

The middle income countries issue

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SAGE MEETING, APRIL 2015

Outline

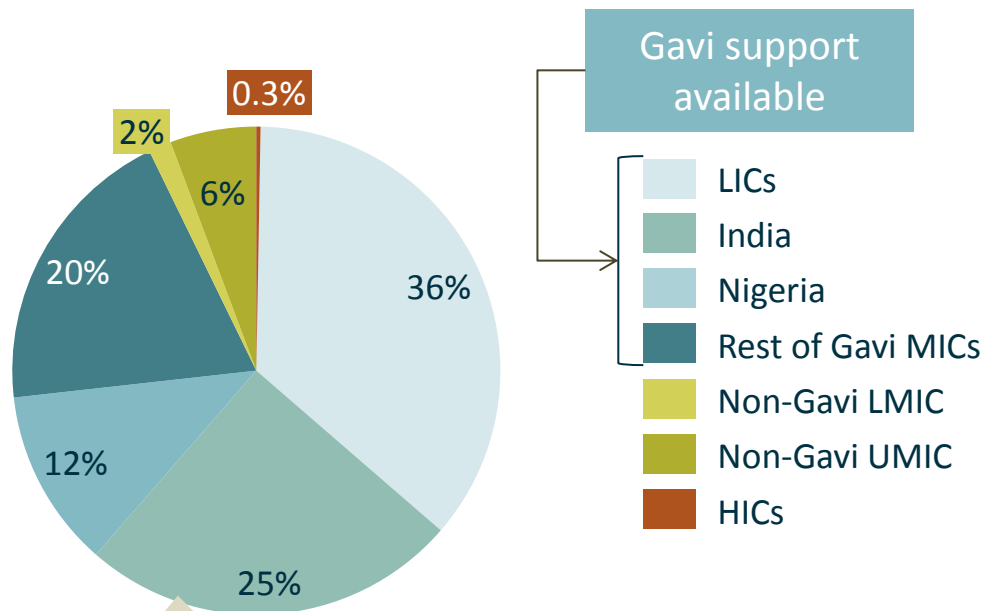
What is the real MIC issue?

Should we invest in non-Gavi MICs?

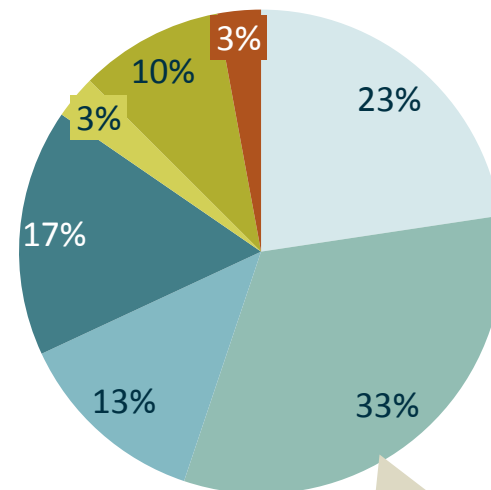
A closer look: MICs with high shares of vaccine-preventable diseases and unvaccinated children are supported by Gavi

Share (%) of global vaccine-preventable deaths

Share (%) of global unvaccinated children (DTP3)



57% of the world's vaccine preventable deaths are in Gavi MICs.
8% are in non-Gavi MICs.



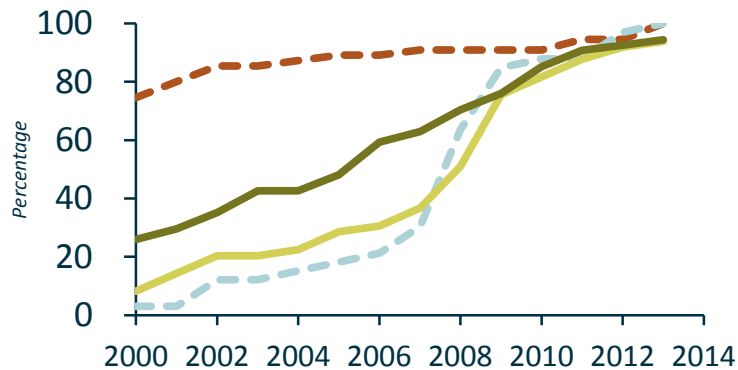
63% of the world's unvaccinated children are in Gavi MICs.
13% are in non-Gavi MICs.

WHO CHERG data (2010) for deaths from diarrhea, measles, meningitis, and pneumonia. Unvaccinated children estimated with DTP3 coverage rate (WUENIC estimates, 2013) and surviving infants (2012).

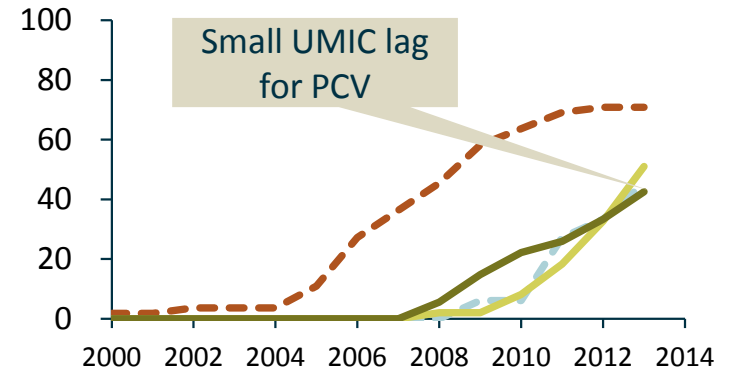
MICs do not lag behind LICs in number of countries introducing PCV, Rota and HPV

Percent of countries with vaccine in schedule by income group (2000-2013)

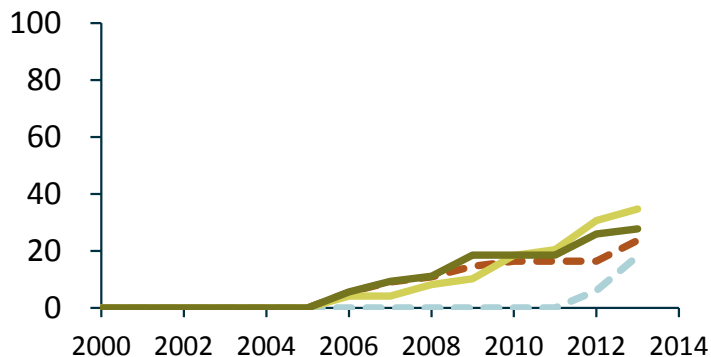
Hib



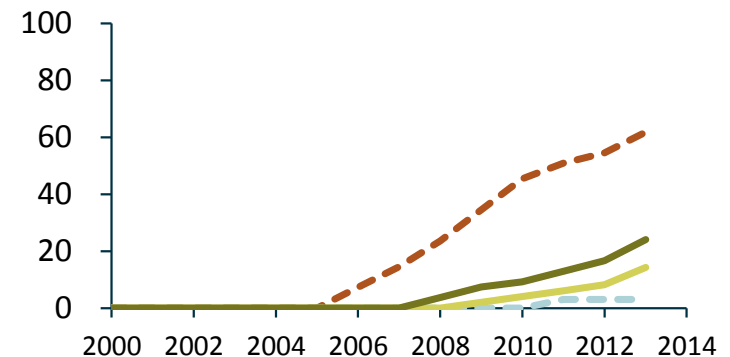
PCV3



Rota



HPV



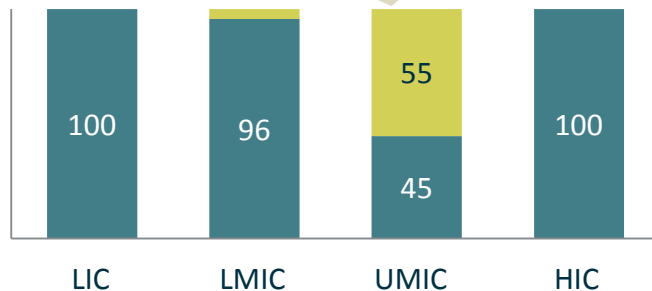
WHO vaccine schedule data (as of Dec 2013). Counted countries with introduction in entire country and part of country (# countries introduced / total countries). In November 2014, EMRO confirmed all countries have introduced Hib (e.g. Egypt and Iran). No new introductions after Dec 2013 have been added to this analysis. However, new introductions are logged elsewhere.

MICs do lag behind LICs in the *fraction of the birth cohort* without access to PCV, Rota, and Hib

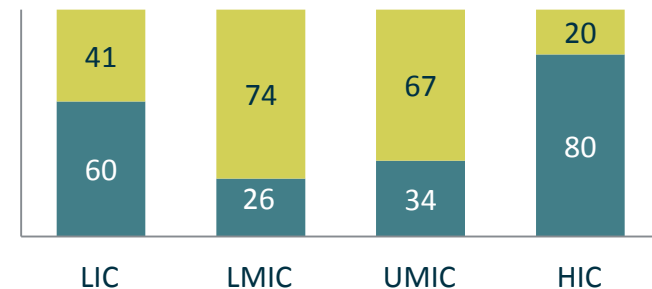
Percent of birth cohort with or without vaccine in schedule by income group

Hib

China, Iran, and Thailand decided not to introduce Hib (Dec 2013)

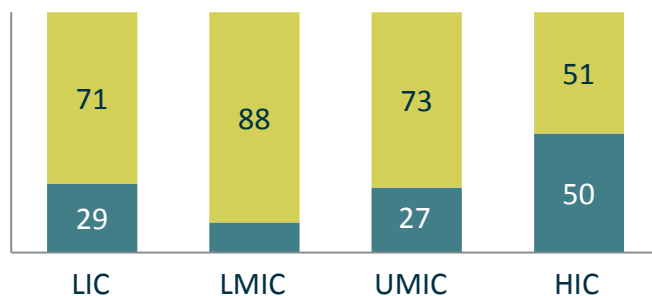


PCV3

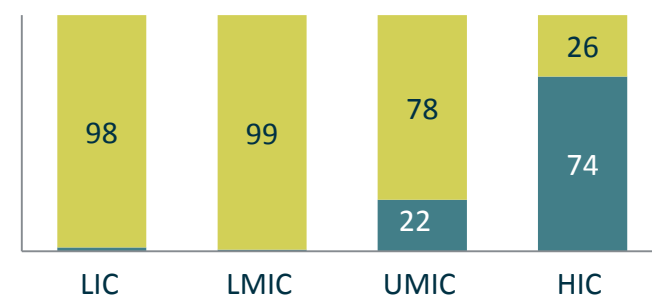


Rota

■ % unreached
■ % reached



HPV



WHO vaccine schedule data as of 31 Dec 2013.

N = LIC: 34; LMIC: 49; UMIC: 54; HIC: 55.

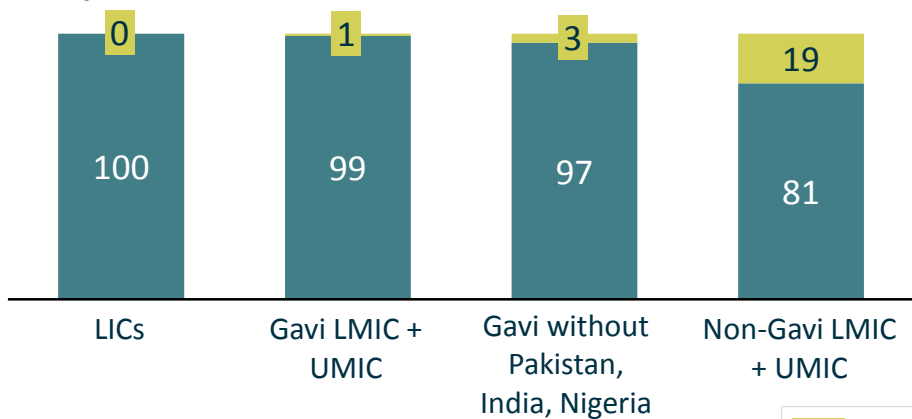
% reached = sum of birth cohorts of countries with vaccine in schedule (full, partial, sequential, risk groups) / total birth cohort of income group.

Only 7 small LMICs (i.e., Bhutan, Paraguay, Micronesia) have fully introduced HPV

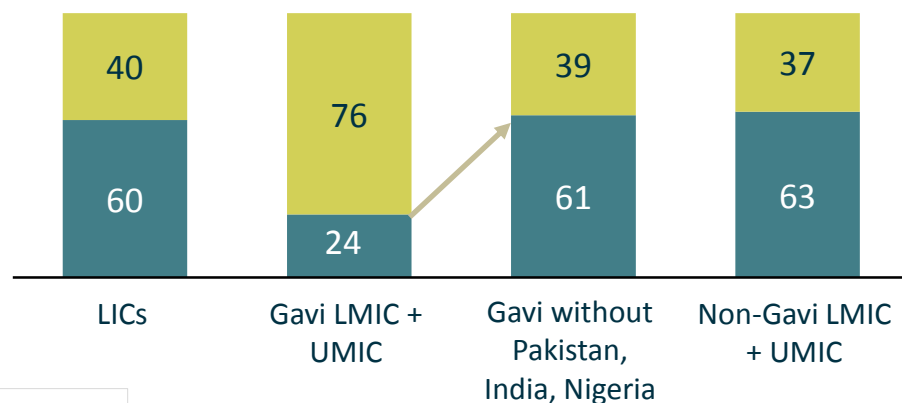
This lag is largely driven by Gavi-supported countries: Pakistan, India, Nigeria, and Indonesia

Percent of birth cohort with or without vaccine in schedule by income group

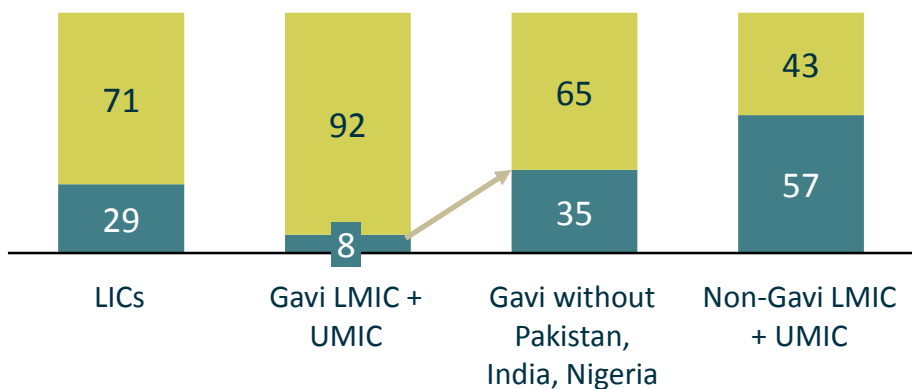
Hib



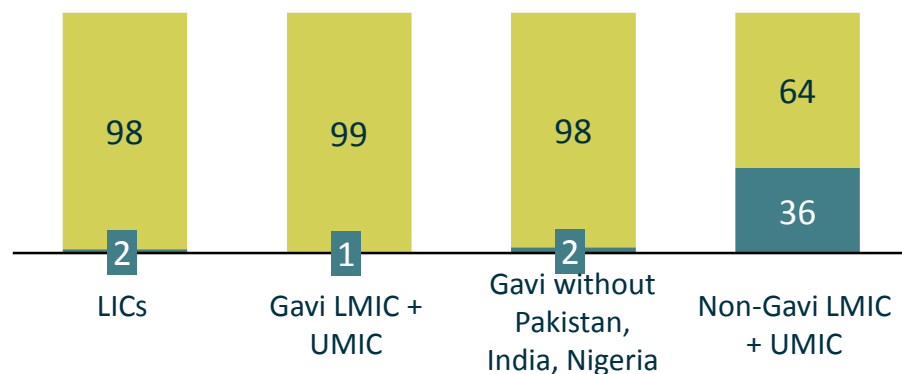
PCV3



Rota



HPV



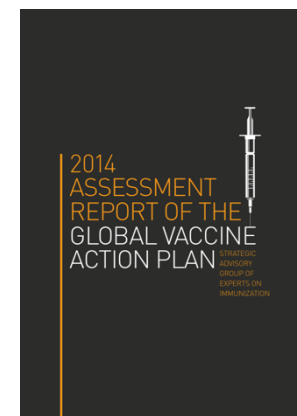
'Gavi' in this case means eligible and graduating countries, LMICs and UMICs.

WHO vaccine schedule data as of Dec 2013 (counted as introduced if full, partial, sequential, or risk group introduction).

A broader look at all GVAP targets: countries that face bigger obstacles receive Gavi support

Relative performance against GVAP targets		Group (Gavi status as of 2014)			
		Gavi eligible	Gavi graduating	Gavi graduated	Non-Gavi
GVAP Indicator	DTP3 >90%	73	87	99	90
	New vaccine introductions	1.1	1.2	1.0	2.5
	Under-5 mortality	73	46	14	21
	NITAGs % (N)	30	40	50	37
	Drop-outs	7.9	3.3	0.3	3.7
	DTP3 >90% for 3 + years % (N)	35	60	75	59
	90% districts with coverage >80%	30	76	100	63

■ High performance
■ Medium performance
■ Low performance



Weighted average (by birth cohort) of DTP3 (WHO-UNICEF estimates, 2013), U5M (WHO, 2012), and 90% dist >80% (JRF, 2013). For NUVI, used schedule data (as of Dec 2013) from WHO for PCV, Rota, HPV, IPV, YF, and JE to calculate average # NUVis per group. NITAG variable is % of group that have functional NITAG, as defined by criteria in JRFs. Dropout % (JRF, 2013) is a straight average of the national percent of dropouts from DTP1 to DTP3. For DTP3 >90% 3+ years, WHO-UNICEF estimates for 2011-2013 were used to create the ratio shown: # of countries with 3 years of 90%+ / total countries in group.

Efforts are well-coordinated for Gavi-funded MICs

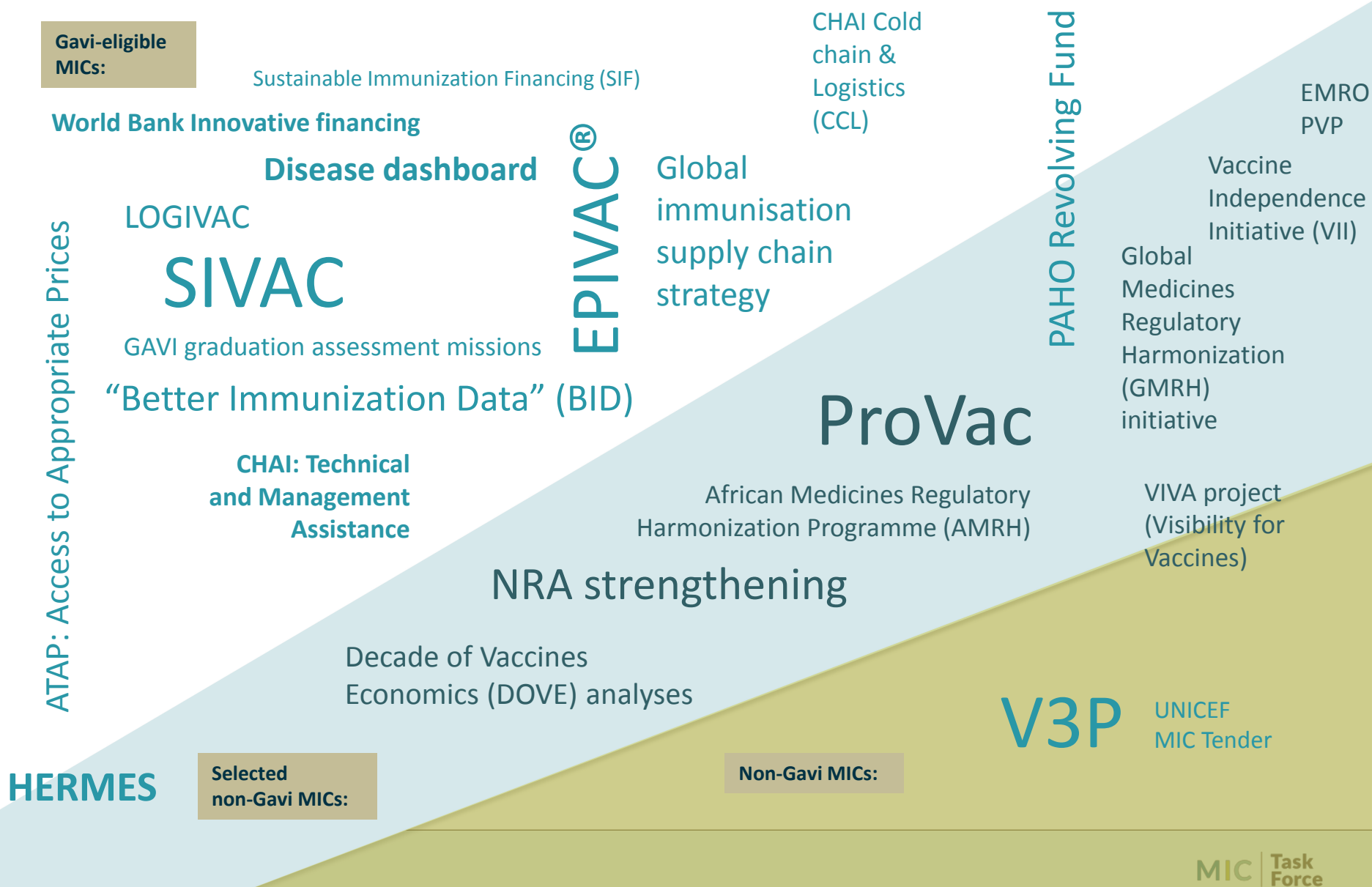


Gavi Receives Record-Breaking Financial Pledges For Vaccines

29/01/2015 BY CATHERINE SAEZ, INTELLECTUAL PROPERTY WATCH — [LEAVE A COMMENT](#)

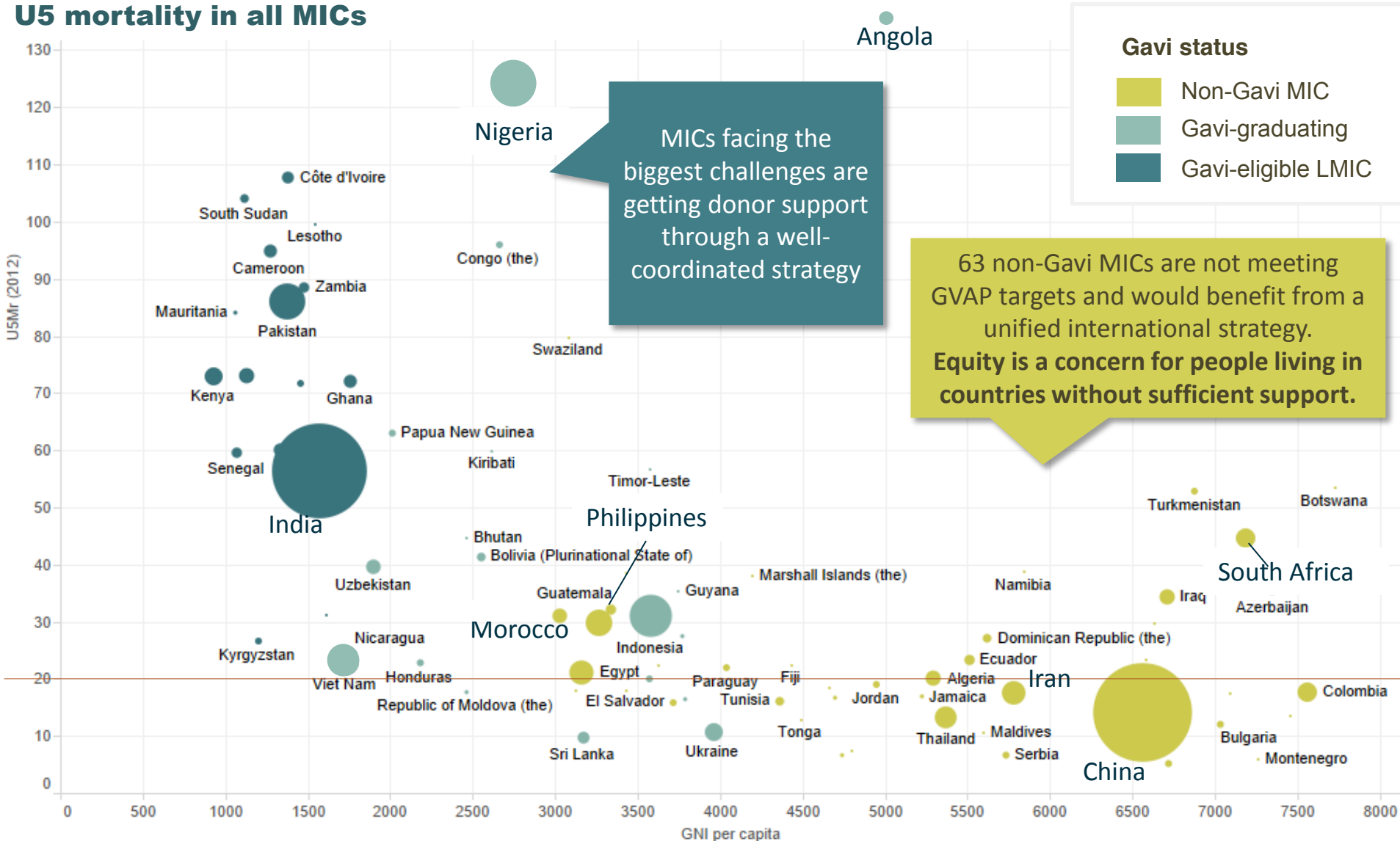


Efforts to help non-Gavi MICs have, to date, been substantial but fragmented and uncoordinated



Recap: the MIC issue is not what we originally thought

U5 mortality in all MICs

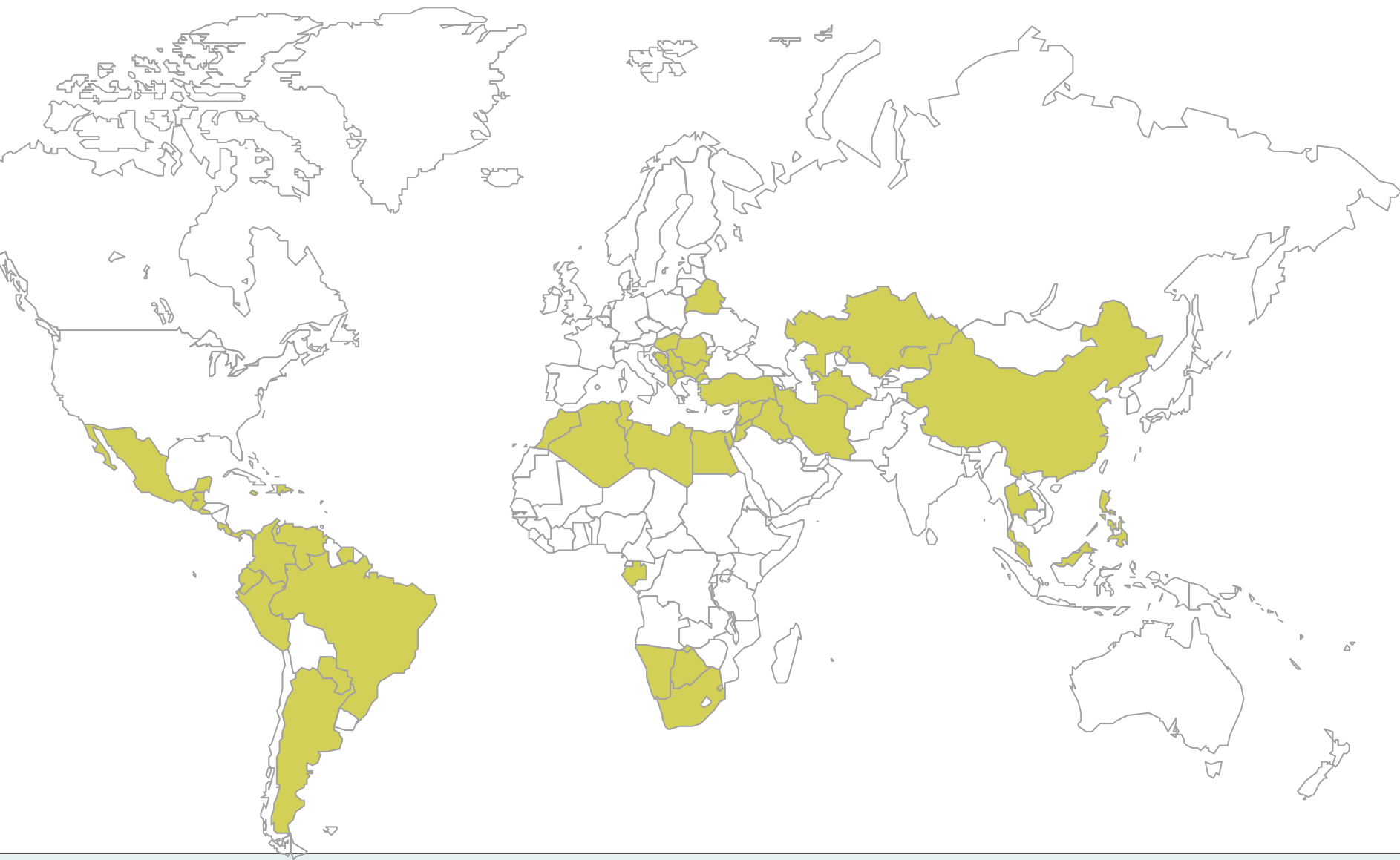


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What is the real MIC issue?

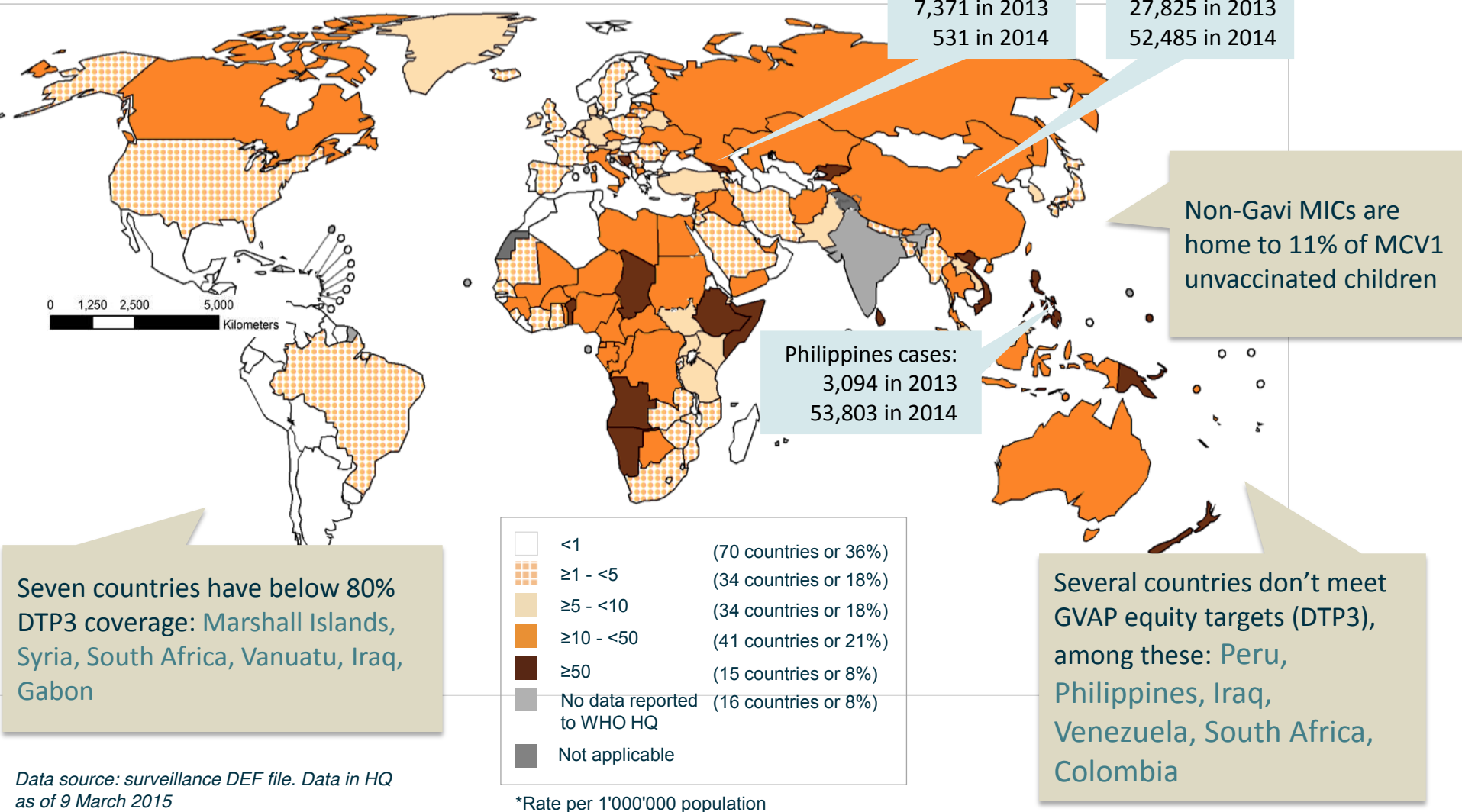
Should we invest in non-Gavi MICs?

There are 63 non-Gavi MICs: a heterogenous group



Opportunities exist to close important gaps

Reported measles incidence rate:* Feb 2014 - Jan 2015

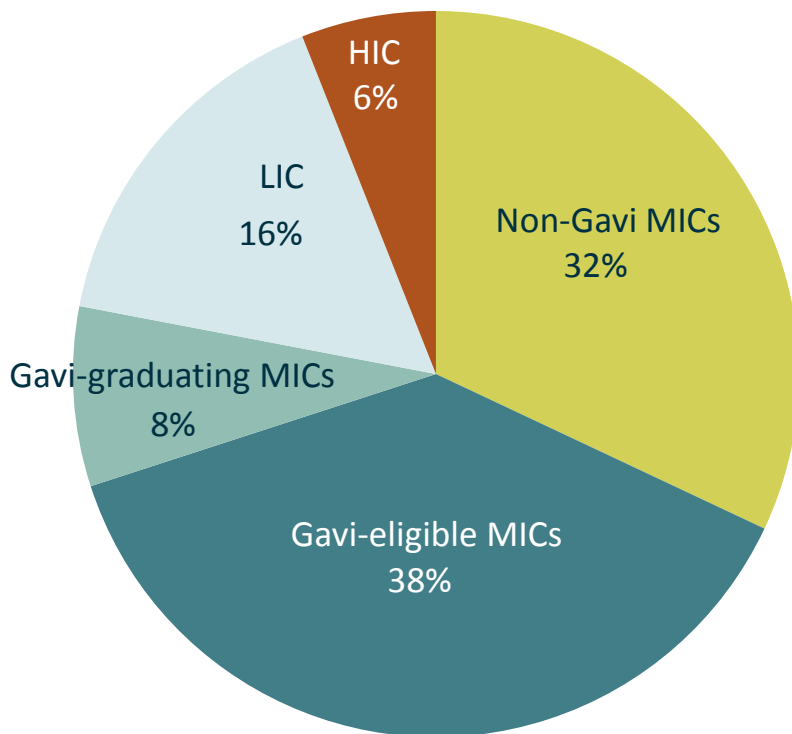


Data source: surveillance DEF file. Data in HQ as of 9 March 2015

The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement. ©WHO 2015. All rights reserved.

Non-Gavi MICs represent an important share of unvaccinated children with NUVI

Share of PCV unvaccinated children
(Global total: almost 1 billion unvaccinated)



Main drivers of unvaccinated children by PCV introduction status

Countries that have not introduced PCV

China, Egypt, Iran, Iraq, Algeria

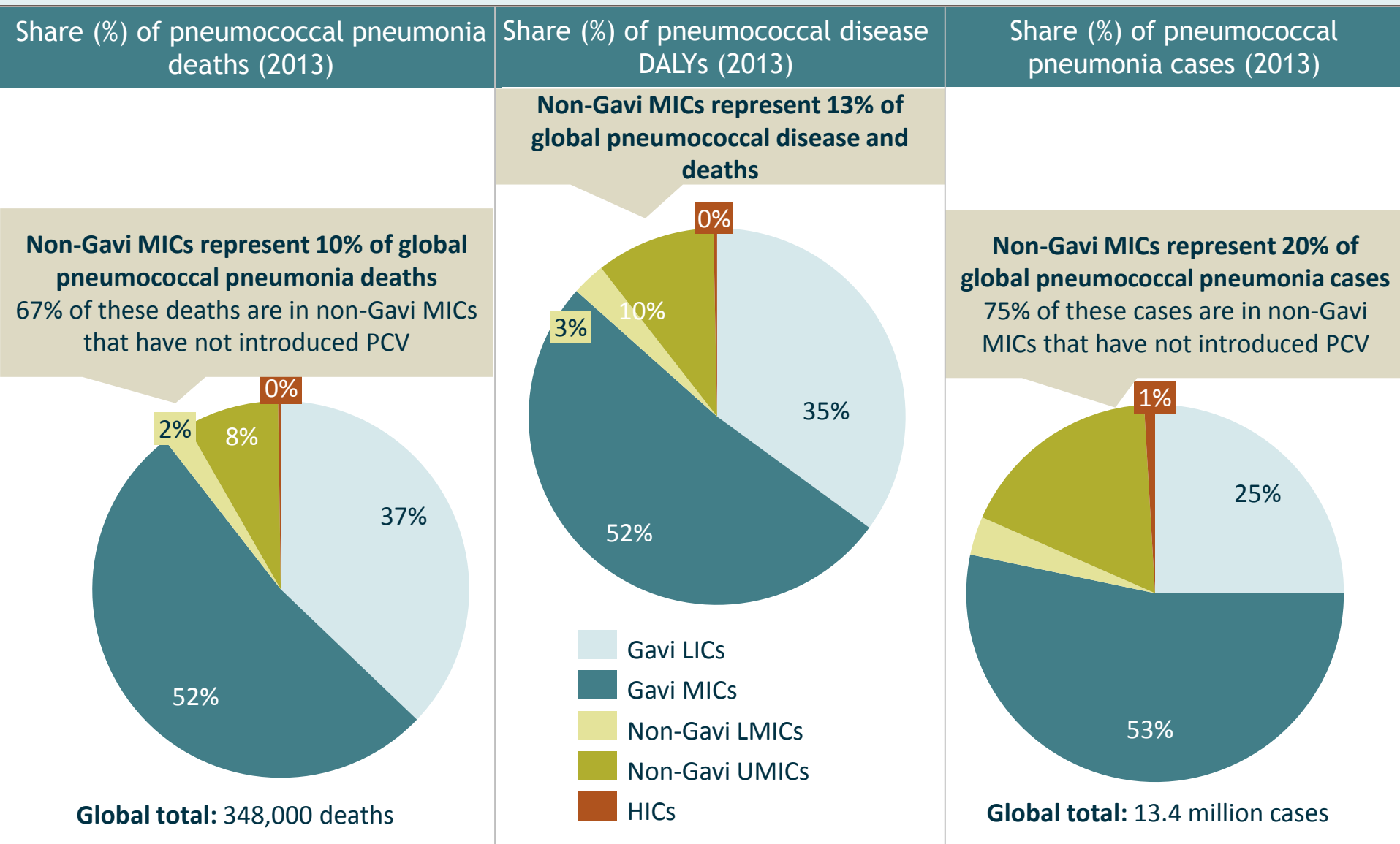
Countries that have introduced PCV

Philippines, Guatemala, South Africa, Mexico, Dominican Republic

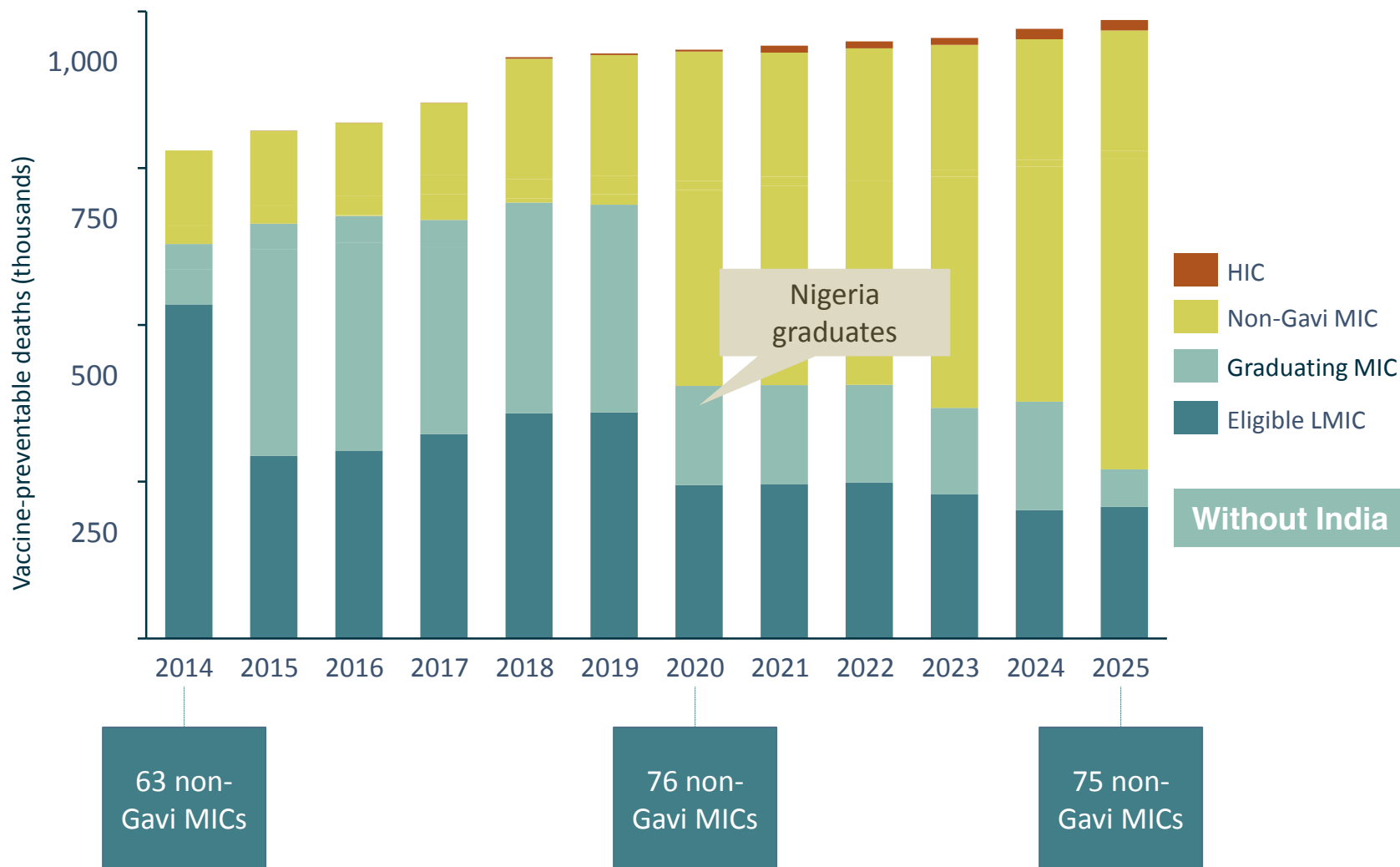
Only 27 non-Gavi MICs have introduced PCV

Unvaccinated children are calculated using WHO-UNICEF coverage estimates (WUENIC, 2013) and surviving infants (2012) from all countries, not just those that have introduced the vaccine. Actual number of global PCV unvaccinated children = 99, 723,971.

Non-Gavi MICs represent an important share of preventable morbidity and mortality



Over time, the number of non-Gavi MICs will grow along with the share of VPD



Baseline year uses WHO CHERG data for deaths from diarrhea, measles, meningitis, and pneumonia. Estimates of VPD growth calculated using the compound annual growth rate of the growth in birth cohort.

Non-Gavi MICs have relatively strong systems to build upon



Small investments now could make a difference

MIDDLE
INCOME
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A shared middle income countries strategy

TANIA CERNUSCHI, World Health Organization
GIAN GANDHI, UNICEF Supply Division

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THANK YOU