Challenges for Advancing Urban Green and Blue Space and Urban Health–

Collaborative statement on integrating research, practice, and policy

Urban Transitions

8-11 November 2022

FFHS
Swiss Distance University of Applied Sciences
Member of SUPSI

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Why advancing urban green and blue space for health…?

THE LANCET
Global Health

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COMMENT | VOLUME 10, ISSUE 6, E786-E787, JUNE 01, 2022

PDF [46 KB]

Urban design is key to healthy environments for all

Thiago Herick de Sa • Abraham Mwaura • Cristina Vert • Pierpaolo Mudu • Nathalie Roebbel • Nhan Tran • et al.

Show all authors

Open Access • Published: June, 2022 • DOI: https://doi.org/10.1016/S2214-109X(22)00202-9 •

Check for updates

Why advancing urban green and blue space for health…?

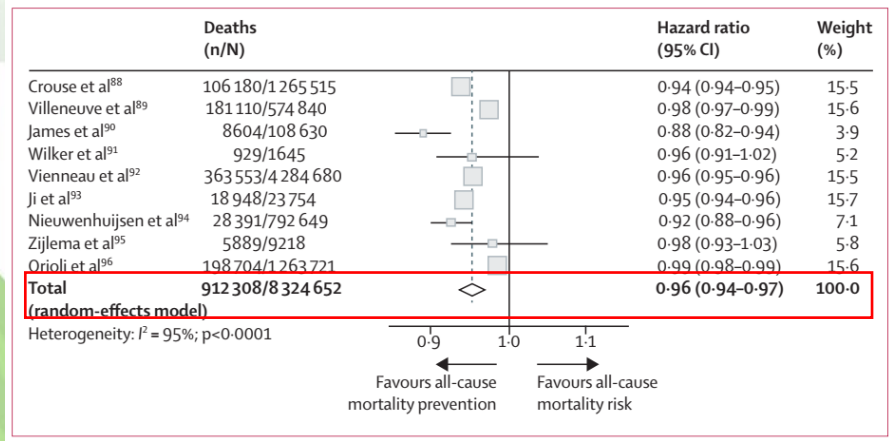
"Interventions on urban design and transport have the potential to provide large, longlasting, and immediate benefits for health…

…are key to healthy and sustainable urban environments for all."

Herick de S et al. thelancet.com/lancetgh Vol 10 June 2022
DOI: https://doi.org/10.1016/S2214-109X(22)00202-9

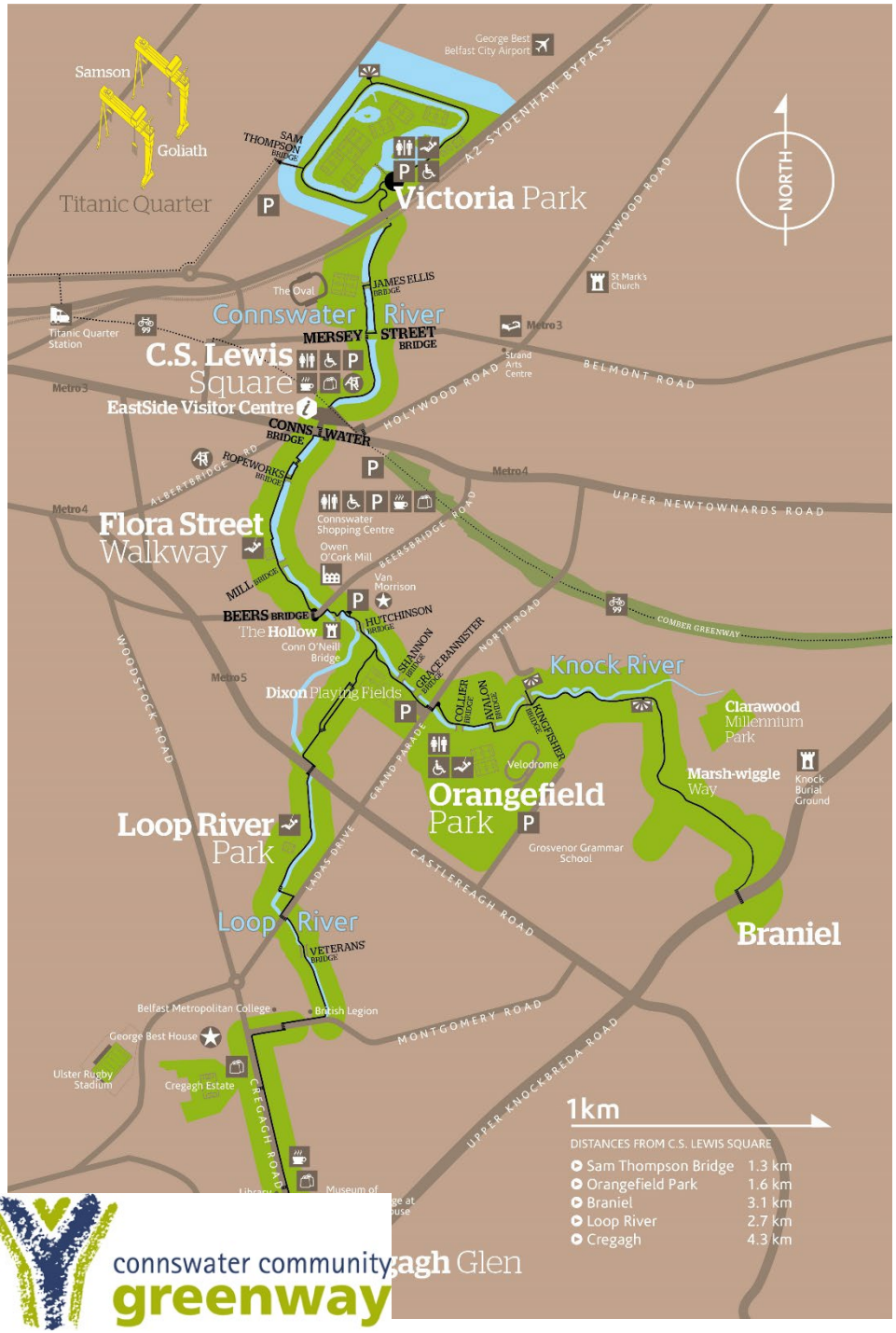
Green spaces and mortality: a systematic review and meta-analysis

- 9 studies with > 8 Mio. people from 7 countries
- 7 found significant relationship between increase in surrounding greenness and reduced mortality
- pooled HR 0·96 (95% CI 0·94–0·97)
  all-cause mortality per increment of 0·1 NDVI within a buffer of 500 m or less for residence
- Physical activity:
  explained ~ 2% of the association green spaces & mortality
  (but: 1 study only: Nurses' Health Study *)*



"Interventions to increase and manage green spaces should therefore be considered as a strategic public health intervention."

Rojas-Ruede et al. 2019, DOI:https://doi.org/10.1016/S2542-5196(19)30215-3
James et al. 2016 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5010419/



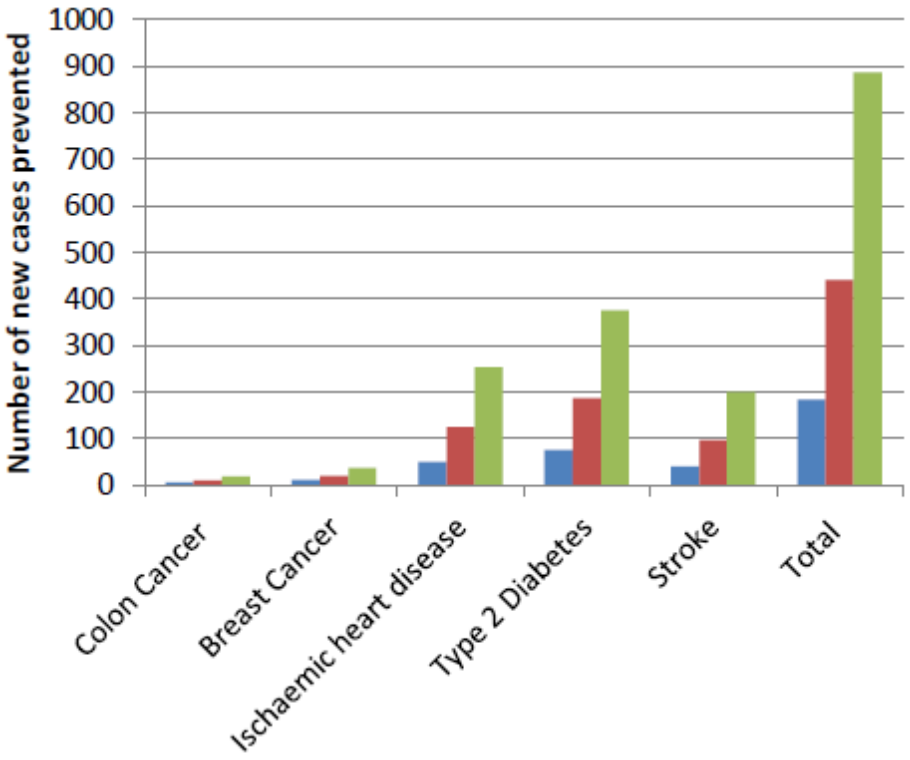
STUDY PROTOCOL Open Access

Physical activity and the rejuvenation of Connswater (PARC study): protocol for a natural experiment investigating the impact of urban regeneration on public health

327 events & activities

26 406 people

Number of new <u>chronic diseases</u> prevented over 40 years, if 2%, 5% or 10% of those currently inactive in the Greenway population, become active



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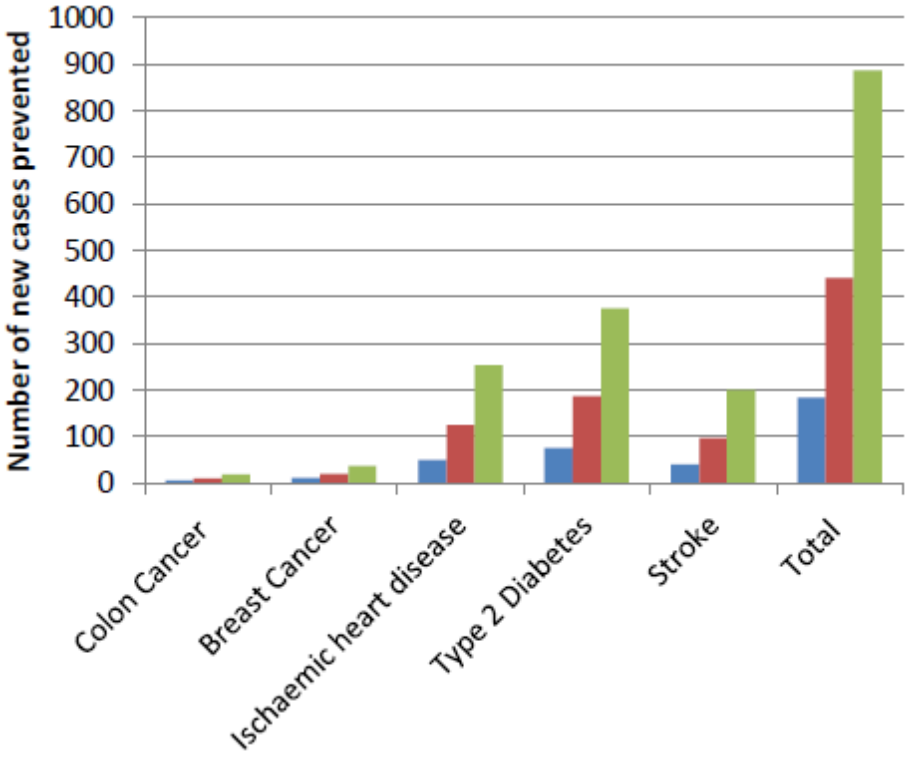

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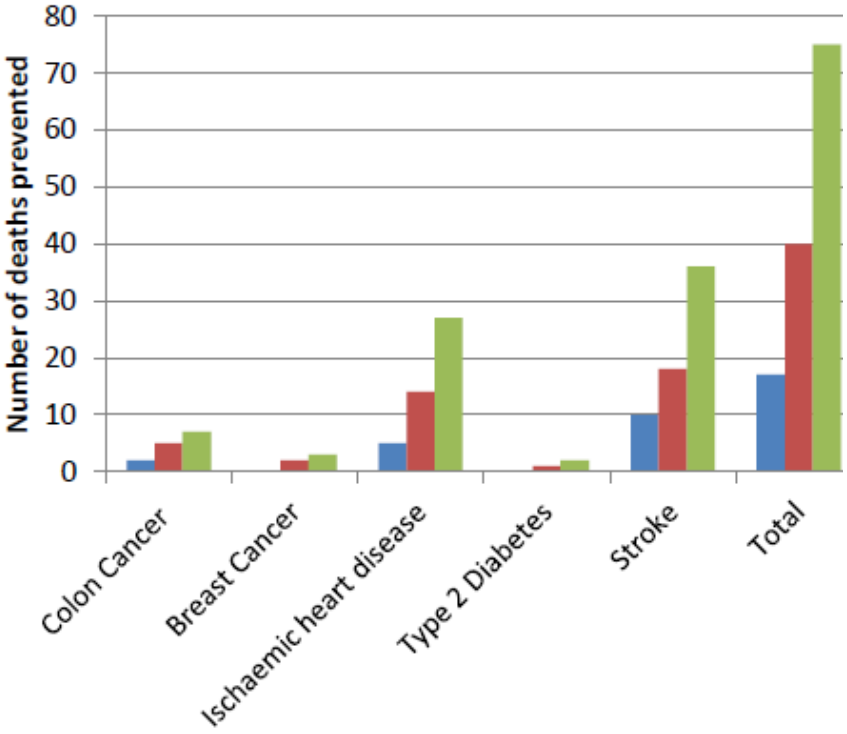

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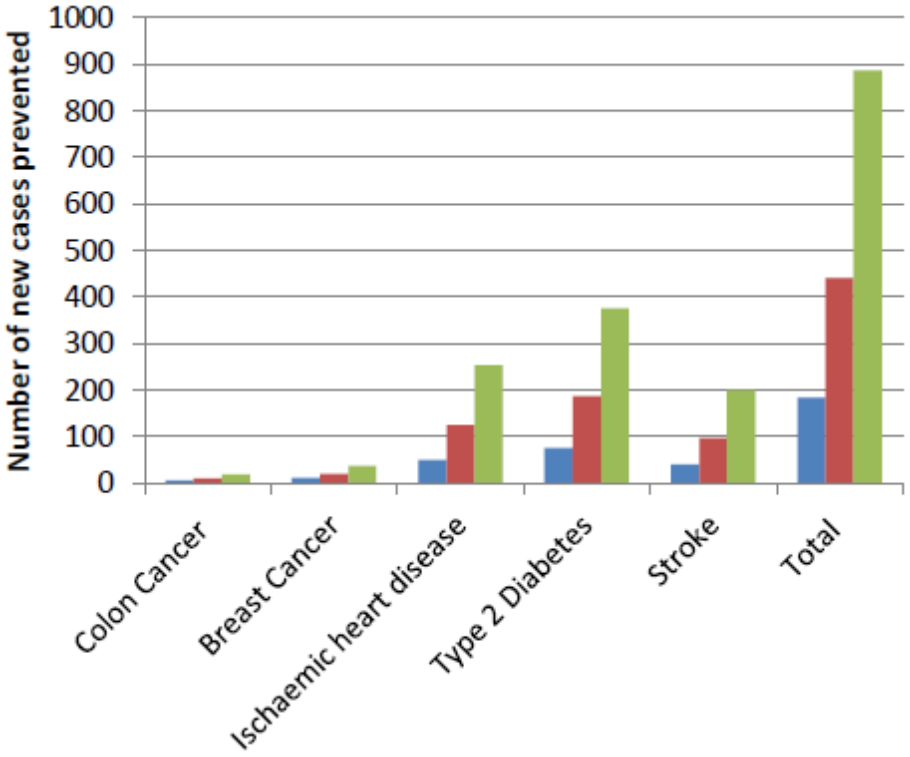

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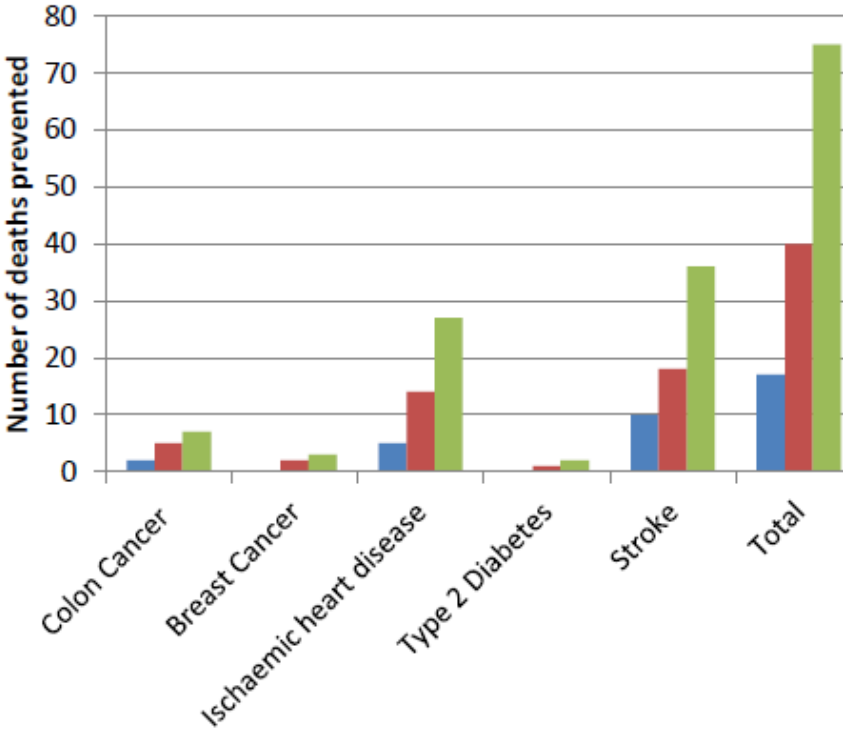


'If 2% of the inactive people living along the CCG become active, then this will cover the costs of the walkways, trails, bridges and lighting, over a 40 year period.'

European Journal of Public Health, 1–6

doi:10.1093/eurpub/ckt035

Urban greenways have the potential to increase physical activity levels cost-effectively

Mary Anne T. Dallat[1], Isabelle Soerjomataram[2], Ruth F. Hunter[1], Mark A. Tully[1,3], Karen J. Cairns[4], Frank Kee[1,3]

Social return on investment analysis of an urban greenway

Ruth F. Hunter , Mary A.T. Dallat , Mark A. Tully , Leonie Heron , Ciaran O'Neill & Frank Kee On Behalf of the PARC Study Research Team

To cite this article: Ruth F. Hunter , Mary A.T. Dallat , Mark A. Tully , Leonie Heron , Ciaran O'Neill & Frank Kee On Behalf of the PARC Study Research Team (2020): Social return on investment analysis of an urban greenway, Cities & Health, DOI: 10.1080/23748834.2020.1766783

To link to this article: https://doi.org/10.1080/23748834.2020.1766783

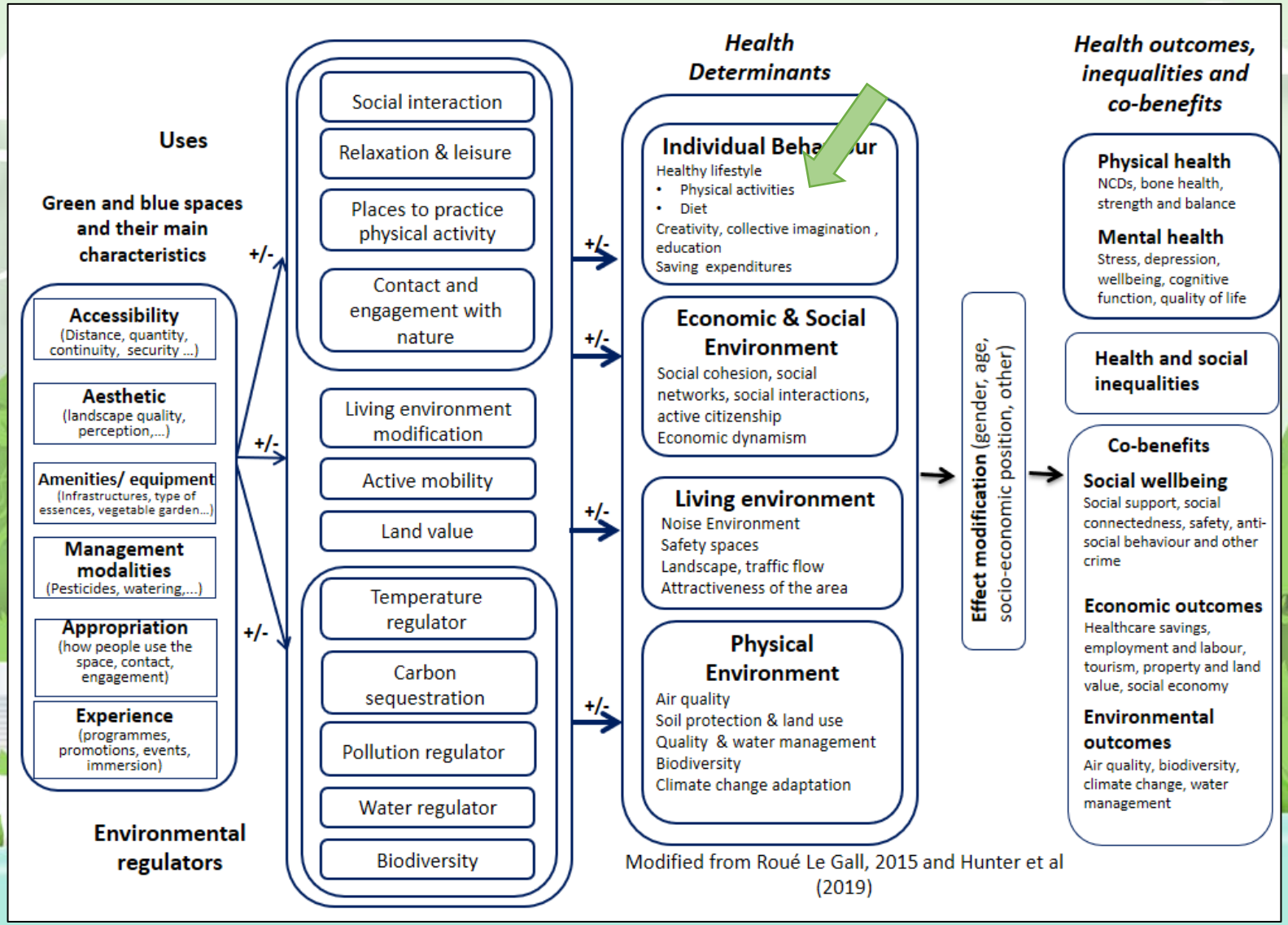
Range of benefits:

- flood alleviation
- property values
- climate change
- health
- employment
- tourism
- crime
- biodiversity

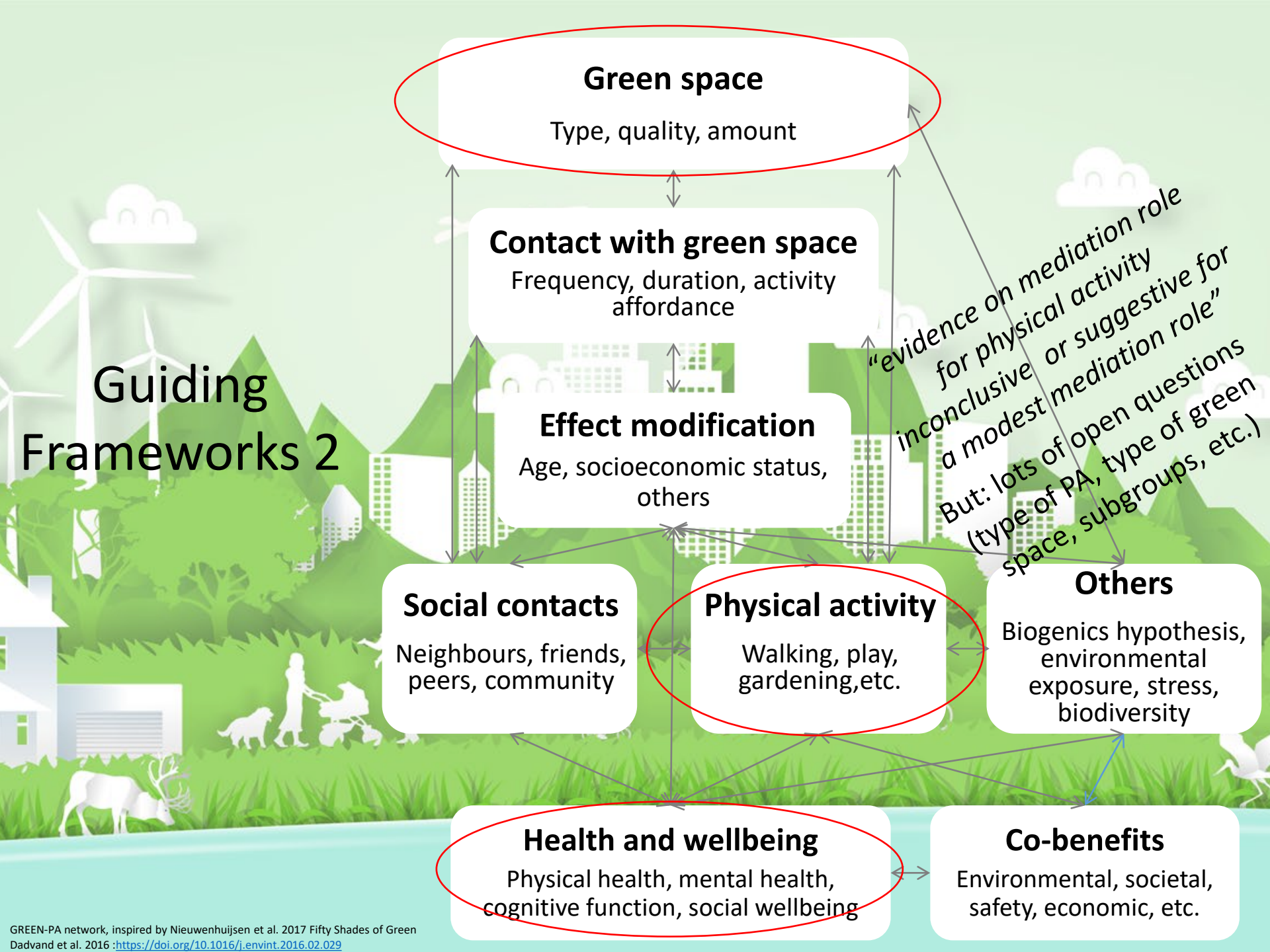
Benefit Cost Ratio: 2.88 to 5.81

For every £1.00 invested in the greenway, there would be £2.00–6.00 returned

Guiding frameworks



Modified from Roué Le Gall, 2015 and Hunter et al (2019)



GREEN-PA network, inspired by Nieuwenhuijsen et al. 2017 Fifty Shades of Green
Dadvand et al. 2016 :https://doi.org/10.1016/j.envint.2016.02.029

Suggested roadmap

for advancing urban green and blue space and urban health

1) **Accelerate research** in blue space and urban health
2) Strengthen the **evidence** base for innovative UGBS **intervention approaches**
   - Evidence on environmental impacts of UGBS actions to inform climate change policies
   - What works, for whom, and where
   - Co-design, co-implementation, co-evaluation and co-translation approaches
3) **Co-innovate novel methods and tools** to simulate and inform future UGBS actions

Paper in preparation, with kind inputs by J Sallis, V Lambert, OL Sarmiento

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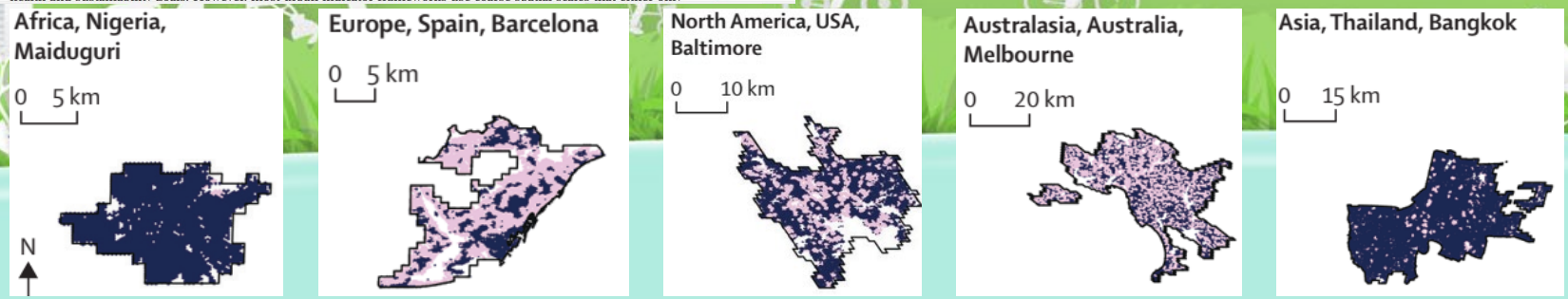
Urban design, transport, and health 3

Using open data and open-source software to develop spatial indicators of urban design and transport features for achieving healthy and sustainable cities

Geoff Boeing, Carl Higgs, Shiqin Liu, Billie Giles-Corti, James F Sallis, Ester Cerin, Melanie Lowe, Deepti Adlakha, Erica Hinckson, Anne Vernez Moudon, Deborah Salvo, Marc A Adams, Ligia V Barrozo, Tamara Bozovic, Xavier Delclòs-Alió, Jan Dygrýn, Sara Ferguson, Klaus Gebel, Thanh Phuong Ho, Poh-Chin Lai, Joan C Martori, Kornsupha Nitvimol, Ana Queralt, Jennifer D Roberts, Garba H Sambo, Jasper Schipperijn, David Vale, Nico Van de Weghe, Guillem Vich, Jonathan Arundel

Benchmarking and monitoring of urban design and transport features is crucial to achieving local and international health and sustainability goals. However, most urban indicator frameworks use coarse spatial scales that either only

Lancet Glob Health 2022; 10: e907–18



Boeing et al. 2022, Lancet Gobal Health, https://doi.org/10.1016/S2214-109X(22)00072-9

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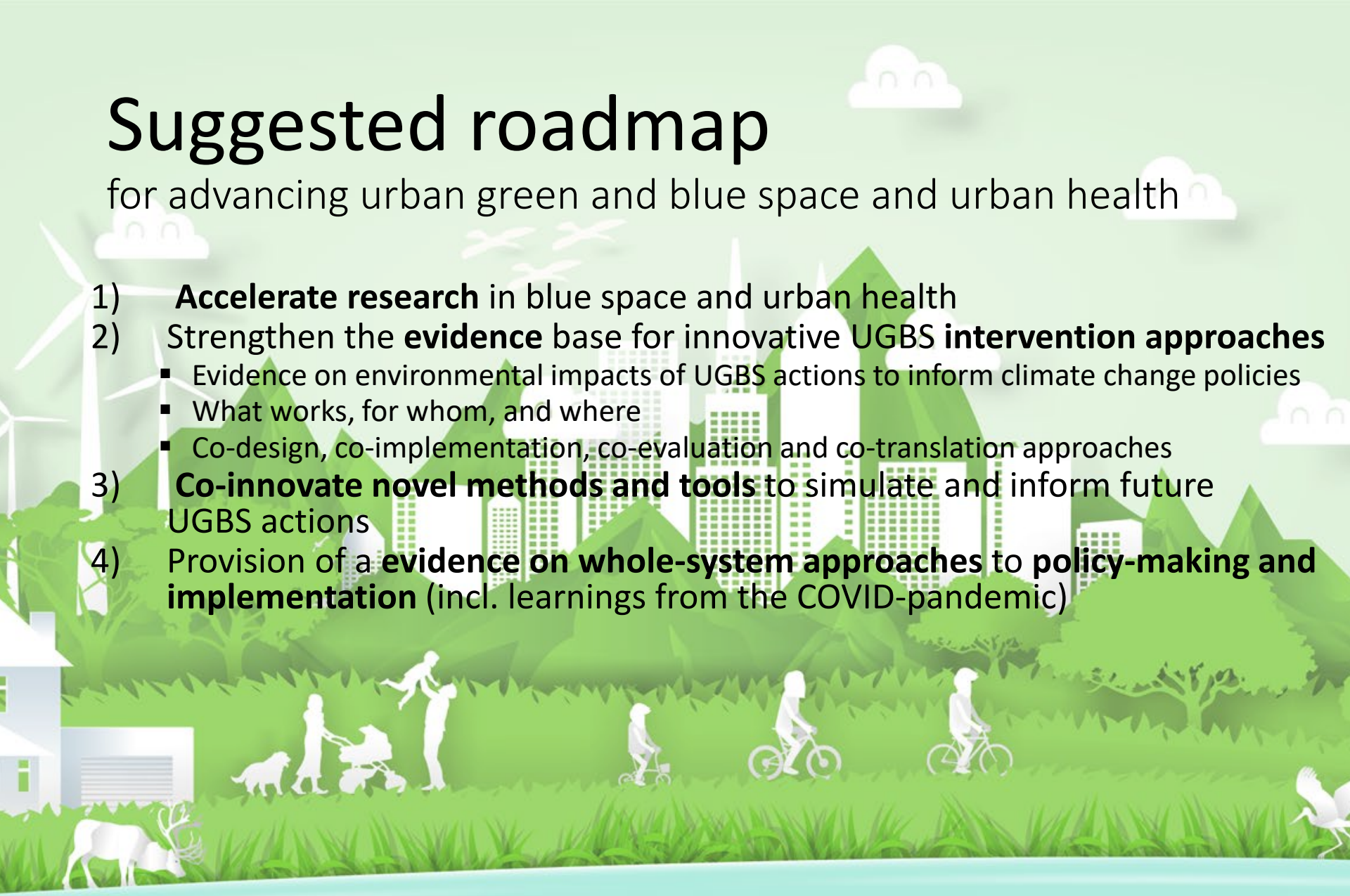

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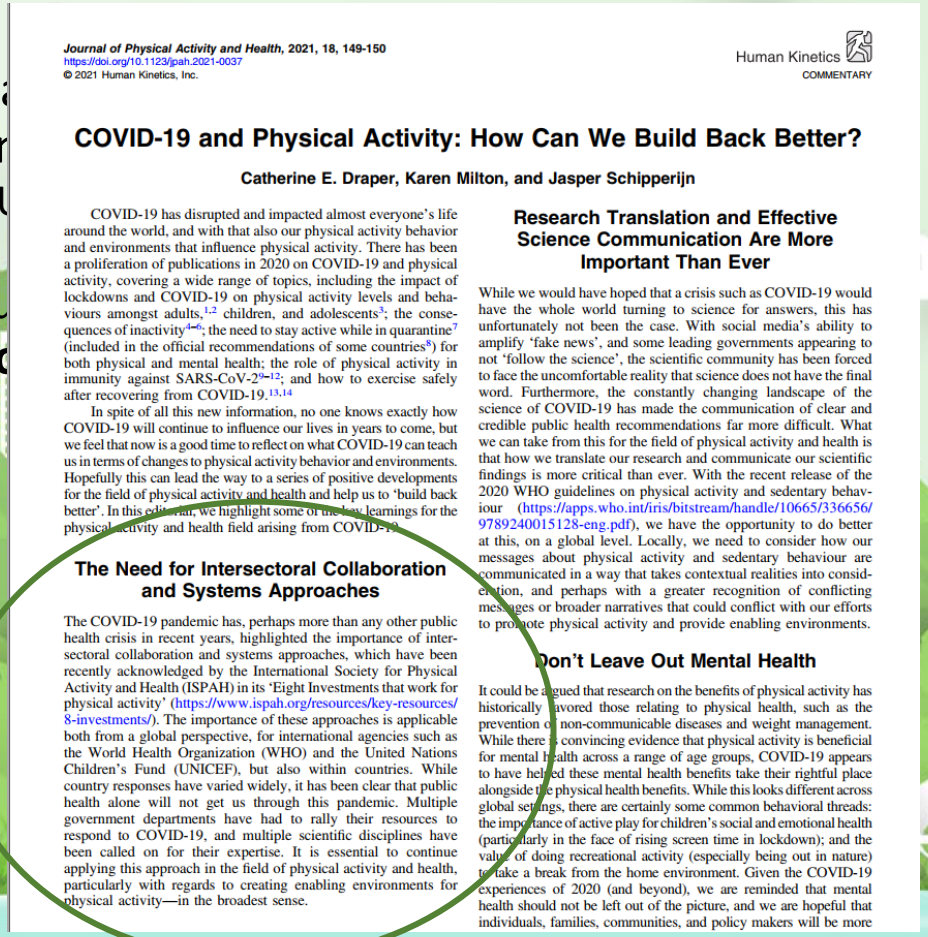

Journal of Physical Activity and Health, 2021, 18, 149-150
https://doi.org/10.1123/jpah.2021-0037
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Human Kinetics
COMMENTARY

COVID-19 and Physical Activity: How Can We Build Back Better?

Catherine E. Draper, Karen Milton, and Jasper Schipperijn

COVID-19 has disrupted and impacted almost everyone's life around the world, and with that also our physical activity behavior and environments that influence physical activity. There has been a proliferation of publications in 2020 on COVID-19 and physical activity, covering a wide range of topics, including the impact of lockdowns and COVID-19 on physical activity levels and behaviours amongst adults,[1,2] children, and adolescents[3]; the consequences of inactivity[4–6]; the need to stay active while in quarantine[7] (included in the official recommendations of some countries[8]) for both physical and mental health; the role of physical activity in immunity against SARS-CoV-2[9–12]; and how to exercise safely after recovering from COVID-19.[13,14]

In spite of all this new information, no one knows exactly how COVID-19 will continue to influence our lives in years to come, but we feel that now is a good time to reflect on what COVID-19 can teach us in terms of changes to physical activity behavior and environments. Hopefully this can lead the way to a series of positive developments for the field of physical activity and health and help us to 'build back better'. In this editorial, we highlight some of the key learnings for the physical activity and health field arising from COVID-19.

The Need for Intersectoral Collaboration and Systems Approaches

The COVID-19 pandemic has, perhaps more than any other public health crisis in recent years, highlighted the importance of intersectoral collaboration and systems approaches, which have been recently acknowledged by the International Society for Physical Activity and Health (ISPAH) in its 'Eight Investments that work for physical activity' (https://www.ispah.org/resources/key-resources/8-investments/). The importance of these approaches is applicable both from a global perspective, for international agencies such as the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF), but also within countries. While country responses have varied widely, it has been clear that public health alone will not get us through this pandemic. Multiple government departments have had to rally their resources to respond to COVID-19, and multiple scientific disciplines have been called on for their expertise. It is essential to continue applying this approach in the field of physical activity and health, particularly with regards to creating enabling environments for physical activity—in the broadest sense.

Research Translation and Effective Science Communication Are More Important Than Ever

While we would have hoped that a crisis such as COVID-19 would have the whole world turning to science for answers, this has unfortunately not been the case. With social media's ability to amplify 'fake news', and some leading governments appearing to not 'follow the science', the scientific community has been forced to face the uncomfortable reality that science does not have the final word. Furthermore, the constantly changing landscape of the science of COVID-19 has made the communication of clear and credible public health recommendations far more difficult. What we can take from this for the field of physical activity and health is that how we translate our research and communicate our scientific findings is more critical than ever. With the recent release of the 2020 WHO guidelines on physical activity and sedentary behaviour (https://apps.who.int/iris/bitstream/handle/10665/336656/9789240015128-eng.pdf), we have the opportunity to do better at this, on a global level. Locally, we need to consider how our messages about physical activity and sedentary behaviour are communicated in a way that takes contextual realities into consideration, and perhaps with a greater recognition of conflicting messages or broader narratives that could conflict with our efforts to promote physical activity and provide enabling environments.

Don't Leave Out Mental Health

It could be argued that research on the benefits of physical activity has historically favored those relating to physical health, such as the prevention of non-communicable diseases and weight management. While there is convincing evidence that physical activity is beneficial for mental health across a range of age groups, COVID-19 appears to have helped these mental health benefits take their rightful place alongside the physical health benefits. While this looks different across global settings, there are certainly some common behavioral threads: the importance of active play for children's social and emotional health (particularly in the face of rising screen time in lockdown); and the value of doing recreational activity (especially being out in nature) to take a break from the home environment. Given the COVID-19 experiences of 2020 (and beyond), we are reminded that mental health should not be left out of the picture, and we are hopeful that individuals, families, communities, and policy makers will be more

Draper et al. JPAH, 2021, 18, 149-150 https://doi.org/10.1123/jpah.2021-0037

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3) **Co-innovate novel methods and tools** to simulate and inform future UGBS actions
4) Provision of a **evidence on whole-system approaches** to **policy-making and implementation** (incl. learnings from the COVID-pandemic)
5) Accelerate **research addressing inequalities and transferability** of approaches, esp. for LMICs
6) **Harness political drivers** to support UGBS actions
7) Create of **new ways for policy-makers, practitioners, researchers and local citizens to collaborate** for sustainable UGBS action, incl. training & support
8) Develop **innovative solutions for integration of UGBS and the urban ecosystem**

Paper in preparation, with kind inputs by J Sallis, V Lambert, OL Sarmiento

Who is behind it?

www.green-pa.org

Interested to join?
Please let us know!

Coordinating team

Co-lead

Prof Sonja Kahlmeier
FFHS, Switzerland

Prof Ruth Hunter
Queen's University Belfast, UK

Members

Prof. Carlo Fabian
University of App. Sc. Northwestern Switzerland FHNW, Switzerland

Dr. Kelly o´Hara
University Beira Interior, Portugal

Dr. Niamh Murphy
Waterford Institute of Technology, Ireland

Dr. Erja Rappe
Age Institute, Finland

Prof. Mark Nieuwenhuijsen
IS Global, Spain

The Green-PA Network aims to:

1. Facilitate an international network of **scientists, policymakers and practitioners** to **support exchange on urban green-** (and blue-)**space related approaches** to promoting physical activity and health
2. **Promoting consensus building** to **identify research and implementation gaps**, facilitating research initiatives and translation of scientific evidence for policy and practice
3. **Securing funding** to **develop a toolbox on urban green-** (and blue-) **space related** approaches to promoting physical activity and health; and
4. **Fostering visibility and recognition** of the topic in scientific organizations, events and policy processes

GREEN-PA – what's next

Interested to join?
Please let us know!

- **Activities** (currently through in-kind contributions)
  - Coordinating team meetings
  - Pre-conference workshop 2019
  - Network survey 2020
  - Collaborative statement paper submission 2022
  - To-does:
    - Update of list of interested experts & insitutions
    - Ideas for funding proposal(s)
    - Any other activities within the scope of the network

www.green-pa.org

Thank you very much for your interest

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