

# Global Alliance for Chronic Diseases

## Research Network Webinar

16/17 April 2019

Your line has been muted on entry.  
If you would like to make a comment or ask a  
question, please let Gary know via the chat  
function.  
You will then need to unmute your line.

# AGENDA

- ❖ Introduction & GACD overview
- ❖ Message from GACD Programme Committee
- ❖ Introduction of Scale-up Projects
- ❖ Research Network
  - Collaborative research efforts
  - Co-chairs



# Welcome, introduction & GACD overview

Gary Parker

GACD Secretariat  
London, UK

# GACD AGENCIES



Argentina's  
Ministry of Science,  
Technology  
and Productive  
Innovation  
(MINCYT)



Australia's  
National Health  
and Medical  
Research Council  
(NHMRC)



Brazil's São  
Paulo Research  
Foundation  
(FAPESP)



Canadian  
Institutes of  
Health Research  
(CIHR)



Chinese  
Academy  
of Medical  
Sciences  
(CAMS)



European  
Commission's  
Health Directorate  
of the Research  
& Innovation  
Directorate General



Indian Council  
of Medical  
Research  
(ICMR)



Japan Agency  
for Medical  
Research and  
Development  
(AMED)



Mexico's  
National Institute  
of Medical  
Science &  
Nutrition  
Salvador Zubirán



Health  
Research  
Council,  
New Zealand  
(HRC)



South African  
Medical  
Research  
Council  
(SA MRC)



Thailand's  
Health Systems  
Research  
Institute (HSRI)



UK's Medical  
Research  
Council  
(UK MRC)



US National  
Institutes of  
Health (NIH)

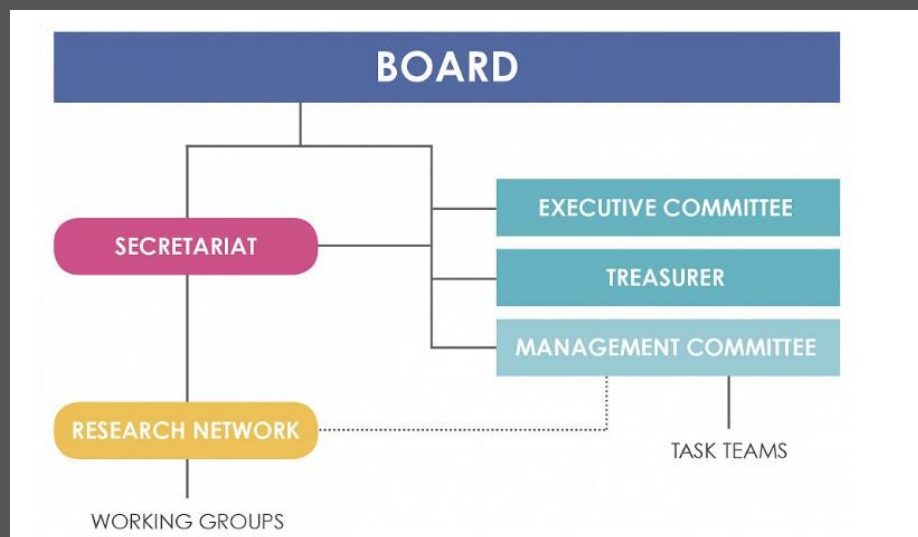


# GACD

GLOBAL ALLIANCE FOR CHRONIC DISEASES  
AN ALLIANCE OF HEALTH RESEARCH FUNDERS

# GACD Oversight Bodies

- ❖ Strategy Board
- ❖ Executive Committee
- ❖ Programme Committee (Prev. Management Committee)
- ❖ Secretariat



# MISSION

To reduce the burden of chronic non communicable diseases (NCDs) in low- and middle-income countries, and in populations facing conditions of vulnerability in high-income countries, by **building evidence** to inform national and international **NCD policies** and contribute to the achievement of the Sustainable Development Goals under section 3.4 .

*- GACD Strategic Plan 2019-2024*

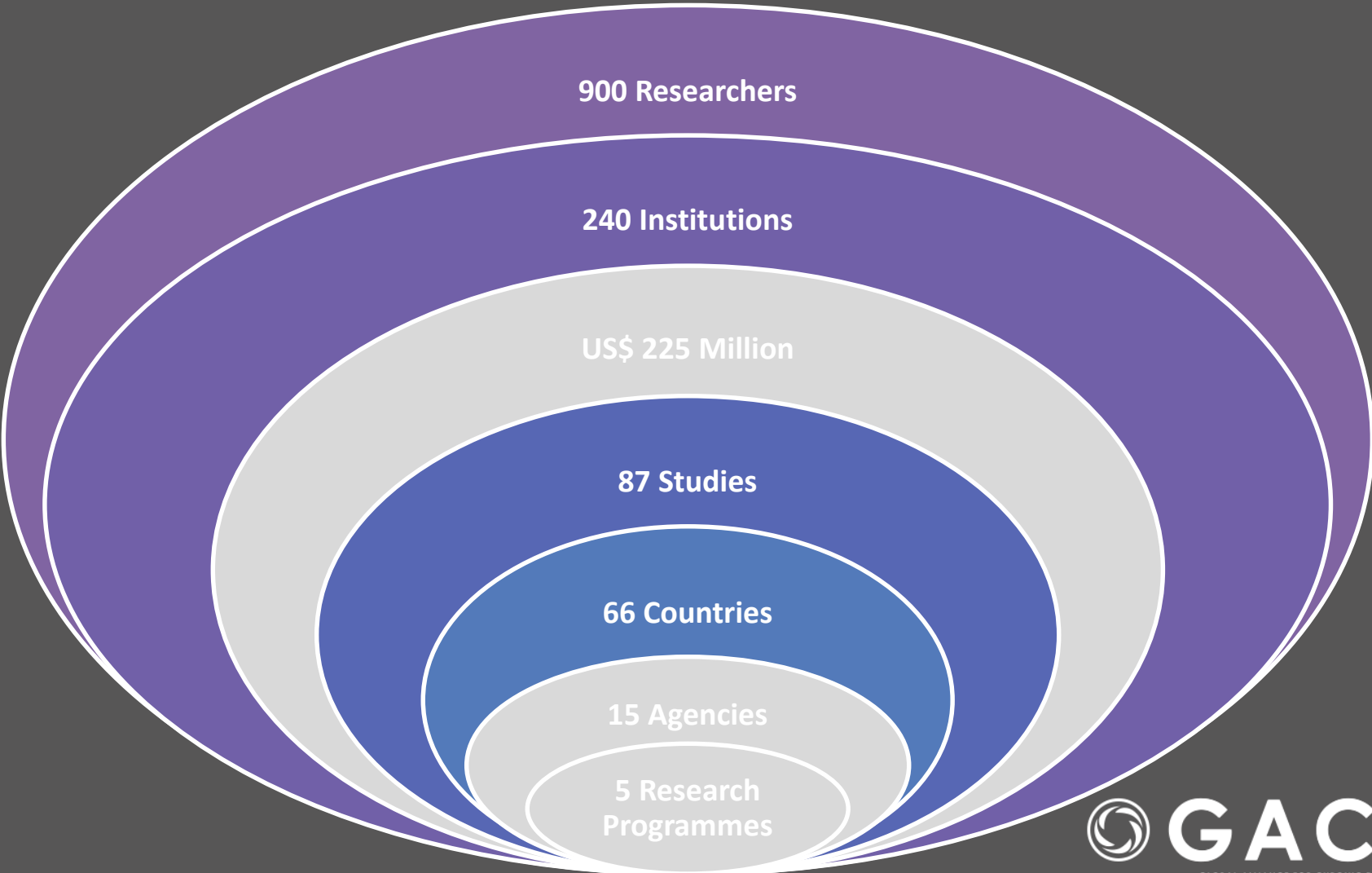
# MISSION

We do this by:

- **Investing** in impactful NCD research
- **Building** implementation science capacity and capability in relation to NCDs
- **Facilitating** collaborations and partnerships to support GACD investment

- *GACD Strategic Plan 2019-2024*

# GACD RESEARCH NETWORK

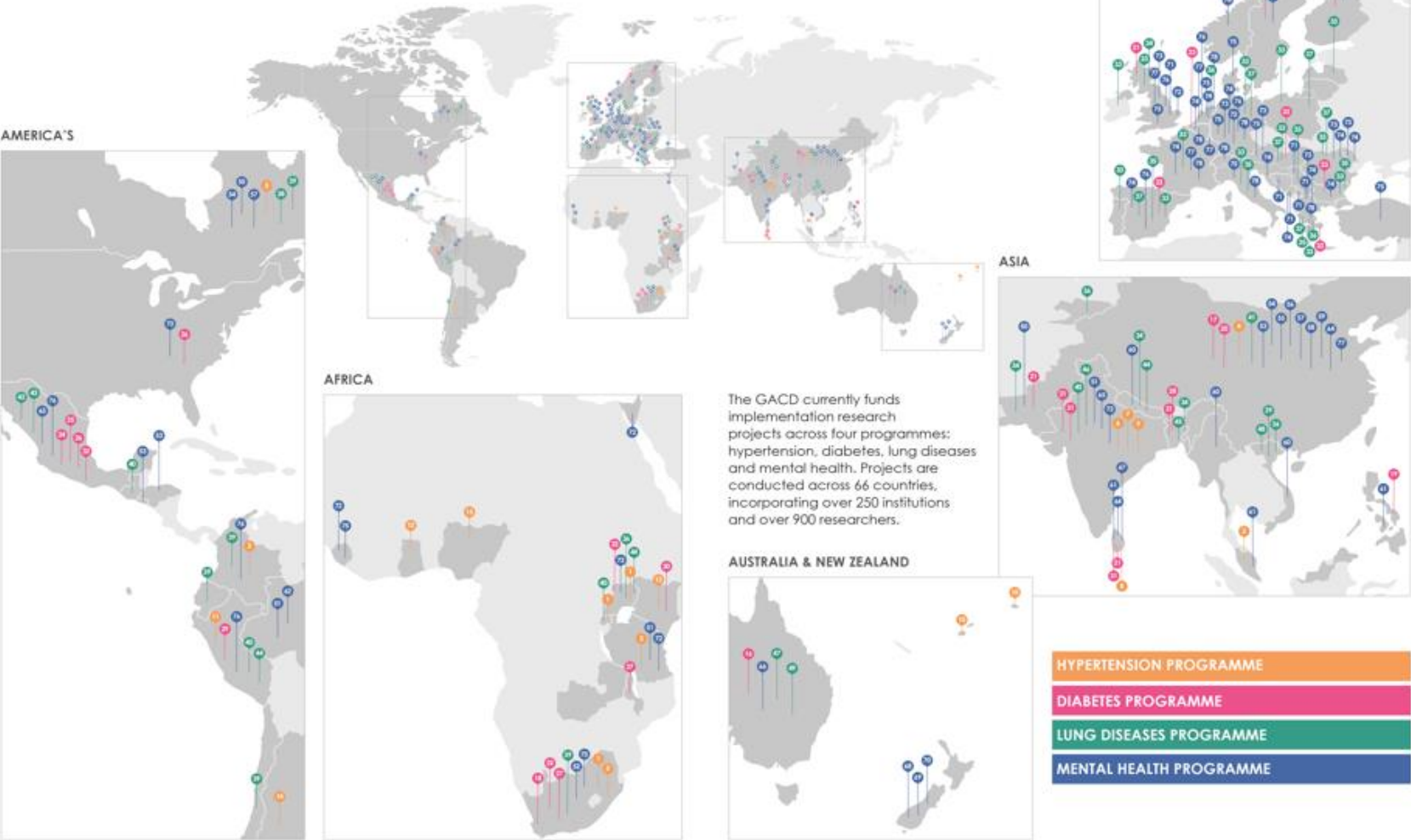


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# GACD RESEARCH NETWORK

## GACD Research projects



# Research Network Offerings

- ❖ Annual Scientific Meeting
- ❖ Implementation Science Workshops/Schools
- ❖ Working groups
- ❖ Co-chairs

# Annual Scientific Meeting



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# Annual Scientific Meeting

- ❖ Brings together funders & researchers from GACD
- ❖ Each project to send 1 HIC & 1 LMIC representative
- ❖ Share project findings, challenges & learnings
- ❖ 2019 ASM will be in Bangkok, Thailand, 11-15 November

<https://www.gacd.org/research/research-network/gacd-annual-scientific-meeting-2018>

# Implementation Science Trainings

## ❖ Implementation Science Workshops

- 2-day programme
- Caters to all levels

## ❖ Implementation Science School

- 5-day programme
- Tailored for ECRs

<https://www.gacd.org/research/implementation-science-capacity-building>

# Working groups

- ❖ Pivotal mechanism for facilitating collaborative research efforts across disease entities, geographies & expertise
- ❖ Often focus on issues that cut across traditional boundaries

# Co-chairs

- ❖ Representatives from each Research Programme
- ❖ Represent the voice of the research network to GACD funders & Secretariat



# Co-chairs

**New Co-chairs for DM & LD to be elected! Stay tuned for nomination & election process**

# GACD Programme Committee

*Jennifer Gunning*

*Canadian Institutes of Health  
Research  
Canada*



*Dr Rupinder Singh Dhaliwal*

*Indian Council for Medical  
Research  
India*



# GACD Scale-up Projects

# SU01: DIABFRAIL – LATAM

- **DIABFRAIL – LATAM** - A multi intervention exercise and education programme for elderly diabetes patients, which learns from the EC funded research. The project works with elderly “fragile” and “pre-fragile” diabetes across Latin America.
- **Project sites:** Colombia, Chile, Mexico, Peru, Argentina
- **Funded by:** EC
- **Coordinator:** Leocadio Rodriguez Manas  
([leocadio.rodriguez@salud.madrid.org](mailto:leocadio.rodriguez@salud.madrid.org))

# SU02: SUNI-SEA

- **Scaling-up NCD Interventions in South East Asia (SUNI-SEA)**  
Indonesia, Myanmar, Vietnam
- **Funded by:** EC
- **Aim:** The project aims to contribute to healthy ageing through better prevention and control of hypertension and diabetes in Southeast Asia by scaling-up cost-effective interventions in this area.
- **Project sites:** Indonesia, Myanmar, Vietnam
- **Coordinator:** Maarten Postma ([m.j.postma@rug.nl](mailto:m.j.postma@rug.nl))



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# SU03: SCUBY

- **Scale Up of an integrated care package for diabetes and hYpertension for vulnerable people in Cambodia, Slovenia and Belgium**
- **Project sites:** Cambodia, Slovenia and Belgium
- **Funded by:** EC
- **Aim:** This project examines the scale-up of existing evidence-based packages for control of diabetes and/or hypertension
- **Coordinator:** Josefien van Olmen ([jvanolmen@itg.be](mailto:jvanolmen@itg.be))

# SU04: WHO-PEN@Scale

- **WHO-PENatScale** - Scaling up the WHOPEN package for diabetes and hypertension in Swaziland: a nation-wide cluster-randomised evaluation of three strategies in Swaziland
- **Project sites:** Eswatini (Swaziland)
- **Funded by:** EC
- **Aim:** The project aims to validate effective scaling up strategies of evidence based diabetes and hypertension prevention and management programmes, using the WHO-PEN protocols.
- **Coordinator:** Jan-Walter De Neve ([janwalter.deneve@uni-Heidelberg.de](mailto:janwalter.deneve@uni-Heidelberg.de))

# SU05: Integrating and decentralising diabetes and hypertension services in

## Africa (INTE-AFRICA) Tanzania and Uganda

- Integrating and decentralising diabetes and hypertension services in Africa (INTE-AFRICA) Tanzania and Uganda
- **Funded by:** EC
- **Aim:** Integrating and scaling up services for diabetes and hypertension in clinics, either as standalone or integrated with HIV infection. The project builds on pilot studies that partners are conducting, funded by UK NIHR.
- **Coordinator:** Shabbar Jaffar ([Shabbar.Jaffar@lstmed.ac.uk](mailto:Shabbar.Jaffar@lstmed.ac.uk))

# NIH Scale-up Funding Opportunity

Late-Stage Implementation Research Addressing Hypertension in Low- and Middle-Income Countries: Scaling Up Proven-Effective Interventions (UG3/UH3 Clinical Trial Optional)

<https://grants.nih.gov/grants/guide/rfa-files/RFA-HL-20-005.html>

# GACD Collaborative Research Efforts



**GACD**

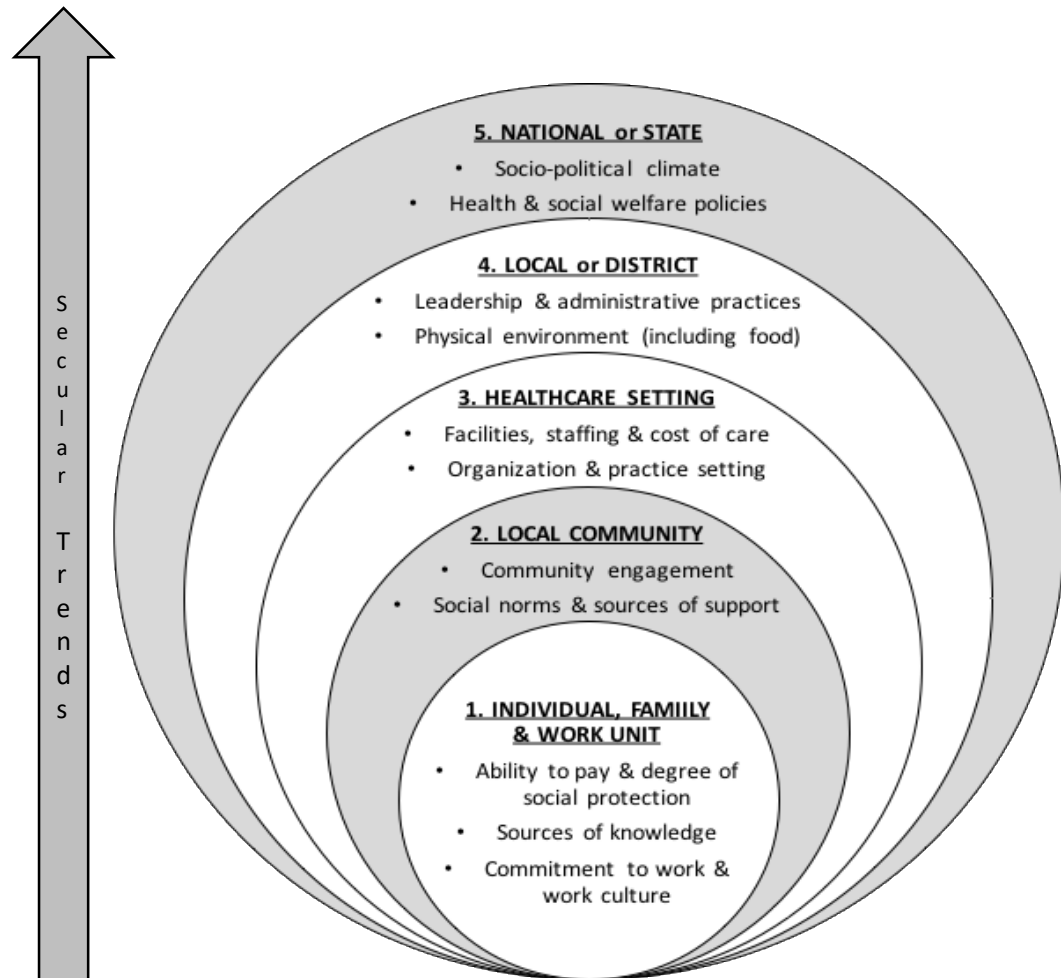
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# **Contexts & Concepts**

Meena Daivadanam on behalf of C&C working  
group  
April 2019

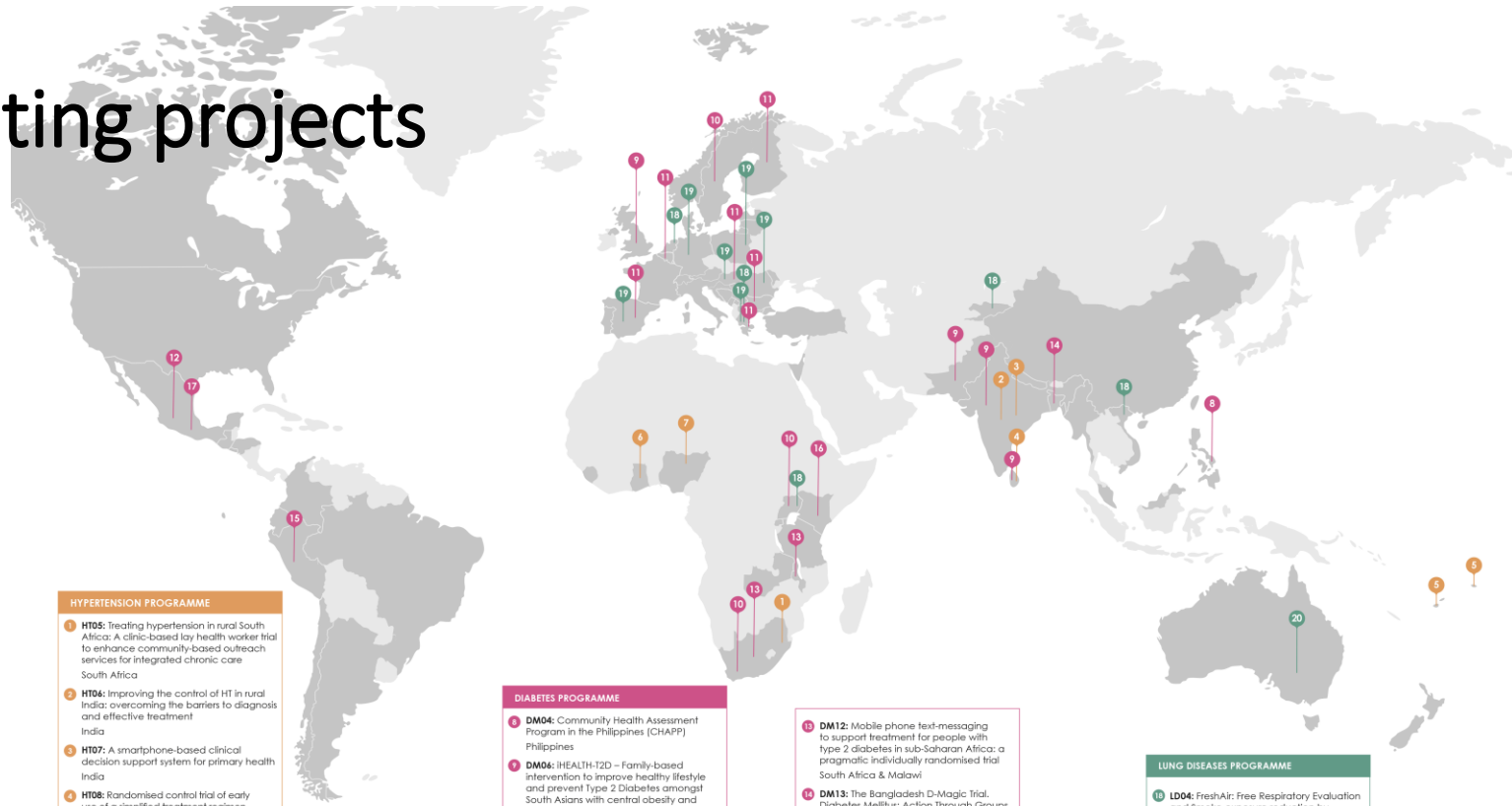
# Study 1 Context



Modified from: Taplin et al. *Figure 1: The multi-level context of cancer care*. *Cancer Epidemiol Biomarkers Prev* 2012;21(10): 1709–15 & dimensions used in the COACH tool (Bergström et al. *Implementation Science* 2015; 10:120).

# Participating projects

(N = 20)



**HYPERTENSION PROGRAMME**

- HT01:** Treating hypertension in rural South Africa: A clinic-based lay health worker trial to enhance community-based outreach services for integrated chronic care South Africa
- HT04:** Improving the control of HT in rural India: overcoming the barriers to diagnosis and effective treatment India
- HT07:** A smartphone-based clinical decision support system for primary health India
- HT08:** Randomised control trial of early use of a single-dose, three-in-one blood pressure lowering pill vs. usual care for improving hypertension control in Sri Lanka Sri Lanka
- HT10:** Cost-effectiveness of salt reduction interventions in Pacific Islands Fiji & Samoa
- HT12:** Task shifting and blood pressure control in Ghana – a cluster-randomised trial Ghana
- HT15:** Tailored Hospital-based Risk Reduction to Impede Vascular Events after Stroke (THRIVES) Nigeria

**DIABETES PROGRAMME**

- DM04:** Community Health Assessment Program in the Philippines (CHAPP) Philippines
- DM06:** iHEALTH-12D – Family-based intervention to improve healthy lifestyle and prevent Type 2 Diabetes amongst South Asians with central obesity and prediabetes India, Pakistan, Sri Lanka & United Kingdom
- DM07:** SMART2D – A people-centred approach through self-management and reciprocal learning for the prevention and management of type 2 diabetes South Africa, Sweden, Uganda
- DM08:** Feel4Diabetes: Promoting healthy lifestyle in families across Europe Belgium, Bulgaria, Finland, Greece, Hungary & Spain
- DM10:** Development of an interactive social network for metabolic control of diabetic patients Mexico

- DM12:** Mobile phone text-messaging to support treatment for people with type 2 diabetes in sub-Saharan Africa: a pragmatic individually randomised trial South Africa & Malawi
- DM13:** The Bangladesh D-Magic Trial. Diabetes Mellitus: Action Through Groups or Information for Better Control? Bangladesh
- DM14:** Implementation of foot thermometry and SMS to prevent diabetic foot ulcer Peru
- DM15:** Bridging Income Generation with Group Integrated Care (BIGPIC) Kenya
- DM17:** Tools and Practices to Reduce CVD and Complications in the Diabetic Population in Mexico Mexico

**LUNG DISEASES PROGRAMME**

- LD04:** FreshAir: Free Respiratory Evaluation and Smoke-exposure reduction by primary Health cAre Integrated groups The Netherlands, Uganda, Kyrgyz Republic, Vietnam and Greece
- LD05:** EUREST-PLUS: Policy Implementation to Reduce Lung Diseases Germany, Greece, Hungary, Poland, Romania, Spain
- LD15:** 'Indigenous Counselling and Nicotine (ICAN) QUIT in Pregnancy' – a cluster randomised trial to implement culturally competent evidence-based smoking cessation for pregnant Aboriginal and Torres Strait Islander smokers Australia

# Poster

- Poster at HSR 2018 in Liverpool

## Addressing context in implementation research for health systems strengthening: lessons from GACD projects

Meena Daivadanam, Mala Ingram, Kirsti Sidney Assenstedt, Gary Pankar, Kirsty Bobrow, Lisa Dolovich, Gillian Gould, Michaela Robell, Rajesh Vedanthan, Jacqui Webster, and the Contexts and Concepts working group

Figure 1: Multi-layered context framework

**Context** was regarded as critical and influenced the *design and implementation* of the GACD funded chronic disease interventions.

**Mixed methods** was used in *diverse set* of approaches to address and incorporate context. Further research is required to *systematically* evaluate contextual approaches in terms of how they contribute to effectiveness or implementation outcomes.

### Introduction

Understanding context and how this can be systematically addressed is crucial to successful implementation. We describe how context has been addressed (explored or evaluated) in Global Alliance for Chronic Diseases (GACD) implementation research projects focused on improving health in people with or at risk of chronic disease and how contextual lessons were incorporated into the intervention or the implementation process.

Figure 2: A map of the projects included in the study (n=20).

### Results

Project teams used both qualitative and mixed methods to address multiple levels of context (avg. = 4). It was common (85%) to address multiple (three or more) contexts within the same project, as well as to investigate different inter-linkages between contexts (figure 3).

Figure 3: Pictorial representation of the contextual levels and inter-linkages addressed in GACD Projects (n=20).

### Methods

A cross-sectional study with a semi-structured survey collected quantitative and qualitative data across 20 implementation research projects (figure 2) addressing hypertension, diabetes and lung diseases. Teams were asked to identify levels of context addressed in the project using a multi-layered context framework (figure 1). Thematic analysis was used to identify how context was addressed and how contextual lessons were incorporated into intervention content/strategies and the implementation process.

**The methodological approaches used to address context**

- Formal and informal assessments
- Engagement of stakeholders
- Local assessments/development based on local needs
- Use of diverse data sources

**How contextual lessons were incorporated into the implementation process**

- Integration of services, alignment or interlinkages
- Continuous engagement with stakeholders
- Feedback for programme to address gaps
- Promoting institutionalisation

**Context and Concepts Working Group**  
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# Article

- Just published

- Link:

<https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0214454>

RESEARCH ARTICLE

## The role of context in implementation research for non-communicable diseases: Answering the 'how-to' dilemma

Meena Dalvaan<sup>1,2\*</sup>, Mala Ingram<sup>3</sup>, Kristi Sidney Annerstedt<sup>4</sup>, Gary Parker<sup>4</sup>, Kirsty Bobrow<sup>5</sup>, Llea Dolovich<sup>6</sup>, Gillian Gould<sup>7</sup>, Michaela Riddell<sup>8</sup>, Rajesh Vedanthan<sup>9</sup>, Jacqui Webster<sup>10</sup>, Piviikki Absetz<sup>11,12</sup>, Helle Mølsted Alvesson<sup>2</sup>, Odysseas Androustos<sup>13</sup>, Niels Chavannes<sup>14</sup>, Briana Cortez<sup>15</sup>, Praveen Devarasetty<sup>16</sup>, Edward Fotrell<sup>1</sup>, Francisco Gonzalez-Salazar<sup>17,18</sup>, Jane Goudge<sup>19</sup>, Omarsy Herasme<sup>15</sup>, Hannah Jennings<sup>4</sup>, Deksha Kapoor<sup>20</sup>, Jemima Kamano<sup>21</sup>, Marise J. Kasteleyn<sup>14</sup>, Christina Kyriakos<sup>22</sup>, Yannis Manios<sup>13</sup>, Kishor Mogulluru<sup>16</sup>, Mayowa Owolabi<sup>23</sup>, Maria Lazo-Porras<sup>24</sup>, Wnurinham Silva<sup>25</sup>, Amanda Thrift<sup>1</sup>, Ezinne Uvare<sup>26</sup>, Ruth Webster<sup>10</sup>, Rianne van der Kleij<sup>14</sup>, Josefien van Olfen<sup>25,27</sup>, Constantine Vardavas<sup>22</sup>, Puhong Zhang<sup>28</sup>, on behalf of the GACD Concepts and Contexts working group<sup>1</sup>



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\* Membership of the Global Alliance for Chronic Diseases (GACD) Concepts and Contexts working group is provided in the Acknowledgments.  
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### Abstract

#### Introduction

Understanding context and how this can be systematically assessed and incorporated is crucial to successful implementation. We describe how context has been assessed

#### OPEN ACCESS

**Citation:** Dalvaan M, Ingram M, Sidney Annerstedt K, Parker G, Bobrow K, Dolovich L, et al. (2019) The role of context in implementation research for non-communicable diseases: Answering the 'how-to' dilemma. PLOS ONE 14(4): e0214454. <https://doi.org/10.1371/journal.pone.0214454>

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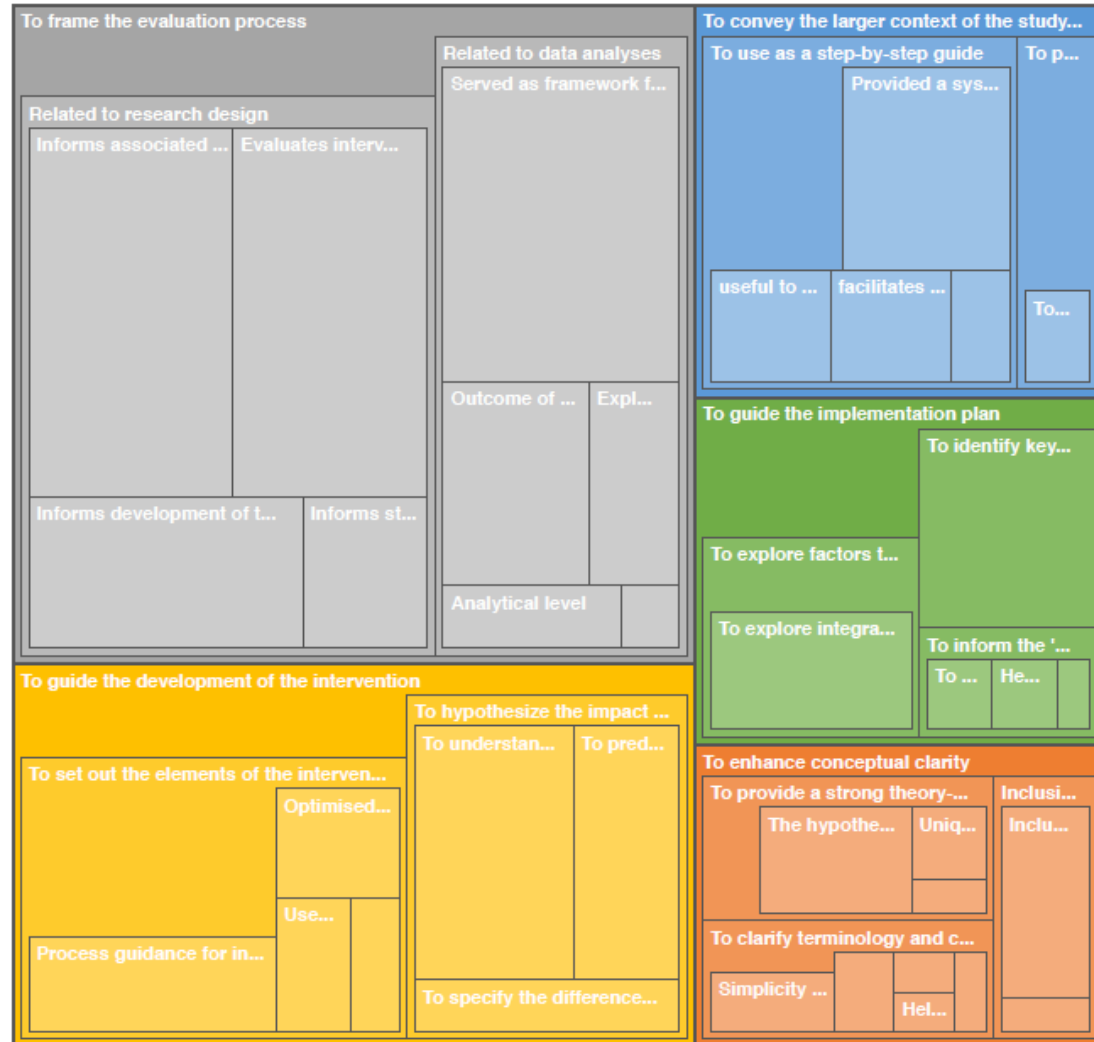
**Data Availability Statement:** All relevant data are within the paper and its Supporting Information files.

**Funding:** Funding for the studies described and for article submission was provided by the following GACD Hypertension Program, Diabetes Program and Lung disease Program funding agencies: Canadian Institutes of Health Research; Canadian Stroke Network; Grand Challenges Canada; Chinese Academy of Medical Sciences;

# Study 2

## Concepts

- Status update
  - Data collection completed
  - Analysis completed
    - Framework analysis
    - Preliminary tree map
  - First draft being prepared for circulation



# Where do we go from here? Some ideas.....

- Deconstructing interventions to evaluate the effect of context and adaptation to context
  - Idea raised by funders during the last GACD ASM
- Developing a checklist or guidance
  - Contextualization process – systematic incorporation of context data into intervention development / implementation process
- Any one interested, please contact Meena/Gary



# GACD Diabetes Data Dictionary

## Working Group Update

Meena Daivadanam – SMART2D, Uppsala University, Kristi Sidney Annerstedt –  
Karolinska Institutet & DD working group (Diabetes)

April 2019

# Progress to date



## Conceptualization & Data collection

### GACD Project Survey

**Phase I (Mar-May 2017):**  
n=5 (DM04, DM07, DM10, DM16, DM17) via SurveyMonkey

**Phase II (Jan-April 2018):**  
n=8 (DM01, DM02, DM06, DM08, DM12, DM13, DM14, DM15) via REDCap

**N=13/17 (76%) response** from GACD Diabetes projects

Data merged and cleaned for each domain

Descriptive stats (i.e. mean, median & 25% 75% percentile) for each variable under the 9 domains

### Delphi Panel

Experts nominated by working group members (Dec 2017 – April 2018)

**88** experts invited to participate via email/online survey between 3/7/18 and 20/9/18

- 3 reminders were sent

**32** filled → **36%** response rate

Variables w/ 75% consensus from GACD projects were deemed core – Delphi panel was asked to evaluate variables between the median and 75%

### Next Steps

1. Review the DP results and correlate with the original survey (Nov 2018)
2. Form writing group (ASM 2018)
3. Manuscript preparation underway
4. Submit manuscript (Aug 2019)

Contact: [meena.daivadanam@ikv.uu.se](mailto:meena.daivadanam@ikv.uu.se)



Thank you...

# GACD-COUNCIL COPD progress update

April, 2019






**J.F.M. van Boven**

# Background

- Successful COUNCIL initiative for diabetes and stroke
- Gaps in guidelines for the management of COPD in low- and middle-income versus high-income countries: a systematic review
- Lead: Job van Boven, University of Groningen (Netherlands)
- On behalf of Aizhamal Tabyshova (Kyrgyzstan), John Hurst (UK), Joan Soriano (Spain), Jennifer Alison (Australia), Will Checkley (USA), Tarana Farous (Bangladesh), David Meharg (Australia), Erick Huang (Taiwan), Patricia Alupo (Uganda), Oscar Flores (Peru), Antigona Trofor (Romania), Gonzolo Giannella (Peru), Niels Chavannes (Netherlands), Kamila Zvolska (Czech Republic), Gary Parker (GACD)

# Project planning

-  • Dec 2018: Data extraction sheet
-  • Jan-Feb 2019: Systematic review PubMed and EMBASE (same keywords as diabetes guidelines review, see paper attached to invite email)+protocol registration in PROSPERO
-  • Feb 2019: Additional (targeted) search for COPD guidelines by collaborators and our network
- Mar-Apr 2019: Data extraction from identified COPD guidelines (several assigned country guidelines per collaborator, final data sheet will be provided)
- May 2019: Data analysis
- Jun-Jul 2019: First draft paper and co-authors review round
- August 2019: Submit final paper

Contact: [jobvanboven@gmail.com](mailto:jobvanboven@gmail.com)



# **Gaps in guidelines for the management of bipolar and unipolar depression in adults: a systematic review of evidence from high- vs. low- and middle-income countries**

Yena Lee & Roger S. McIntyre

on behalf of the  
Global Alliance for Chronic Diseases Mental Health Guidelines Working Group

# Purpose

- To evaluate and characterize determinants of guideline **development**, **dissemination**, and **implementation** in existing practice guidelines;
- Compare **contextually** relevant factors between those from *high- and low/middle-income* countries; and
- Inform future guidelines that aim to improve **health outcomes** and **cost-effectiveness**



# Deliverables

- Currently conducting a **systematic review** of national and international practice guidelines for the
- Assessment, treatment, and management of depression in
- Adults with bipolar or major depressive disorder.

Study protocol is registered on PROSPERO ([CRD42019124759](https://www.crd42019124759))

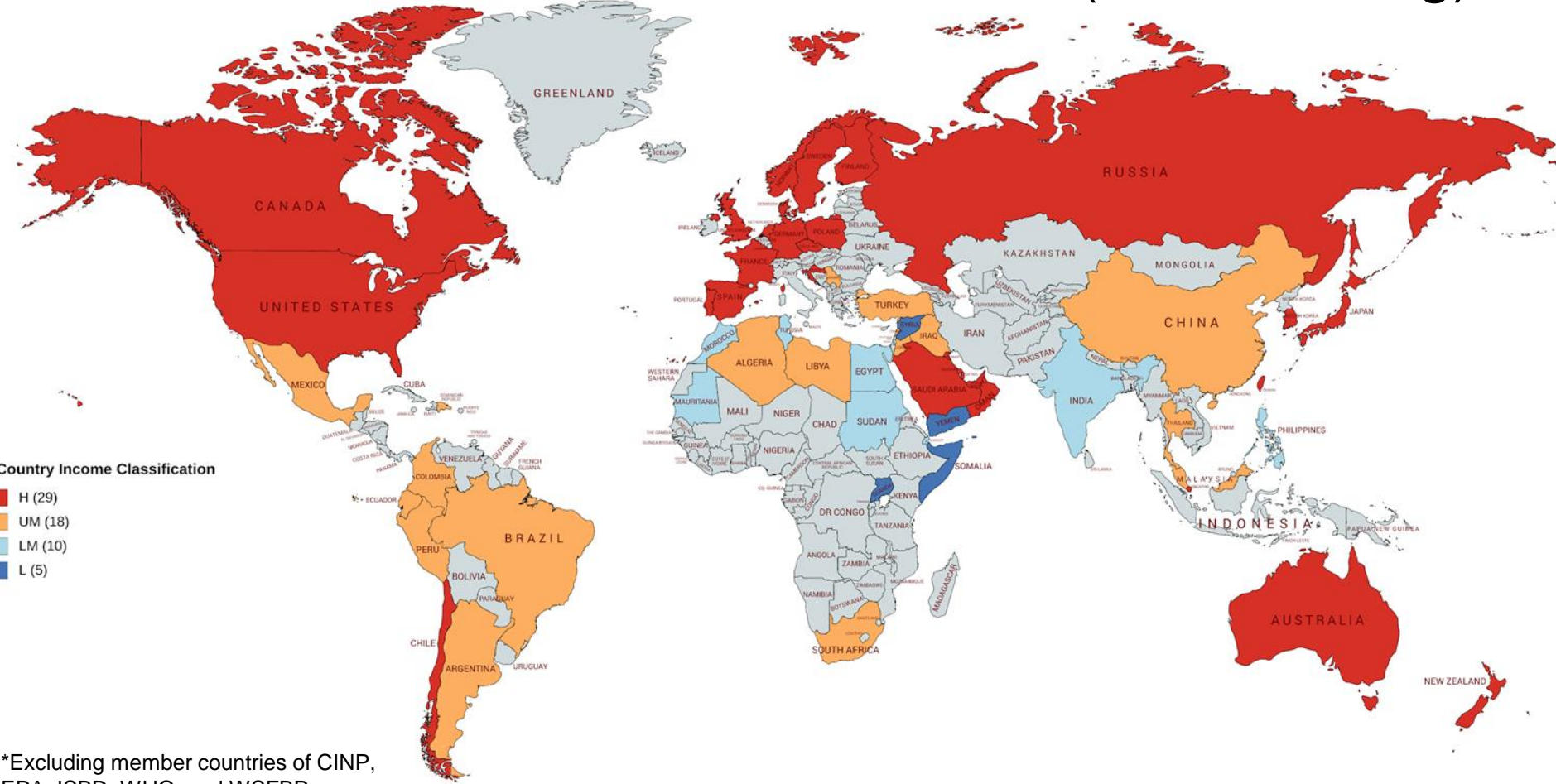
# Comparison of Guidelines from High- vs. Low- and Middle-Income Countries

- Quality of guideline **development** processes
  - e.g., compliance to standards of clinical practice guidelines by the Institute of Medicine: transparency, conflict of interest, multidisciplinary and balanced guideline development group composition, systematic review of comparative efficacy research, strength of recommendation grading, articulation of recommendations, external review, scheduled guideline updating; rigour of development
- Translatability, applicability, and content of **recommendations**
  - e.g., attention to ease of implementation, evaluation of cost/resource limitations, consideration of ethical, legal, social, and economic issues, intervention
- Stakeholder involvement in guideline development and **implementation**
  - e.g., involvement of target users and population in evaluation of enablers/barriers

# Progress

- Nov. 2018: Project and Mental Health Guidelines Working Group inception
- Dec. 2018: Call to GACD Network for collaborators
- Jan. 2019: Completed systematic search of 16 medical databases in 5 languages, review of >9800 abstracts in 13 languages
- Feb. 2019: Completed review of >350 full-texts in 18 languages
- Mar-Apr. 2019: Extracting data from ~100 national/international guidelines
- May 2019: Target project completion

# National Guidelines for 62\* countries (and counting)



\*Excluding member countries of CINP, EPA, ISBD, WHO, and WSFBP



Yena Lee & Roger S. McIntyre

on behalf of the  
Global Alliance for Chronic Diseases Mental Health Guidelines Working Group

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Respiratory  
Effectiveness  
Group

# Towards Optimum Reporting of Pulmonary Effectiveness Databases and Outcomes (TORPEDO) study

*Progress update*

**Job van Boven** (Primary Investigator, University of Groningen, REG collaborator) &  
**Gary Parker** (GACD)

GACD webinar April 2019



**GACD**

GLOBAL ALLIANCE FOR CHRONIC DISEASES  
AN ALLIANCE OF HEALTH RESEARCH FUNDERS

## Background

- Collaboration Respiratory Effectiveness Group (REG) with Global Alliance for Chronic Diseases (GACD)
- GACD Research Network is able to provide more respiratory disease experts from Lower Middle Income Countries (LMICs)
- REG are a group of mostly HIC pulmonary experts in real-world respiratory research



## TORPEDO project

- aims**
1. Development of a **checklist** with optimum and minimum required variables for respiratory research
  2. Develop a **repository of respiratory databases** in which each database is characterised against this new checklist

 Phase I- Identifying the **full scope of variables** for an ideal database

 Phase II- Voting and endorsing of variables to **reduce the list** to the minimally required variables

Phase III- Prioritization of the **minimally required variables**



## Phase 3 update

Priorization survey sent out end of February 2019 to all respondents of 2nd Delphi round

### Preliminary results

After analysing the results, of the **initial 224 variables**, **immediate consensus (>66% agreement)** was reached for **18 (8%)** and **partly agreement (50-66%)** was reached for **44 (20%)**. The latter were discussed at the REG and GACD 2018 meetings and most were deemed relevant but some only for specific studies (e.g. retrospective database only or prospective clinical study) or only in asthma or only in COPD. As such, in total we have a **remaining list of 62 variables** and have arrived at the final Phase 3 of the Delphi panel: Allocation and prioritization of variables for different type of studies.

### **So, what's now expected of you?**

In the survey (link above), you will be presented with the list of minimum variables identified during Phase 2 of this initiative. In the survey, you will be asked to indicate which variables you feel are a minimum requirement for each of the study designs outlined below:

1. A prospective clinical asthma (field) study with original data collection;
2. A prospective clinical COPD (field) study with original data collection;
3. A retrospective asthma database study or
4. A retrospective COPD database study.

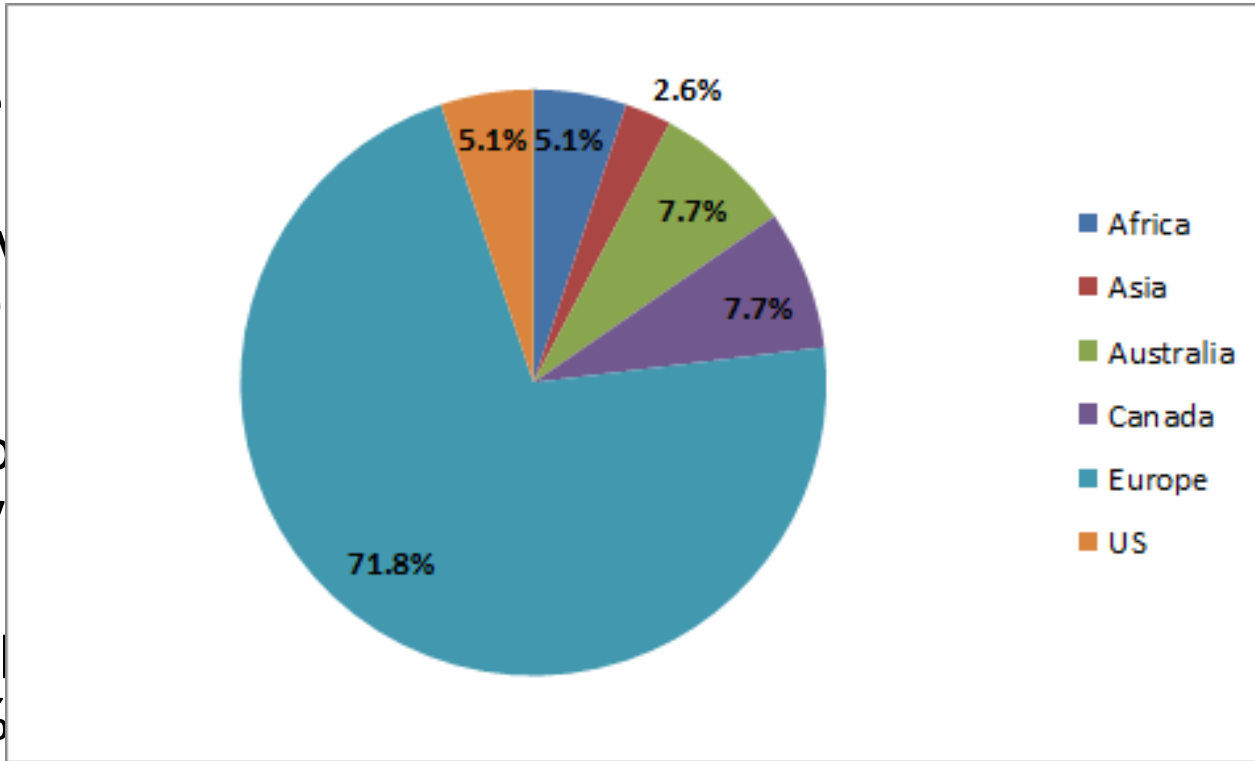


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**Response**

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## Example data voting

### Demographics

	Asthma_retrospective	Asthma_prospective	COPD_retrospective	COPD_prospective
<b>Date of birth</b>	<b>32 (94.1)</b>	<b>33 (97.1)</b>	<b>32 (94.1)</b>	<b>33 (97.1)</b>
<b>Gender</b>	<b>34 (100)</b>	<b>34 (100)</b>	<b>34 (100)</b>	<b>34 (100)</b>
Ethnicity	11 (32.4)	18 (52.9)	11 (32.4)	18 (52.9)
Level of education	9 (26.5)	16 (47.1)	9 (26.5)	16 (47.1)
SEC	13 (38.2)	21 (61.8)	12 (35.3)	22 (64.7)
<b>Geographical location</b>	18 (52.9)	<b>23 (67.6)</b>	18 (52.9)	<b>23 (67.6)</b>

## Next steps

- Finalize data analyses
- Publication
- Develop a database repository and apply generated checklist of minimal criteria for retrospective studies

Collecting databases, trials and characteristics from:

- REG members
- GACD members
- Through literature search
- Through Bridge to Data, ENCePP search engines

Applying the checklist

Collaborators will **complete the checklist** on these databases and will present the overview on the we



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# Data harmonisation of implementation measures in the mental health group

Research Network Webinars  
16 & 17 April 2019

Melissa Pearson  
University of Edinburgh & University of Sydney

# Mental Health GACD projects

33 projects

5  
continents

50  
countries

78 outcome  
measures

Schizophrenia	1
Dementia	3
Wellbeing	9
Depression	7
Suicide	2
Substance misuse	4
Psychosis	2
ADHD	1
Not available	4

# Work to date

1. Grand Challenges Canada Core Metrics
2. Sent questionnaire to teams
3. Mapped responses to REAIM and Proctor domains
4. Decision to re-survey teams
5. Developing a simplified survey tool

# Core Metrics Reporting Categories

Development	
1	Availability of situation analysis and report <i>(including knowledge or innovation gap, plus barriers to implementation)</i>
2	Availability of innovation product / protocol / manual
3	MOU or project agreement document signed with partner/s
4	Enumeration of (non-GCC) financial, human and other resources allocated by key stakeholders to innovation development and implementation

Evaluation	
11	Symptom severity score / effect size <i>(e.g. PHQ-9; SRQ)</i> Functioning score / effect size <i>(e.g. WHODAS, WHOQOL)</i>
12	Mental health & well-being score / effect size <i>(e.g. "WHO-5" index)</i>
13	Change in public perceptions, knowledge and attitudes about MNS disorders <i>(KAP score or discrimination / stigma measure; e.g. DISC-10)</i>
14	Cost-effectiveness <i>(cost per unit improvement in symptom severity / function)</i>

Delivery	
5	Number of mental health care providers trained Knowledge, attitudes and practices of providers <i>(pre- and post-training score)</i>
6	Continuous quality improvement mechanism in place <i>(e.g. regular supervision)</i>
7	Proportion of people in target population screened / identified
8	Expected time and cost for recipients to access innovation <i>(travel time, transport cost and any fees paid out of pocket)</i>
9	Expected proportion of target population with access to innovation medium <i>(e.g. TV, radio, internet)</i>
10	Number of people in target population receiving innovation <i>(disaggregated by diagnosis, level of care, year of project etc.)</i> Satisfaction ratings of persons receiving innovation

Scale up	
15	Allocation of financial, human and other resources by key stakeholders for innovation scale-up
16	Mental health system profile, based on key global mental health indicators <i>(including mental health policy and financial commitment, HR capacity, management and information systems, service infrastructure, etc.)</i>
17	Number of health facilities or providers using the innovation
18	Proportion of people in target population who are seen and/or receiving innovation as intended <i>(disaggregated by socioeconomic group)</i>

Context	
19	Change in public perceptions, knowledge and attitudes about MNS disorders <i>(KAP score or discrimination / stigma measure; e.g. DISC-10)</i>
20	Frequency of contacts with key stakeholders <i>(e.g. meetings, conference calls)</i>
21	List of identified strategies for overcoming barriers to innovation implementation or scale-up

# Mapped responses of MH Projects

<b>REAIM domains</b>	<b>Proctor domains</b>	<b>CM Project category</b>	<b>Projects (n)</b>
Reach	Penetration	Delivery	15
		Scale-up	15
Effectiveness/Efficacy	Appropriateness	Context	13
		Evaluation	20
		Adoption	15
Implementation	Adoption	Delivery/Scale-up	15
		Delivery/Implementation	15
	Acceptability	Delivery	15
	Feasibility	Scale-up	15
	Fidelity	Delivery	15
Maintenance	Implementation Cost	Evaluation	15
	Sustainability	Evaluation/Scale-up	20
	Sustainability	Evaluation at later time points	8

# Survey redesign aims

- Simplify
  - Start with REAIM domains
- Avoid duplication
  - Incorporate previous responses
- Provide opportunities for links to learning or discussions
  - Propose webinars topics for projects to link with
- Encourage collaboration
  - Mapping as a potential way for projects to collaborate on theme, scale, setting level etc.

# Survey redesign

Domain	Description	Example measures	Link to content
<b>REACH</b>	The absolute number, proportion, and representativeness of individuals or settings who are willing to participate in a given initiative.	Exclusion Criteria (% excluded or characteristics) Percent individuals who participate Characteristics of participants compared to non-participants or to target population Factors contributing to the participation/non-participation of the participants?	
<b>EFFICACY</b>	The impact of an intervention on important outcomes, including potential negative effects, quality of life, and economic outcomes.	Measure of primary outcome with or w/o comparison to a public health goal (e.g. treatment for depression) Measure of broader outcomes (e.g. measure of QoL or potential negative outcome) or use of multiple criteria Measure of robustness across subgroups (e.g. moderation analyses) Measure of short-term attrition (%) and differential rates by patient characteristics or treatment condition Qualitative assessment of contextual factors contributed to the results	

# Redcap interface



**Project details**

**Project number** (H)  ▼  
Please select your project number from the list

**Project title** (H)  
A randomised stepped wedge trial of the scaling up of a community-based alcohol education program in rural Sri Lanka

**Condition** (H)

- ADHD
- Dementia
- Depression
- MH first aid
- Prevention
- Psychosis
- Resilience
- Schizophrenia
- Screening
- Substance Use
- Suicide
- Well-being

Please amend if incorrect

**Project research focus** (H)

- Context
- Delivery
- Intervention

**Save & Exit Form**

▼

Expand

# Redcap interface



<b>REACH</b> The absolute number, proportion, and representativeness of individuals or settings who are willing to participate in a given initiative.	<b>Save &amp; Exit Form</b> <b>Save &amp; ...</b> -- Cancel --
<b>Example measures</b> Exclusion Criteria (% excluded or characteristics) Percent individuals who participate Characteristics of participants compared to non-participants or to target population Factors contributing to the participation/non-participation of the participants?	
<b>Reach details to date</b>	Screening for whole population of village approximately 20 villages of 250 people; Intervention will be offered to whole village; Baseline health clinic - 4000, Brief intervention - 100, drama performance 4000; Current <small>read only</small> Expand
<b>Reach - general comments on aspects of reach your project will measure</b>	 Expand
<b>Method</b>	<input type="checkbox"/> Quantitative <input type="checkbox"/> Qualitative <input type="checkbox"/> Both
<b>Tools</b>	<input type="text"/> please describe tools (Scale, questionnaire, focus group etc)

Contact: [melissa.pearson@ed.ac.uk](mailto:melissa.pearson@ed.ac.uk)





# Indigenous Populations Working Group GACD

Co-Chairs:

A/Prof Gillian Gould, Dr Marilyn  
Clarke, Mr David Meharg

## Inaugural meeting

- Initiated as many (11) Indigenous projects are part of GACD
- Held 15-11-2019 at GACD Annual meeting Sao Paulo
- Chaired by Gould
- 15 people attended - Australia, Canada, Mexico and USA
- Dialogue on aims and purpose
- Interest areas include:
  - Share resources and stories
  - Conduct systematic review on barriers/enablers to Indigenous Implementation Science
  - Develop/publish model/statement about Indigenous implementation science
  - Prioritise Indigenous leadership
  - Plan an Indigenous workshop for GACD 2019
  - Commence temporary platform for email and sharing
  - Potential of GACD communication platform for WPs

## Following IPWG GACD meeting

- Group leadership model- Dr Marilyn Clarke and David Meharg requested to co-chair WP with Gould (only Clarke and Meharg identified as Indigenous at meeting - Aboriginal Australians)
- Group email and share site at University of Newcastle  
[gacdindigenouspopulations@uonstaff.edu.au](mailto:gacdindigenouspopulations@uonstaff.edu.au)
- Clarke, Meharg and Gould discussed actions from inaugural meeting 5th March 2019
- Actions
  - Develop systematic review protocol (Clarke)
  - Request involvement of group in SR (Gould)
  - Invite others from GACD network to join (Gould)
  - Obtain list of Indigenous GACD projects to be descriptively analysed (Meharg)

# Points for further discussion/action



23  
EMAILS  
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Contact:

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[david.meharg@sydney.edu.au](mailto:david.meharg@sydney.edu.au)

[marilyn.clarke@health.nsw.gov.au](mailto:marilyn.clarke@health.nsw.gov.au)

# GACD Multi-Morbidity Working Group Update, April 2019

John Hurst, London

On behalf of the whole working group

# Rationale for the Group

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- No introduction necessary to the scale of the challenge, addressing multi-morbidity in LMIC!
- Currently rising interest.
- As GACD Researchers:
  - We SHOULD say something.
  - Our unique collaboration and expertise gives us something important to say
    - Expertise in LMIC and Implementation Science.
    - We are Multi-Professional, Multi-Disciplinary, and Collaborative.
    - We have Data dictionaries, Outcome Definitions and Working Groups....
  - We have the ability to influence policy.
  - We can assist GACD to leverage new funds

# GACD Multi-Morbidity: Recap

- Initial discussions at GACD Buenos Aires, 2017
- Group initiation call, March 2018
  - Develop a GACD Statement and Policy Briefs
  - Combination of GACD Data Sets
  - LMIC Multi-Morbidity Research Prioritisation
- Group discussion call, May 2018
- Workshop, GACD Sao Paulo, 2018

# Principles of the Group

- Inclusivity
- Transparency
- Everyone taking part listed as ‘contributors’

# GACD Multi-Morbidity Statement

- Published 10<sup>th</sup> November 2018



**GACD**  
GLOBAL ALLIANCE FOR CHRONIC DISEASES

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**GACD Research Network**  
Publications and reference list  
» GACD Researchers' Statement on Multimorbidity  
What are NCDs?  
Implementation science  
Implementation Science Capacity Building

## Global Alliance for Chronic Diseases Researchers' Statement on Multi-Morbidity

John R Hurst, Julia Dickhouse, Patrick K Mwambi, Jaime Miranda, Sonali Prastakis, Joao Santana, Tishul Sridharan and Rajesh Vaidyanathan on behalf of The GACD Multi-Morbidity Working Group (see bottom of page for list of contributing authors).

We present the first Global Alliance for Chronic Diseases (GACD) Researchers' Statement on Multi-Morbidity. The GACD network is an alliance of multidisciplinary health-care professionals, researchers and health-research funders. We aim to reduce the impact of non-communicable diseases (NCDs) through a focus on implementation research in low and middle-income countries (LMICs), and vulnerable populations in high-income countries (HICs).

An ageing population develops an increasing number of NCDs. Consequent to improvements in public health measures (such as improved sanitation), preventive measures (such as vaccination) and global vertical initiatives aimed at reducing mortality from infectious diseases (particularly pneumonia and gastrointestinal) global life expectancy has improved. Global Burden of Disease data highlights that 70% of global deaths are attributable to NCDs, whilst 80% of premature deaths from NCDs occur in LMICs [1]. In LMICs multi-morbidity from NCDs, acute and chronic infections, developmental problems from childhood and malnutrition all add to the overall burden of adult ill-health. NCDs often co-exist as 'multi-morbidity' which is most simply defined as the presence of two or more long-term physical or mental health conditions.

"We argue that multi-morbidity has not been adequately recognised in current policy and funding priorities and therefore in research, healthcare provision and healthcare education. Moreover, multi-morbidity research in the field has been hampered by the absence of an agreed definition across investigators."

— GACD multi-morbidity working group.

**Case vignette:** Maria is fifty. She lives in the suburbs of a large LMIC city remote from the nearest health-centre and earns money by washing clothes. She has elderly relatives at home and her partner is unemployed. She has obesity, hypertension, chronic obstructive pulmonary disease (COPD) and depression. How do these conditions interact to affect health and social outcomes? How does treatment for one condition affect the outcome or progression of the others? How can she access holistic community-based health-care? Who cares for her relatives when she is unwell and how will the family earn money when she can't work? How can the impact of her health-conditions be maintained, both for her and her family? Such are the challenges in detection and management of non-communicable disease multi-morbidity in low- and middle-income countries.




**Global Alliance for Chronic Disease researchers' statement on multimorbidity**

The Global Alliance for Chronic Disease (GACD) is an alliance of health research funders whose research teams form a network of multidisciplinary health-care professionals and researchers. We aim to reduce the impact of non-communicable diseases (NCDs) through a focus on implementation research in low-income and middle-income countries (LMICs) and vulnerable populations in high-income countries (HICs).

The GACD has commissioned research on hypertension, diabetes, chronic respiratory diseases, mental health, and in 2018, the scale up of hypertension and diabetes interventions. We particularly recognise the importance and challenge of coexisting physical and mental health multimorbidity arising from epidemiological transitions (ie, from communicable to non-communicable diseases) and rapid population ageing. Although our initial programmes have not explicitly considered multimorbidity in the context of cancer and chronic infectious diseases such as tuberculosis and HIV, we recognise that multimorbidity in relation to these conditions is also a burgeoning challenge. Notably, very little research has been done to address the coexistence of and potential for reciprocal interactions between the course of NCDs and the natural history of acute or long-term infections.

Our collaborative approach resulted in the realisation that multimorbidity was a challenge for all our members. To address this issue, we formed a multidisciplinary multimorbidity working group, listed in the appendix, with the aim of identifying common themes and developing a researchers' statement on multimorbidity. The full version of the GACD Researchers' Statement<sup>1</sup> highlights the specific data that we considered when collating these themes, and an exemplar case history that illustrates the challenges for those living with multimorbidity in LMICs. The six common themes identified of importance across all our research programmes are: (1) the relevance of multimorbidity to all health-care professionals, (2) the general under-recognition of multimorbidity in the health-care provision and research, including research to explore new models of delivery of care, (3) the absence of evidence-based guidelines on approaches to manage patients with multimorbidity leading to undertreatment, mistreatment, and overtreatment (in part driven by the absence of primary evidence due to exclusion of many people with multimorbidity from efficacy trials); (4) the need to provide greater access to expert, proactive holistic primary care that integrates NCDs; (5) the need for improved integration of health-care education, both to health-care providers and to patients and their families, specifically in relation to multimorbidity and including how to best access current models of care; and (6) the need for further research assessing interventions that address the challenge of multimorbidity in LMIC settings (eg, low-cost combination interventions and holistic prevention programmes).

The following statement summarised our deliberations: "The GACD research network believes that a greater focus on multimorbidity is overdue and necessary to successfully improve global health outcomes".<sup>1</sup> To achieve the GACD aim of reducing the impact of multimorbidity in LMICs with a switch to healthy active ageing, we identified three strategic objectives.

The first objective is greater policy awareness and focus on multimorbidity through integrated proactive chronic care, rather than systems that address single NCDs. Practical examples of how this objective could be achieved include support for education, training, and guideline development that focus on multimorbidity, and policies that make implementation of simple universal interventions—around diet, exercise, reduced exposure to tobacco, indoor and outdoor air pollution, and alcohol—attractive, effective, and practical to implement.

The second objective proposes changes in the way that research is commissioned, funded, and delivered when considering NCDs in LMICs, particularly the promotion of working across and between traditional disease, primary care, and specialist boundaries. Pragmatic trial designs are one approach to ensure the effects of interventions are considered holistically, in the situations in which they are developed and treated with shared data dictionaries of disease and broad outcome definitions.

[Comment](#)

www.thelancet.com/lancetgh. Vol 6 December 2018 41270

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# Six Common Themes in GACD Research

- Relevance of multimorbidity to all HCPs
- Under-recognition of multimorbidity in health-care provision
- Absence of evidence-based guidelines on multimorbidity
- Need for greater access to expert, pro-active and holistic primary care that integrates NCDs
- Need for improved integration of health-care education around NCDs, including to people living with NCDs
- Need for further research addressing interventions to address multimorbid NCDs in LMIC

---

# Our Researchers' Statement

The GACD Research Network believes that a greater focus on multimorbidity is overdue and necessary to successfully improve global health outcomes

## Three Strategic Objectives

- To reduce the burden of NCDs in LMIC/VPHIC:
  - 1. Greater policy awareness and focus on multimorbidity
  - 2. Changes to the way research is commissioned, funded and delivered, to promote multi-professional, multi-disciplinary, integrated implementation science
  - 3. Alignment of health-systems research with universal health coverage

## Next Steps (Sao Paulo 2018)

- Develop a Lay Summary of the Statement
  - In progress (Antigona Trofor & team)
- Develop a Multi-Morbidity Outcomes Review
  - In progress, for circulation to all interested (John Hurst & team)
- Develop a policy-brief
  - In progress (Josefien van Olmen & team)
- Research Prioritisation Exercise for MM LIMC
  - Preliminary stages (Roger McIntyre & team – other volunteers to assist welcome!)

# More on the Outcomes Review

Recommended reading!

but this doesn't consider the LMIC setting, and no specific recommendations

## A Core Outcome Set for Multimorbidity Research (COSmm)

Susan M. Smith, MD, MSc, MB  
BCB BAO, DCH, MRCP, MRCP<sup>a</sup>

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rado School of Medicine, Denver, Colorado

<sup>e</sup>Département de médecine de famille,  
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MORE ONLINE  
[www.annfam.org](http://www.annfam.org)

Conflicts of interest: E.W. is Senior Research Fellow  
in the HRB Centre for Primary Care Research in  
Ireland (HRB grant HRC-2014-1). M.F. holds the  
Research Chair on Chronic Diseases in Primary  
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### ABSTRACT

**PURPOSE** We aimed to develop a consensus-based set of core outcomes specifically for studies in multimorbidity.

**METHODS** We undertook a consensus study following the COS-STAR (Core Outcome Set-StAndards for Reporting) guidelines for the design and reporting of core outcome sets. A Delphi panel of experts completed a web-based survey with 2 rounds. Panelists were presented with a range of outcomes that had been identified in previous workshops and a related systematic review. They indicated their level of agreement on whether each outcome should be included in the core set using a 5-point Likert scale, and outcomes reaching a prespecified consensus level were included.

**RESULTS** Of 30 individuals invited to be panelists, 26 from 13 countries agreed. All 26 completed both rounds of the survey. The Delphi panel reached consensus on 17 outcomes for inclusion in a core outcome set for multimorbidity (COSmm). The highest-ranked outcomes were health-related quality of life, mental health outcomes, and mortality. Other outcomes were grouped into overarching themes of patient-reported impacts and behaviors (treatment burden, self-rated health, self-management behavior, self-efficacy, adherence); physical activity and function (activities of daily living, physical function, physical activity); consultation related (communication, shared decision making, prioritization); and health systems (health care use, costs, quality of health care).

**CONCLUSIONS** This consensus study involved a wide range of international experts who identified a large number of outcomes for multimorbidity intervention studies. Our results suggest that quality of life, mental health outcomes, and mortality should be regarded as essential core outcomes. Researchers should, however, also consider the full range of outcomes when designing studies to capture important domains in multimorbidity depending on individual study aims and interventions.

*Ann Fam Med* 2018;16:132-138. <https://doi.org/10.1370/afm.2178>.

### INTRODUCTION

The Core Outcome Measures in Effectiveness Trials (COMET) initiative aims to develop consensus-based standardized sets of outcomes, known as core outcome sets (<http://www.comet-initiative.org/>).<sup>1</sup> Core outcome sets represent the minimum that should be measured and reported in all clinical trials of a specific condition or conditions.<sup>1</sup>

Multimorbidity is commonly defined as the coexistence of 2 or more chronic conditions in an individual.<sup>2</sup> Its effects include reduced health-related quality of life, increased psychological distress, functional difficulties, increased health care use, and heightened mortality risk.<sup>3,4</sup> Current randomized controlled trials tend to adopt a single-disease focus, resulting in a paucity of relevant evidence for the management of patients with multimorbidity.<sup>5</sup> A growing number of trials are examining the effectiveness of interventions to address the specific experiences of patients with multimorbidity.<sup>6</sup> Systematic review of these studies highlights challenges of evidence synthesis due to differences between studies including methodo-

# More on the Outcomes Review

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rado School of Medicine, Denver, Colorado

‡Département de médecine de famille,  
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We are considering...

1. Mortality – **Rajesh Vedanthan**
2. Generic HRQoL scales- **Kamran Siddiqi**
3. Health Economic Indices- **Job van Boven**
4. Health Care Access such as hospitalisation or other indices of unplanned care – **Pallab Maulik**
5. Treatment burden and medication adherence – **Erick Huang supported by Pallab**
6. Multi-dimensional indices such as Frailty Scores – **Dinky Levitt**
7. Measures of ‘Healthy Living’ such as exercise, exposure, nutrition and alcohol – **Meena Daivadanam**
8. Self-efficacy and social-functioning / Measures of Self Determination – **Gina Agarwal**

And with support from...

Ricardo Araya, Jaime Miranda, Mayowa Owolabi, Joan Soriano, Lijing Yan

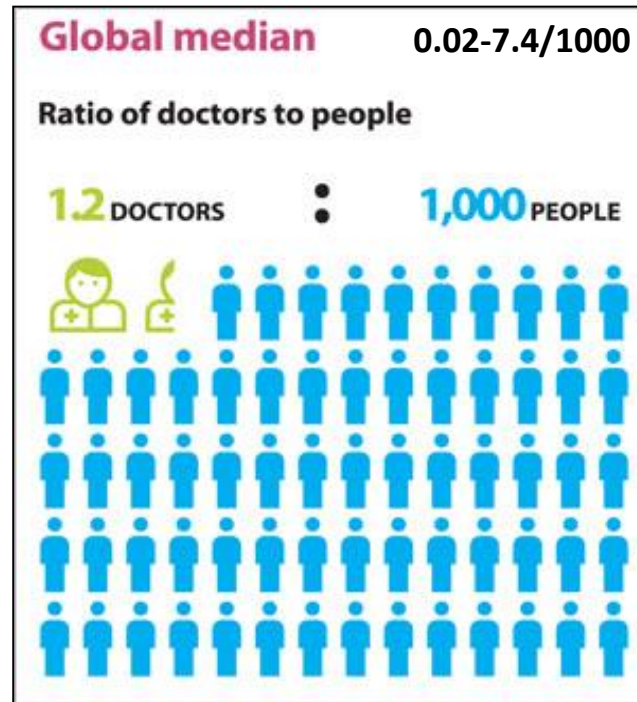
# Thank You, Apologies for my Absence and Discussion

John Hurst

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# Task-shifting for the management of hypertension: lessons from the Global Alliance for Chronic Diseases



*Shifting specific tasks from physicians to health professionals with different level of education or to a person specifically trained to do a limited task*



# Objective

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- Bring together projects with an element of task-shifting and analyse them collectively to understand the key challenges and opportunities of task-sharing on Hypertension/cardiovascular disease management



# Methods

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From each of the studies we obtained information on

- types of tasks shifted,
- professional level from which the task was shifted,
- training provided
- challenges faced.

After studies were completed, we collected granular and project specific data on

- ‘lessons learned’ throughout the implementation process
- ‘design to implementation’ changes that emerged.

Data were collated and mapped for comparative analysis of themes



# Results

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8 studies included across 9 countries in Argentina, Canada, Colombia, Ghana, India (2), Kenya, Malaysia, South Africa and Tanzania.

7 RCTs, 1 randomised feasibility study

NPHWs included nurses, community health workers, accredited social health activists, community health extension workers

NPHW education: 8 -14 years

Nurses: graduates from formal nursing programs

Tasks shifted from physicians to NPHWs – 4 studies

Tasks shared between two different levels of NPHWs – 4 studies.



# Which tasks were shifted?

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The tasks shifted to NPHWs included

- screening of individuals,
- referral to physicians for diagnosis and management,
- patient education for lifestyle improvement,
- follow-up of patients and patient reminders for medication adherence and appointments.

Training programs: 3 and 7 days + refresher training

Clinical decision support tools and m-health components – 2 studies

Challenges faced: system level barriers such as inability to prescribe evidence-based drugs, varying capacity and skill sets of NPHWs, high workload and high staff turnover.



# How to implement an intervention involving task-shifting?

Process	Why?
<b>Audit the health system</b>	To understand the various factors which need to be considered in the implementation of the intervention from a health system's perspective. E.g. are medicines available in the health centre?
<b>Conduct qualitative assessment of key stakeholders</b>	To gain a better understanding of the perception of key stakeholders. E.g. Will the community members accept the new role of the NPHW?
<b>Pilot the intervention</b>	To better understand enablers and barriers to the implementation of the intervention.
<b>Train the NPHWs and assess training using a broad framework</b>	To ensure NPHWs have gained the knowledge and skills required of them
<b>Supervise/monitor the implementation</b>	To ensure good quality health care to the community
<b>Check fidelity of intervention</b>	To ensure that the intervention is being implemented in accordance to the protocol
<b>Conduct a process evaluation</b>	To get a better understanding of what worked and why



# Outputs

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- Learnt from each-other
- Opportunities to collaborate outside the GACD projects
- 1 publication BMJ Global Health, October 2018
- Oral presentation at the World Congress of Cardiology

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# PROCESS EVALUATION WG

GACD Research Network Webinar

FELIX LIMBANI

16<sup>th</sup> and 17<sup>th</sup> April 2019



# Background

- The research teams working in a variety of complex interventions
- Many incorporating process evaluation to support primary outcomes in trials.
- A working group that focuses on process evaluation was ideal.

# Aims

- To share and exchange ideas, and establish everyone's relative experience.

# Since 2014

- Engaged external people to interact with the group
- Produced a set of guidelines for process evaluation
- Conducted a mapping exercise to understand teams' relative approaches to PE
- Working group meetings - sharing PE progress and experiences
- Sharing process evaluation resources
- Joint paper

# However

- The working group has been inactive for the past one year
- As the group started with HTP teams, later the focus was on the joint HPT PE paper
- Most HPT studies have closed, no drive moving forward.

# Moving forwards

- New and emerging teams need to reflect if there is need sustain the working group
- If yes, a clear road map on its objectives need to be discussed and agreed.
- Volunteers must come up and champion the process.

**Thank you**  
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THANK YOU

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