



CARIBBEAN HEALTH RESEARCH COUNCIL

Health Research Agenda for the Caribbean



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ST. AUGUSTINE, TRINIDAD AND TOBAGO
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List of Abbreviations

CARICOM.....	Caribbean Community
CD.....	Communicable Diseases
CCH	Caribbean Cooperative in Health
CHRC.....	Caribbean Health Research Council
COHRED.....	Council on Health Research for Development
EH.....	Environmental Health
ENHR	Essential National Health Research
FCH.....	Family and Community Health
FN.....	Food and Nutrition
HRD	Human Resource Development
MH.....	Mental Health
NCD	Non-Communicable Diseases
SHS	Strengthening Health Systems

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Executive Summary

The Caribbean Health Research Council (CHRC) has developed a **Health Research Agenda** for the Caribbean. The development of the Agenda was guided by the latest edition of the Caribbean Cooperation in Health (CCH III). The latter defines the health priorities of CARICOM countries and comprises eight Programme Areas: Communicable Diseases, Food and Nutrition, Chronic Non-Communicable Diseases, Human Resource Development, Family and Community Health Services, Strengthening Health Systems, Environmental Health, and Mental Health.

Objectives

The Health Research Agenda was developed to:

1. Define areas for health research that should be given high priority in the Caribbean. Priorities were determined for each Programme Area of the CCH III.
2. Identify critical gaps and define health research priorities that can be adapted or adopted by Caribbean countries, researchers/research institutions and funding agencies.

Methods

The methodology to develop the Agenda included:

1. Collation of key background documents, which were shared with participants
2. Identification and recruitment of participants, who comprised policy makers, programme managers, researchers and health professionals
3. Determination of the research priorities using the Delphi Methodology (an iterative process to achieve consensus)
 - a. Round One – participants were asked to list and rate what they believed to be priority areas of research for each of the sub-priority areas of the CCH III Programme Areas. These were analyzed and a list of priority research topics prepared.
 - b. Round Two – the list generated from the Delphi Round One was sent to participants who were asked to score each topic in terms of Relevance, Appropriateness, Feasibility and Impact of the Outcome using a five point scale. The maximum score attainable was 20 while the minimum was 4. The mean scores were used to rank the research topics.
4. Validations of the draft Agendas – the Agendas were shared with stakeholders who were asked to rate the research priority setting process as well as the resulting list of research priorities. The feedback was positive on both issues.

The use of the electronic media (emails, telephone calls and the CHRC website) was a central feature in the development of the Agenda.

A Steering Committee comprising Chief Medical Officers and senior Caribbean researchers provided oversight, ensuring transparency and inclusiveness while the Council on Health Research for Development (COHRED) provided technical support.

Results:

Delphi Round 1

There were 102 participants from 15 Caribbean countries in the first round of the Delphi Process. Greater than 50% of the participants were from the Ministries of Health. Other Institutions represented were Universities, Professional Associations and Regional Health Institutions.

The majority of participants agreed that there was inadequate research available to support the implementation of programmes to address the objectives of the CCH III Programme Areas and that the evidence derived from Caribbean research has not been used extensively to support the implementation of programmes or re-definition of actions. Very few participants believed that there were sufficient funds available for research.

After analysis of the submissions of the participants, over 500 research topics were included in the second round of the Delphi Process.

Delphi Round 2

Eighty-six persons from 17 Caribbean Countries participated in the second round of the Delphi. After analysis of the data, the priority research topics were ranked based on their mean scores.

The final Agenda comprise of 553 topics: Communicable Diseases (48), Food and Nutrition (36), Non-Communicable Diseases (61), Strengthening Health Systems (94), Mental Health (66), Environmental Health (84), Human Resource Development (45) and Family and Community Health (119).

The ranges of scores as well as the research topics with the highest scores in each CCH III Programme Area are presented below. Note that the highest possible score was 20 and the lowest 4.

Programme Area	Sub-priority	Range	Topic with the highest score
Communicable Diseases	HIV/AIDS, STIs and Tuberculosis	17.9 – 13.4	Adherence with Anti-Retroviral Treatment
	Communicable Diseases with Epidemic Potential	16.2 – 10.6	Evaluation of Prevention Programmes
	Vaccine Preventable Diseases	15.3 – 10.8	Data Quality Audit of Immunization Programmes
Food and Nutrition	Obesity and Co-morbidities	16.7 – 10.9	Nutrition and Physical Activity in Schools
	Nutrition Deficiency Diseases	16.2 – 8.6	Breast Feeding, Infant Feeding and Young Child Feeding Practices
	Food Security	13.3 – 10.0	Strategies for Household Food Security and the Availability of Healthy Foods
Non-Communicable Diseases	Policy and Plan of Action	15.6 – 13.5	Impact of Social Determinants of Health on Non-Communicable Diseases.
	Health Promotion and Disease Prevention	15.9 – 10.7	Determination of the Effect of Self-Management Support on the Reduction of Complications of Non-Communicable Diseases.
	Integrated Management of Chronic Diseases and Risks Factors	16.4 – 12.0	Quality of Care for Diabetes, Hypertension and Cervical Cancer
Strengthening Health Systems	System-Wide Strengthening	18.1 – 12.4	Quality Assessment in the Provision of Health Services.
	Information and Evidence for Health Systems Management	17.3 – 11.3	Evaluation of Information Systems.
	Health Financing	16.2 – 8.8	Cost and Challenges to Achieving Universal Access.
	Risk/Disaster Management	18.4 – 11.1	Evidence of Good Practices and Smart Policies for Ensuring Continuity of Health Services and Reducing the Health Impact of Disasters
	Pharmaceutical Policy, Regulation and Management	17.4 – 6.4	Household Expenditure Surveys to Determine the Ability of Households to Afford Medications.

Programme Area	Sub-priority	Range	Topic with the highest score
Mental Health	Development of a Regional Mental Health Policy, Action Plan and Legislation	17.5 – 8.7	Review of Mental Health Legislation and Policies
	Reform of Mental Health Services	15.8 – 12.8	Training Curriculum on the Care of Mentally Ill and Substance Abuser for General Health Care Workers.
	Management and Care of Vulnerable or At-Risk Mentally Ill People Including Substance Abusers	17.2 – 11.8	Effectiveness of Drug Rehabilitation Centres
	Public Information, Education and Communication	16.8 – 11.3	Caregiver’s Attitudes.
Environmental Health	Institutional Strengthening	19.0 – 13.3	Review of Environmental Health Legislation
	Water Resources Management	18.8 – 11.3	Appropriate Techniques for Water Conservation and the Effectiveness of Current Conservation Programmes
	Vector Control	19.0- 11.0	Cost Effective Chemical and Biological Approaches to Reduce the Mosquito Vectors
	Liquid Waste and Excreta Disposal	18.5 – 11.8	Cost Benefit Analysis of Having a Sewer system and a Treatment Plan
	Solid Waste Management	18.8 – 13.5	Best Approaches for Waste Reduction as it Relates to Polyethylene Terephthalate (PET) Bottles and Styrofoam
	Workers’ Health	19.5 – 9.5	Injury Data
Human Resource Development	Movement of Health Professionals	16.3 – 9.3	Database of all Caribbean and Medical and Public Health Schools with their Curriculum and Graduation Requirements
	Regional Health Human Resource Policy and Actions Plans	17.3 – 11.5	Job Satisfaction and Motivation of Health Workers in Public and Private Sectors
	Strengthening the Regional Primary Care Workforce	17.0 – 12.0	A Comparison of Curricular and Requirements in Caribbean Schools of Higher Education with Respect to Health Professions
	Strengthening Regional Training Institutions	17.0 – 13.5	Determination of Human Resource Planning Capacity in Member Countries
	Building a Public Health Workforce to Promote Health and Development for CARICOM Member States	17.8 – 17.0	A Review of Lesson Learnt from Initiatives taken to Strengthen Leadership in Public Health

Programme Area	Sub-priority	Range	Topic with the highest score
Family and Community Health	Child Health and Development	15.8 – 9.4	Factors which Contribute to Low Birth Weight in the Caribbean
	Reproductive and Sexual Health	16.0 – 8.1	Obstacles to Behaviour Change
	Adolescent Health	16.3 – 10.2	Design and Operation of an Adolescent –Friendly Health Facility in the Community
	Health of the Elderly	15.1 – 10.8	Enhanced Senior Care Skills and the Community Level
	Injuries and Violence	14.7 – 10.8	Violence Against the Elderly

Next Steps

The Health Research Agenda now has to be:

- Disseminated to all stakeholders including Ministries of Health, Universities, Regional Health Institutions/ Research Institutions, NGOs, other persons who participated in the project.
- Submitted to the Council on Human and Social Development (COHSOD), CARICOM Secretariat and subsequently to CHRC member countries for adoption
- Implemented – this includes the engagement of health research institutions and other researchers to conduct the priority research studies, and funding agencies to provide financial support.
- Monitored and evaluated: relevant indicators will be identified/ developed to monitor the uptake and implementation of the Agenda. The impact of the Agenda on the conduct of essential research will be the subject of an independent review.

Conclusion

The development of the Health Research Agenda represents a significant step in the strengthening of health research systems in the Caribbean. The transparent and inclusive approach that was used is expected to engender its widespread adoption. The challenge remains in the engagement of the researchers and funding agencies, who have a critical role in its implementation.



Introduction

A Health Research Agenda can be defined as a list of health research priorities that serve as a guide for researchers and funding agencies. The main purpose of any Health Research Agenda is to guide the conduct of research so as to facilitate the evidence-informed implementation of policies, programs and clinical practice. It also serves as guide for resource allocation to ensure that limited resources for health are invested in areas with the highest social return^[1].

In the early 1990s, the Caribbean Health Research Council (then known as the Council Commonwealth Caribbean Medical Research Council) established a Regional Committee for Research Coordination charged with the responsibility to define the health research needs of the Commonwealth Caribbean and present the findings to the Conference of Ministers Responsible for Health, Research Organization/ Institutes, Universities and the Pan American Health Organization. The health research priority areas identified were: *Non-Communicable Diseases; Sexually Transmitted Infections; Health Promotion and Other Interventions; Socio-Cultural Factors and Health Outcomes; and Health Care Delivery*. However, the implementation of the resulting Agenda was impeded by insufficient capacity at the Ministries of Health and other relevant organizations^[2].

In the Nassau Declaration of 2001, the Heads of Government of CARICOM highlighted the importance of evidence-based decision making^[3]. This was consistent with the growing groundswell for health policies, programs and practices in the Caribbean to be informed by the best scientific evidence.

The development of the Caribbean Health Research Agenda is timely as it complements and supports a number of regional initiatives. Of particular relevance is the recent completion of the process to develop the third edition of the Caribbean Cooperation in Health (CCH III). CCH III defines the health priorities of the Caribbean and was recently endorsed by CARICOM Member States. It includes eight Programme Areas (Table 1). There is a requirement that the activities conducted to achieve the Expected Results for the various CCH III Programme Areas are well grounded in research. It is therefore necessary to facilitate the production of research that would support the evidenced-based implementation of CCH III^[4].

Another regional development that prompted the establishment of the Agenda was the endorsement of the Caribbean Health Research Policy by CARICOM. The Policy includes the proposed structure for health research systems in the Caribbean as well as strategies to strengthen them. It highlighted the development of a Research Agenda in consultation with all stakeholders as being critical to the strengthening of health research systems in the Region^[5].

OBJECTIVES

The main objectives of the Agenda are:

1. To identify areas for research that should be given high priority in the Caribbean. Priorities will be determined for each Programme Area of the CCH III.
2. To identify critical gaps and define health research priorities that can be adapted or adopted by Caribbean countries, researchers/research institutions and funding agencies.

The sub-priorities for each CCH III Programme area are presented in Table 1 below:

Table 1: List of the CCH III Programme Areas and their Sub-Priorities

CCH III Programme Area	Sub-Priorities
Communicable Diseases	HIV/AIDS, STIs and Tuberculosis Communicable Diseases with Epidemic Potential Vaccine Preventable Diseases
Food and Nutrition	Obesity and Co-morbidities Nutrition Deficiency Diseases Food Security
Non-Communicable Diseases	Policy and Plan of Action Health Promotion and Disease Prevention Integrated Management of Chronic Diseases and Risks Factors
Strengthening Health Systems	System-Wide Strengthening Information and Evidence for Health Systems Management (Surveillance, M&E, Research) Health Financing Risk/Disaster Management Pharmaceutical Policy, Regulation and Management
Mental Health	Development of a Regional Mental Health Policy, Action Plan and Legislation Reform of Mental Health Services Management and Care of Vulnerable or At-Risk Mentally Ill People Including Substance Abusers Public Information, Education and Communication
Environmental Health	Institutional Strengthening Water Resources Management Vector Control Liquid Waste and Excreta Disposal Solid Waste Management Workers' Health
Human Resource Development	Movement of Health Professionals Regional Health Human Resource Policy and Actions Plans Strengthening the Regional Primary Care Workforce Strengthening Regional Training Institutions Building a Public Health Workforce to Promote Health and Development for CARICOM Member States
Family and Community Health	Child Health and Development Reproductive and Sexual Health Adolescent Health Health of the Elderly Injuries and Violence

Methods

At the onset, a Steering Committee was established to provide project oversight. It also had a key role in ensuring that the process was transparent and inclusive. It comprised of two Chief Medical Officers and three senior Caribbean Research Scientists. The main responsibilities of the Steering Committee were to supervise, co-ordinate, and provide advice to the team conducting the work; review and approve the methodology; review reports; and provide general feedback.

Technical support for the development of the Agenda was guided by the Council on Health Research for Development (COHRED). It provided key technical support and has supported the development of Research Agendas in countries globally for over fifteen (15) years as part of its mandate to strengthen health research systems.

Research Agendas were developed for each of the eight CCH III Programme Areas with priority topics being identified for the sub-priorities of each Area (See Table 1).

The electronic media, that is, emails, telephone calls and the CHRC website were fully utilized in the development of the Agenda.

The Agenda was developed in four (4) phases:

Phase 1 – Identification of Background Documents

Key background documents were collated that highlighted the research related health issues that needed to be considered. These were shared with participants for consideration as they completed the questionnaires.

Each participant received an electronic package that contained:

- Caribbean Health Research Agenda Proposal
- Caribbean Cooperation in Health III – the relevant Programme Area
- Report of the Caribbean Commission on Health and Development
- Health Research Policy for the Caribbean
- Database of Caribbean HIV/AIDS Research (for Communicable Diseases Programme Area)
- Caribbean Food and Nutrition Institute: “Notes on Research Implications” (for Food and Nutrition Programme Area)

All the documents listed above were also available on the CHRC website.

Phase 2 – Stakeholders Recruitment

Relevant stakeholders were identified and invited to contribute to the development of the Agenda. They included:

-
- Chief Medical Officers/ Ministries of Health representatives
 - CMOs were asked to delegate the task of completing the questionnaires to the relevant persons at the Ministry of Health
 - Content experts based at Universities, Regional Health Institutions, others agencies
 - Non-Governmental Organizations and community representatives
 - Professional associations

Phase 3 – Determination of the Research Priorities

The Delphi methodology was used to determine the priority areas for research. Delphi methods can be defined as the use of an iterative process to achieve consensus or expert opinion where a problem can be resolved using subjective judgment on a collective basis. In its simplest form, the method is anonymous, has controlled iteration and feedback and formal group judgment [6, 7, 8].

The steps involved in the determination of the research priorities included [9]:

1. Development of the first round Delphi questionnaire in which participants were asked to list and rate (on a scale of 1-10) the 10 most important topics that should be researched in each sub-priority of the various CCH III Programme Areas.

For each sub-priority, the participants were also asked whether adequate research was currently being conducted or being used to support the implementation of programmes; and whether there was sufficient funding for the conduct of such research in the Caribbean.

2. Transmission of the questionnaire to participants who submitted their responses. All correspondences were sent via email with periodic phone calls that served as reminders to complete the questionnaires. Responses were submitted using email and via the CHRC website.
3. Analysis of the 1st round of results: The frequency of occurrence of each topic and the ratings designated by the participants were used to prepare a list of priority research topics.
4. Preparation of the second round questionnaire and transmitting it to participants. The questionnaire included the list of the research topics for each sub-priority area that were generated from the analysis of Delphi Round 1 questionnaires.

Participants were asked to score each topic, using the Council on Health Research for Development (COHRED) “Criteria for Research Priority Setting – Mini Module” [2]. The latter comprised:

Appropriateness

- *Ethical and moral issues*
- *Availability of pre existing data*

Relevancy

- *Equity focus and community concern/demand*
- *The burden of illness*

Feasibility

- *Capacity of the system to undertake the research*
- *Cost justification*

Impact of Research Outcome

- *Chances of implementation*
- *Overall reduction of burden, including cost*

5. Analysis of the second round of questionnaires: The Relevance, Appropriateness, Feasibility and Impact of the Outcome of each research topic listed were scored using a five point scale (5 being the highest score and 1 being the lowest). The maximum score attainable was 20 while the minimum was 4.

The mean values were used to rank the research topics.

Phase 4 – Validation of the Agendas

This included getting feedback from stakeholders regarding both the process used to develop the Agenda and the list of research topics generated via an on-line survey, and the hosting of the stakeholders' meeting.

On-line Survey:

Everyone who participated in the Delphi was invited to assist in the process of validating the Agendas. This included completing a questionnaire that required participants to rate the research priority setting process and the resulting list of research priorities. The Relevance, Inclusiveness, and Transparency of the research priority setting process were scored using a five point scale (5 being the highest score and 1 being the lowest). Also, the Relevance, Chances of Implementation, and Completeness of the research priority list were scored using a similar scale. The maximum score attainable was 5. The mean score for each category was then calculated.

Stakeholders Meeting:

This meeting was hosted at CHRC's 55th Annual Scientific Meeting in 2010. Delegates were invited to a special 2-hour session. The session focused on getting feedback about the priority setting process and the results of the Delphi Round 1 for the Communicable Diseases and Food and Nutrition Programme Areas.

Participants were presented with a review of the priority setting process and informed of the findings to date. They gave feedback on ways to strengthen the process and increase inclusiveness.

Input was also sought on how to address possible challenges in the implementation of the Agendas i.e. how to:

- Engage Researchers
- Engage Funders
- Move from a Regional to National Research Agendas



Results

DELPHI ROUND 1

There were 102 participants from 15 Caribbean countries in the first round of the Delphi Process (Table 2). The majority of participants were from Trinidad and Tobago (20%), Jamaica (17%) and Barbados (9%). The Food and Nutrition Programme Area had participants from the largest number of Caribbean Countries (15) followed by Strengthening Health Systems (9), Family and Community Health (9), Environmental Health (8), Communicable Diseases (7), Non-Communicable Diseases (7), Mental Health (7) and Human Resource Development (4).

Table 2: Country Representation among the Participants

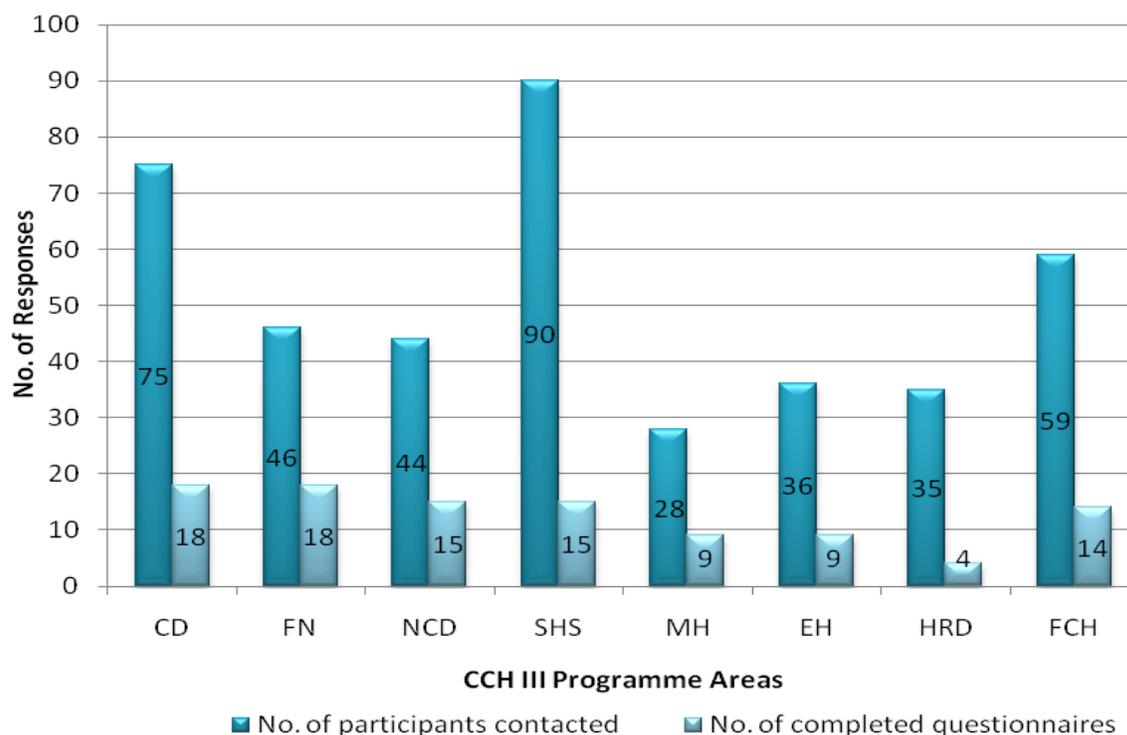
Countries	Delphi 1	Delphi 2
Antigua & Barbuda	2	4
Barbados	9	4
Bahamas	0	1
Belize	2	1
British Virgin Islands	4	1
Cayman Islands	2	1
Dominica		1
Grenada	5	1
Guyana	5	4
Jamaica	17	19
Montserrat	6	3
St. Kitts and Nevis	4	3
St. Lucia	8	13
Suriname	7	3
Trinidad & Tobago	20	18
Turks and Caicos Islands	7	6
UK (CHRC Council Member)	1	0
USA (Barbados Citizen)	1	1
Regional		1
Total	100	85

**for the Programme Areas: Environmental Health and Family and Community Health, 2 participants did not identify their country*

**for the Programme Area: Family and Community Health, 1 participants did not identify his/her country*

The response rate ranged from 39.1% - 11.4%. The Programme Area: Food and Nutrition had the largest response rate (39.1%) followed by Mental Health (Figure 1). The majority of the participants were from the Ministries of Health. Researchers from the Universities were also well represented for most Programme Areas. The other institutions represented were Regional Health Institutions, NGOs and professional associations (Table 3).

Figure 1: Number of Responses for each CCH III Programme Area for Delphi Round 1



See List of Abbreviations on Page vi

Table 3: Institutional Affiliation of Participants for Delphi Round 1

CCH III Programme Area	Ministry of Health	(%)	Universities	(%)	Other	(%)
Communicable Diseases	6	33.3	4	22.2	8	44.4
Food and Nutrition	9	50.0	4	22.2	5	27.8
Non-Communicable Diseases	8	53.3	5	33.3	2	13.4
Strengthening Health Systems	10	66.7	1	6.7	4	26.7
Mental Health	7	77.8	1	11.1	1	11.1
Environmental Health	7	87.5	0	0.0	1	12.5
Human Resource Development	4	100.0	0	0.0	0	0.0
Family and Community Health	7	53.8	2	15.4	4	30.8

Perceived Availability, Need for and Use of Research for each Programme Area

(See Appendix I for the Tabulated Results)

Communicable Diseases

Most of the participants (>65%) believed that there was inadequate research available to support the implementation of programmes to address the objectives of the three sub-priority areas. The majority of the participants (>70%) also did not think that the evidence derived from Caribbean research has been used extensively to support the implementation of programmes or re-definition of actions. The only exception was for Vaccine Preventable Diseases (50%).

Food and Nutrition

Over 75% of the participants thought that there was inadequate research conducted in the Caribbean to support the implementation of programmes to address the objectives of the three sub-priority areas for Food and Nutrition. Less than 30% of the participants believed that the evidence from Caribbean research has been used extensively to support the implementation of programmes or re-definition of actions. None of the participants believed that there were sufficient funds available for the research.

Non-Communicable Diseases

More than half of the participants believed that there was inadequate research available to support the implementation of programmes to address the objectives of the three sub-priority areas. Less than half of the participants also did not think that the evidence derived from Caribbean research has been used to support the implementation of programmes or re-definition of actions. Very few participants believed that there were sufficient funds available for these research topics (<13%).

Strengthening Health Systems

Less than half the participants thought that there was inadequate research conducted in the Caribbean to support the implementation of programmes to address the objectives of all sub-priority areas for Strengthening Health Systems except for Risk/Disaster Management (60%). Less than one-third of the participants believed that the evidence from Caribbean research has been used extensively to support the implementation of programmes or re-definition of actions. Less than one-fifth of the participants believed that there were sufficient funds available for the research.

Mental Health

Greater than two-thirds of the participants thought that there was inadequate research conducted in the Caribbean to support the implementation of programmes to address the objectives of all sub-priority areas for Mental Health, except for Development of a Regional Mental Health Policy, Action Plan and Legislation (44.4%). Less than one-quarter of the participants believed that the evidence from Caribbean research has been used extensively to support the implementation of programmes or re-definition of actions. None of the participants believed that there were sufficient funds available for the research.

Environmental Health

Less than one-third of the participants believed that there was adequate research conducted in the Caribbean to support the implementation of programmes to address the objectives of all sub-priority areas. Less than two-fifths of the participants believed that the evidence from Caribbean research has been used extensively to support the implementation of programmes or re-definition of action.

For four of the six priority areas, none of the participants believed that there were sufficient funds available for the research. For the remaining two priority areas only 11.1% of the participants indicated that sufficient funds were available for research.

Human Resource Development

In four of the five sub-priority areas of Human Resource Development no participant believed there was adequate research conducted in the Caribbean to support the implementation of programmes to address the objectives of the sub-priority areas. Also, none of the participants believed that the evidence from Caribbean research has been used extensively to support the implementation of programmes or re-definition of action. Less than one-quarter of the participants indicated that sufficient funds were available for research.

Family and Community Health

Greater than one-third of the participants believed there was inadequate research conducted in the Caribbean to support the implementation of programmes to address the objectives of all sub-priority areas. Less than 30 % of the participants believed that the evidence from Caribbean research has been used extensively to support the implementation of programmes or re-definition of action. Less than 7% of the participants indicated that sufficient funds were available for research.

Priority Research Topics

Table 4 shows the number of research topics identified for each sub-priority area at the end of the first round of the Delphi process. After analysis, research priorities were identified. The Programme Area: Family and Community Health had the largest number of research priorities identified (119). This was followed by Strengthening Health Systems (93), Environmental Health (83), Mental Health (66), Communicable Diseases (48), Non-Communicable Diseases (47), Human Resource Development (47) and Food and Nutrition (36).

These research priorities were used in the second round questionnaire.

Table 4: Number of Research Priorities Identified after analysis of Delphi Round 1

CCH III Programme Area	Sub-Priorities	No. of Research Topics	No. of Research Priorities Identified
Communicable Diseases	HIV/AIDS, STIs and Tuberculosis	70	22
	Communicable Diseases with Epidemic Potential	65	18
	Vaccine Preventable Diseases	34	8
Food and Nutrition	Obesity and Co-morbidities	81	14
	Nutrition Deficiency Diseases	81	12
	Food Security	55	10
Non-Communicable Diseases	Policy and Plan of Action	38	14
	Health Promotion and Disease Prevention	45	16
	Integrated Management of Chronic Diseases and Risks Factors	30	17
Strengthening Health Systems	System-Wide Strengthening	40	15
	Information and Evidence for Health Systems Management (Surveillance, M&E, Research).	26	18
	Health Financing	22	17
	Risk/Disaster Management	42	22
	Pharmaceutical Policy, Regulation and Management	27	21
Mental Health	Development of a Regional Mental Health Policy, Action Plan and Legislation	38	16
	Reform of Mental Health Services	27	18
	Management and Care of Vulnerable or At-Risk Mentally Ill People Including Substance Abusers	26	22
	Public Information, Education and Communication	14	10
Environmental Health	Institutional Strengthening	25	13
	Water Resources Management	16	15
	Vector Control	17	11
	Liquid Waste and Excreta Disposal	14	12
	Solid Waste Management	21	15
	Workers' Health	19	17
Human Resource Development	Movement of Health Professionals	15	10
	Regional Health Human Resource Policy and Actions Plans	12	9
	Strengthening the Regional Primary Care Workforce	11	9
	Strengthening Regional Training Institutions	19	9
	Building a Public Health Workforce to Promote Health and Development for CARICOM Member States	5	4
Family and Community Health	Child Health and Development	39	25
	Reproductive and Sexual Health	44	29
	Adolescent Health	24	26
	Health of the Elderly	24	19
	Injuries and Violence	28	20

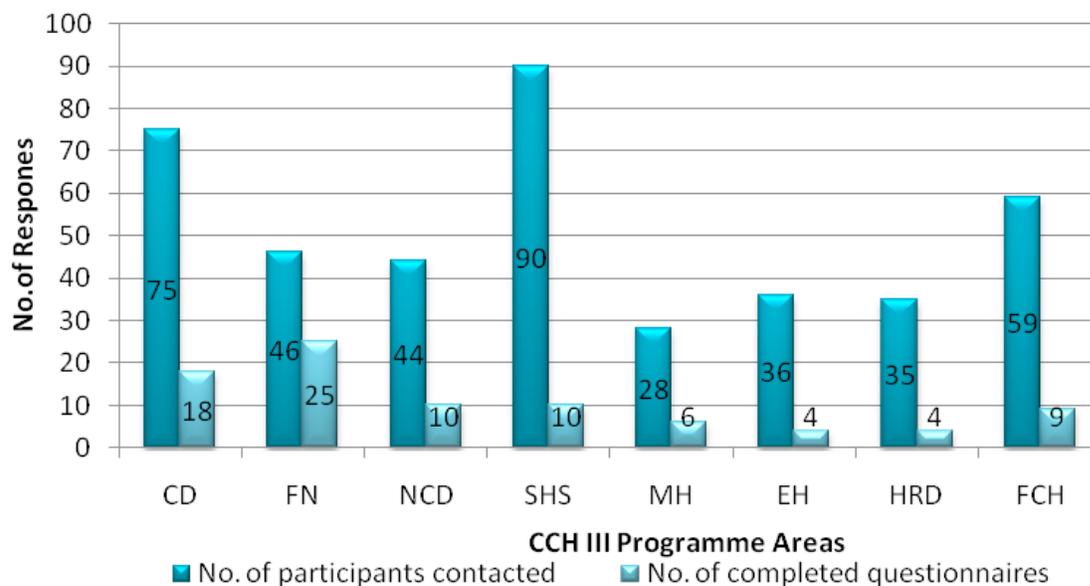
DELPHI ROUND 2

Eighty-six persons from 17 Caribbean countries participated in the second round of the Delphi (Table 2).

The majority of participants were from Jamaica (22%), Trinidad and Tobago (21%), and St. Lucia (15%). The Food and Nutrition Programme Area had participants from the largest number of Caribbean Countries (11) followed by Communicable Diseases (9), Strengthening Health Systems (8), Non-Communicable Diseases (7), Mental Health (6), Environmental Health (4), Human Resource Development (4) and Family and Community Health (3).

The response rate ranged from 54.3% - 11.1% (See Figure 2). The Programme Area: Food and Nutrition had the largest response rate (54.3%) followed by Communicable Diseases (24.0%). Greater than 50% of the participants were from the Ministries of Health (Table 5). The Universities were also represented as well as other institutions such as Regional Health Institutions, NGOs and professional associations.

Figure 2: Number of Responses for each CCH III Programme Area for Delphi Round 2



See List of Abbreviations on Page vi

Table 5: Institutional Affiliation of Participants for Delphi Round 2

CCH III Programme Area	Ministry of Health	(%)	Universities	(%)	Other	(%)
Communicable Diseases	8	44.4	4	22.2	6	33.3
Food and Nutrition	16	64.0	5	20.0	4	16.0
Non-Communicable Diseases	5	50.0	3	30.0	2	20.0
Strengthening Health Systems	7	70.0	0	0.0	3	30.0
Mental Health	4	66.7	1	16.7	1	16.7
Environmental Health	3	75.0	0	0.0	1	25.0
Human Resource Development	4	100.0	0	0.0	0	0.0
Family and Community Health	3	33.3	4	44.4	2	22.2

The ratings obtained for each topic in terms of its Relevance, Appropriateness, Feasibility and Impact of Outcome were analyzed. The ranges of scores for the topics in each sub-priority of the eight Programme Areas are presented in Table 6.

Table 6: Ranges of Scores for Research Topics within the Sub Priority Area for the CCH III Programme Areas

Programme Area	Sub-priority Area	Range (4-20)
Communicable Diseases	HIV/AIDS, STIs and Tuberculosis	17.9 – 13.4
	Communicable Diseases with Epidemic Potential	16.2 – 10.6
	Vaccine Preventable Diseases	15.3 – 10.8
Food and Nutrition	Obesity and Co-morbidities	16.7 – 10.9
	Nutrition Deficiency Diseases	16.2 – 8.6
	Food Security	13.3 – 10.0
Non-Communicable Diseases	Policy and Plan of Action	15.6 – 13.5
	Health Promotion and Disease Prevention	15.9 – 10.7
	Integrated Management of Chronic Diseases and Risks Factors	16.4 – 12.0
Strengthening Health Systems	System-Wide Strengthening	18.1 – 12.4
	Information and Evidence for Health Systems Management (Surveillance, M&E, Research).	17.3 – 11.3
	Health Financing	16.2 – 8.8
	Risk/Disaster Management	18.4 – 11.1
	Pharmaceutical Policy, Regulation and Management	17.4 – 6.4
Mental Health	Development of a Regional Mental Health Policy, Action Plan and Legislation	17.5 – 8.7
	Reform of Mental Health Services	15.8 – 12.8
	Management and Care of Vulnerable or At-Risk Mentally Ill People Including Substance Abusers	17.2 – 11.8
	Public Information, Education and Communication	16.8 – 11.3
Environmental Health	Institutional Strengthening	19.0 – 13.3
	Water Resources Management	18.8 – 11.3
	Vector Control	19.0- 11.0
	Liquid Waste and Excreta Disposal	18.5 – 11.8
	Solid Waste Management	18.8 – 13.5
	Workers' Health	19.5 – 9.5
Human Resource Development	Movement of Health Professionals	16.3 – 9.3
	Regional Health Human Resource Policy and Actions Plans	17.3 – 11.5
	Strengthening the Regional Primary Care Workforce	17.0 – 12.0
	Strengthening Regional Training Institutions	17.0 – 13.5
	Building a Public Health Workforce to Promote Health and Development for CARICOM Member States	17.8 – 17.0
Family and Community Health	Child Health and Development	15.8 – 9.4
	Reproductive and Sexual Health	16.0 – 8.1
	Adolescent Health	16.3 – 10.2
	Health of the Elderly	15.1 – 10.8
	Injuries and Violence	14.7 – 10.8

The Health Research Agenda for the Caribbean comprises of 553 topics: Communicable Diseases (48), Food and Nutrition (36), Non-Communicable Diseases (61), Strengthening Health Systems (94), Mental Health (66), Environmental Health (84), Human Resource Development (45) and Family and Community Health (119).

The list of these research priorities and their average scores, by sub-priorities for each of the eight CCH III Programme Areas are presented in Tables 7-14.

Table 7: List of Research Priorities for Communicable Diseases

Research Topics		Average Score
Sub-Priority – Communicable Diseases with Epidemic Potential		
1	Evaluation of prevention programmes	16.2
2	Effectiveness of Dengue control methods	15.2
3	Gastroenteritis: impact of weather patterns and water shortages	15.2
4	Readiness for Influenza outbreaks	15.1
5	Disease outbreak management	14.8
6	Risk factors for communicable diseases in most at risk persons	14.6
7	Antibiotic use and resistance	14.2
8	KABP on Dengue prevention	14.1
9	Factors related to the spread of Dengue	14.0
10	KABP of Food Borne Illnesses	13.9
1	Respiratory infections in children	13.7
12	H1N1- KABP and Prevention	13.6
13	Leptospirosis epidemics, KABP surveys on prevention	13.6
14	Costing of outbreaks	13.4
15	Food screening at ports of entry	12.3
16	H5N1	11.8
17	Hanta virus and other emergent illnesses	11.7
18	Genotyping of Malaria	8.6
Sub-Priority – Vaccine Preventable Diseases		
1	Data quality audit of immunization programmes	13.3
2	Surveys of immunization coverage	12.6
3	Cost effectiveness of vaccines	11.4
4	KAPB- barriers to immunization	11.1
5	Sero-surveys of immune response	10.9
6	Vaccine side effects surveys	10.8
7	Development of new vaccines for Dengue and Malaria	10.6
8	Vaccine efficacy trials	10.0
Sub-Priority – HIV/AIDS, STI and Tuberculosis		
1	Adherence with Anti –Retroviral Treatment	16.7
2	Evaluation of prevention programmes	16.2
3	Drug resistance with Anti –Retroviral Treatment	16.1
4	Prevention in most at risk population	15.8
5	Prevalence of resistant strains of Tuberculosis	15.7
6	TB/HIV co-infection	15.6
7	Hospitalization of HIV patients – morbidity patterns	15.3
8	Diagnosis of Tuberculosis	15.3
9	Behavioural Surveillance Studies (BSS) in most at risk populations	15.1
10	Laboratory capacity to diagnose Tuberculosis	15.1
11	Opportunistic infections in HIV patients	15.0

Research Topics		Average Score
12	Stigma and discrimination in HIV	14.6
13	Syndromic management of STIs	14.6
14	Economic cost studies	14.5
15	Positive prevention of HIV	14.4
16	KAP in most at risk populations	13.8
17	Sero-prevalence studies in most at risk populations	13.7
18	KABP on Tuberculosis	13.6
19	Emergent contraceptions – impact on condom use	13.2
20	Factors associated with resilient HIV Infection	12.7
21	Male circumcision	11.7
22	Intra-vaginal practices	10.9

Table 8: List of Research Priorities for Food and Nutrition

Research Topics		Average Score
Sub-Priority – Nutritional Deficiency Diseases		
1	Breast feeding, infant feeding and young child feeding practices	16.2
2	Anaemia in young children and pregnant women	15.1
3	Food choices	15.1
4	Nutrition in pregnancy	14.8
5	Food consumption surveys	14.7
5	Malnutrition in children – risk factors, interventions and long term effects	14.6
6	Analysis of school meals	14.5
7	Dietary guidelines	14.4
9	Nutrition status	14.4
10	Supplementation programmes for vulnerable groups	13.4
11	Micronutrient status	12.0
12	Osteoporosis	10.6
Sub-Priority – Obesity and Co-Morbidities		
1	Nutrition and physical activity in schools	17.9
2	Prevalence of obesity and co-morbidities	16.3
3	Healthy eating and lifestyles in children	16.2
4	Food consumption surveys	15.4
5	Multi-sectoral approaches to obesity management	15.4
6	Economic cost associated with obesity and co-morbidities	15.2
7	Work place wellness	15.0
8	Risk reduction strategies	15.0
9	Management of obesity	14.9
10	Impact of nutrition on co-morbidities	14.6
11	Risk factors for obesity and co-morbidities	14.6
12	Breast feeding and infant obesity	14.4
13	Review of legislation and trade policies	14.2
14	Body mass index and growth charts – development and use	13.4
Sub-Priority – Food Security		
1	Strategies for household food security and availability of healthy foods	15.3
2	Food consumption surveys	15.2
3	Food labelling	14.8
4	Food safety – imports, genetically modified foods, food handlers, pesticide residues, heavy metals	14.4
5	Local food production	14.3
6	Nutritional status surveys	14.0
7	Value of Caribbean foods	14.0
8	Role of trade policies	13.5
9	Supplementation of vulnerable groups	13.1
10	Impact of biotechnology	10.8

Table 9: List of Research Priorities for Non-Communicable Diseases

Research Topics		Average Score
Sub-Priority - Policy and Plan of Action		
1	Impact of social determinants of health on Non- Communicable Diseases.	15.6
2	Morbidity and mortality statistics and the quality of data collected.	15.6
3	Evidence based interventions.	15.4
4	Prevalence and incidence of Non- Communicable Diseases.	15.3
5	Systematic review of specific public policy initiatives.	15.0
6	Monitoring and evaluation of the implementation of public health policies on nutrition, smoking, physical activity, air quality.	14.9
7	Audit of public policies from multiple sectors relating to healthy eating, active living, tobacco control and alcohol reduction, access to screening and health information.	14.8
8	Determining factors that negatively affect the implementation of public health policies.	14.8
9	Drug utilization studies for Non- Communicable Diseases.	14.8
10	Adequacy of funding for the implementation of policies and programs.	14.7
11	Cost effectiveness of cancer screening programmes.	14.5
12	Civil society's and Faith Based Organizations' role in response to the Non- Communicable Diseases epidemic.	14.0
13	Determining cost effective ways to provide comprehensive newborn screening for Sickle Cell Diseases.	13.5
14	Investigating models available for having high quality care for Sickle Cell Diseases.	13.4
Sub-Priority - Health Promotion and Disease Prevention		
1	Determination of the effect of self management support on the reduction of Non-Communicable Diseases complications.	15.9
2	KAP for Non-Communicable Diseases' risk factors.	15.9
3	Knowledge and attitudes of self-management of Non-Communicable Diseases.	15.9
4	Strategies for the promotion of healthy lifestyles.	15.9
5	KAP - diabetes, hypertension, cancer (cervical, lung, breast, colon, prostate): disease aetiology, prevention, screening and treatment.	15.8
6	Assessment of initiatives to improve use of routine testing by individuals and families e.g. blood pressure, blood glucose and cholesterol.	15.6
7	Understanding of barriers to change and evaluation of strategies that address these barriers.	15.5
8	Assessment of impact of behaviour change initiatives on risk reduction.	15.3
9	Evaluation of the impact of various communication strategies, including new technologies.	15.3
10	Review of Non-Communicable Diseases screening programmes.	15.0
11	Assessment of the barriers at the community levels that impact on increasing physical activity.	14.9
12	Assessment of the effectiveness of different methods of information sharing on risk reduction.	14.8
13	Implementation of organized physical activity programmes in schools and communities.	14.0
14	Education of the population regarding risk of having children with Sickle Cell Disease.	12.3
15	Effective transfer of (Sickle Cell Disease) genotype data to women who attend antenatal clinic.	11.2
16	Patient and caregiver information.	10.7
Sub Priority - Integrated Management of Chronic Diseases and Risks Factors		
1	Quality of care for diabetes, hypertension and cervical cancer.	16.4
2	Strategies to reduce the incidence of amputations and chronic renal failure.	16.3
3	Prospective study on results of nutrition interventions in elementary school to achieve reduction of childhood obesity.	16.1

Research Topics		Average Score
4	Lifestyle interventions in improving Diabetes and Hypertension control.	16.0
5	Intervention programs in different age groups throughout the lifecycle for priority Non-Communicable Diseases.	15.7
6	Evaluation of the distribution, implementation, application/utilization and adherence of the protocols for managing Non-Communicable Diseases in primary care settings as well as the community.	15.6
7	Review of international guidelines and development of regional/national food based dietary guidelines to ensure that consistent messages are communicated.	15.6
8	Assessment of the total cardio-vascular risk approaches as mechanisms for improving the care provided by the health care provider.	14.9
9	The use of HbA1c testing for screening for diabetes.	14.8
10	Longitudinal study of children born to diabetic parents.	14.6
11	Role of the Ministry of Health in making information available and ensuring guideline based care.	14.2
12	Determining effective ways of improving the level of knowledge of health care providers on Sickle Cell Disease.	13.1
13	Investigating models available for having high quality care for Sickle Cell Diseases available throughout the Caribbean.	12.9
14	Complementary medicine and the prevention and control of Non-Communicable Diseases - science or fiction.	12.6
15	Identifying cost effective ways of distributing Sickle Cell Disease newborn screening results.	12.5
16	Determining whether Sickle Cell Disease management strategies developed within the region can be broadly applied in countries with less developed programs in the region.	12.3
17	Determination of workplace hazards and the implementation of Health Promotion interventions.	12.0

Additional topics received during the validation phase:

- Control of dust mites with regards to asthma
- Men's perceptions of digital rectal examinations
- Epidemiology of seizure disorders e.g. Epilepsy
- Compliance to treatment and incidence of admissions to secondary care for patients diagnosed with seizure disorders
- Epidemiology of Chronic Obstructive Pulmonary Disease
- Aetiology of Chronic Obstructive Pulmonary Disease
- Frequency, causes and health care burden of exacerbations associated with Chronic Obstructive Pulmonary Disease
- Causes and health care burden of hyperglycaemic crisis
- Causes and health care burden of hypertensive emergencies
- The association between drug compliance and the incidence of admissions to secondary care for Non-Communicable Diseases
- Epidemiology of Cataract disease
- Health service burden of Cataract disease
- Effects on quality of life for patients diagnosed with Coronary Artery Disease
- Health care cost in primary, secondary and tertiary care institutions for patients diagnosed with Coronary Artery Disease

Table 10: List of Research Priorities for Strengthening Health Systems

Research Topics		Average Score
Sub-Priority - System-Wide Strengthening		
1	Quality assessment in the provision of health services.	18.1
2	Evaluation of planning in health systems and services.	16.3
3	Use of the World Health Organization or similar Health System Performance indicators.	16.1
4	Preparedness of public and private health systems to meet existing and future health needs, based on shifting demographics, as well as societal health trends.	15.4
5	Situation analysis and needs assessment of the capability and capacity of the primary health care clinics to deliver an integrated approach to chronic diseases.	15.3
6	Measuring access to health services.	15.1
7	Economic development opportunities in the health sector: incentives and enabling environments for private sector involvement e.g. health tourism.	14.6
8	National service framework: primary care model.	14.4
9	Aging populations: health needs, standards and legislation to regulate care (private and public institutions).	14.1
10	Best practice research on: a) Performance based management systems for health; b) Social participation in health.	14.1
11	Knowledge and attitudes of private and public health practitioners of the Ministries of Health's primary health care programmes.	14.1
12	Applying "Best Practice" to national programmes.	14.0
13	A review of existing legislation and institutional documents as a baseline measure and to determine adequacy.	13.6
14	Fostering Regional harmonization.	12.6
15	Meta-analysis of existing Primary Health Care research.	12.4
Sub Priority - Information and Evidence for Health Systems Management (Surveillance, M&E, Research)		
1	Evaluation of health information systems.	17.3
2	A review of systems to collect surveillance data.	16.4
3	Capacity building and mobilization of resources for the conduct and use of research in health and development efforts.	16.1
4	Facilitating the translation of research to practice through effective knowledge management.	16.1
5	Inter-country collaboration and exchange on health information systems with a view to understanding differences in needs of various territories.	16.0
6	Effective means to establish automated Health Information Systems in the smaller Caribbean territories.	15.8
7	Identifying support systems for the Expanded Program on Immunization units to carry out their responsibility.	15.3
8	Surveillance and use of information generated.	15.3
9	M&E component on projects and programmes.	14.9
10	Use of Global Information Systems in disease surveillance.	14.6
11	Statistics and system analysis of notifiable diseases.	14.4
12	Health impact assessment - models and best practice.	14.1
13	Assessing the existence of core elements (including the quality and effectiveness) of the health research system.	13.4
14	Data mining's influence on decision making.	12.6
15	Merging automated and non-automated data repositories.	12.3
16	Data entry innovations for public health inspections.	11.9

Research Topics		Average Score
17	Adapting and adopting DALYs or QALYs.	11.4
18	Operational barriers to efficient and effective implementation of programs being administered by institutions involved in strengthening health research.	11.3
Sub- Priority - Health Financing		
1	Cost and challenges to achieving universal access.	16.2
2	Public-Private Partnerships: capitalization for health care facilities .	15.8
3	Financing for safer hospitals and health centres both in terms of structural and non structural aspects.	15.0
4	Health sector demand-supply financing analysis, prioritization and alternative financing in context of highly indebted country scenarios.	15.0
5	Cost of care research.	14.7
6	Cost benefit analysis to determine which program will give the best value for money in terms of morbidity, mortality and burden of disease vs. cost to provide services.	14.5
7	Limitations of governmental financial procedures for effective procurement.	13.8
8	National and Regional Health Insurance and other financing options including public and private partners.	13.5
9	Knowledge and attitudes of health consumers on National Health Insurance.	13.0
10	Cost-benefit analysis of mobile clinics.	12.2
11	Budget neutral innovations – low cost improvements.	11.7
12	Research to guide budgetary allocations to Public Health programmes.	11.7
13	A review of financial mechanisms to establish baselines.	10.7
14	Service level agreements with public providers.	10.0
15	Opportunities and pitfalls in the donor community.	9.8
16	Avoiding disease-specific expenditure resulting in verticalisation of health care.	9.0
17	Non-tax contributions other than user fees.	8.8
Sub-Priority - Risk/Disaster Management		
1	Explore and document evidence of good practices and smart policies for ensuring continuity of health services and reducing the health impact of disasters, with emphasis on vulnerable groups such as children and youth, people living with HIV/AIDS, people living with mental health issues, and the elderly.	18.4
2	Evaluate the capacity of hospitals' A&E Departments to deploy medical teams to impacted zones, for the establishment of Advanced Medical Posts for the on-scene management of an incident and make recommendations for improvement.	17.9
3	Research progress in the development of Caribbean building codes for health facilities and compile hazard mitigation measures that have been used in the construction of hospitals over the last five years.	17.3
4	Hospitals and other health facilities (structural and non structural): safety from natural hazards (and preparedness).	16.8
5	Review of existing policy guidelines for shelters and upgrading the policies in terms of personnel, training, financing and IT requirements (for timely implementations).	15.9
6	Evaluate the current threshold capacity in the A&E Department for red tag victims (critically injured persons) and how can that capacity be increased.	15.2
7	Explore the historical impact of disasters on the health sector, looking at the extent of injuries and loss of life, temporary barriers to access to health care, the time and extent of interruption of basic health protection services (water, sanitation, etc.).	15.0
8	Assess the level of coordination among first response agencies.	14.9
9	Country-specific needs assessment surveys.	14.6
10	Elements of efficient and effective post disaster shelters.	14.1

Research Topics		Average Score
11	Examine the economic impact of disasters on the health sector.	14.1
12	Physical audits of facilities: risk assessment approach.	14.0
13	Cost-benefit analysis of implementing the safe hospital initiative.	13.8
14	Knowledge of assistive personnel of hospitals: their role during disaster.	13.2
15	Response to mass casualty national and regional events/disasters based on a risk management approach.	13.2
16	The National 1st , 2nd, and 3rd Triage Tags for field operation and subsequent hospital triage.	12.4
17	Assess the effects of disaster on Caribbean countries' progress to meet the Millennium Development Goals.	12.3
18	Simulation models for health delivery: category 5 or higher earthquakes on the Richter scale	11.6
19	Surveys of the numbers of trained disaster awareness persons in the health sector.	11.6
20	Perception of hospital workers on preparedness level of their hospitals.	11.4
21	Conduct gender impact assessments of disasters in the Caribbean and assess progress towards gender mainstreaming in national health disaster plans and programmes.	11.2
22	Regional standards and minimum practical skill sets for non-health sector disaster workers.	11.1
Sub-Priority - Pharmaceutical Policy, Regulation and Management		
1	Household expenditure surveys to determine the ability of households to afford medications.	17.4
2	Strategies for keeping the prices of medicine affordable.	17.0
3	Baseline information to inform formulary lists for various countries.	16.2
4	Medication use in Primary Health Care	15.6
5	Pocket cost for the acquisition of drugs	14.8
6	KAP study on patients' education regarding the proper use of pharmaceuticals.	14.4
7	Monitoring the efficacy of drugs and counterfeiting of drugs.	14.2
8	Patterns of alternative medicines/drugs, drug use and factors driving them.	14.0
9	Natural products, efficacies and benefits	13.8
10	Pharmacy legislation.	13.4
11	Procurement planning for pharmaceuticals.	13.4
12	Human resource management in pharmacy and the master plan (pharmaceutical policy for the region).	13.0
13	Access to high cost medicines and its impact on the disease burden in the Caribbean.	12.8
14	The changing role of the Pharmacist in community practice.	12.6
15	Rational medicine uses.	11.8
16	TRIPS, Generics and Procurement agenda.	11.8
17	Impact of bio-similars	11.6
18	Review OECS/Eastern Caribbean Drug Service (ECDS) to ascertain adequacy and areas of improvement.	11.6
19	Economic impact of the pharmaceuticals industry in the Caribbean.	9.4
20	Country price comparisons.	8.6
21	Regional/National Post Market Studies.	6.4

Table 11: List of Research Priorities for Mental Health

Research Topics		Average Score
Sub-Priority - Development of a Regional Mental Health Policy, Action Plan and Legislation		
1	Review of mental health legislation and policies: recommendations for improvement.	17.5
2	Mental health and chronic disease	16.3
3	Children and adolescents mental health.	15.3
4	Childhood sexual abuse in the Caribbean and its role in current prevalence of mental disorders.	15.2
5	Dementia.	15.2
6	Epidemiology of Mental Illnesses.	15.0
7	Mental health, HIV and reproductive behaviour including mental health and pregnancy.	14.8
8	Human rights in mental health and how it affects the client, relatives and professionals.	14.5
9	Documentation/description of best practices in mental health programmes.	14.3
10	Self-harm, suicide and violence.	14.3
11	Pharmaceutical usage patterns and outcomes.	14.2
12	Stress related mental health issues.	13.7
13	Economics of mental illnesses.	13.5
14	Caregiver burden.	13.0
15	KAP studies on various aspect of mental health.	12.2
16	Ethnicity based pharmacological research.	8.7
Sub-Priority - Reform of Mental Health Services		
1	Development of a training curriculum in care of mentally ill and substances abusers, for general health care workers.	15.8
2	Development of regional guidelines and protocols for continuum of care in mental health.	15.8
3	Establishment of supportive networks in mental health for general health care workers.	15.5
4	Quality of facilities, services, service utilization and satisfaction.	15.5
5	Development of guidelines/protocols of care for children and adolescents in mental health.	15.3
6	Occupational therapy.	15.3
7	Relationship of Community Mental Health Programmes with reduced rate of admission and re-admissions at mental facilities.	15.3
8	Review of models for integration of mental health care in primary and secondary care levels.	15.3
9	Competencies of professionals in providing care for the mentally ill clients.	15.2
10	Determining the challenges faced by clients and staff in receiving and providing quality care.	15.2
11	Evaluation of the need for trained professionals for the delivery of (decentralized) mental health care	14.7
12	Mental health problems in primary care.	14.7
13	Role of psychotherapy.	14.2
14	The quality of care mentally challenged clients receive both at primary and secondary health facilities.	14.2
15	Five and ten year follow-up of service users.	14.0
16	Situation analysis needs assessment and analysis of findings for the decentralization of mental care.	14.0
17	KAP studies of mental health among Primary Care Providers.	13.3
18	Option appraisal evaluation of mental hospital vs. community based care	12.8

Research Topics		Average Score
Sub-Priority - Management and Care of Vulnerable or At-Risk Mentally Ill People Including Substance Abusers		
1	Effectiveness of drug rehabilitation centres.	17.2
2	Best practice models for substance abuse treatment and rehabilitation.	16.5
3	Defining vulnerable 'at risk' mentally ill groups in the Caribbean.	16.3
4	Role of substance use in mental health service utilization.	16.0
5	Risk factors for mental diseases in the Caribbean.	15.7
6	Needs analysis.	15.3
7	Outcome studies of current practice.	15.0
8	Best practices for in-patient care for children and adolescents in mental health.	14.7
9	Care received by mentally ill patients from society and family.	14.7
10	Myths about mental illness that prevent mentally ill clients from functioning at their optimum level.	14.7
11	Perception of the need for alternative housing for mentally ill and substance abusers.	14.5
12	Population studies to determine the extent of untreated illnesses.	14.5
13	Prevalence or incidence of mental disorders in the elderly.	14.5
14	Effectiveness of behavioural change science on the reduction of substance abuse.	14.3
15	Attitudes of primary health care workers toward the mentally ill clients.	14.3
16	Best practice programmes for the homeless mentally ill.	14.2
17	Clinical trials of intervention, pharmaco vs. psychotherapy.	14.2
18	Factors leading to suicide in people who attempted suicide.	14.2
19	Status report on forensic psychiatric services in the region and recommendations for improvement.	13.7
20	Substance abuse programs - how effective is the bio-psychosocial model approach?	12.7
21	Culture differences in the treatment of people suffering from Post Traumatic Stress Disorder.	12.3
22	Role of changes in living conditions in the elderly regarding dementia.	11.8
Sub-Priority - Public Information, Education and Communication		
1	Caregiver attitudes	16.8
2	Evidence-based practices in information, education and communication strategies in mental health	15.8
3	Stigma and discrimination	15.5
4	Knowledge and attitude survey of families of mentally ill client on out patient management	15.3
5	The negative barriers that prevent society from accepting mentally ill clients	15.3
6	Public awareness and perception on mental health	15.0
7	Development of a sustainable plan for public information, education and communication in mental health	14.8
8	Integration of mental health in the school curriculum for all ages - from kindergarten to college	14.7
9	Mental health in emergency settings	13.3
10	KAP studies in the general population	11.3

Table 12: List of Research Priorities for Environmental Health

Research Topics		Average Score
Sub-Priority - Institutional Strengthening		
1	Review of environmental health legislation	19.0
2	The adequacy of training in the region adequate to meet Environmental Health needs	18.8
3	An examination into the relationship between communicable diseases and environmental health	18.3
4	Assessment of Department performance and capacity gaps	18.3
5	Emissions of power plants and other industries	18.0
6	The impact of current Water Sanitation and Hygiene(WASH) initiatives on diarrhoeal morbidity	18.0
7	The relationship between climate change and health and seafood safety	18.0
8	Air quality standards for the Caribbean	17.3
9	The impact of current environmental health public relations interventions on behaviour change	16.5
10	An evaluation of and the need for reform in the structure, administration and delivery of environmental health services	15.8
11	Model Environmental Health units	15.5
12	The impact of mercury use in the mining sector and heavy metals on human health	14.8
13	Privatization of components of Environmental Health services	13.3
Sub-Priority - Water Resources Management		
1	Appropriate techniques for Water Conservation and the effectiveness of current conservation programmes	18.8
2	An evaluation of current water surveillance systems and recommendations for improvement	18.3
3	An evaluation of how activities in the watershed/ catchment influence water quality	18.0
4	Community based watershed management	18.0
5	Impact of land use change on water resource management techniques	18.0
6	Impact of climate change on water resource management	17.8
7	Swimming pool water quality at hotels/ guest houses	17.8
8	Effectiveness of current household water treatment	17.5
9	Gaps in potability	17.3
10	Modelling techniques for water resource estimation and protection	16.5
11	Urbanization and water pollution	16.5
12	An evaluation of current health promotional activities to promote household water treatment	13.0
13	Development of indigenous integrated water resources management techniques	13.0
14	Impact of providing bins on river pollution	12.5
15	Cost effective methods of treating creek, river and pond water for drinking in the hinterland region	11.3
Sub-Priority - Vector Control		
1	Cost effective chemical or biological approaches to reduce the mosquito vectors	19.0
2	Impact effectiveness of current programmes	18.8
3	Alternative methods of control	18.5
4	Insecticide resistance in mosquitoes	17.8
5	The association between climatic seasons and the prevalence of different type of mosquitoes	17.8
6	The effects of fogging using malathion on the reduction of mosquitoes	16.0
7	The association between the type and index of mosquitoes to environmental conditions	14.3
8	Role of repellents in vector control and disease prevention	13.5
9	The influence of unhygienic pit latrines to the prevalence of Culex mosquitoes	12.8

Research Topics		Average Score
10	Privatization of components of the service	12.5
11	Migratory patterns of birds	11.0
Sub-Priority - Liquid Waste and Excreta Disposal		
1	Cost benefit analysis of having a sewer system and a treatment plan	18.5
2	Appropriate techniques for liquid waste and excreta disposal in Small Island Developing States	18.3
3	Environmental impact of generated liquid waste	17.8
4	Operational effectiveness and efficiency of liquid waste and excreta disposal	17.8
5	Development of small-scale Caribbean oriented treatment plan	17.5
6	Impact of agricultural run-off on water quality	16.5
7	Impact of septic tanks on the environment	15.5
8	An examination of how liquid waste is managed at the household and industrial levels	14.8
9	Assessment of current inventory of programmes	14.5
10	Cost effective methods for excreta disposal in rural areas	13.8
11	Indigenous techniques for sewage system deployment	12.0
12	Relationship between sewage treatment and health	11.8
Sub-Priority - Solid Waste Management		
1	An examination of best approaches for waste reduction as it relates to Polyethylene terephthalate (PET) bottles and Styrofoam	18.8
2	Feasibility of source separation of waste	18.5
3	Marketing and sales of recyclables	18.3
4	Impact of current disposal sites on the environment	18.0
5	Recycling in the Caribbean: problems and solutions	18.0
6	Waste reduction/minimization	18.0
7	Composting projects	17.3
8	Hazardous waste disposal and management	16.8
9	Operational effectiveness and efficiency of solid waste disposal	16.8
10	Development of an inventory of electronic waste (e-waste).	16.0
11	Alternative energy projects	15.8
12	An evaluation of the best approaches to promote behavioural changes in relation to solid waste disposal	15.5
13	KAP of waste segregation at health care facilities	13.5
14	Environmental Health implications of "land-fill" fires and incinerators on human health.	13.5
15	The health implications of scavenging	13.5
Sub-Priority - Workers' Health		
1	Injury data	19.5
2	Employees awareness of occupation, safety and health in the workplace	19.0
3	Effective workplace health promotion programmes	18.5
4	Investigation of relationships between injuries and job categories	18.5
5	Effectiveness of occupation, safety and health policies required in the workplace	17.5
6	Factors influencing safety culture in small to medium sized businesses	17.3
7	Enactment and enforcement of worker safety laws	16.8
8	The burden of ergonomic illness/challenges on health care sector	16.8
9	Factors that contribute to occupational stress within the Caribbean Context	16.0

Research Topics		Average Score
10	The relationship between occupational stress and occupational health outcomes	15.8
11	Prevalence of noise induced hearing loss	15.5
12	The relationship between adult onset Asthma and the work environment	14.8
13	Indoor air quality in non-industrial workplaces	14.5
14	Prevalence of occupationally induced cancer	14.5
15	Assessment of worker's health	13.0
16	Scrap metal, heavy metal and radiation exposure	12.5
17	Prevalence of hand-arm vibration syndrome	9.5

Additional topics received during the Validation Phase:

- Impact of climate change on disaster risk and population health in the Caribbean

Table 13: List of Research Priorities for Human Resource Development

Research Topics		Average Score
Sub-Priority - Movement of Health Professionals		
1	Database of all Caribbean medical and public health schools with their curriculum and graduation requirements	16.3
2	A review: Lessons learnt from piloted, and successful retention strategies for health workers within the Caribbean (and other regions with similar out-migration challenges)	16.0
3	Push and pull factors for the movement of health workers	15.5
4	Ratios of all working Caribbean professional health graduates by country i.e. MDs vs. Nurses vs. all remaining allied health professionals	15.0
5	Use and factors impeding the use of Human Resource Information Systems (HRIS) in the region	15.0
6	Current inventory and needs assessment	14.5
7	Database of salary scales for all health professionals by category with job requirements	13.8
8	A study of remittances by migrant health workers originating from the Caribbean	12.8
9	Tracking the movement of health workers in the Region	11.8
10	Database of all health school professionals' origin, destiny upon graduation and final resident location	9.3
Sub-Priority - Regional Health Human Resource Policy and Action Plan		
1	Job satisfaction and motivation of health workers in public and private sectors	17.3
2	A comparison of regional working standards regarding entry job qualification and entry pay scale for all professionals	15.8
3	Situational analysis of human resource in Health in the region, including private health workforce	15.8
4	A regional report on the effects of both decentralization and privatization of human resources in health sector	15.3
5	Examination of existing human resource policies among Member States, legal implications of regional human resource policy	15.0
6	Legal and financial implications of implementation of regional Human Resource Information System	14.5
7	Human Resource needs in short, medium and long-term, knowing health priorities; institutional capacities to train and retrain	13.0
8	Acceptance of draft policy on movement of health workers: Legal and financial implications for each country	11.8
9	Identification of enabling conditions for the implementation of draft plan in the region	11.5
Sub-Priority - Strengthening the Regional Primary Care Workforce		
1	A comparison of curricula and requirements in Caribbean schools of higher education with respect to health professions	17.0
2	Curricula relevance to priority health needs	16.8
3	Determine the training needs for health workers to effectively manage chronic and other diseases	16.8
4	Identification of supporting information and communication infrastructure	16.8
5	Trans-disciplinary primary health care (PHC) approach & workforce (to reignite the importance of PHC)	16.8
6	Identification of effective strategies to standardize pre-service training in the region with particular emphasis on primary health care and disease prevention	16.5
7	A study of the schools in the Region that deal with chronic diseases i.e. how many, where are they and the affordability of attending these schools	16.3
8	Identification of approaches to Continuing Medical Education certification within the region	16.0
9	Determine the legal and financial implications for standardization of pre-service training in the region	12.0

Research Topics		Average Score
Sub-Priority - Strengthening Regional Training Institutions		
1	Determination of Human Resource planning capacity in member countries	17.0
2	Determination of skills and competencies that need to be improved	17.0
3	Identification of challenges that may hinder use of distance learning initiatives	16.8
4	Case studies: distance learning for health workers - initiatives previously undertaken	16.5
5	Health professionals perspective in availability of regional training	16.3
6	Skilled health professionals in the topic of caring for the elderly	16.3
7	Assessment of countries in the region to determine the ability of the population to afford both the time and expense of attending schools at a distant learning site	15.3
8	Determination of available resources to build capacity through distance education in member countries	14.8
9	Inventory of skills and training curricula	13.5
Sub-Priority - Building a Public Health Workforce to Promote Health and Development for CARICOM Member States		
1	A review of lessons learned from initiatives taken to strengthen leadership of in regional public health	17.8
2	A review of pre-service and in-service health practice and leadership training available in each of the CARICOM Member States	17.5
3	A study/survey of all regional schools with the purpose of getting their buy-in to build a public health workforce to promote health and development for CARICOM Member States	17.5
4	A review of current regional infrastructure for training in public health practice and leadership	17.0

Additional topics received during the Validation Phase:

- Adequacy of current training provided in the Region to meet Environmental Health needs
- Ethical issues in the movement of health professionals
- Distribution of specially trained professionals in Non-Communicable Diseases among CARICOM institutions.
- Intentions of health professionals e.g. nurses who move between CARICOM member countries

Table 14: List of Research Priorities for Family and Community Health

Research Topics		Average Score
Sub-Priority - Child Health and Development		
1	Factors which contribute to low birth weight in the Caribbean	15.8
2	The causes of perinatal mortality.	15.7
3	Best practices for managing low birth weight newborns in low resource settings	15.4
4	Gestational diabetes	15.3
5	Effectiveness of Integrated Management of Childhood Illnesses (IMCIs) strategy	14.7
6	Childhood asthma	14.4
7	Factors affecting morbidity in the perinatal period	14.3
8	Infant mortality	14.2
9	Effect of the environmental conditions (poor social determinants) on the mortality and morbidity in children	14.1
10	Obstacles to accessing perinatal services and the management of high risk pregnancy	14.1
11	Rates and causes of abuse (including sexual) in children	14.1
12	Newborn resuscitation quality of care	13.8
13	Accurate documentation and interpretation of partograph when monitoring women during labour	13.7
14	Factors contributing to the cessation of breastfeeding after 3-6 months	13.7
15	Weaning practices and factors contributing to malnutrition in young children	13.4
16	Use of supplemental feeding versus exclusive breastfeeding on the weight of the infant	13.3
17	Developmental milestones	13.2
18	Prevention of intranatal hypoxia	13.1
19	Immunization cost effectiveness	12.4
20	Causes of prematurity in newborns and strategies to reduce them.	12.2
21	Continuous quality improvement of maternal and neonatal care through an improvement collaborative method	12.0
22	Effects of hypertensive drugs on pregnancy and the outcome of the foetus.	11.8
23	The effect of occupation on the health of the foetus	10.8
24	Tinea capitis	10.6
25	Children's perception of multiple siblings in the family.	9.4
Sub-Priority - Reproductive and Sexual Health		
1	Obstacles to behaviour change	16.0
2	Men's perception of vasectomy and condom use.	15.0
3	Sexual and Reproductive Health education	15.0
4	Women of reproductive age with HIV and their access to contraceptive methods	14.9
5	Factors associated with the reluctance of men to allow the female partners to utilize contraceptive devices.	14.3
6	Integrated management of at-risk pregnant women and the impact on pregnancy	14.3
7	Quality of antenatal care	14.3
8	Sexual violence, prevalence and prevention	14.1
9	Contraceptive prevalence studies	13.8
10	Unplanned pregnancy	13.8
11	National and regional policy for abortion	13.6
12	Factors affecting sexual behaviour changes in men.	13.3

Research Topics		Average Score
13	Domestic violence and reproductive health	13.2
14	Prevalence of Chlamydia using sensitive testing methods	13.2
15	Prevention of cultural sexual practices (multiple partners)	13.1
16	Depression and reproductive health	12.9
17	A regional population policy	12.7
18	Maternal mortality validation studies	12.7
19	Drug abuse related to reproductive health	12.0
20	Programmatic errors surrounding cervical cancer - morbidity and mortality prevalence rate	11.9
21	Programmatic errors surrounding the prevalence of contraceptive use	11.9
22	Impact of genetic counselling on reducing congenital abnormalities	11.3
23	Cultural barriers to family planning	11.1
24	Impact of Visual Inspection with Acetic Acid (VIA) method on cervical cancer morbidity/prevalence	10.9
25	Increased options for contraceptives, including for males	10.9
26	Premarital counselling: Strategies to improve availability and scope	10.9
27	Effect of ethnicity on reproductive health practices	10.6
28	National and regional policy for tubal ligation	10.4
29	Effectiveness of breastfeeding as a contraceptive method	8.1
Sub-Priority - Adolescent Health		
1	Design and operation of an adolescent-friendly health facility in the community	16.3
2	The resiliency factors that promote positive behaviours and outcomes among the young	16.2
3	Factors contributing to increased drug use at an early age	16.1
4	User friendly guidelines for the delivery of services of adolescents	16.0
5	Obesity in teens	15.9
6	Improvement of collaborative methods for adolescents Sexual and Reproductive Health services	15.8
7	Caribbean Adolescent Health survey	15.3
8	Depression and anxiety among teens	14.7
9	Factors impacting on self esteem and mental health of adolescents	14.7
10	Eating habits and food consumption	14.6
11	Effective ways to treat the sequelae of sexual abuse in childhood	14.4
12	Teacher's knowledge, attitude and practice towards teaching Sexual and Reproductive Health	14.4
13	Adolescent sexual violence: prevalence and prevention	14.2
14	Alcohol use and smoking among teens	14.2
15	Teen pregnancy	14.1
16	Cost effectiveness of support programs targeting adolescents	13.9
17	Effect of sexual abuse in childhood on our female teens' sexual practice, uptake of contraception and mental health	13.9
18	Influence of culture and television on health behaviours	13.7
19	Epidemiology of adolescent illnesses	13.6
20	KAP sexual health	13.4
21	Contraceptives use	13.2
22	Impact of social marketing on the behaviour of adolescents	13.0
23	Standardized method for teaching Sexual and Reproductive Health to children, done with and for children	12.7

Research Topics		Average Score
24	Legal barriers for adolescents to access sexual and reproductive health services without parental consent	12.4
25	Parental attitude to explicit sex education for children	11.3
26	Personal hygiene	10.2
Sub-Priority - Health of the Elderly		
1	Enhanced senior care skills at community level	15.1
2	Needs assessment for recreational facilities	14.1
3	Levels of dependence/independence among the elderly	13.7
4	Integrated management of illnesses in the elderly	13.4
5	Factors contributing to Alzheimer's Disease in the Caribbean.	13.3
6	Health profile, by age category	13.3
7	Primary care management of mental disorders in the elderly	13.0
8	Quantity of exercise performed by the elderly and strategies for improvement	13.0
9	Adherence to medication regimens	12.8
10	Palliative care	12.7
11	Physical activity and support systems	12.7
12	Social health	12.7
13	Health promotion strategies and activities for the elderly.	12.6
14	Nutritional status of the elderly	12.6
15	Access to health care (medicines etc)	12.3
16	The psychological effect of living in a geriatric home.	12.2
17	Effect of global recession on use by the elderly of medical services and medication	11.2
18	Substance abuse in the elderly	11.1
19	Health benefits of the elderly	10.8
Sub-Priority - Injuries and Violence		
1	Violence against the elderly	14.7
2	Cost analyses of injuries and violence e.g. health expenditure; percentage of GDP	14.6
3	Road traffic accidents	14.3
4	Epidemiology of injuries and violence	13.9
5	Prevalence rate of gender based violence	13.9
6	Community first aid capacity to manage injuries and violence	13.8
7	Occupational injuries	13.7
8	Influence of family structure on violence	13.4
9	Clinical competencies in managing complicated injuries	13.3
10	Influence of childhood sexual abuse on violence	13.3
11	Influence of mental health on violence	13.2
12	Influence of substance use on violence	13.2
13	Needs assessment for national injuries and violence surveillance systems	13.2
14	Support and rehabilitation for victims of injuries and violence	13.1
15	Standardization of service delivery guidelines for injuries and violence	13.0
16	Emergency medical services to respond to injuries and violence	12.8
17	Influence of parenting styles on violence	12.6
18	Unintentional injuries among the young	12.4

Research Topics		Average Score
19	Suicide and factors that influence completion	11.3
20	Best counter-measures	10.8

Additional topics received during the Validation Phase:

- Men's reluctance to access health care

VALIDATION OF THE AGENDAS

On-line Survey

The Agendas were shared with participants via an on-line survey that was accessible through the CHRC website.

All participants were invited to complete a survey developed by CHRC in collaboration with COHRED to obtain feedback on the process used to develop the Agendas and on the resulting list of research priorities. Overall, the feedback was positive with support for both the priority setting process and the list of research priorities identified.

The mean scores are presented in Table 15.

Table 15: Mean Scores obtained for the Validation of the Draft Agendas

	**CD	FN	NCD	SHS	MH	EH	HRD	FCH
Priority Setting Process								
Relevance	3.8	4.0	4.3	4.2	4.5	4.3	4.4	5.0
Inclusiveness	2.8	3.4	4.1	4.0	4.0	4.3	4.0	4.8
Transparency	3.8	4.2	4.1	4.4	4.0	4.0	4.0	4.5
Research Priority List								
Relevance	4.2	4.2	4.4	4.4	4.5	4.0	4.6	4.3
Implementable	3.7	3.6	4.0	3.8	4.5	4.0	3.4	3.3
Completeness	3.3	3.0	3.9	4.0	4.0	4.0	4.0	4.5

**Note that a 5-point Likert scale was used with 5 being the highest rating.*

*** See List of Abbreviations on Page vi*

Stakeholders Meeting

The participants comprised 29 delegates attending the CHRC's 55th Annual Conference. The feedback on the process to develop the Agenda was very encouraging with participants endorsing the approach taken and commended CHRC on the innovative methodology used. They were also supportive of the process used to ensure that a wide cross-section of stakeholders participated in the project.

Excellent suggestions were offered as to how CHRC can engage researchers and encourage them to conduct the priority research in the Agenda. These included publicizing and disseminating the Agenda widely across the Caribbean; targeting "budding researchers" and students (including medical students).

The participants noted the challenges faced in securing funding for research in the Caribbean. The proposed approaches to encourage funding agencies to support the implementation of the Caribbean Health Research Agenda included identifying similarities in the Agendas and those of the funding agencies; developing capacity in the area of proposal writing; facilitating collaboration across the Region.

There was an appreciation that it is not automatic that regional products would be adopted at the national level. However, the participants made suggestions to facilitate the adoption of the Regional Agenda such as the need for “Buy-In” by all stakeholders; ensuring that Government agencies and Ministries of Health are involved; putting mechanisms in place at the country level to ‘localize’ the Agenda.

A report on the Stakeholders Meeting is presented in Appendix II.

LIMITATIONS

CHRC developed the Health Research Agenda to strengthen the health research system of its 19 Member Countries on a very limited budget. Whereas originally, the intention was to host 2-3 day retreats comprising the key stakeholders for each of the eight CCH III Programme Areas, this was not possible due to financial constraints. Although the Delphi Methodology was successfully used to develop the Caribbean Agenda with inputs from almost all countries, there were limitations.

Perhaps the most significant limitation was the low response rate. This was particularly so for the Round 2 Delphi questionnaires but even in Round 1, the response rate for the Strengthening Health Systems and Human Resource Development Programme Areas was less than 20%. The rate was lower than expected in spite of all the efforts that CHRC made to facilitate participation including numerous telephone call and emails to all participants. One reason for the low rate in these Areas may have been the lack of an appreciation of the importance of research among persons invited to participate in the project. A review of peer-reviewed Journals is likely to indicate that the CCH III Programme Area with the fewest publications is the Human Resource Development. It is also notable that the Programme Area with the largest number of persons invited to participate was Strengthening Health Systems (90 persons). Although there has been an increase in health systems research in the Caribbean in the last decade (based on papers presented at the Annual CHRC Conferences), it is possible that many of the persons invited were not convinced of the value of research and a research Agenda. It is expected that the process of developing the Agenda and more so, the engagement of stakeholders in its implementation would lead to an important increase in awareness and appreciation of health research in the Caribbean.

The low response rate can result in the omission of important research topics in the Agenda. It is expected that this was minimized by the large cross section of persons who actually participated in terms of the number of countries represented as well as institutional affiliation. Participants comprised research scientists, subject experts, health programme managers, and care providers from 16 Caribbean countries. The validation process was also very valuable in identifying overlooked research topics and a number of topics were added to the Agenda during that phase.

The Agenda comprises research topics, some of which were vague and subject to various interpretations. It is therefore possible that the intention of some participants may not fully emerge when these topics are translated into specific research questions.

The limitations identified above are important and may bring into question the completeness of the Agenda. While it is possible that a few critical research topics were inadvertently omitted, it is believed that the present report is reflective of the priority health research topics at this time.



Next Step/Conclusions

The development of the Health Research Agenda for the Caribbean is significant. However, it will be of little value if it is not shared with all the key stakeholders and implemented to enable the production of the essential research findings for the evidence-informed implementation of policies, programmes and clinical practice. Consequently, the next steps include the acceptance and endorsement of the Agenda by health sector leaders at the Regional and National levels, the widespread dissemination to all stakeholders, the implementation of the priority research topics and its monitoring and evaluation.

Endorsement of the Agenda

The Research Agenda will be submitted to the Council on Human and Social Development (COHSOD), CARICOM Secretariat for endorsement. The acceptance by the Senior Decision makers is critical to facilitate its uptake by regional health institutions as well as agencies at the national level. Regarding the latter, the buy-in of all CHRC Member Countries is critical.

The matter of the adoption of the Regional Agenda at the national level has to be addressed. The PAHO report on Public Health in the Americas reviewed the status of Essential Public Health Functions in the Caribbean and the findings indicated that none of the countries had a Health Research Agenda (10). This was a significant failing, which can now be addressed through the availability of a Regional Agenda. It ensures that countries can either adopt it as their National Agenda (most of the CHRC Member Countries actively participated in its development) or adapt it to ensure that it is consistent with their national health priorities.

Dissemination of the Agenda to Stakeholders

It is critical that all the key stakeholders own a copy of the Caribbean Health Research Agenda and use it as they plan their research. Consequently, CHRC has a duty to disseminate it to its partners including institutions and persons involved in the conduct of health research, the agencies that fund the research and the users of the research findings. Copies of the Agenda will be sent all Ministries of Health, Ministries of Science and Technology, Universities, Regional Health Institutions, Research Institutions, Health Professionals Associations, and other relevant NGOs. It is also critical that all the persons who participated in the project receive a copy of the Agenda as well as other interested agencies and individuals.

The Agenda will be posted on the websites of the CHRC and its partner institutions.

Implementation of the Research Agendas

The implementation of the Agenda requires the engagement of research institutions / researchers as well as funding agencies. It is critical that the premier Caribbean research institutions such as the Tropical Medicine Research Institute (TMRI) and the Sir Arthur Lewis Institute of Social and Economic Studies (SALISES) of the University of the West Indies as well as the Windward Islands Research and Education Foundation (WINDREF) appreciate the key roles that they have to play in the implementation of the Agenda. CHRC will convene meeting with the Heads of these institutions to finalize how best

they can contribute. Regional Health institutions, Ministries of Health, academic staff and students of Faculties of Health and Social Sciences at Universities throughout the Caribbean, and individual researchers will also be encouraged to contribute to the conduct of the priority research identified in the Agenda.

The Agenda includes over 500 research topics – all of which cannot be addressed at the same time. To date, Caribbean researchers have prioritized their research based on personal interest⁽¹¹⁾, perhaps due to the absence of an accepted Agenda. CHRC is not only proposing that the Agenda be used to guide the conduct of Caribbean research but that the topics with the highest scores receive the highest priority and urgency.

Even as efforts are made to engage researchers to implement the Agenda, it is important to note existing initiatives. For example the TMRI has developed an agenda for its research programme. In the area of HIV, there is the Trans-Caribbean HIV/AIDS Research Initiative (TCHARI), a multi-disciplinary group of Caribbean-based HIV/AIDS researchers. Its objectives include defining a Caribbean HIV/AIDS research agenda and facilitating collaboration among Caribbean HIV/AIDS researchers. There are other HIV research initiatives in the Caribbean that include the establishment of databases of researchers and research studies. Similar databases have been established for health researchers by ENHR Committees in Jamaica and Trinidad and Tobago. CHRC will meet with these groups and other partners to win their support and commitment towards contributing to the implementation of the Agenda

It is important to note that the Agenda comprises research topics so before implementation, there will be the need for problem specification for each research topic, development of specific research questions and the determination of resources requirements.

Funding agencies have a critical role in contributing resources to facilitate the implementation of the Agenda. Although the ENHR strategy promotes Governments' investment in the conduct of health research at the level of 2% of the national health budget, this is not the case in the Caribbean at this time and the situation may not change in the near future. While it is important to engage funding agencies such as the Fogarty International Center of the NIH, it is critical to build the capacity of Caribbean researchers in grant writing to enable them to successfully compete for research funding when the opportunities arise.

Monitoring and Evaluation

It is critical that the implementation of the Agenda be monitored and that its impact evaluated. Consequently, relevant indicators will be identified/ developed to monitor whether there was uptake of the Agenda by researchers as well as the level of funding secured in the priority research areas.

The impact of the Agenda on the conduct of essential research will be the subject of an independent review in 2014

Conclusions

The development of the Health Research Agenda represents a significant step in the strengthening of health research systems in the Caribbean. The transparent and inclusive approach that was used in its development is expected to engender its widespread adoption. The challenge remains in the engagement of the researchers and funding agencies, which have a critical role in its implementation.

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Appendix I

Perceived Availability, Need for and Use of Research for each Programme Area

Perceived Availability, Need for and Use of Research for Communicable Diseases

	Yes	No	Don't Know	Missing
Communicable Diseases with Epidemic Potential				
Is there adequate research conducted in the Caribbean to support the implementation of programmes to address the objectives of this sub-priority area?	1	14	2	1
%	5.6	77.8	11.1	5.6
Has the evidence on the topic, derived from Caribbean performed research been used extensively to support the implementation of programmes or re-definition of actions?	1	14	2	1
%	5.6	77.8	11.1	5.6
Is the amount of funds for these research topics sufficient?	0	12	5	1
%	0	66.7	27.8	5.6
Vaccine Preventable Diseases				
Is there adequate research conducted in the Caribbean to support the implementation of programmes to address the objectives of this sub-priority area?	2	12	2	2
%	11.1	66.7	11.1	11.1
Has the evidence on the topic, derived from Caribbean performed research been used extensively to support the implementation of programmes or re-definition of actions?	4	9	3	2
%	22.2	50.0	16.7	11.1
Is the amount of funds for these research topics sufficient?	0	10	6	2
%	0	55.6	33.3	11.1
HIV/AIDS, STIs and Tuberculosis				
Is there adequate research conducted in the Caribbean to support the implementation of programmes to address the objectives of this sub-priority area?	4	14	0	0
%	22.2	77.8	0	0
Has the evidence on the topic, derived from Caribbean performed research been used extensively to support the implementation of programmes or re-definition of actions?	2	13	1	2
%	11.1	72.2	5.6	11.1
Is the amount of funds for these research topics sufficient?	2	13	3	0
%	11.1	72.2	16.7	0

Perceived Availability, Need for and Use of Research for Food and Nutrition

	Yes	No	Don't Know	Missing
Nutritional Deficiency Diseases				
Is there adequate research conducted in the Caribbean to support the implementation of programmes to address the objectives of this sub-priority area?	2	15	1	0
%	11.1	83.3	5.6	
Has the evidence on the topic, derived from Caribbean performed research been used extensively to support the implementation of programmes or re-definition of actions?	3	11	3	1
%	16.7	61.1	16.7	5.6
Is the amount of funds for these research topics sufficient?	0	14	3	1
%	0	77.8	16.7	5.6
Obesity and Co-Morbidities				
Is there adequate research conducted in the Caribbean to support the implementation of programmes to address the objectives of this sub-priority area?	3	14	1	0
%	16.7	77.8	5.6	0
Has the evidence on the topic, derived from Caribbean performed research been used extensively to support the implementation of programmes or re-definition of actions?	5	10	3	0
%	27.8	55.6	16.7	0
Is the amount of funds for these research topics sufficient?	0	15	3	0
%	0	83.3	16.7	0
Food Security				
Is there adequate research conducted in the Caribbean to support the implementation of programmes to address the objectives of this sub-priority area?	2	14	2	0
%	11.1	77.8	11.1	0
Has the evidence on the topic, derived from Caribbean performed research been used extensively to support the implementation of programmes or re-definition of actions?	1	12	4	1
%	5.6	66.7	22.2	5.6
Is the amount of funds for these research topics sufficient?	0	11	7	0
%	0	61.1	38.9	0

Perceived Availability, Need for and Use of Research for Non-Communicable Diseases

	Yes	No	Don't Know	Missing
Policy and Plan of Action				
Is there adequate research conducted in the Caribbean to support the implementation of programmes to address the objectives of this sub-priority area?	3	9	3	0
%	20	60	20	0
Has the evidence on the topic, derived from Caribbean performed research been used extensively to support the implementation of programmes or re-definition of actions?	6	7	2	0
%	40	46.7	13.3	0
Is the amount of funds for these research topics sufficient?	2	9	4	0
%	13.3	60	26.7	0
Health Promotion and Disease Prevention				
Is there adequate research conducted in the Caribbean to support the implementation of programmes to address the objectives of this sub-priority area?	3	9	2	1
%	20	60	13.3	6.7
Has the evidence on the topic, derived from Caribbean performed research been used extensively to support the implementation of programmes or re-definition of actions?	5	7	2	1
%	33.3	46.7	13.3	6.7
Is the amount of funds for these research topics sufficient?	0	10	4	1
%	0	66.7	26.7	6.7
Integrated Management of Chronic Diseases and Risks Factors				
Is there adequate research conducted in the Caribbean to support the implementation of programmes to address the objectives of this sub-priority area?	6	8	1	0
%	40	53.3	6.7	0
Has the evidence on the topic, derived from Caribbean performed research been used extensively to support the implementation of programmes or re-definition of actions?	4	9	2	0
%	26.7	60	13.3	0
Is the amount of funds for these research topics sufficient?	0	9	6	0
%	0	60	40	0

Perceived Availability, Need for and Use of Research for Strengthening Health System

	Yes	No	Don't Know	Missing
System-Wide Strengthening				
Is there adequate research conducted in the Caribbean to support the implementation of programmes to address the objectives of this sub-priority area?	1	6	3	5
%	6.7	40	20	33.3
Has the evidence on the topic, derived from Caribbean performed research been used extensively to support the implementation of programmes or re-definition of actions?	1	7	2	5
%	6.7	46.7	13.3	33.3
Is the amount of funds for these research topics sufficient?	0	6	5	4
%	0	40	33.3	26.7
Information and Evidence for Health Systems Management (Surveillance, M&E, Research)				
Is there adequate research conducted in the Caribbean to support the implementation of programmes to address the objectives of this sub-priority area?	4	7	1	3
%	26.7	46.7	6.7	20
Has the evidence on the topic, derived from Caribbean performed research been used extensively to support the implementation of programmes or re-definition of actions?	3	6	2	4
%	20	40	13.3	26.7
Is the amount of funds for these research topics sufficient?	2	5	5	3
%	13.3	33.3	33.3	20
Health Financing				
Is there adequate research conducted in the Caribbean to support the implementation of programmes to address the objectives of this sub-priority area?	3	7	2	3
%	20	46.7	13.3	20
Has the evidence on the topic, derived from Caribbean performed research been used extensively to support the implementation of programmes or re-definition of actions?	2	8	2	3
%	13.3	53.3	13.3	20
Is the amount of funds for these research topics sufficient?	0	7	5	3
%	0	46.7	33.3	20
Risk/Disaster Management				
Is there adequate research conducted in the Caribbean to support the implementation of programmes to address the objectives of this sub-priority area?	4	9	1	1
%	26.7	60	6.7	6.7
Has the evidence on the topic, derived from Caribbean performed research been used extensively to support the implementation of programmes or re-definition of actions?	3	9	2	1
%	20.0	60	13.3	6.7
Is the amount of funds for these research topics sufficient?	1	7	6	1
%	6.7	46.7	40	6.7
Pharmaceutical Policy, Regulation and Management				
Is there adequate research conducted in the Caribbean to support the implementation of programmes to address the objectives of this sub-priority area?	5	5	3	2
%	33.3	33.3	20	13.3
Has the evidence on the topic, derived from Caribbean performed research been used extensively to support the implementation of programmes or re-definition of actions?	3	7	3	2
%	20	46.7	20	13.3
Is the amount of funds for these research topics sufficient?	1	5	7	2
%	6.7	33.3	46.7	13.3

Perceived Availability, Need for and Use of Research for Mental Health

	Yes	No	Don't Know	Missing
Development of a Regional Mental Health Policy, Action Plan and Legislation				
Is there adequate research conducted in the Caribbean to support the implementation of programmes to address the objectives of this sub-priority area?	2	4	0	3
%	22.2	44.4	0	33.3
Has the evidence on the topic, derived from Caribbean performed research been used extensively to support the implementation of programmes or re-definition of actions?	2	4	0	3
%	22.2	44.4	0	33.3
Is the amount of funds for these research topics sufficient?	0	6	3	0
%	0	66.7	33.3	0
Reform of Mental Health Services				
Is there adequate research conducted in the Caribbean to support the implementation of programmes to address the objectives of this sub-priority area?	0	6	2	1
%	0	66.7	22.2	11.1
Has the evidence on the topic, derived from Caribbean performed research been used extensively to support the implementation of programmes or re-definition of actions?	1	5	2	1
%	11.1	55.6	22.2	11.1
Is the amount of funds for these research topics sufficient?	0	5	3	1
%	0	55.6	33.3	11.1
Management and Care of Vulnerable or At-Risk Mentally Ill People Including Substance Abusers				
Is there adequate research conducted in the Caribbean to support the implementation of programmes to address the objectives of this sub-priority area?	0	7	1	1
%	0	77.8	11.1	11.1
Has the evidence on the topic, derived from Caribbean performed research been used extensively to support the implementation of programmes or re-definition of actions?	1	6	1	1
%	11.1	66.7	11.1	11.1
Is the amount of funds for these research topics sufficient?	0	6	2	1
%	0	66.7	22.2	11.1
Public Information, Education and Communication				
Is there adequate research conducted in the Caribbean to support the implementation of programmes to address the objectives of this sub-priority area?	0	7	1	1
%	0	77.8	11.1	11.1
Has the evidence on the topic, derived from Caribbean performed research been used extensively to support the implementation of programmes or re-definition of actions?	1	7	0	1
%	11.1	77.8	0	11.1
Is the amount of funds for these research topics sufficient?	0	7	1	1
%	0	77.8	11.1	11.1

Perceived Availability, Need for and Use of Research for Environmental Health

	Yes	No	Don't Know	Missing
Institutional Strengthening				
Is there adequate research conducted in the Caribbean to support the implementation of programmes to address the objectives of this sub-priority area?	2	2	0	5
%	22.2	22.2	0	55.6
Has the evidence on the topic, derived from Caribbean performed research been used extensively to support the implementation of programmes or re-definition of actions?	1	4	1	3
%	11.1	44.4	11.1	33.3
Is the amount of funds for these research topics sufficient?	1	1	5	2
%	11.1	11.1	55.6	22.2
Water Resources Management				
Is there adequate research conducted in the Caribbean to support the implementation of programmes to address the objectives of this sub-priority area?	3	4	0	2
%	33.3	44.4	0	22.2
Has the evidence on the topic, derived from Caribbean performed research been used extensively to support the implementation of programmes or re-definition of actions?	2	4	1	2
%	22.2	44.4	11.1	22.2
Is the amount of funds for these research topics sufficient?	0	4	3	2
%	0	44.3	33.3	22.2
Vector Control				
Is there adequate research conducted in the Caribbean to support the implementation of programmes to address the objectives of this sub-priority area?	3	4	0	2
%	33.3	44.4	0	22.2
Has the evidence on the topic, derived from Caribbean performed research been used extensively to support the implementation of programmes or re-definition of actions?	3	4	0	2
%	33.3	44.4	0	22.2
Is the amount of funds for these research topics sufficient?	0	4	3	2
%	0	44.4	33.3	22.2
Liquid Waste and Excreta Disposal				
Is there adequate research conducted in the Caribbean to support the implementation of programmes to address the objectives of this sub-priority area?	2	5	0	2
%	22.2	55.6	0	22.2
Has the evidence on the topic, derived from Caribbean performed research been used extensively to support the implementation of programmes or re-definition of actions?	1	5	1	2
%	11.1	55.6	11.1	22.2
Is the amount of funds for these research topics sufficient?	0	4	3	2
%	0	44.4	33.3	22.2
Solid Waste Management				
Is there adequate research conducted in the Caribbean to support the implementation of programmes to address the objectives of this sub-priority area?	3	3	0	3
%	33.3	33.3	0	33.3
Has the evidence on the topic, derived from Caribbean performed research been used extensively to support the implementation of programmes or re-definition of actions?	4	2	0	3
%	44.4	22.2	0	33.3
Is the amount of funds for these research topics sufficient?	1	2	3	3
%	11.1	22.2	33.3	33.3

	Yes	No	Don't Know	Missing
Workers' Health				
Is there adequate research conducted in the Caribbean to support the implementation of programmes to address the objectives of this sub-priority area?	0	5	1	3
%		55.6	11.1	33.3
Has the evidence on the topic, derived from Caribbean performed research been used extensively to support the implementation of programmes or re-definition of actions?	1	4	1	3
%	11.1	44.4	11.1	33.3
Is the amount of funds for these research topics sufficient?	0	2	3	4
%	0	22.2	33.3	44.4

Perceived Availability, Need for and Use of Research for Human Resource Development

	Yes	No	Don't Know	Missing
Movement of Health Professionals				
Is there adequate research conducted in the Caribbean to support the implementation of programmes to address the objectives of this sub-priority area?	0	2	1	1
%	0	50	25	25
Has the evidence on the topic, derived from Caribbean performed research been used extensively to support the implementation of programmes or re-definition of actions?	0	1	1	2
%	0	25	25	50
Is the amount of funds for these research topics sufficient?	0	0	2	2
%	0	0	50	50
Regional Health Human Resource Policy and Actions Plans				
Is there adequate research conducted in the Caribbean to support the implementation of programmes to address the objectives of this sub-priority area?	0	2	1	1
%	0	50	25	25
Has the evidence on the topic, derived from Caribbean performed research been used extensively to support the implementation of programmes or re-definition of actions?	0	2	1	1
%	0	50	25	25
Is the amount of funds for these research topics sufficient?	1	1	1	1
%	25	25	25	25
Strengthening the Regional Primary Care Workforce				
Is there adequate research conducted in the Caribbean to support the implementation of programmes to address the objectives of this sub-priority area?	1	2	1	0
%	25	50	25	0
Has the evidence on the topic, derived from Caribbean performed research been used extensively to support the implementation of programmes or re-definition of actions?	0	2	2	0
%	0	50	50	0
Is the amount of funds for these research topics sufficient?	1	2	1	0
%	25	50	25	0
Strengthening the Regional Training Institutions				
Is there adequate research conducted in the Caribbean to support the implementation of programmes to address the objectives of this sub-priority area?	0	1	3	0
%	0	25	75	0
Has the evidence on the topic, derived from Caribbean performed research been used extensively to support the implementation of programmes or re-definition of actions?	0	1	3	0
%	0	25	75	0
Is the amount of funds for these research topics sufficient?	1	1	2	0
%	25	25	50	0
Building a Public Health Workforce to Promote Health and Development for CARICOM Member States				
Is there adequate research conducted in the Caribbean to support the implementation of programmes to address the objectives of this sub-priority area?	0	2	2	0
%	0	50	50	0
Has the evidence on the topic, derived from Caribbean performed research been used extensively to support the implementation of programmes or re-definition of actions?	0	2	2	0
%	0	50	50	0
Is the amount of funds for these research topics sufficient?	0	1	3	0
%	0	25	75	0

Perceived Availability, Need for and Use of Research for Family and Community Development

	Yes	No	Don't Know	Missing
Child Health and Development				
Is there adequate research conducted in the Caribbean to support the implementation of programmes to address the objectives of this sub-priority area?	2	5	0	7
%	14.3	35.7	0	50.0
Has the evidence on the topic, derived from Caribbean performed research been used extensively to support the implementation of programmes or re-definition of actions?	3	2	6	3
%	21.4	14.3	42.9	21.4
Is the amount of funds for these research topics sufficient?	1	5	3	5
%	7.1	35.7	21.4	35.7
Reproductive and Sexual Health				
Is there adequate research conducted in the Caribbean to support the implementation of programmes to address the objectives of this sub-priority area?	2	6	2	4
%	14.3	42.9	14.3	28.6
Has the evidence on the topic, derived from Caribbean performed research been used extensively to support the implementation of programmes or re-definition of actions?	4	3	2	5
%	28.6	21.4	14.3	35.7
Is the amount of funds for these research topics sufficient?	0	5	5	4
%	0	35.7	35.7	28.6
Adolescent Health				
Is there adequate research conducted in the Caribbean to support the implementation of programmes to address the objectives of this sub-priority area?	3	5	1	5
%	21.4	35.7	7.1	35.7
Has the evidence on the topic, derived from Caribbean performed research been used extensively to support the implementation of programmes or re-definition of actions?	1	4	3	6
%	7.1	28.6	21.4	42.9
Is the amount of funds for these research topics sufficient?	0	4	5	5
%	0	28.6	35.7	35.7
Health of the Elderly				
Is there adequate research conducted in the Caribbean to support the implementation of programmes to address the objectives of this sub-priority area?	0	6	2	6
%	0	42.9	14.3	42.9
Has the evidence on the topic, derived from Caribbean performed research been used extensively to support the implementation of programmes or re-definition of actions?	1	4	3	6
%	7.1	28.6	21.4	42.9
Is the amount of funds for these research topics sufficient?	0	6	2	6
%	0	42.9	14.3	42.9
Injuries and Violence				
Is there adequate research conducted in the Caribbean to support the implementation of programmes to address the objectives of this sub-priority area?	2	5	2	5
%	14.3	35.7	14.3	35.7
Has the evidence on the topic, derived from Caribbean performed research been used extensively to support the implementation of programmes or re-definition of actions?	0	5	4	5
%	0	35.7	28.6	35.7
Is the amount of funds for these research topics sufficient?	0	7	2	5
%	0	50.0	14.3	35.7

Appendix II

Report on Meeting of Stakeholders

A Stakeholders Meeting was held on April 23, 2010 at the CHRC's 55th Annual Conference.

Objectives

The main objectives of the Meeting were:

- **Advocacy:** To update conference participants about the regional priority setting process and the findings to date;
- **Obtaining buy-in for next steps of project:** To discuss the approach that was taken and reflect on ways to strengthen the process and increase inclusiveness;
- **Implementing the agenda:** To get feedback regarding:
 - o Engaging Researchers
 - o Engaging Funders
 - o Moving from a Regional to National Health Research Agenda

Methodology

The meeting was conducted in two sessions:

The first session focused on providing information about the priority setting process and the presentation of the results of the 1st round of the Delphi for the Communicable Diseases and Food and Nutrition Programme Areas. Feedback was sought regarding the process used to engage participants and the methodology used to develop the Agendas.

The second session addressed the implementation of the Agenda and included working group discussions. Discussions were conducted using the *World Café* format. Participants occupied any one of three tables addressing Engaging Researchers, Engaging Funders, and Moving from a Regional to National Health Research Agenda. At each table, a series of conversational rounds lasting from ~20 minutes were initiated using guiding questions. At the end of each round, the table host and the note-taker remained at the table, while the participants move on to other tables for additional rounds. Table hosts welcomed newcomers to their tables, shared the essence of the previous conversation and initiated further discussion. Note-takers recorded the information generated at the table.

Summary of Findings

The participants comprised 29 delegates from the CHRC Conference.

Process to Develop Agenda

The feedback on the process to develop the Agenda was very positive. The participants endorsed the approach being taken and commended CHRC on the innovative methodology used, given the financial constraints. They were particularly supportive of the Delphi as well as process used to ensure that as wide a cross-section of stakeholders were invited to participate in the project.

Engaging Researchers

Excellent suggestions were offered as to how CHRC can engage researchers and encourage them to conduct the priority research in the Agenda. These included;

- Publicize and disseminate the agenda widely across the Caribbean.
- Target “budding researchers” as they may be more open to new ideas.
- Student research (including Medical Students) can be guided by the Agenda.
- Facilitate collaboration among researchers in the region.
- Multi-centre studies.
- Identify leading Caribbean researchers and make their expertise/experience known.
- Identify resources needed and source funding.
- Capitalize on routine data collected.
- Publish document highlighting the work done vs. work required.
- Make past research results easy accessible to public.
- Strengthen Health Information Systems.
- Provide awards/credits for research done in priority areas.
- Researchers and NGOs should network.
- Research skills courses should be easily accessed.
- Help researchers link their interest to priority areas.
- Create an enabling environment that facilitate research
- Provide incentives (e.g. salary, promotion) based on involvement in priority research.

Engaging Funders

The participants noted the challenges faced in funding research in the Caribbean and in engaging funders. They proposed the following approaches for funding agencies to support the implementation of the Caribbean Health Research Agenda:

- Identify similarities in the national/regional Agendas and those of funding agencies.
- Ensure capacity exist in order to approach funders – proposal writing skills, include cost/benefit analysis.
- Collaboration across the region may increase funding from international agencies.
- Identify potential funding sources
- Understand their requirements.
- Focus on “Research for Health” and include funding agencies that are from other sectors such as agriculture, environment and climate change.
- Ensure that research outcomes influence practice/policy/ interventions.
- Tap into resources available at private hospitals and Universities.
- Collaborate with larger countries that have similar research priorities.

- Collaborate with international organizations.
- Develop links with private sector

Moving from a Regional to a National Agenda

There was an appreciation that it is not automatic that regional initiatives would be adopted at the national level. However, the participants made the following suggestions to facilitate the adoption of the Regional Agenda:

- There must be “Buy-In” by all stakeholders.
- Government Agencies and Ministries of Health need to be involved.
- If local priorities are not in line with CCH III agenda then mechanisms must be in place at country level to localize the Agenda.
- Key organizations should come together to form a working group of stakeholders.
- Challenge and include NGOs.
- Appoint a Coordinator that is project specific.
- Develop general deadlines for submission of reports across the region.
- Ministries of Health should ensure that resources are available.
- Networking is critical
- Implementation plan should be developed.
- Need for institutional Review Boards to oversee research at national level.
- Need for an independent agency or entity that takes the research information and translates it into policies that can be implemented by the Ministry of Health.