Report on the CHAMPS Care of the Premature Baby Workshop

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19-Sep-25

Neonatal Nurses Association Conference

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG
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About Wits VIDA

The Vaccines and Infectious Diseases Analytics (VIDA) is a renowned African-led research unit established in 1995.

- High-quality, translational scientific research
- We save lives in Africa and LMICs
- Clinical & Molecular epidemiology of vaccine-preventable diseases
- Vaccine development & assessment
- Immunology of vaccines
- Basic Science research

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About CHAMPS

CHAMPS

What We Stand For

The CHAMPS Promise

CHAMPS transforms data into action, working at the local, national and global levels to ensure sustainable changes in policies, systems, and health interventions to accelerate improvements in child health.

Reducing Child Mortality

Our data catalyzes evidence-driven interventions that can save the lives of millions of children.

Building Local Capacity

CHAMPS works with communities, ministries of health and national public health institutes to strengthens local health and science capacity.

Data to Action

CHAMPS transforms data into action, working with partners to use our findings to inform interventions that address under-five mortality.

Data Sharing

Our open-access data sharing and diverse, multi-sectoral partnerships drive evidence-based interventions.

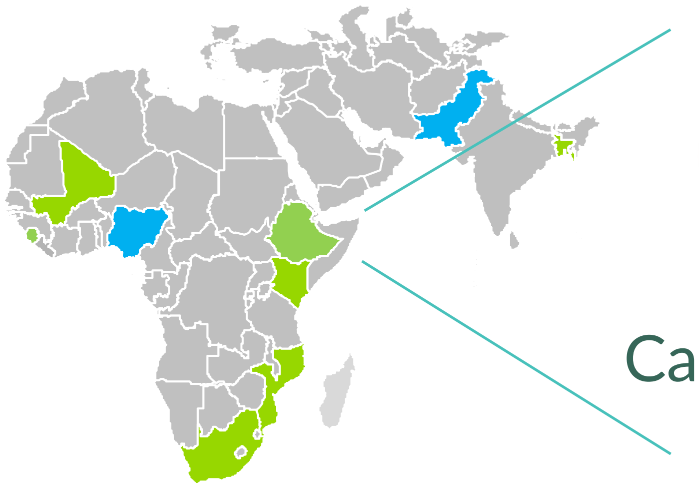
CHAMPS engages communities, identifies and examines deaths, then feeds back results to families and communities

Community Engagement

Surveillance

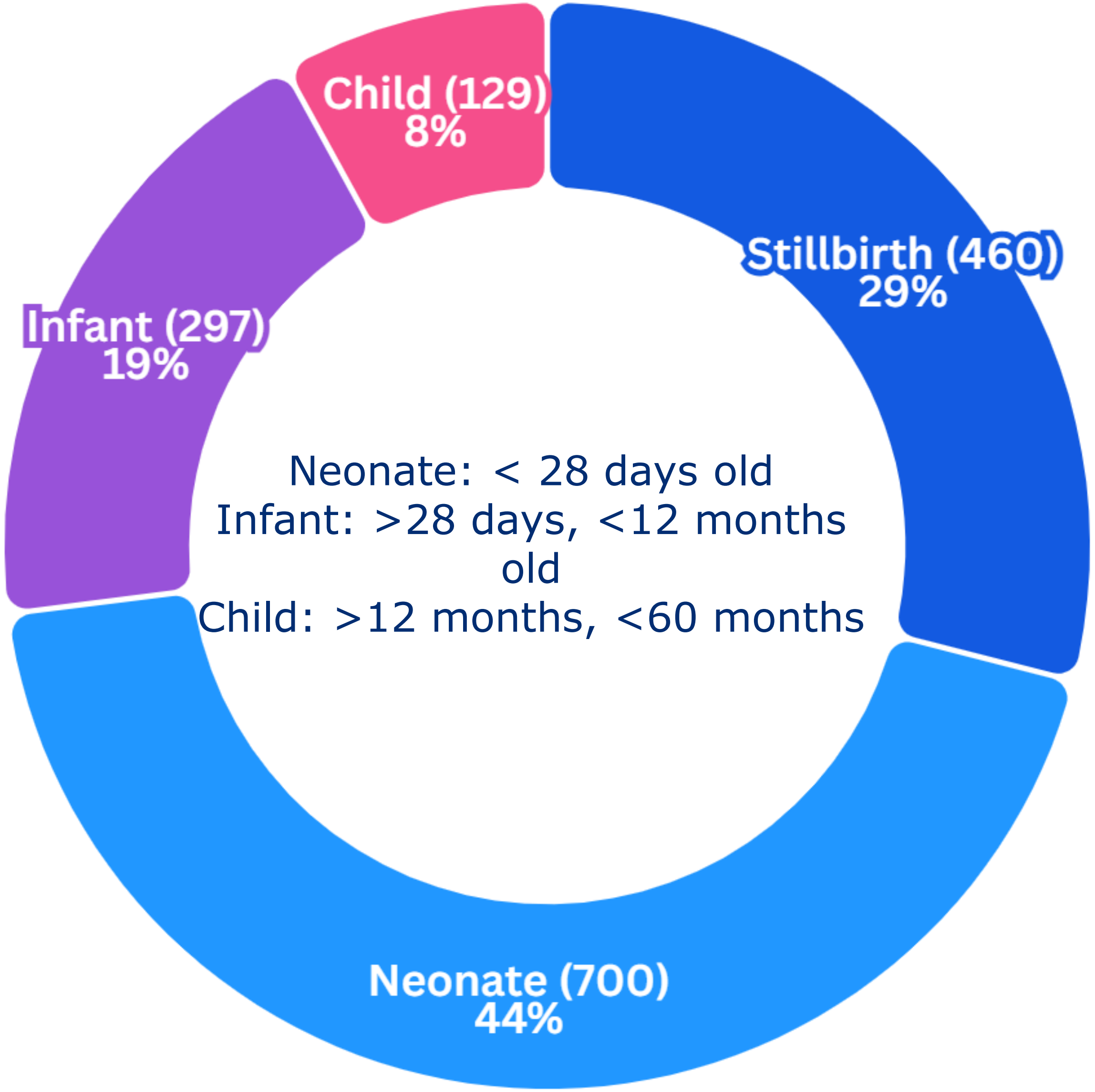
Case Enrollment

Cause of Death Determination



Where we work

Age Distribution of Cases Enrolled in CHAMPS



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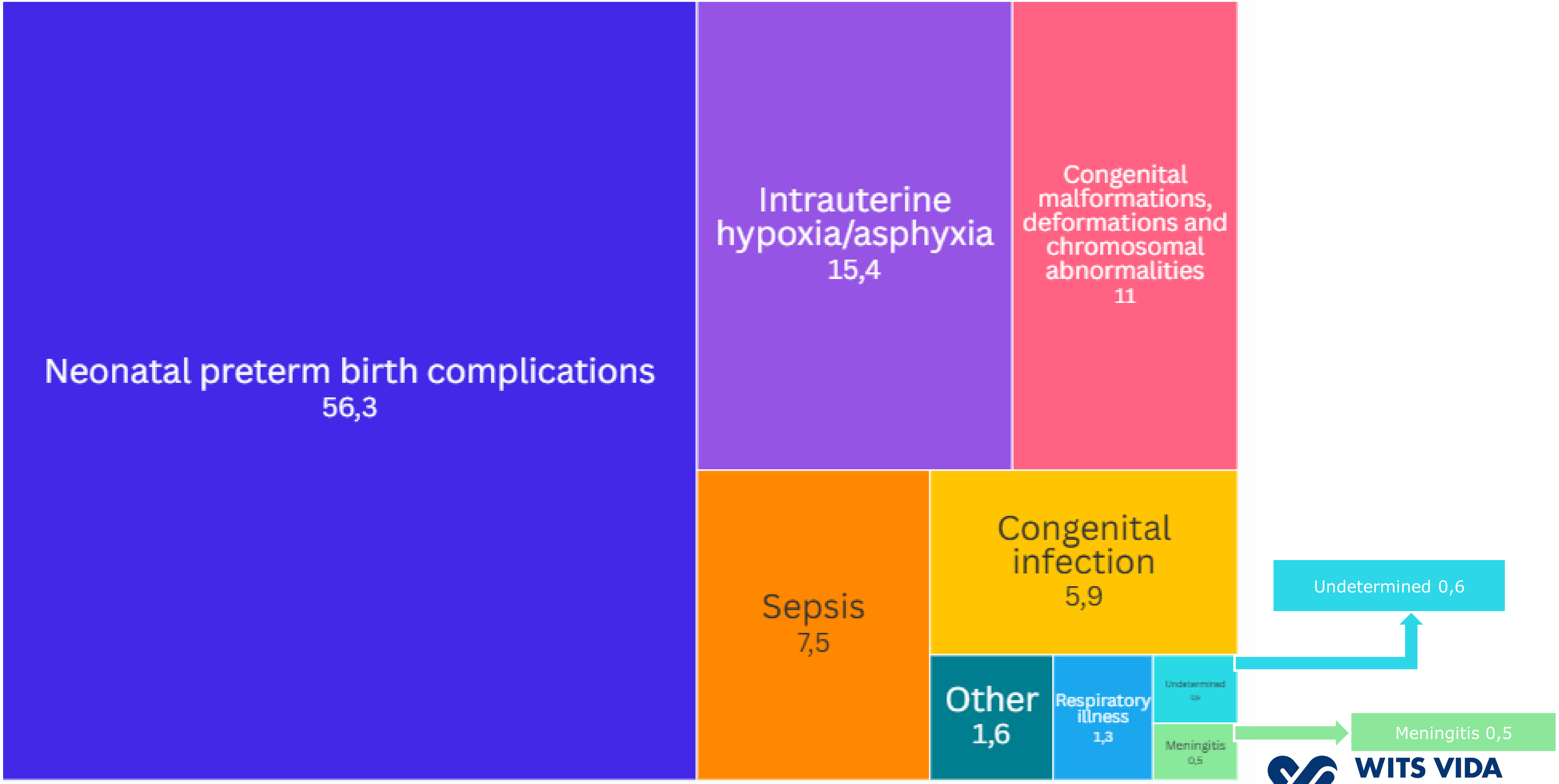
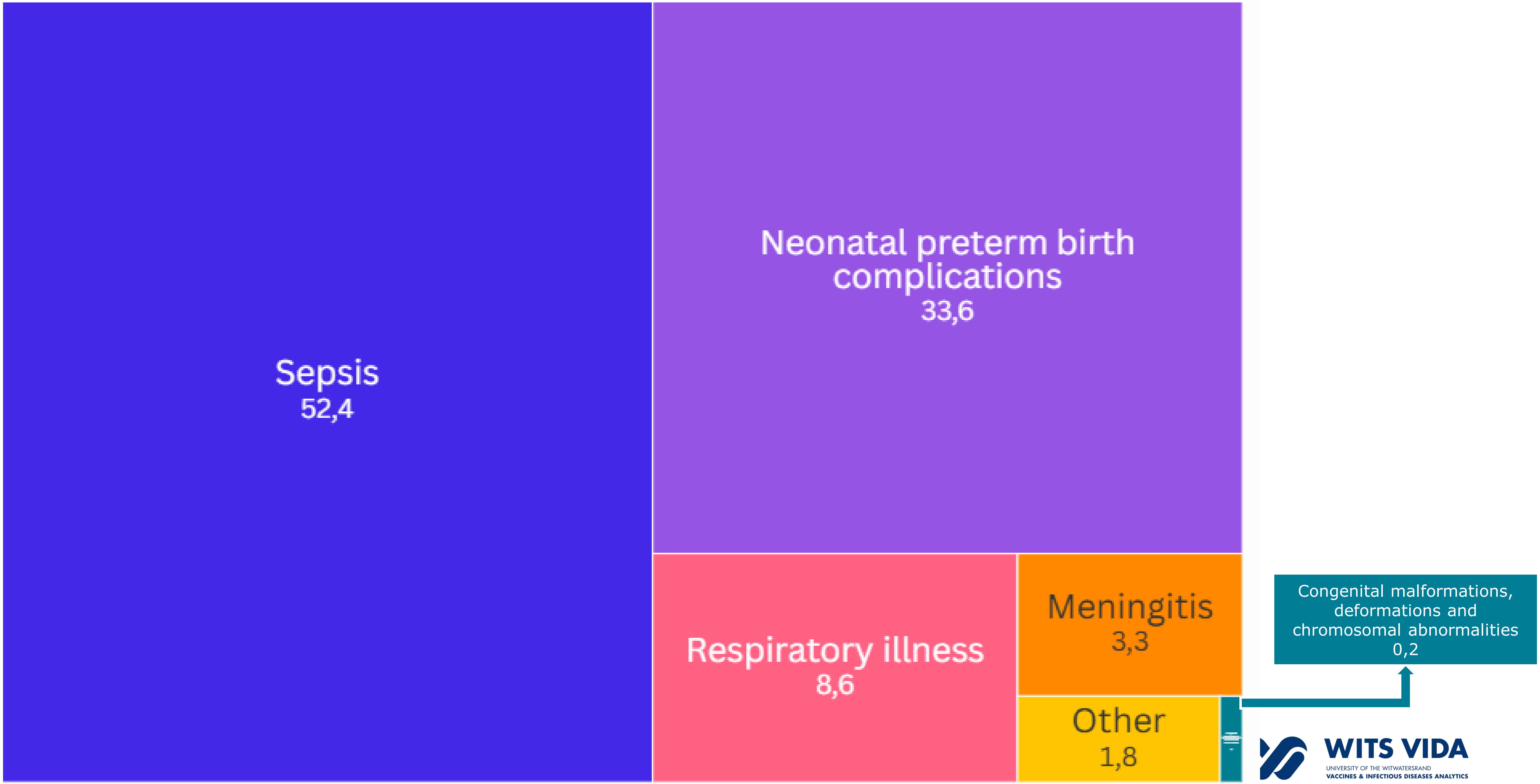
Findings in Neonates

Underlying Cause of Death in Neonates - %

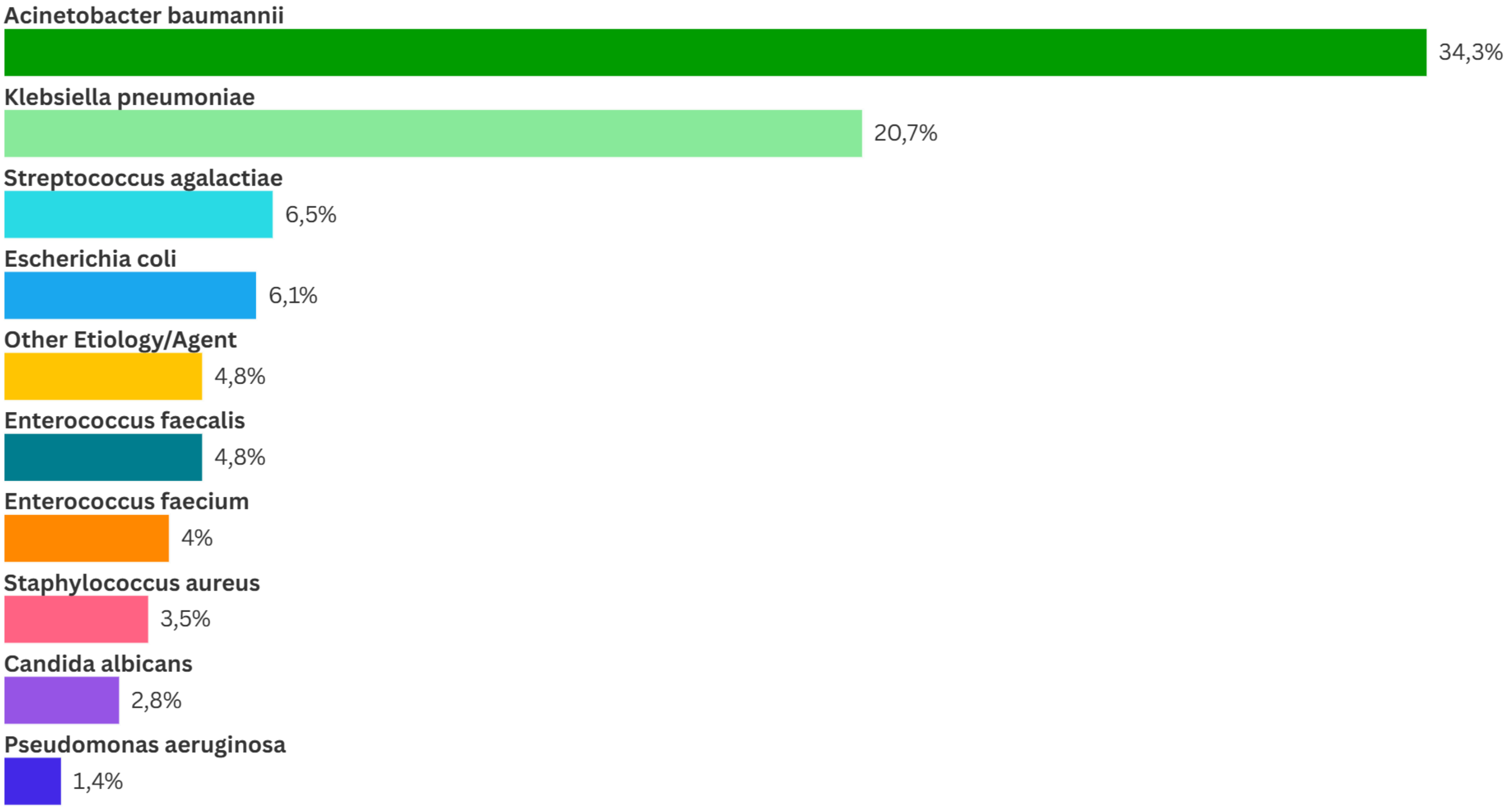


Immediate Cause of Death in Neonates (%)



Top 10 Organisms in the Causal Pathway to Death (Neonates)

Data is presented as proportion of total organisms (%)



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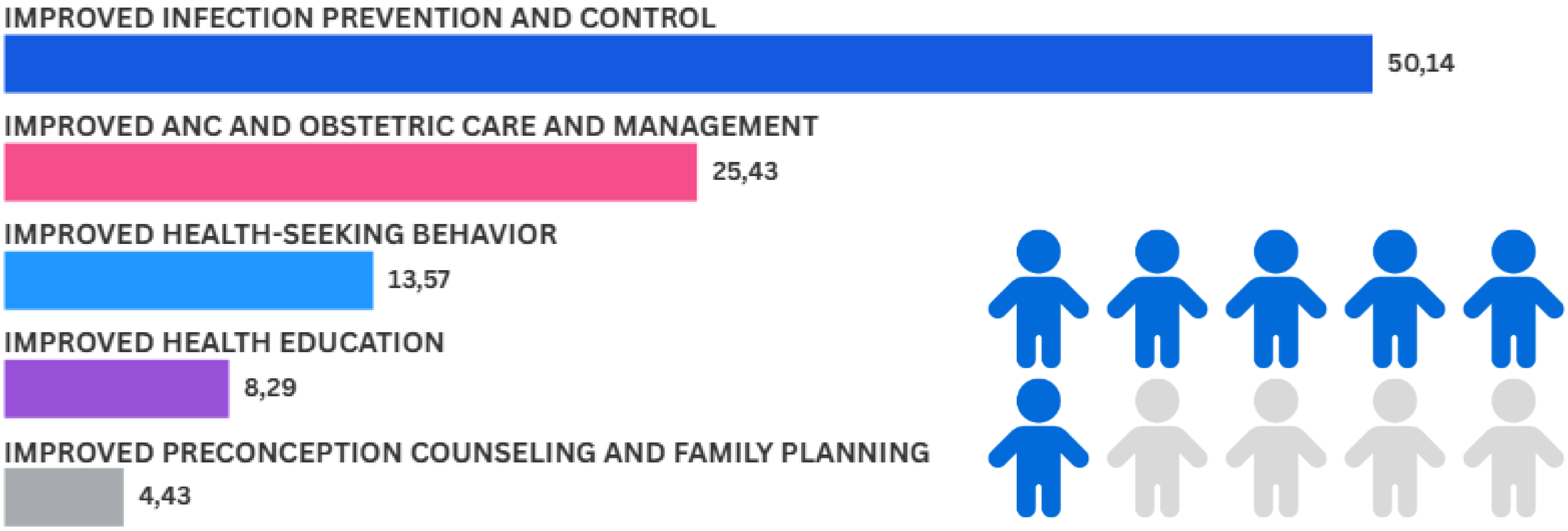
Preventability – Neonates (%)



*More than 1 preventability recommendation can be given per case

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Care of the Premature Baby Workshop:
Reduce prematurity, improve survival

Outcomes:

-Priorities and strategies to reduce preterm birth and improve infant survival

-Actionable tools for healthcare workers and caregivers

-Identify training gaps for community health workers and linkages to community-based care pathways

-Forge strategic partnerships for sustainable impact

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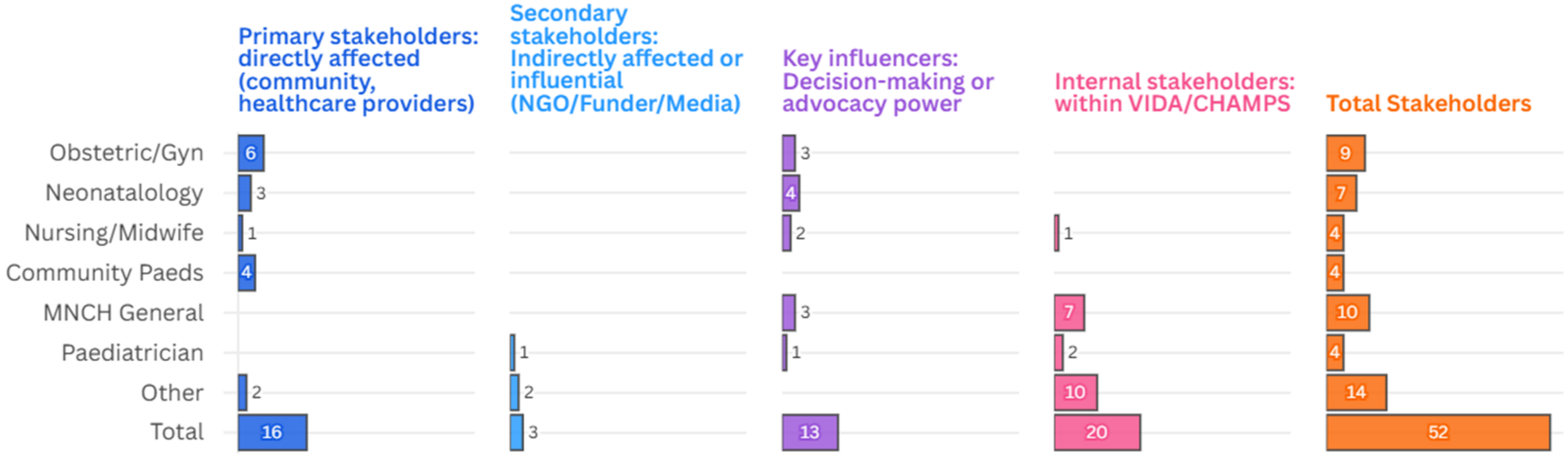
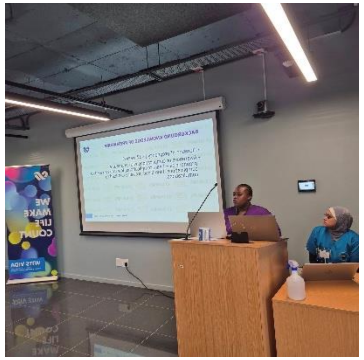
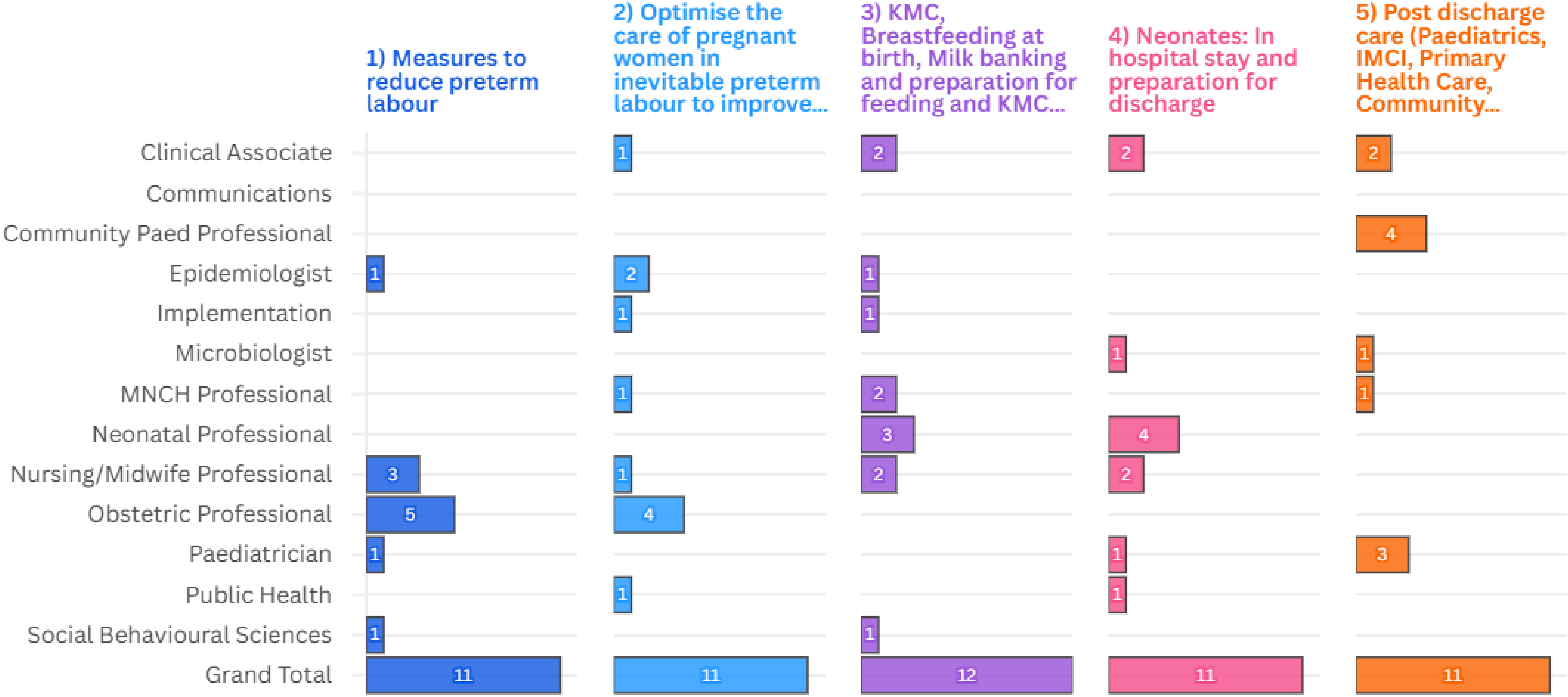
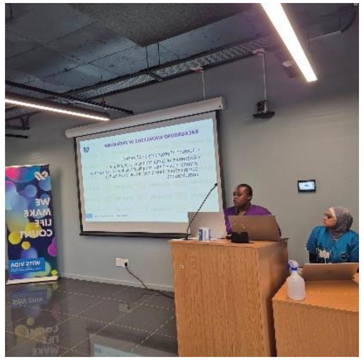
Methods: 57 Diverse stakeholders from 27 organisations





Methods: Expert breakout groups





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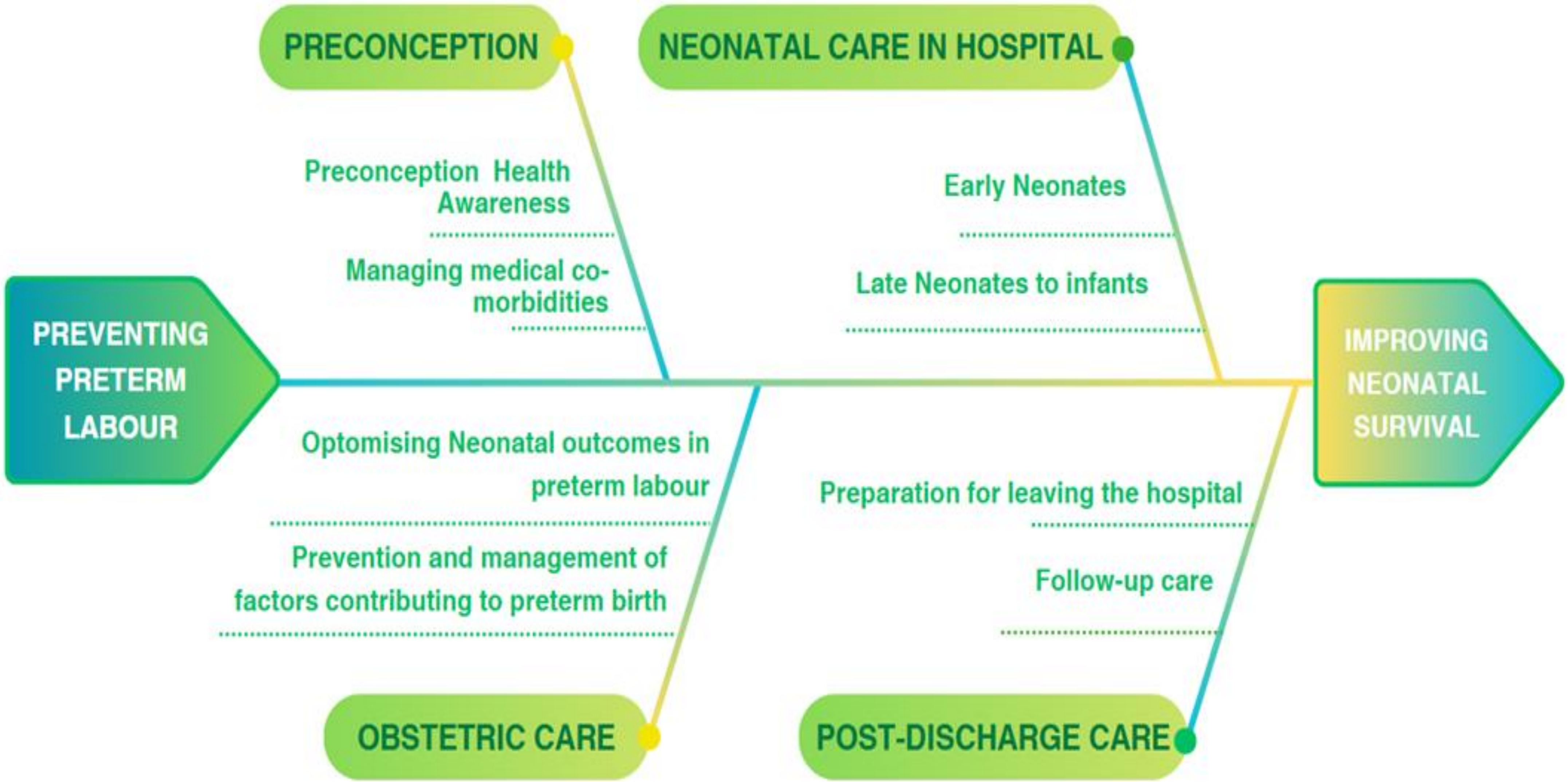
Results: Recommendations for a continuum of care model



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Optimising Obstetric–Neonatal Continuum of Care

Identified barriers:

- Siloed care (maternity, neonatal, postnatal)
- Fragmented communication & gaps in care

Optimising Obstetric–Neonatal Continuum of Care

Recommendations:

- Complete MCR Documentation for improved handover

- Multidisciplinary (Obstetric & Neonatal) care planning & communication

-Institutionalising combined ward rounds & care planning

-Interdisciplinary nursing and clinician teams.

-Clear SOPs for obstetric-to-neonatal handover, including role transition

- Facility Readiness.

-Equip PHCs to handle emergency care (incubators, appropriate resuscitation equipment).

Neonatal care in Hospital for Premature Infants

Barriers & challenges to IPC:

- Infrastructure and Equipment

-Inadequate bed numbers

-Overcrowded neonatal units

-Insufficient staff-to-patient ratios

-Shortage of essential equipment

- Shortage of neonatal-trained nurses

Neonatal care in Hospital for Premature Infants

Recommendations:

- National audit of neonatal facilities & bed occupancy
  - Identify & expand in facilities often over capacity
  - Ensure every baby has access to CPAP & high-flow oxygen
  - Space & resources for effective IPC implementation

- Reiteration of existing IPC guidelines
  - IPC champions per shift
  - Train caregivers in IPC
  - Involve IPC trained care-givers in basic care

Neonatal care in Hospital for Premature Infants

Recommendations:

- Specialist Neonatal Nursing
  - Increased opportunity for specialisation in line with international curricula
  - Specialisation offered from the start of nursing education
  - Partner to write policy brief

Sustainable staffing models with appropriately trained personnel

Neonatal care in Hospital for Premature Infants

Recommendations:

- Morbidity & Mortality (M&M) Meetings

  - Broaden scope to cover infections, equipment gaps, & process improvement

  - Guide systemic change & prevent recurrence

Early Neonatal Care (<7 Days)

Recommendations:

- Kangaroo Mother Care (KMC)
  - Early initiation after birth
  - Additional KMC beds, parent lodging
  - Remove restrictive visiting hours
  - Train & allow surrogates to perform KMC
  - Dedicated KMC nurse (oversee, ensure safety & champion)
  - Remove restrictive criteria (all stable preterm infants)

Early Neonatal Care (<7 Days)

Recommendations:

- Breastmilk Banks
  - Establish at all facilities (public–private partnerships)
  - Champions to promote donation
  - Educate mothers on expression, handling, hygiene, & storage

Neonates (Early and Late Periods)

Barriers:

- Families overwhelmed by fragmented follow-up schedules
- Lack of co-ordination between departments/healthcare levels

Neonates (Early and Late Periods)

Recommendations:

- Structured discharge planning
  - Differential pathways for <1800g & >1800g
  - Motivate mothers to continue breastfeeding (lactation consultants)
  - Bedside caregiver education within existing ward spaces (danger signs, emergency care at home, KMC, growth monitoring & clinic visits)
  - Caregiver checklist for discharge (education, discharge plan)
  - Discharge package with vaccination dates, specific warning signs & referral information
  - Coordinated follow-up

Scan for local underlying cause of death data shared in this presentation

Scan to see more data on the CHAMPS website (or view: https://champshealth.org/data/)

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Thank you

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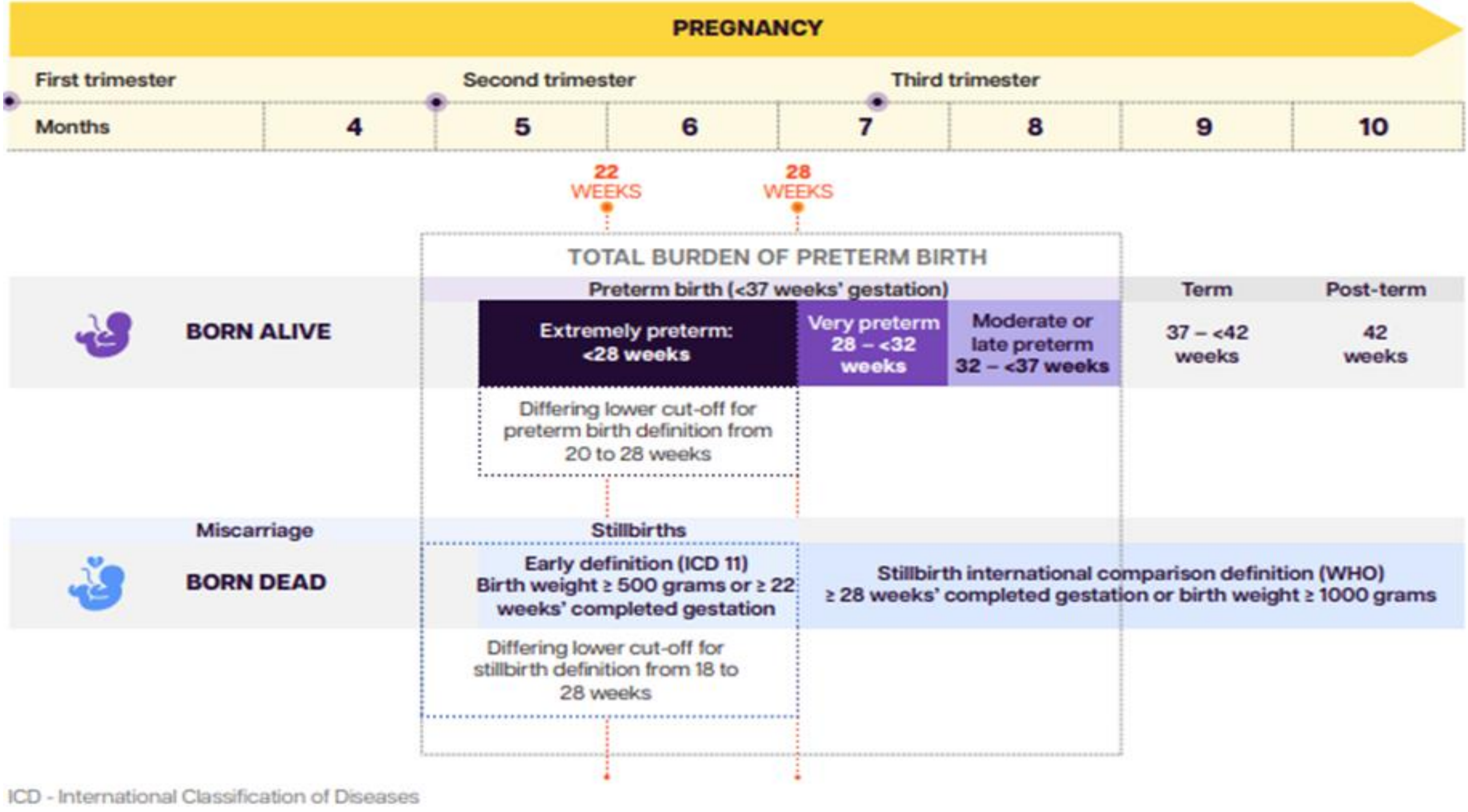

(Reproduced from the Born too soon report)

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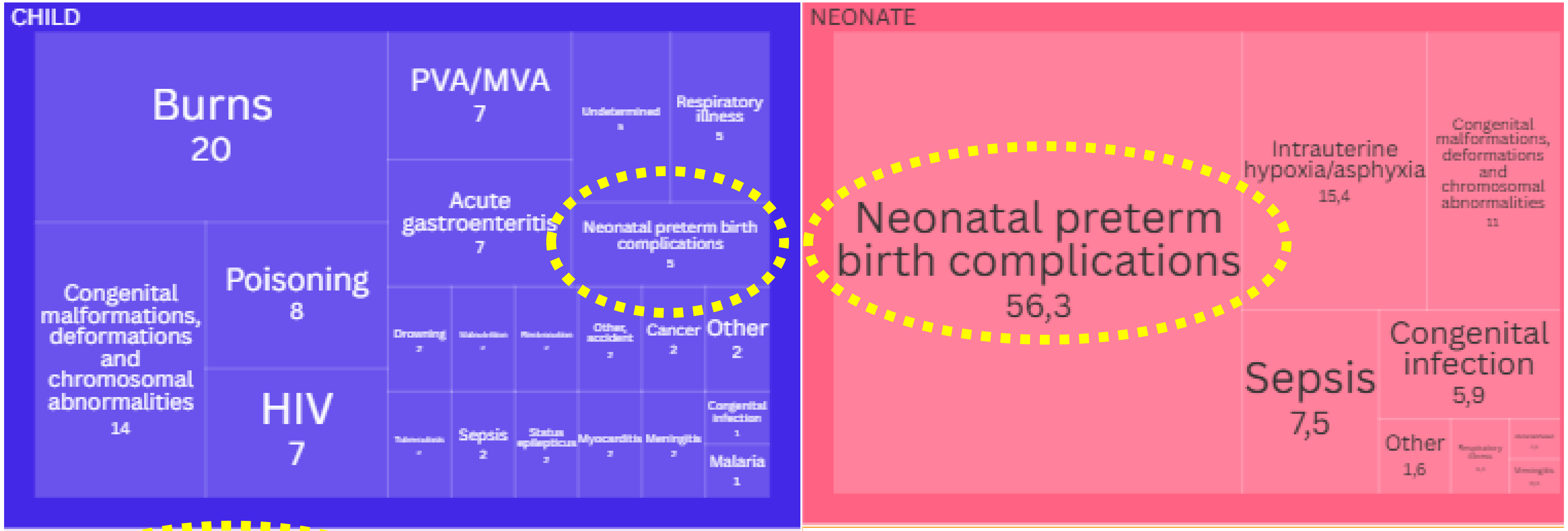
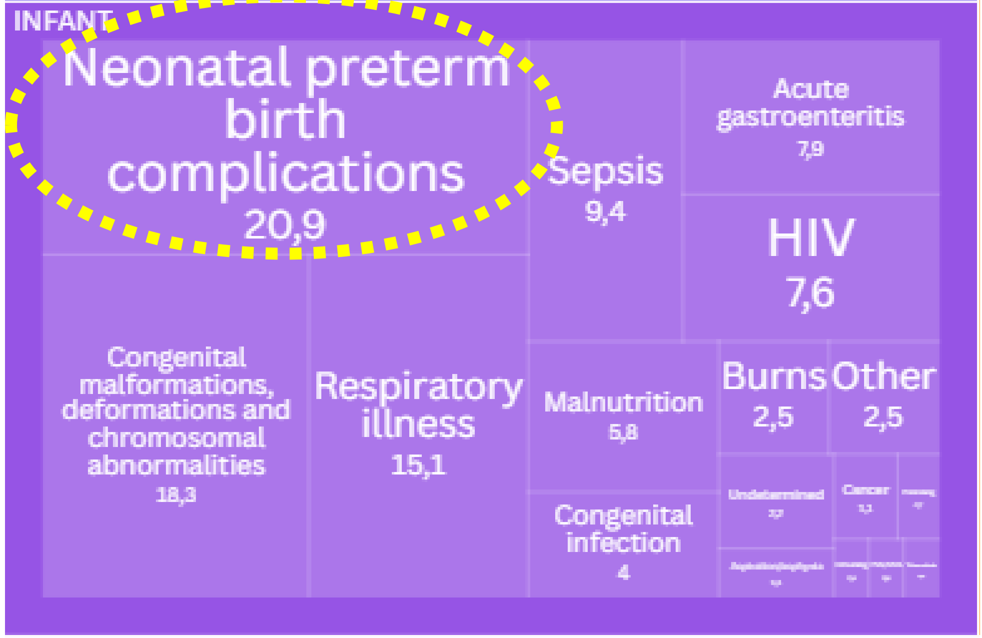
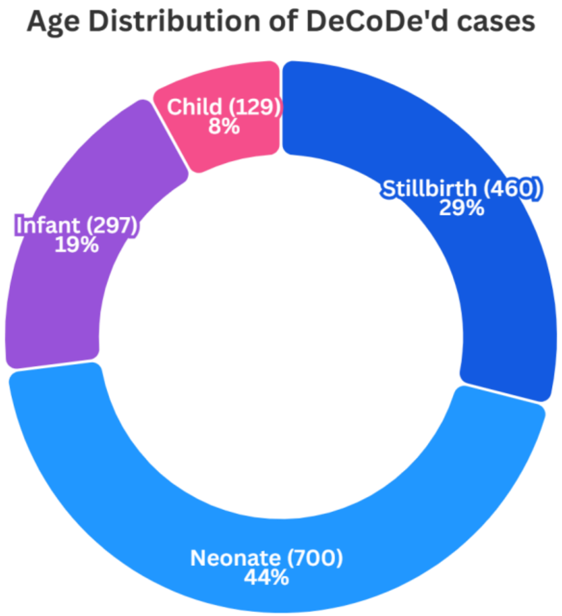
Pathways to Death

Prematurity Contributes to Death up to Late Infancy







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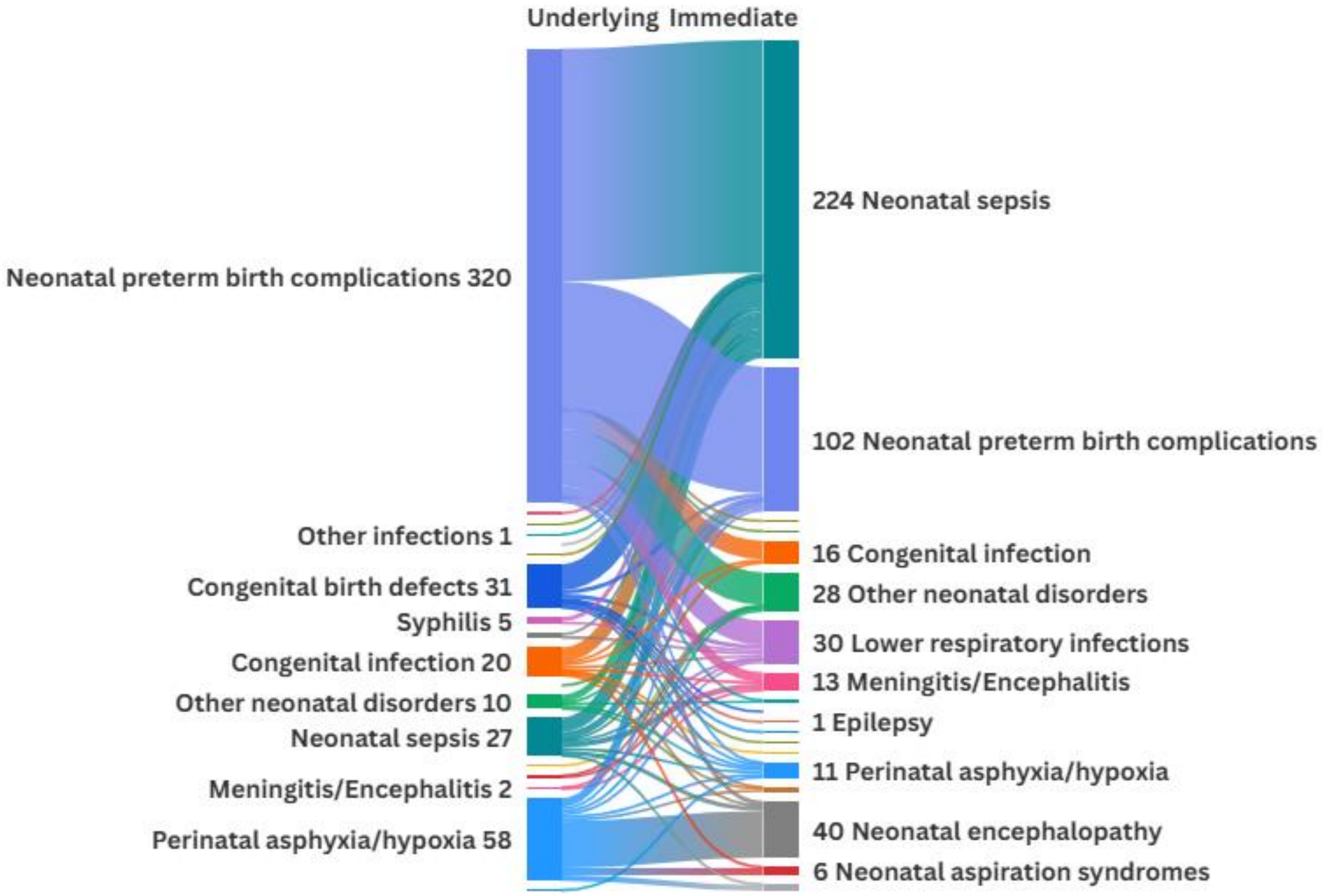
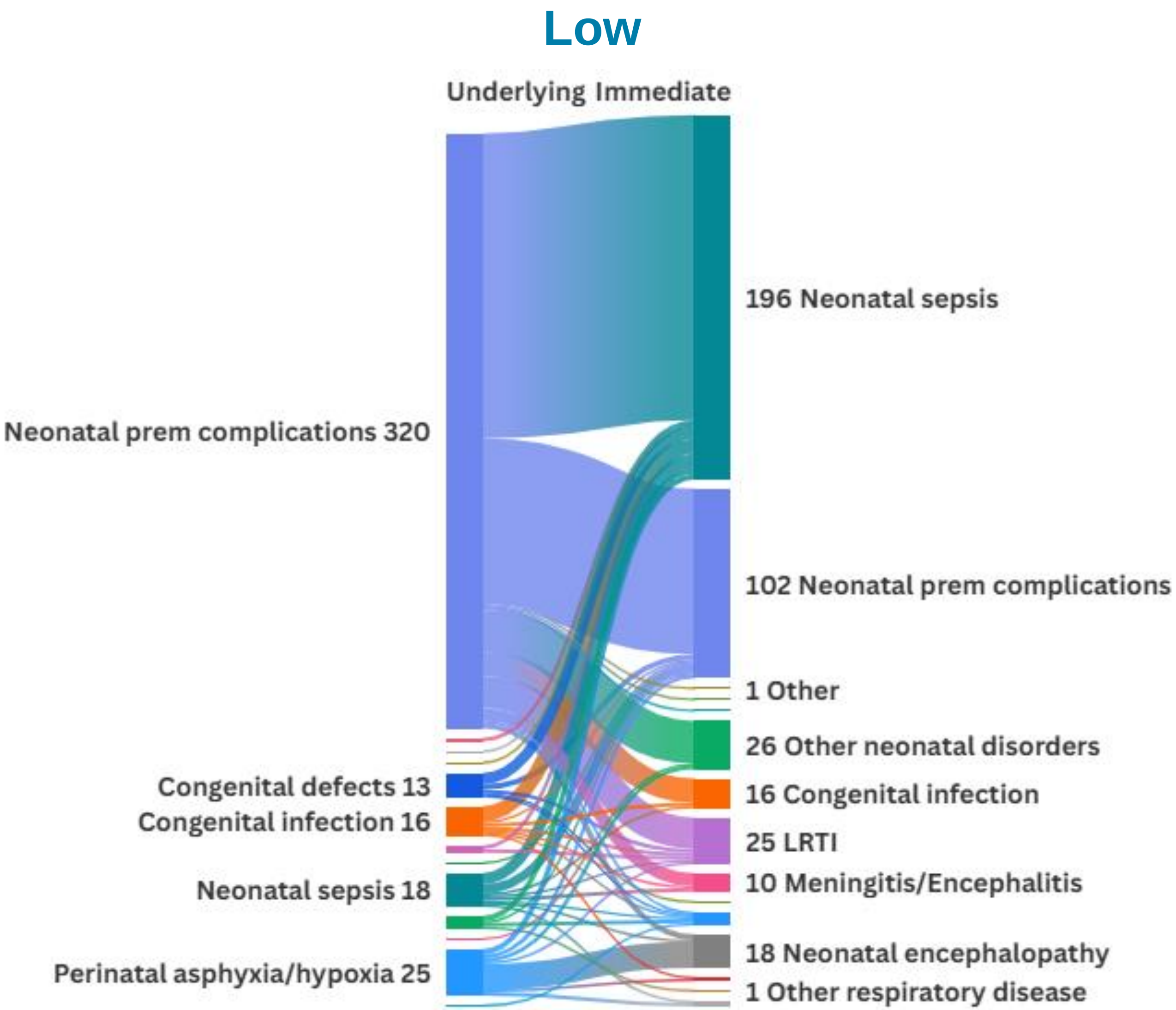
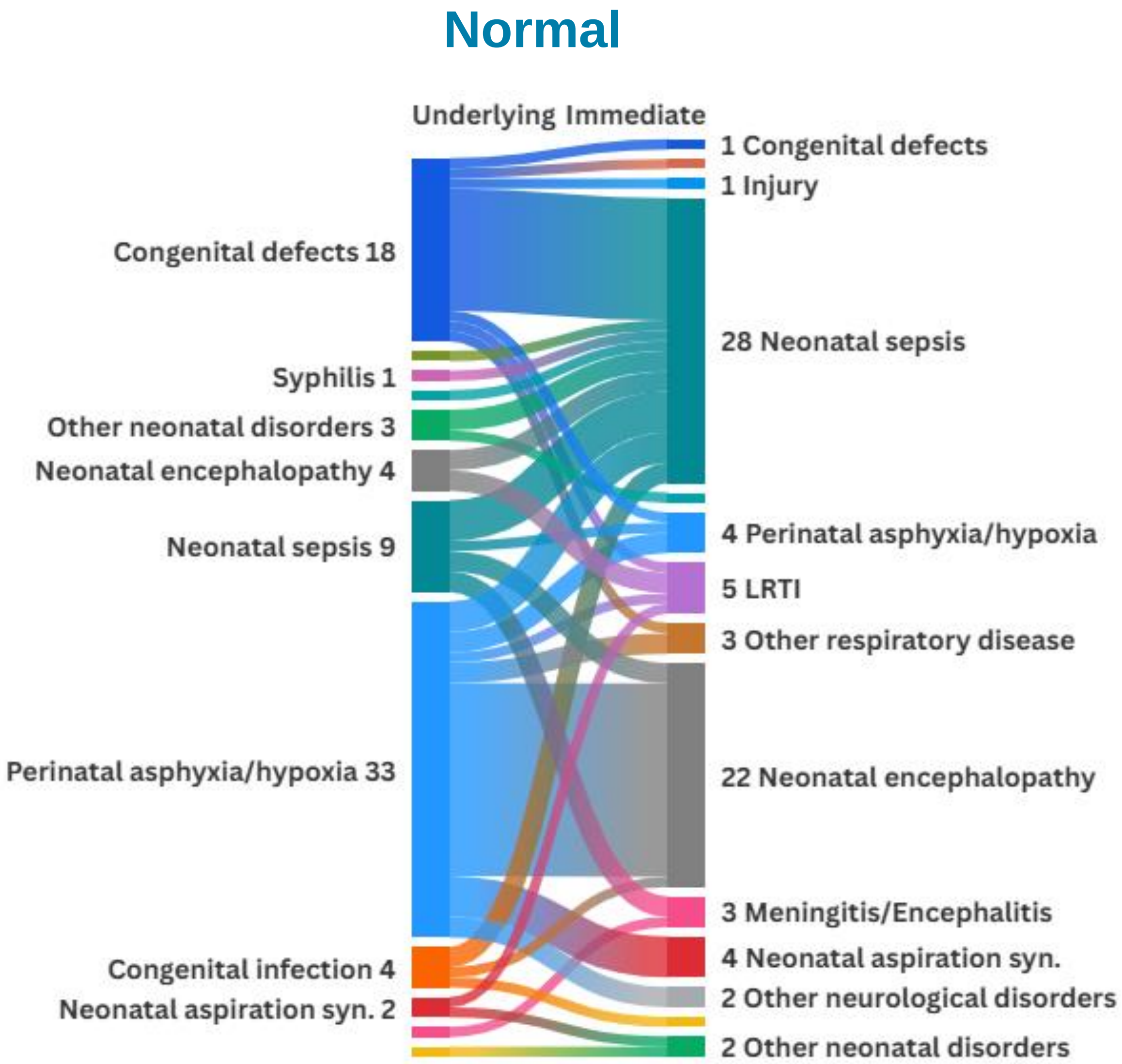
Pathway to Death for Neonates



Pathway to Death for Neonates by Birthweight





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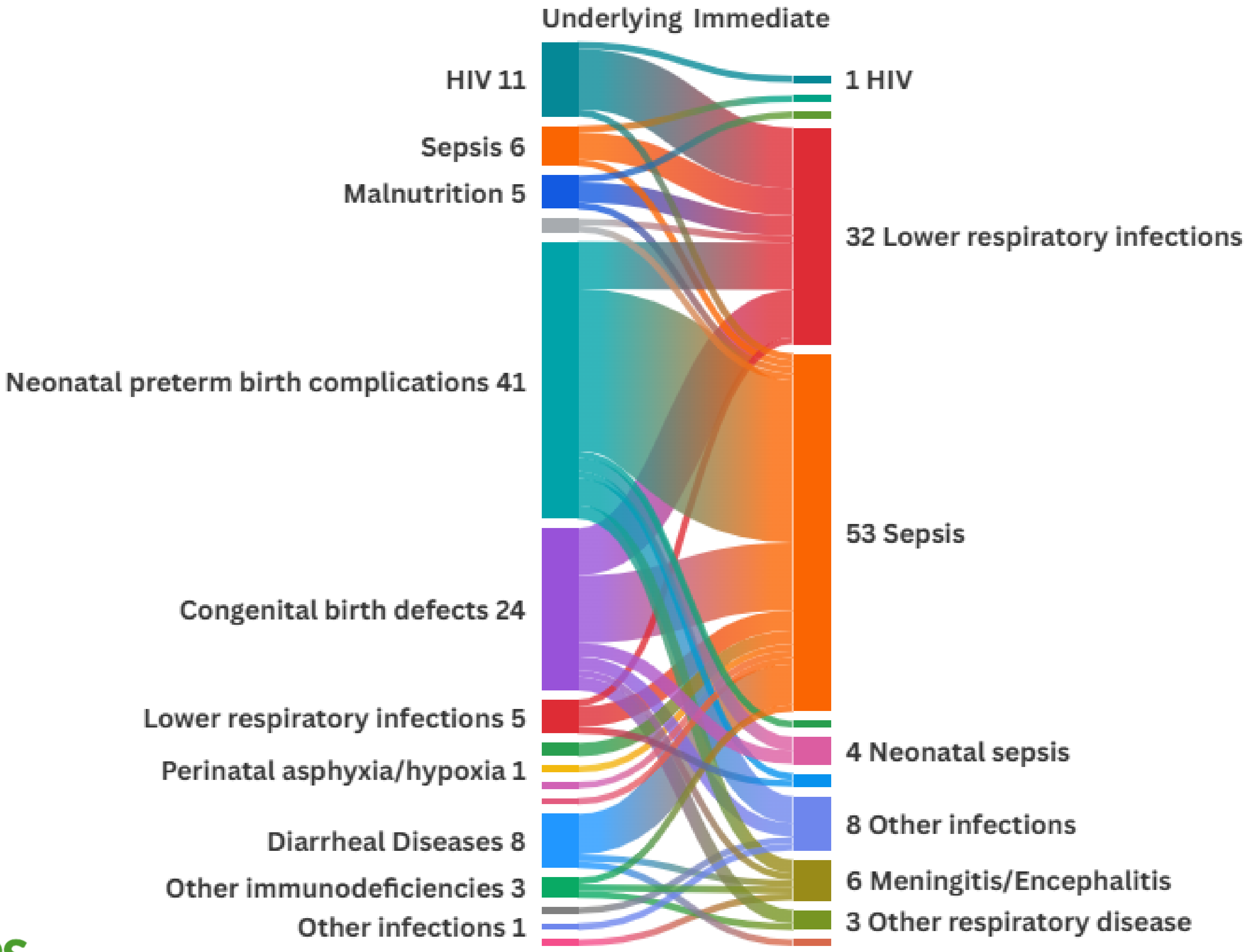
Pathway to Death for Infants between 1-12 months



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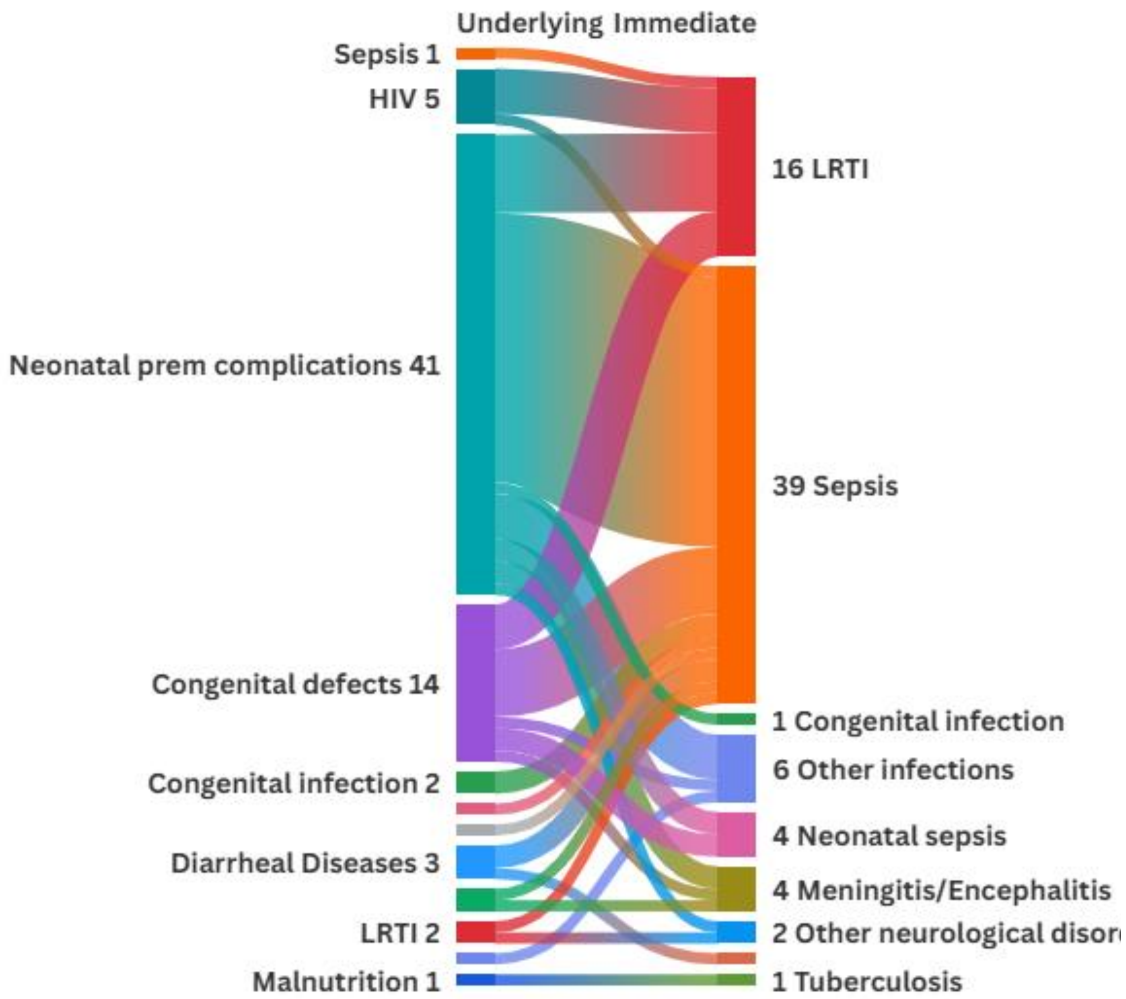
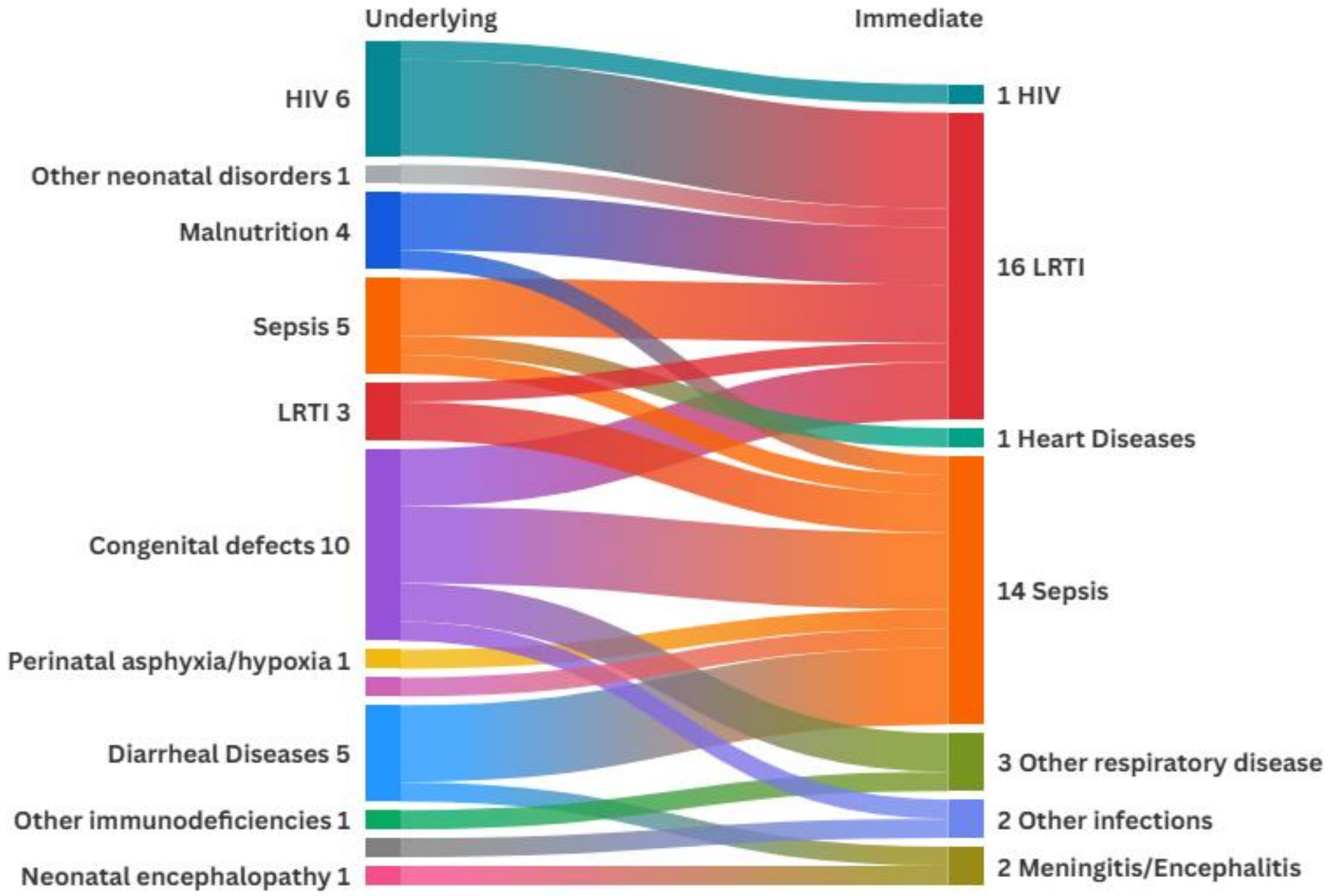
Pathway to Death for Infants (1-12 months) by Birthweight

Low



Normal



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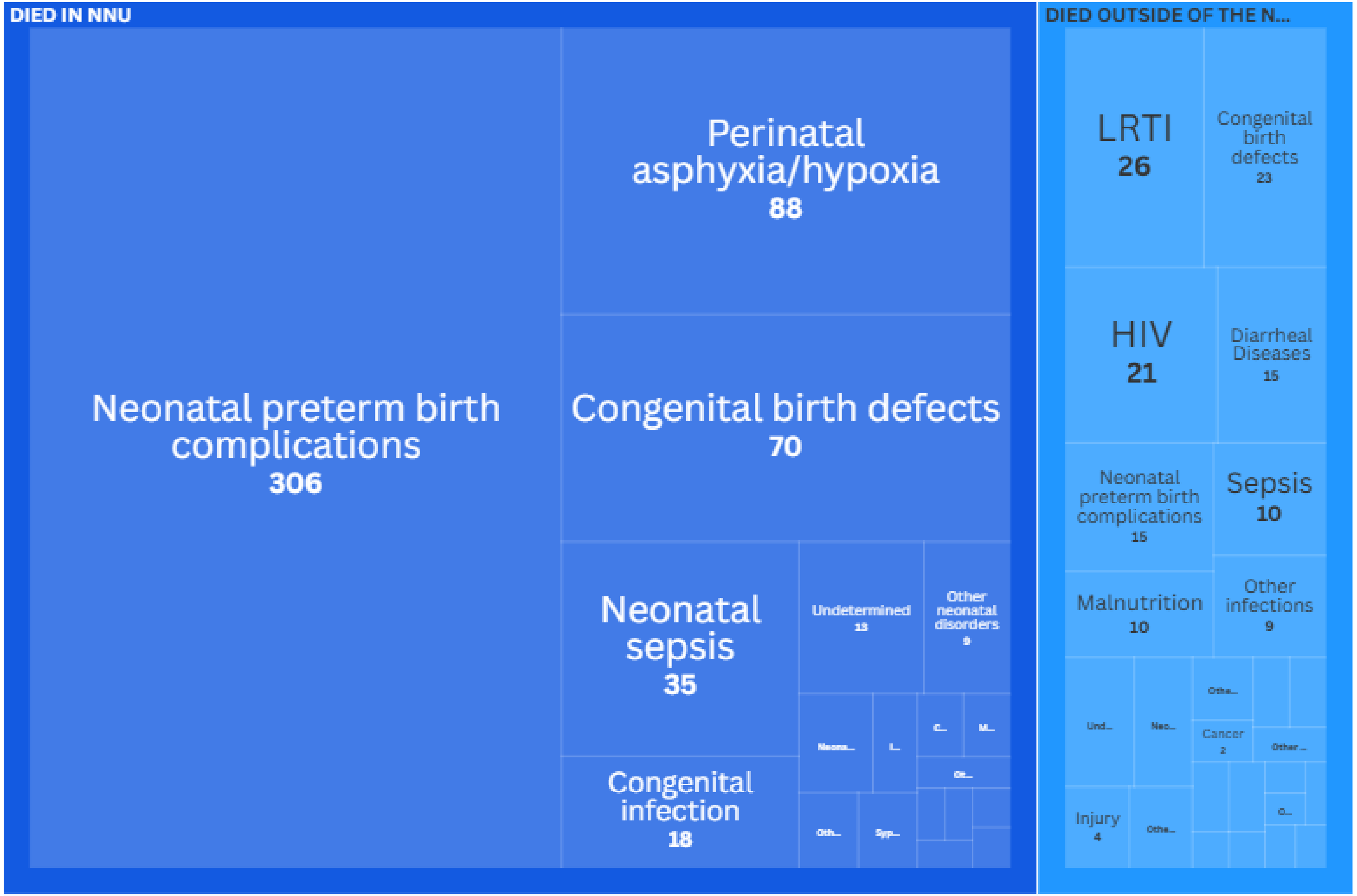
Deaths in the Neonatal Unit

Underlying COD for infants (0-12 months) that died in the NNU (n=651) versus those that died outside of the NNU* (n=350)



*Unclear if those that died outside of the NNU were ever exposed to the NNU or not (analysis in progress)

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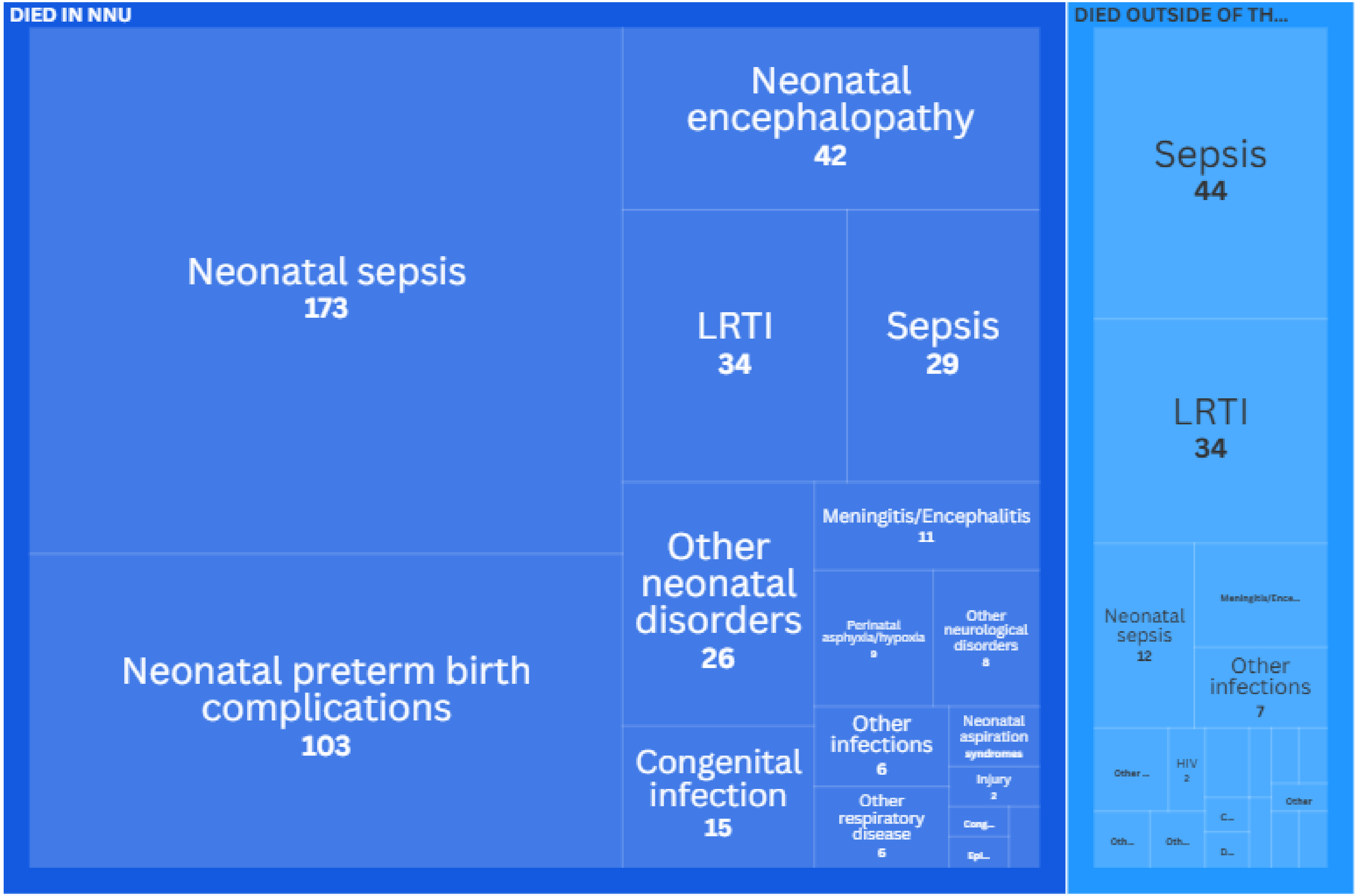
Immediate COD for infants (0-12 months) that died in the NNU (n=651) versus those that died outside of the NNU* (n=350)



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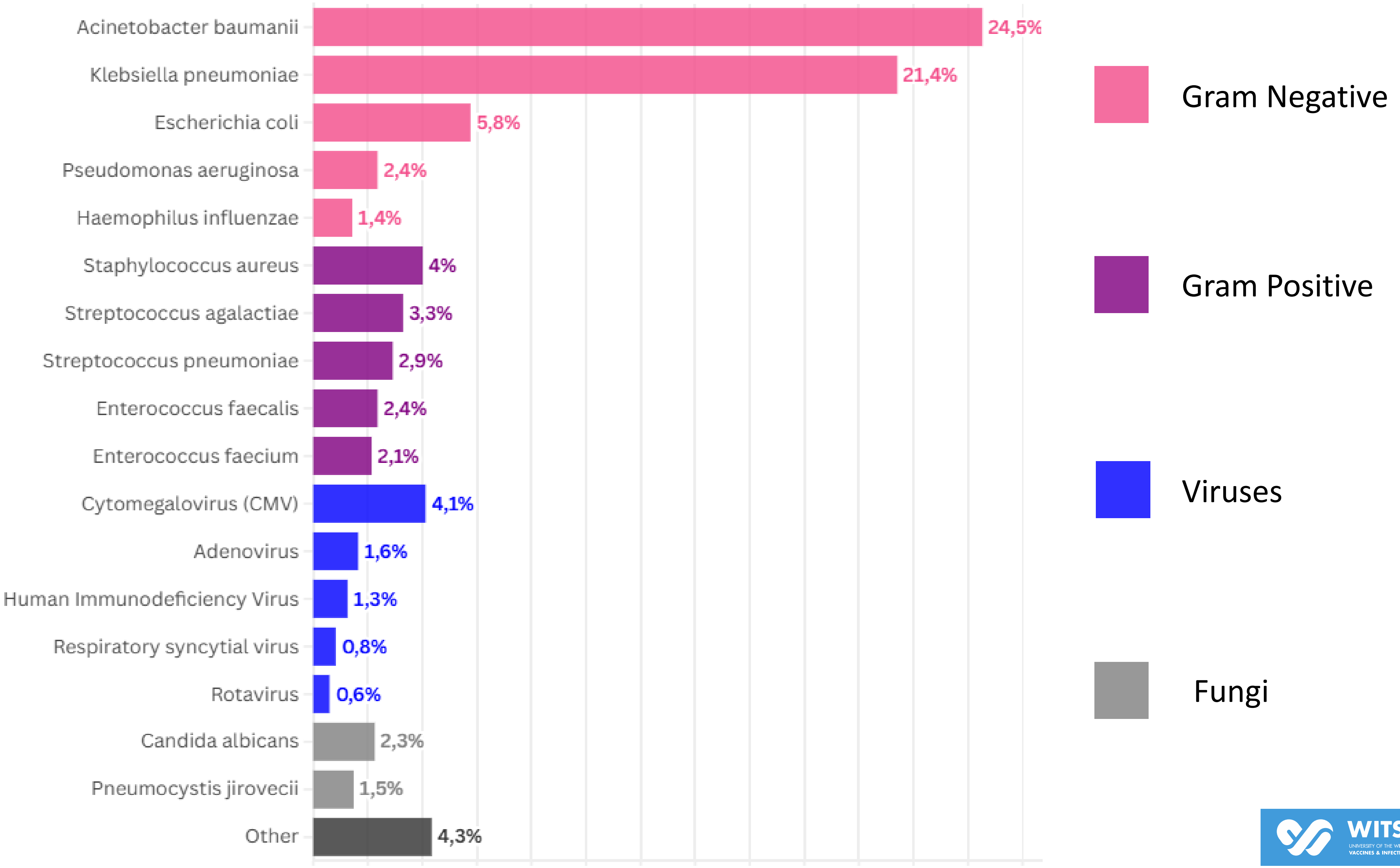
Organisms in Causal Pathway to Death

Organisms in the Causal Pathway to Death (0-12 months)



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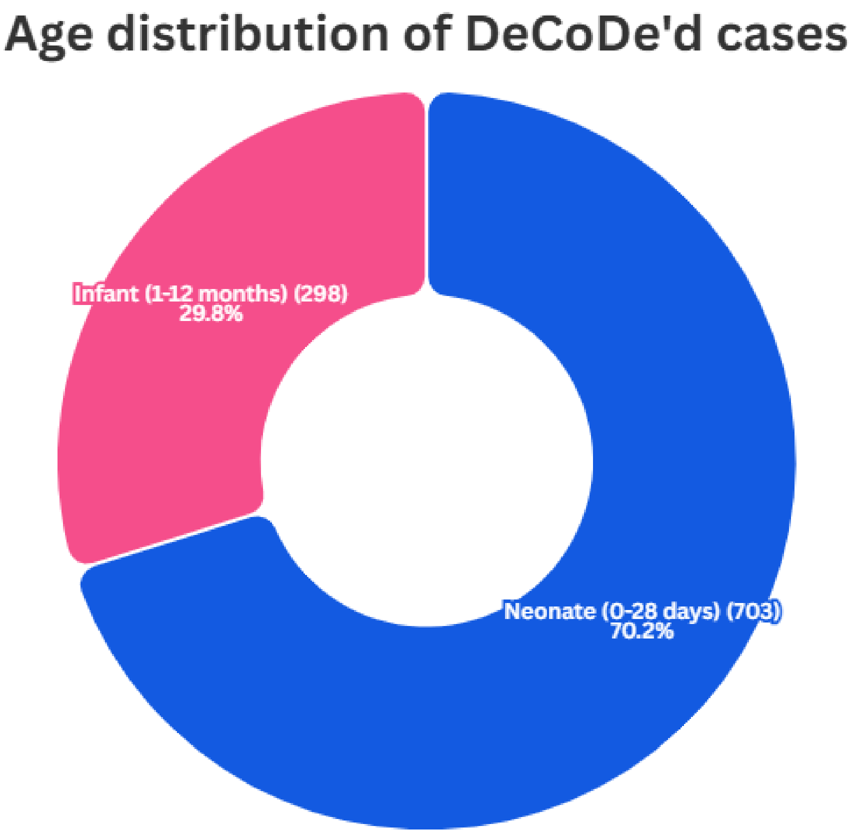
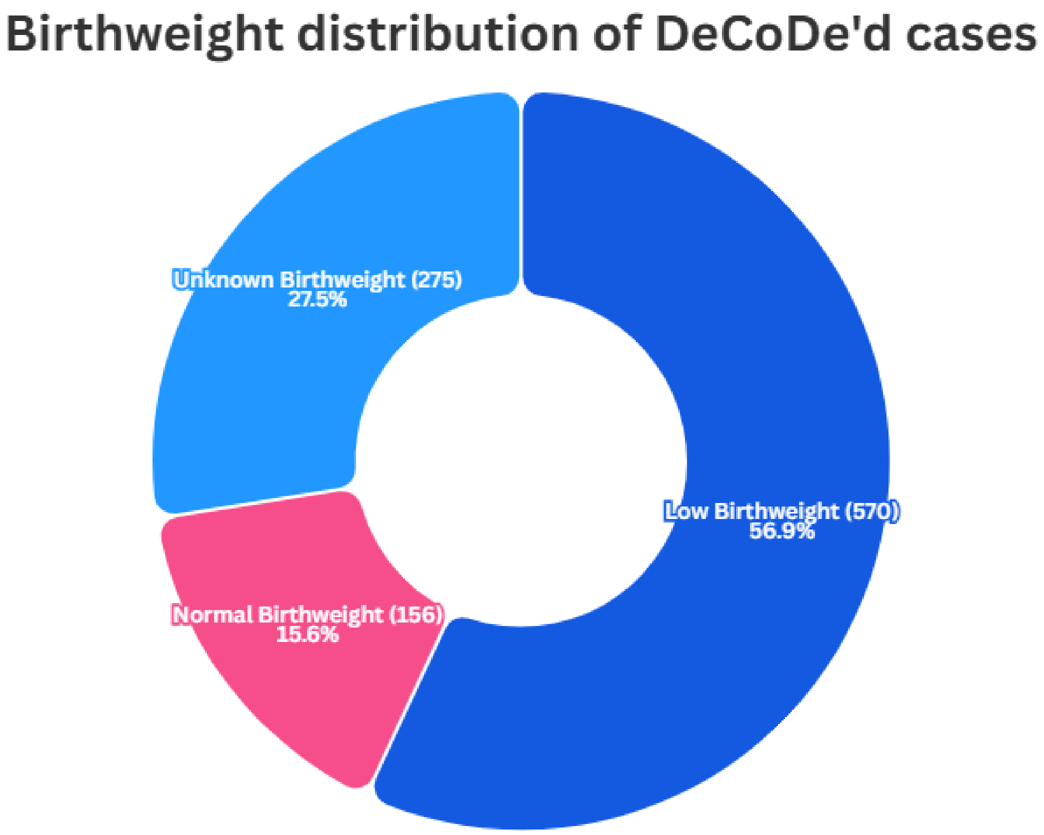
Age and Birthweight Distribution in Deaths at 0-12 Months





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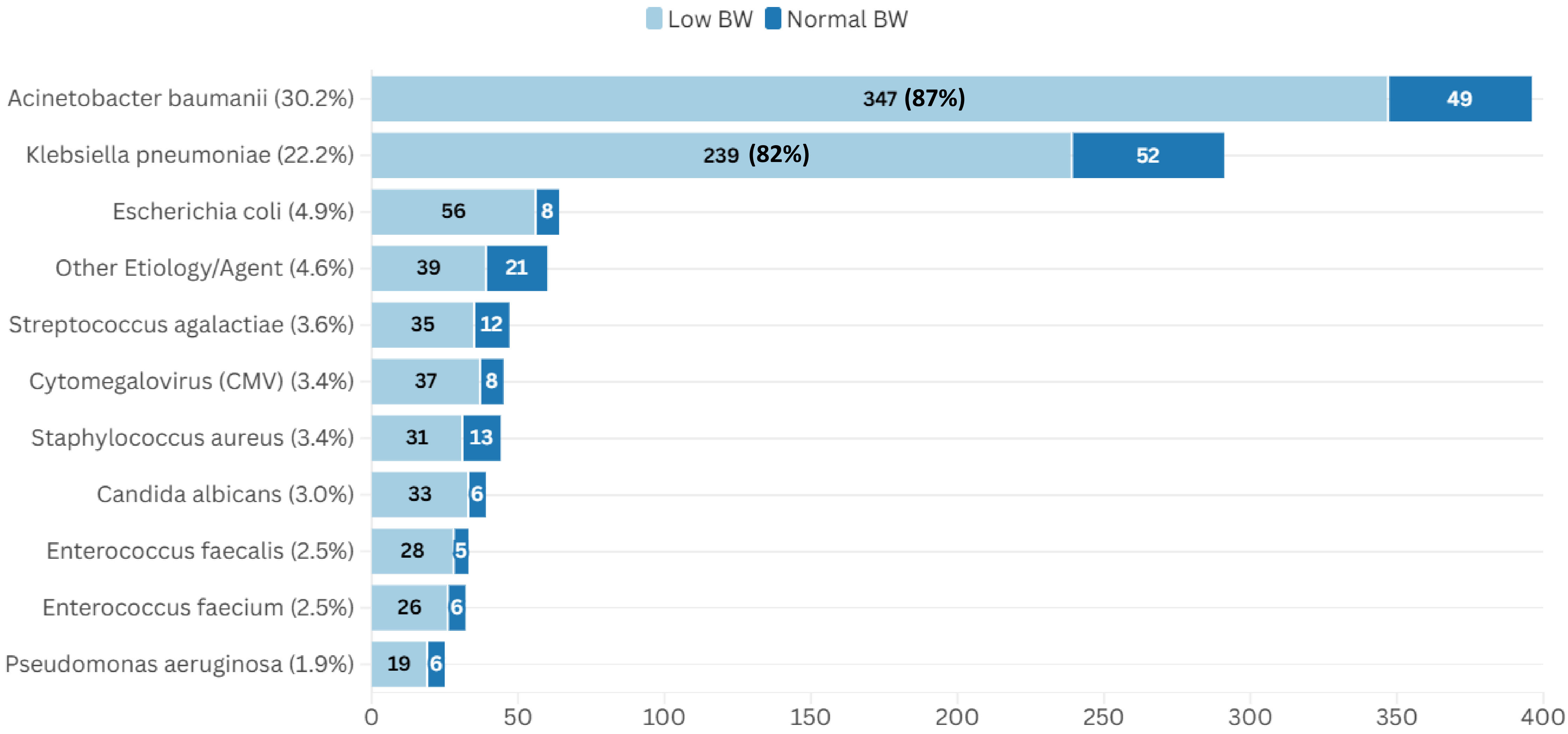
Organisms in Causal Pathway by Birthweight (0-12 months) (n=1312 Organisms in 726 Cases)



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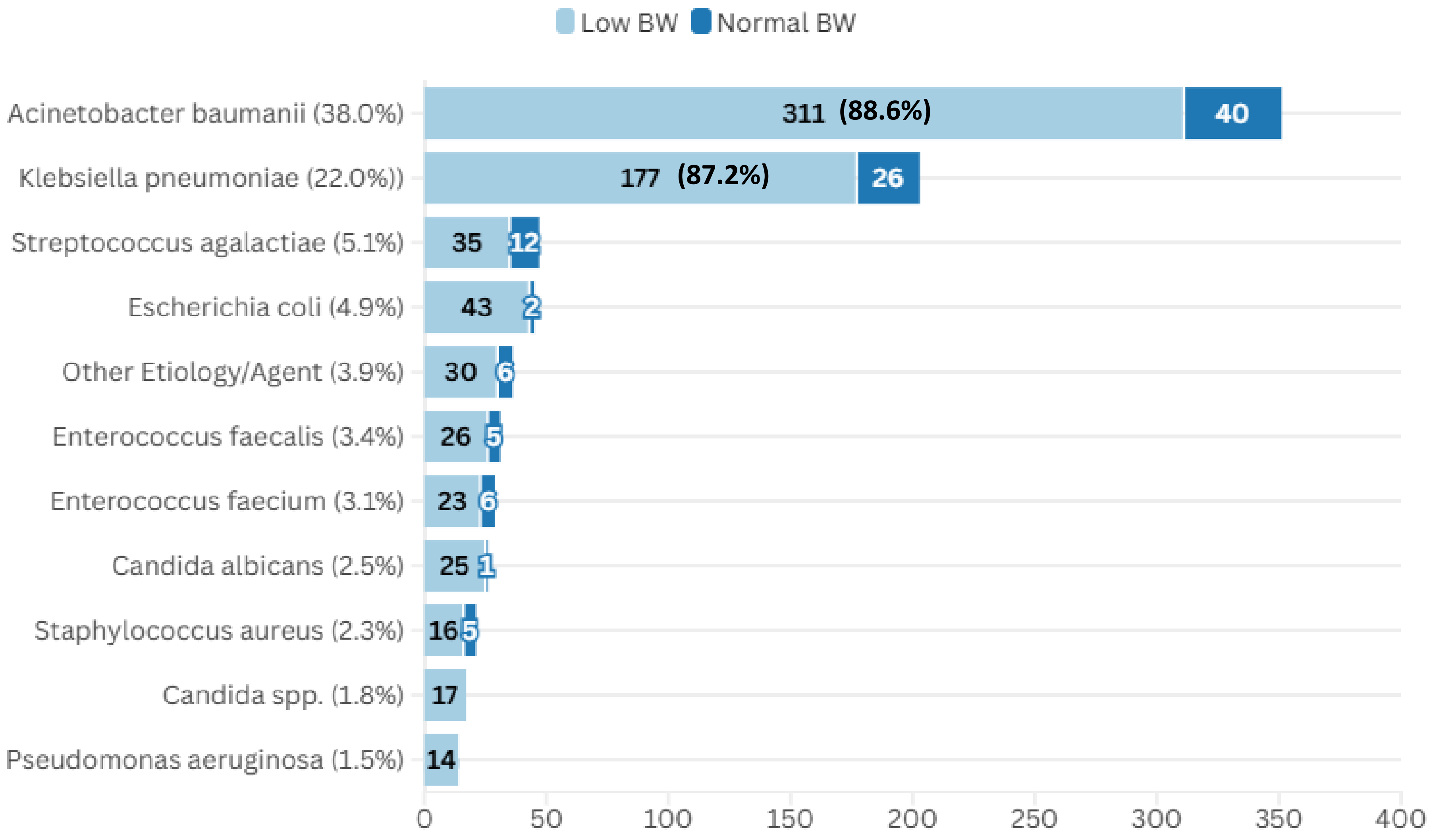
Organisms in Causal Pathway in Neonates by Birthweight (n=923 Organisms in 602 Cases)



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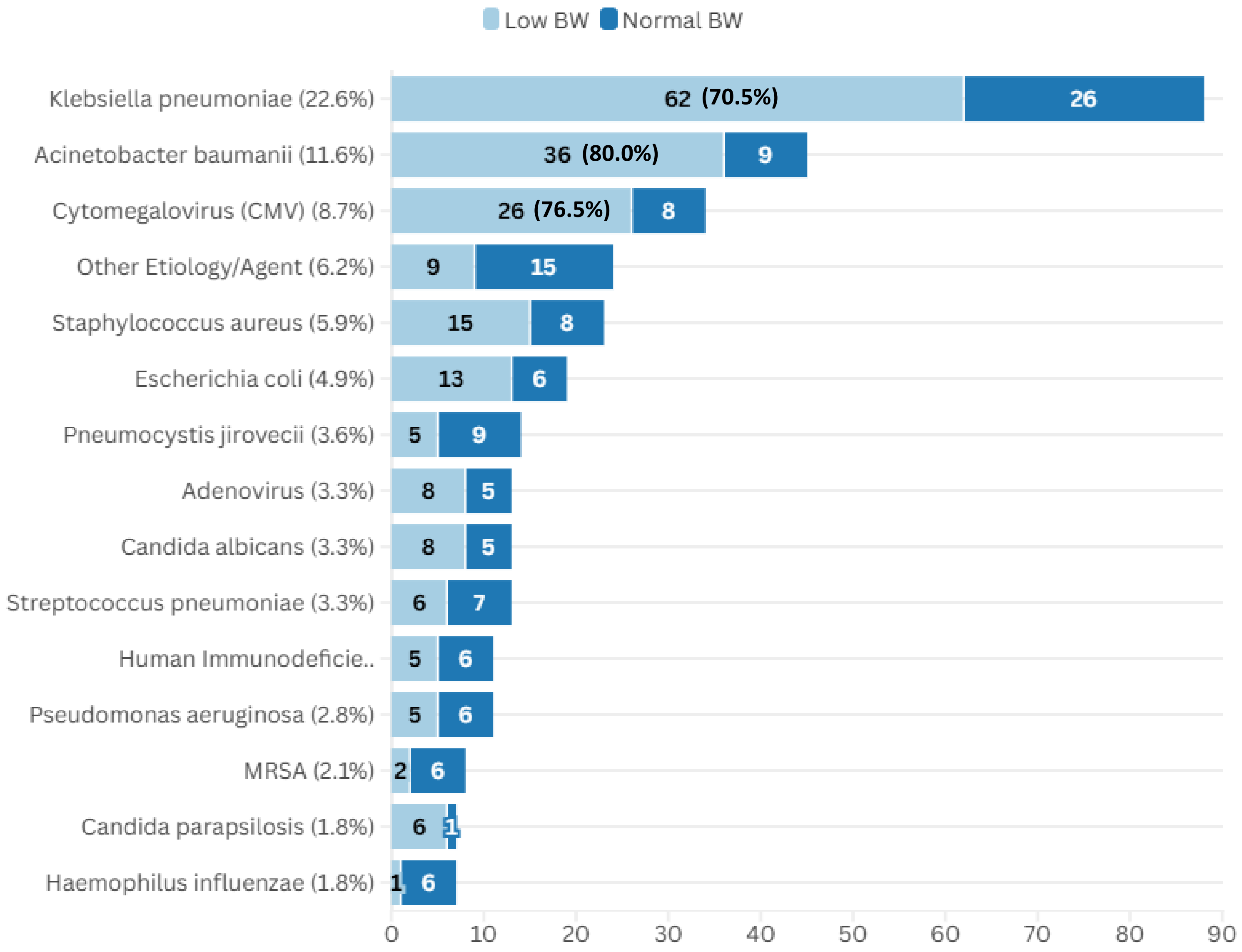
Organisms in Causal Pathway in Infants (1-12 months) by Birthweight (n=389 Organisms in 124 Cases)



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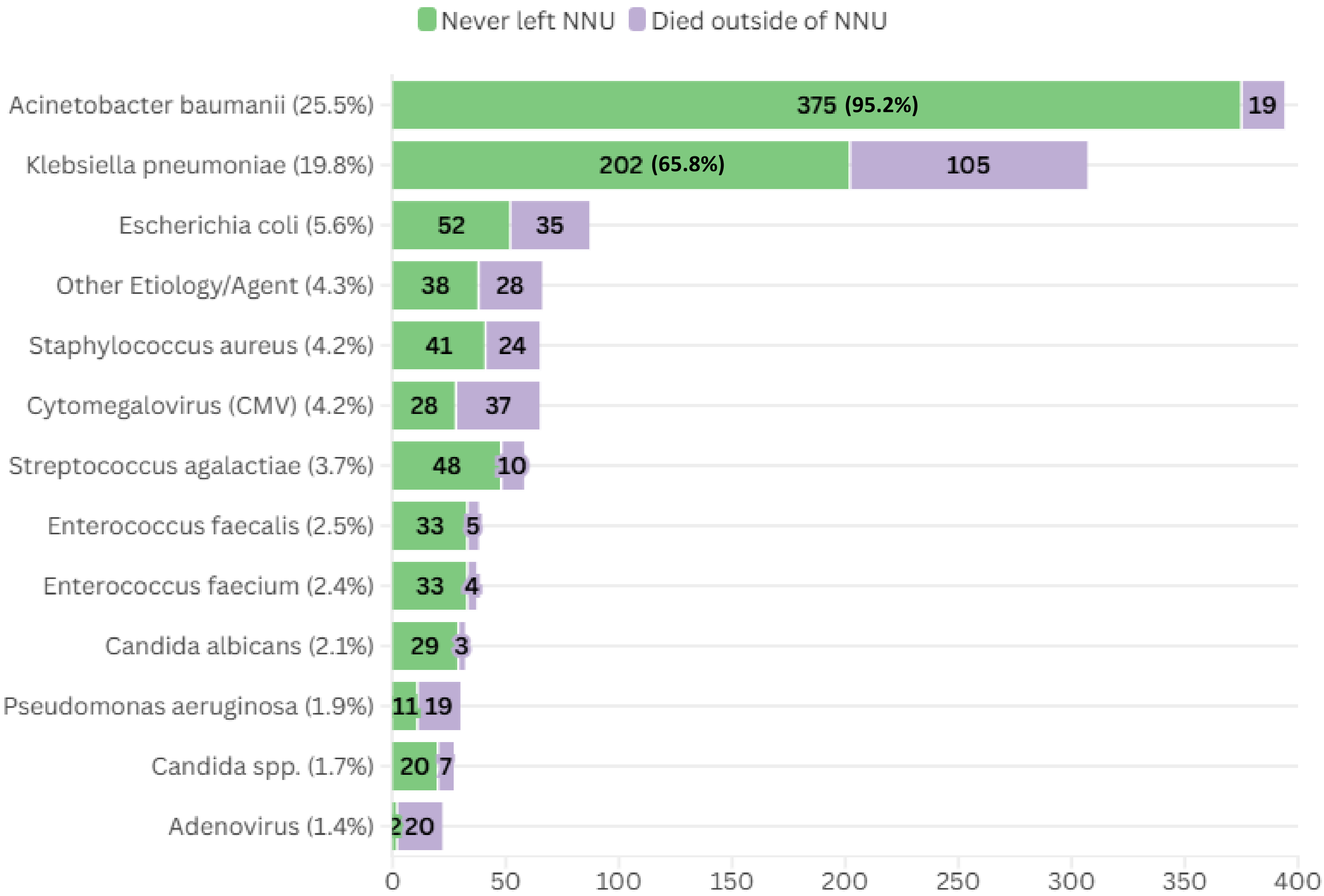
Organisms for Infants (0-12 months) that Died in the NNU (n=1016 Organisms in 651 Cases) versus those that Died Outside of the NNU* (n=531 Organisms in 350 Cases)



*Unclear if those that died outside of the NNU were ever exposed to the NNU or not (analysis in progress)

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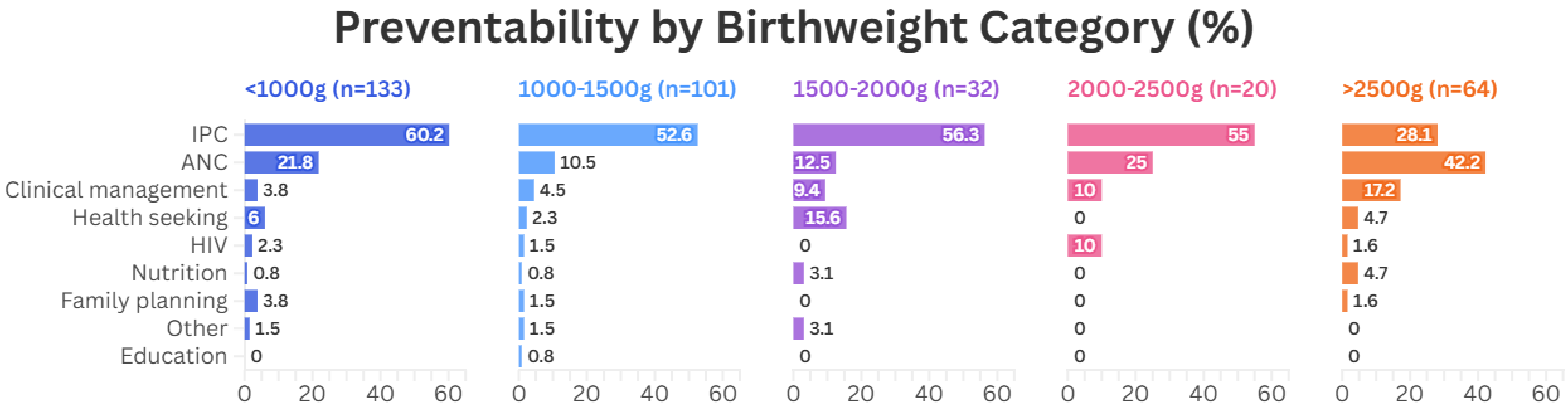
Preventability

Neonates



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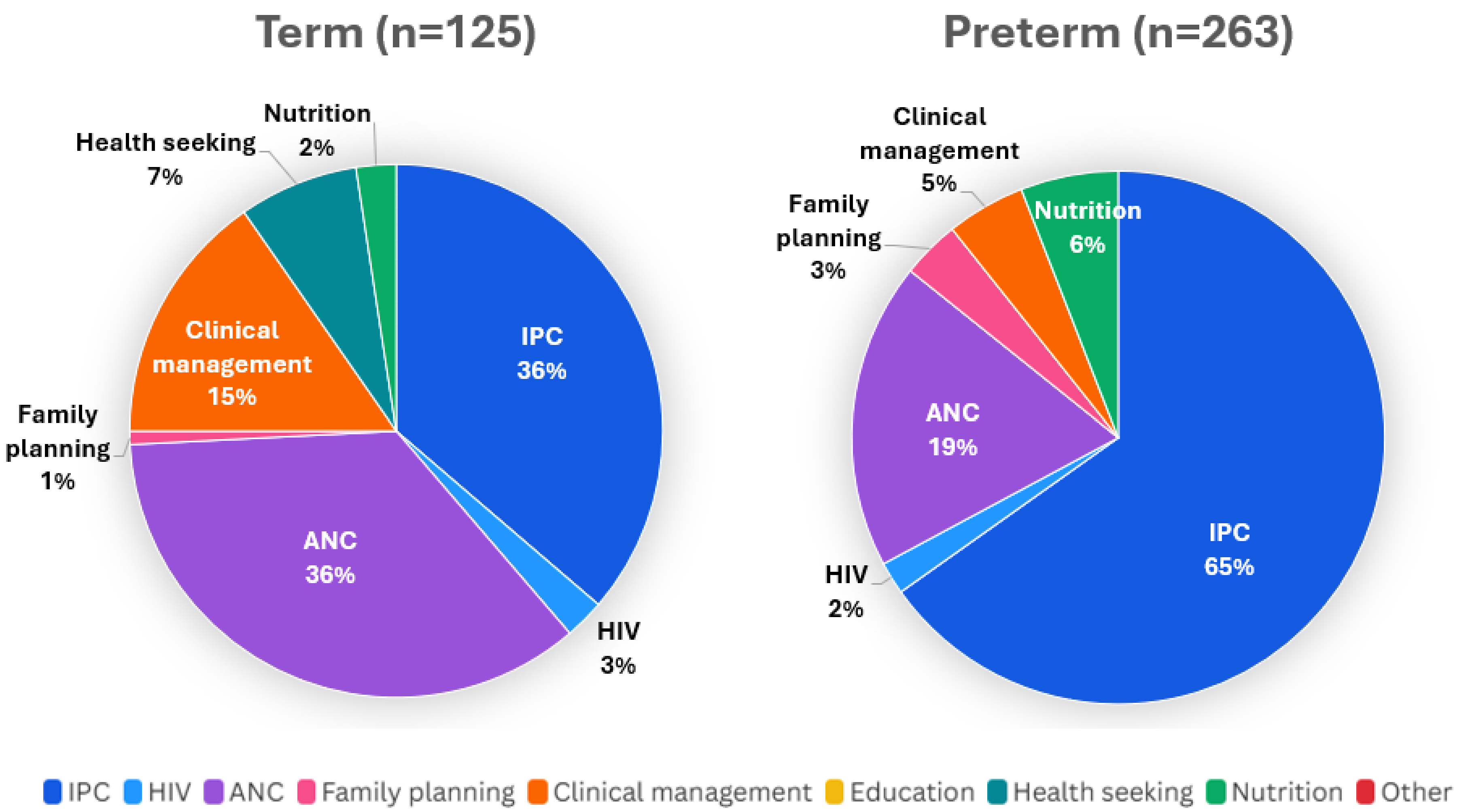
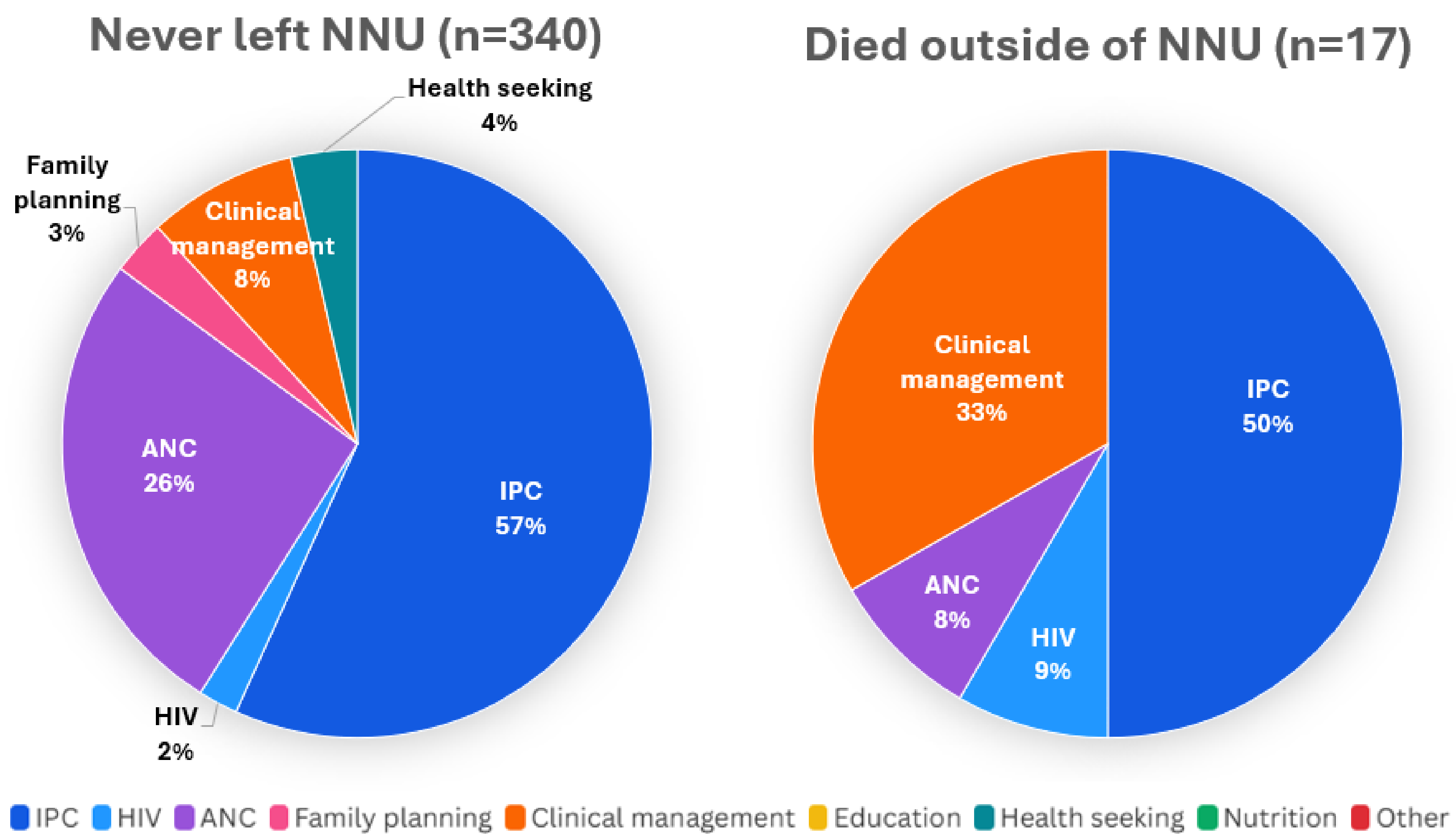
Neonates: Preventability by Underlying Prematurity



Neonates: Preventability by Death in NNU vs Death Outside NNU*



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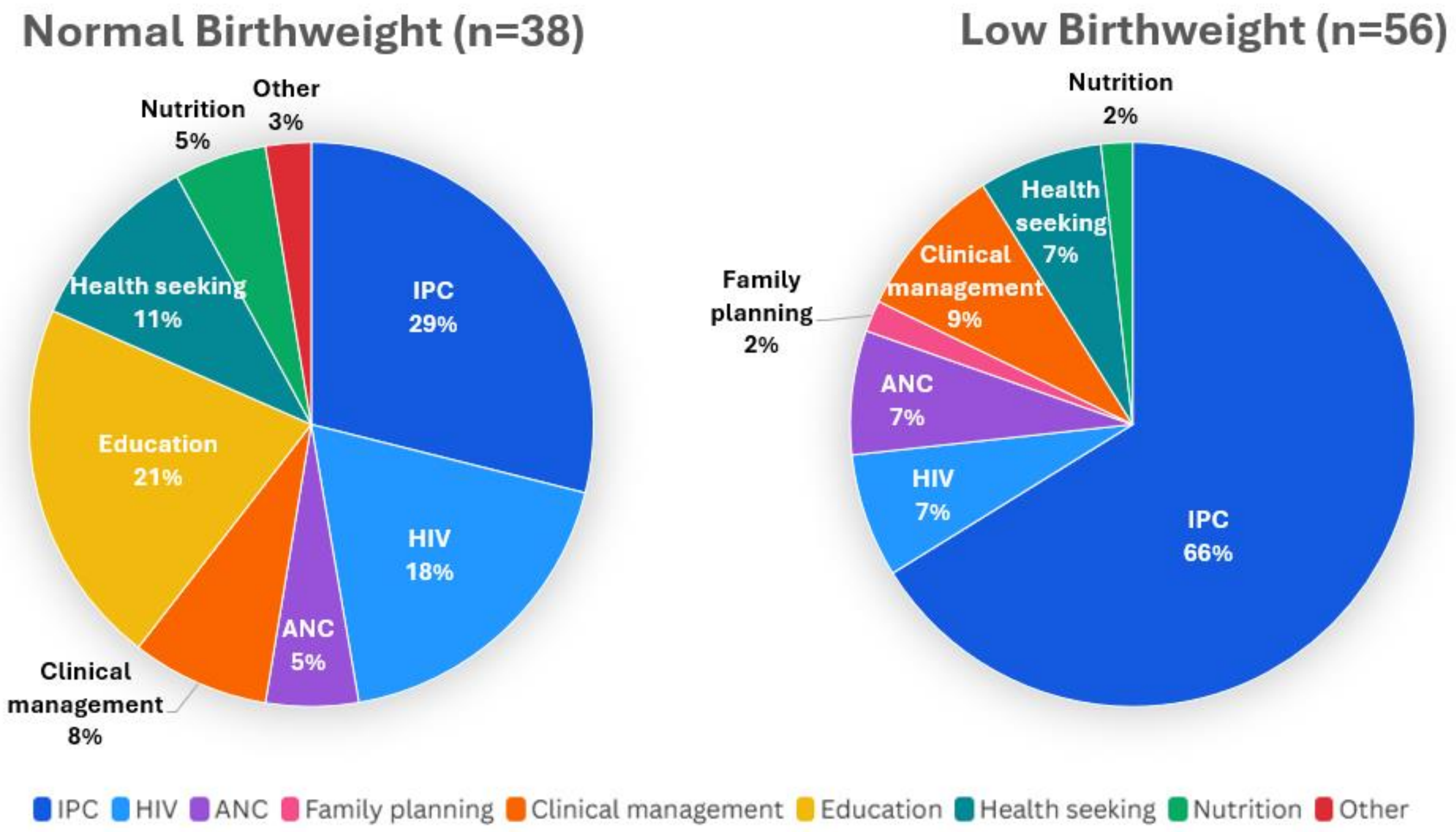
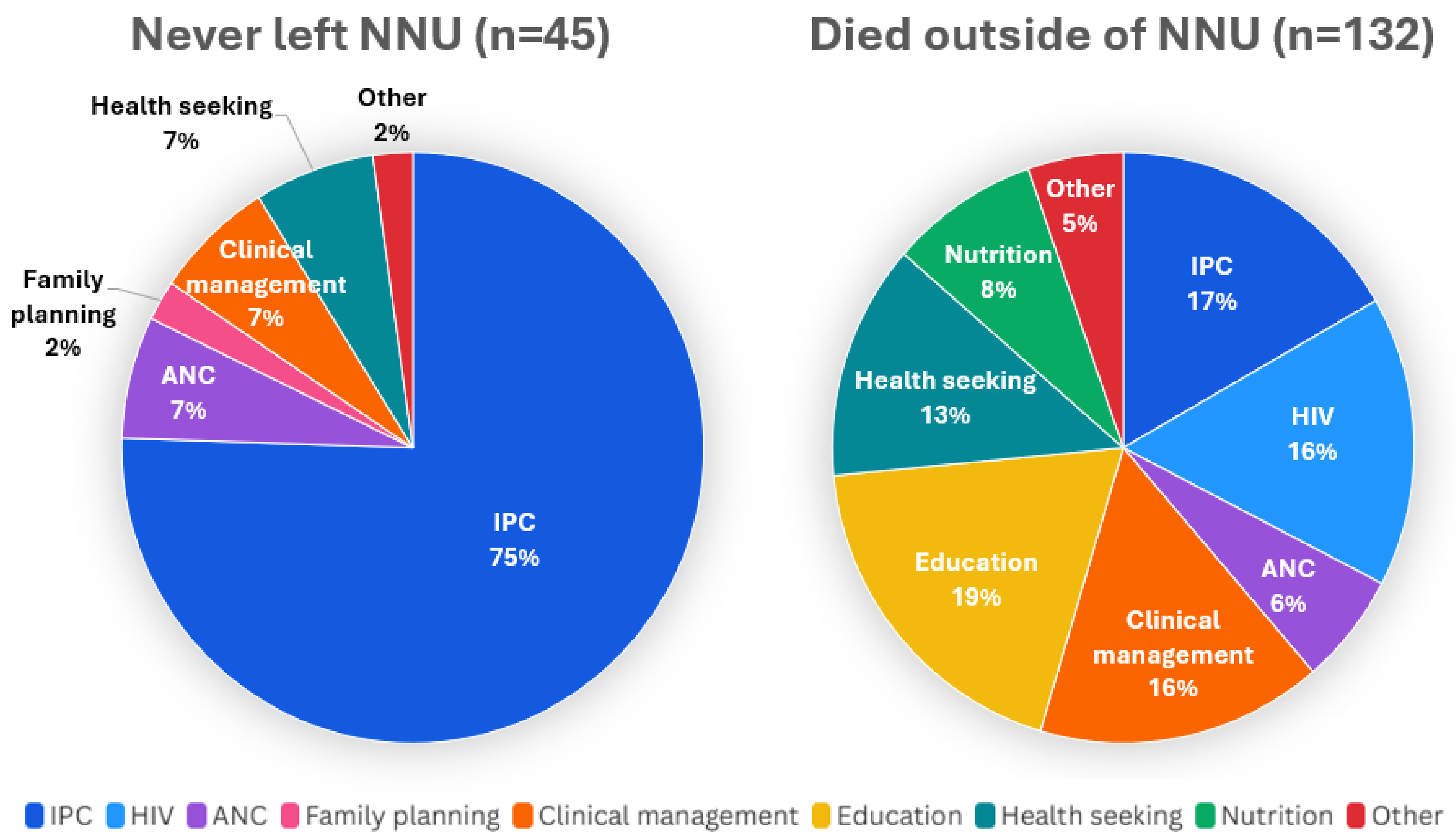
Infants: Preventability by Birthweight



Infants: Preventability by Death in NNU vs Death Outside NNU*



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