

#### Amsterdam Public Health

## Mental Health Research Agenda









# Introduction

"As a research program we face the challenge of sharpening our profile. To clearly demonstrate our relevance to financiers, potential partners and talent we need to reassess our research agenda to ensure our priorities are set at the current societal challenges." - Program leaders of the APH Mental Health Research Program, October 2022

#### (How) Does the research program of APH Mental Health contribute to societal challenges?

The following sub-questions were developed as a starting point :

- What are the most important societal challenges in the field of mental health?
- What are the most important research themes or expertises and which stakeholders are involved?









Together with Free Finch, a three-stage approach was used to answer these questions and to develop the research agenda. The three stages were:

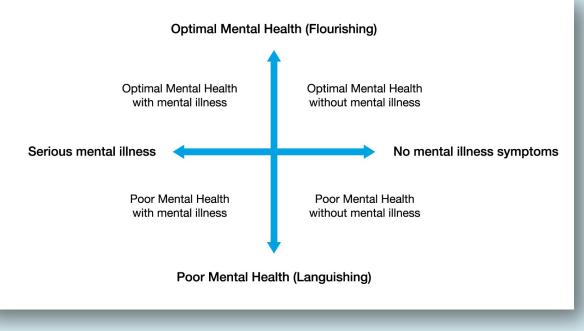
- 1. Exploration, including desk research, survey among MH members, and exploratory interviews
- 2. Validation, and testing a first version with (external) stakeholders
- **3.** Advice & implementation, a final version was delivered together with advice on next steps & implementation





# Research Agenda APH-MH

- It addresses 6 societal challenge that are currently considered as relevant in mental health
- In building the contents of this agenda, the two continua model as applied by the Trimbos Institute was used
- It incorporates the translation from understanding mental health to implementation in the treatment of mental health challenges to the implementation and organization of care
- This translation was incorporated in a model, that is based on traditional translational research models



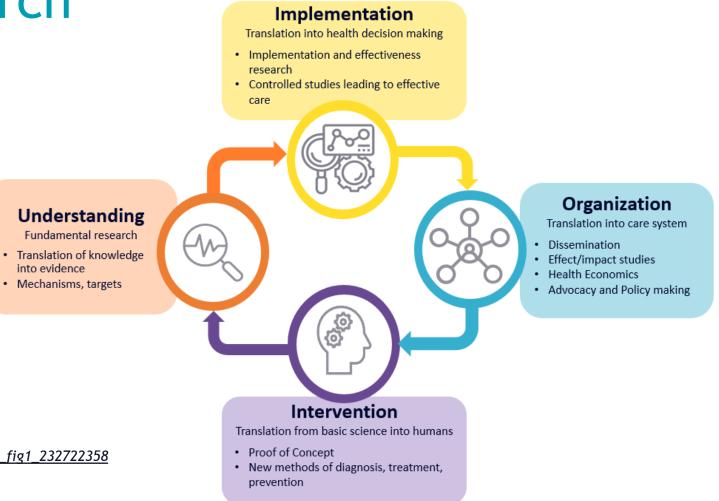
https://opentextbc.ca/mhwframework/back-matter/appendix-b/





# Translational research model

From understanding mental health to implementation in the mental health care system



The APH-MH translational research model is based on:

- <u>https://www.researchgate.net/figure/Translational-research-model\_fig1\_232722358</u>
- https://www.nature.com/articles/s41390-020-01225-4/figures/1
- <u>https://www.tri.edu.au/our-research</u>





### Research Agenda Societal challenges in mental health

What is the impact of **societal and environmental factors** on mental health?

(Epidemiology & Population health)

How do we maintain & improve **mental wellbeing?** 

(Promotion & Prevention)

How do **mental disorders** arise & develop?

(Etiology & Development)

How do we develop **effective mental health interventions**?

(Application & Intervention)

How do we integrate interventions in accessible and effective care networks for all?

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(Implementation & Evaluation)

How do we keep mental health care sustainable for patients and professionals?

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(Policy & Organization)







# What is the impact of **societal and environmental factors** on mental health?

#### Background

Various (changing) factors and trends in society and our personal (living) environment can have a significant impact on mental health. For example, the way we live, work, and interact with each other can all affect our mental health, both positively and negatively. Individual (risk) factors make us more vulnerable to influences from society and our surroundings. The current status of our mental health has an impact on society and our environment as well. Think about, for example, the effect of burn-outs on society.

#### The APH-MH approach

In order to study and improve mental health, an accurate overview on current mental health trends - on a population level, as well as in specific subpopulations -is conditional. The strength of our program is that we house large cohorts, big data sets, and key analytic knowledge and skills that enable understanding, monitoring and studying mental health and the impact of societal and environmental factors on a population level. In combination with rich data on individual (risk) factors such as genetics and other -omics data, and data collected in real-life (e.g. digital monitoring), these resources serve as a solid base for evidence-based information. APH-MH epidemiologists and experts in complexity science use this information to study the impact of these factors on mental health.







# How do we maintain & improve mental well-being?

#### Background

In today's society, demands on citizens are increasing, juggling with multiple roles, increasing number of stimuli (e.g. social media), but also with environmental factors (e g light/sound pollution) What makes that some people, despite these challenges, are resilient and maintain their mental health? How can we improve mental health in those that are not yet experiencing psychological problems? Research covering this question can encompass both mental health promotion as well as prevention of mental problems and disorders.

#### The APH-MH approach

What drives mental health is more than the other side of the coin of mental illness Understanding the relation between mental health and mental illness and the identification of factors that increase or reduce mental health contribute to improving wellbeing of citizens, thus preventing potential deterioration into (stress related) mental illness For this, APH MH leverages on the comprehensive longitudinal cohorts, citizen science projects, research on prevention resilience that are already ongoing, but also utilize expertise available on methods such as routine outcome measurement and digital monitoring tools.









# How do mental disorders arise & develop?

#### Background

Mental disorders affect a significant proportion of the population worldwide and are large contributors to global burden of disease. Understanding how such disorders develop is crucial to develop effective (preventive or curative) interventions, and research in different settings representing different stages of disease (community, general practice and/or psychiatric care setting) can help to unravel the etiology and development of mental disorders. This includes both common mental disorders as more uncommon disorders and severe pathology.

#### The APH-MH approach

We do this by (fundamental) research in which we investigate genetic, clinical, biological, psychosocial and environmental factors that contribute to the development of mental disorders and the chronicity, staging and profiling of these disorders. APH-MH also has a strong track record in studying mental disorders in the context of somatic illness (Soma & Psyche), and uses a variety of designs (cohorts, RCTs, genetic designs). Lately, also AI and machine learning are used to identify factors involved in etiology and development of mental disorders.







# How do we develop effective mental health interventions?

#### Background

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Mental health challenges are complex and multifactorial Development of effective interventions requires understanding the etiology, risk factors and protective factors of mental health challenges In addition, interventions should be tailored to the specific needs and characteristics of the population being served This also includes (when relevant) an integrated approach, taking into account psychological, biological and social factors, rather than just treating specific symptoms or disorders Lastly, it's important to continuously evaluate the effectiveness of the intervention and make adaptations as needed.

#### The APH MH approach

The APH MH approach includes (amongst others) translating results from observational studies that have led to new leads for (treatment into experimental studies, improved diagnostics, and state of the art complex system approaches that take the complexities and dynamics of a persons' environment into account E health and AI are tools that facilitate both the collection and interpretation of outcome data and the monitoring and assessment of the feasibility and acceptability of interventions.







# How do we **integrate** interventions in accessible and effective care networks **for all**?

#### Background

Access to mental health is hampered by barriers such as stigma, mental health illiteracy, distrust in institutions, as well as lack in capacities resulting in long waiting lists. Moreover, access to mental health care can be limited by factors such as income, ethnicity and social class, which can result in significant disparities in mental health outcomes. (In)formal care networks are a critical component of mental health care. Community-based care through informal networks can provide emotional and practical support for individuals with mental health challenges and reduce the burden on formal mental health services (and make their efforts more effective).

#### The APH-MH approach

APH-MH encompasses comprehensive research on e-health that could potentially lower the threshold to care and other healthcare innovation projects. Furthermore, the extensive expertise in both research and clinical practice of APH-MH program members facilitates implementation of interventions, thereby using design thinking , qualitative research and care evaluation.







# How do we keep **mental health care** sustainable for patients and professionals?

#### Background

As the demand for mental health services continues to increase, mental health care providers face numerous challenges including limited resources, high patient volumes and a shortage of qualified professionals, all of which can lead to significant pressure on the mental health care system. The quadruple aim is a framework that has been developed to guide the delivery of healthcare services. The quadruple aim aims to:

- Improve the health and well-being of populations
- Enhance the patient experience
- Improve the health of care providers
- Reduce the overall cost of care

#### The APH-MH approach

The APH-MH approach includes (amongst others) studies on cost-effectiveness of interventions, measurements of need of care, and studies leveraging data on population level, taking into account also economic and sociodemographic data. With the extensive expertise and network, APH-MH contributes to the advocacy and lobby for policy changes within mental health care system.



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## About this research agenda

#### This agenda:

- Was developed during a 5 month exercise of exploration and validation together with Free Finch, and with the involvement of APH MH Program Leaders, Program Council and several (external) stakeholders with expertise in Public and/or Mental Health,
- Is the signature of APH MH. It shows the expertise and added value of the APH MH research program, also for external parties, e.g. municipalities, knowledge institutes, funders, etc.
- Gives the program leaders and program council an instrument to steer, give context and stimulate (young) APH MH researchers,
- Gives a focus for activities in the (near) future,
- Is dynamic and adaptable to scope changes, either internally or due to external factors,
- Will be revised regularly.





## Many thanks to Amsterdam Public Health and Free Finch!

FREE FINCH



