Enhancing immunisation coverage:

A spotlight on migrant and refugee background communities

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Ko Wai Au?
Who Am I?

"When we include the voices and contributions of people on the move, we build more trusted, responsive, and resilient systems, for everyone."

Dr. Santino Severoni
Director of WHO Health and Migration

Migration Context

Table 1. Key facts and figures from World Migration Reports 2000 and 2024

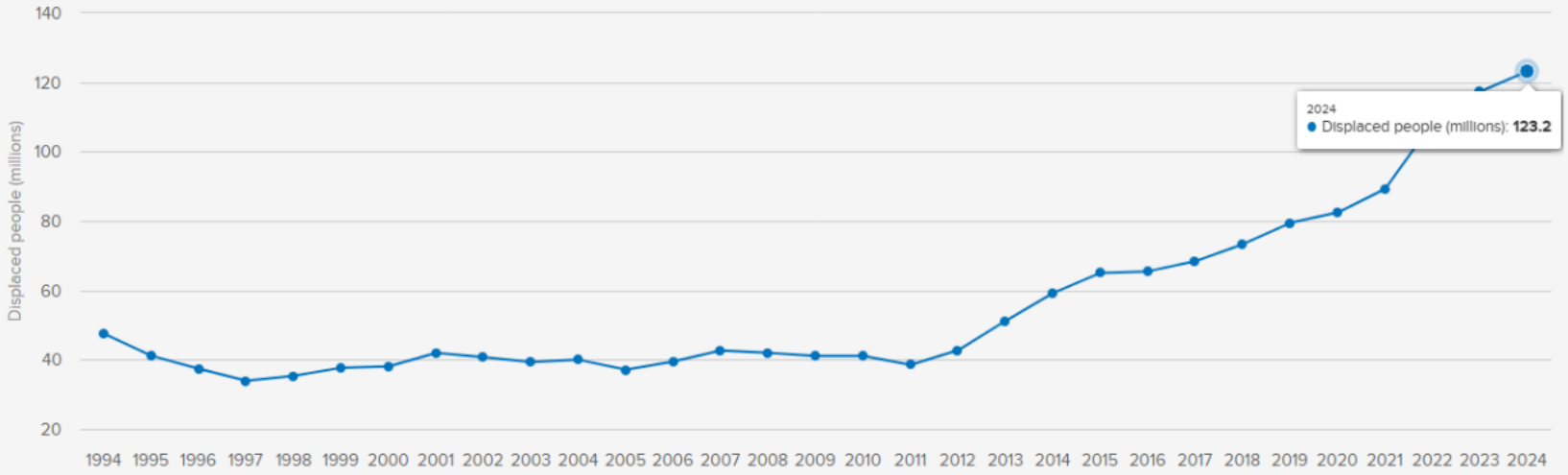
	2000 Report	2024 Report
Estimated number of international migrants	150 million	281 million
Estimated proportion of world population who are migrants	2.8%	3.6%
Estimated proportion of female international migrants	47.5%	48.0%
Estimated proportion of international migrants who are children	16.0%	10.1%
Region with the highest proportion of international migrants	Oceania	Oceania
Country with the highest proportion of international migrants	United Arab Emirates	United Arab Emirates
Number of migrant workers	-	169 million
Global international remittances (USD)	128 billion	831 billion
Number of refugees	14 million	35.4 million
Number of internally displaced persons	21 million	71.4 million

Sources: See IOM, 2000 and the present edition of the report for sources.
Notes: The dates of the data estimates in the table may be different to the report publishing date (refer to the reports for more detail on dates of estimates); refer to Chapter 3 of this report for regional breakdowns.

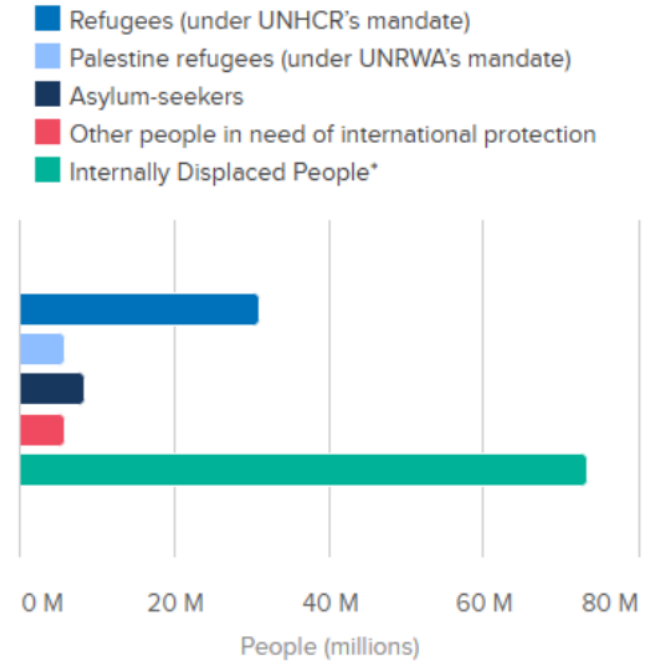
International Migration Context

Global forced displacement trend over the last 30 years

At the end of 2024, 123.2 million people worldwide were forcibly displaced as a result of persecution, conflict, violence, human rights violations or events seriously disturbing public order.



Source: UNHCR Global Trends 2024, 12 June 2025.



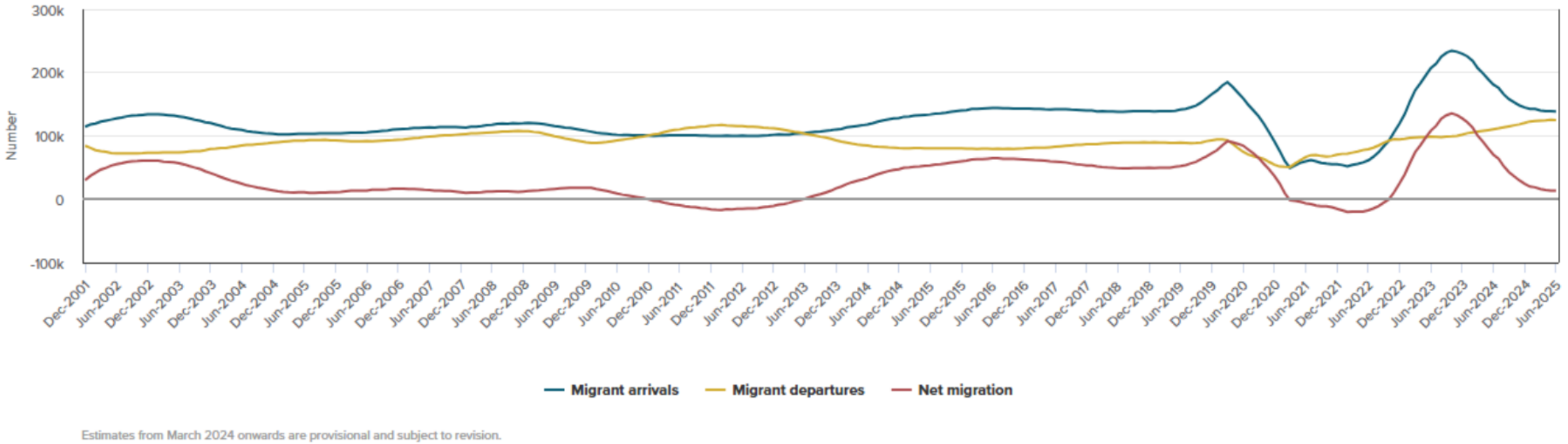
Source: UNHCR Global Trends 2024, 12 June 2025.
* Source: Internal Displacement Monitoring Centre

International Migration Context

United Nations High Commissioner for Refugees. 2025. Figures at a Glance. Accessed. 12 Aug 2024. Available from https://www.unhcr.org/about-unhcr/overview/figures-glance

Migration context in Aotearoa New Zealand

Estimated migration by direction, rolling year ended December 2001-June 2025



Estimates from March 2024 onwards are provisional and subject to revision.

- NZ net inward migration was growing, lowered due to COVID-19 border and travel restrictions, now positive again. (Stats NZ, n.d.)
- Various pathways for migrants and refugees to enter and settle in NZ.

Statistics New Zealand. n.d. Migration. Accessed 12 August 2025. Available from: https://www.stats.govt.nz/topics/migration
Immigration New Zealand. 2022. Supporting refugees and asylum seekers. Accessed 12 August 2025. Available from: https://www.immigration.govt.nz/about-us/our-strategies-and-programmes/supporting-refugees-and-asylum-seekers/

Global inequities among migrants and refugees compared to host populations

Migrants generally experience higher VPD burden

- Almost all of the studies comparing VPD burden (n = 17, 89%) reported higher VPD burden among migrants compared to non-migrants (Charania et al., 2019)
- Migrants involved in VPD outbreaks in Europe, refugees living in temporary camps or shelters at particular risk (Deal et al., 2021)

Migrants are generally under-immunised

- Most studies comparing vaccine coverage (n = 26, 70%) reported lower rates among migrants compared to non-migrants (Charania et al., 2019)
- Newly arrived refugees' recorded coverage is suboptimal in the UK (Deal et al., 2022)
- Migrants have low immunity for key VPDs in Europe (Cherri et al., 2024)
- Migrant have low coverage in the MENA region (Bouaddi et al., 2024)

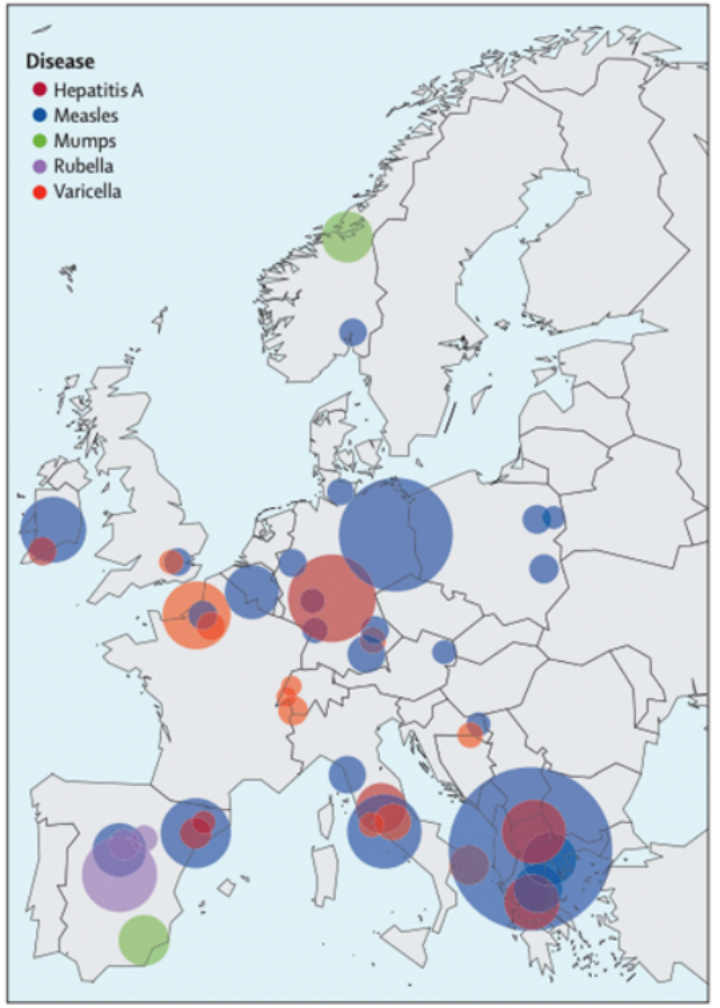


***Figure 3*: Case-load of vaccine-preventable disease outbreaks involving migrants by reported location**
Bubble colours represent disease type, bubble size represents caseload.

Charania, N.A., Gaze, N., Kung, J., Brooks, S. (2019). Vaccine-preventable diseases and immunisation coverage among migrants and non-migrants worldwide: A scoping review of published literature, 2006 to 2016. Vaccine, 37(20):2661-2669.
Deal A, Halliday R, Crawshaw AF, Hayward SE, Burnard A, Rustage K, et al. Migration and outbreaks of vaccine-preventable disease in Europe: a systematic review. The Lancet Infectious Diseases. 2021;21(12):e387-e98.
Deal A, Hayward SE, Crawshaw AF, Goldsmith LP, Hui C, Dalal W, et al. Immunisation status of UK-bound refugees between January, 2018, and October, 2019: a retrospective, population-based cross-sectional study. The Lancet Public Health. 2022;7(7):e606-e15.
Cherri Z, Lau K, Nellums LB, Himmels J, Deal A, McGuire E, et al. The immune status of migrant populations in Europe and implications for vaccine-preventable disease control: a systematic review and meta-analysis. J Travel Med. 2024 Aug 3;31(6):taae033.
Bouaddi O, Seedat F, Hasaan Mohammed HE, Evangelidou S, Deal A, Requena-Mendez A, et al. Vaccination coverage and access among children and adult migrants and refugees in the Middle East and North African region: a systematic review and meta-analysis. EClinicalMedicine. 2024;78:102950.

Factors influencing vaccine access and acceptance among migrant populations

Panel 2: What are the barriers to and facilitators of vaccine uptake in migrants?

Access

Barriers

- Language, literacy, and communication barriers[26,28,36–39,43,44,48,53,55,58–60,64,65,67]
- Resource and capacity constraints[39,43,47,52,58,61,65]
- Practical barriers[34,39,43,43,44,45,47,59]
- Legal barriers[43,45,68]
- Distrust of health system or authorities; sense of alienation and disempowerment[8,34,39,58–60]
- Specific provider-level barriers[34,47,46,48,58,60–62]—eg, health professionals lacking specific knowledge of migrant entitlements or catch-up vaccination guidelines, missed opportunities to vaccinate

Facilitators

- Social integration[34,39,44,48,64]—eg, engaging with health or vaccination system, having citizenship
- Service coordination, organisation, and infrastructure[27,42,58]
- Culturally competent and migrant-sensitive care[29,34,38,43,53,59,60,63]—eg, inclusive services and policies, alternative access points
- Tailored information sources[8,53,59]
- Vaccination policy[63]—eg, policy to vaccinate in absence of vaccination card
- Trust in the provider, system, or State[34,60]

Affordability

Barriers

- Direct costs[28,32,42,58]
- Indirect costs[58]—eg, cost of travelling to vaccination appointment
- Competing priorities[34,58,59]

Facilitators

- Cost offsetting[32,36,39,44,48,59]—eg, free vaccination, insurance cover
- Convenience[38,58]—eg, walk-in clinics rather than pre-booked appointments, flexible appointments

Awareness

Barriers

- Lack of knowledge about disease or need for vaccination[8,28,30,35,37,39,42,43,45,46,51,54,55,58,60,64]
- Lack of knowledge about entitlement to vaccination[39,45]
- Personal health stewardship[45,66]—eg, knowing own medical and vaccination history
- Misinformation or lack of information[8,51,58–60]—eg, about the vaccine or its availability

Facilitators

- Health promotion and awareness[35,45]—eg, health educational programmes, being aware of benefits of vaccination

Acceptance

Barriers

- Worries about vaccine safety and side-effects[30,34–39,54,56,58,59,64]
- Cultural, religious, and social barriers[26,32,49,54–58,64]—eg, stigma around specific vaccines, vaccination unfashionable in home country
- Distrust of health system or authorities, sense of alienation and disempowerment[8,34,55,58,59]
- Misinformation or lack of information[8,30,36,56,59,60]
- Low perception of risk of disease or importance of vaccination[8,30,37,42,58–60,64]
- Vaccination not physician-recommended[30]

Facilitators

- Positive perceptions of vaccination[34,35,37,38,67]
- Positive social norms[34,36,38,39,60]—eg, normalisation of vaccination
- Tailored approaches, information, and messaging[38,55]—eg, emphasising that human papillomavirus vaccine prevents cervical cancer, rather than a sexually transmitted infection
- Access to credible information sources[37,51,56]

Activation

Barriers

- Lack of information or practical support from health-care professionals when desired[64]
- Blanket approaches[58]—eg, vaccination reminders sent via letter or text message not suitable for transient Roma populations

Facilitators

- Catch-up vaccination initiatives[47,59]—eg, on-arrival health screening and vaccination for asylum seekers, mass vaccination campaigns
- Mandates[54]—eg, mandatory workplace vaccination
- Provider recommendation[54]
- Health promotion and education[42]
- Culturally tailored and community-based interventions[39,42,57,58]—eg, face-to-face communication, personalised reminders, community advocates

Other

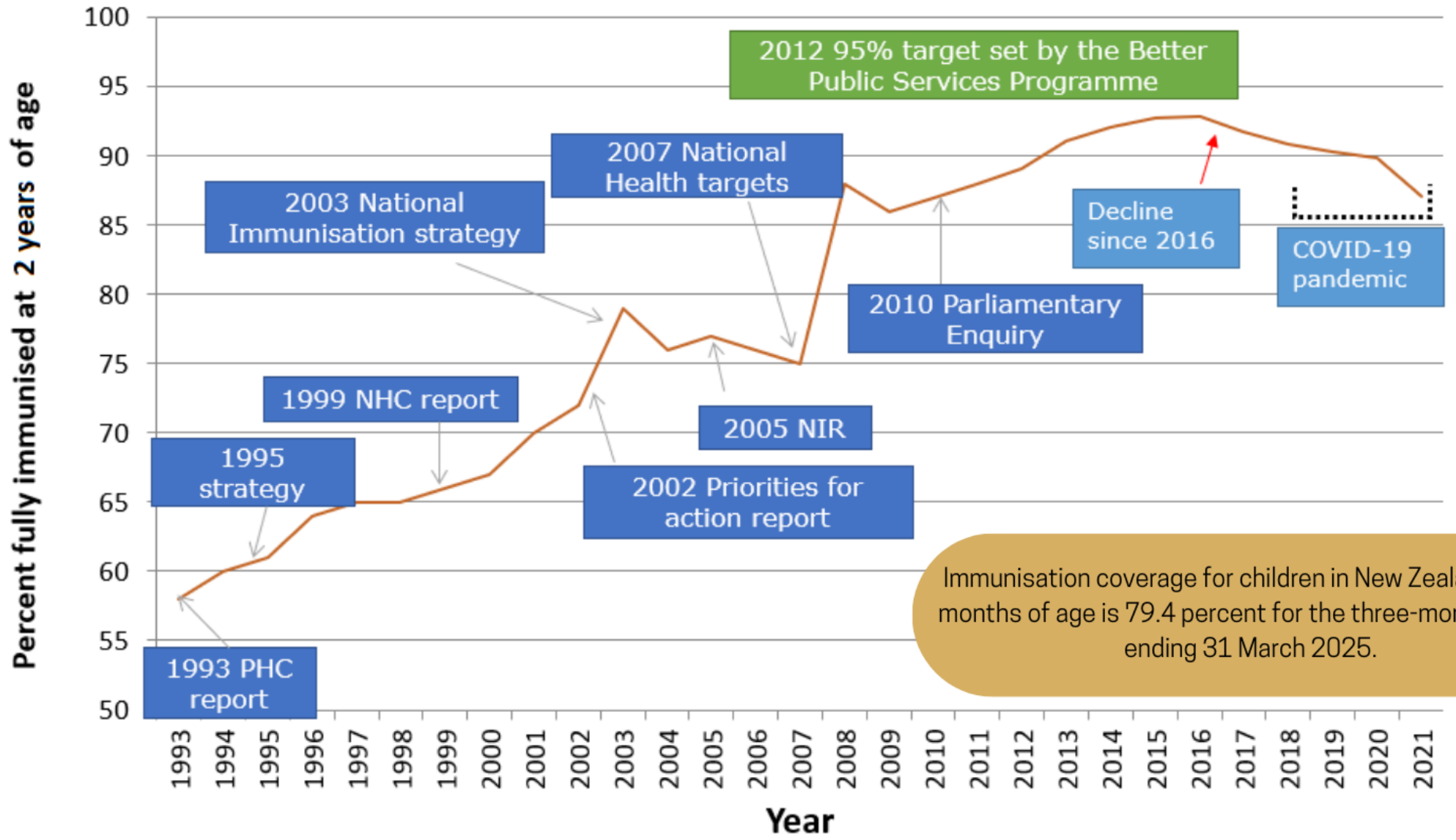
Barriers

- Lack of vaccination documentation or record[43,45,65,66]

Facilitators

- Not applicable

Crawshaw A, Farah Y, Deal A, Rustage K, Hayward SE, Carter J, et al. Defining the determinants of vaccine uptake and undervaccination in migrant populations in Europe to improve routine and COVID-19 vaccine uptake: a systematic review. The Lancet Infectious Diseases. 2022.



Immunisation coverage for children in New Zealand at 24 months of age is 79.4 percent for the three-month period ending 31 March 2025.

Immunisation Advisory Centre. (2024). "Immunisation coverage ". Retrieved 26 May, 2025, from https://www.immune.org.nz/immunisation/immunisation-coverage

National inequities among migrants and refugees compared to host populations

Overseas-born children

- Not all registered on NIR
- Very low reported coverage rates

NZ-born children

- Almost all registered on the NIR
- Children of migrant parents **>** Children of non-migrant parents
- Children of recent migrants **>** Children of settled migrants

VPD-related hospitalisations

- NZ-born non-migrant children **>** NZ-born migrant and foreign-born children

Charania, N. A., et al. (2023). MMR vaccine coverage and associated factors among overseas-born refugee children resettled in Aotearoa New Zealand: A national retrospective cohort study. The Lancet Regional Health - Western Pacific 33 (100709).
Charania, N. A., et al. (2023). Childhood vaccination uptake among children born in Aotearoa New Zealand based on parental nationality. Human Vaccines & Immunotherapeutics 19(2): 2240688.
Charania, N.A., Paynter, J., Lee, A.C., Watson, D.G., Turner N.M. (2018). Exploring immunisation inequities among migrant and refugee children in New Zealand. Human Vaccines & Immunotherapeutics, 14(12):3026-3033.
Charania NA, Paynter J, Lee AC, Watson DG, Turner NM. Vaccine-Preventable Disease-Associated Hospitalisations Among Migrant and Non-migrant Children in New Zealand. J Immigr Minor Health. 2020;22(2):223-231.
Hashemi L, Ghasemi M, Bartley A, Fenaughty J, Pirouzi M, Grant C. Migration and infant immunization timeliness in New Zealand: Evidence from the Growing Up in New Zealand study. Vaccine. 2024.

"… [I had] a pretty hard time to find a good midwife because when I was pregnant for the first time, I didn't know anything, and New Zealand is a new country. And I didn't have anyone, didn't know anyone, and had no family and no friends." (Indian migrant mother)

"She [nurse] vaccinated my baby and that's all. And she was like, "Oh, you're done for the day." I didn't know what she was getting and, as a parent, I wanted to know." (Refugee background mother)

"Due to the language barriers, I have a feeling of uncertainty. I am concerned that what if I cannot understand what the doctor says." (Chinese migrant mother)

"She vaccinated my baby and that's all…" Immunisation decision-making and experiences among refugee mothers resettled in Aotearoa New Zealand

Nadia A. Charania

Chinese and Indian migrant mother's perceptions and experiences of utilising maternal and early childhood healthcare services in Aotearoa New Zealand: a qualitative descriptive study

Anjali Bhatia, Hongxia Qi & Nadia A. Charania

Strategies to increase vaccine uptake and reduce VPD burden

Interventions to reduce VPD burden and increase vaccination rates among migrants and refugees

Different outcome measures

Four categories based on the level of intervention targeted

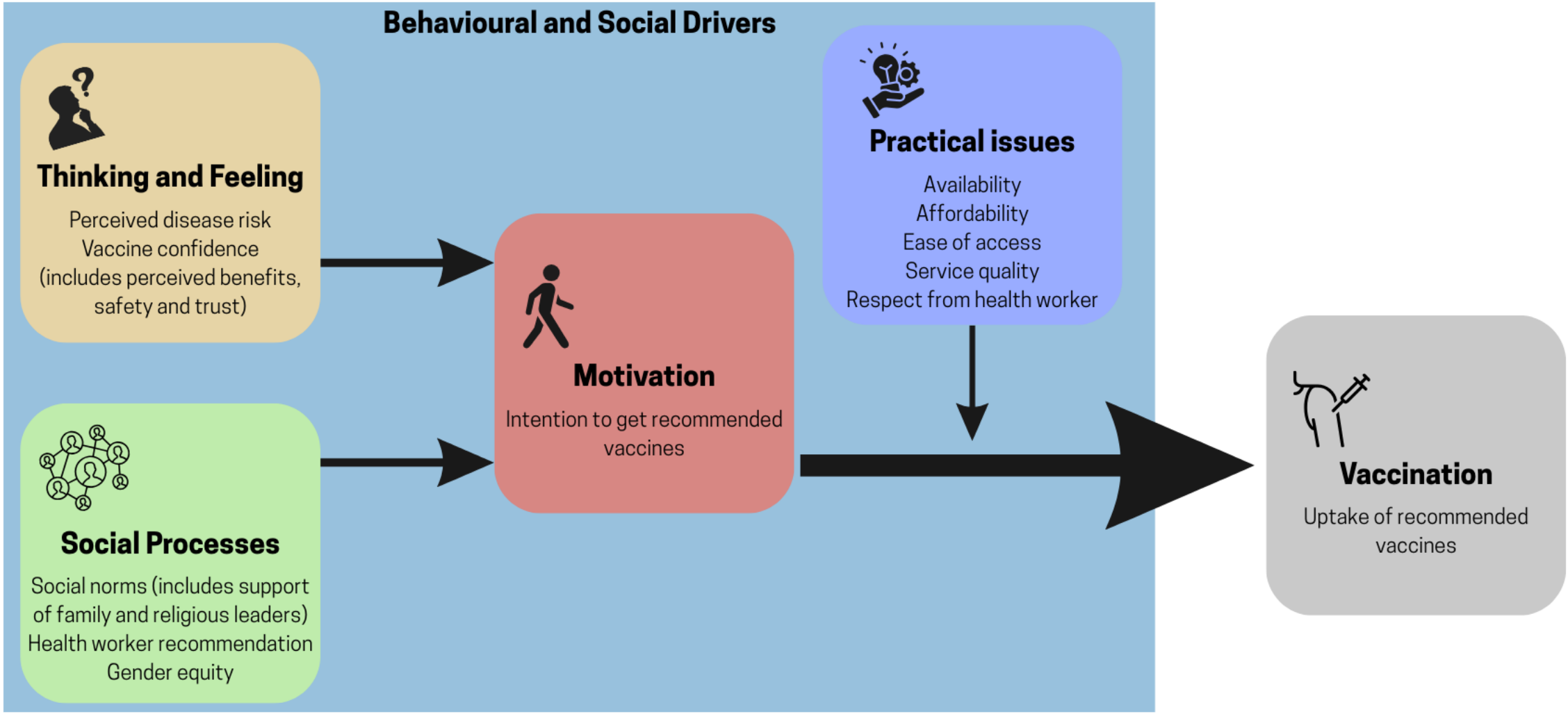
- Individual - to facilitate uptake of health services (e.g., reminders, mobile tech)
- Community (e.g., education campaigns to improve knowledge)
- Provider (e.g., screening, treatment, and vaccination)
- System (e.g., guidelines, policies or regulations) (universal and targeted vaccinations)

Need to address identified barriers to accessing services

Need for engagement with community members and organisations

Charania, N.A., Gaze, N., Kung, J., Brooks, S. (2020). Interventions to reduce the burden of vaccine-preventable diseases among migrants and refugees worldwide: A scoping review of published literature, 2006 to 2018. Vaccine, 38:7217-7225.

Behavioural and social drivers of vaccination framework



Source: The BeSD working group. Based on Brewer et al. Psychol Sci Public Interest. (2017).

Brewer NT, Chapman GB, Rothman AJ, Leask J, Kempe A. Increasing Vaccination: Putting Psychological Science Into Action. Psychol Sci Public Interest. 2017;18(3):149-207.
World Health Organisation. Behavioural and social drivers of vaccination: tools and practical guidance for achieving high uptake. Geneva: World Health Organisation; 2022.

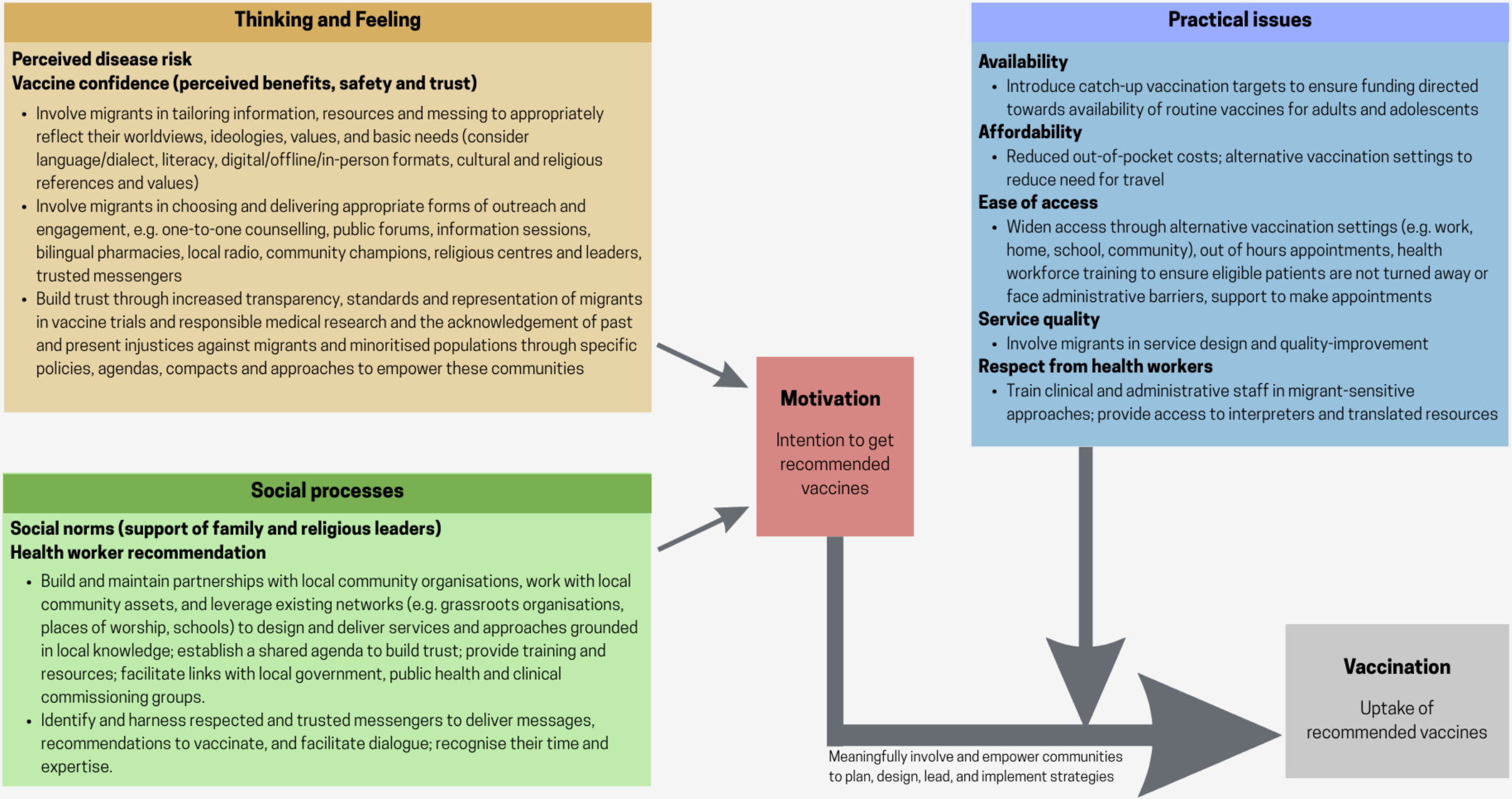


Fig. 1: Strengthening uptake of routine immunisations in migrant communities: Strategies to consider based on the behavioural and social drivers (BeSD) of vaccination framework (Based on Brewer et al. [32]).

Knights, F., et al., Strengthening life-course immunisation in migrant populations: access, equity, and inclusion. Lancet Reg Health Eur, 2024. 41: p. 100806.

As we look forward ...

How do we improve coverage among migrant and refugee background communities?

Policy

- Include migrants in vaccination policies
- Reduce access barriers for caregivers (e.g., in/direct costs)
- Improve infrastructure to support data collection and information sharing between organisations
- Prioritise and invest in comprehensive and long-term (re)settlement support that addresses the social determinants of health
- Proactive and coordinated efforts to address the evolving geopolitical climate

Research

- Support research partnerships and community-led research
- Strengths-based approach
- Value diverse paradigms and methodologies
- Collect and report disaggregated data
- More comprehensive reporting (focus on longer-term outcomes) and studies to understand drivers and interventions

Practice

- Build awareness of the migrant and refugee experience
- Improve vaccine resources to support awareness
- Improve support to deliver culturally safe care and innovate service delivery
- Build trusting relationships and focus on the whole immunisation experience
- Ways to identify and engage overseas-born children and adolescents
- Improve knowledge and expertise regarding catch-up immunisations

Thank You

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