

Integrated data systems

A game changer for overcoming the challenges of measuring migration and beyond

Refugee Plus, 5th Congress Polish Statistics,
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A health system

...is as strong
as its weakest link...



More than a billion people are on the move, globally

304 M

International Migrants
(2022 estimate)

123.2 M

Forcibly Displaced
(end 2024)

48.8 M

Children
(end 2024)

At no time have more
people been on the move

We must have their
health needs visible to
address and achieve
health for all

Ukraine emergency—by numbers

61 M

Border crossings from
Ukraine

23 M

Border crossings to
Ukraine

5.6 M

Refugees recorded across
world (5.1 million in Europe)

1.1 M

Refugees from Ukraine
in Poland/under
temporary protection

3.7 M

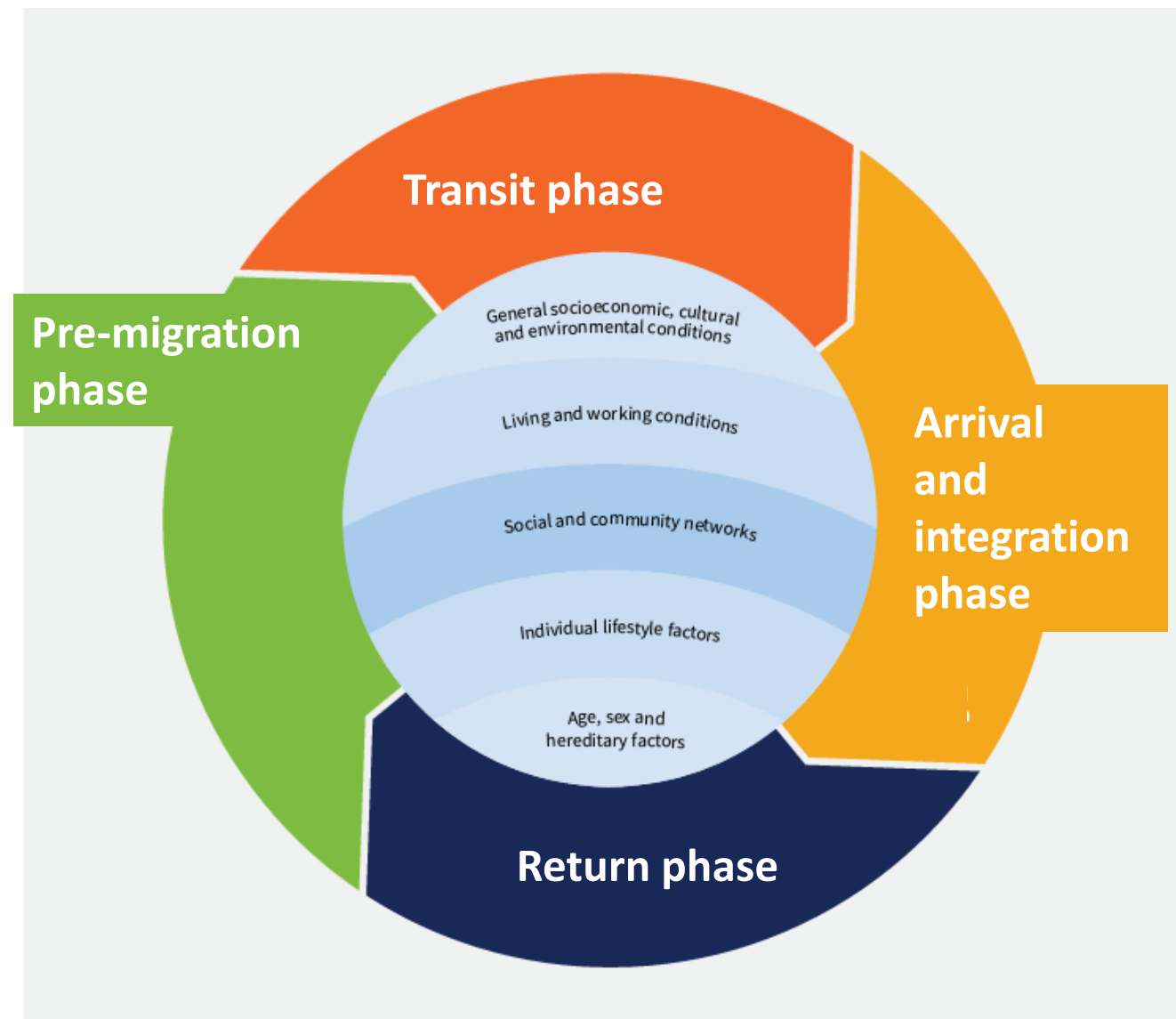
Internally displaced

“Health does
not begin or end
at countries'
borders”

World report on health of refugees and migrants and determinants of health



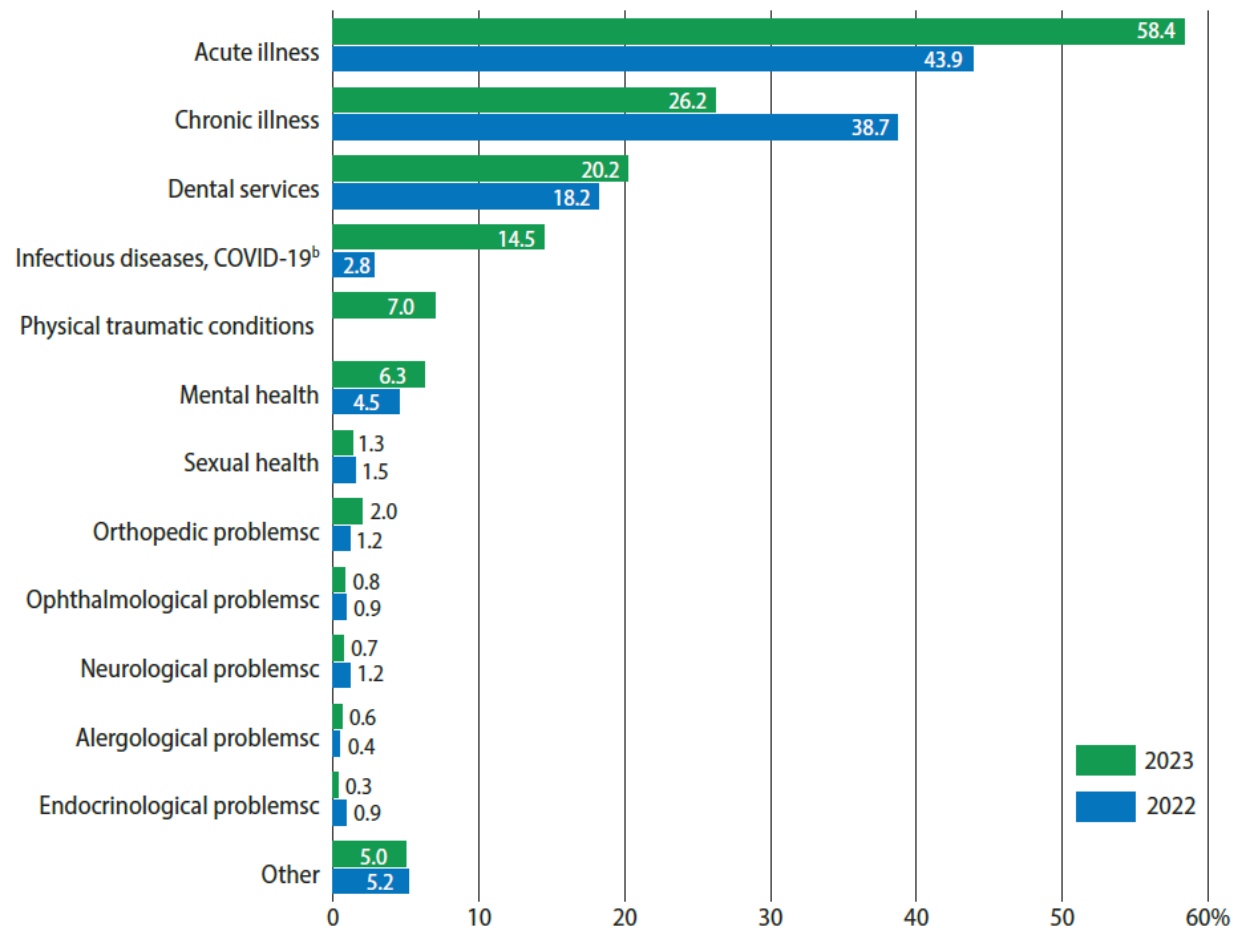
Fig. 1.3. Determinants of health and phases of migration



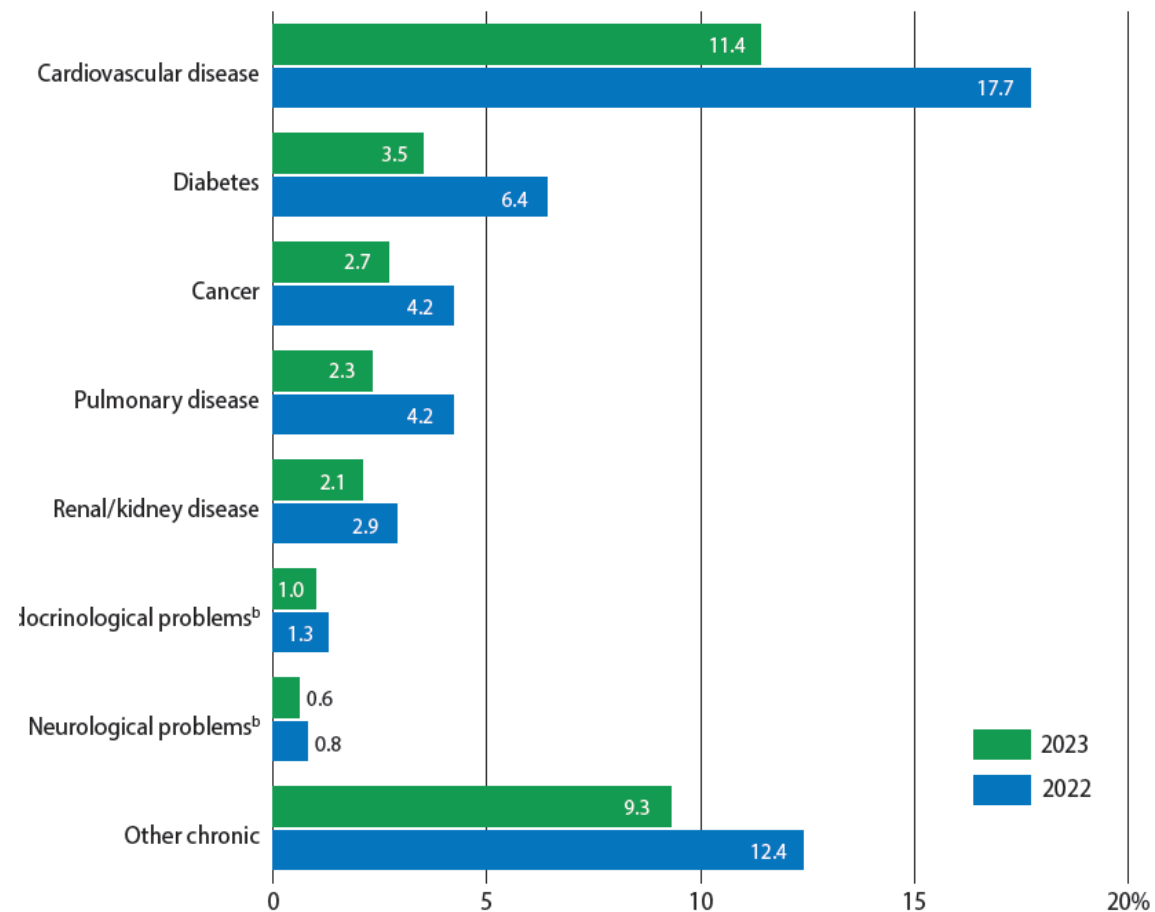
Health of Refugees from Ukraine in Poland

Comparative findings from 2022-2023 surveys

Types of health care needed*

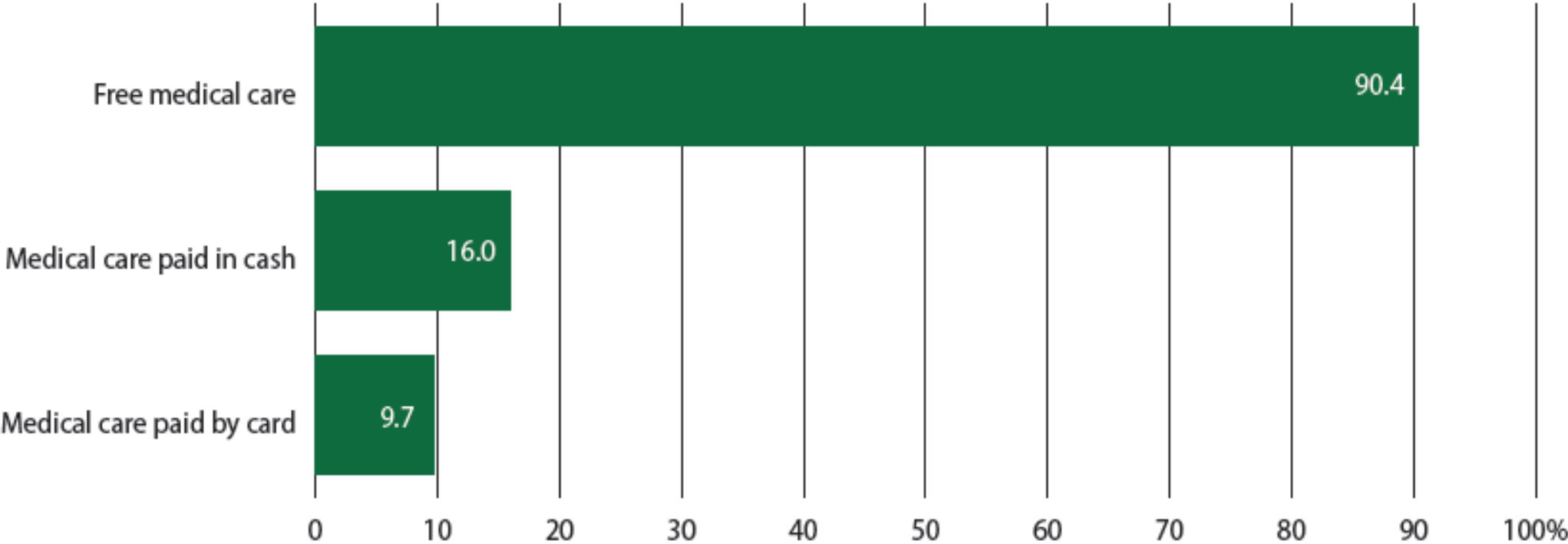


Types of health care needed for chronic illnesses*



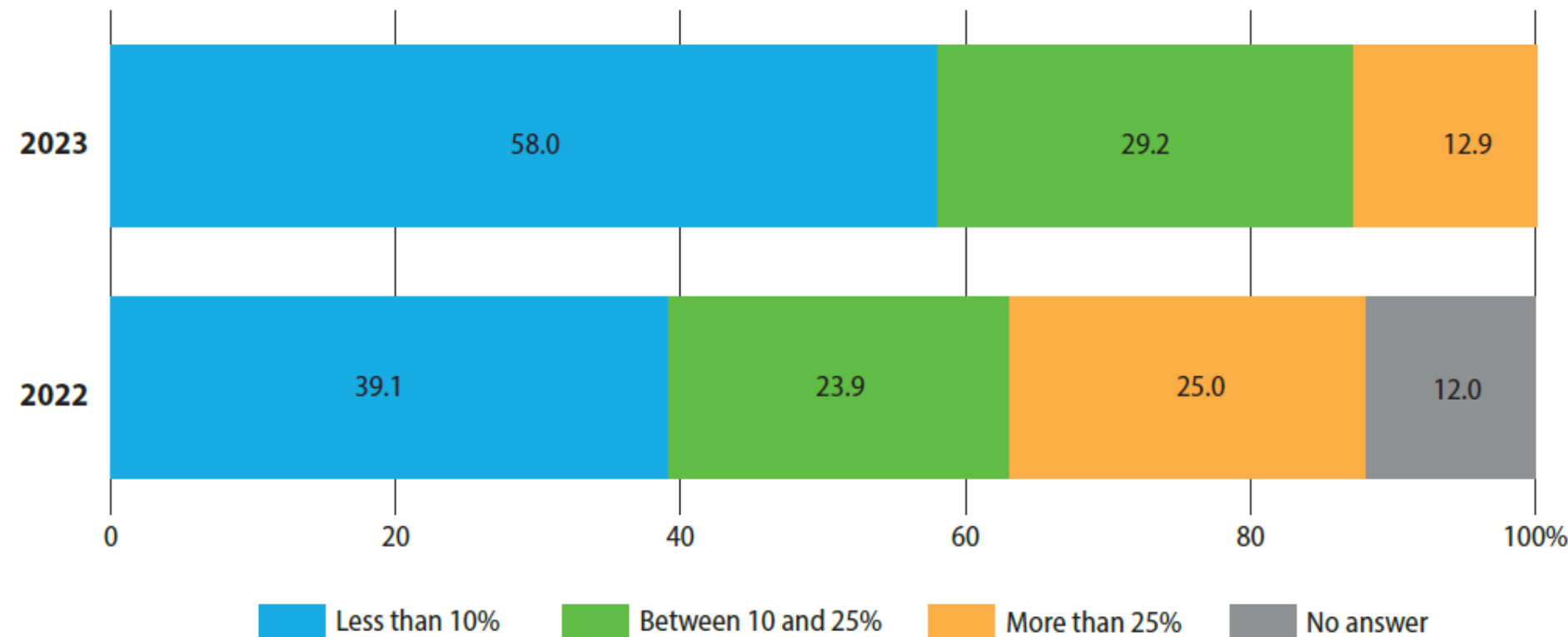
Comparative findings from 2022-2023 surveys

Access to healthcare free or paid



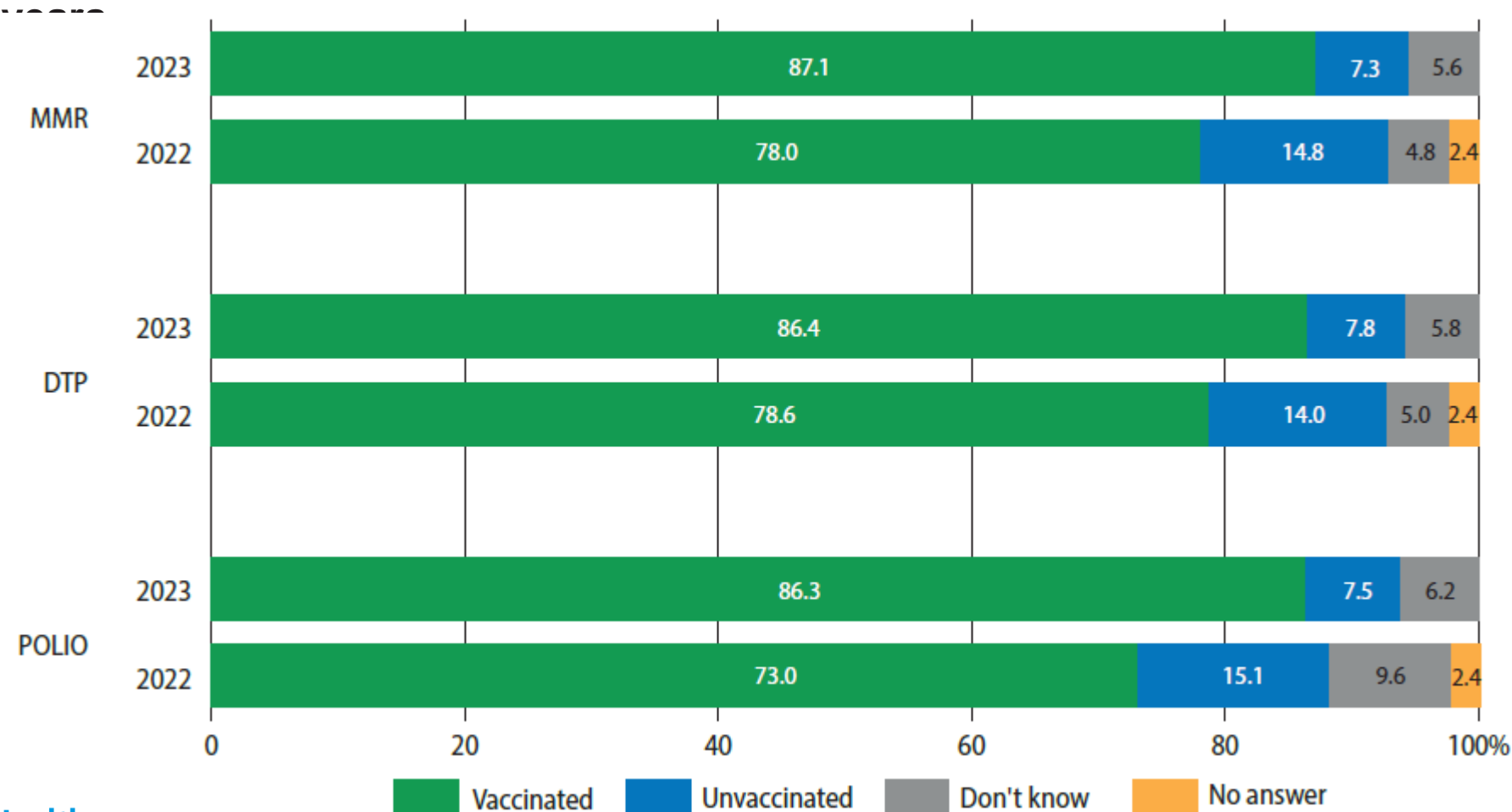
Comparative findings from 2022-2023 surveys

Share of income/savings spent on health care costs



Comparative findings from 2022-2023 surveys

Declared vaccination status of children aged 1–4



Health of Refugees



World Health
Organization

Poland



Statistics Poland

Data integration model – a comprehensive approach

Disaggregated data on refugees and migrants allows stakeholders to:

- understand and address their health needs
- develop inclusive public health approaches
- track progress towards national and global health goals
- enable decision-makers to understand and respond to public health challenges that occur within their borders

Fit for purpose data are urgently needed
to monitor the health of refugees and migrants if we
are to meet the SDGs – leave no one behind mantra

Food for thought...only 5 years remaining for the SDGs

- 200 zettabytes (1 zettabyte 10^{21} byte) of data
- Only 1 zettabyte in the public domain
- 90% of the data generated within the last two years
- Can we afford to ignore all the other datasets?
- Quality of data to be assessed but not discarded immediately
- Data integration is a must
 - A true public-private partnership of data
 - Statistical-geospatial integration as well as integration of Big Data

Towards an Integrated Information System for Health Equity in Poland

WHO Poland and partners are implementing a three-pronged approach to build an integrated information system for health equity:

- ❑ Two national-scale surveys—one for general population and the other for Ukrainian refugees—a harmonized baseline – health needs, access barriers, equity gaps across regions, population groups.
- ❑ The Health Equity Report for Poland (2026) synthesizes survey results, administrative data, and stakeholder input to offer a comprehensive narrative on disparities and actionable recommendations. It is a policy tool to drive equitable reforms and enhance transparency.
- ❑ A national platform integrating public and private-sector data (e.g. NFZ, GUS, mobile, financial, environmental) will support real-time monitoring, forecasting, and simulation of policy impacts. AI tools ensure data-driven decision-making while respecting ethical standards.

These form a robust, inclusive, and forward-looking foundation for national health planning.

The BIG picture – why this matters

- Poland is hosting 1M+ refugees amid ongoing health system pressures
- Need for a unified, inclusive, and equity-focused data ecosystem
- Supports health system planning, international cooperation, and policy simulation
- Leverages and synergizing tools: HESRi, Health Index, AI-driven equity analytics

Integrated Health and Inclusion Survey (IHIS-2025)

- Unified national survey covering both host and refugee populations
- Combines GUS health modules + WHO equity monitoring concepts – socio-economic health determinants
- Synergy between health index indicators and SEIS questions
- Feeds into Health Equity Report and regional refugee planning
- Partnership: GUS (lead), WHO, UNHCR, UNICEF, NIZP

IHIS: Design and Methodology

- Nationally representative + refugee oversampling
- Modules: health, protection, mental health, socio-economic inclusion
- Multi-modal data collection (household, phone, web)
- Disaggregation by legal status, gender, region, age, income, disability

Health Equity Report for Poland (HERP)

- Poland's second national health equity report (April 2025–June 2026)
- Assesses disparities in access, outcomes, and determinants
- Focus on regions, socioeconomic groups, and refugees
- Uses indicators from GUS, MoH, NFZ, private data (e.g., MNO, debit/credit cards)

HERP: Timeline and Components

- Q2 2025: Data and indicator finalization
- Q3–Q4 2025: Data gathering and analysis
- Q1 2026: Drafting and validation
- Q2 2026: Final report and launch

How AI feeds into HERP and beyond

- IHS provides population-level data (host + refugees)
- AI platform integrates spending, mobility, geospatial data, and eventually also Electronic Medical Records (EMRs)
- Combined for predictive analysis, equity stratification, and tailored policy insights

AI-Enabled Health Data Integration

- Real-time analytics platform by WHO Poland and GUS
- Combines health spending, EMRs, mobile, and geospatial data
- Uses machine learning to simulate policy scenarios and forecast needs
- Supports health equity, service planning, and resilience building

Benefits of AI-Driven Health Analytics

- Forecasts demand and identifies gaps early
- Supports policy reform across health, housing, transport
- Tailors services by demographic and vulnerability level
- Promotes efficient and equitable resource allocation

Thank you

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Dashboard: [Health of Refugees](#)

