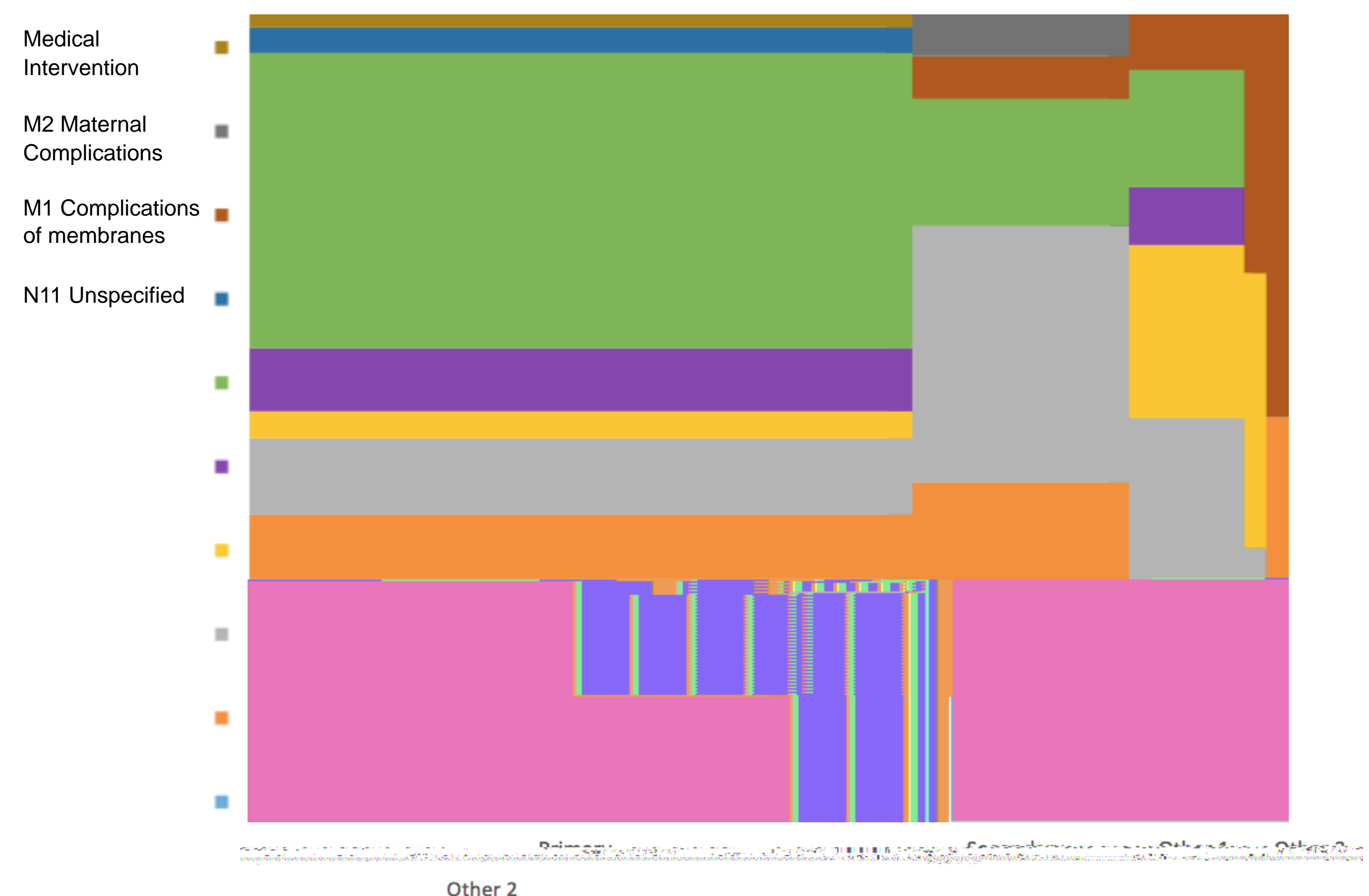


- **Eligible population:** live-birth deliveries to diagnosed women in 1998-2017.
- **Neonatal death was defined as a live-born baby, who died before 28 completed days after birth**
- Estimated **yearly incidence of NND** was reported for 1998-2017 and causes of NND coded using **WHO ICD-PM classification**.
- **Risk factor analysis used multivariable logistic regression**, including delivery year, maternal origin, maternal age, delivery CD4 count and viral load, antiretroviral therapy (ART) at conception, injecting drug use (IDU) and infant sex.
- A second analysis restricted to the years 2007-2017 was carried out, reflecting a time of improved reporting of delivery viral load.

- **20,012 live-born infants born to 12,684 WLWH** in 1998-2017.
- Median **maternal age** at delivery was 31 years (IQR 27-35); other **maternal characteristics** are shown in Table 1.
- The overall NND rate was **4.1 per 1000 live-births** (95% CI, 3.2-5.0), compared to an average of 3.24 in the general population (1998-2016).

Characteristic	Value
Maternal age at delivery (median)	31 years (IQR 27-35)
Other maternal characteristics	See Table 1



#### Risk factor analysis 1998-2017

- Only factor significantly associated with NND risk was ART at conception
  - Adjusted odds ratio (AOR) 0.57 (95% CI 0.30-0.99)

#### Restricted analysis (including delivery viral load 2007-2017)

- Delivery year (AOR 1.18 [95% CI 1.03-1.34] per 1 year increase) and detectable viral load (i.e. >50 copies/ml) (AOR 8.14 [95% CI 3.46-19.17] vs undetectable) were associated with increased NND risk
- Other AORs (all non statistically significant)
  - Maternal age 40 vs 24-39 years = 1.40 (95% CI 0.54-3.58)
  - Maternal IDU vs no IDU = 2.97 (95% CI 0.78-11.3)
  - CD4 <350 cells/mm<sup>3</sup> vs 350 = 1.47 (95% CI 0.96-2.69)

- WLWH had a **higher NND rate than the general population**
- **Detectable viral load** and **increasing calendar year** were associated with increased risk and **ART use at conception** with decreased risk of NND
- Main cause of NND was **preterm delivery**