

# INNOVATING AND ADVANCING HANDHELD HEALTH: A GLOBAL SOLUTION FOR SCALING UP mHEALTH TECHNOLOGIES TO CONTROL AND PREVENT NCD

## THE GOAL

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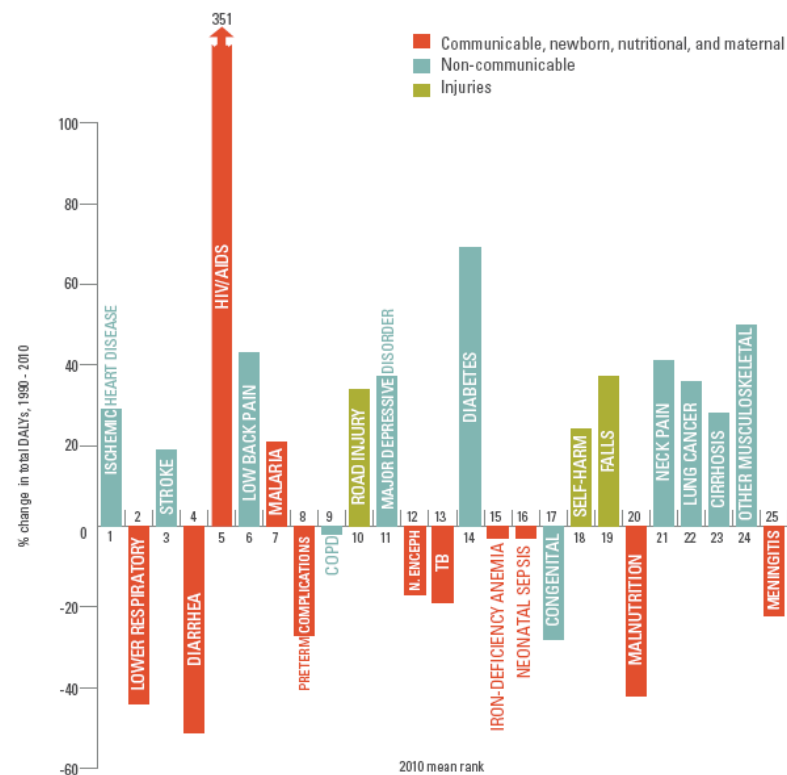


**INNOVATE, SCALE UP, and ADVANCE**  
mobile health technologies  
to reduce global non-communicable disease burden.

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## WHY ARE FOCUSING ON NCDs?

### Leading Causes of Death Are Shifting to NCDs



Global shifts in leading causes of DALYs, 1990-2010. Adapted from "The Global Burden of Disease: Generating Evidence, Guiding Policy," by Institute for Health Metrics and Evaluation, 2013, p. 19. Copyright 2013 by IHME.

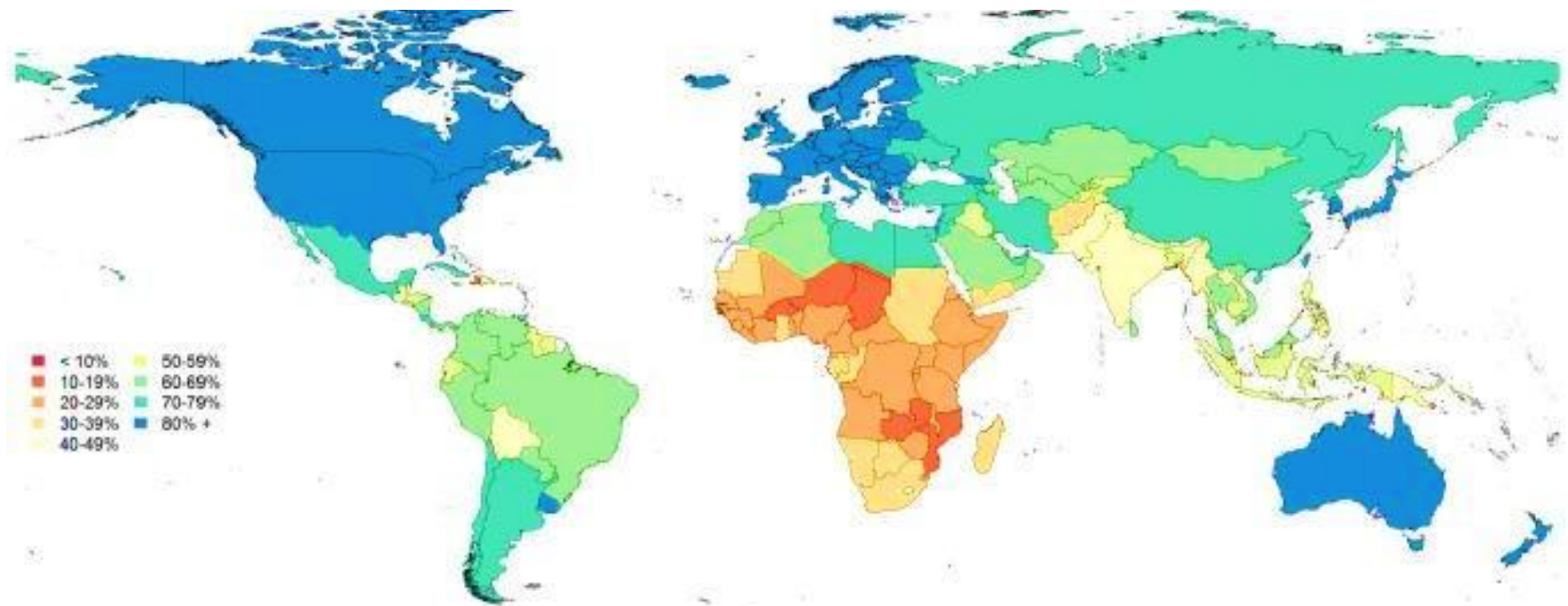
Tsukuda, T. N., Madrid, D., Majekodunmi, J., Truong, W., Velez-Colon, J. J. (2014). *Innovating and advancing handheld health: A global solution for scaling up mHealth technologies to control and prevent non-communicable disease*. APHA 142<sup>nd</sup> Annual Meeting & Expo, 18 November 2014.

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## WHY ARE FOCUSING ON NCDs?

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Percent of Global DALYs Due to NCDs in 2010



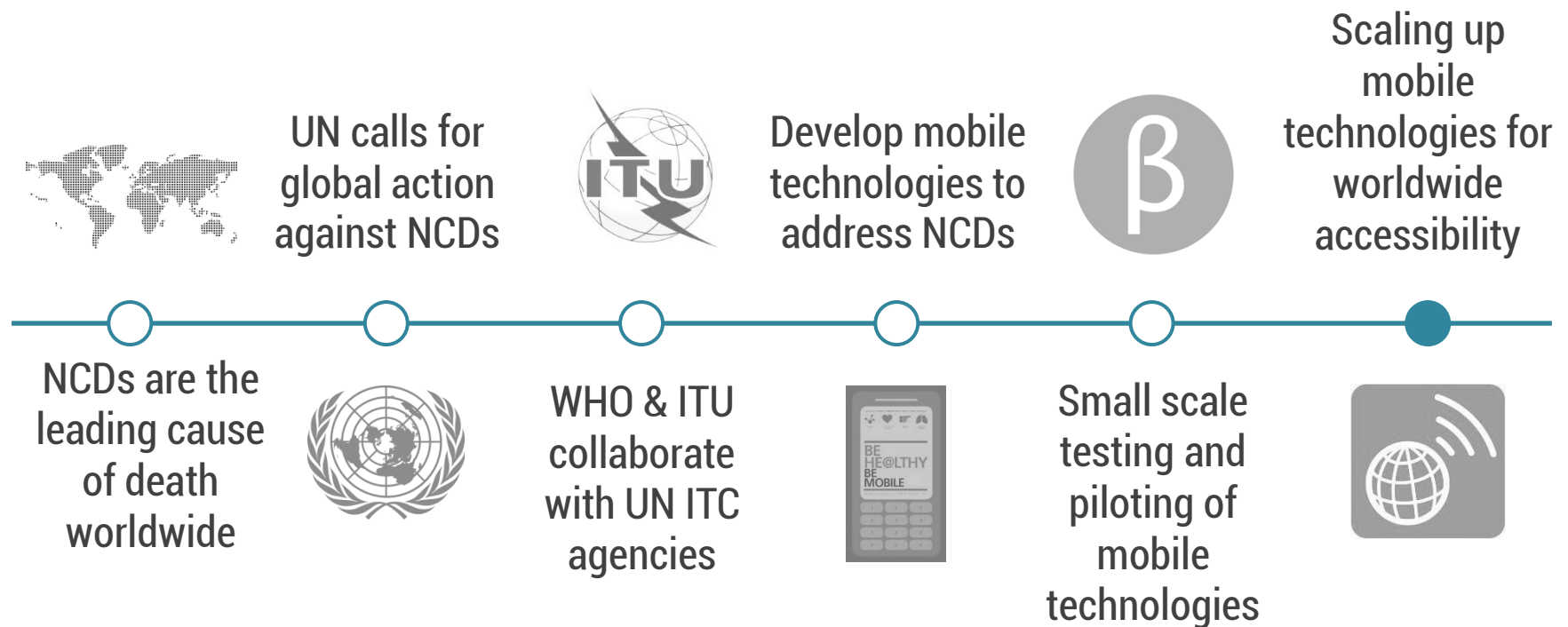
Percent of Global DALYs Due to NCDs in 2010. Adapted from "The Global Burden of Disease: Generating Evidence, Guiding Policy," by Institute for Health Metrics and Evaluation, 2013, p. 20. Copyright 2013 by IHME.

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## WHERE ARE WE NOW?

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# INNOVATING AND ADVANCING HANDHELD HEALTH: A GLOBAL SOLUTION FOR SCALING UP mHEALTH TECHNOLOGIES TO CONTROL AND PREVENT NCD

## CHALLENGES WITH BRINGING mHEALTH TO THE GLOBAL STAGE

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- ▶ Lack of interoperability and sustainability
- ▶ Need for capacity-building and infrastructure
- ▶ Gaining buy-in and maintaining engagement from the developer community
- ▶ Need for monitoring and evaluating outcomes, quality, and effectiveness



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## STRATEGIC APPROACH

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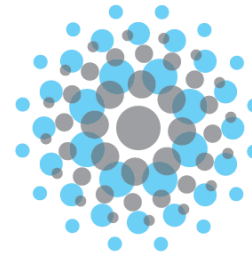
### STAGE 1: TARGET

Identify and target existing global NCD initiatives to complement, convene stakeholders and strategic partnerships, cultivate buy-in.



### STAGE 2: BUILD

Assemble a multidisciplinary technical advisory group to steer the adoption of universal health information technology interoperability and sustainability standards, establish or partner with a globally representative open-source community to create a public-facing web and mobile app portal for proven mHealth technologies and services, build capacity.



### STAGE 3: DIFFUSE

Launch the portal and continually target and engage the development community and end-users.



### STAGE 4: EVALUATE

Collect, mine, monitor, and analyze meaningful data to pinpoint NCD risk factors, measure effectiveness and outcomes associated with use of mHealth, determine indicators of success, and engage in continuous quality improvement to identify and deploy enhancements.

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## STAKEHOLDERS & STRATEGIC PARTNERSHIPS

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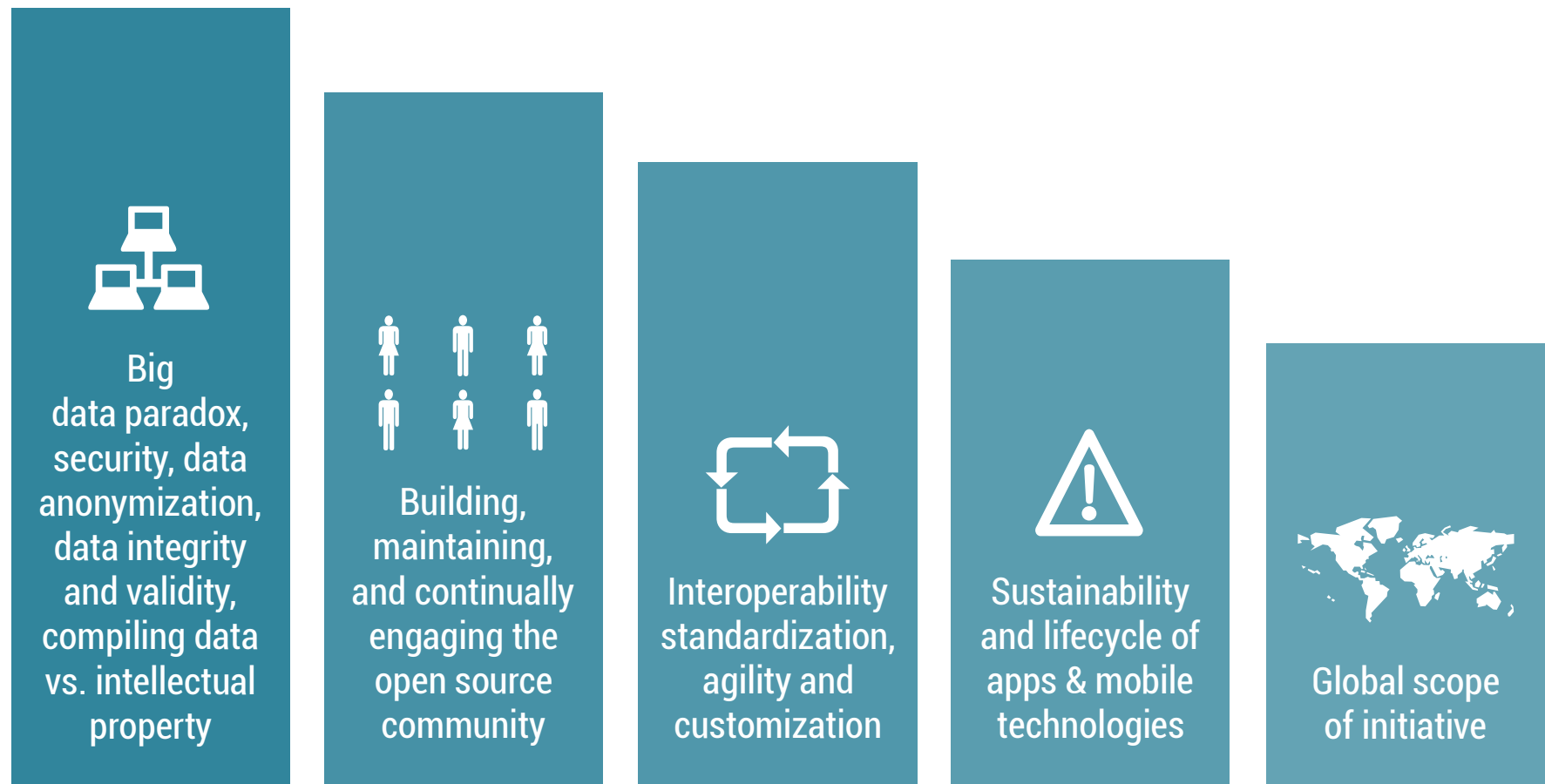


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## CHALLENGES & LIMITATIONS

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## OPEN-SOURCE MODEL

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Open Source DevOps, Agile, and Cloud Tooling. Adapted from <http://server.dzone.com/articles/model-cloud-devops-factory>, by WS02 App Factory.

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