinidad and Tobago: Strategic Plan Fiscal Years 2012 - 2016.
7. Ministry of Health Guyana. Health Vision 2020: A National Health Strategy for Guyana 2013 - 2020. 2013 Dec.
8. Ministerie van Volksgezondheid. Suriname: National Health Sector Plan 2011 - 2018 [Internet]. [cited 2015 May 21]. Available from: http://www.nationalplanningcycles.org/sites/default/files/country_docs/Suriname/nhsp_2011_2018.pdf
9. Caribbean Cooperation in Health IV 2016 - 2025: Focusing on Regional Public Goods for Sustainable Health Development - Draft Report.
10. HEU Centre for Health Economics. THE UNIVERSITY OF THE WEST INDIES FACULTY OF SOCIAL SCIENCES. HEU, Centre for Health Economics: Annual Report 2015-2016.
11. Scientific Research Center Suriname. Summary Annual Report. Scientific Research Center, Academic Hospital Paramaribo, Suriname, (AZP): 2016.
12. Winward Islands Research and Education Foundation. Windward Islands Research and Education Foundation: 2016 Annual Report.
13. Tropical Medicine Research Institute. Tropical Medicine Research Institute: Annual Report 2015 - 2016. In.

14. Start D, Hovland I, Overseas Development Institute (London E. Tools for policy impact: a handbook for researchers. London: Overseas Development Institute; 2004.
15. Ghaffar A, Langlois EV, Rasanathan K, Peterson S, Adedokun L, Tran NT. Strengthening health systems through embedded research. Bull World Health Organ. 2017 Feb 1;95(2):87–87.