The Value of Health R&D – The Return on Investment

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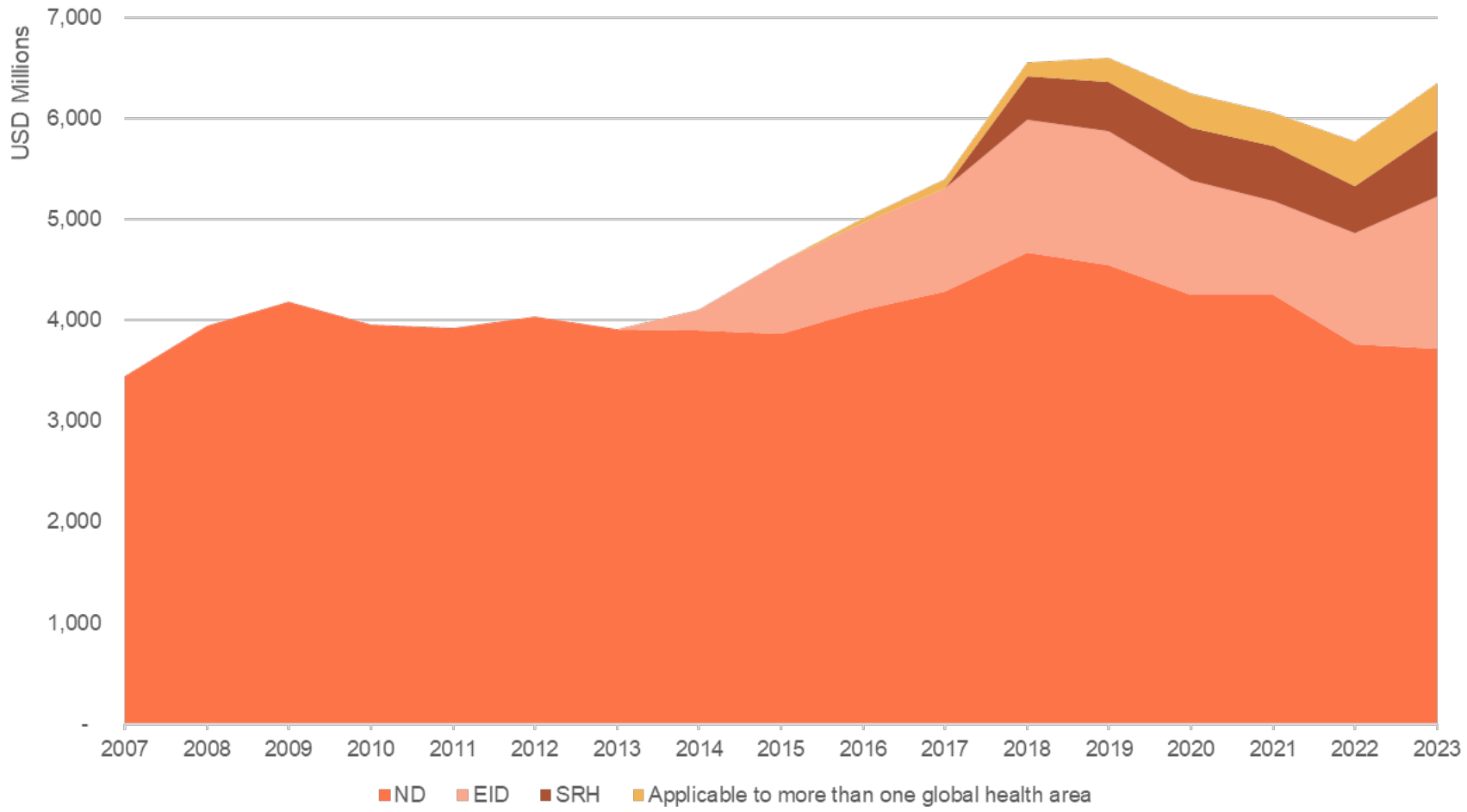
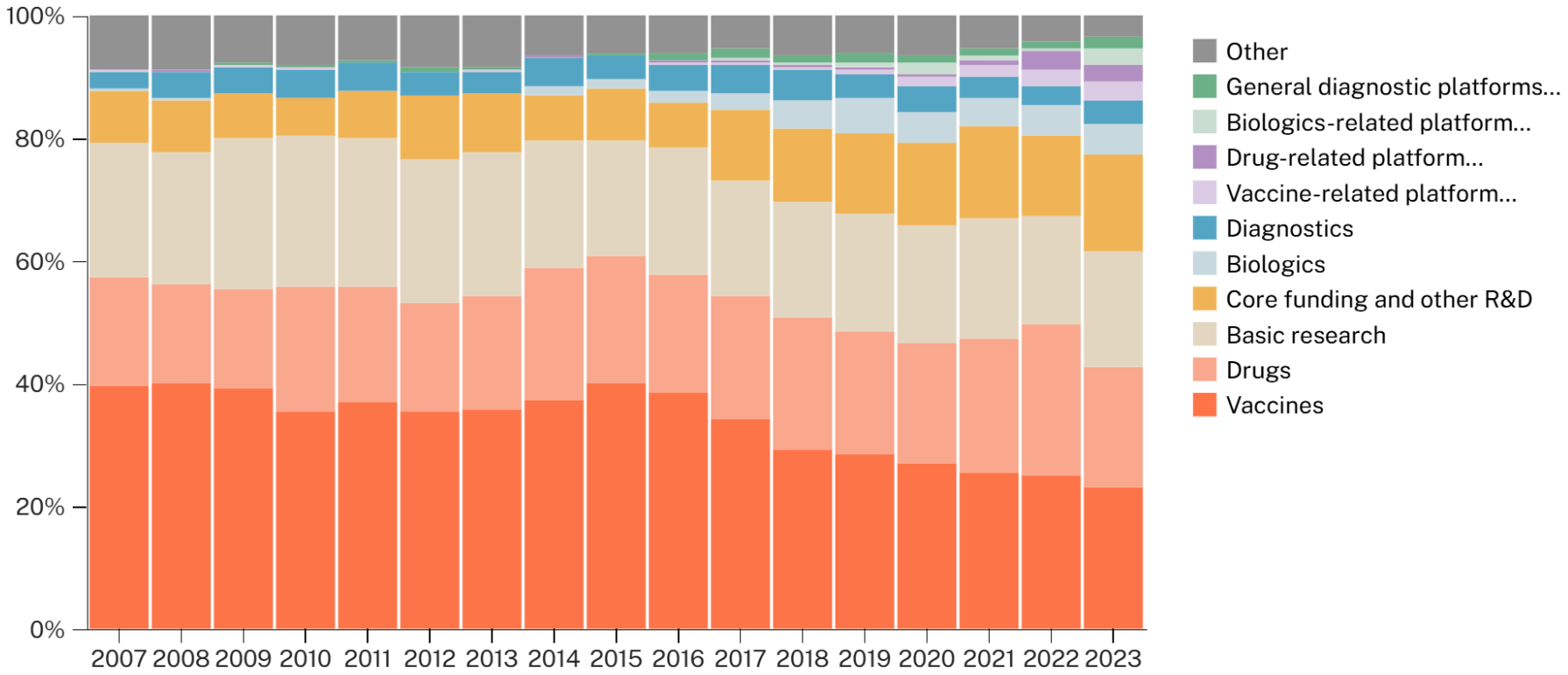
OVERVIEW

1. Overview of the global health R&D funding landscape
2. The ROI of investment in global health R&D
3. Challenges and the future
4. Key messages

What does the investment landscape for global health R&D look like?



What does the investment landscape for global health R&D look like?

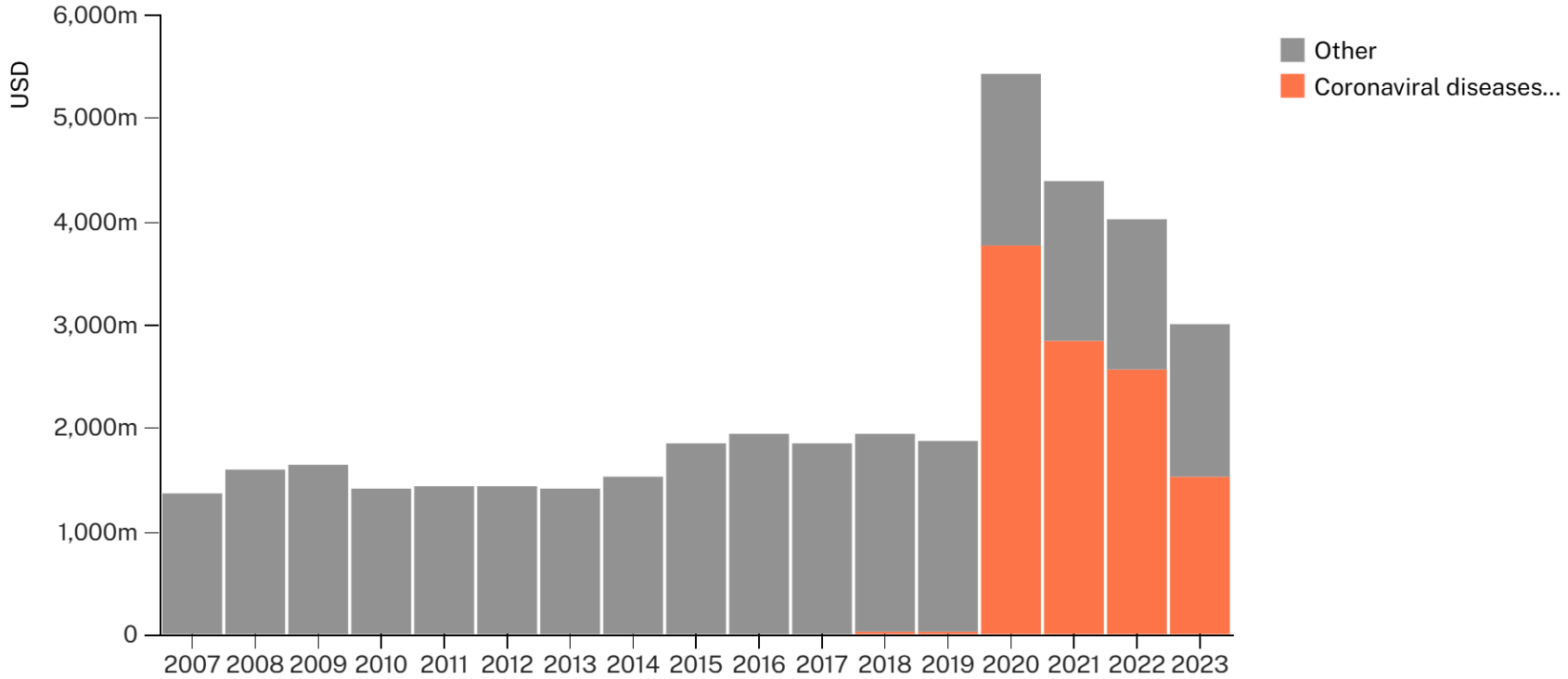


Vaccine R&D investment: Coronaviruses vs everything else

COVID-19 had an unsurprisingly significant impact on the funding landscape for global health vaccine R&D

Volume of new vaccine R&D funding was unprecedented

Investment in non-coronavirus vaccine R&D for global health is down more than 20% compared to pre-pandemic levels



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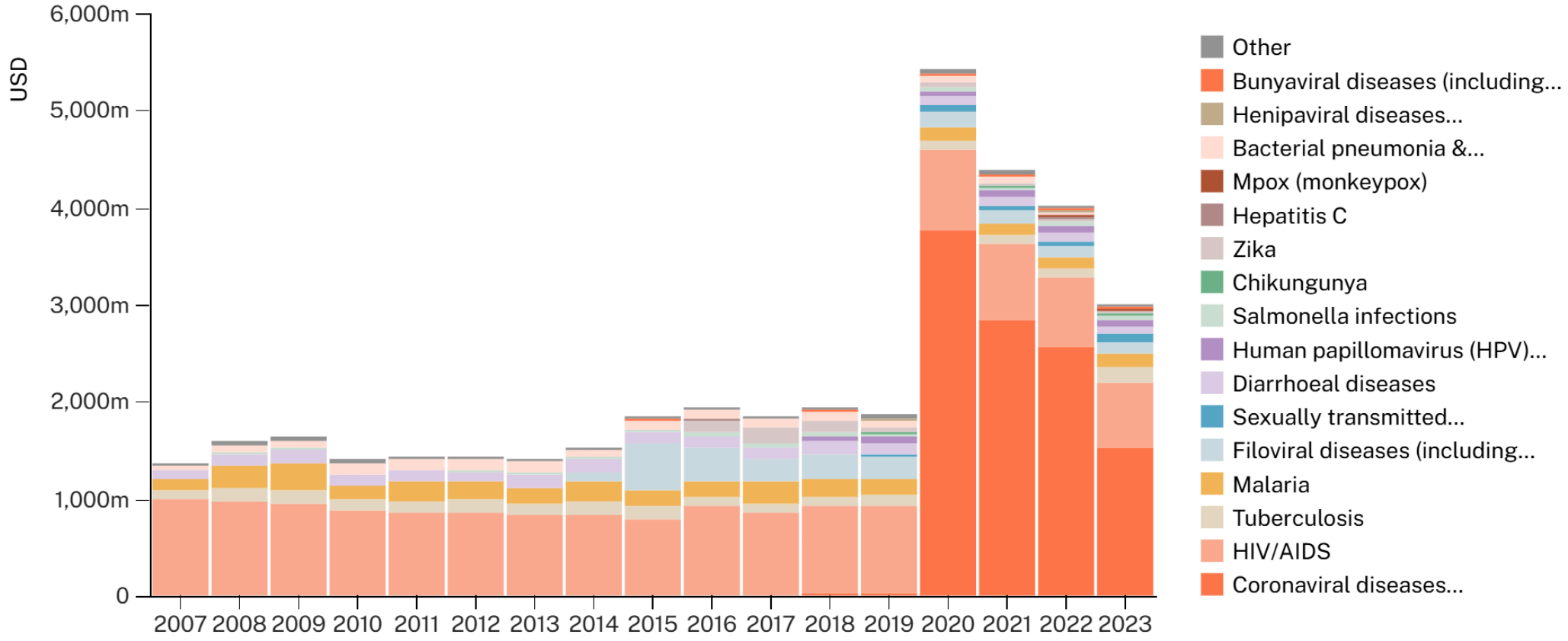
What is the focus of vaccine R&D investment?



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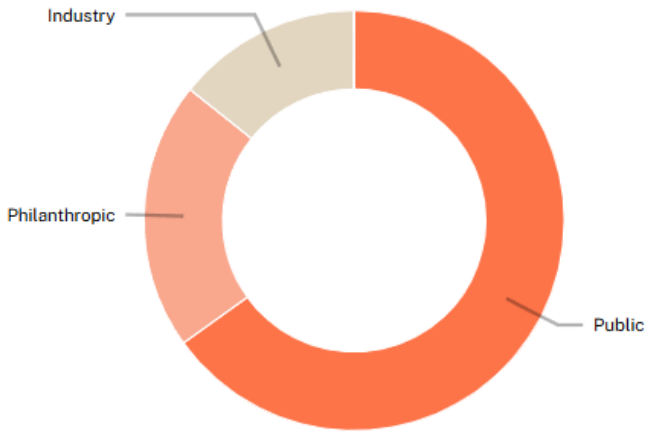
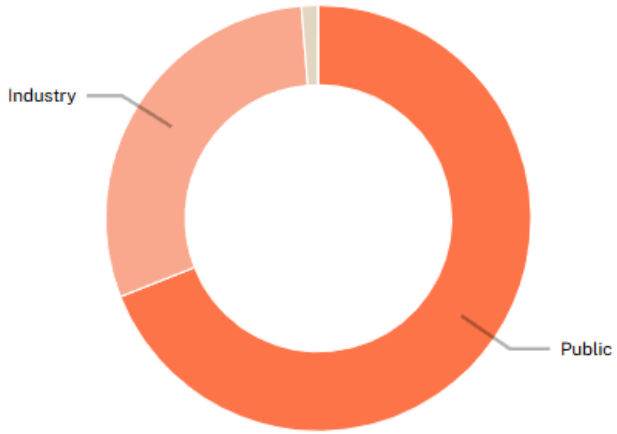
Where is vaccine R&D funding coming from?



Neglected infectious diseases

$1.1bn

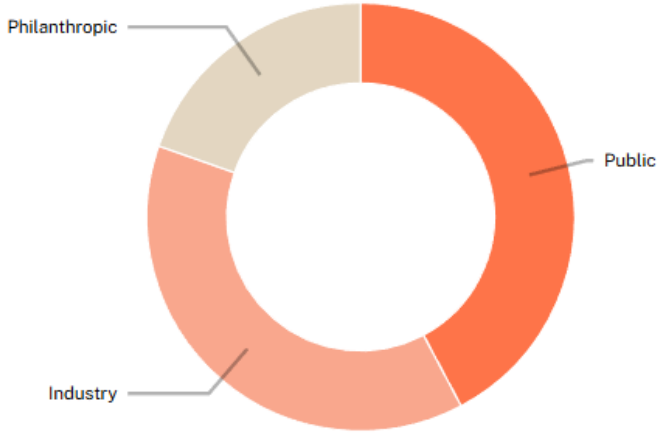
In 2023



Emerging infectious diseases (ex-COVID)

$185m

In 2023 (but $1.7bn including CoV)



Sexual & Reproductive Health

$150m

In 2023

Where is vaccine R&D funding coming from?

Funder

All values are in millions

FUNDERS	2023
US NIH	758
Gates Foundation	241
Aggregate industry	235
US BARDA	67
EC	41
USAID	33
Wellcome	27
Other	61
Total	**1,463**

Three of the top six funders of (non-CoV) vaccine R&D for global health are US Government agencies.

The US NIH alone is responsible for more than 50% of global investment.

** In this readout, all pharma companies are aggregated into a single entity*

RETURN ON INVESTMENT OF INVESTING IN GLOBAL HEALTH R&D

1 **Measurement framework**

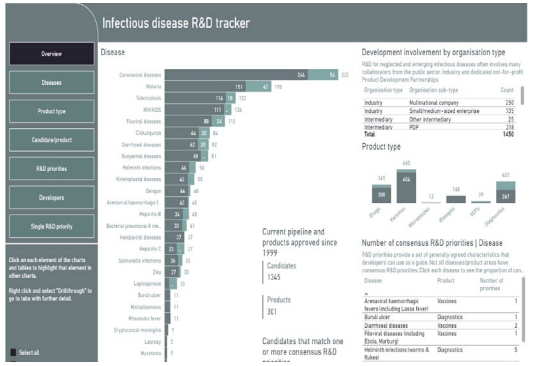
2 **Evidence Base**

3 **Impact Assessment**

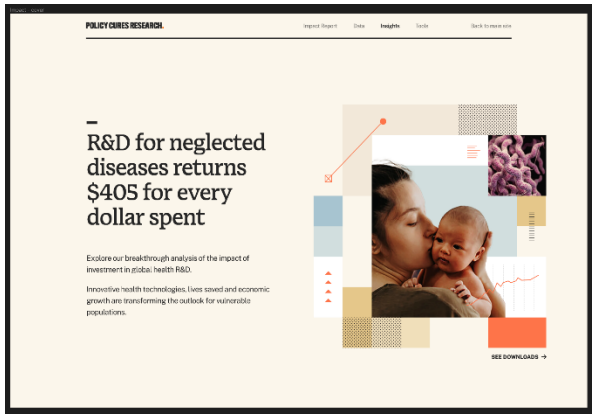
4 **Stakeholder Engagement**

Framework and indicators

Approved products
Updated pipeline
R&D priorities
Literature review



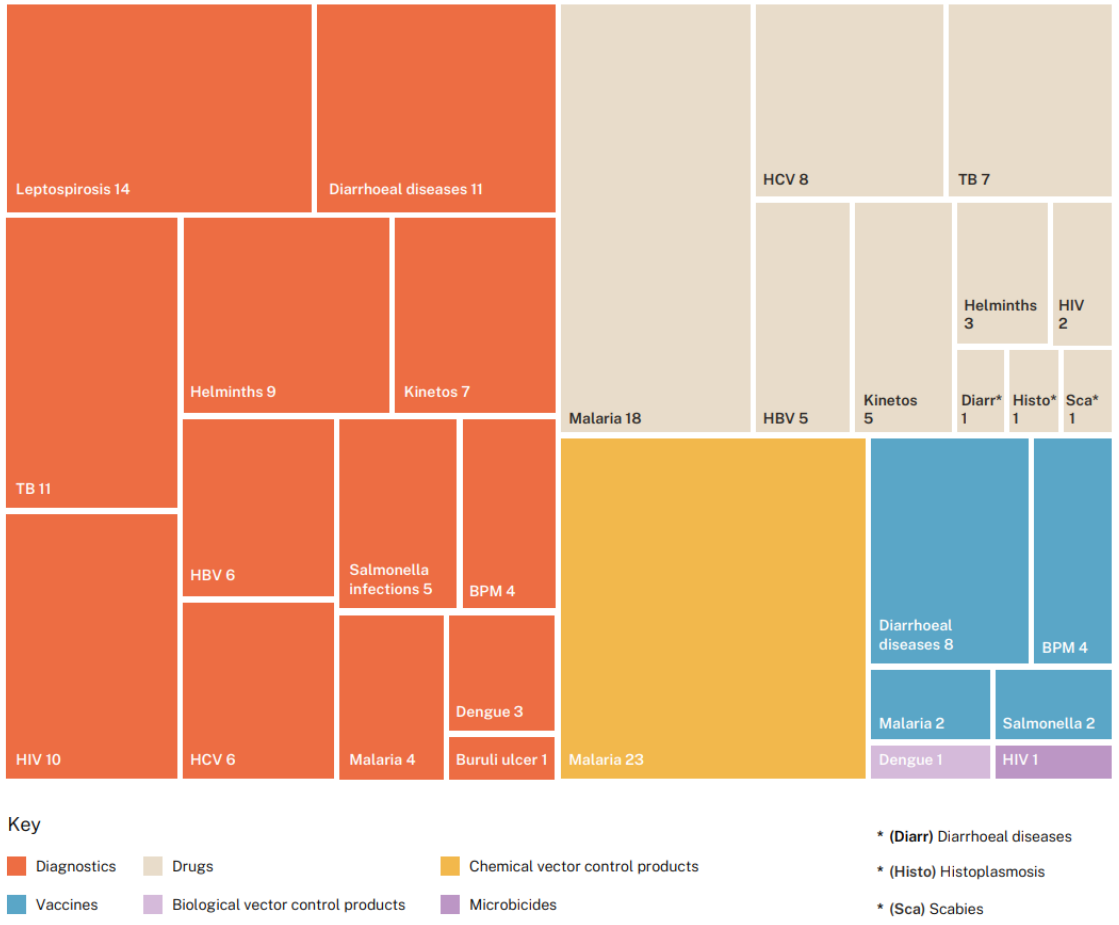
Report demonstrating the impact of the last two decades of investment in global health R&D



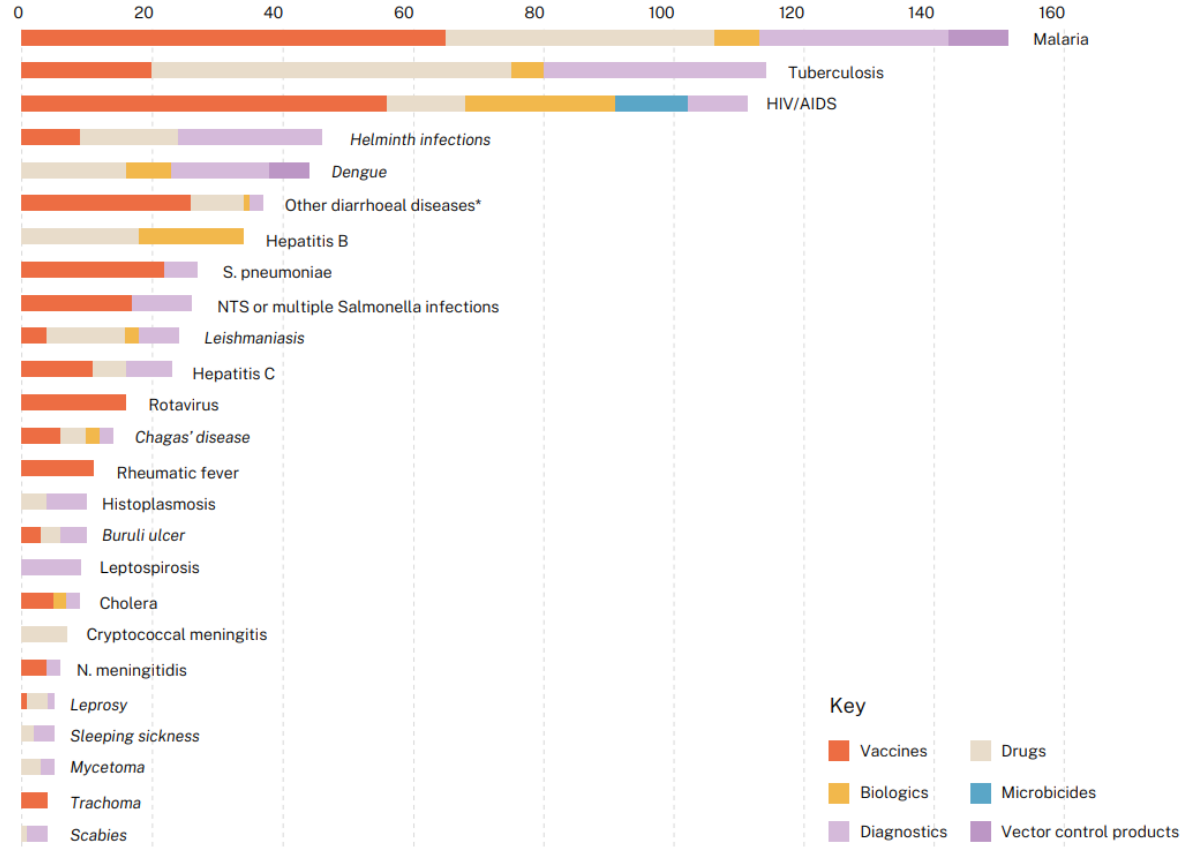
Engaging decision-makers that care about and can action positive change in the R&D ecosystem

Fruits of investment – approved products since 2000 and the current R&D pipeline

Approved products for neglected diseases by product type (2000-2024)

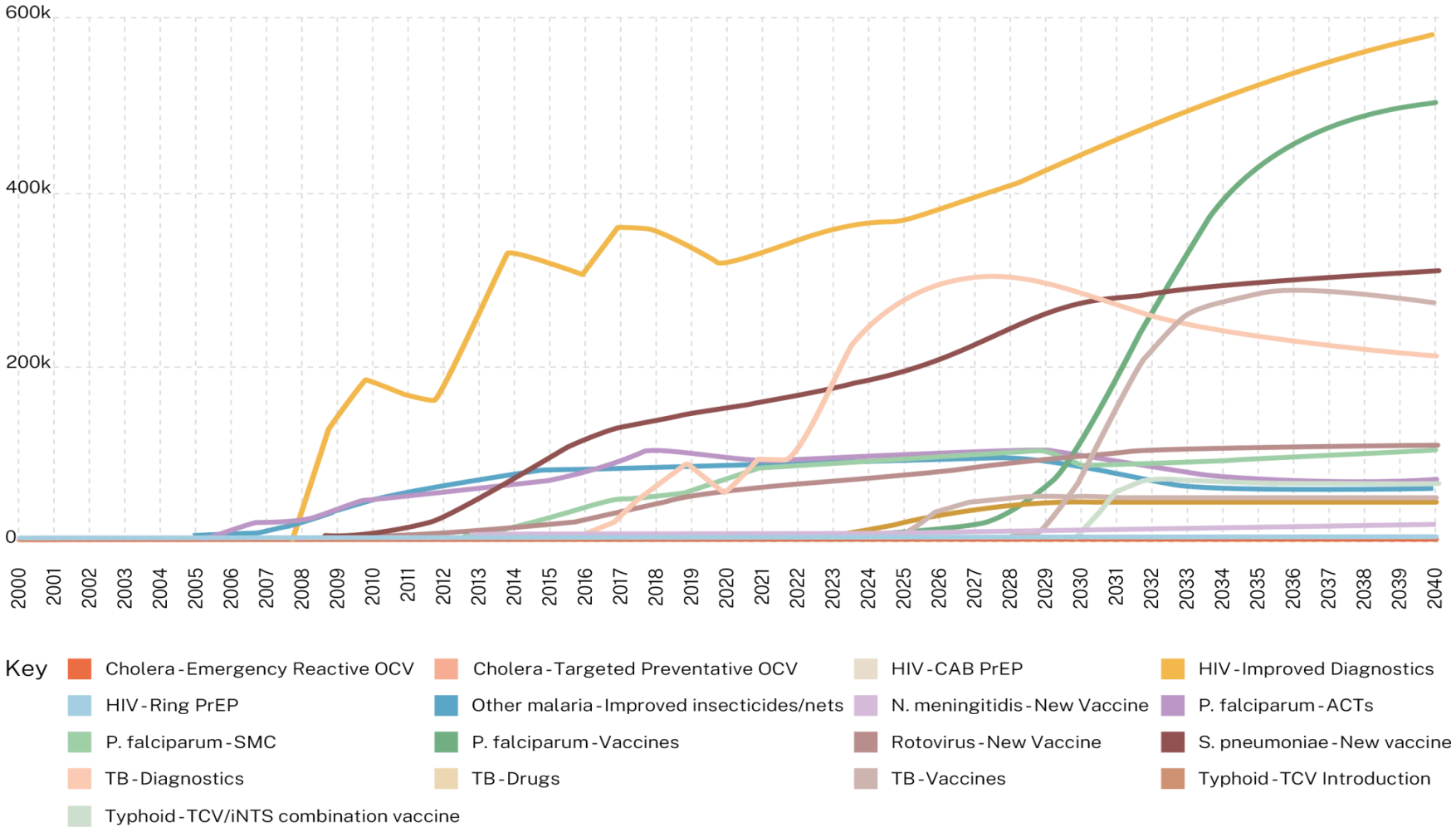


Pipeline of candidates for neglected diseases by product type



*Note: the 'other diarrhoeal diseases' category includes Shigella, cryptosporidiosis, and enterotoxigenic & enteroaggregative E. coli.
Italicised diseases are among the WHO Neglected Tropical Diseases

Deaths and DALYs averted by disease, 2000–2040



40.7m

Lives saved

2.83bn

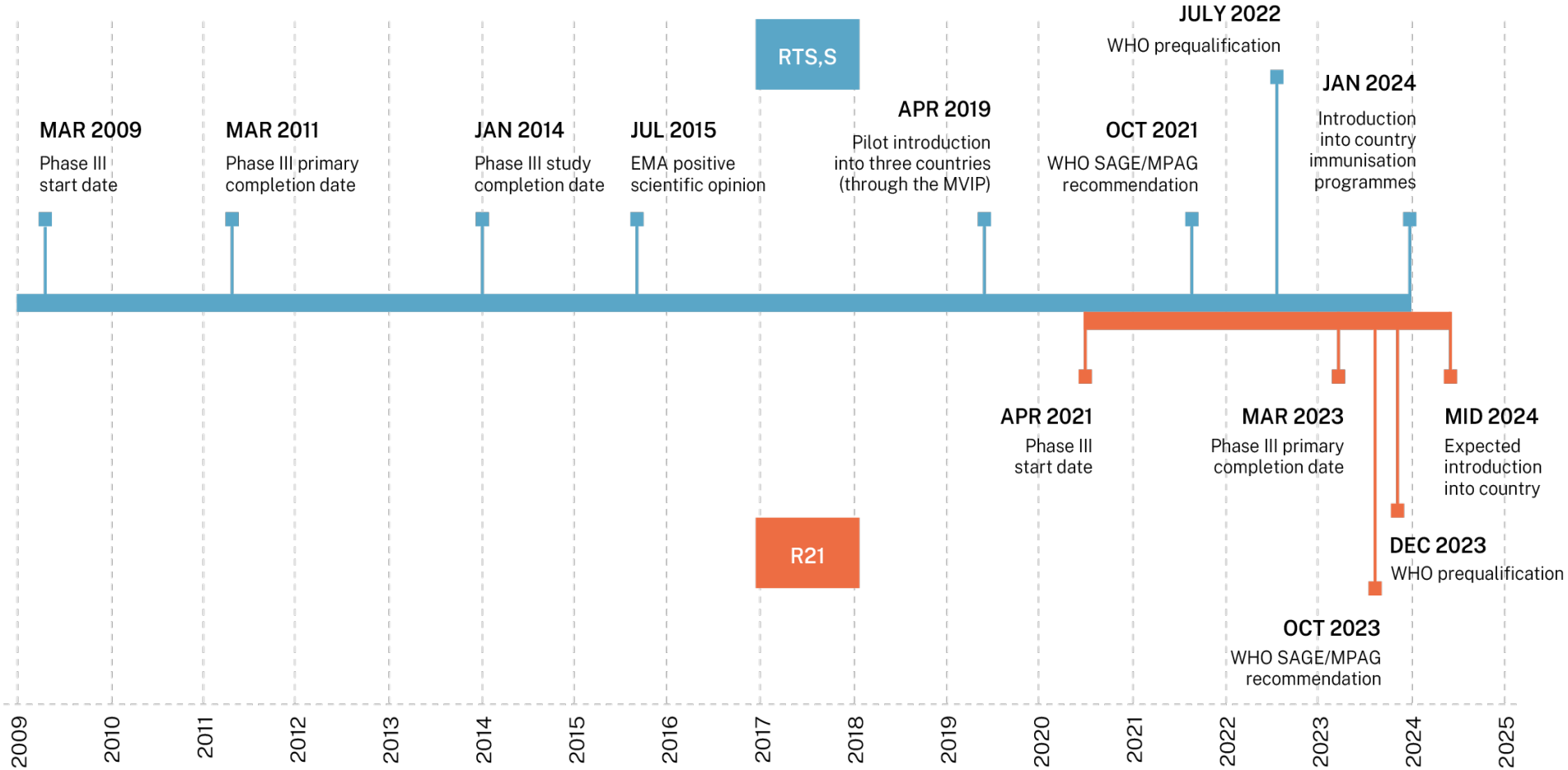
DALYs averted (undiscounted)

RETURN ON INVESTMENT OF INVESTING IN GLOBAL HEALTH R&D

Total Societal Return on Investment

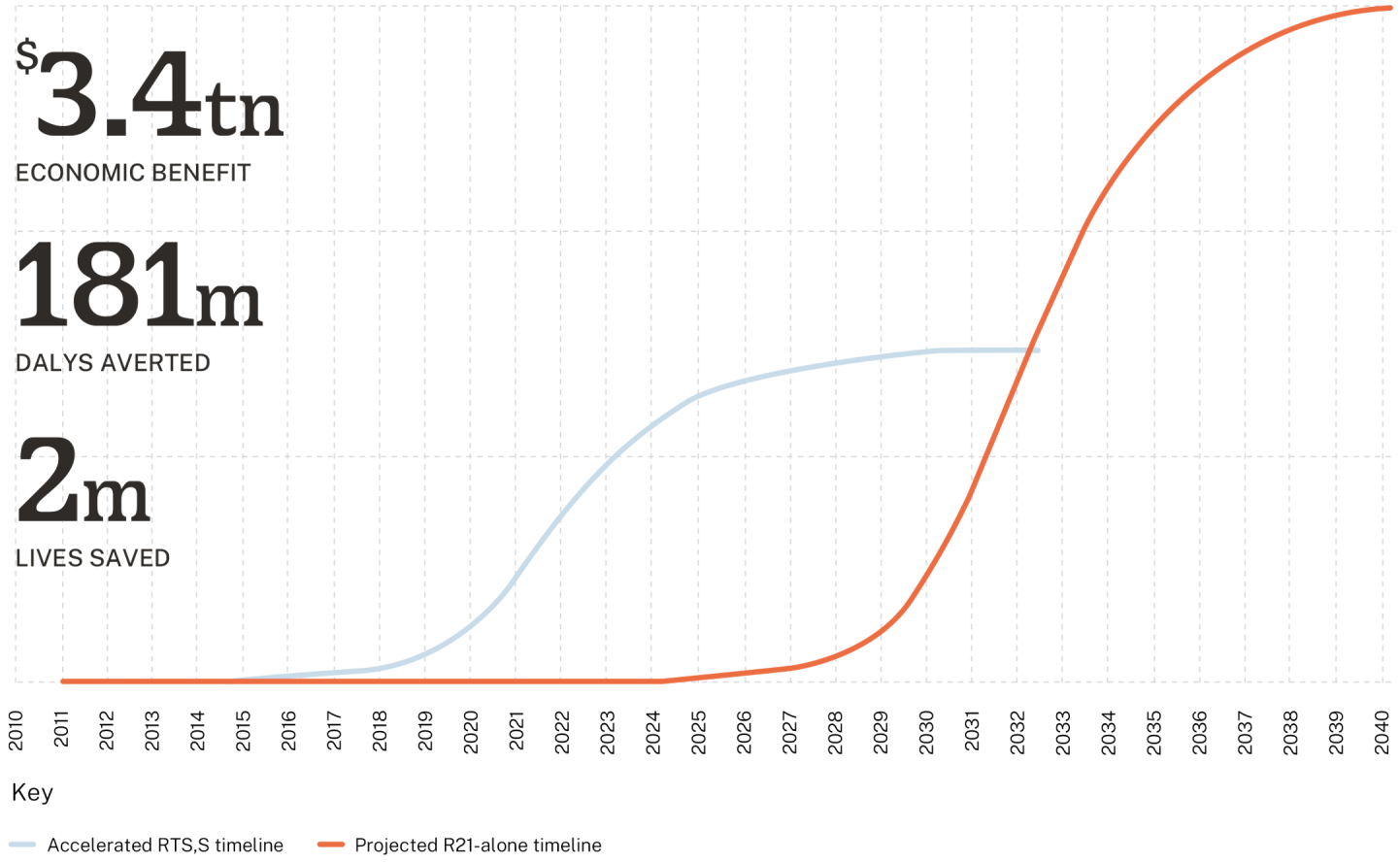
Net benefit	÷	Total R&D investment	=	Return on investment
(based on economic value of DALYs averted)		(past and future; discounted)		
$49.7 trillion		$123 billion		$405 for every $ invested in R&D for neglected diseases

Comparative timeline of RTS,S and R21: Phase III commencement to product introduction



Estimating the benefit of an accelerated introduction of RTS,S

If RTS,S had advanced as quickly from the start of Phase III trials to product introduction as did R21, this would have resulted in an estimated…



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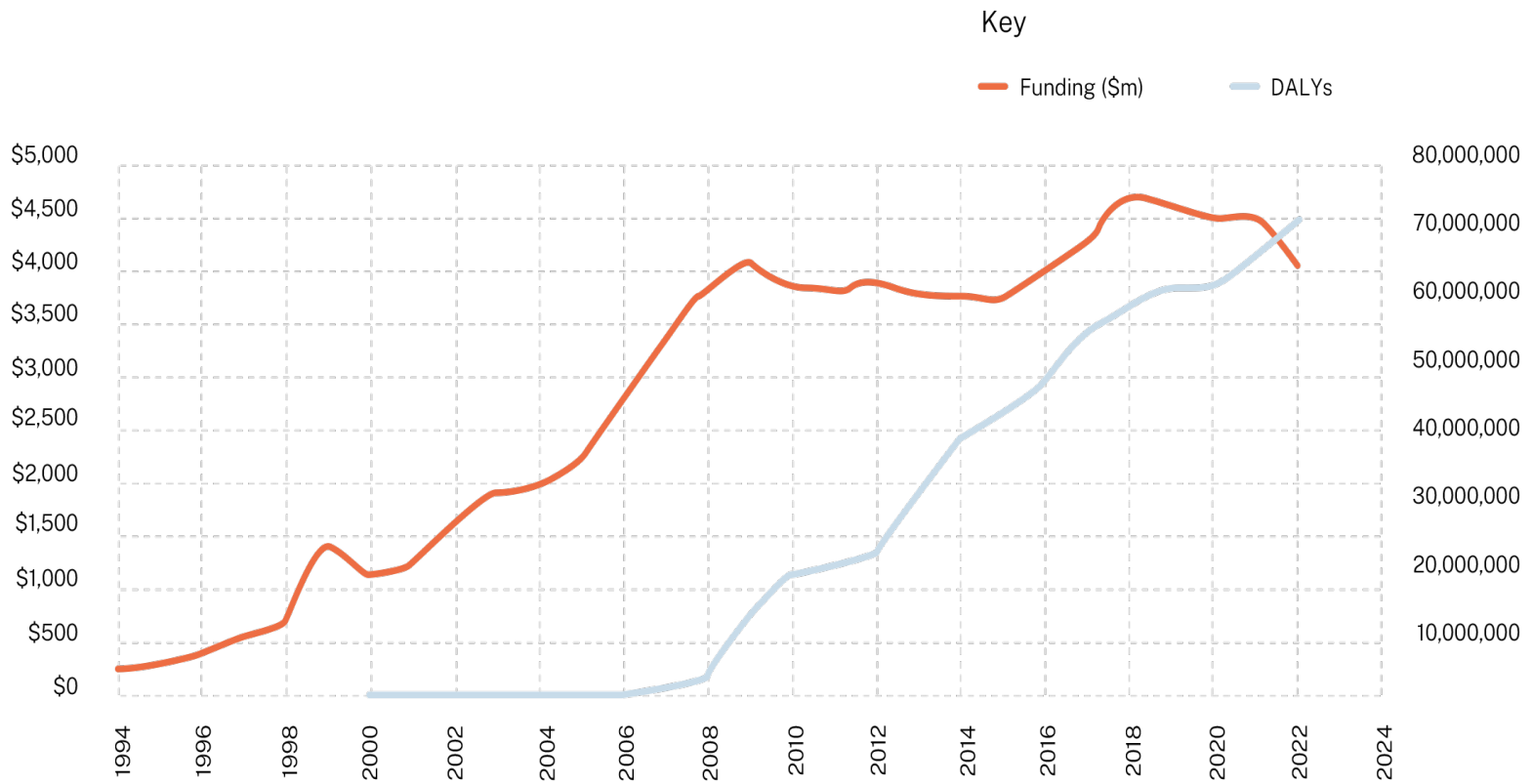

More than 70% of the expected health and economic impact of the last 20 years of investment is modelled to occur between now and 2040.

If this benefit is to be realised, there must be sufficient ongoing investment in R&D to progress the pipeline and deliver the next generation of breakthrough global health products, as well as sufficient programmatic and health systems investment to scale up existing and new tools alike.

Where to from here?

Annual investment in vaccine R&D for global health

~$1.5bn

Across neglected infectious diseases, emerging infectious diseases (excluding coronaviruses), and SRH

Based on latest full-year data from 2023; investment in coronavirus vaccine R&D in 2023 was (at least) an additional $1.5bn

Percentage of this investment that comes from the US Government

59%

Share of all non-coronavirus vaccine R&D in 2023

What does the next 20 years of funding for vaccine R&D in global health look like?
Where is the funding going to come from, and what form will it take?

1. Lots of investment, and lots of progress that we can articulate the impact of (both realised, and to come in the future)
2. Further investment is going to be required to deliver this impact, and this is clearly under threat
3. Need to prepare for a future that doesn't look like the past, and be clear-eyed about what global health R&D (and global health) looks like in the future