

Unadjusted Effects of Risk Factors on Binary Stunting Outcomes

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2018-06-14

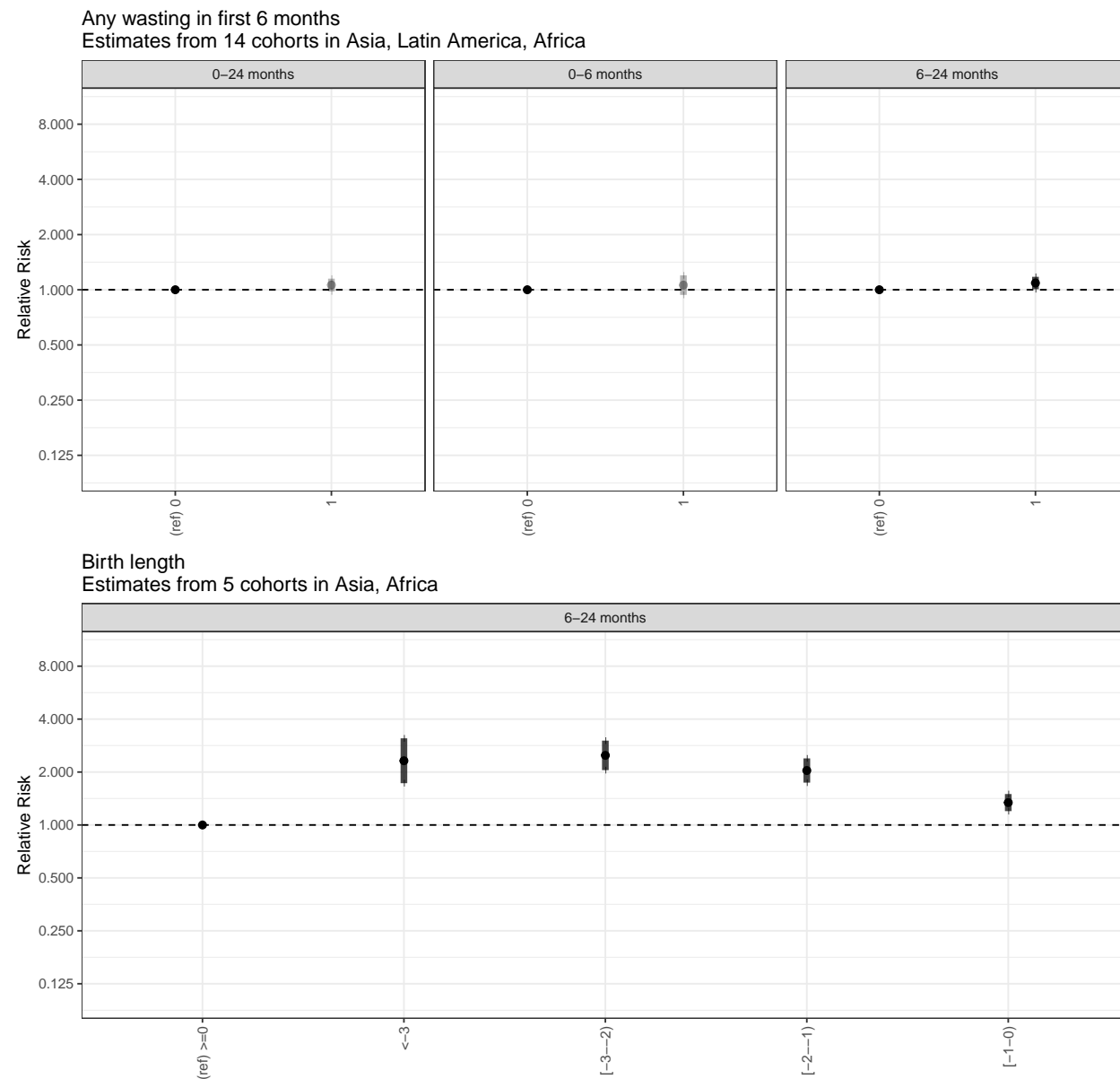
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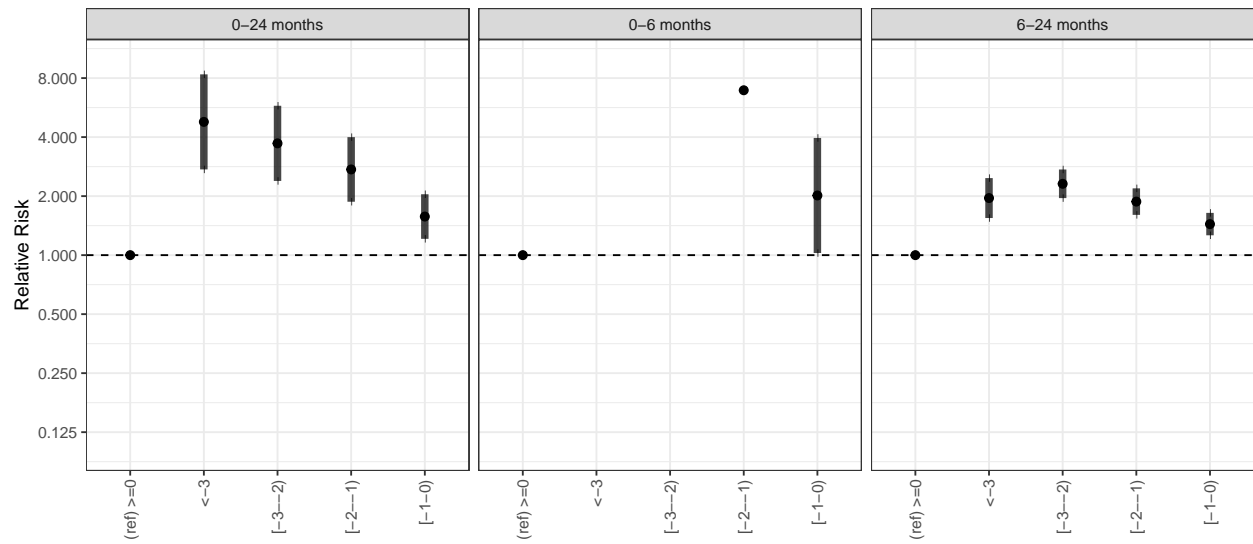
Relative risk pooled across cohorts

Cumulative incidence of stunting from birth to 24 months

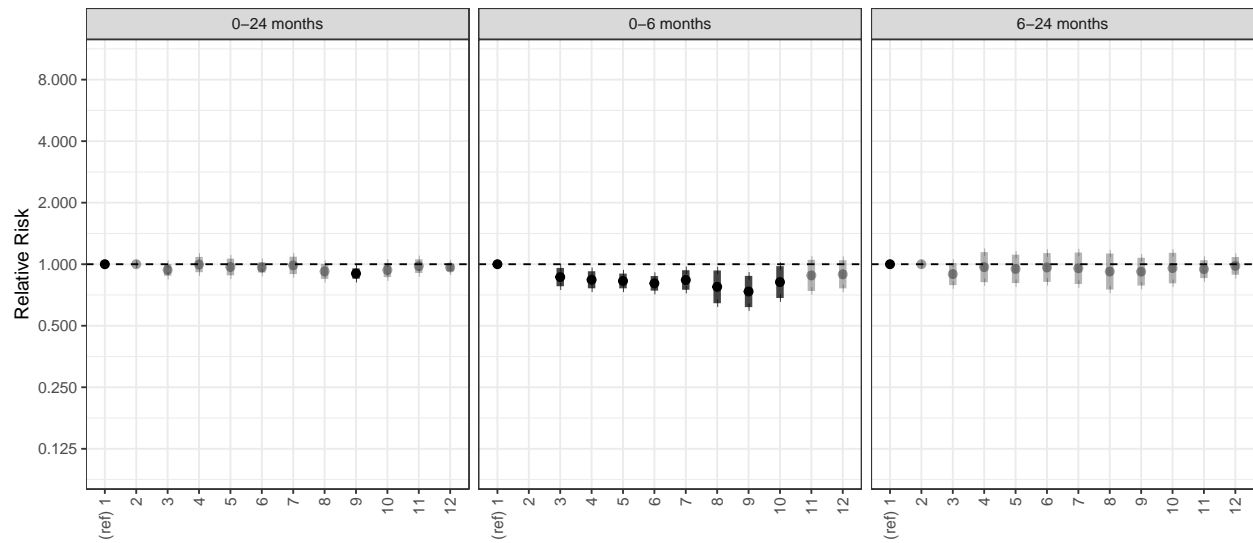
Child characteristics



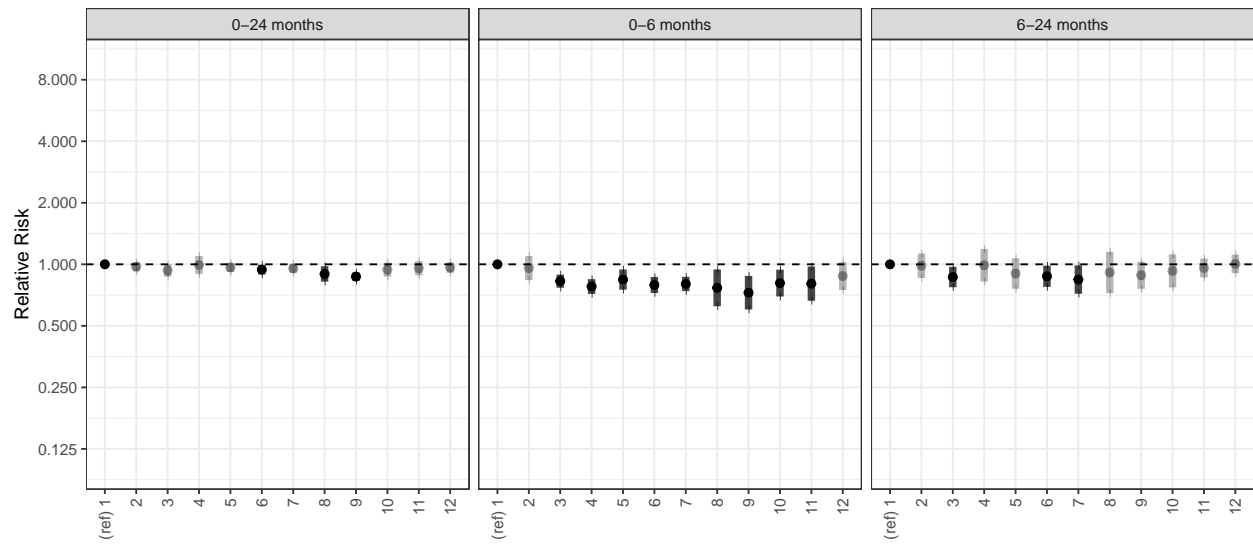
Birthweight
Estimates from 8 cohorts in Asia, Africa, Europe



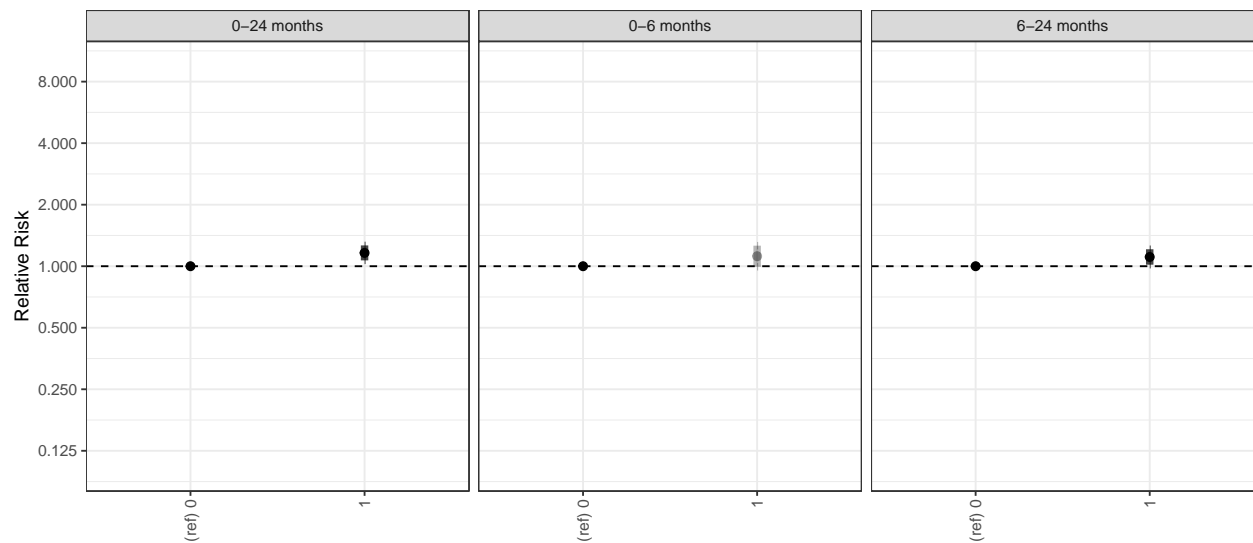
Calendar month of birth
Estimates from 15 cohorts in Africa, Latin America, Asia, Europe



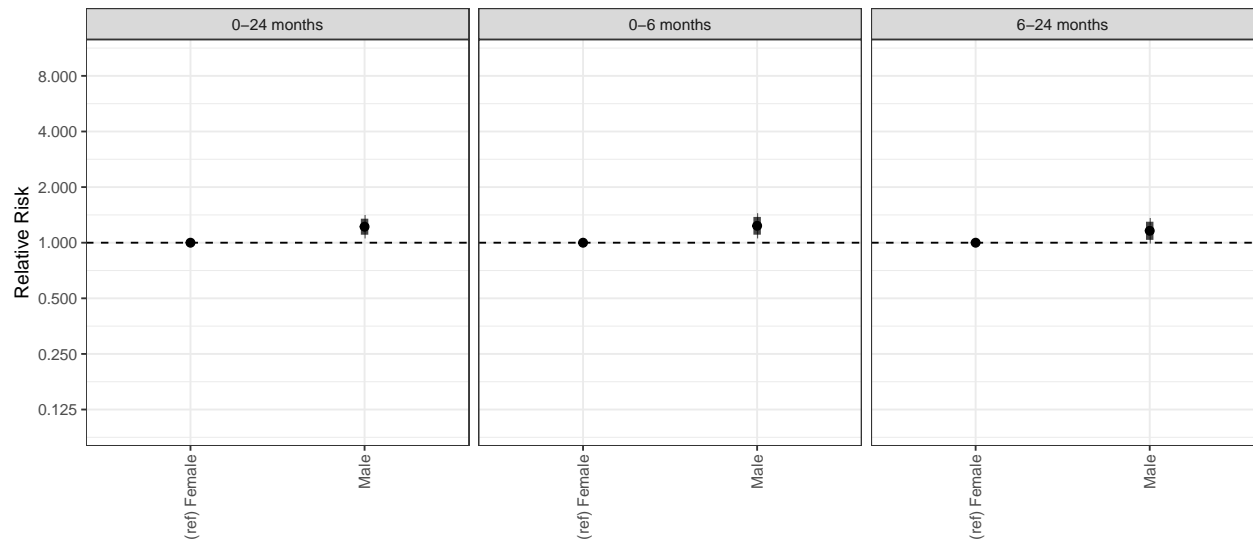
Calendar month of measurement
Estimates from 14 cohorts in Africa, Latin America, Asia, Europe



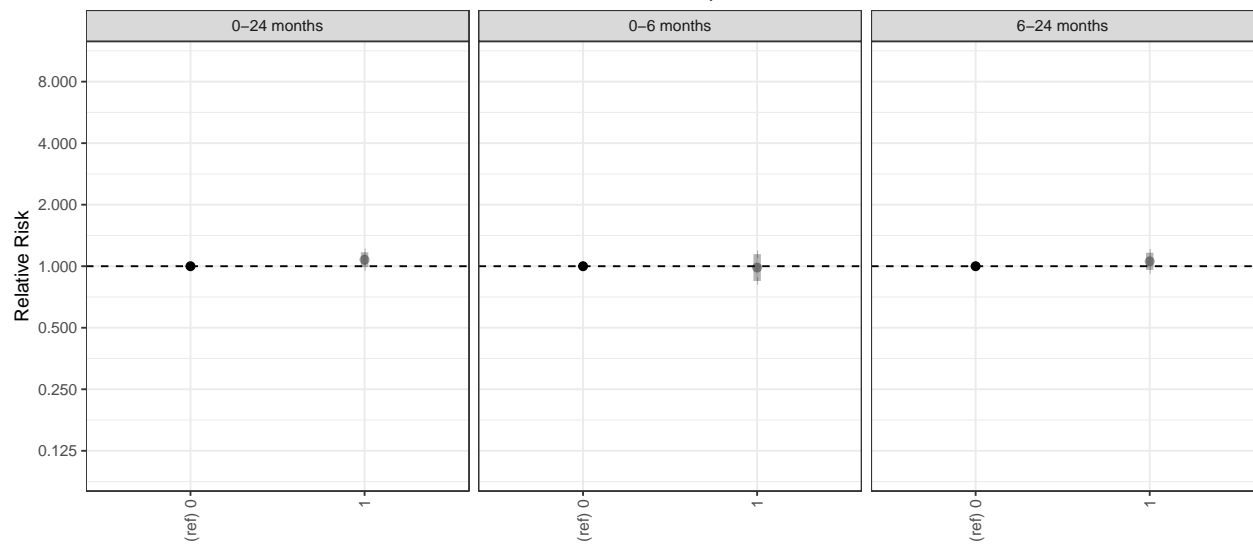
Child delivered at home
Estimates from 10 cohorts in Asia, Africa



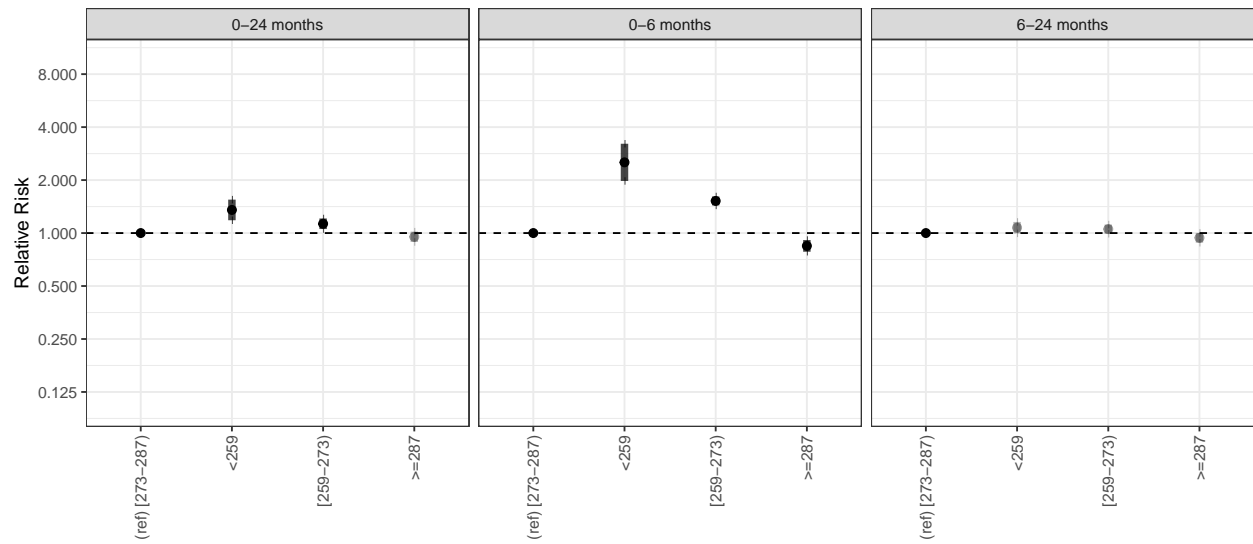
Child's sex
Estimates from 34 cohorts in Asia, Latin America, Africa, Europe



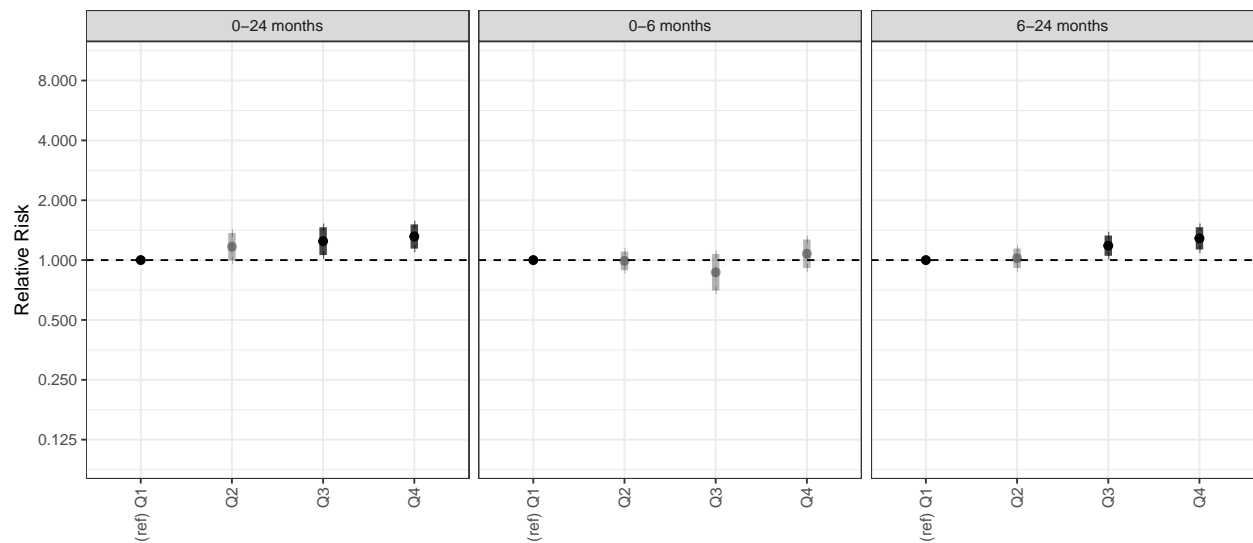
Enrolled wasted
Estimates from 19 cohorts in Africa, Latin America, Asia, Europe



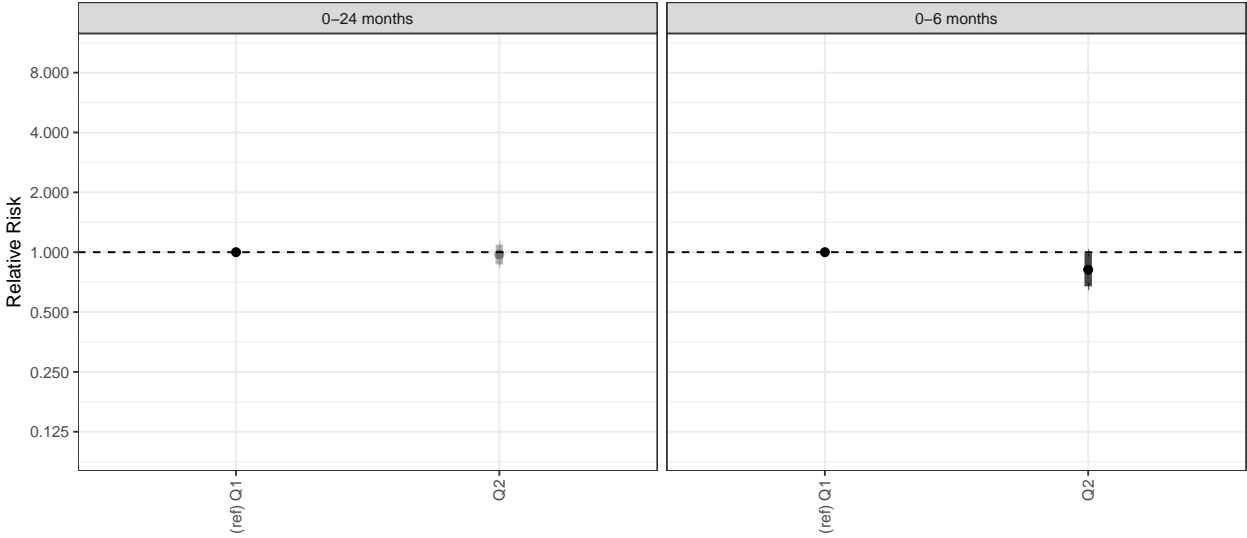
Gestational age at birth in days
Estimates from 8 cohorts in Asia, Latin America, Africa



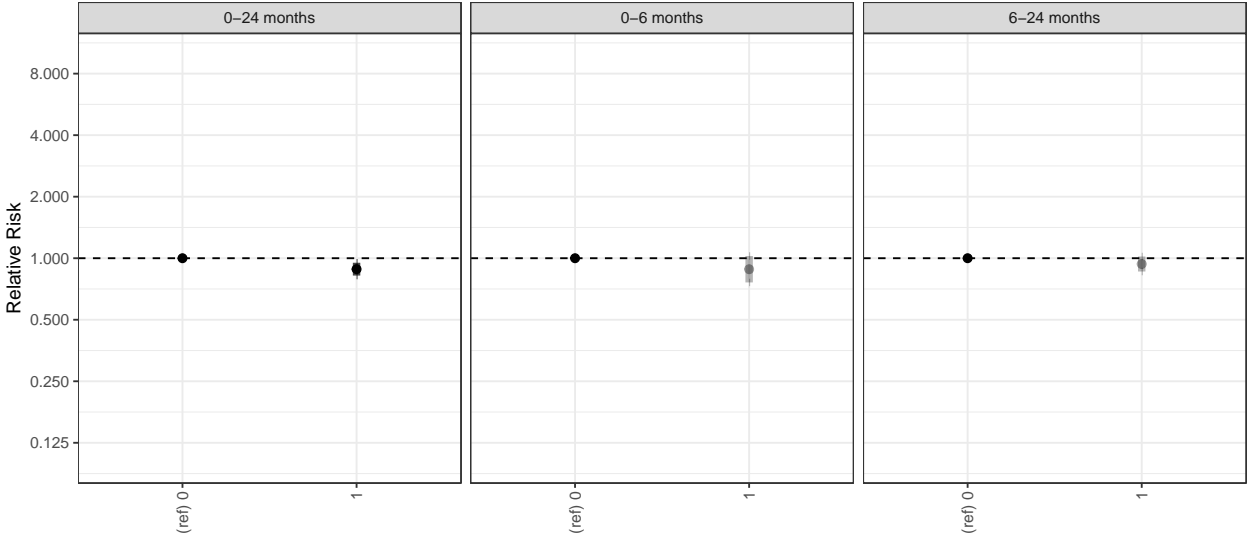
Percent diarrhea in first 24 months
Estimates from 16 cohorts in Asia, Africa, Latin America



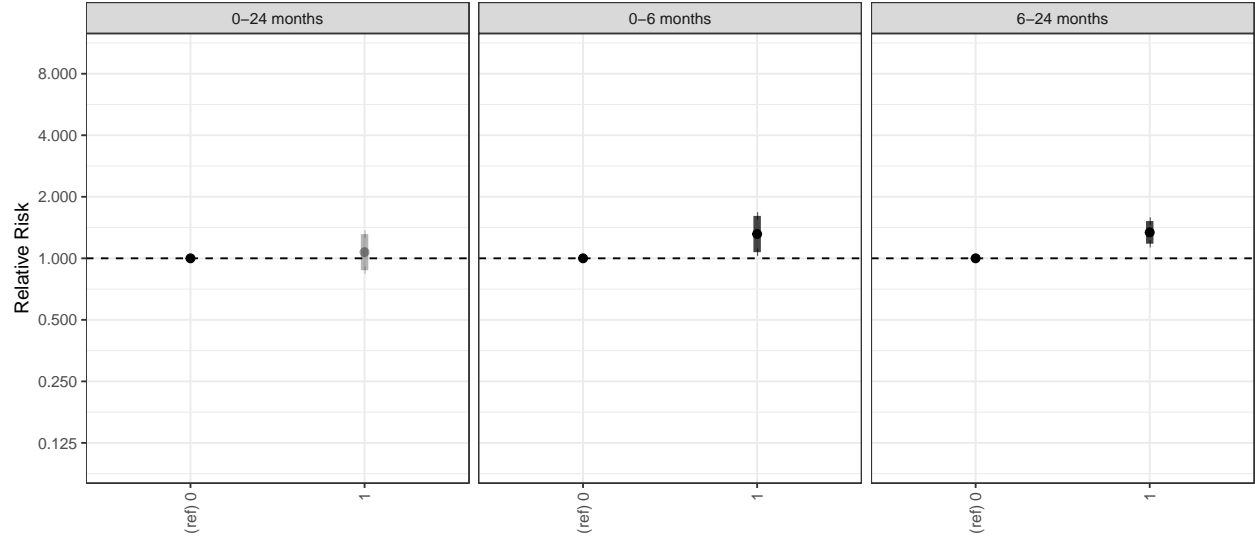
Percent diarrhea in first 6 months
Estimates from 1 cohorts in Asia



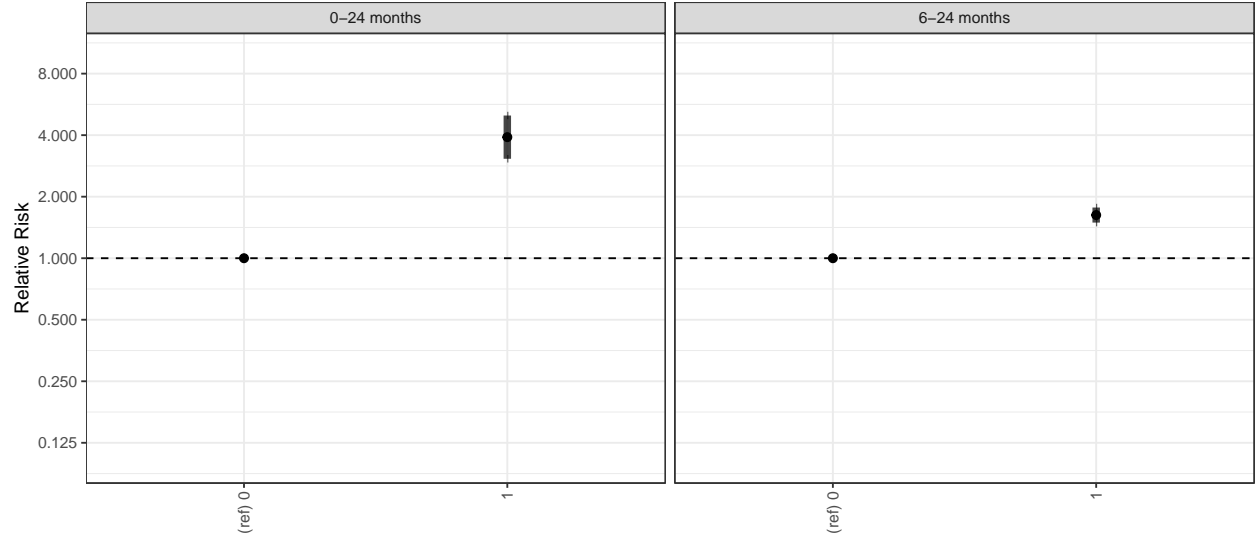
Percent exclusive breastfeeding
Estimates from 13 cohorts in Asia, Africa, Latin America



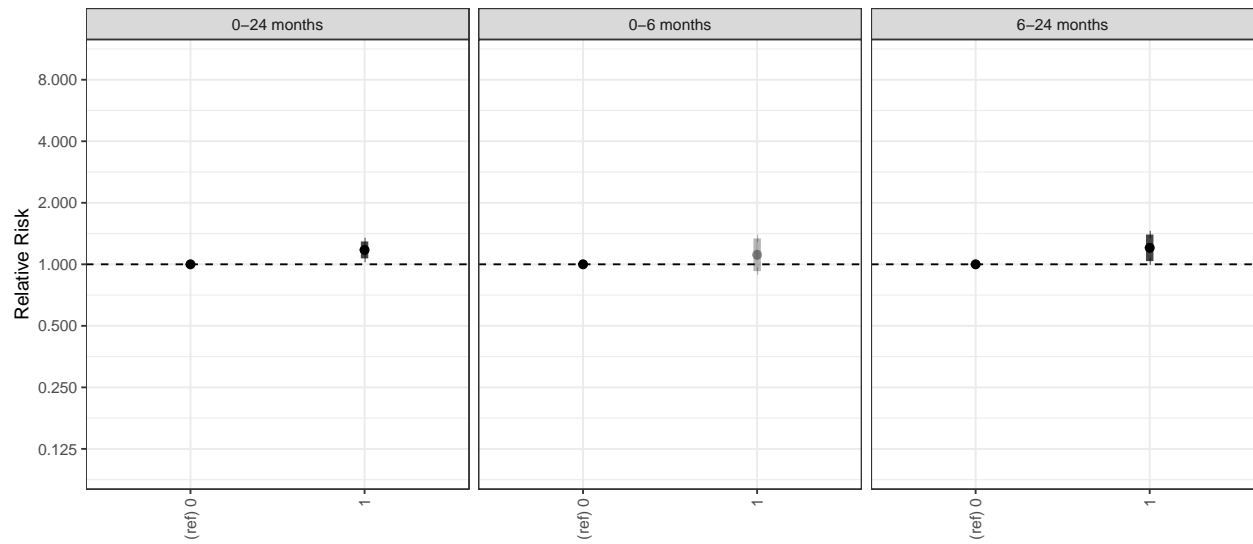
Persistent wasting in first 6 months
Estimates from 7 cohorts in Asia, Africa



Stunted at enrollment
Estimates from 16 cohorts in Africa, Latin America, Asia

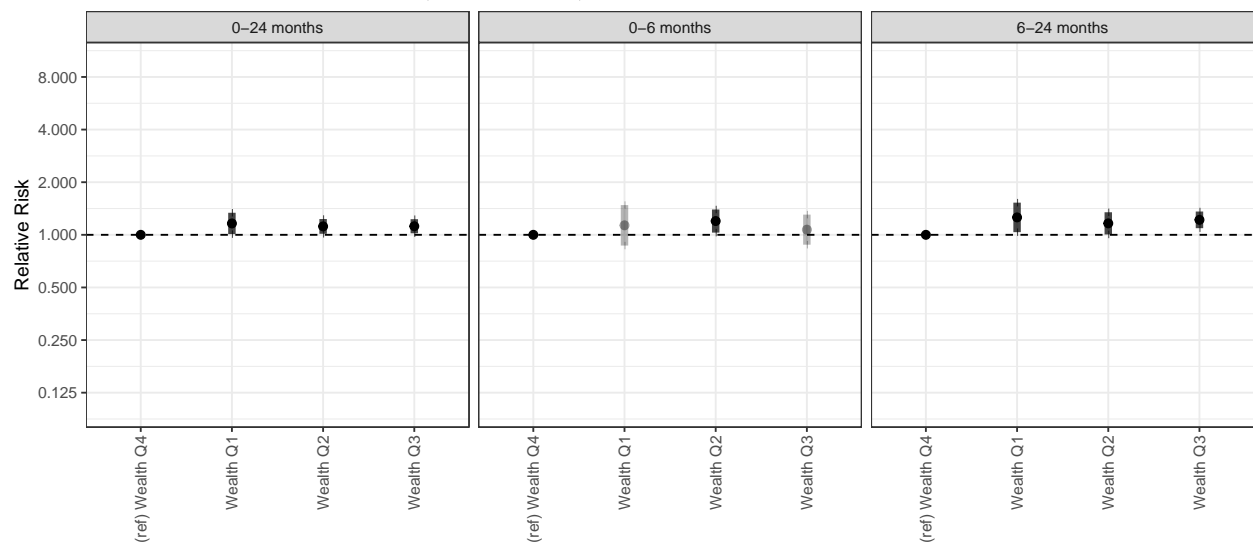


Vaginal delivery
Estimates from 9 cohorts in Asia, Europe, Africa

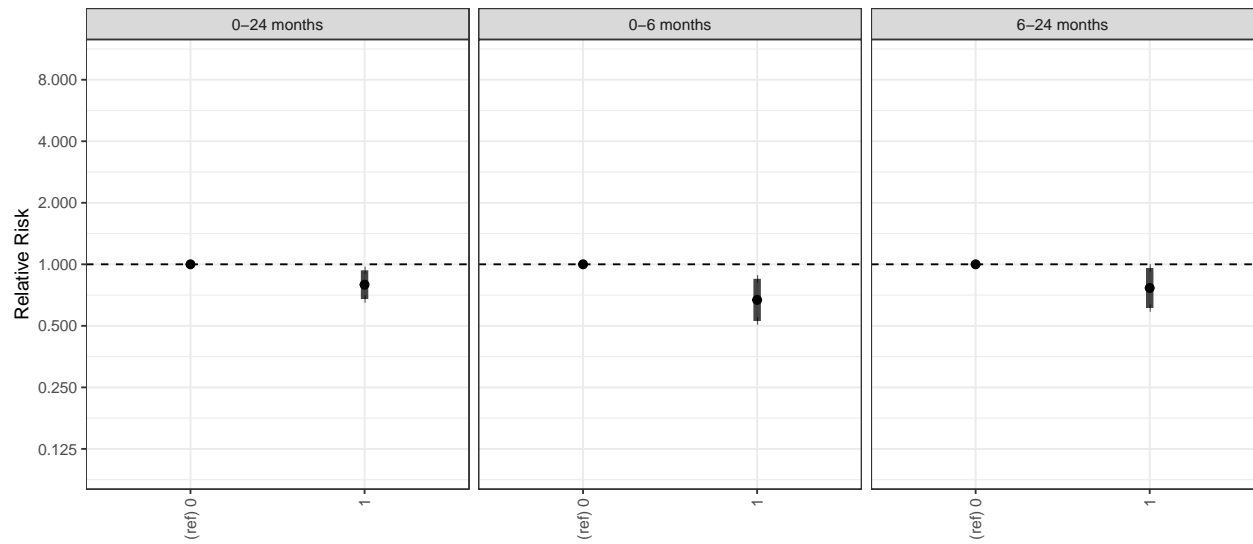


Household characteristics

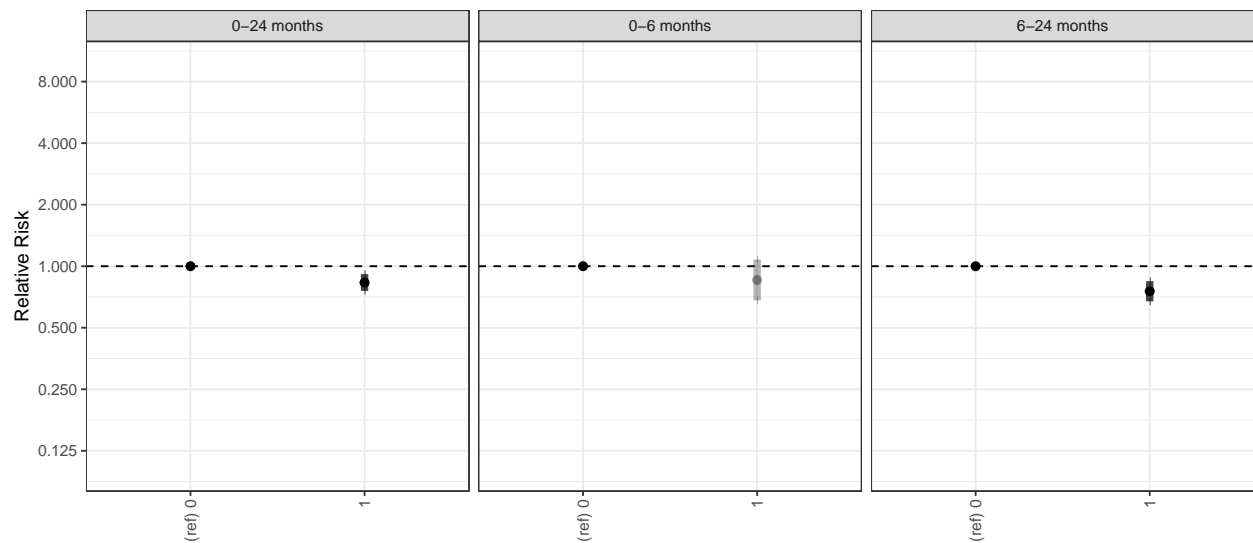
Asset based wealth index
Estimates from 11 cohorts in Asia, Latin America, Africa



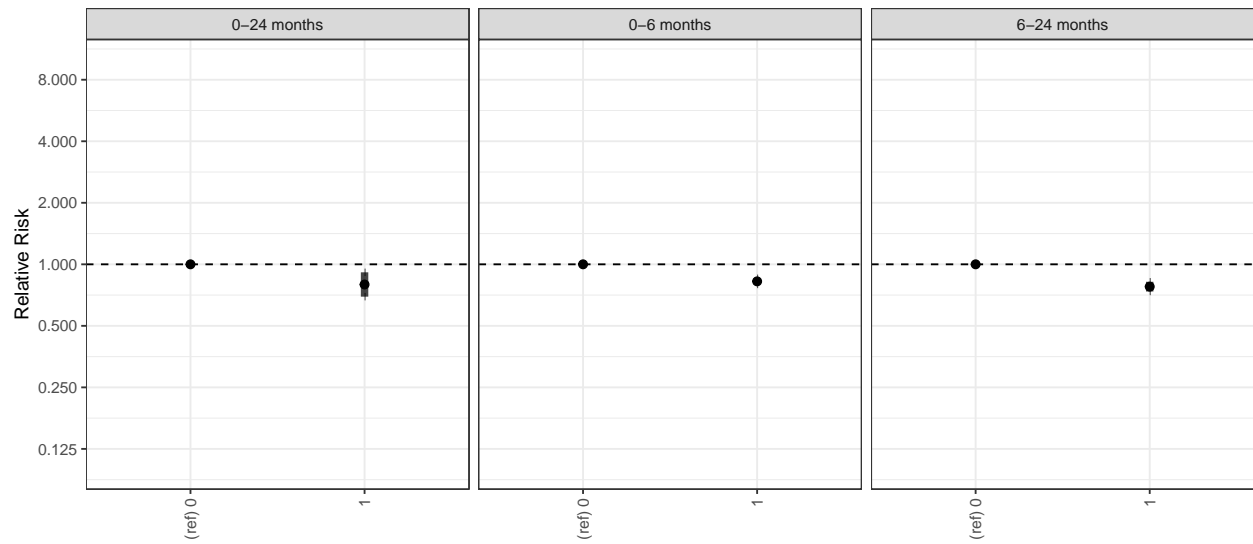
Clean cook
Estimates from 4 cohorts in Asia



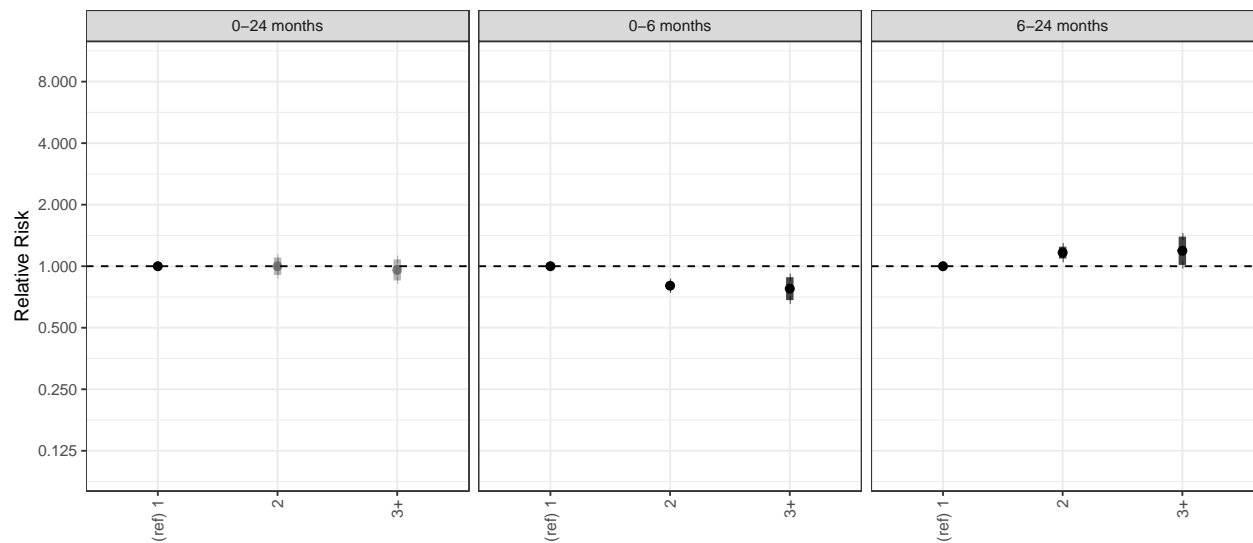
Improved floor
Estimates from 12 cohorts in Asia, Latin America, Africa



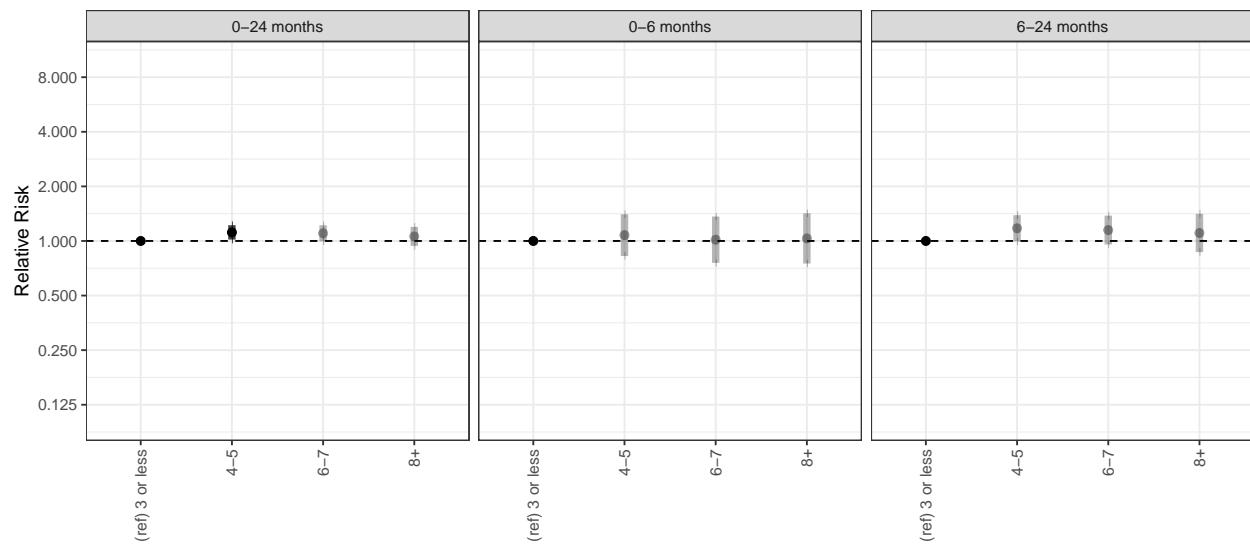
Improved sanitation
Estimates from 12 cohorts in Latin America, Asia



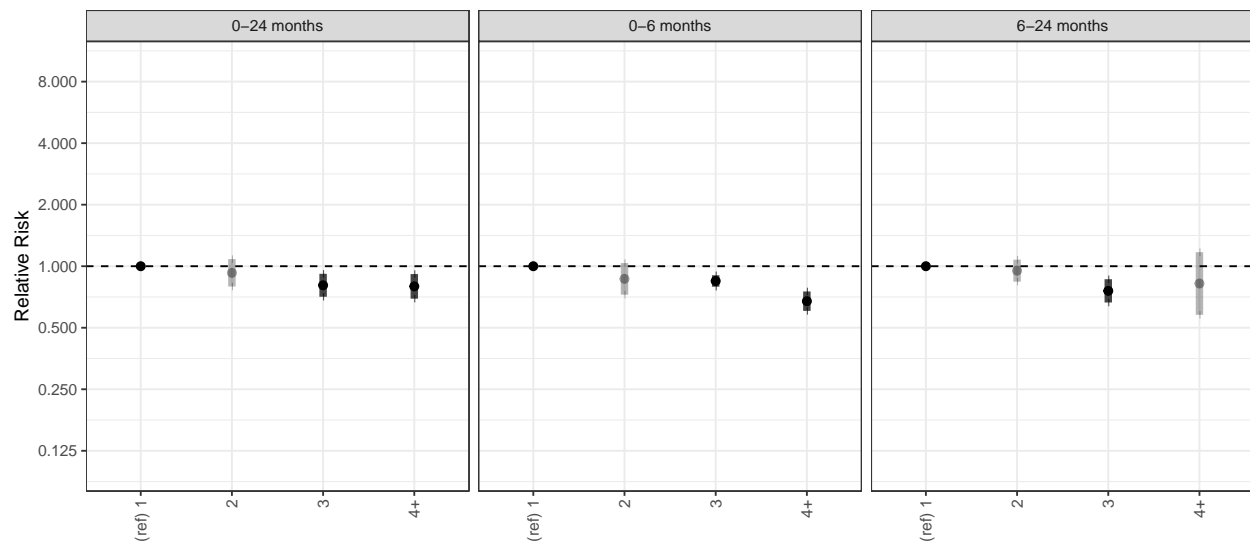
Number of children in the household under 5 years
Estimates from 5 cohorts in Asia, Africa



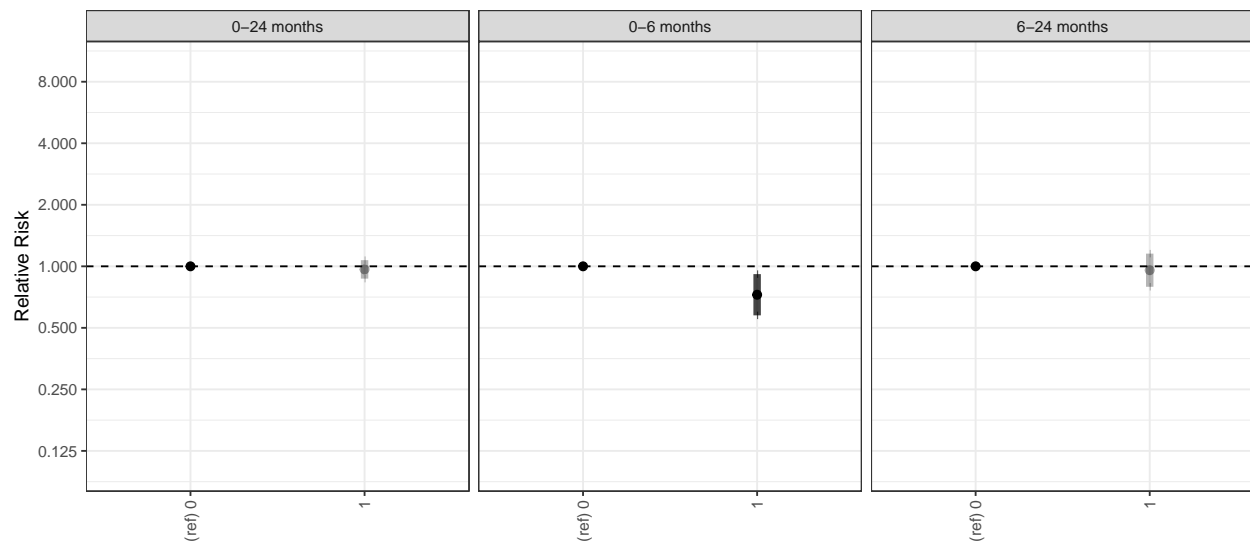
Number of people in the household
Estimates from 6 cohorts in Asia, Africa



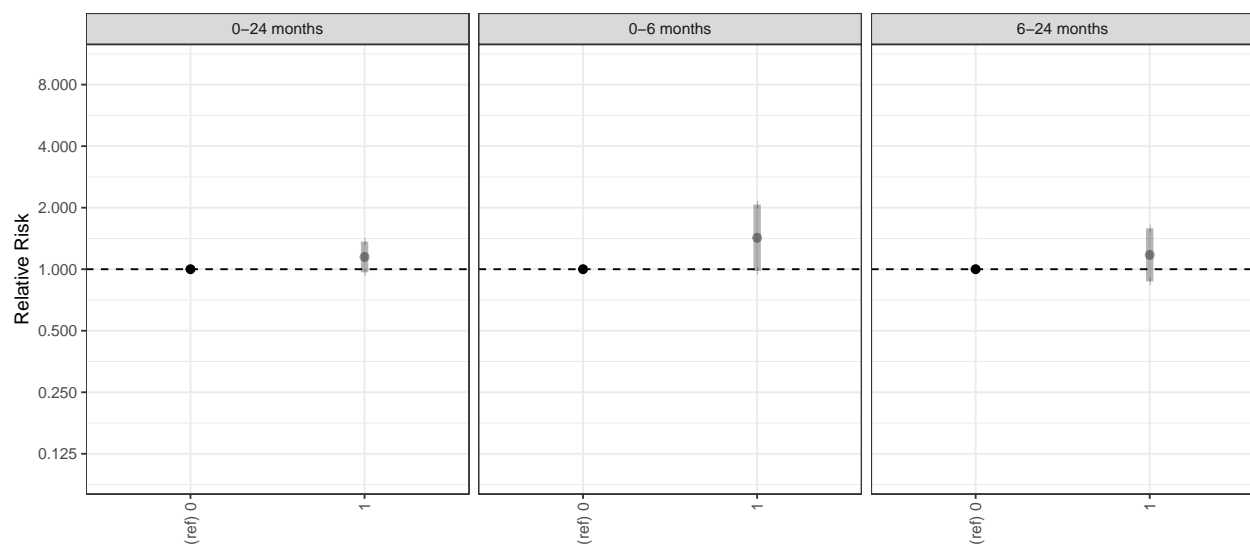
Number of rooms in household
Estimates from 9 cohorts in Asia, Latin America



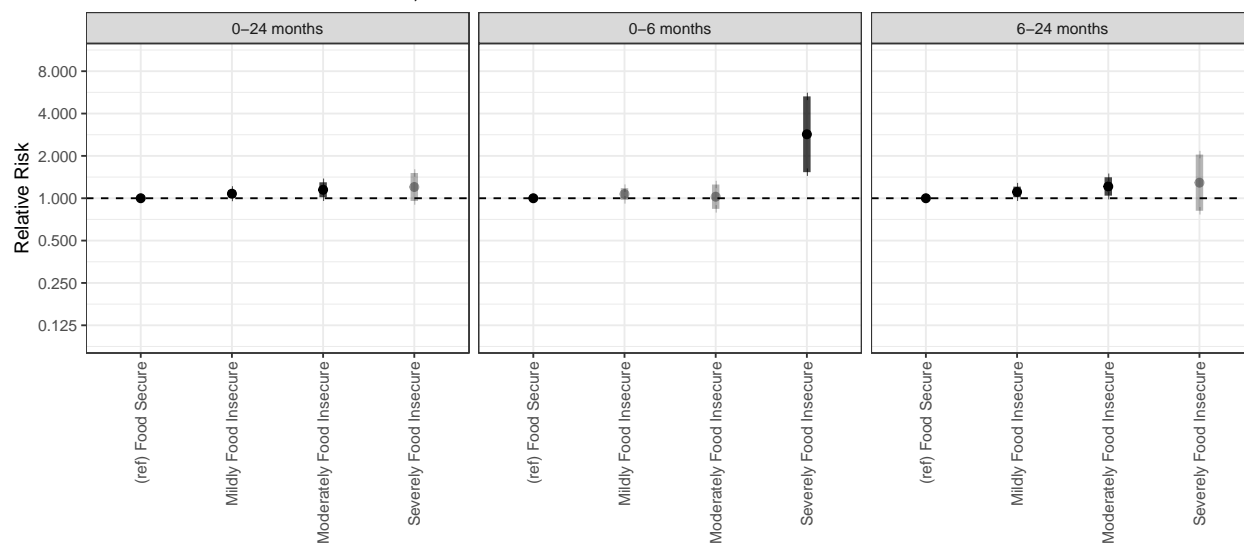
Safe water
Estimates from 4 cohorts in Asia, Africa



Treats water
Estimates from 3 cohorts in Asia

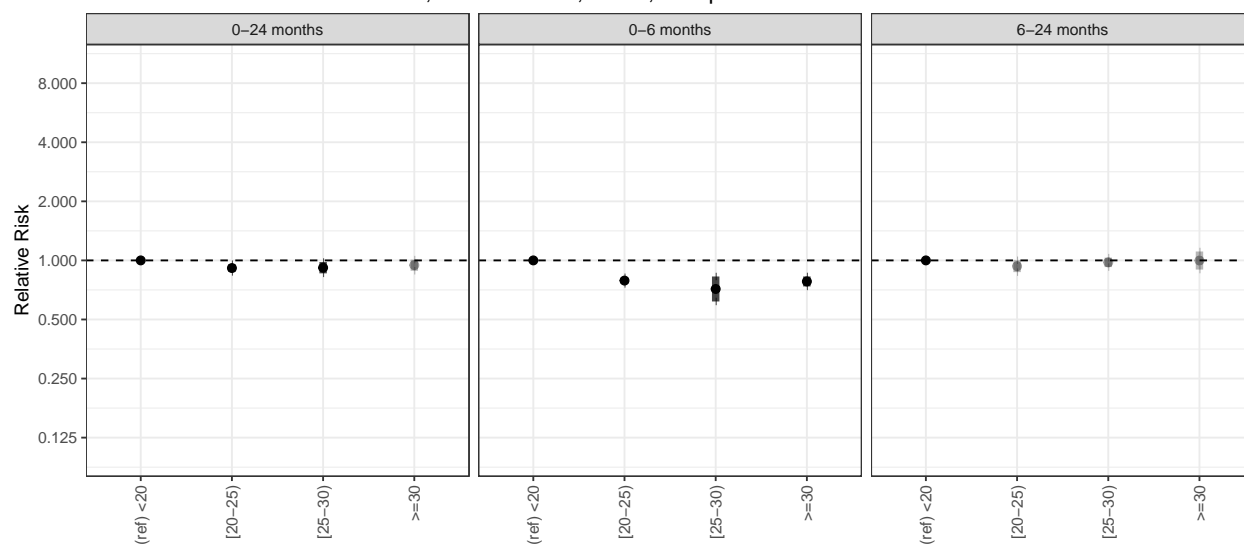


USAID Household Food Insecurity Access Scale (HFIAS) category
Estimates from 5 cohorts in Asia, Latin America

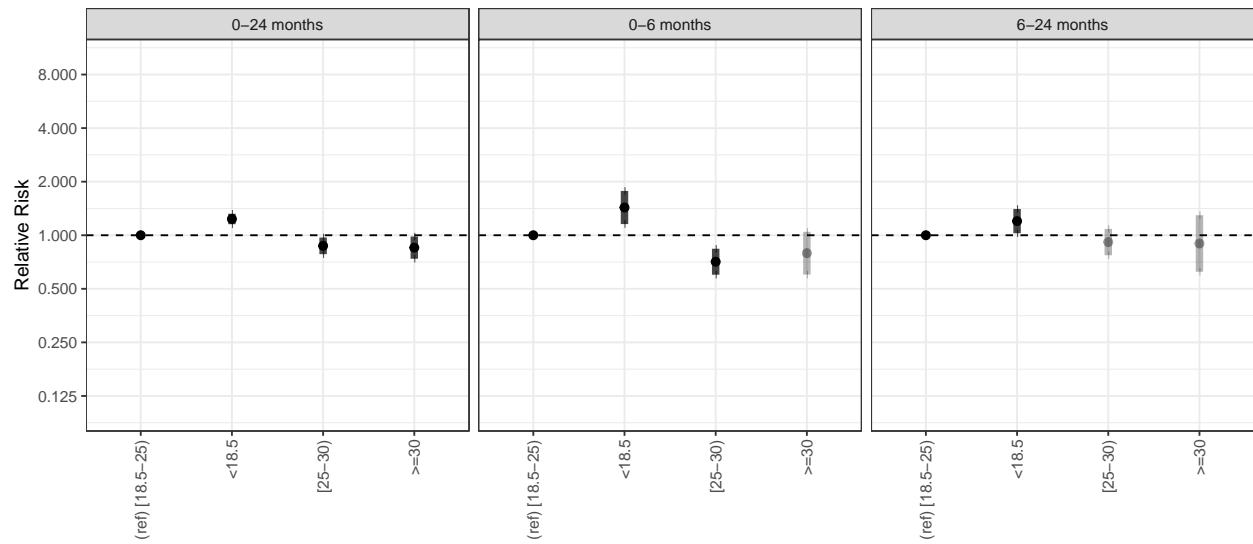


Maternal characteristics

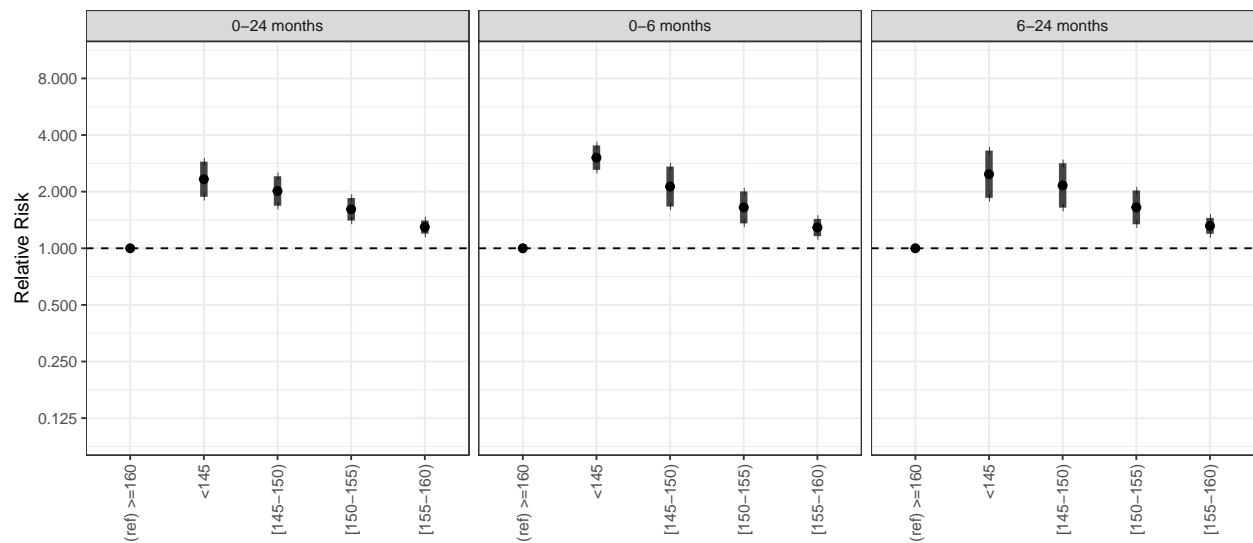
Maternal age
Estimates from 24 cohorts in Asia, Latin America, Africa, Europe



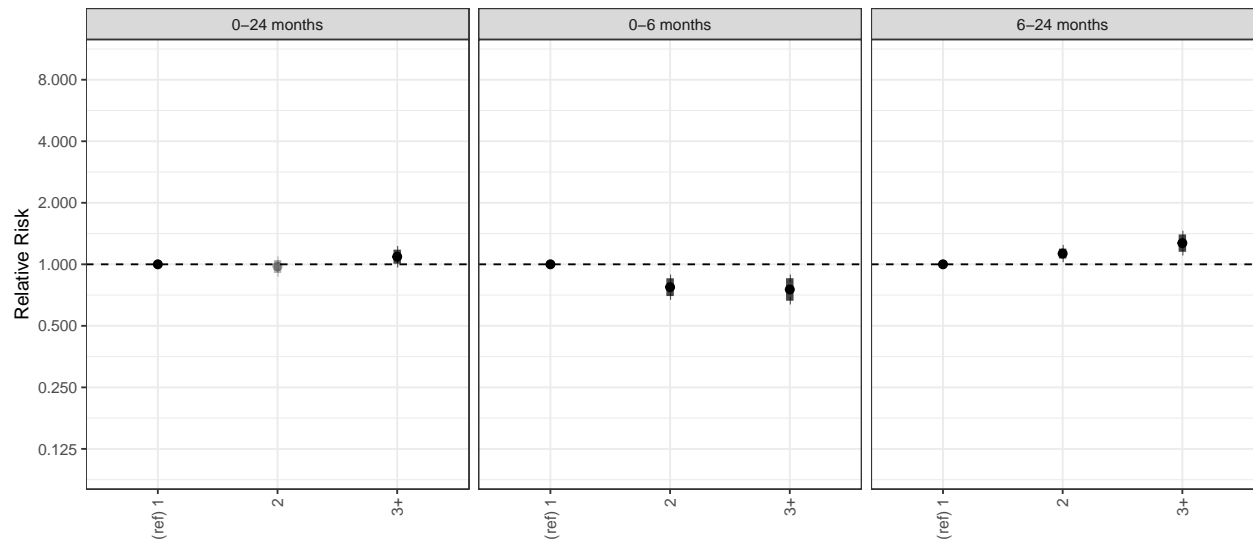
Maternal BMI
Estimates from 8 cohorts in Asia, Europe, Africa



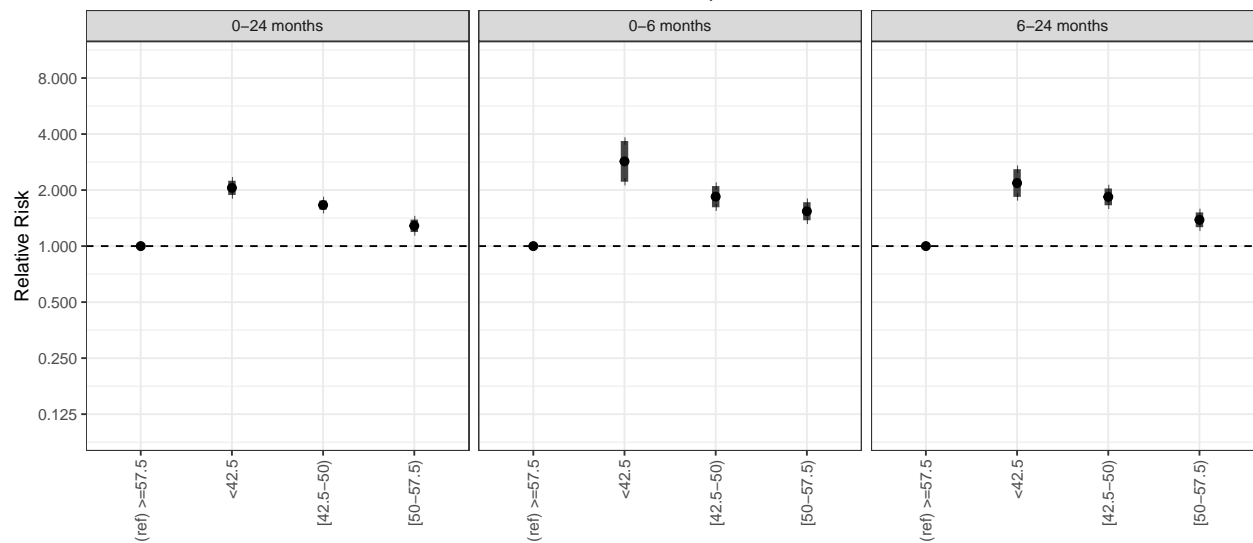
Maternal height
Estimates from 10 cohorts in Latin America, Asia, Africa



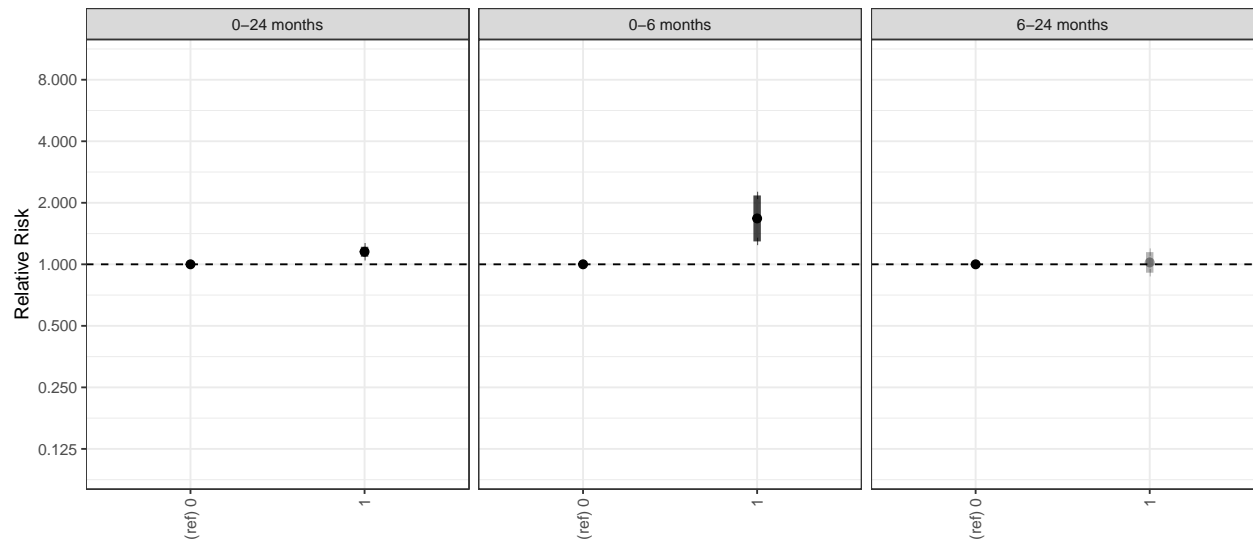
Maternal parity
Estimates from 11 cohorts in Latin America, Asia, Africa



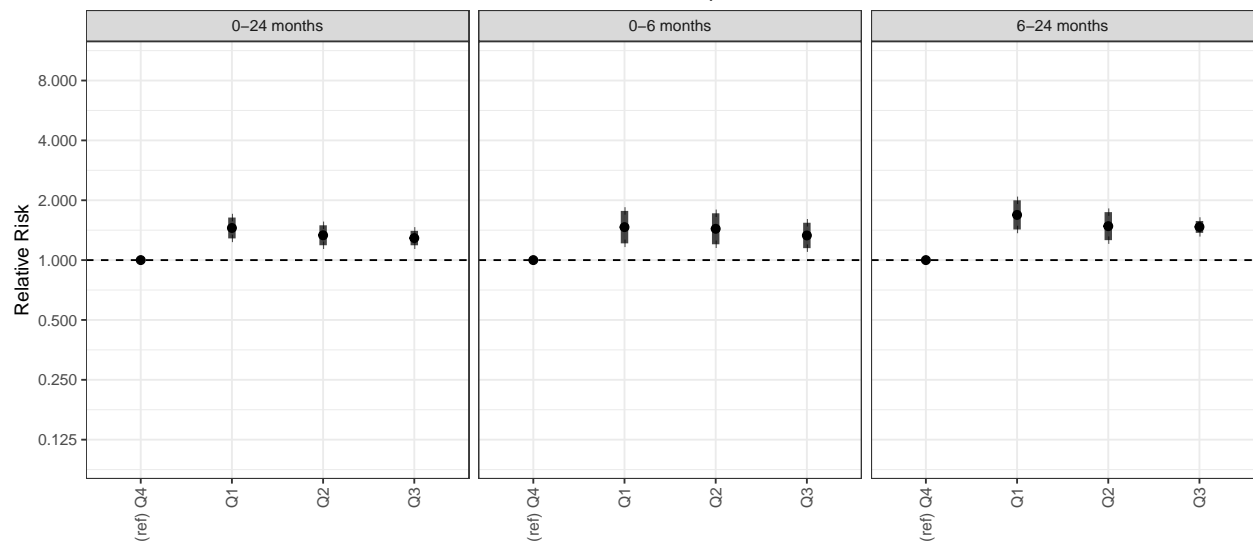
Maternal weight
Estimates from 12 cohorts in Africa, Asia, Latin America, Europe



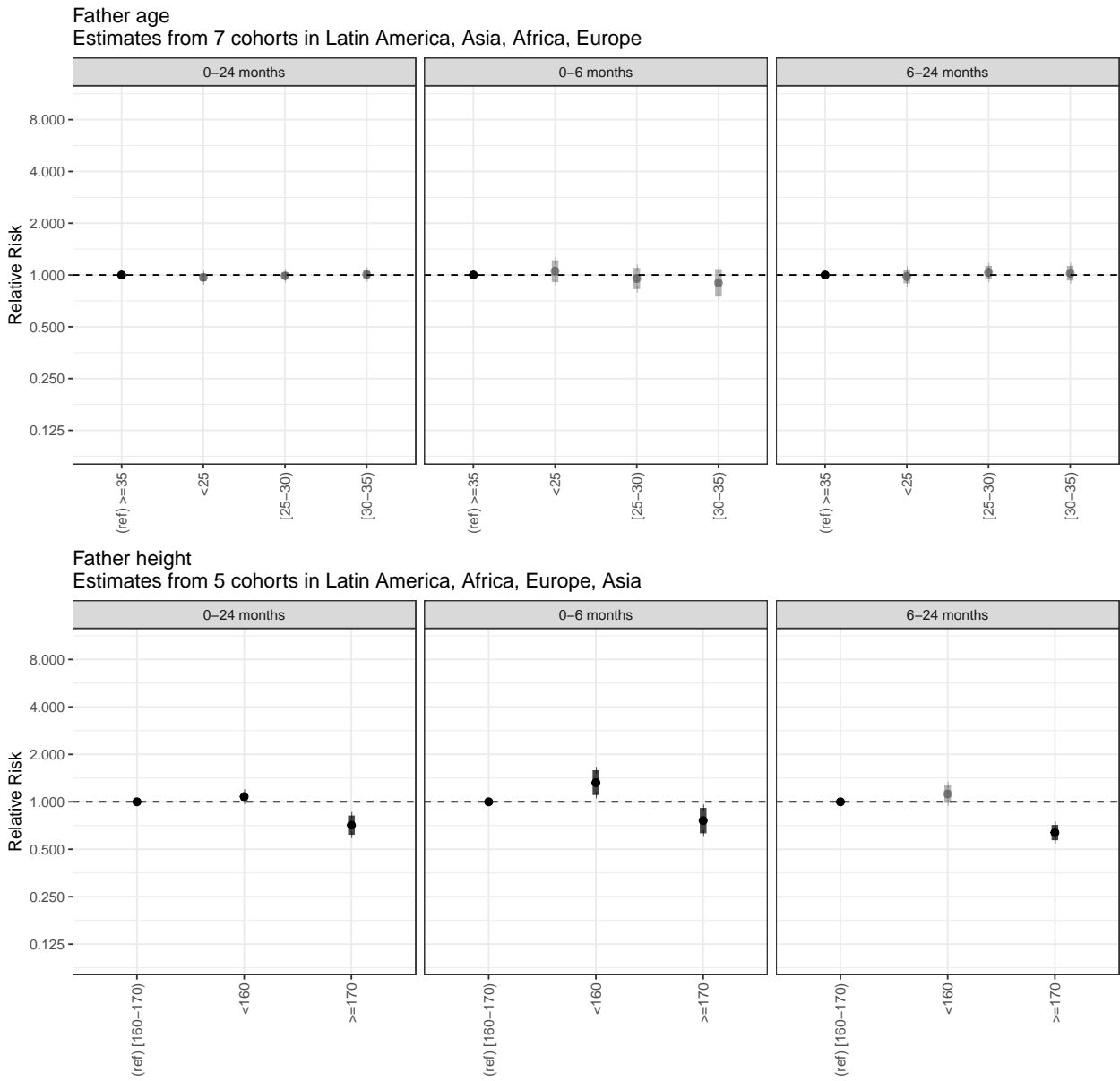
Mother is unmarried
Estimates from 9 cohorts in Latin America, Asia, Africa, Europe



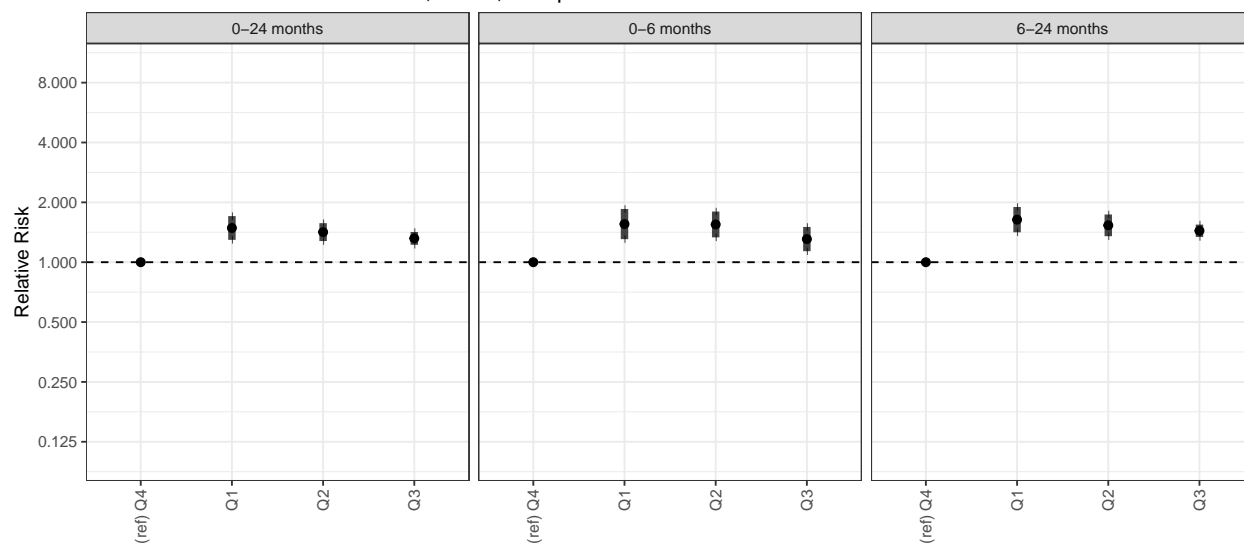
Mother's education
Estimates from 19 cohorts in Asia, Latin America, Africa, Europe



Paternal characteristics



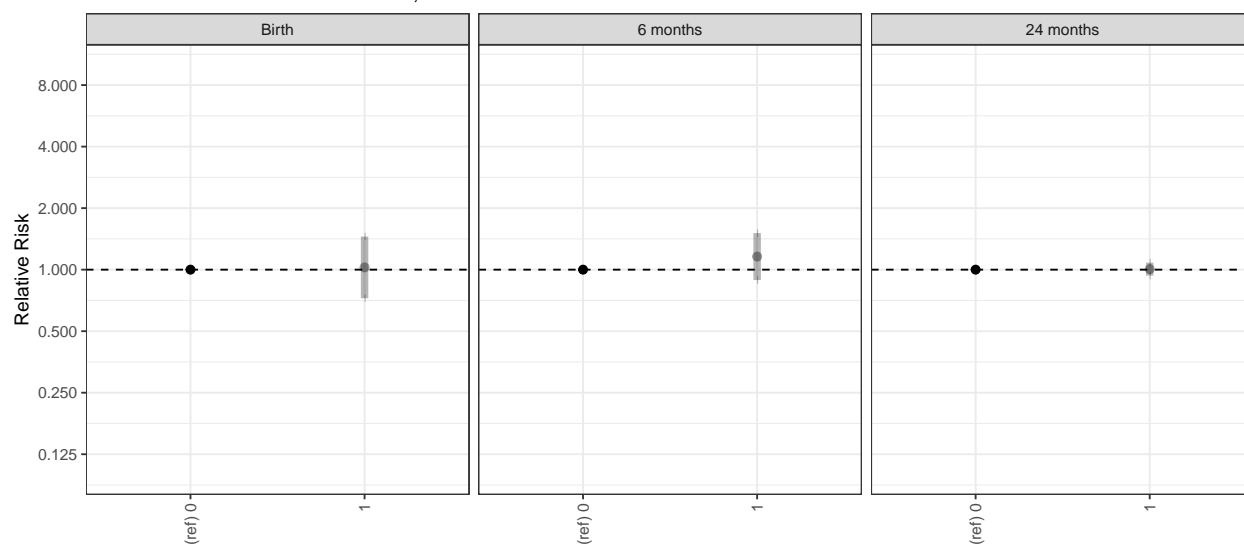
Father's education Estimates from 13 cohorts in Asia, Africa, Europe



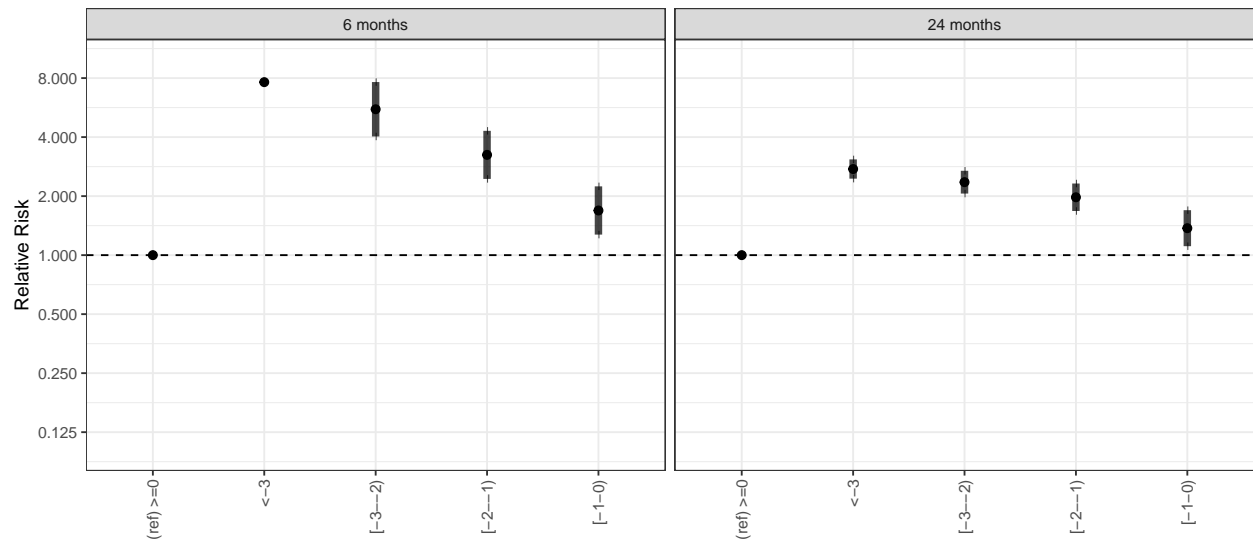
Point prevalence of stunting

Child characteristics

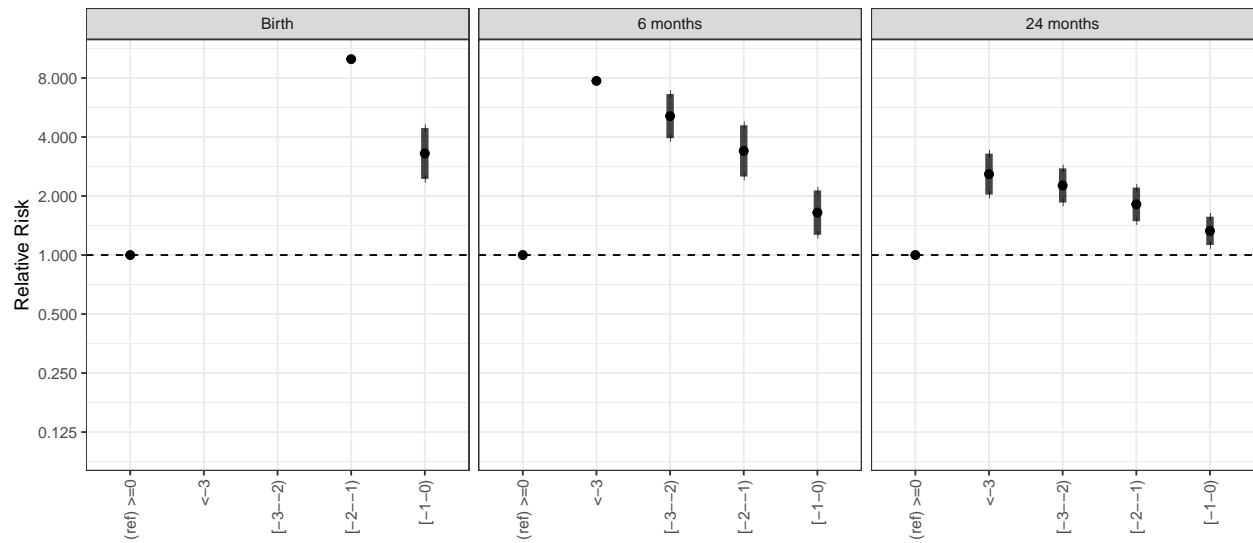
Any wasting in first 6 months Estimates from 7 cohorts in Asia, Africa



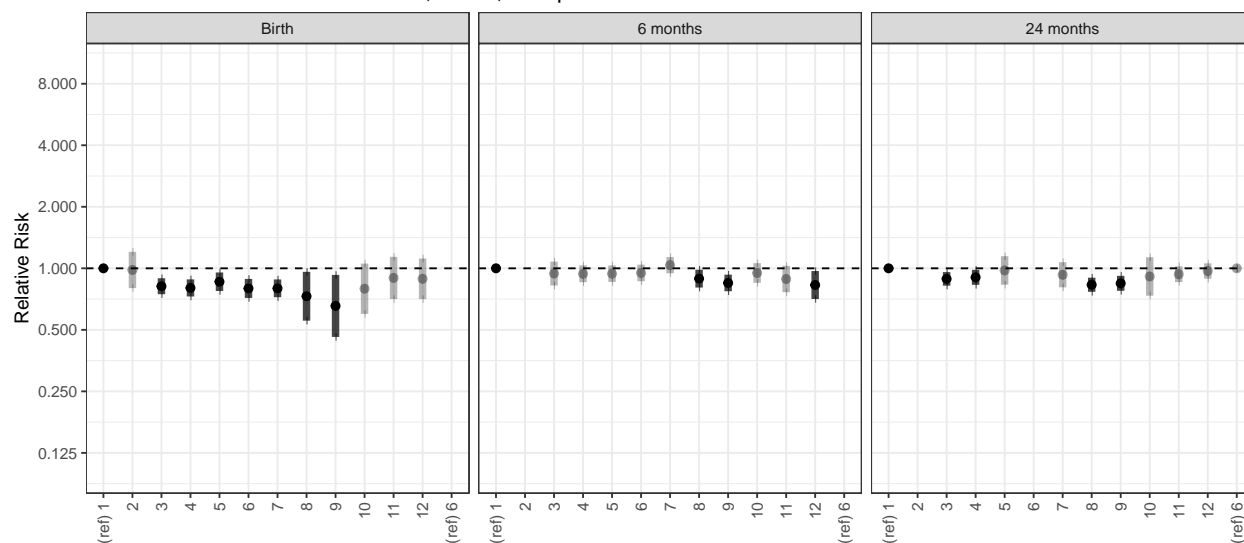
Birth length
Estimates from 7 cohorts in Asia, Africa



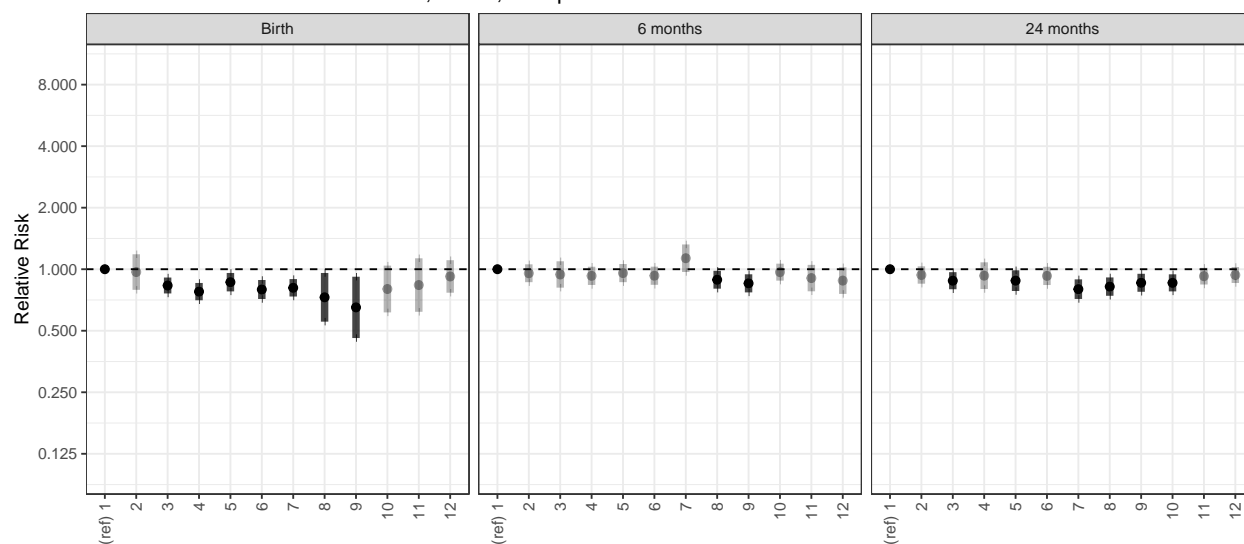
Birthweight
Estimates from 2 cohorts in Asia, Africa



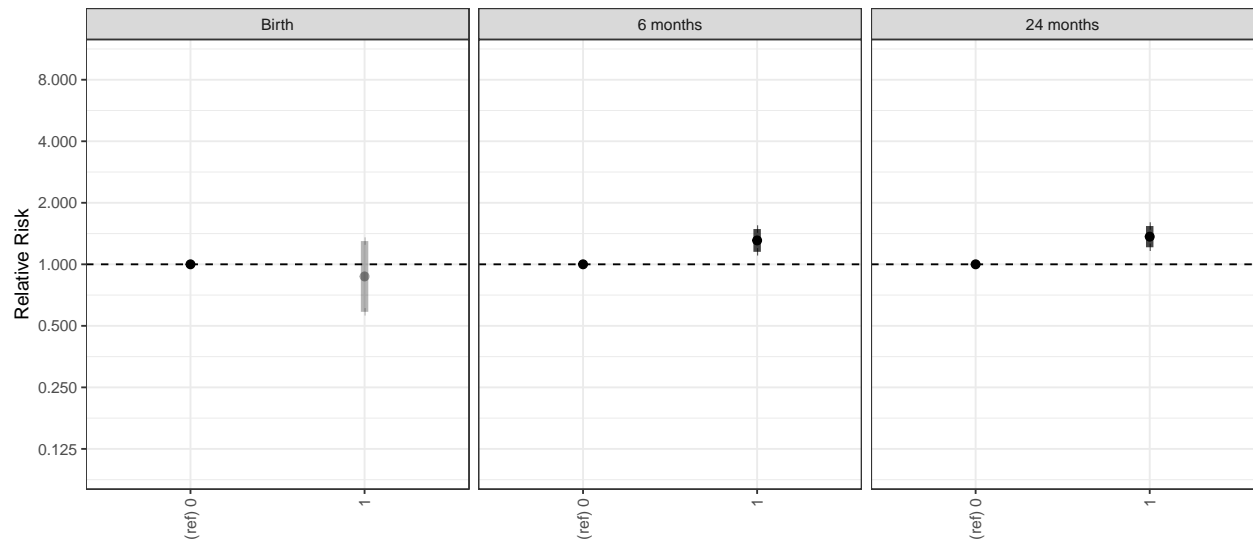
Calendar month of birth
Estimates from 10 cohorts in Asia, Africa, Europe



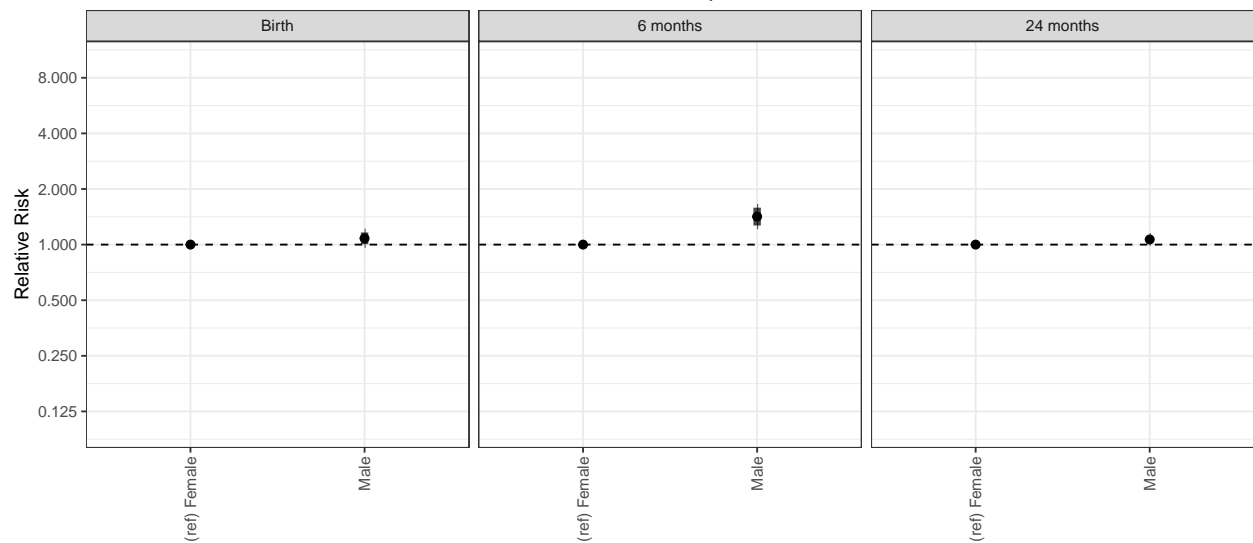
Calendar month of measurement
Estimates from 11 cohorts in Asia, Africa, Europe



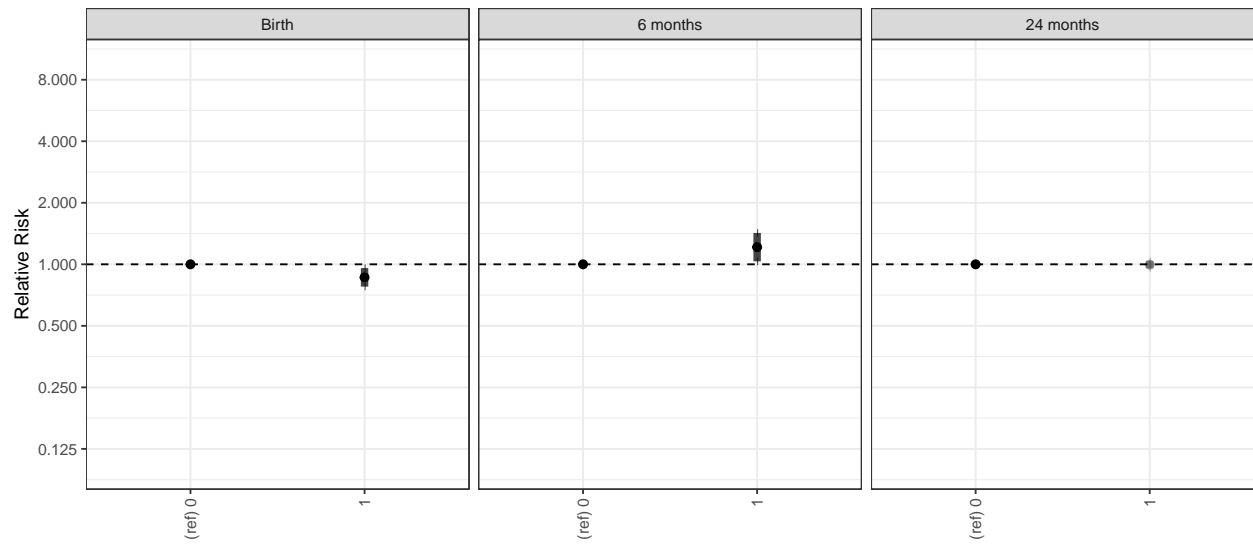
Child delivered at home
Estimates from 4 cohorts in Asia



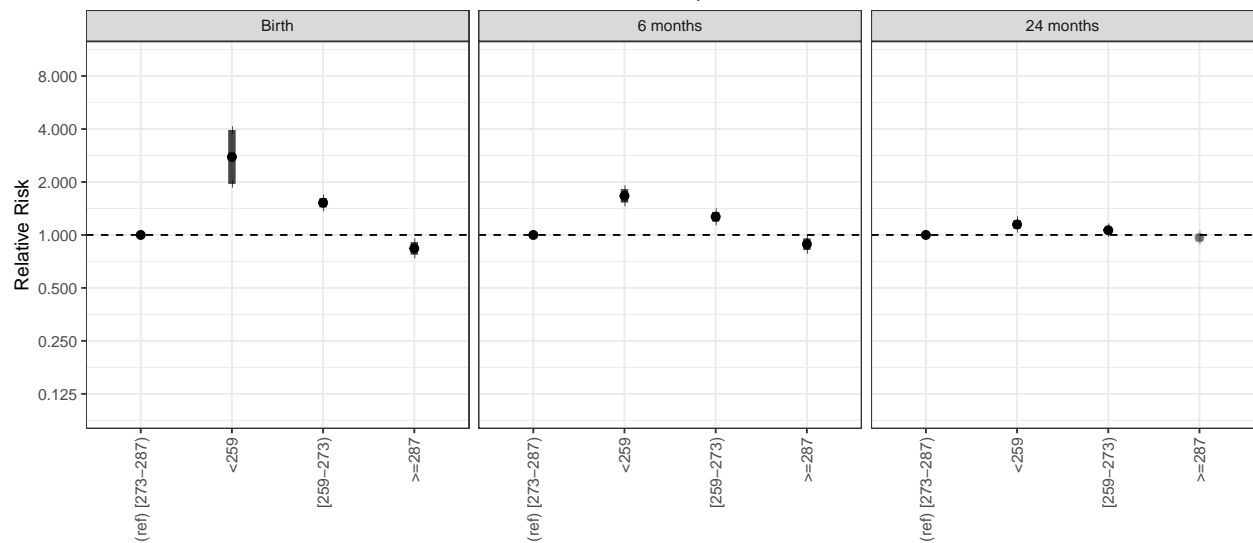
Child's sex
Estimates from 18 cohorts in Asia, Latin America, Africa, Europe



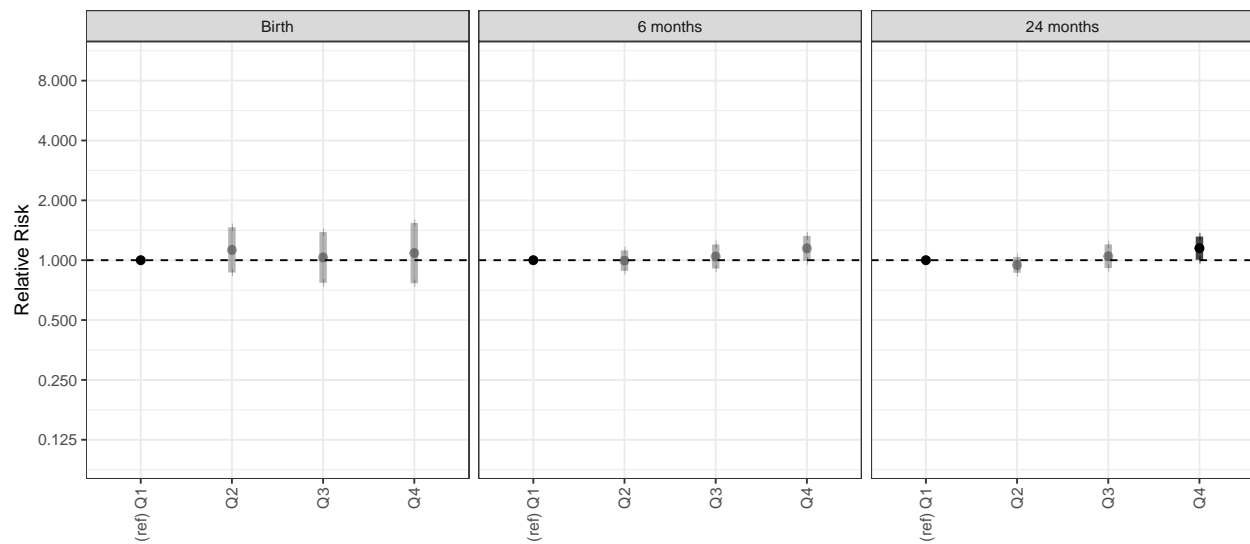
Enrolled wasted
Estimates from 16 cohorts in Latin America, Asia, Africa, Europe



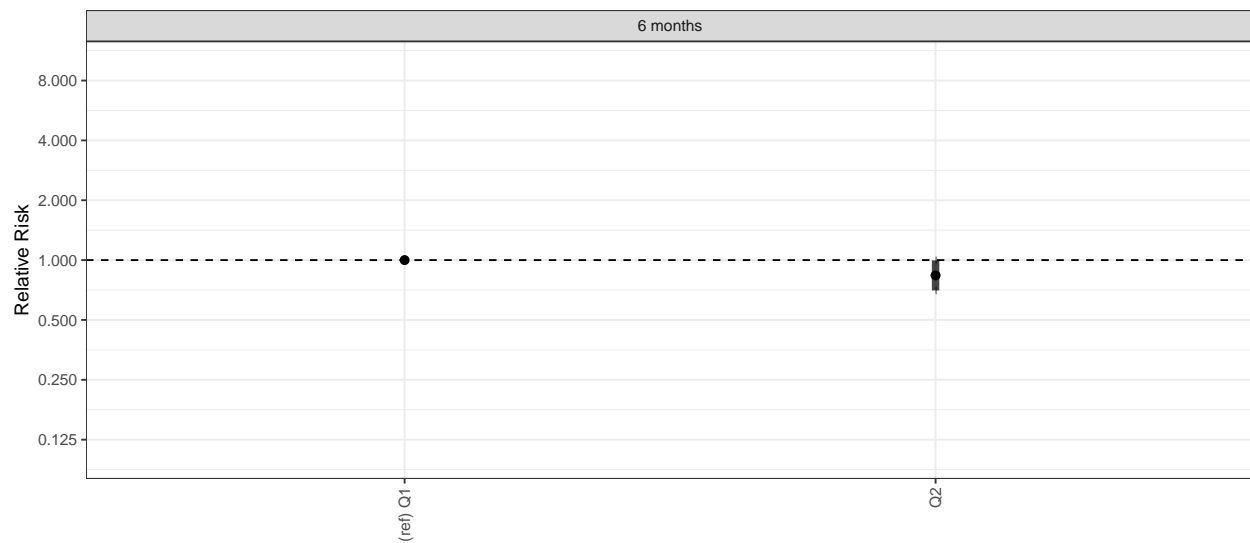
Gestational age at birth in days
Estimates from 9 cohorts in Asia, Latin America, Africa, Europe



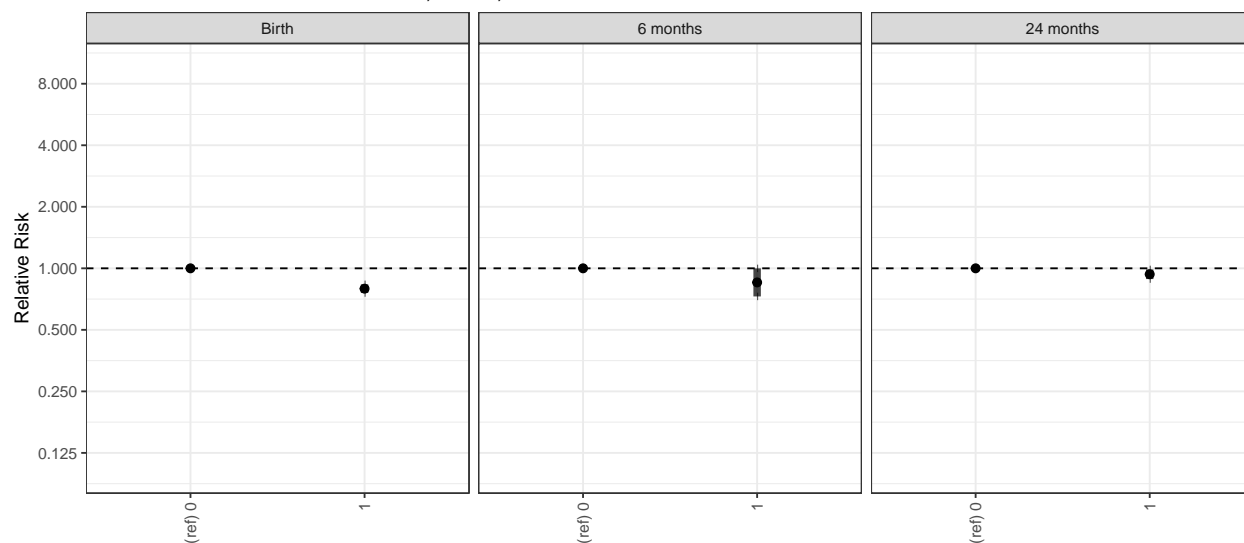
Percent diarrhea in first 24 months
Estimates from 8 cohorts in Africa, Latin America, Asia



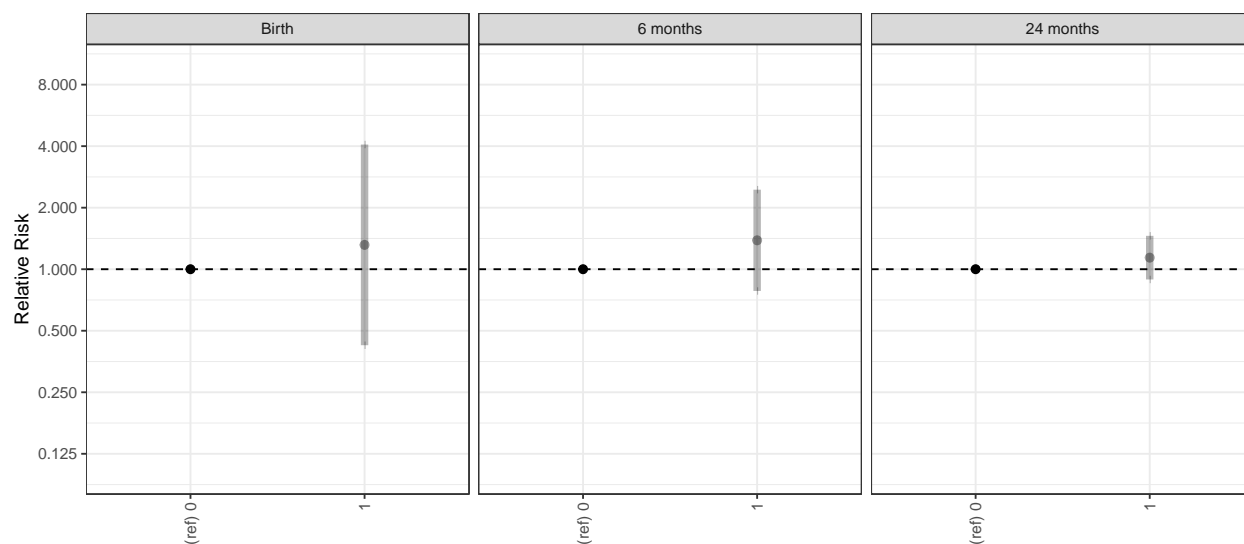
Percent diarrhea in first 6 months
Estimates from 1 cohorts in Asia



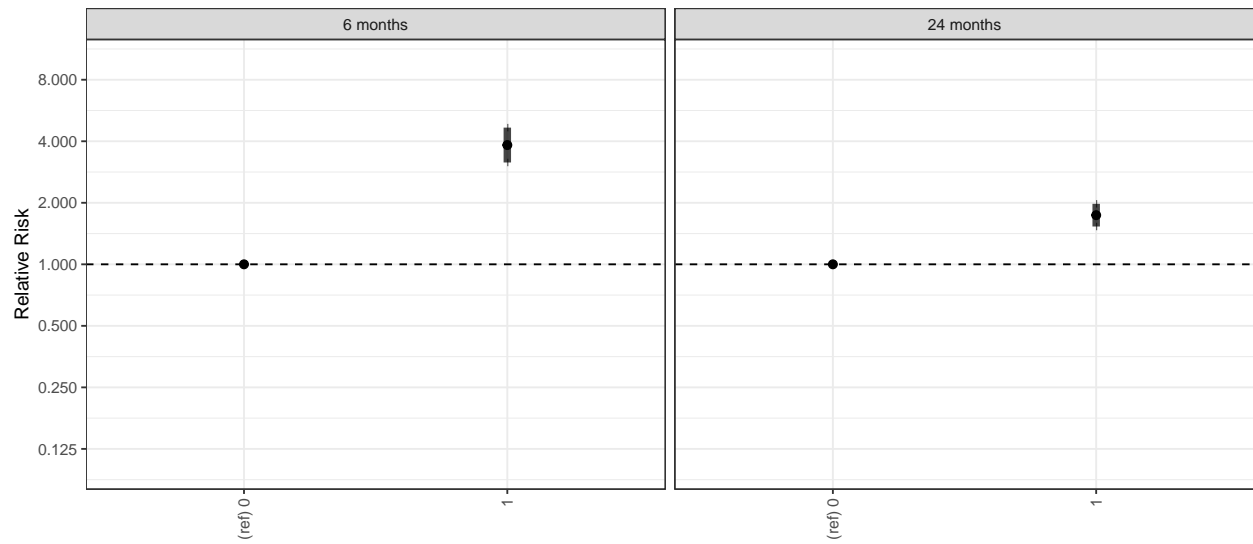
Percent exclusive breastfeeding
Estimates from 11 cohorts in Asia, Africa, Latin America



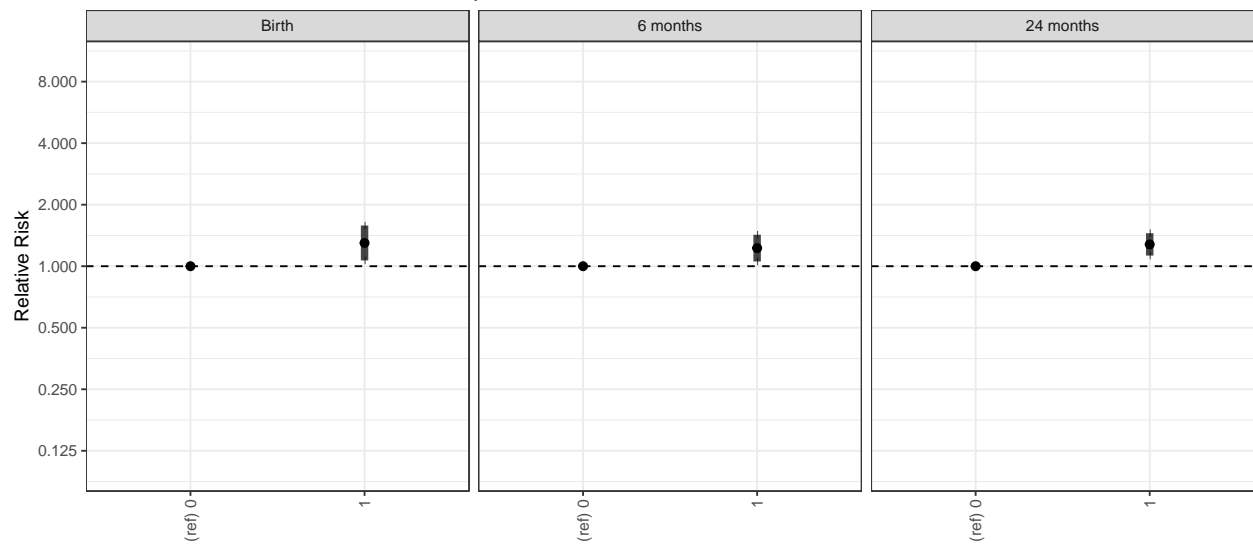
Persistent wasting in first 6 months
Estimates from 2 cohorts in Asia



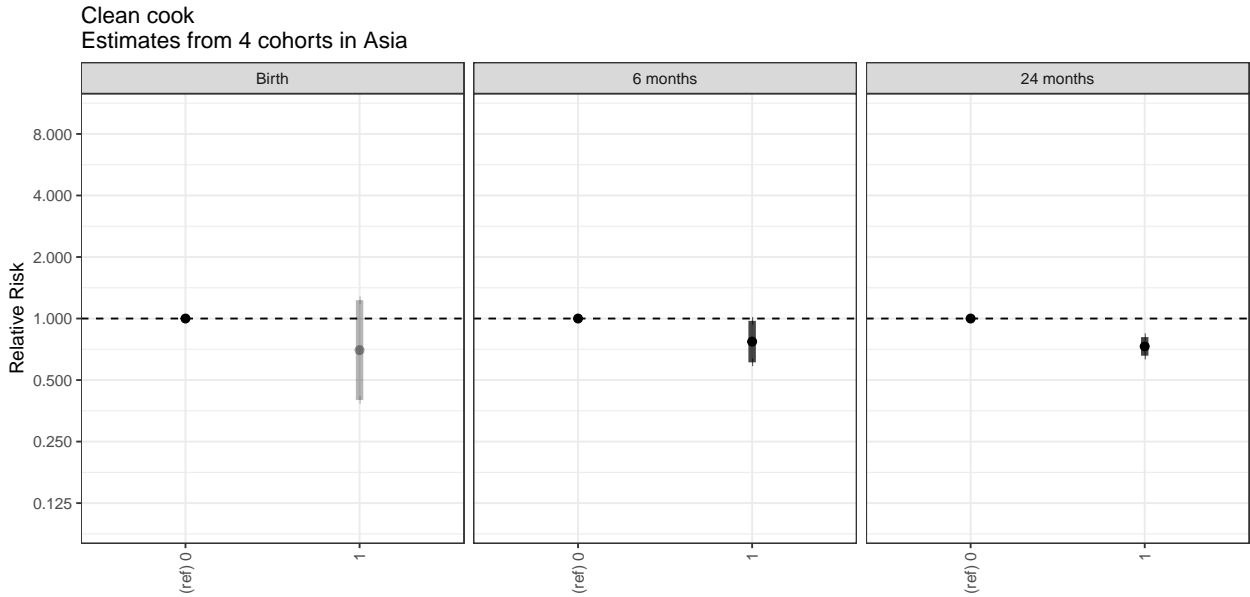
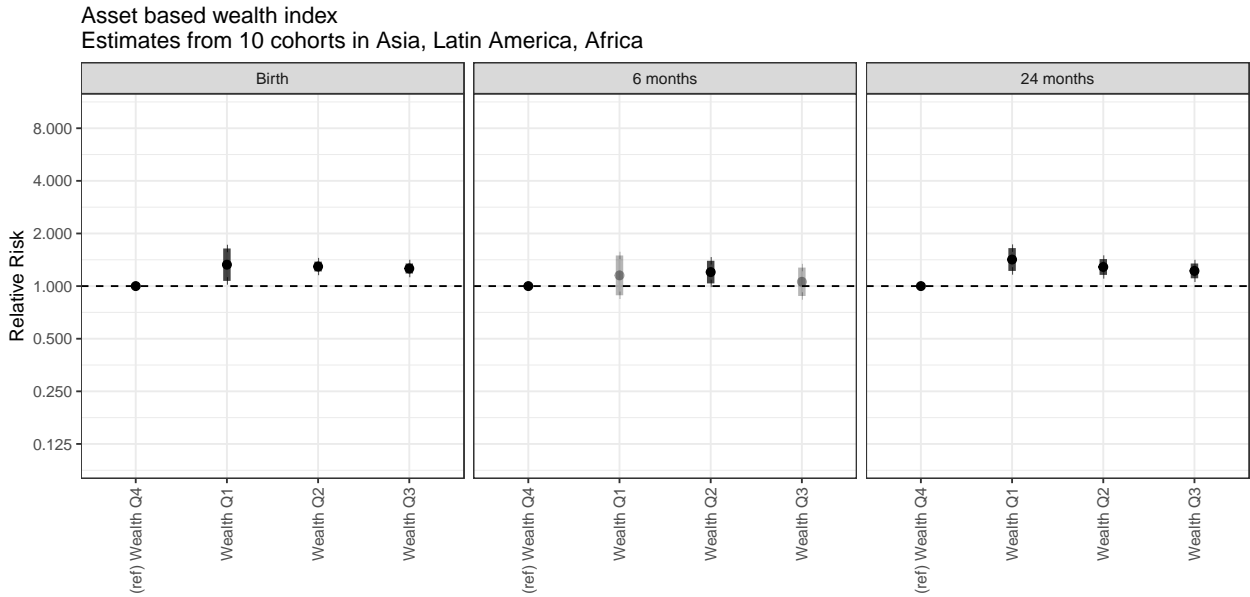
Stunted at enrollment
Estimates from 20 cohorts in Asia, Africa, Latin America, Europe



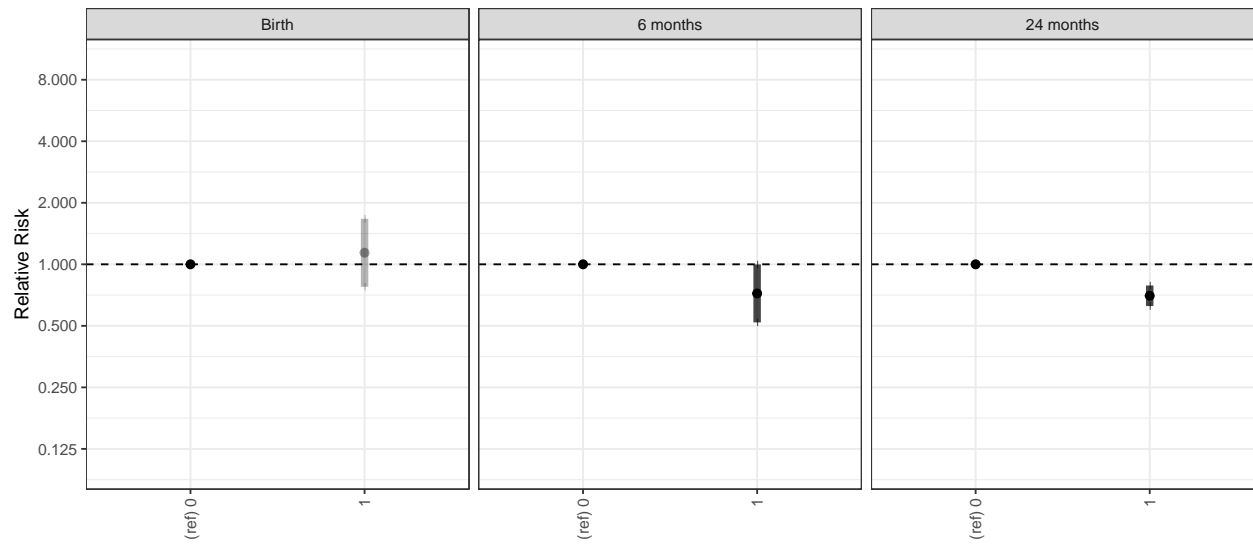
Vaginal delivery
Estimates from 9 cohorts in Asia, Europe, Africa



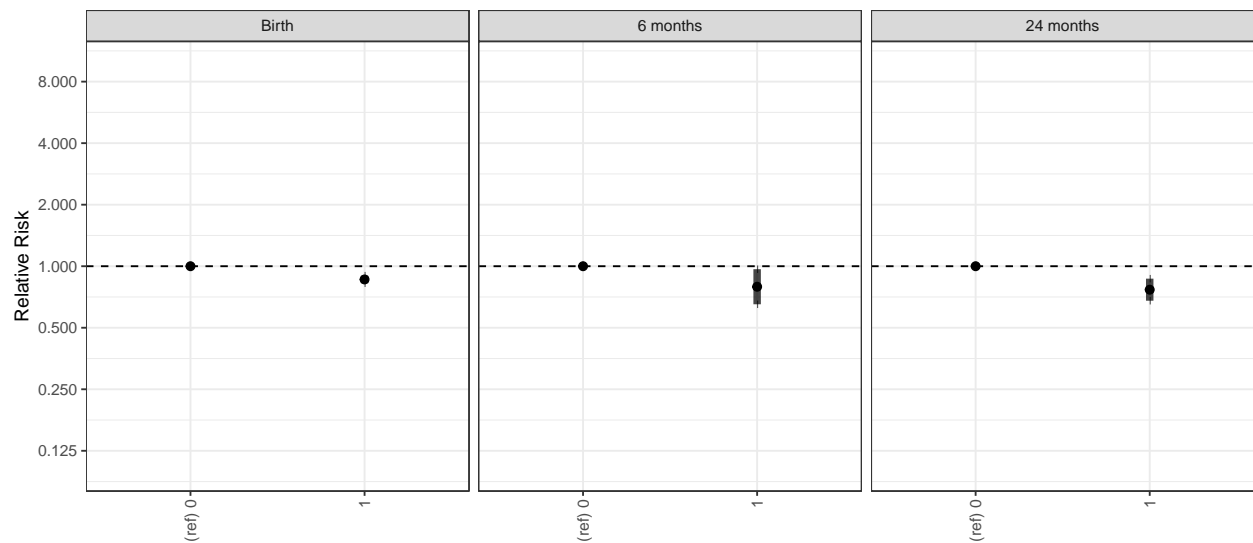
Household characteristics



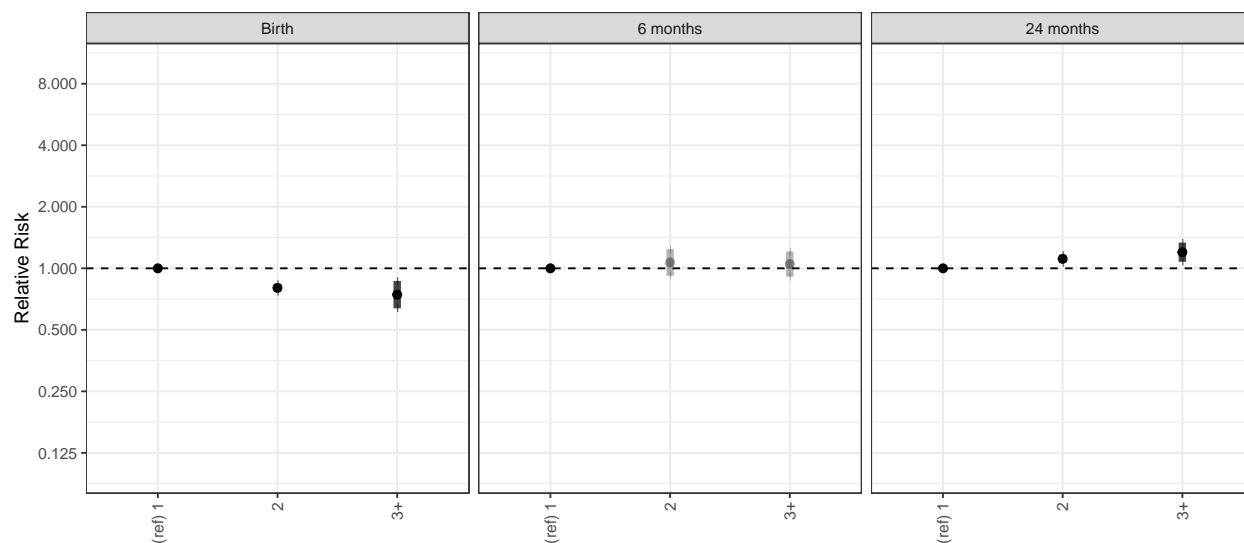
Improved floor
Estimates from 8 cohorts in Asia, Latin America



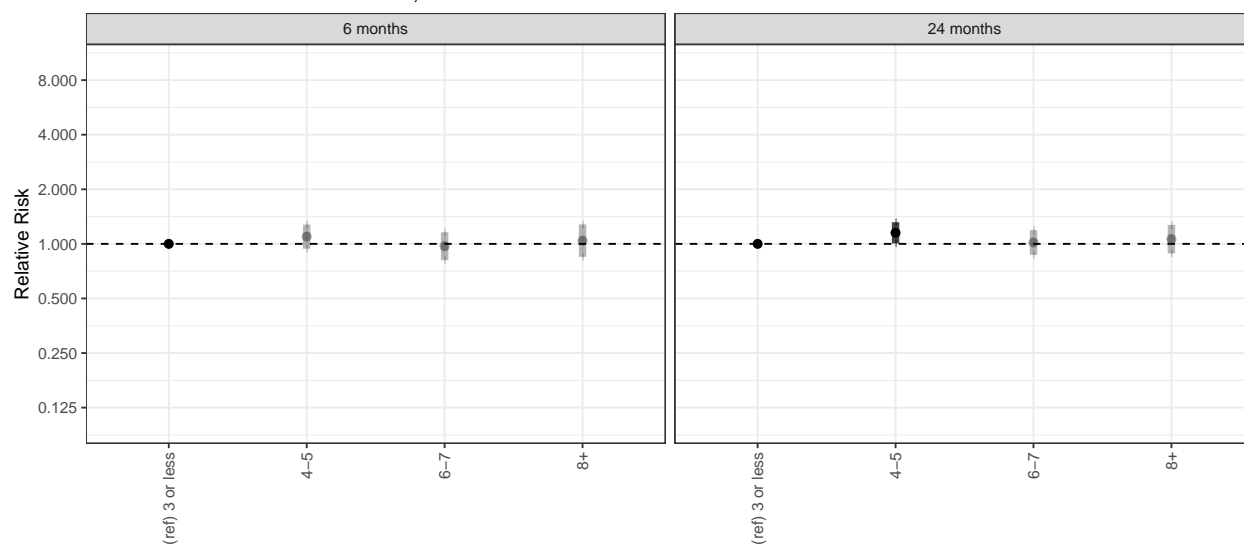
Improved sanitation
Estimates from 11 cohorts in Latin America, Asia



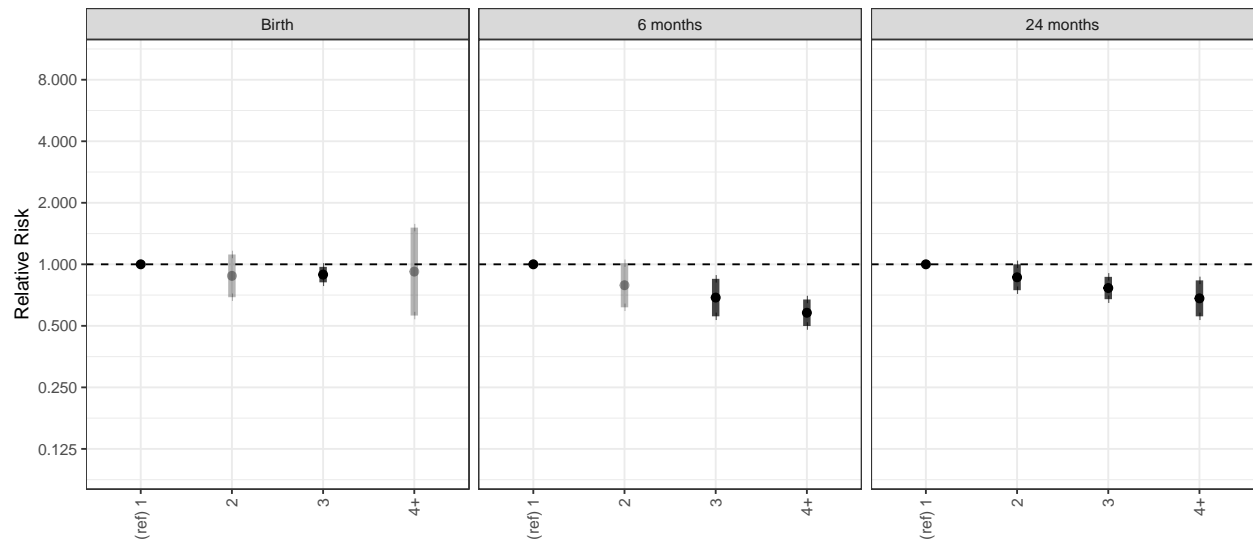
Number of children in the household under 5 years
Estimates from 2 cohorts in Asia



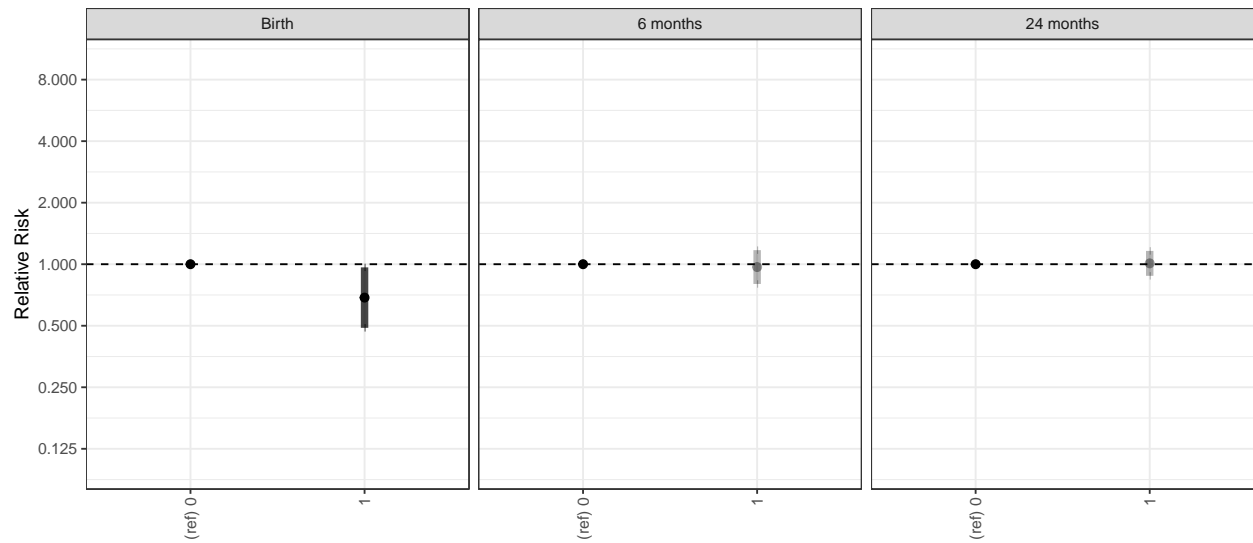
Number of people in the household
Estimates from 6 cohorts in Asia, Africa



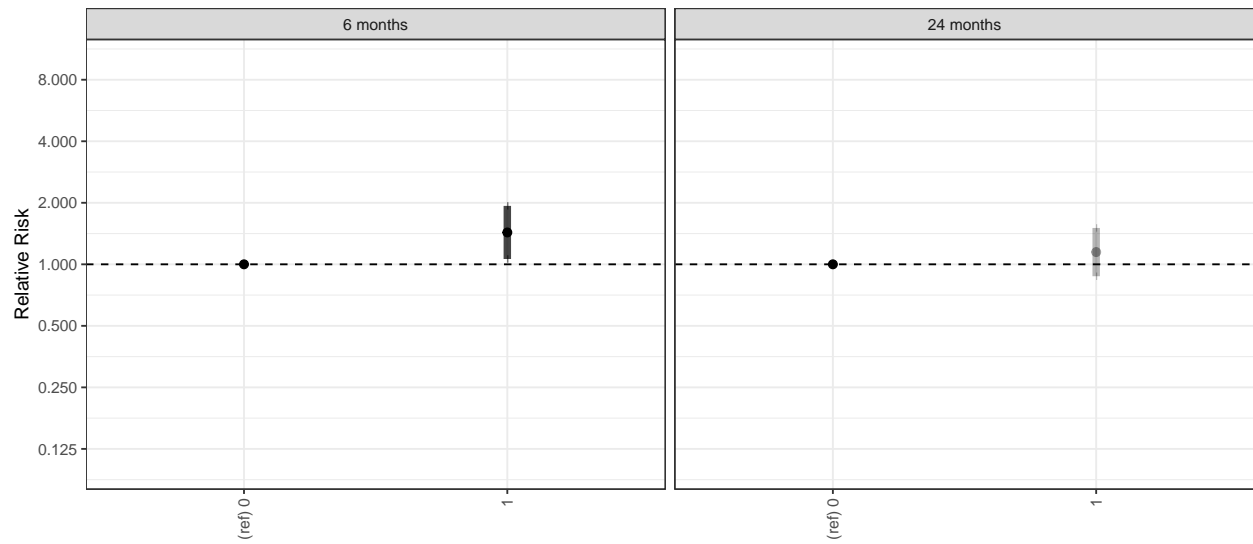
Number of rooms in household
Estimates from 12 cohorts in Asia, Latin America, Africa



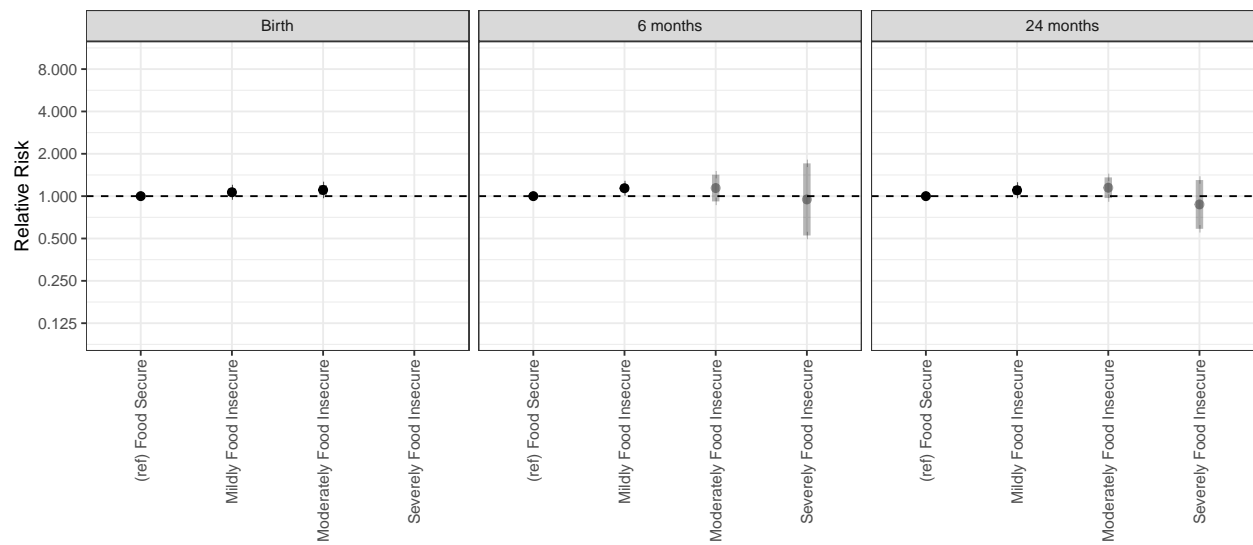
Safe water
Estimates from 2 cohorts in Asia, Africa



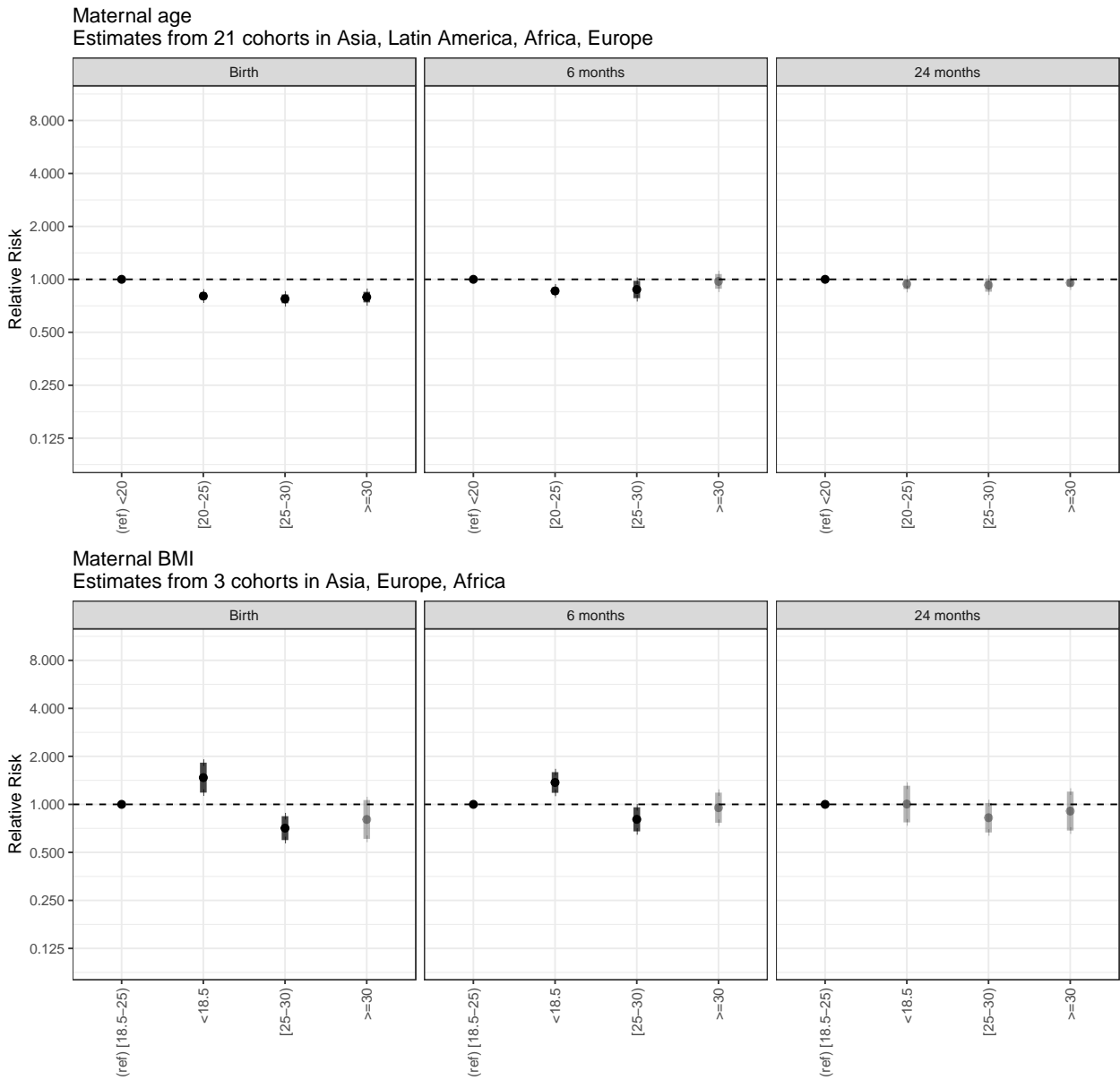
Treats water
Estimates from 1 cohorts in Asia



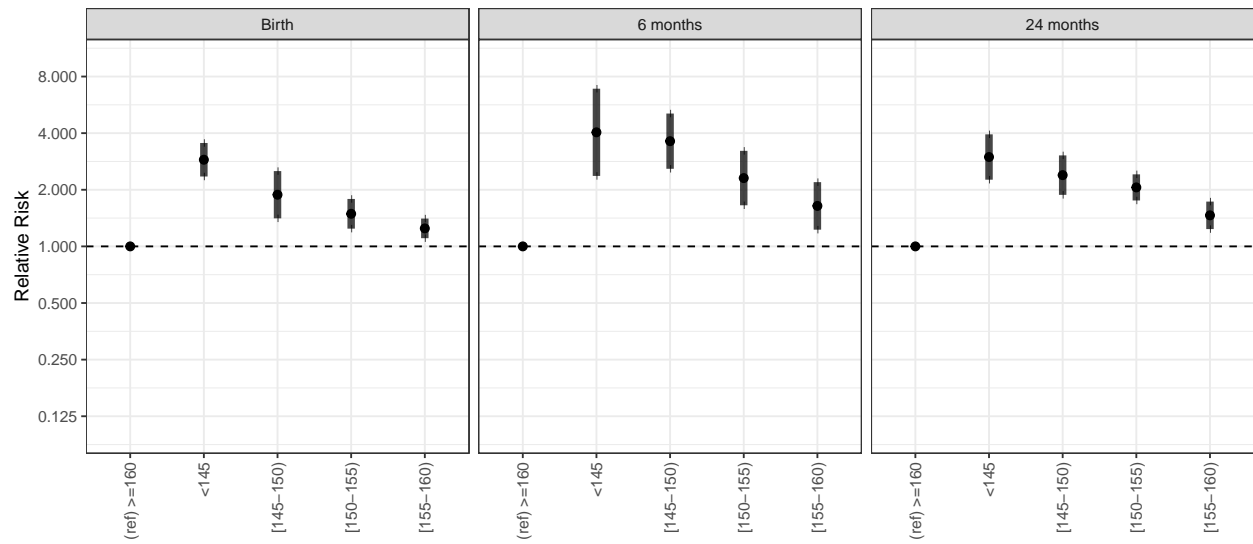
USAID Household Food Insecurity Access Scale (HFIAS) category
Estimates from 5 cohorts in Asia, Latin America



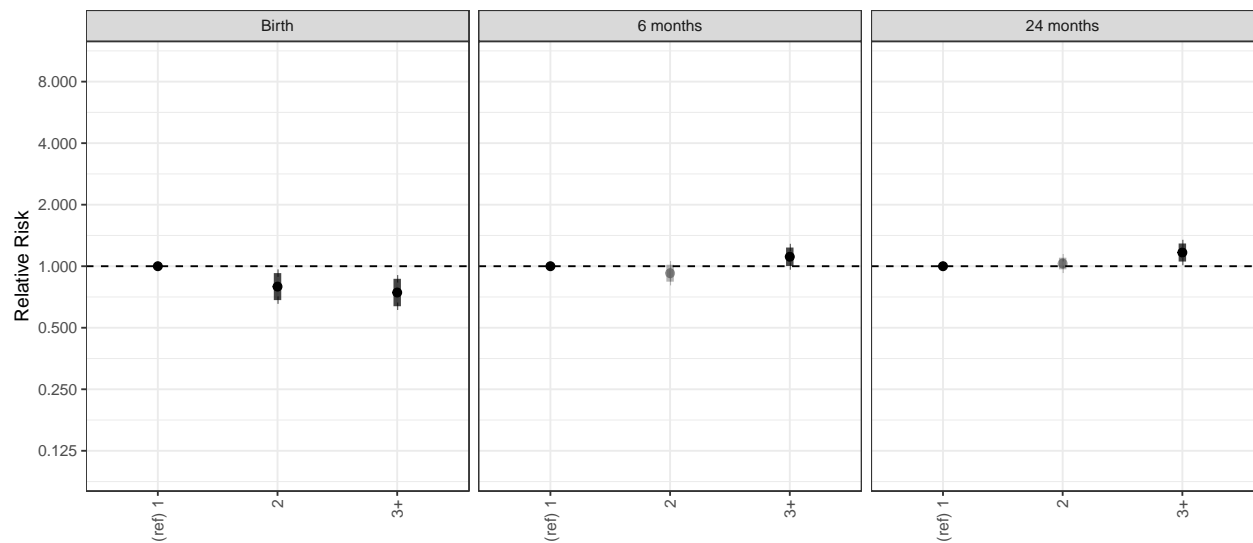
Maternal characteristics



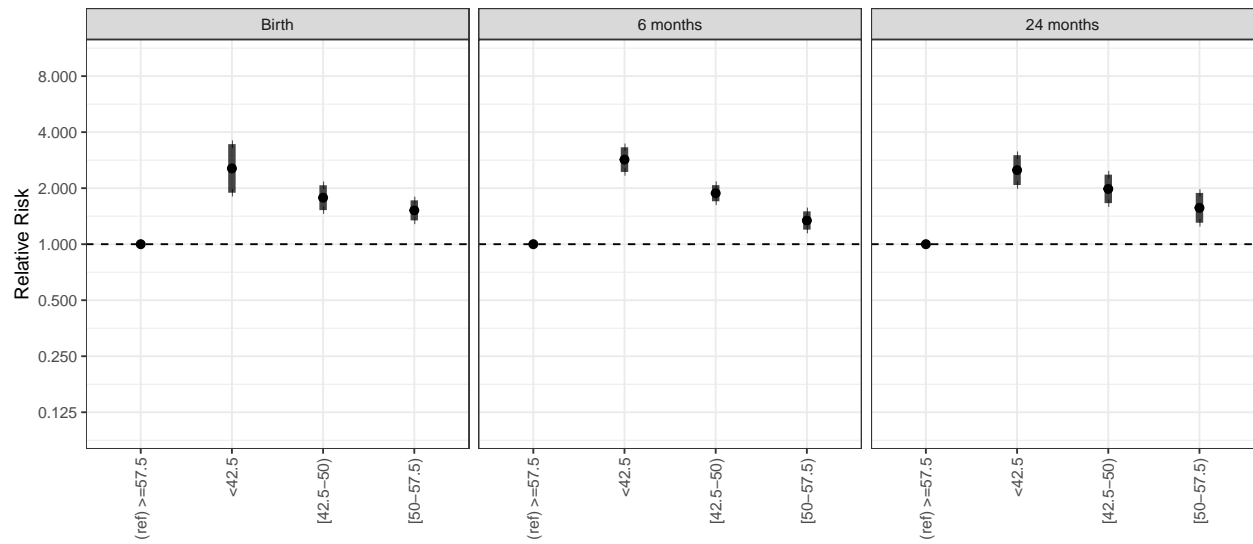
Maternal height
Estimates from 5 cohorts in Latin America, Asia



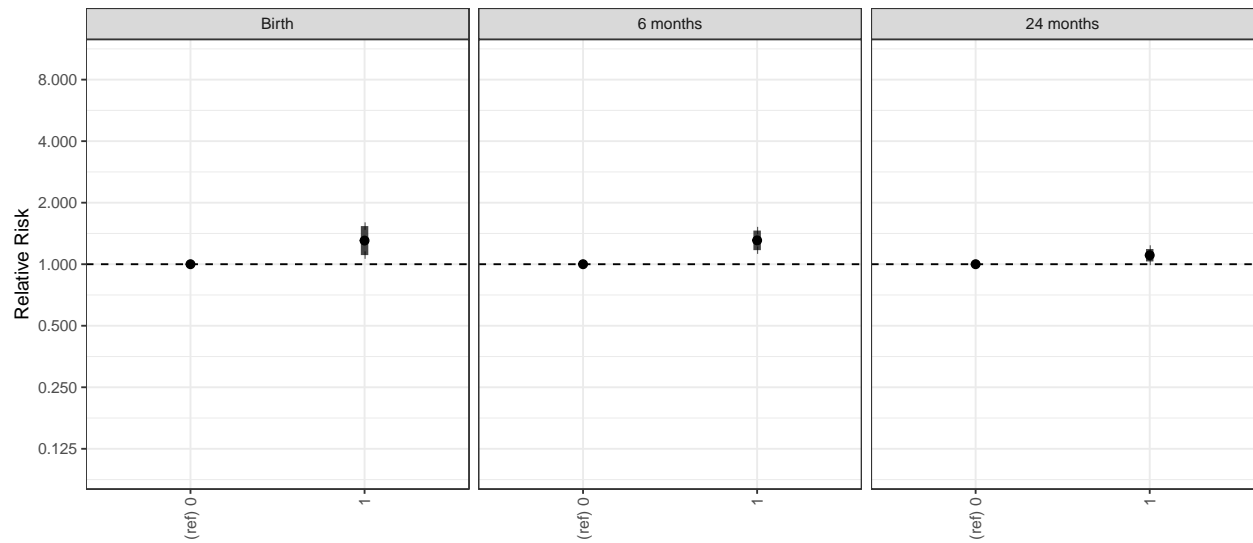
Maternal parity
Estimates from 7 cohorts in Latin America, Asia, Africa



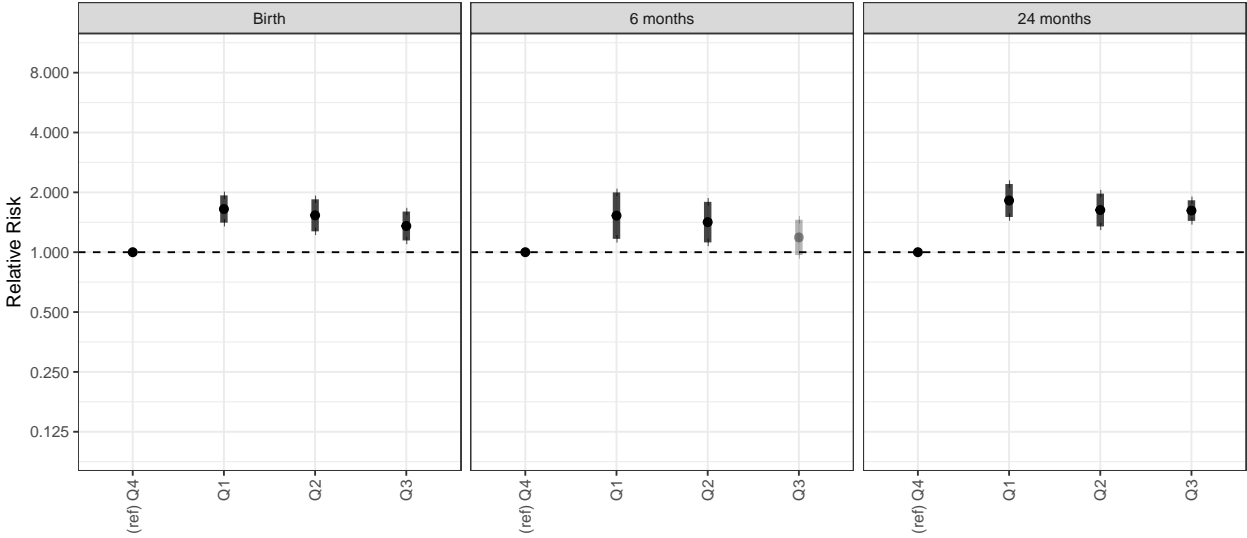
Maternal weight
Estimates from 9 cohorts in Africa, Asia, Latin America, Europe



Mother is unmarried
Estimates from 6 cohorts in Latin America, Asia, Africa

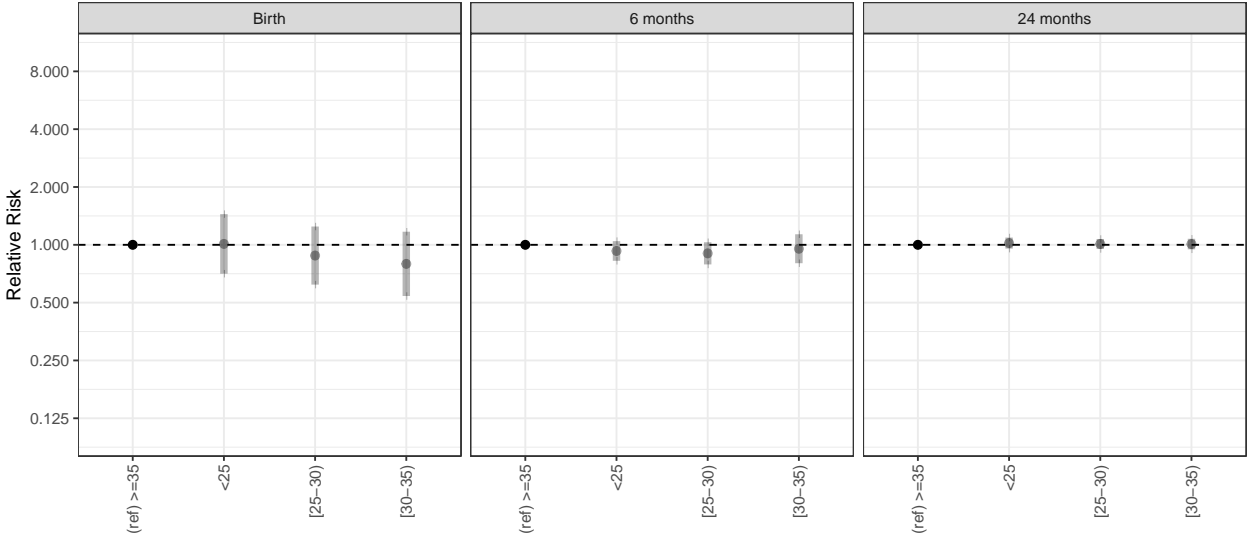


Mother's education
Estimates from 15 cohorts in Asia, Latin America, Africa, Europe

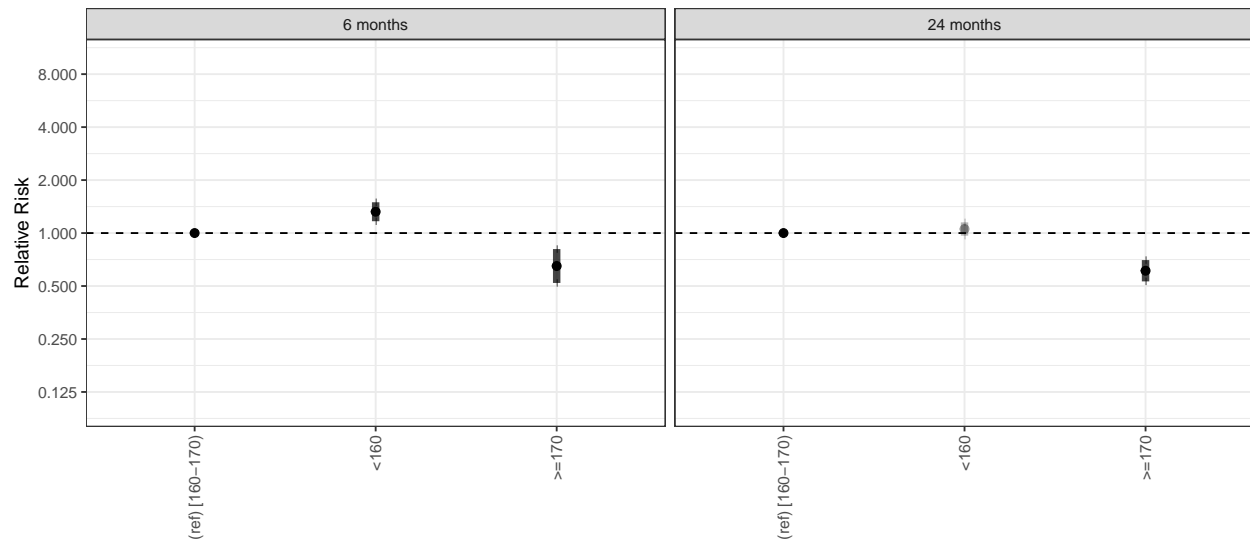


Paternal characteristics

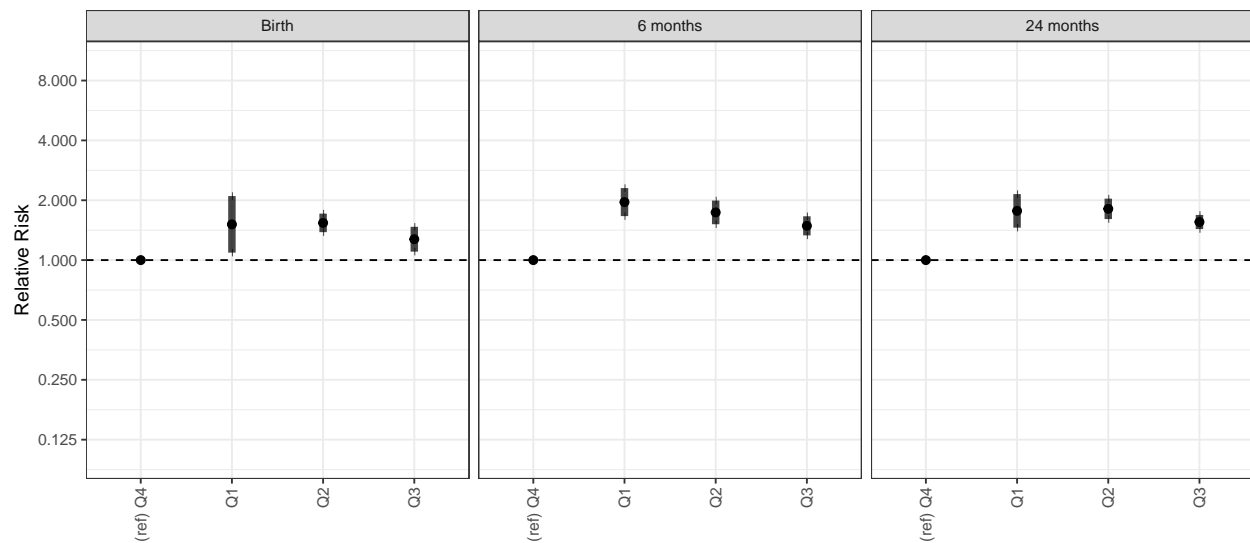
Father age
Estimates from 2 cohorts in Latin America, Asia



Father height
Estimates from 5 cohorts in Latin America, Africa, Europe, Asia



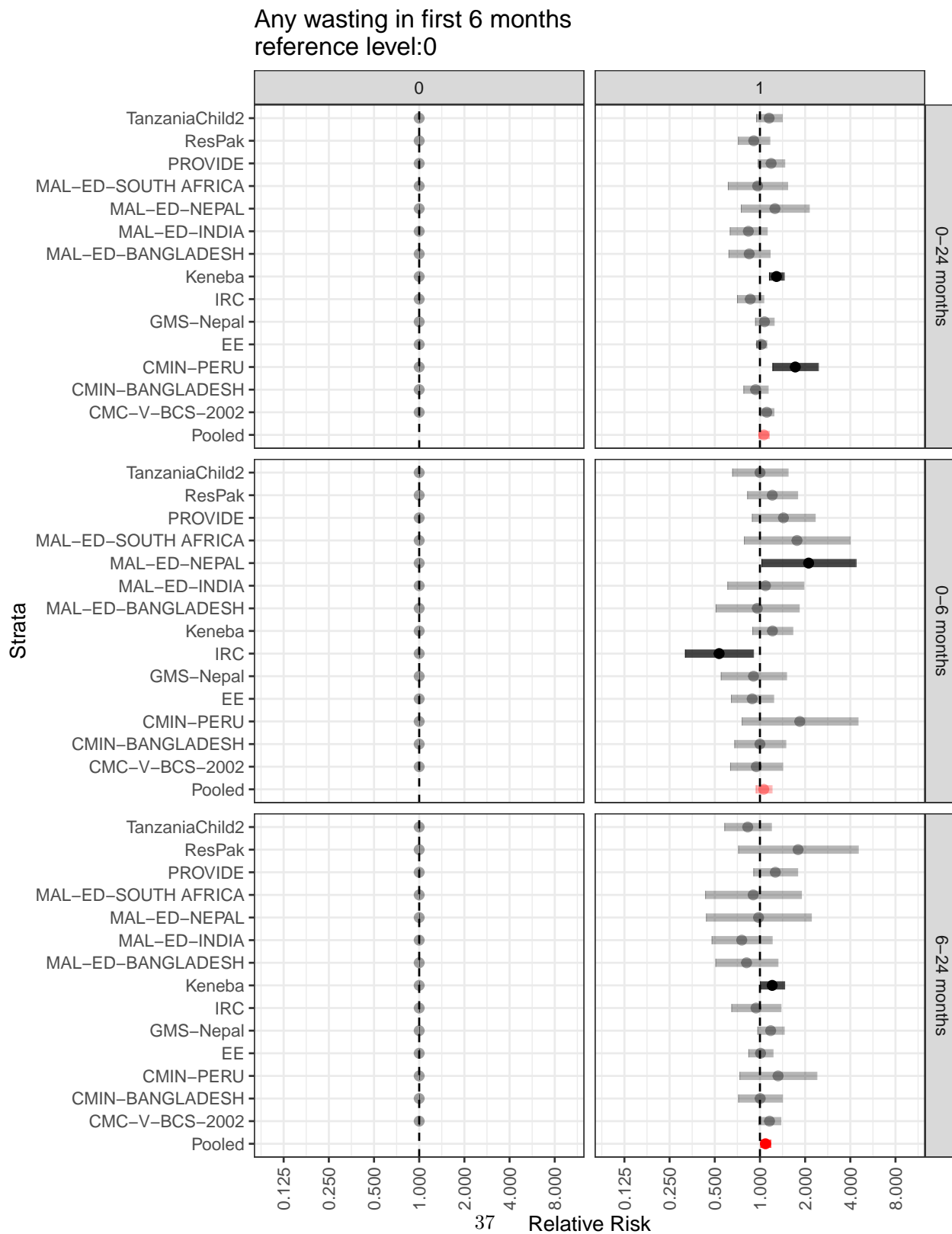
Father's education
Estimates from 4 cohorts in Asia, Africa



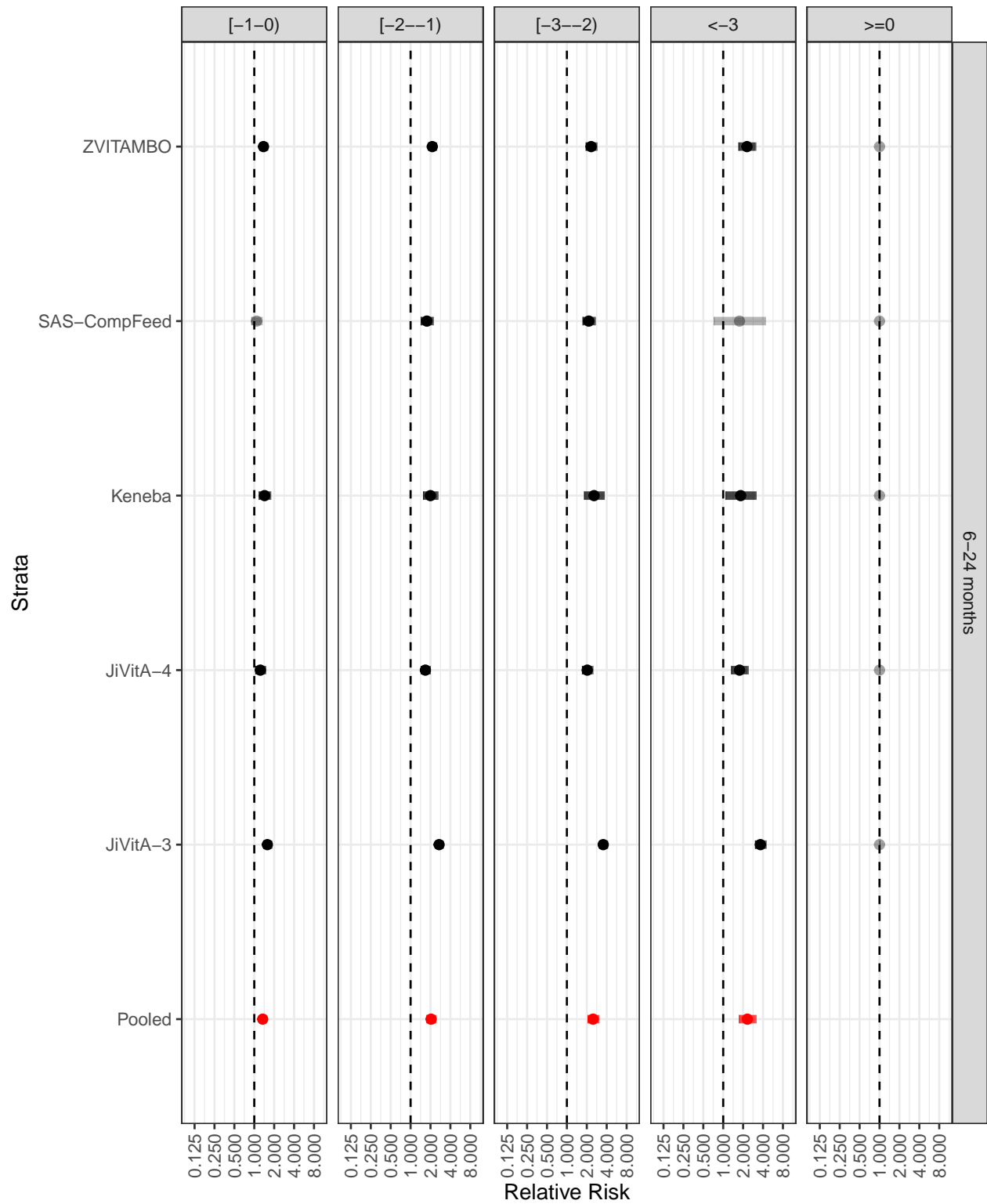
Appendix 1 - Relative risk stratified by cohort

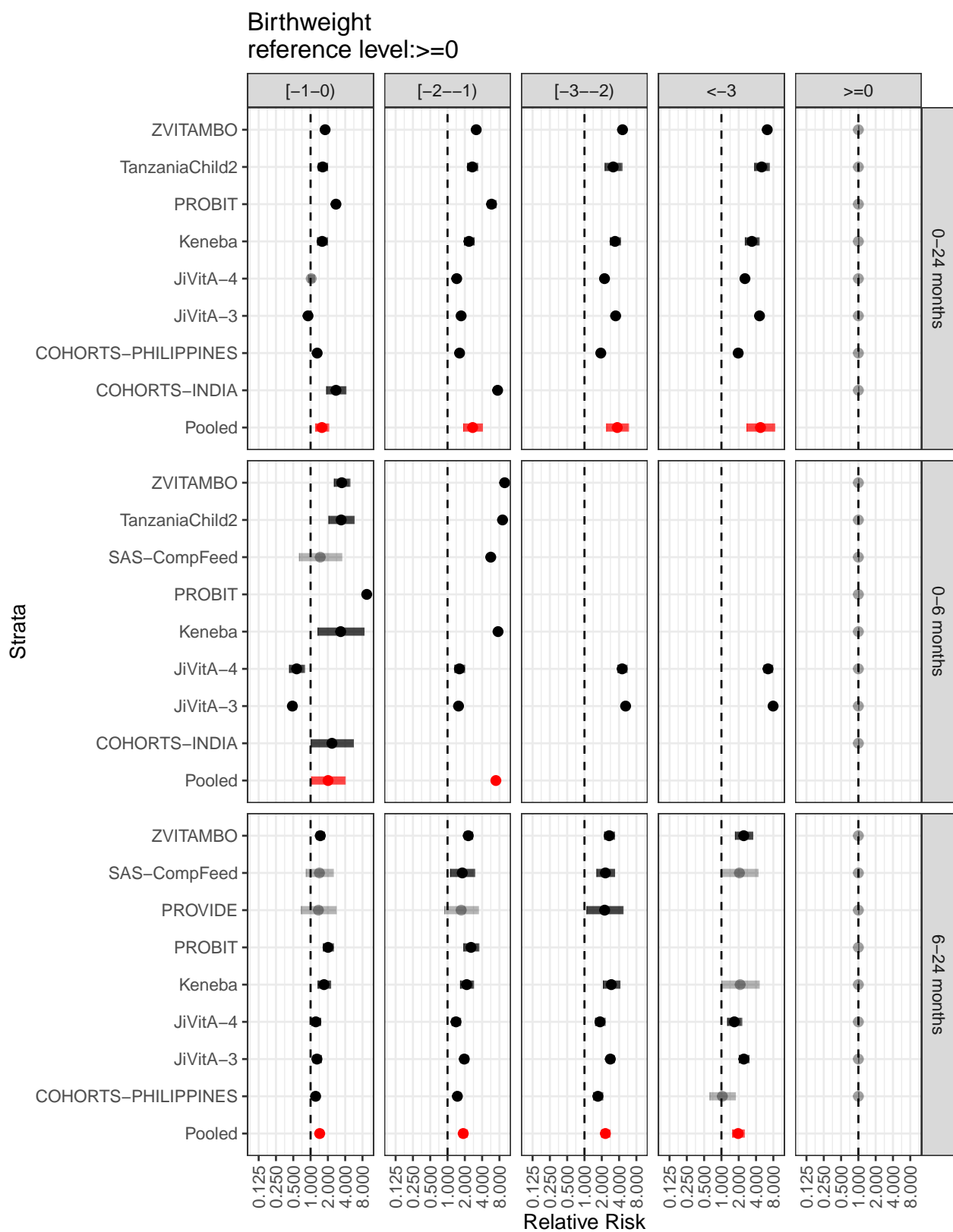
Cumulative incidence of stunting from birth to 24 months

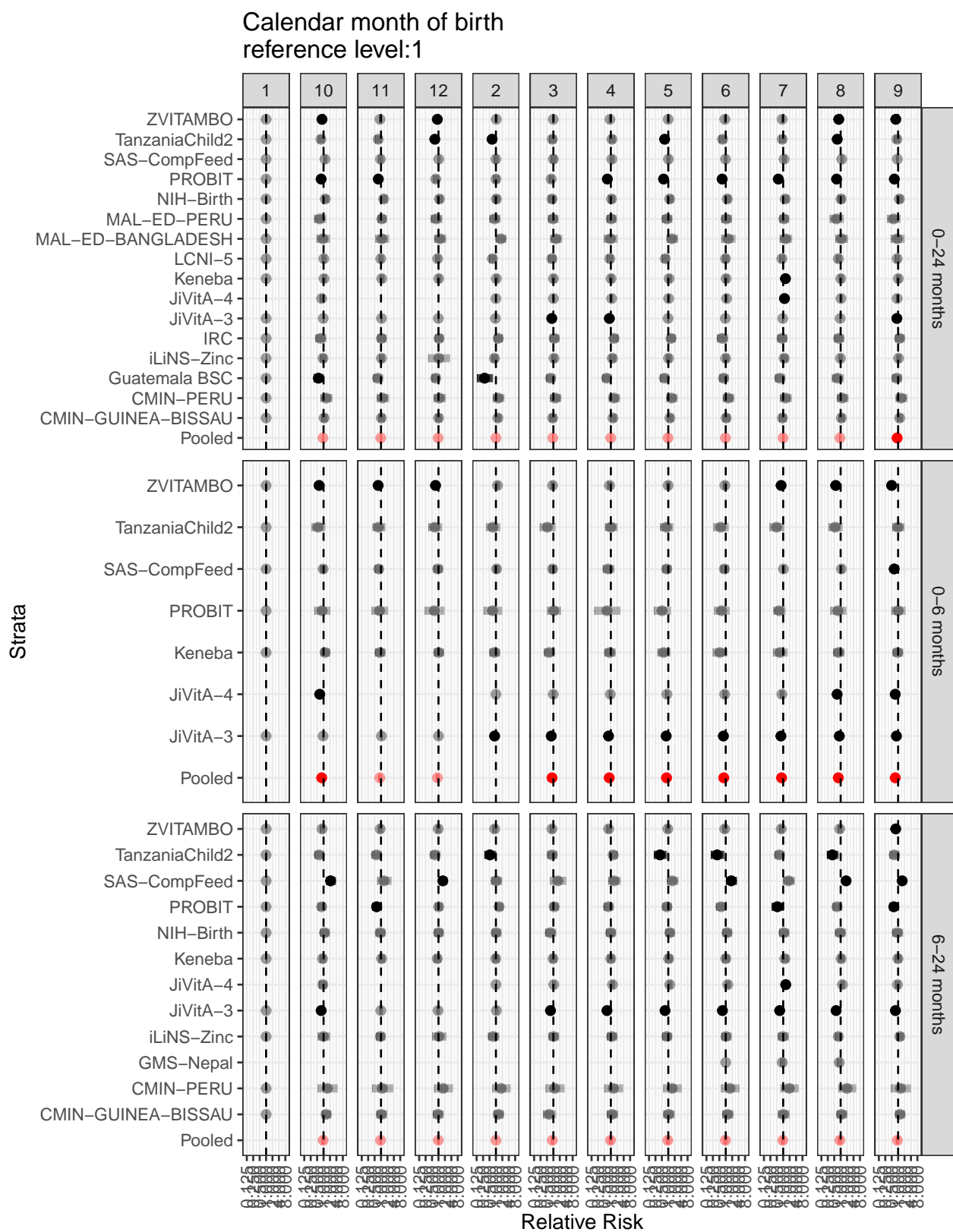
Child characteristics

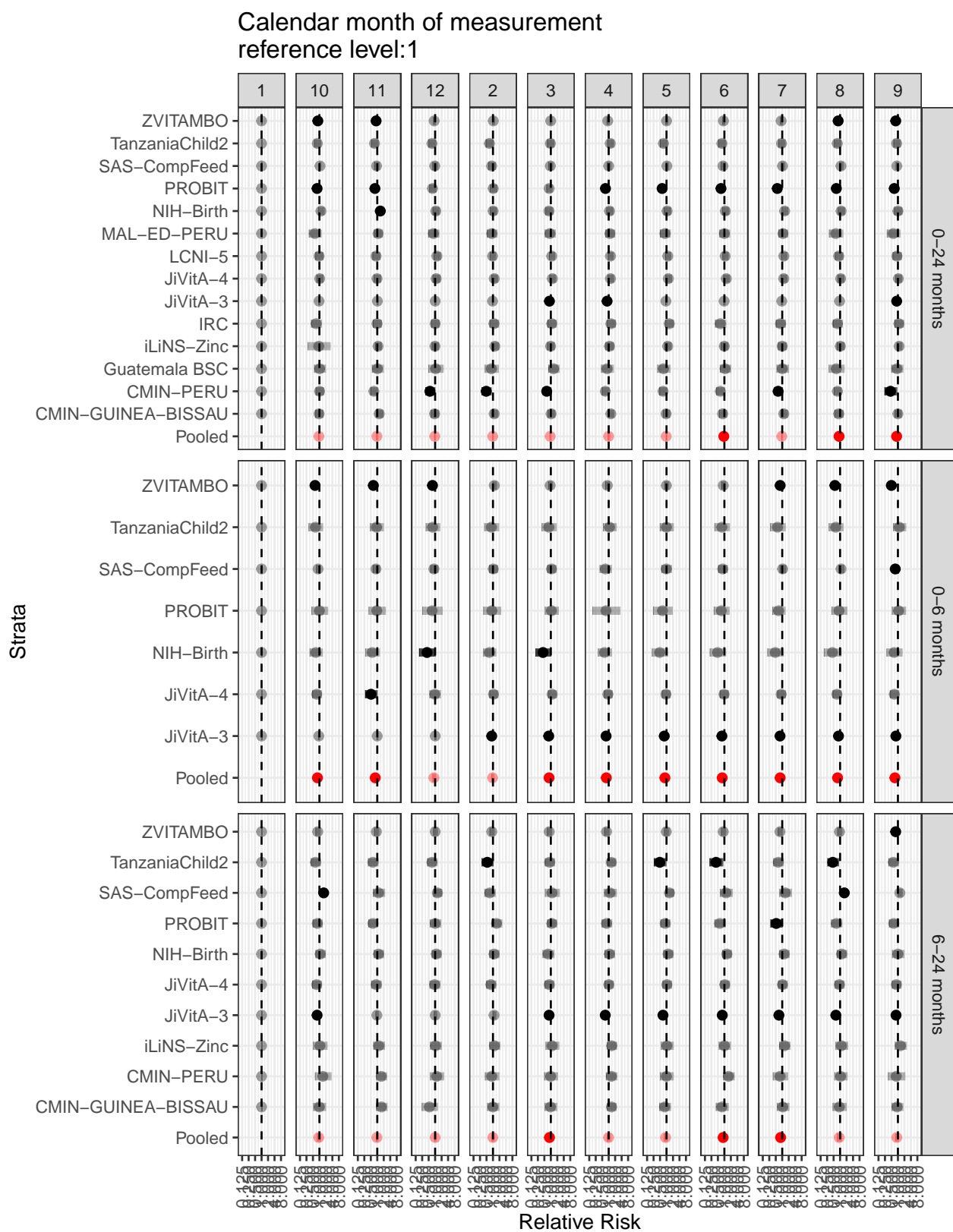


Birth length
reference level: ≥ 0

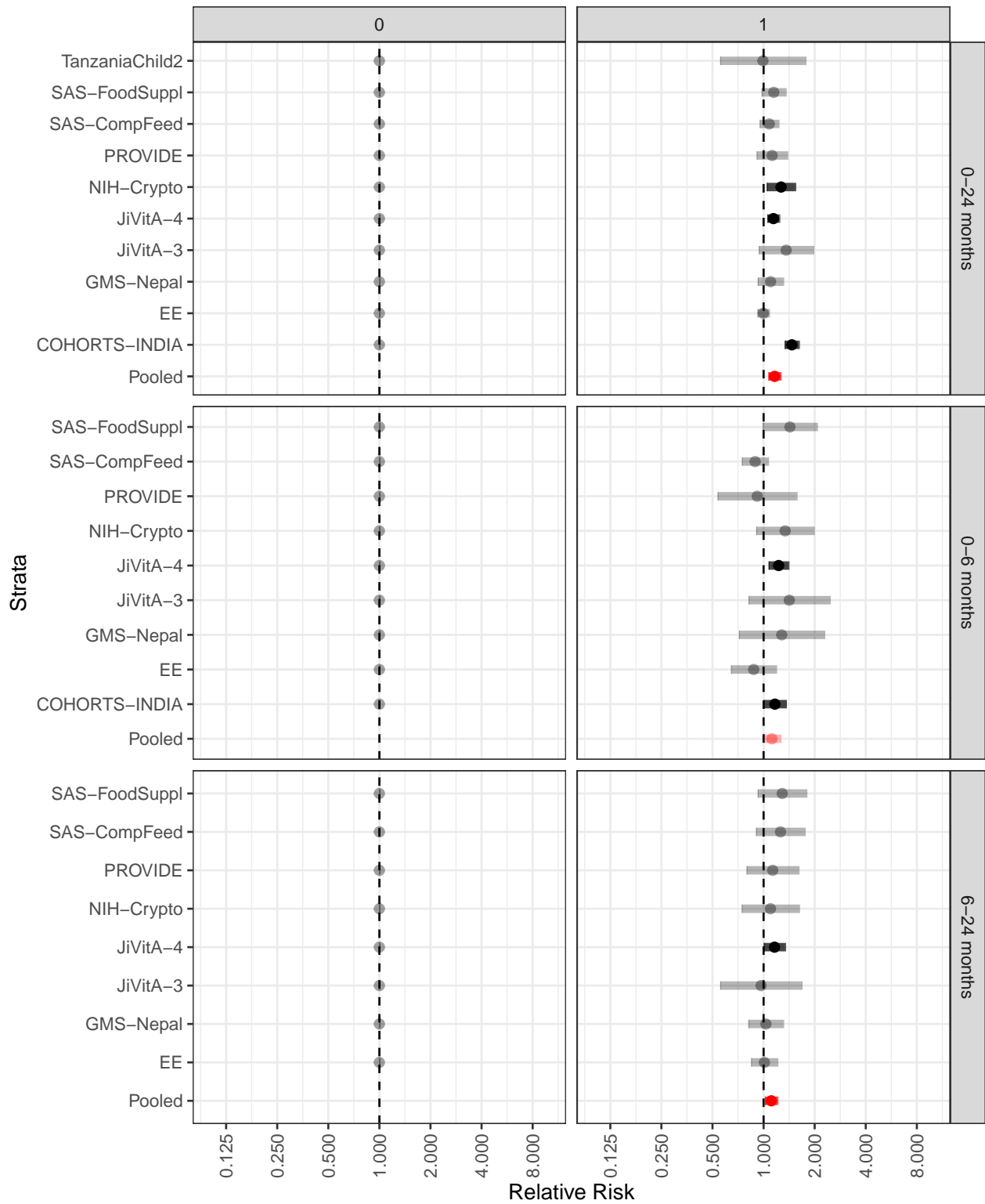




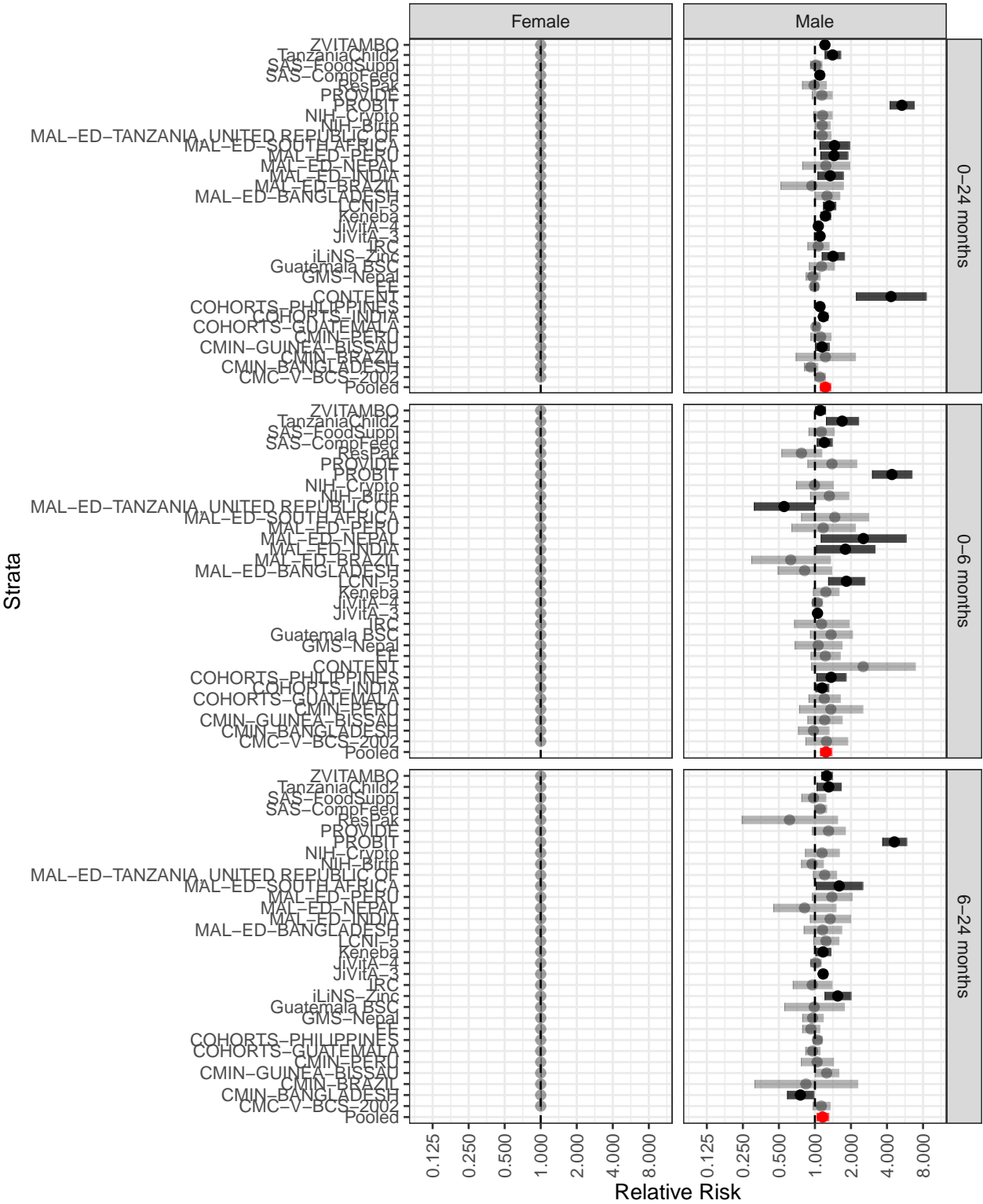


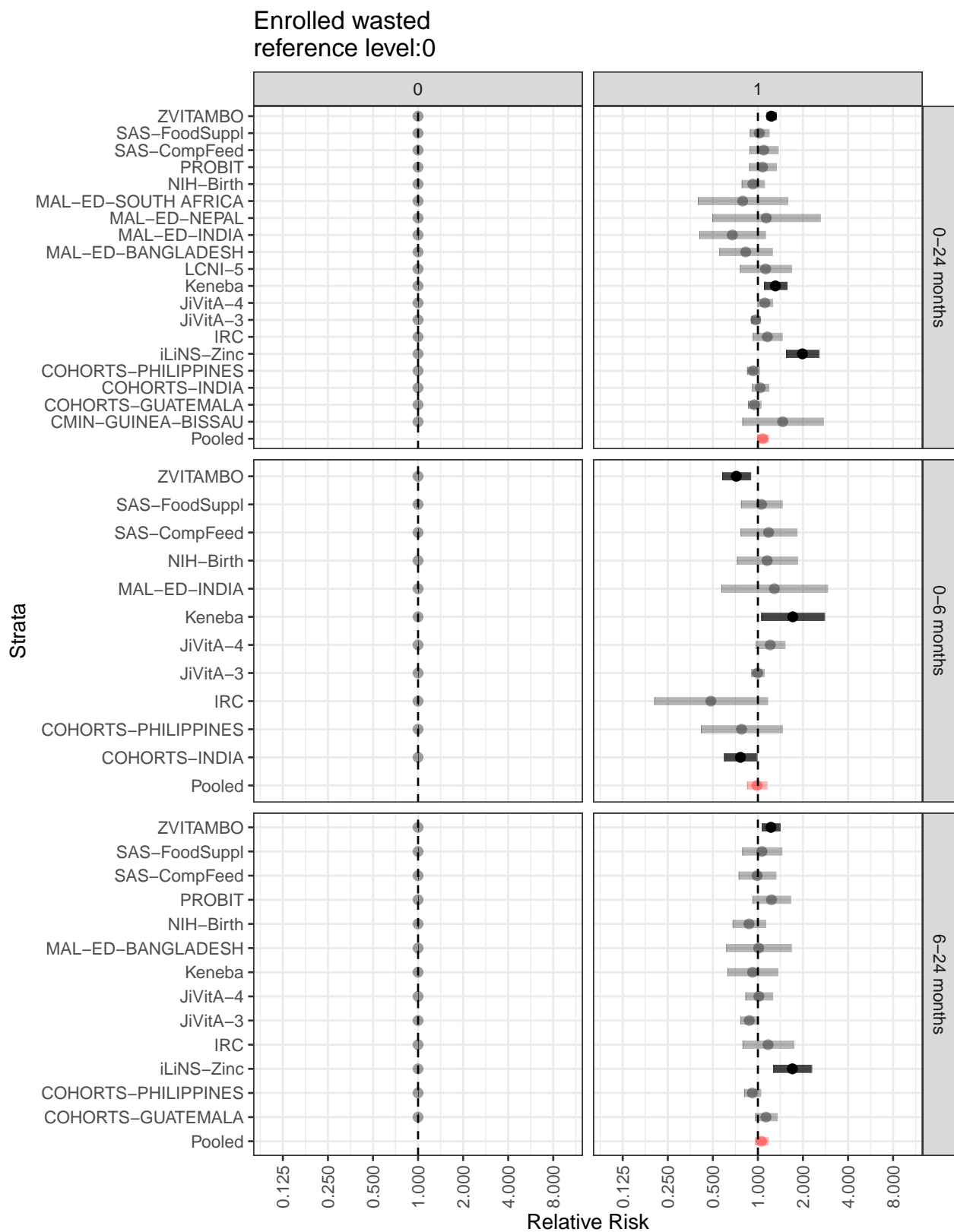


Child delivered at home
reference level:0

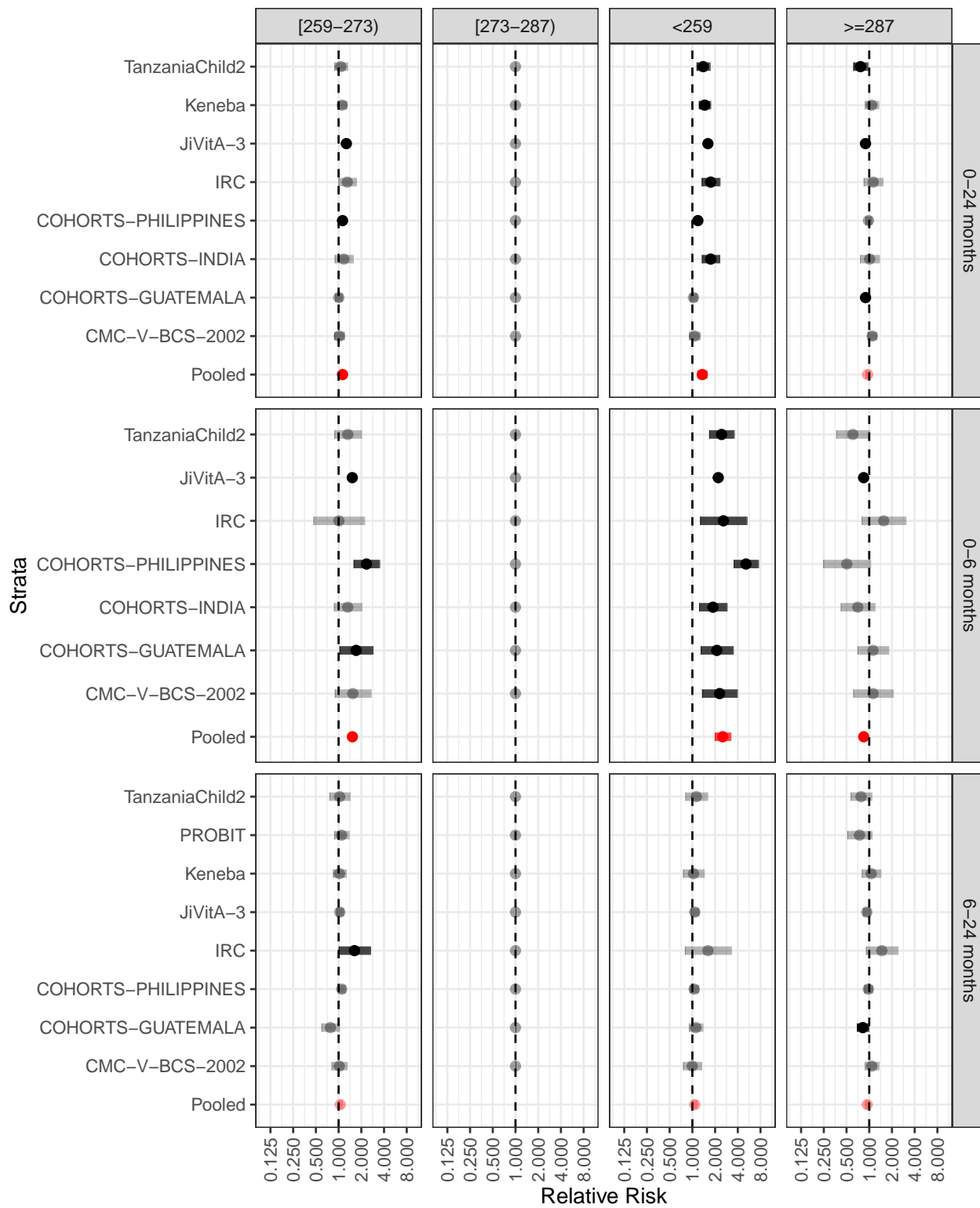


Child's sex
reference level:Female

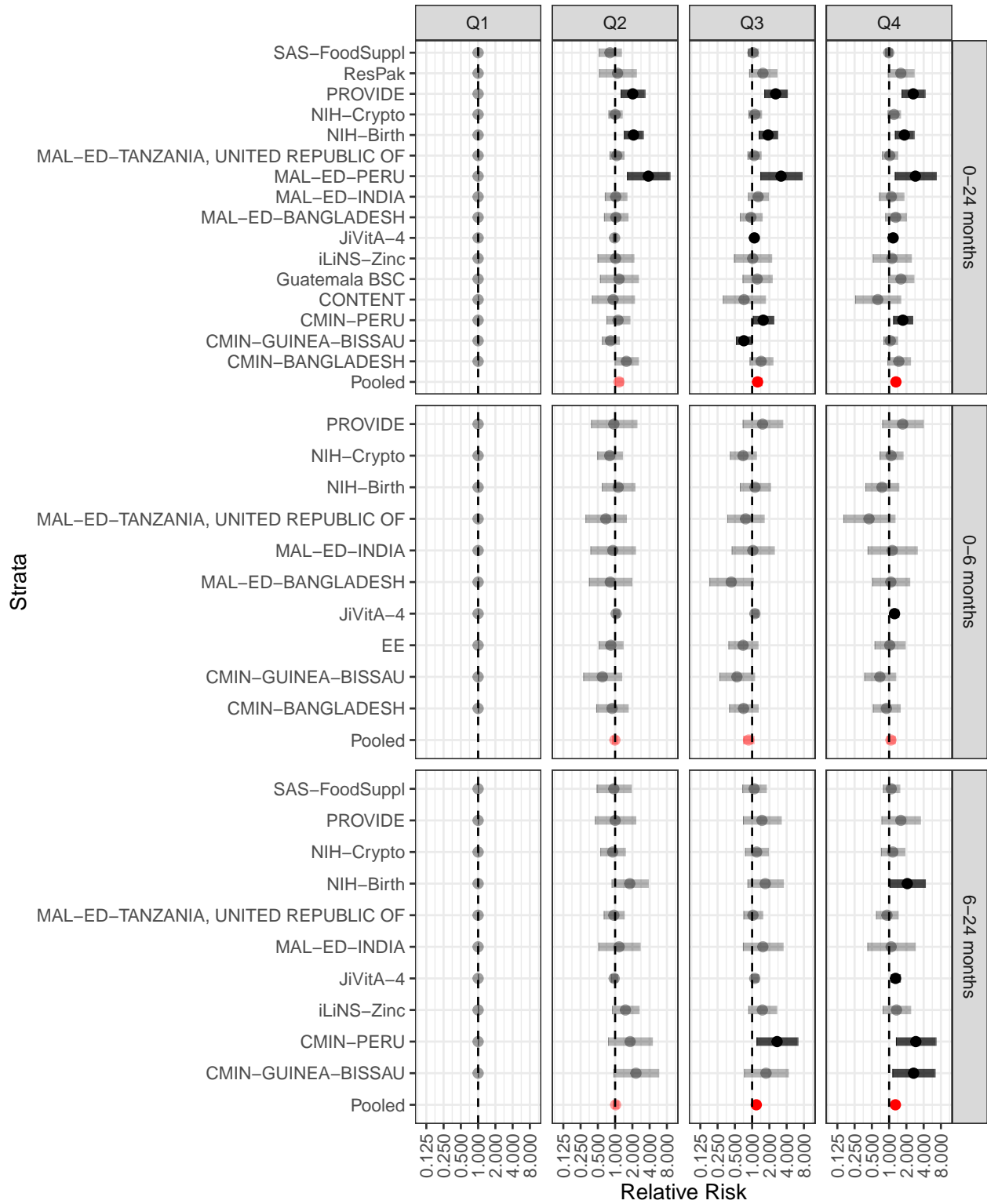




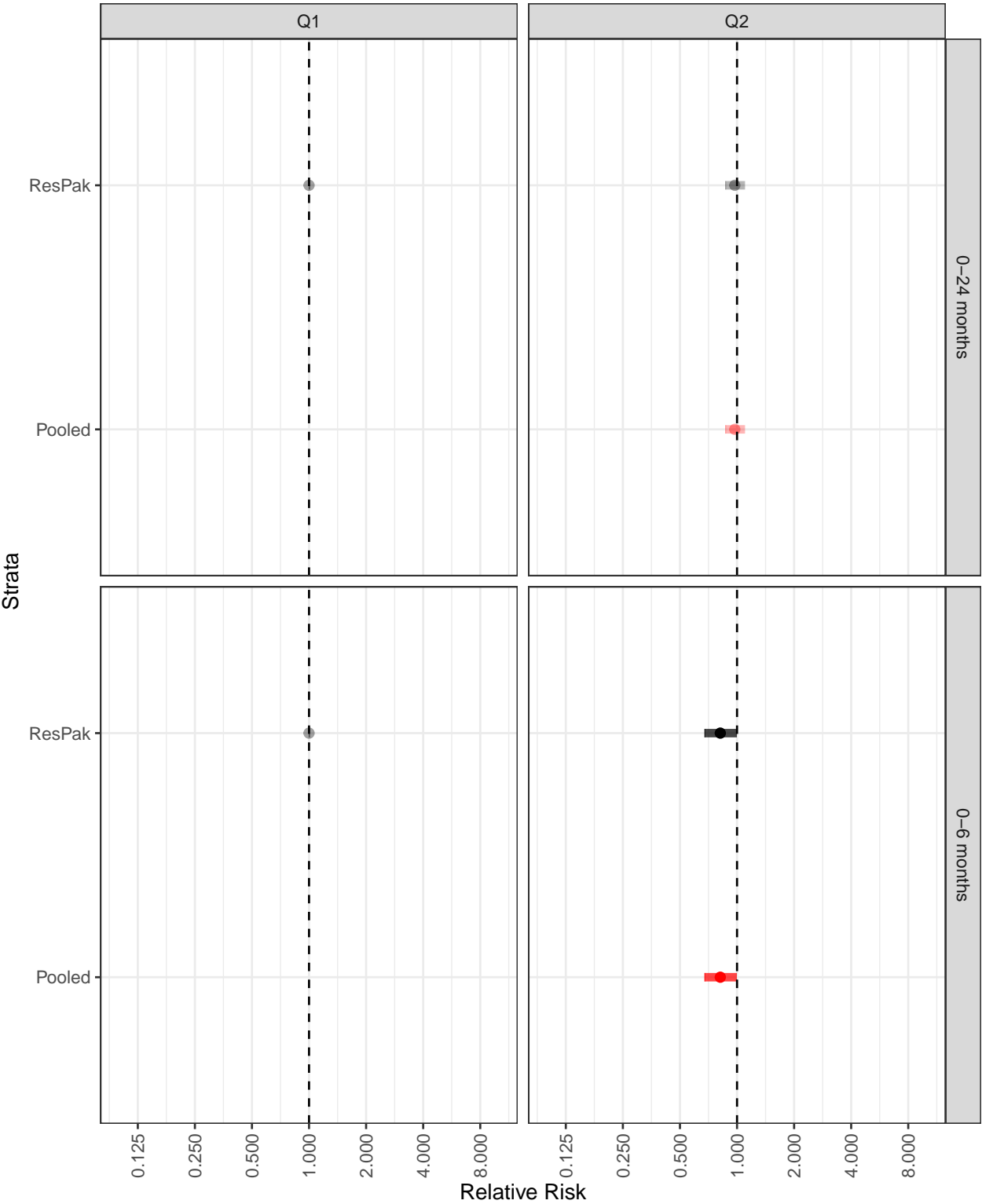
Gestational age at birth in days
reference level:[273–287)

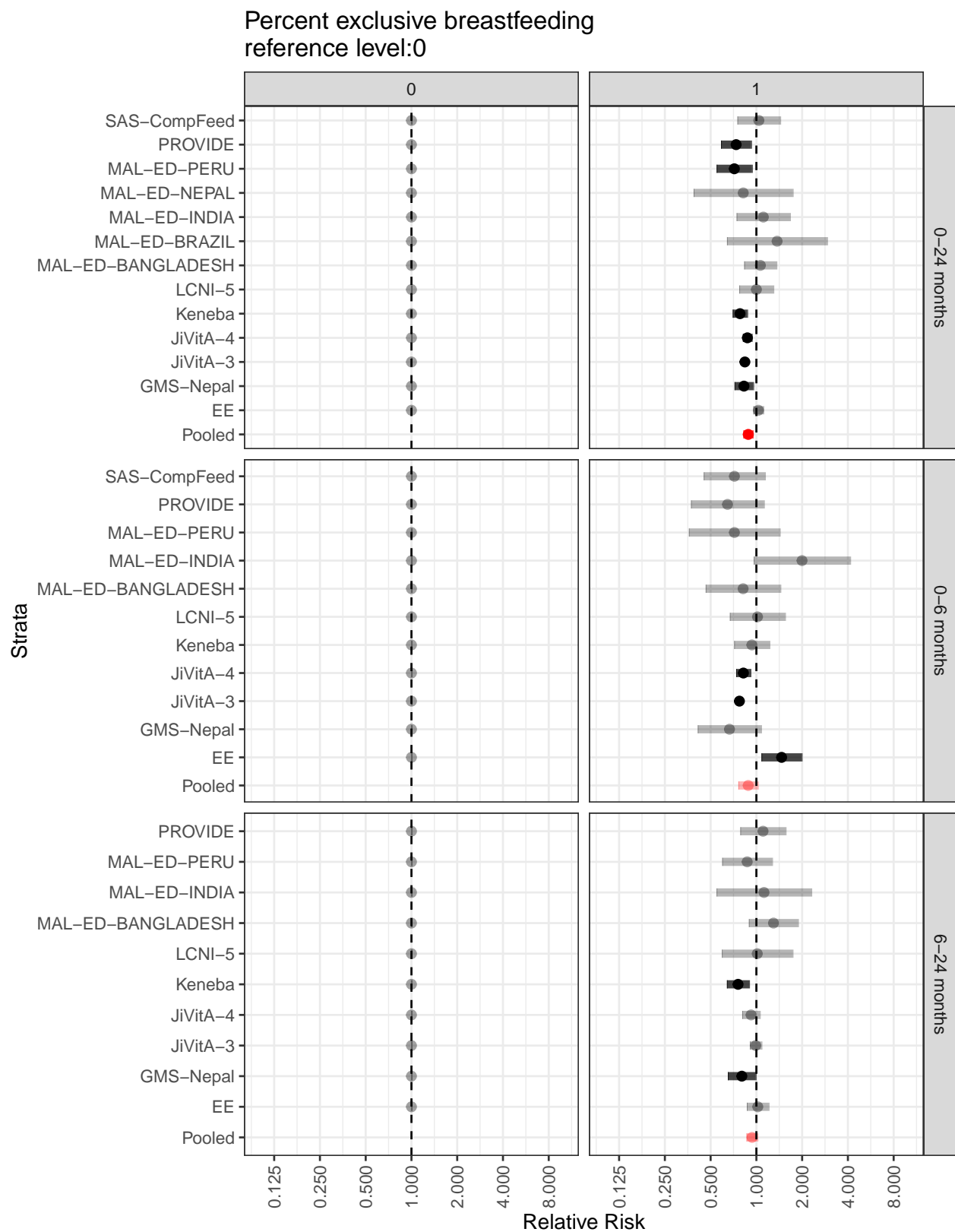


Percent diarrhea in first 24 months
reference level:Q1

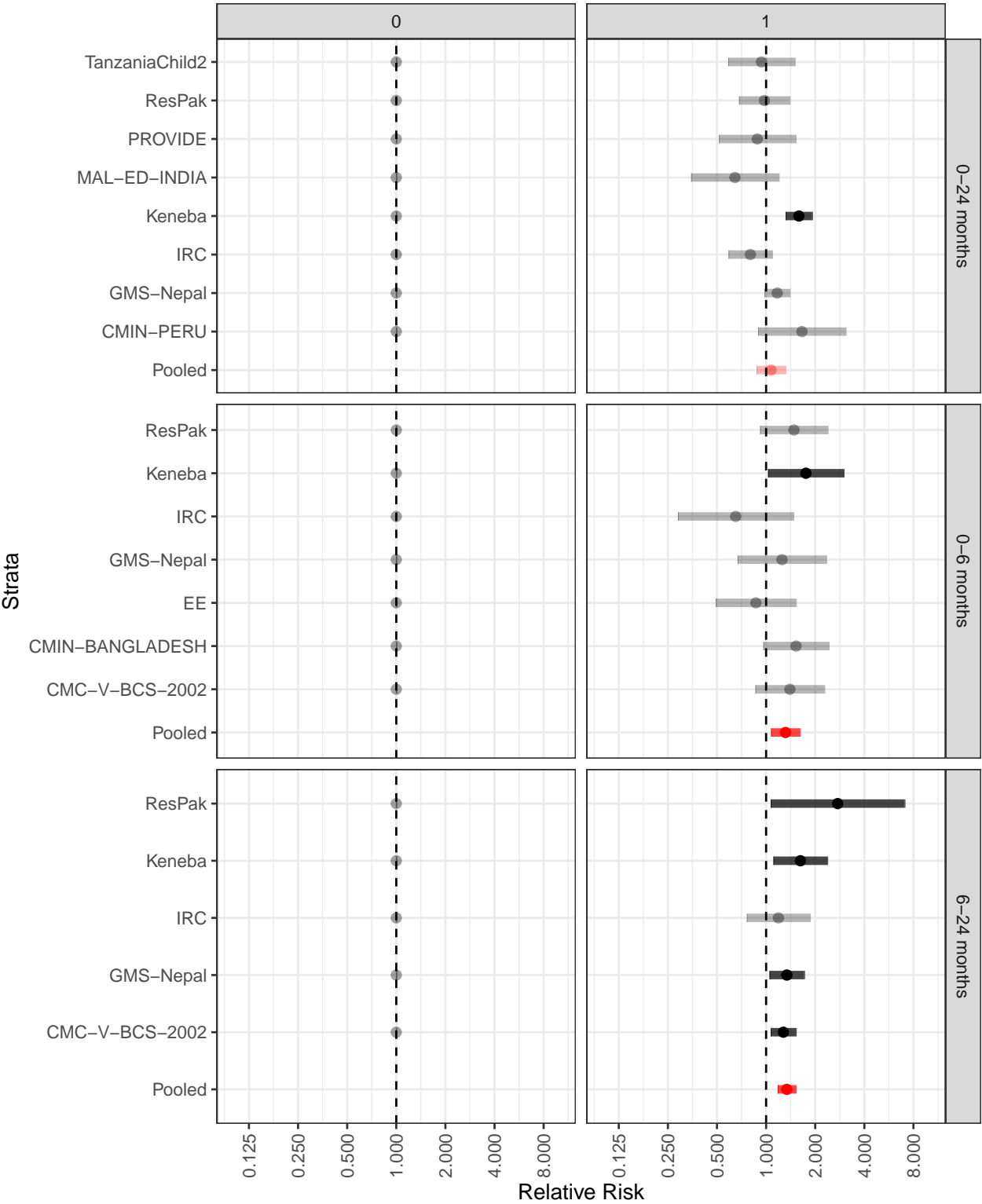


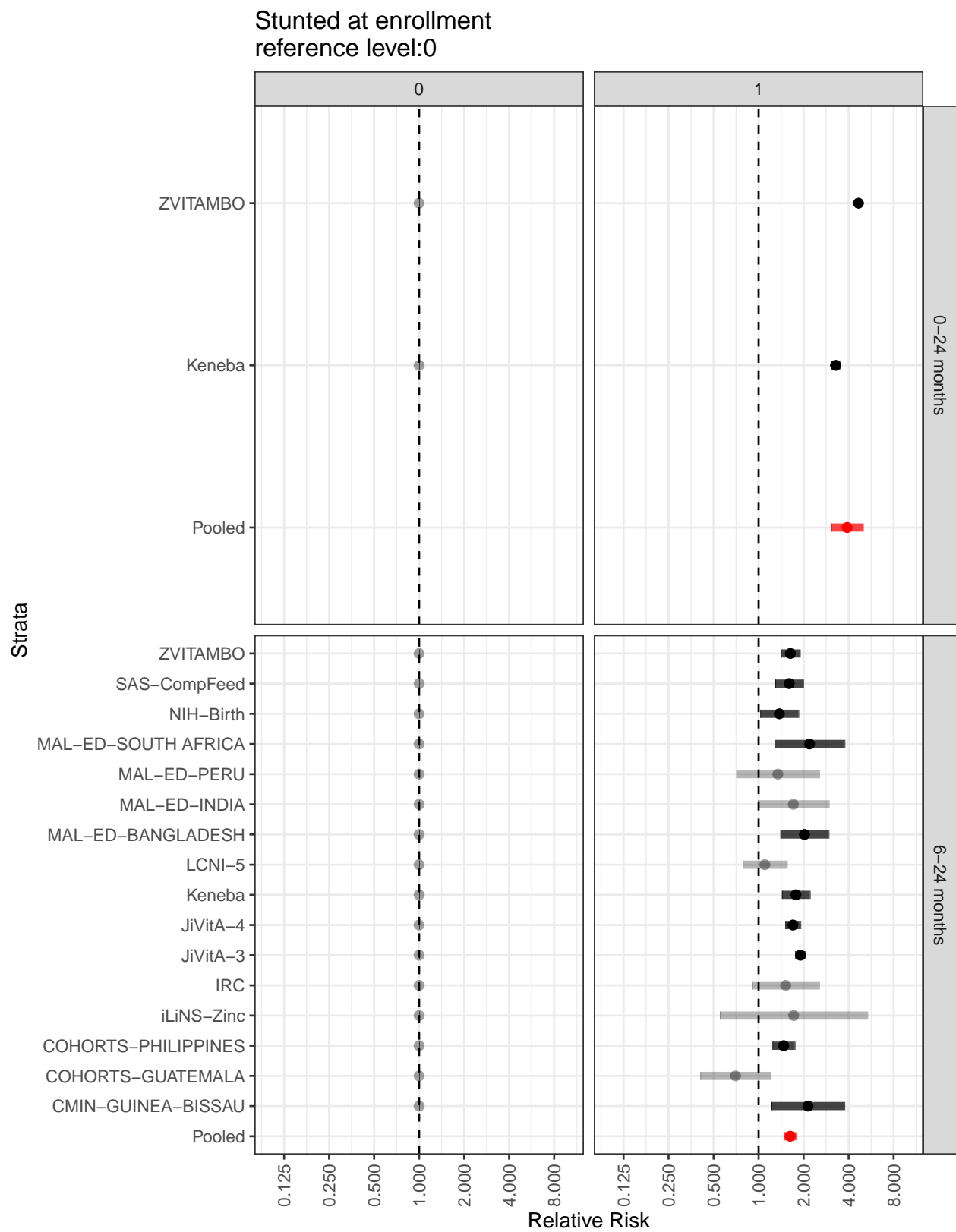
Percent diarrhea in first 6 months
reference level:Q1

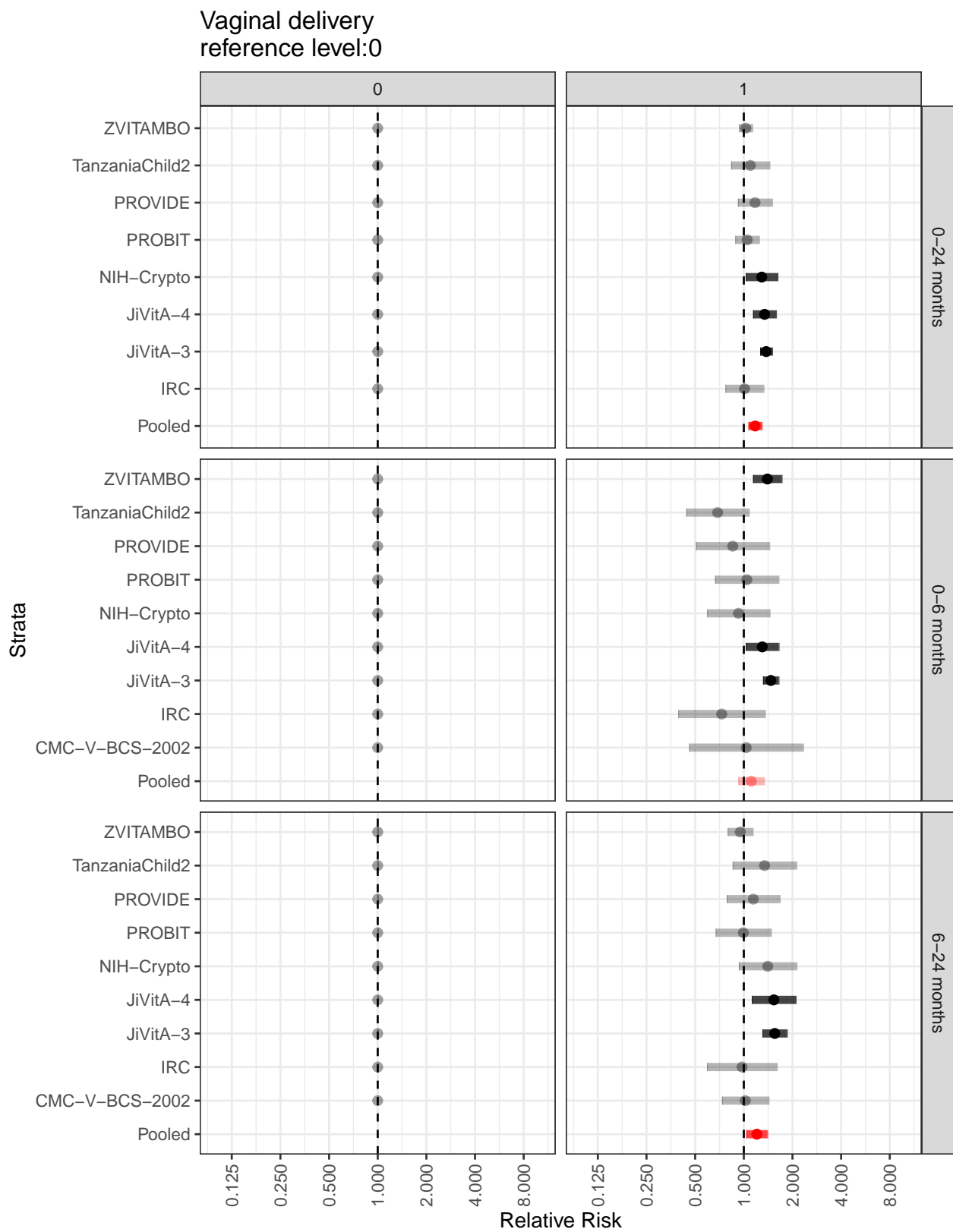




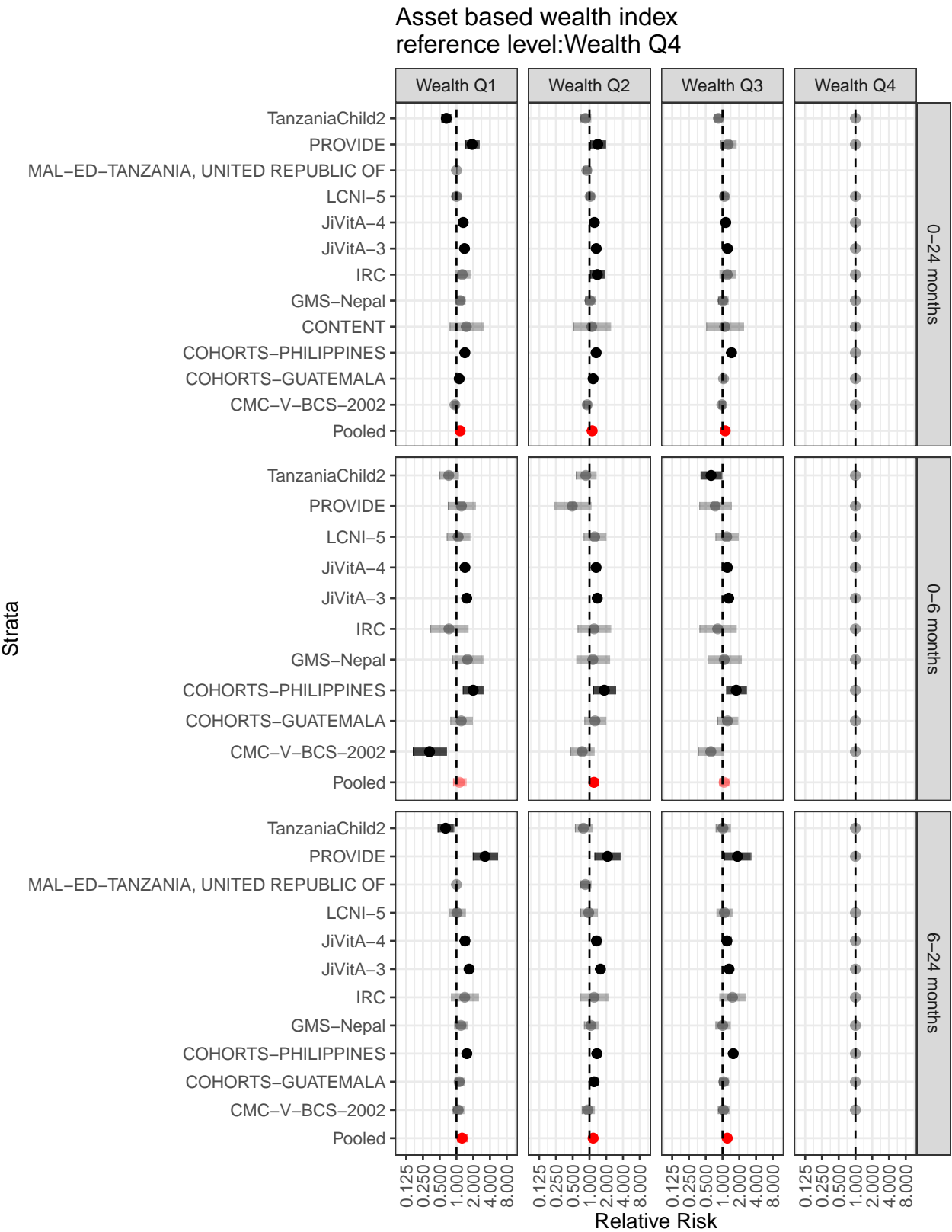
Persistent wasting in first 6 months reference level:0



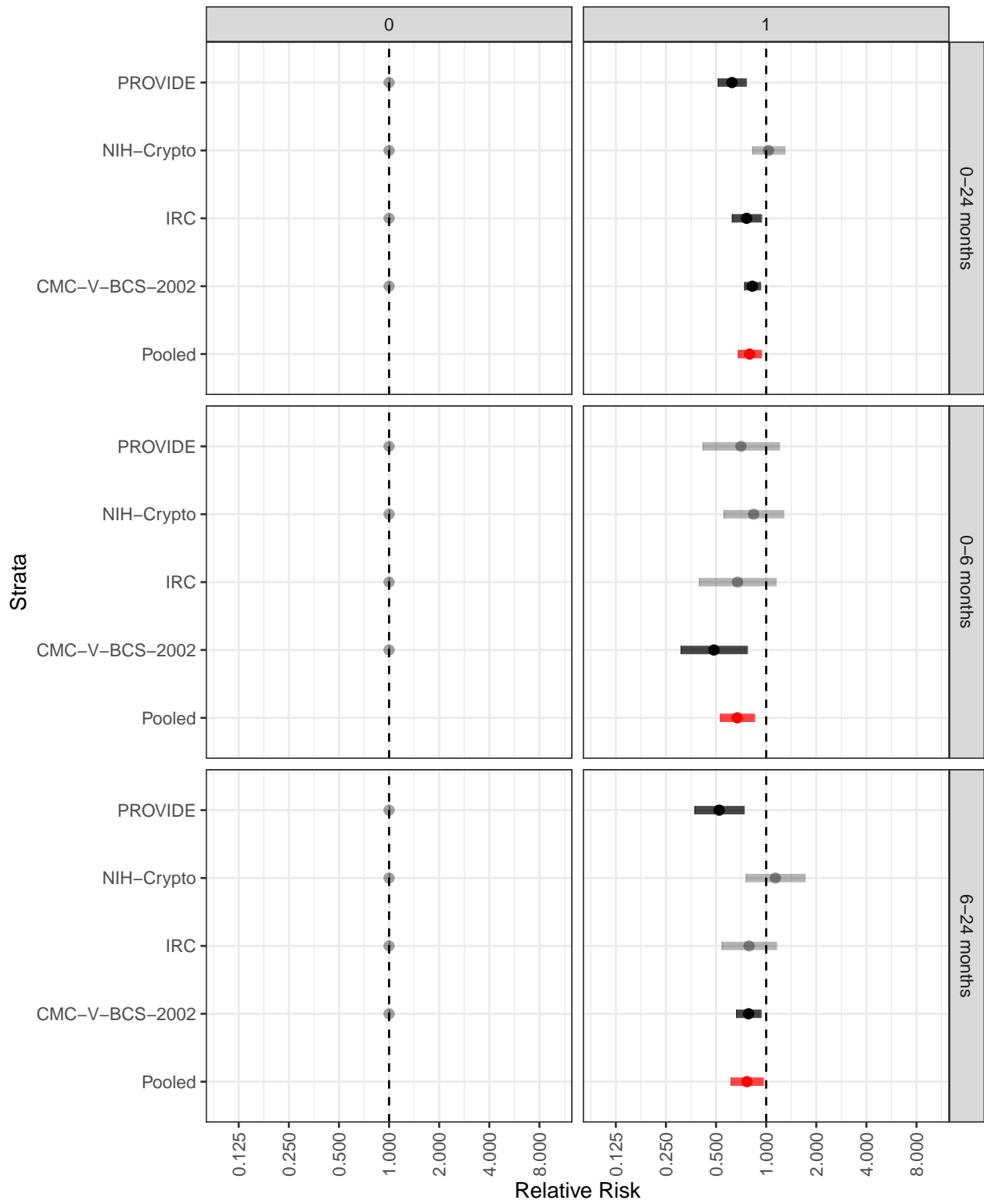


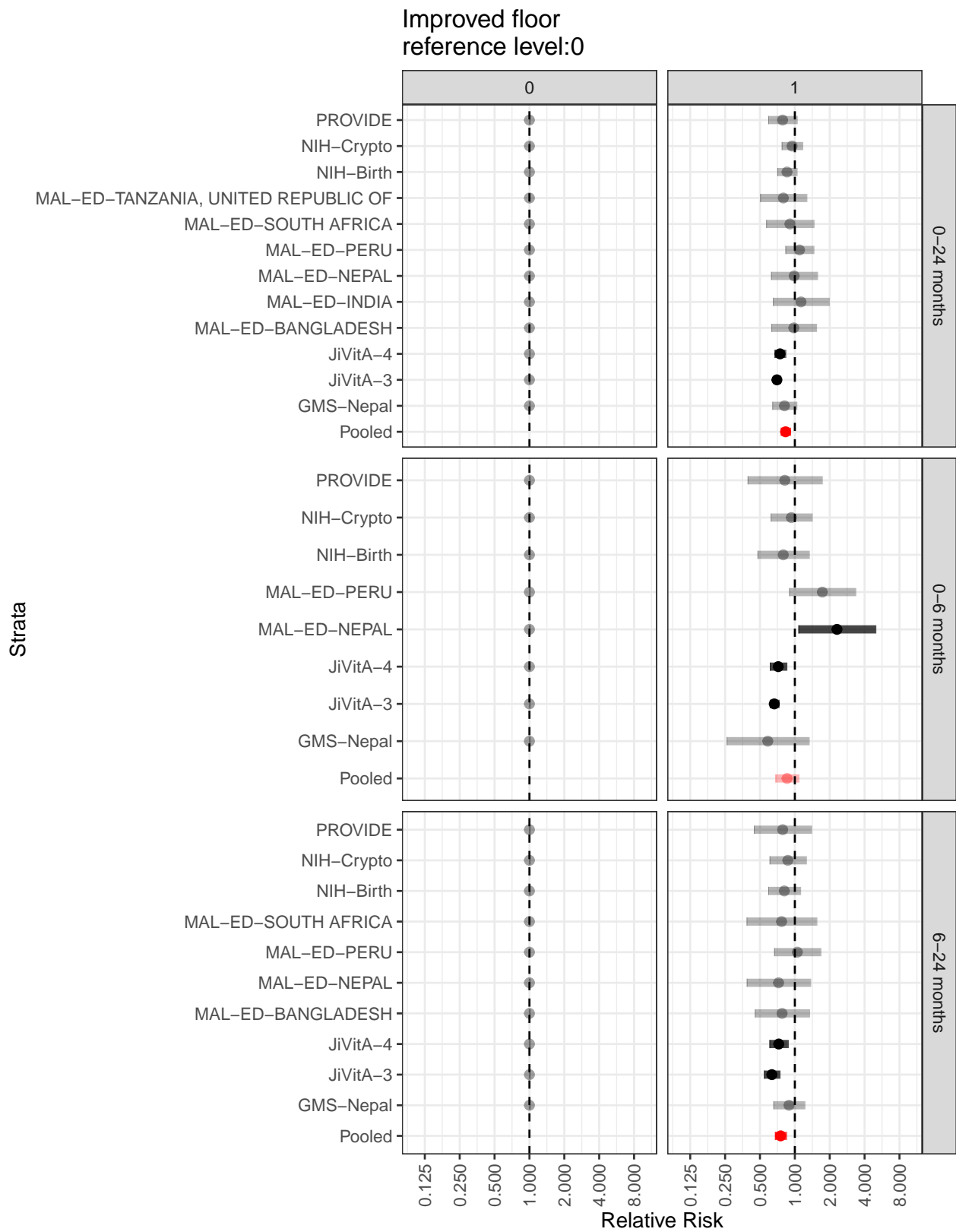


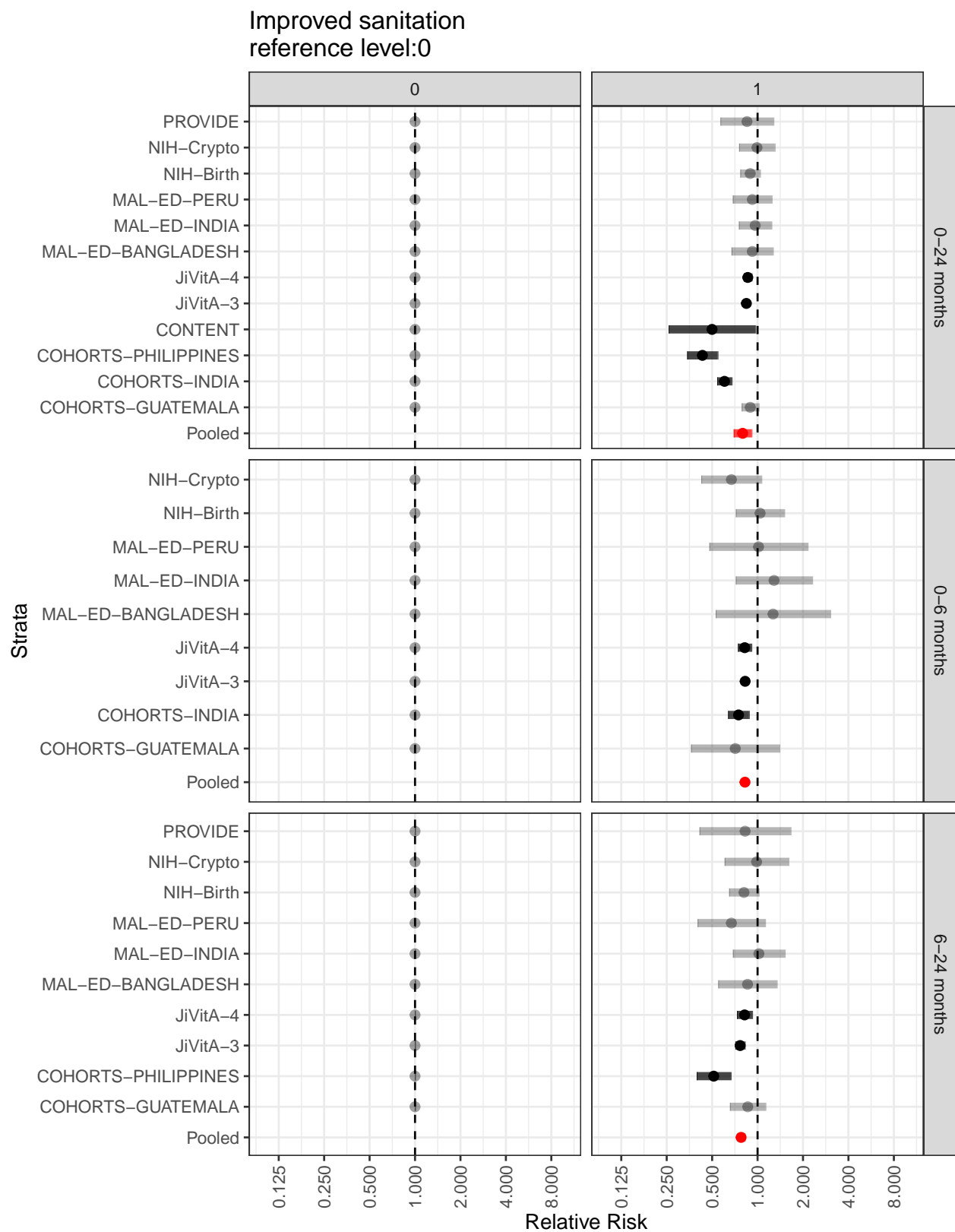
Household characteristics



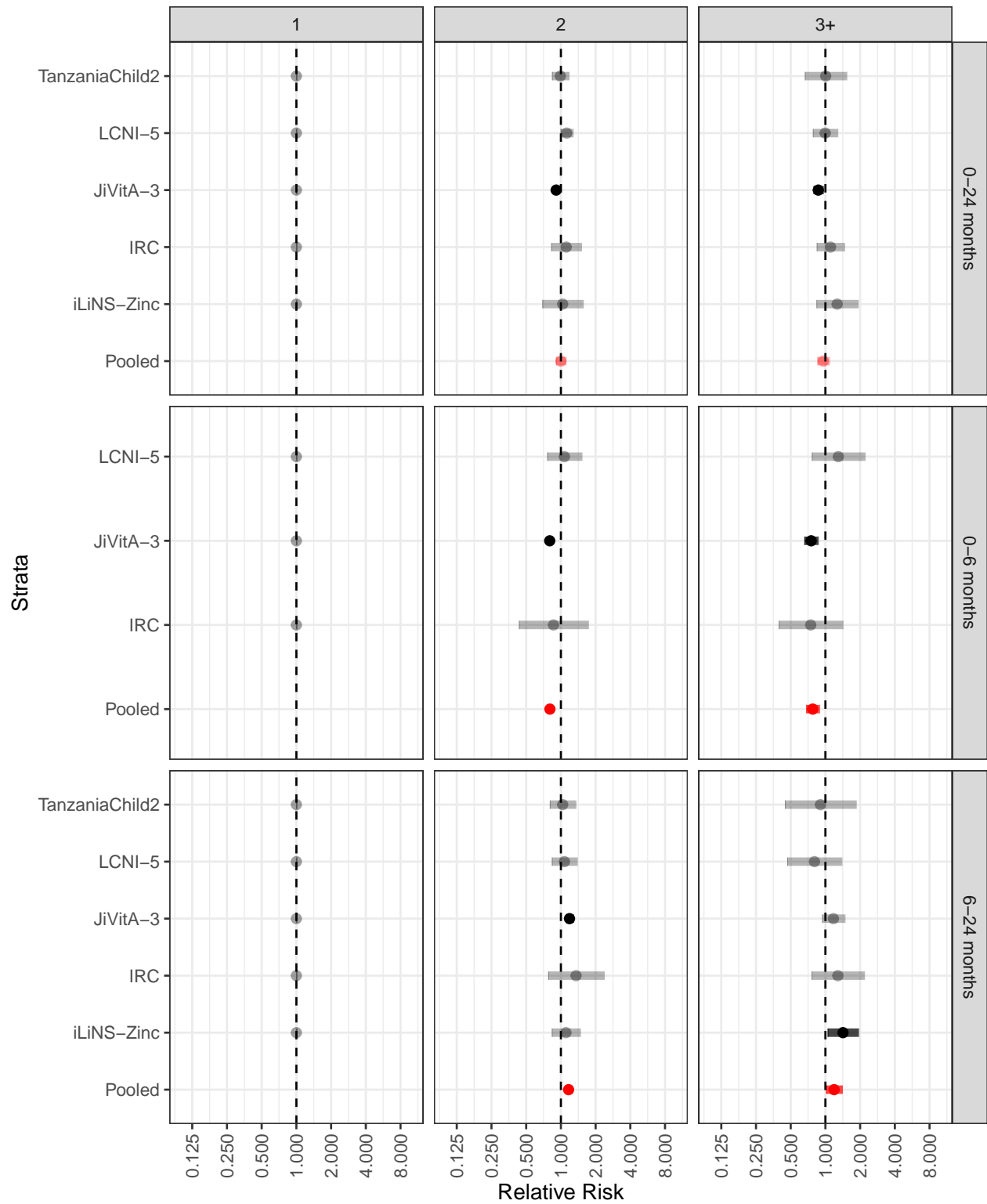
Clean cook
reference level:0



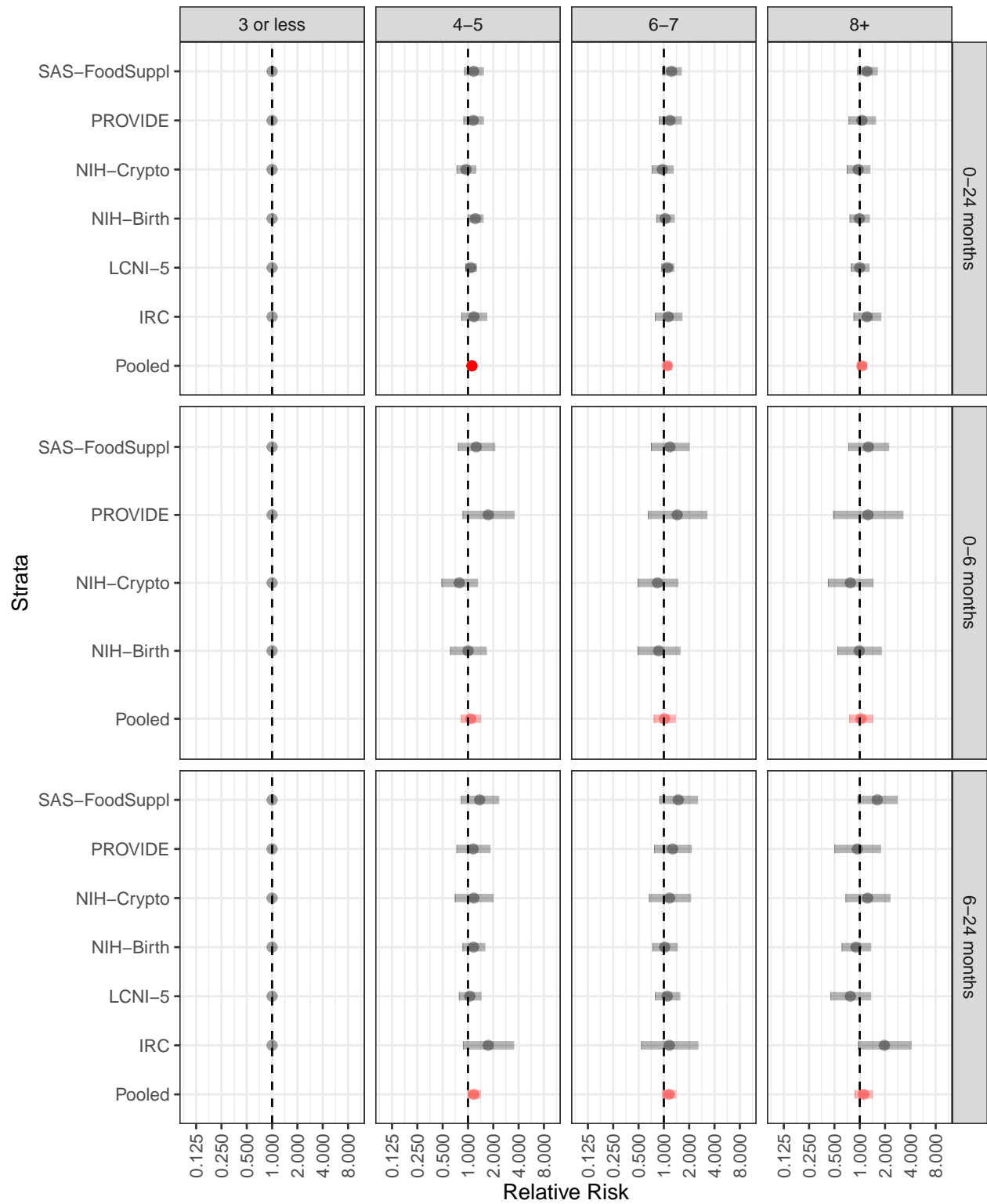




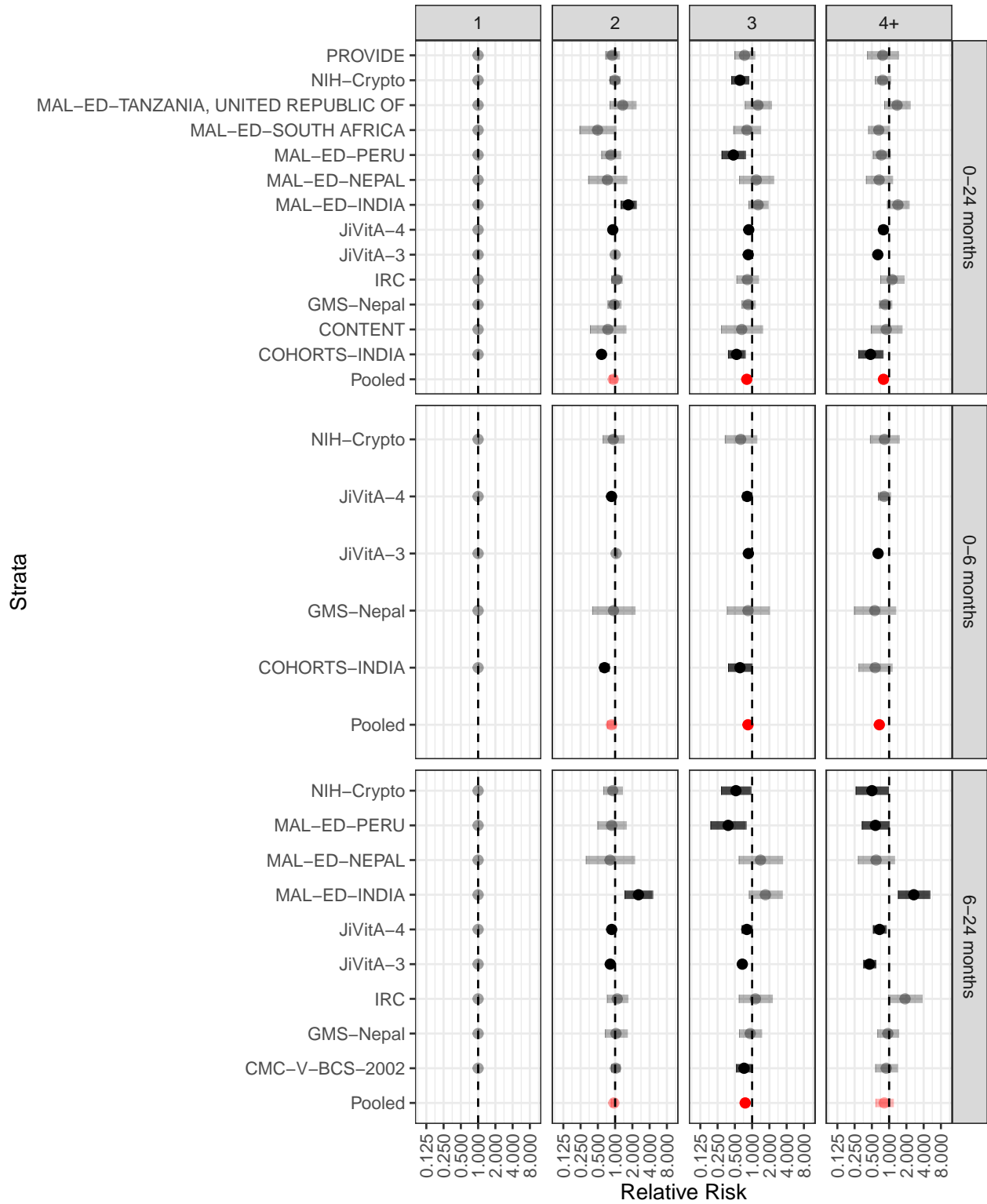
Number of children in the household under 5 years
reference level:1

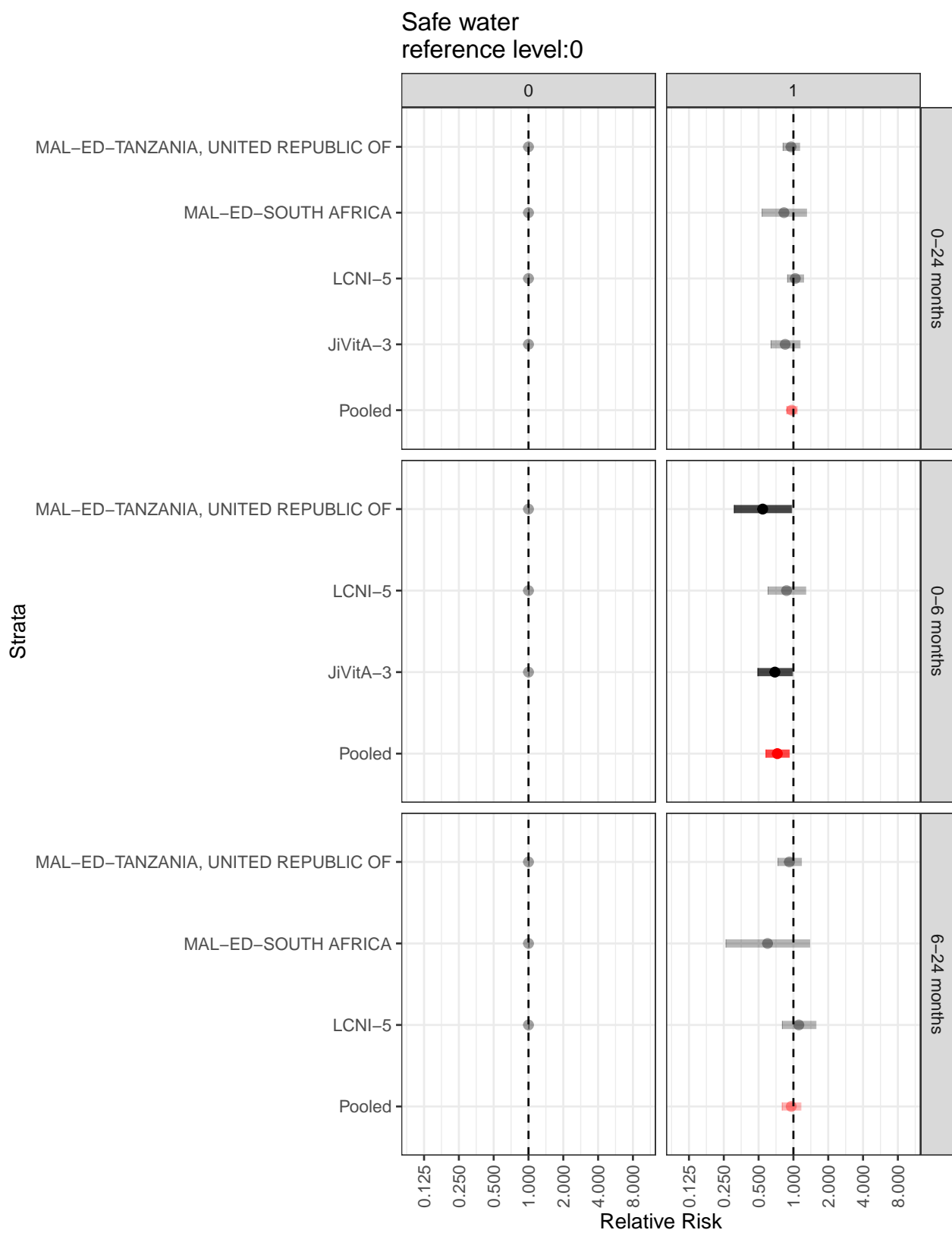


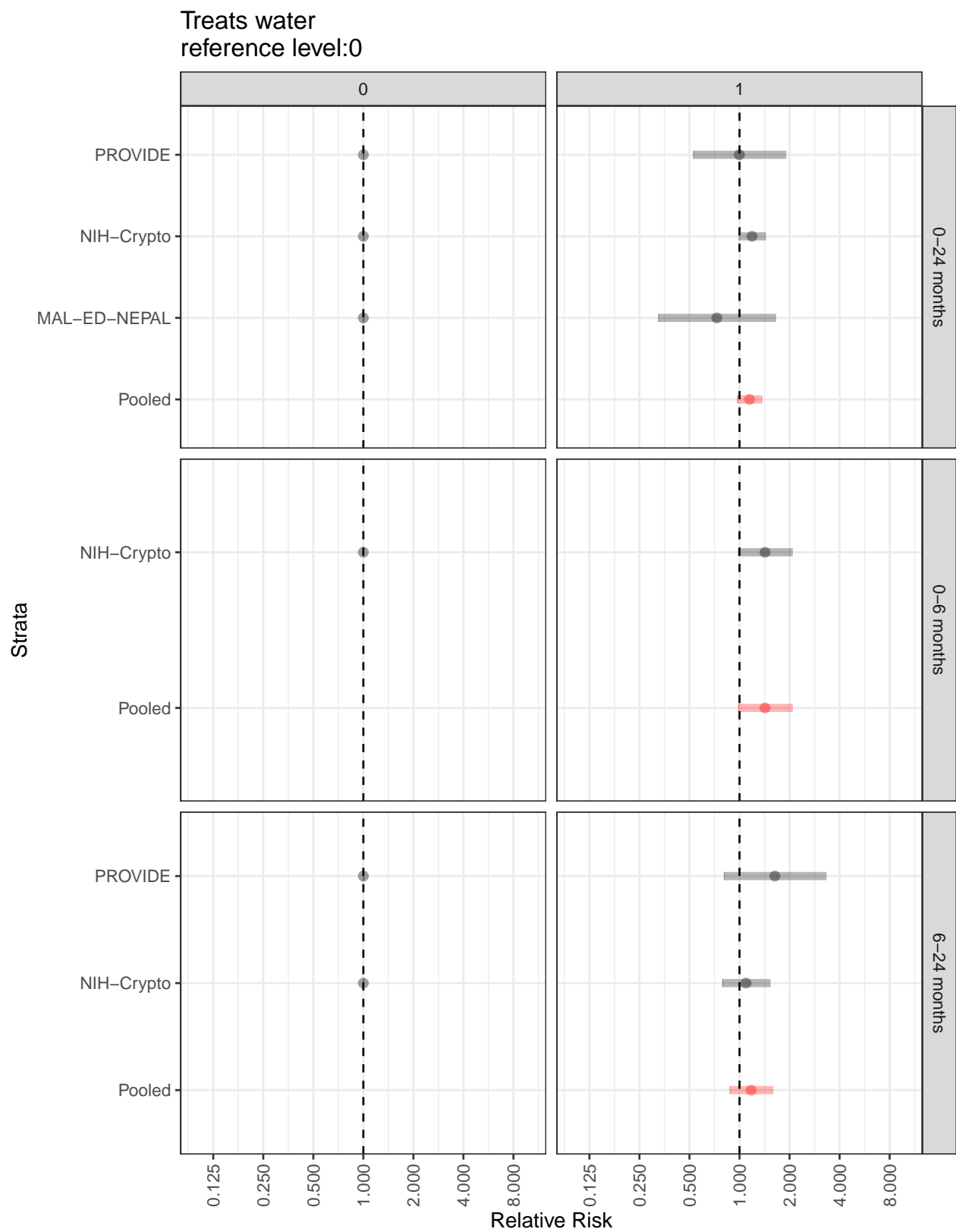
Number of people in the household
reference level:3 or less



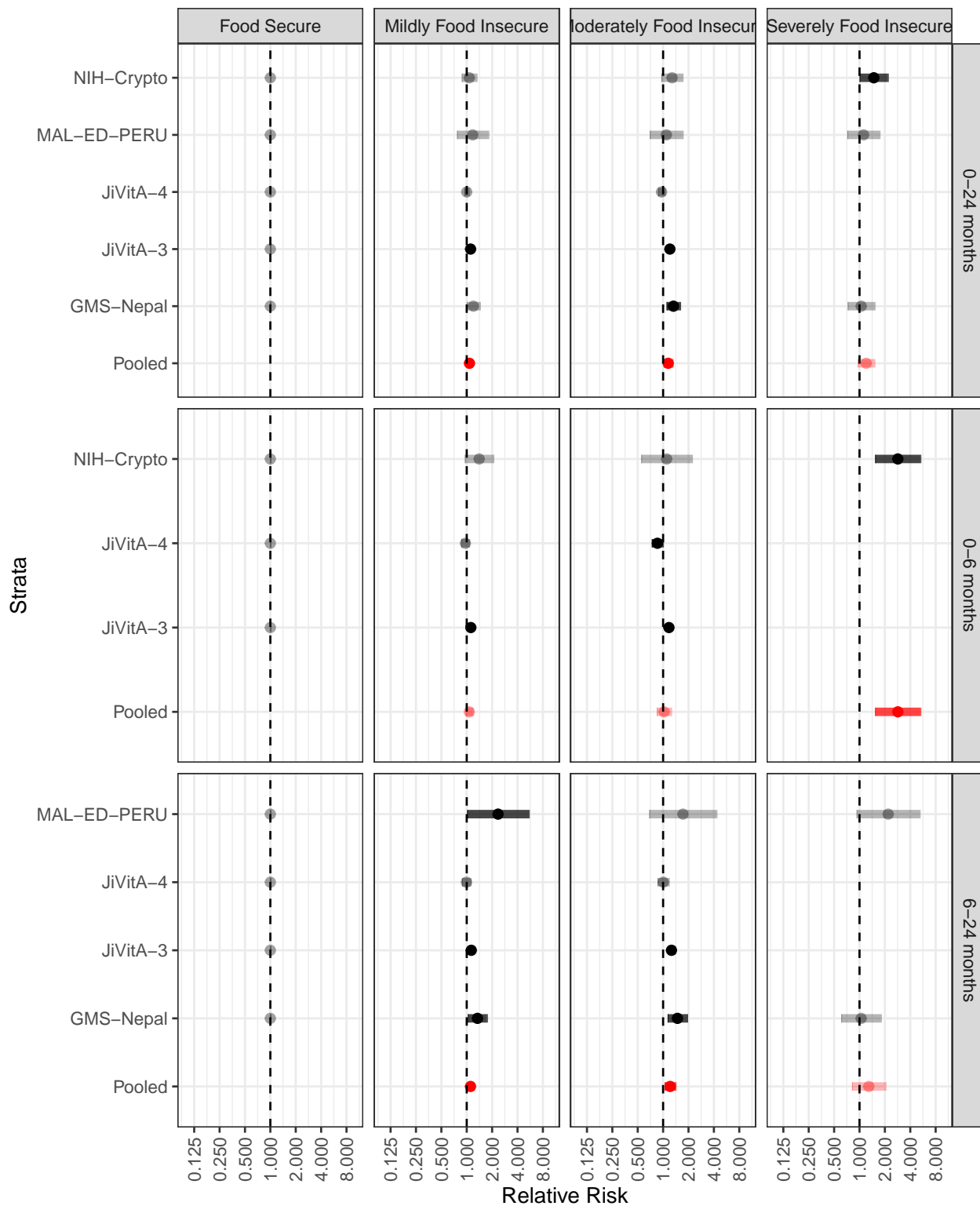
Number of rooms in household
reference level:1



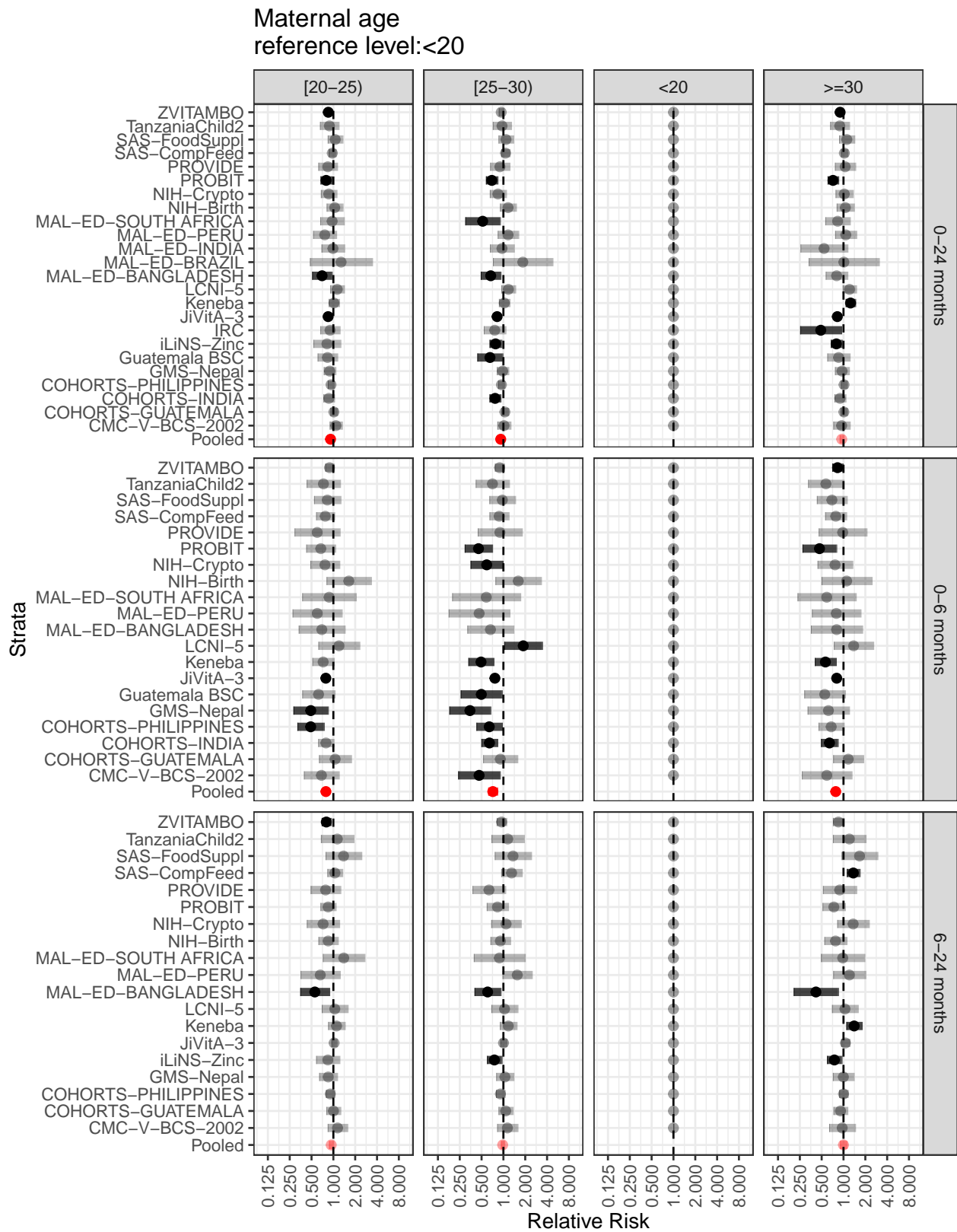




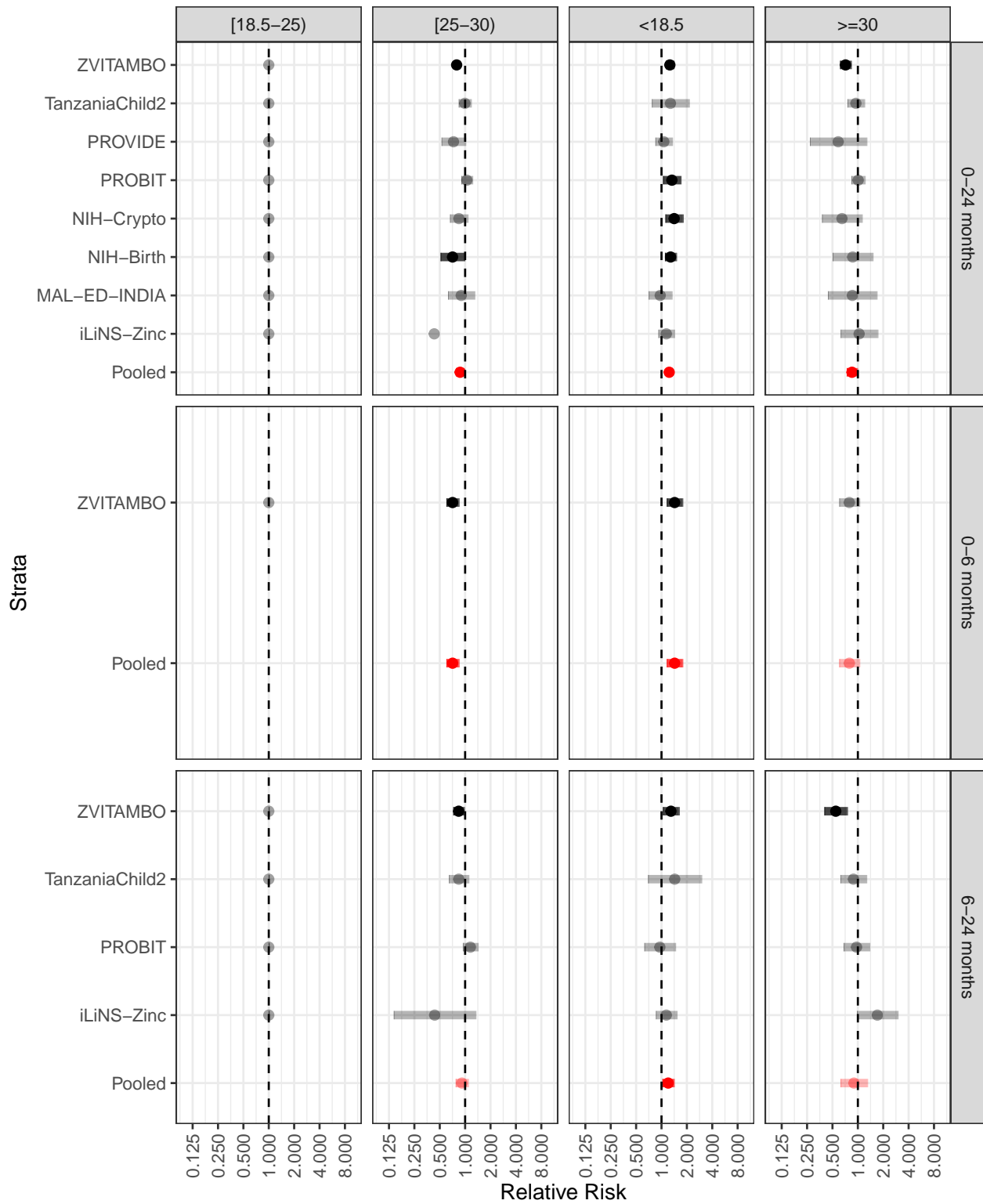
USAID Household Food Insecurity Access Scale (HFIAS) category reference level: Food Secure



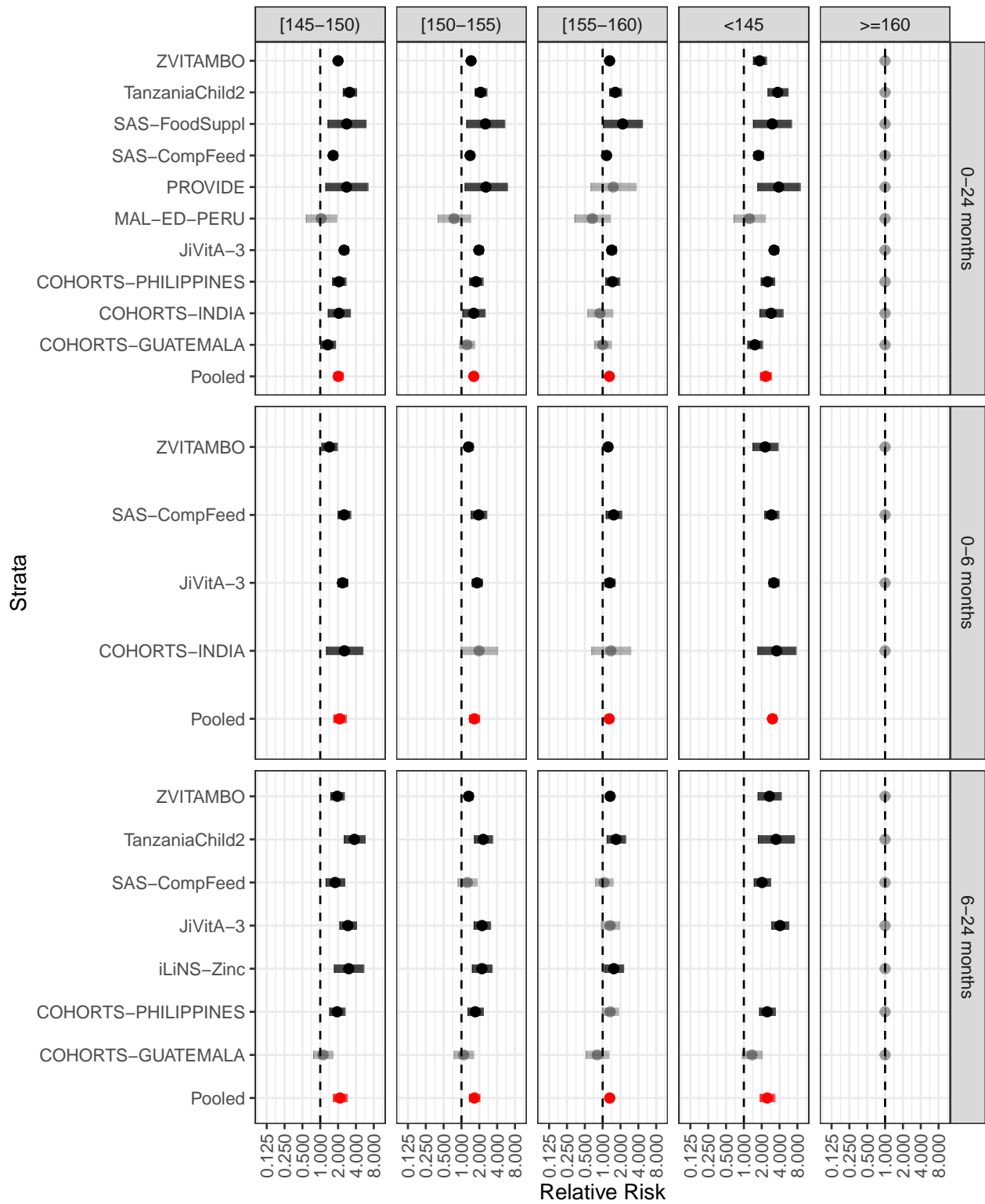
Maternal characteristics

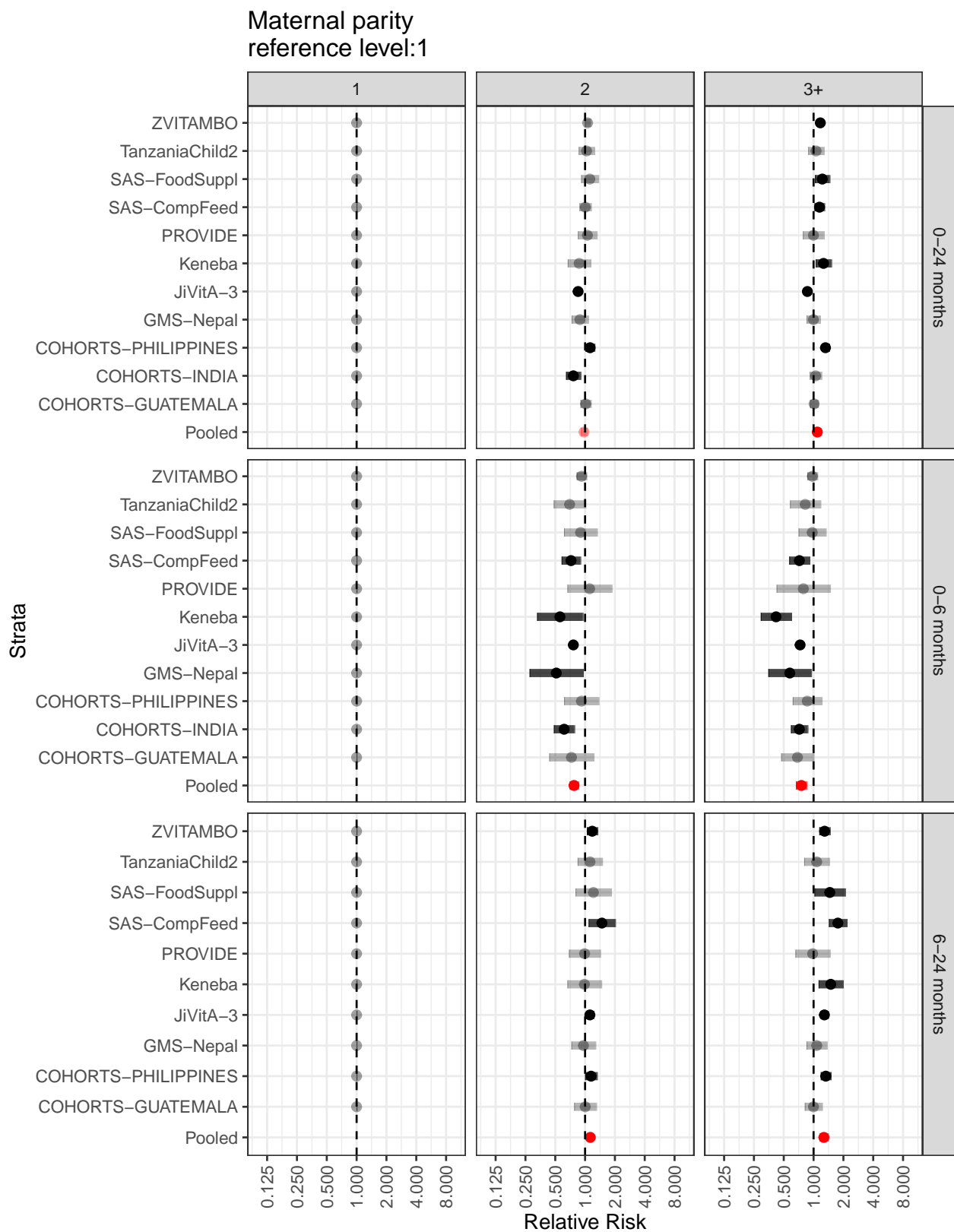


Maternal BMI
reference level:[18.5–25)

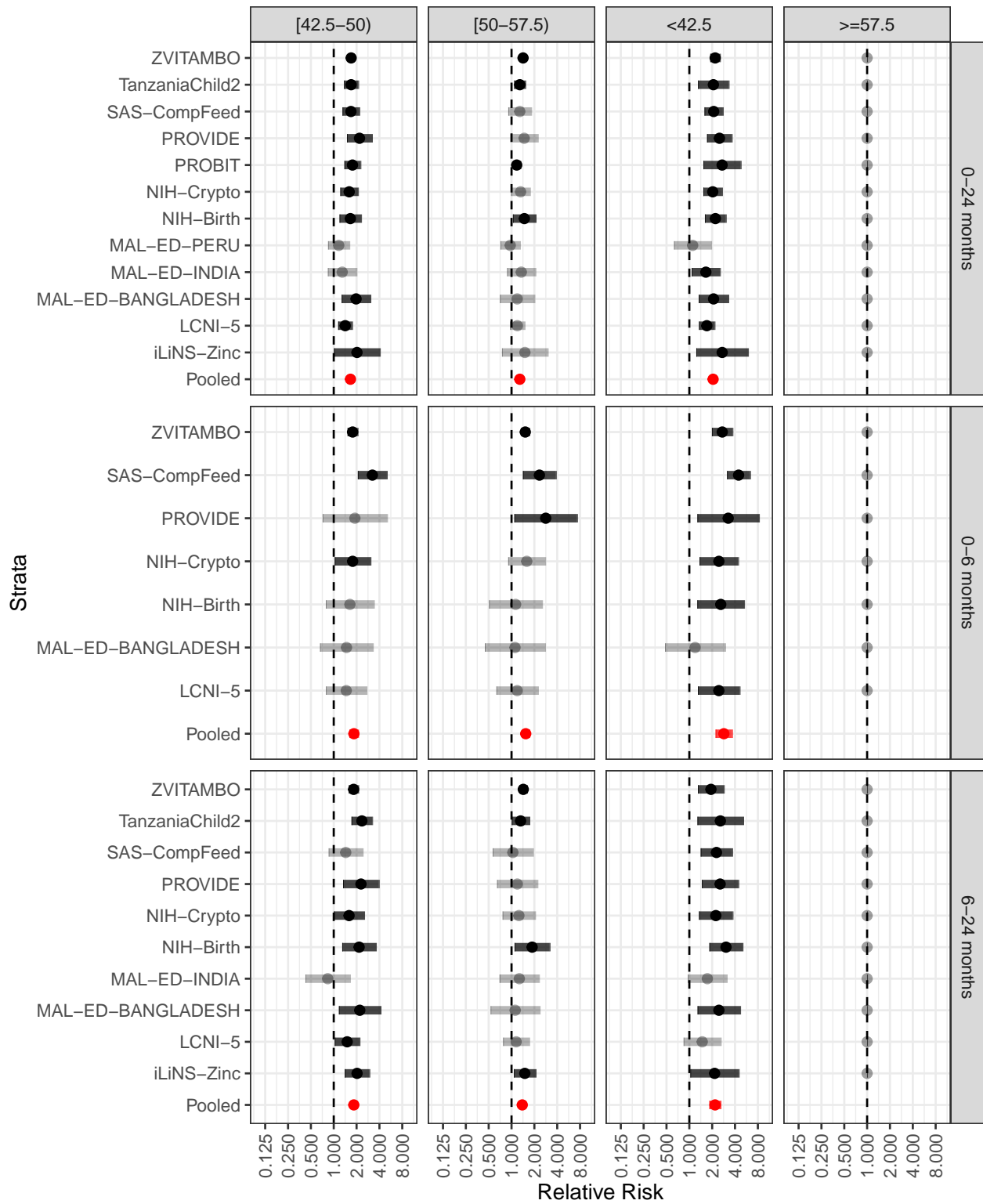


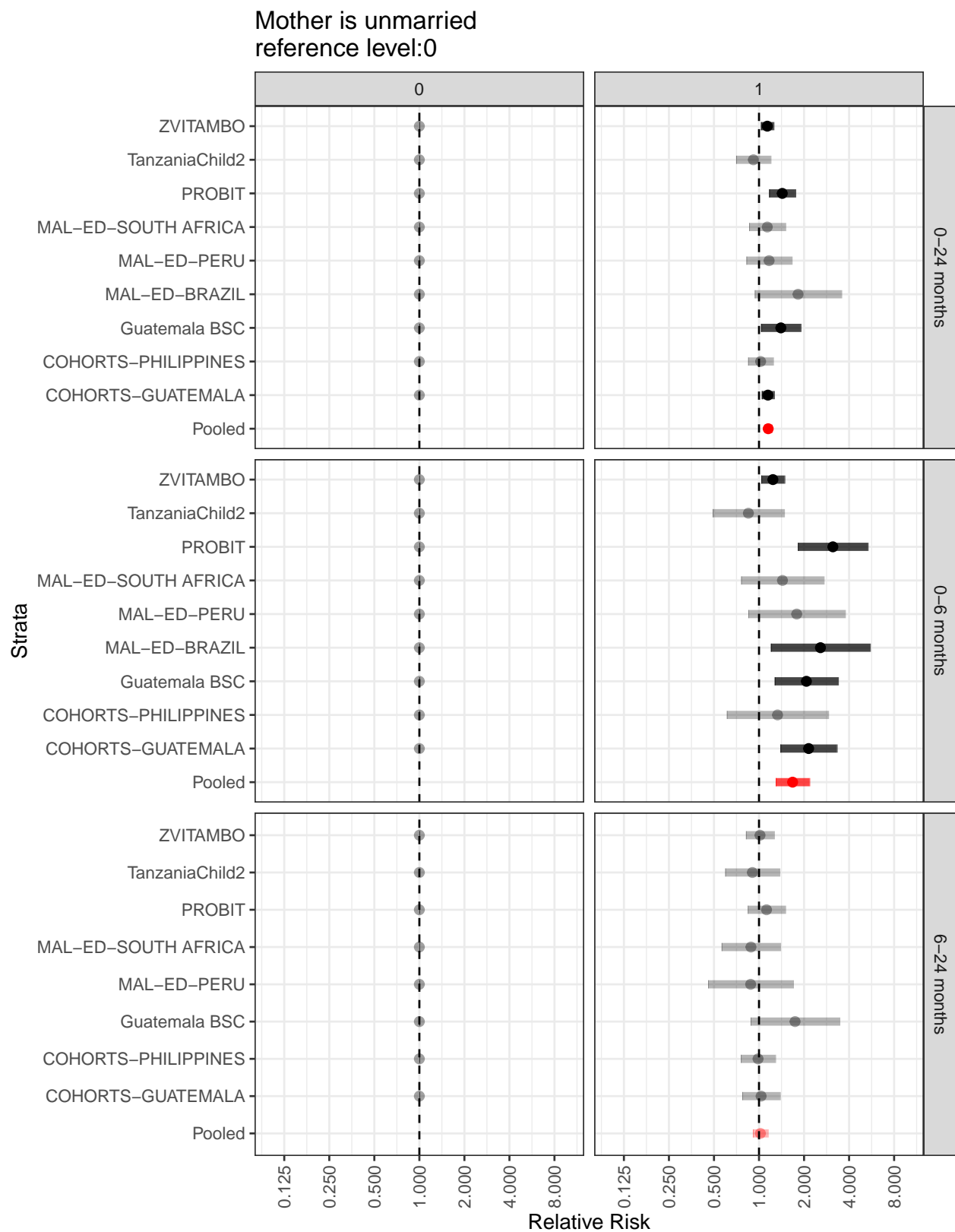
Maternal height
reference level: ≥ 160



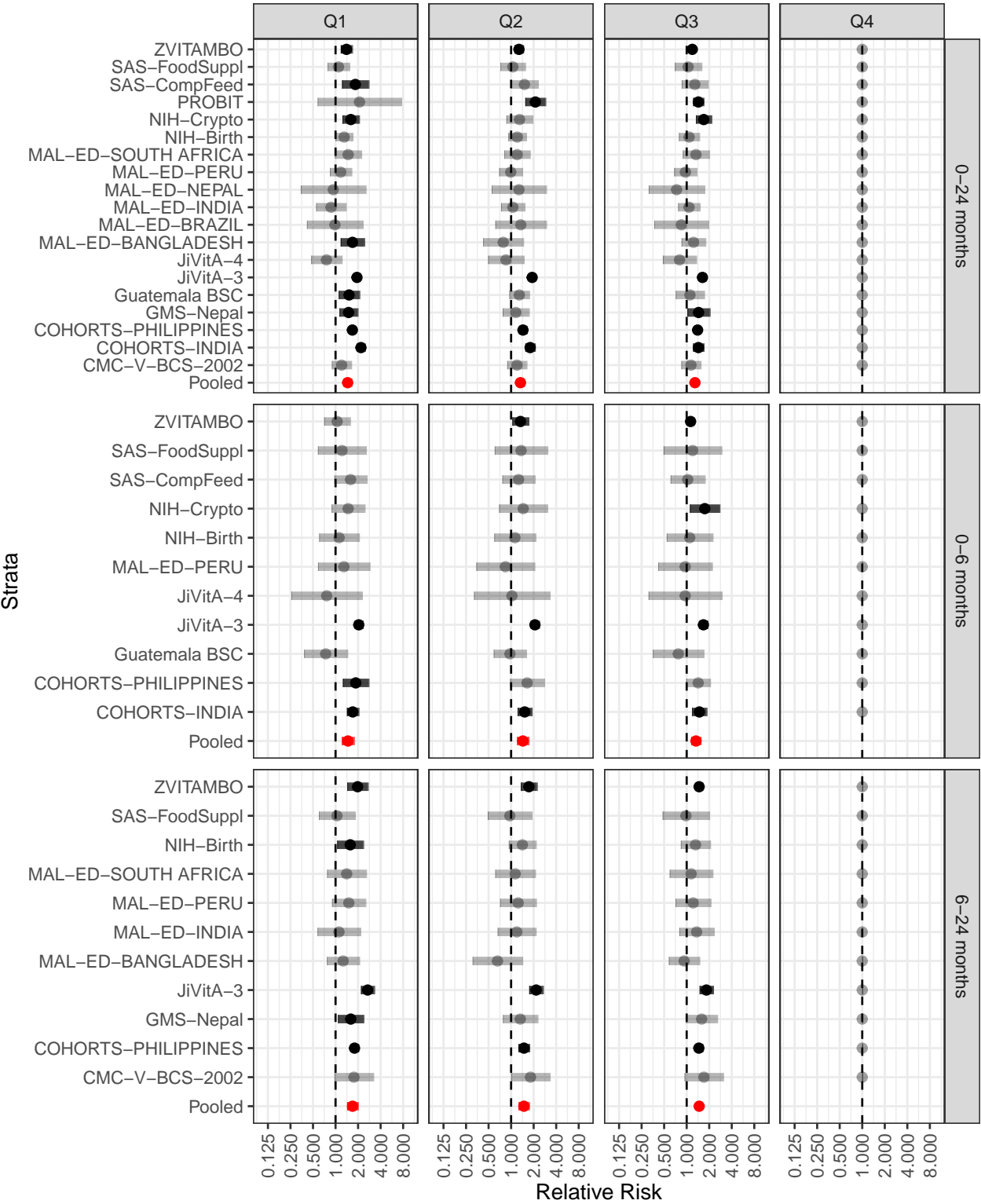


Maternal weight
reference level: ≥ 57.5

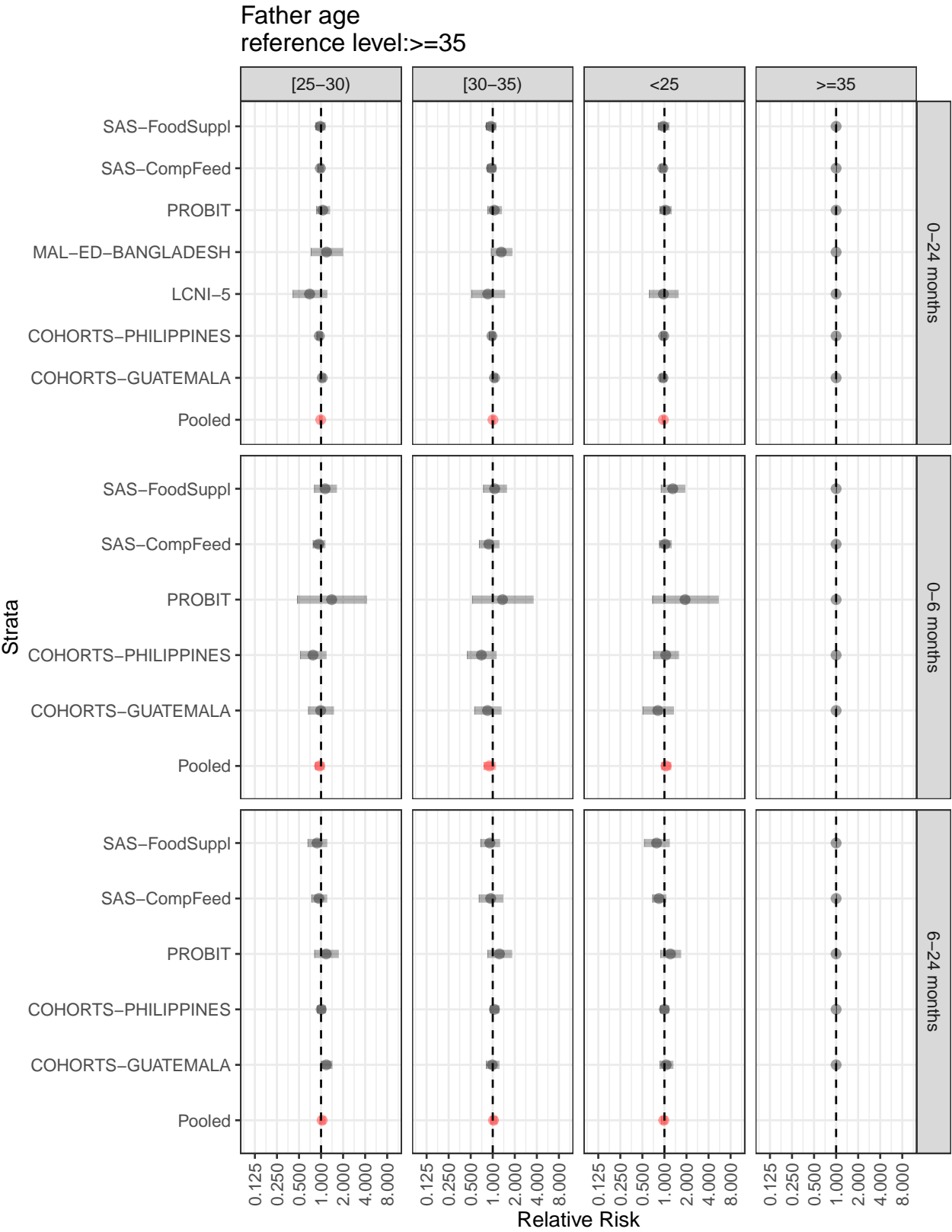


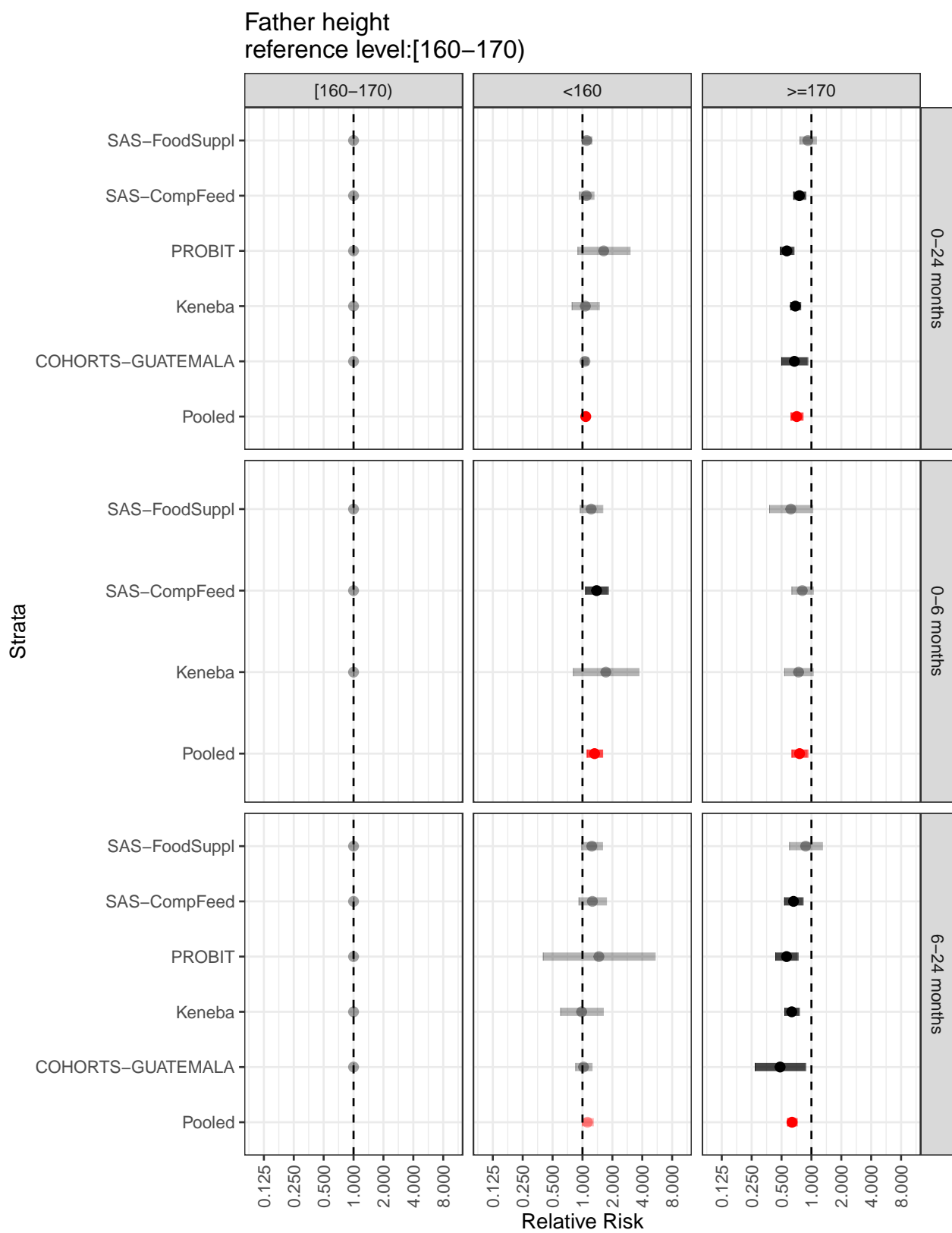


Mother's education
reference level:Q4

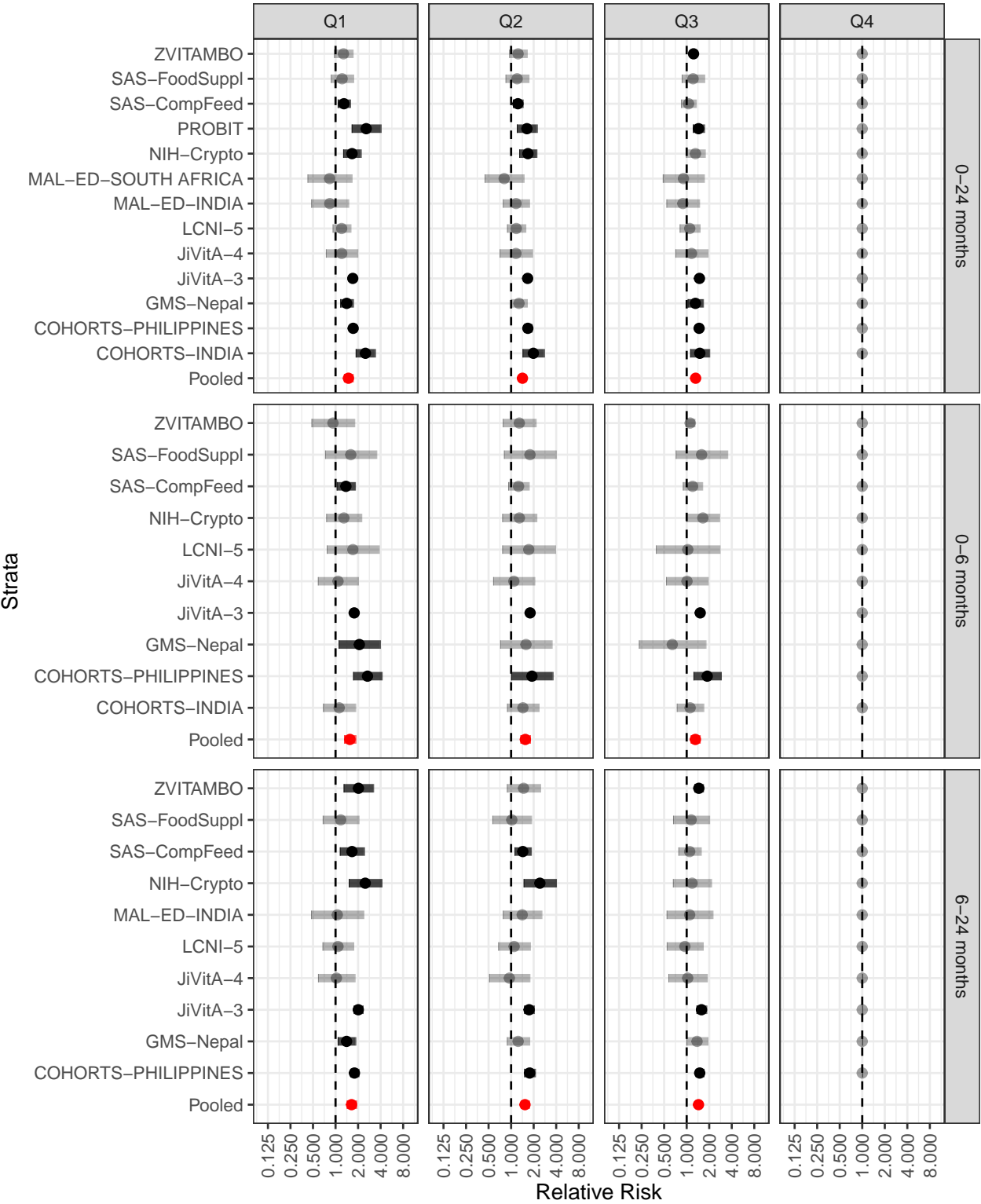


Paternal characteristics



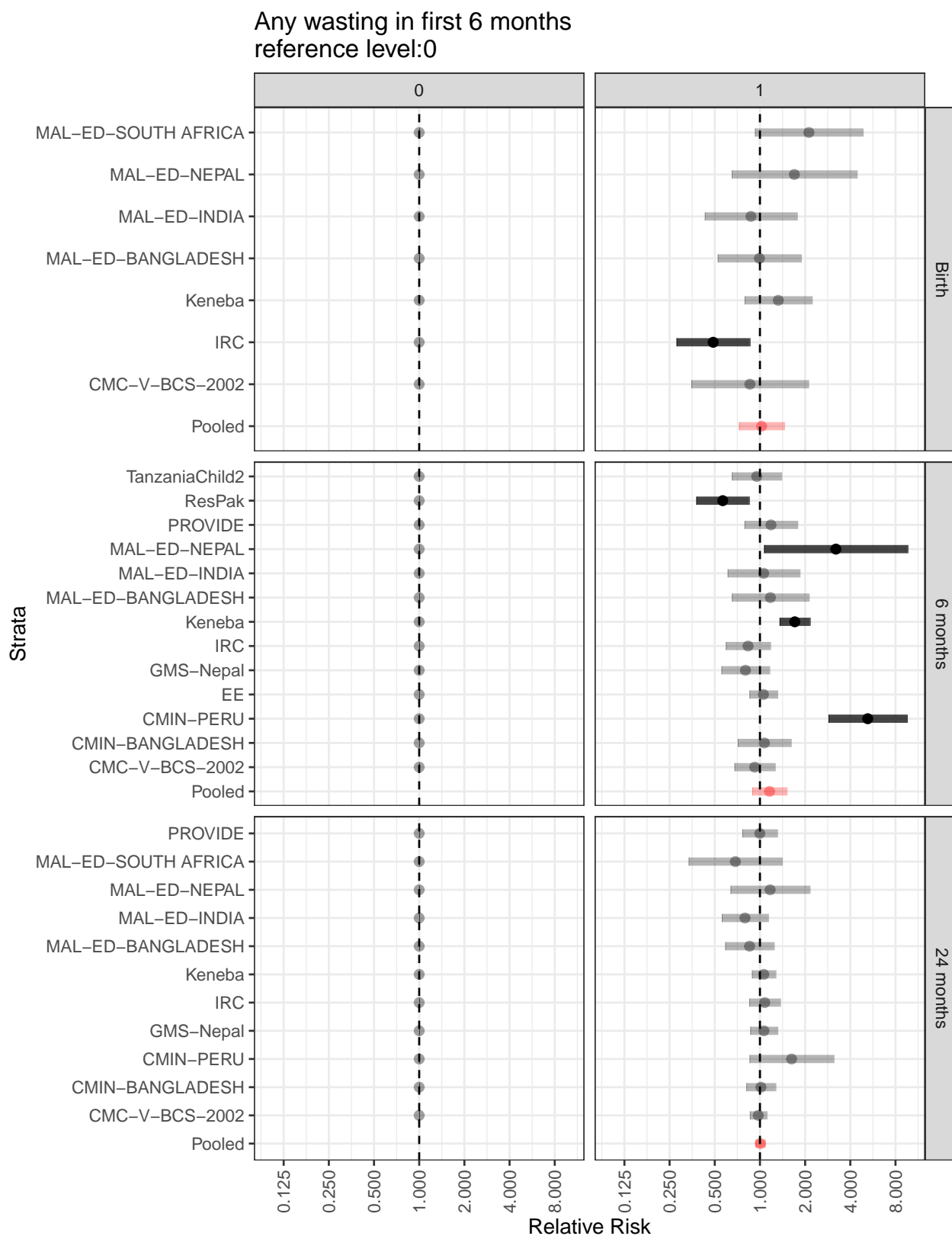


Father's education
reference level:Q4

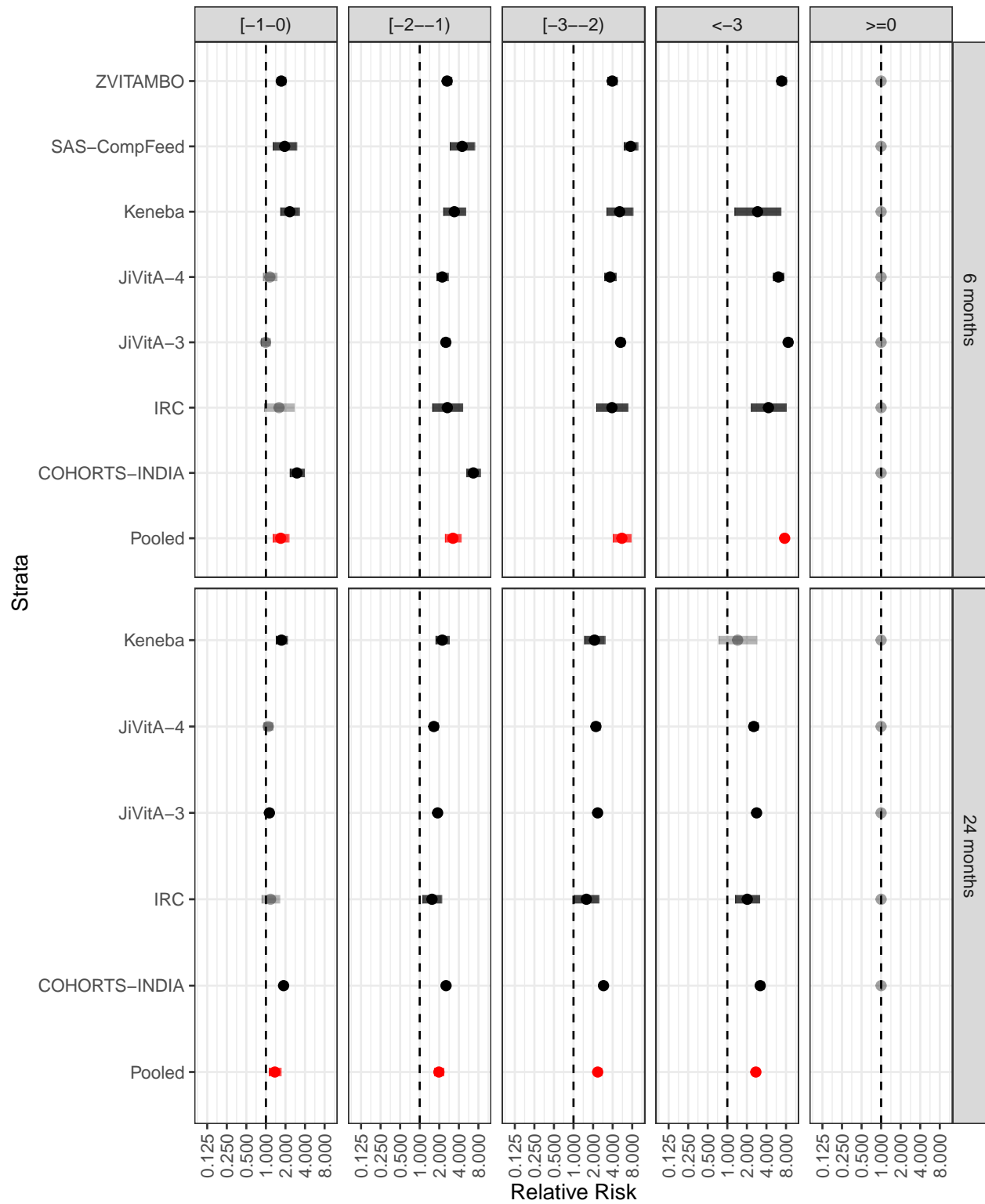


Point prevalence of stunting

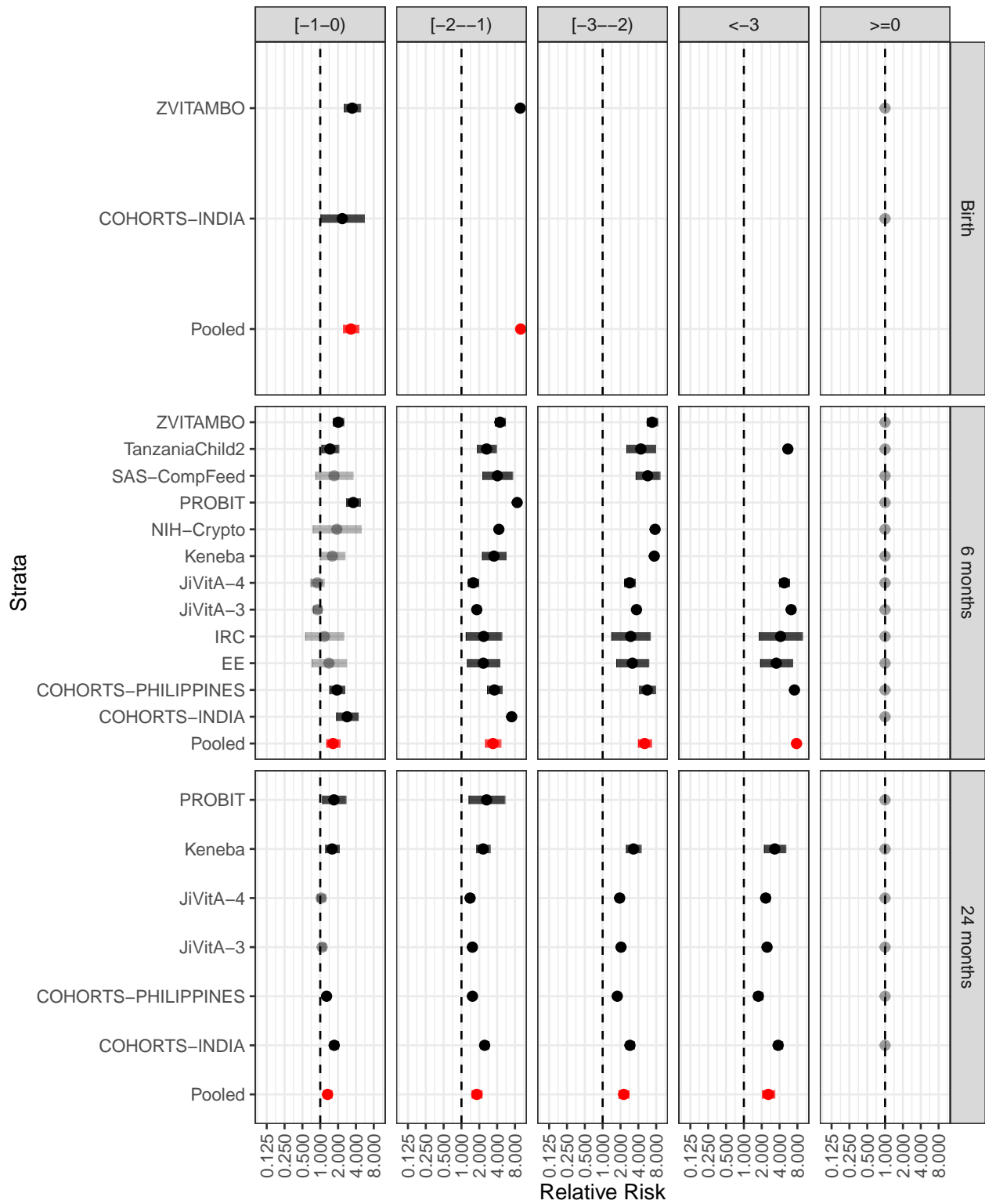
Child characteristics



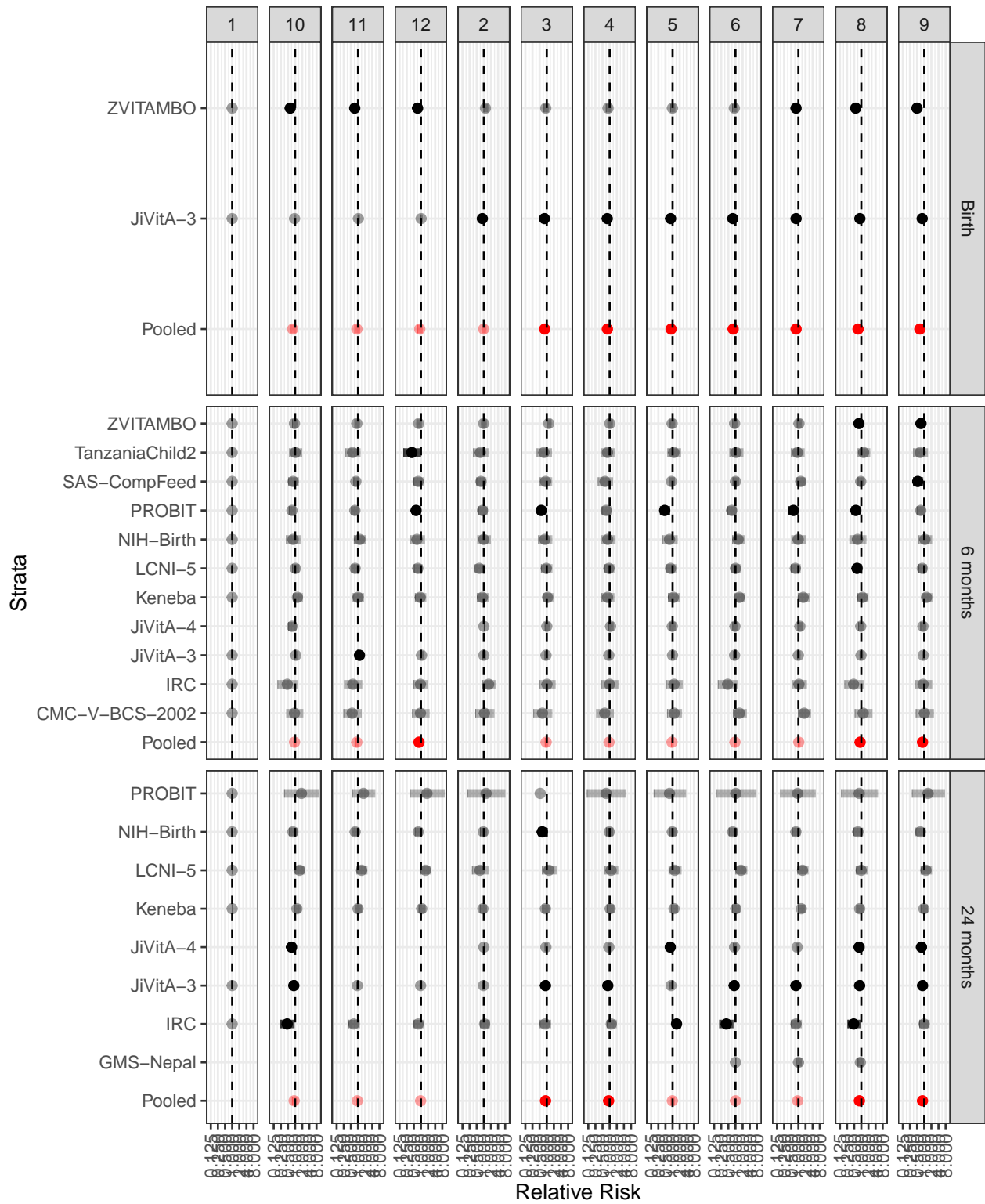
Birth length
reference level: ≥ 0

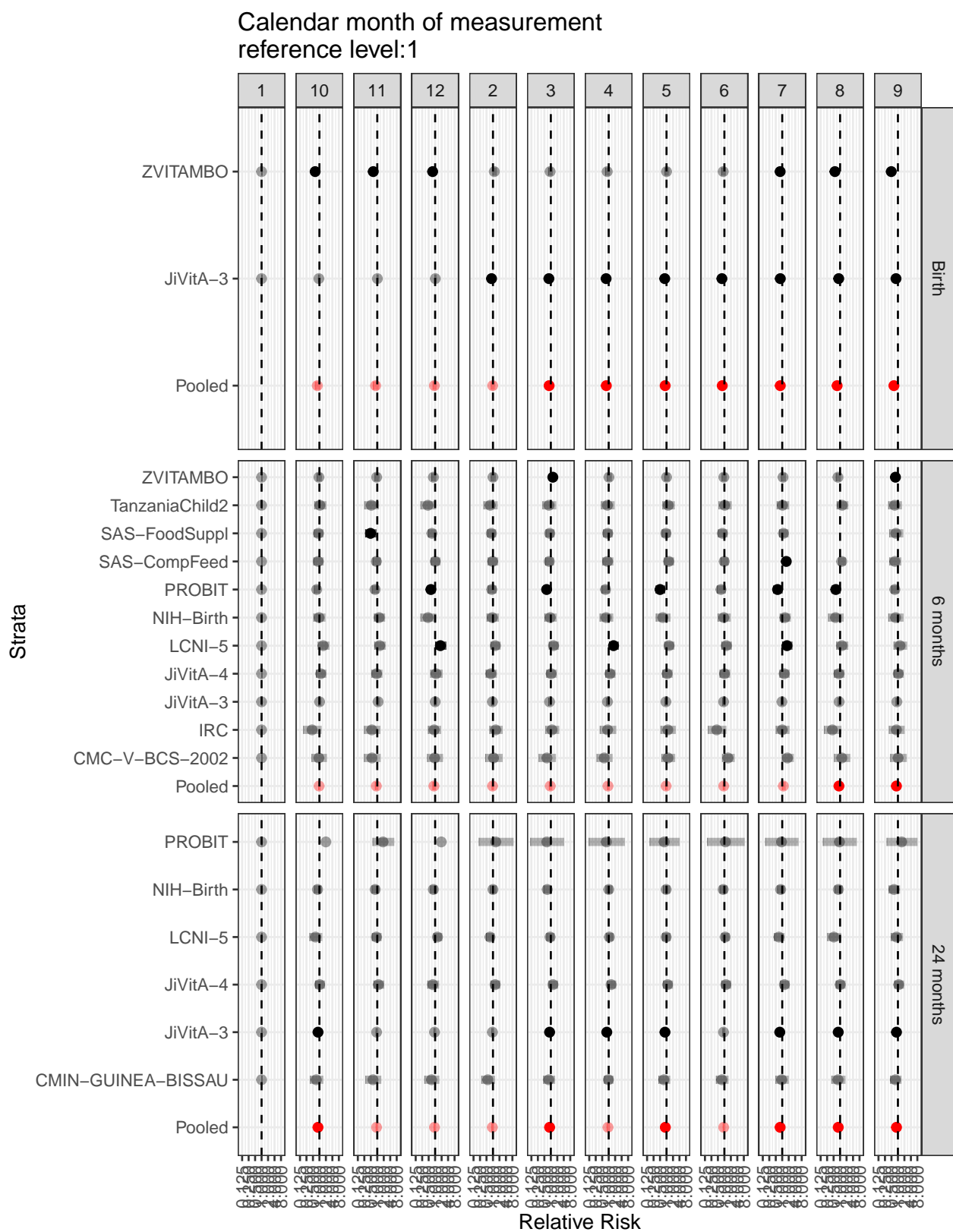


Birthweight
reference level: ≥ 0

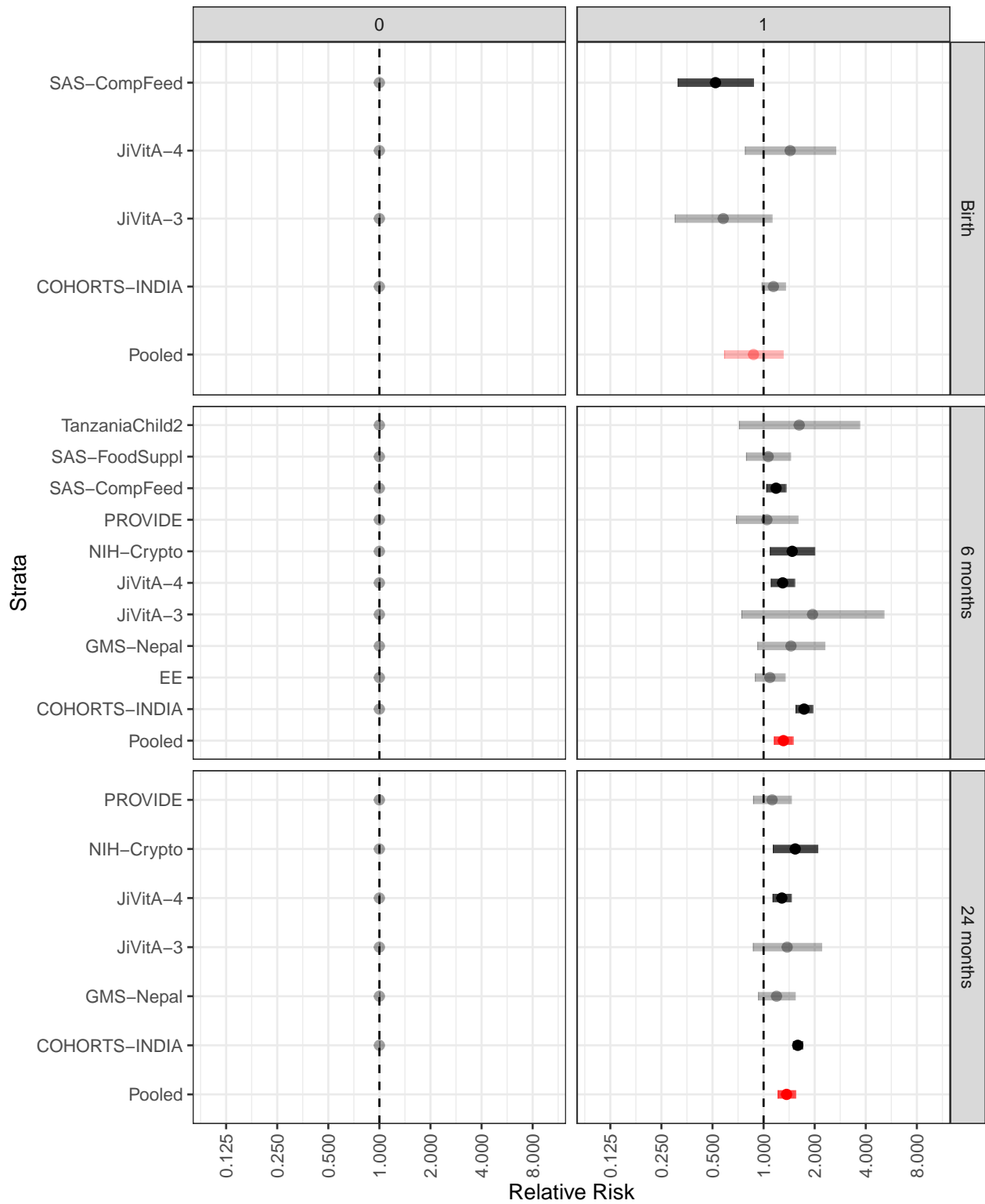


Calendar month of birth
reference level: 1

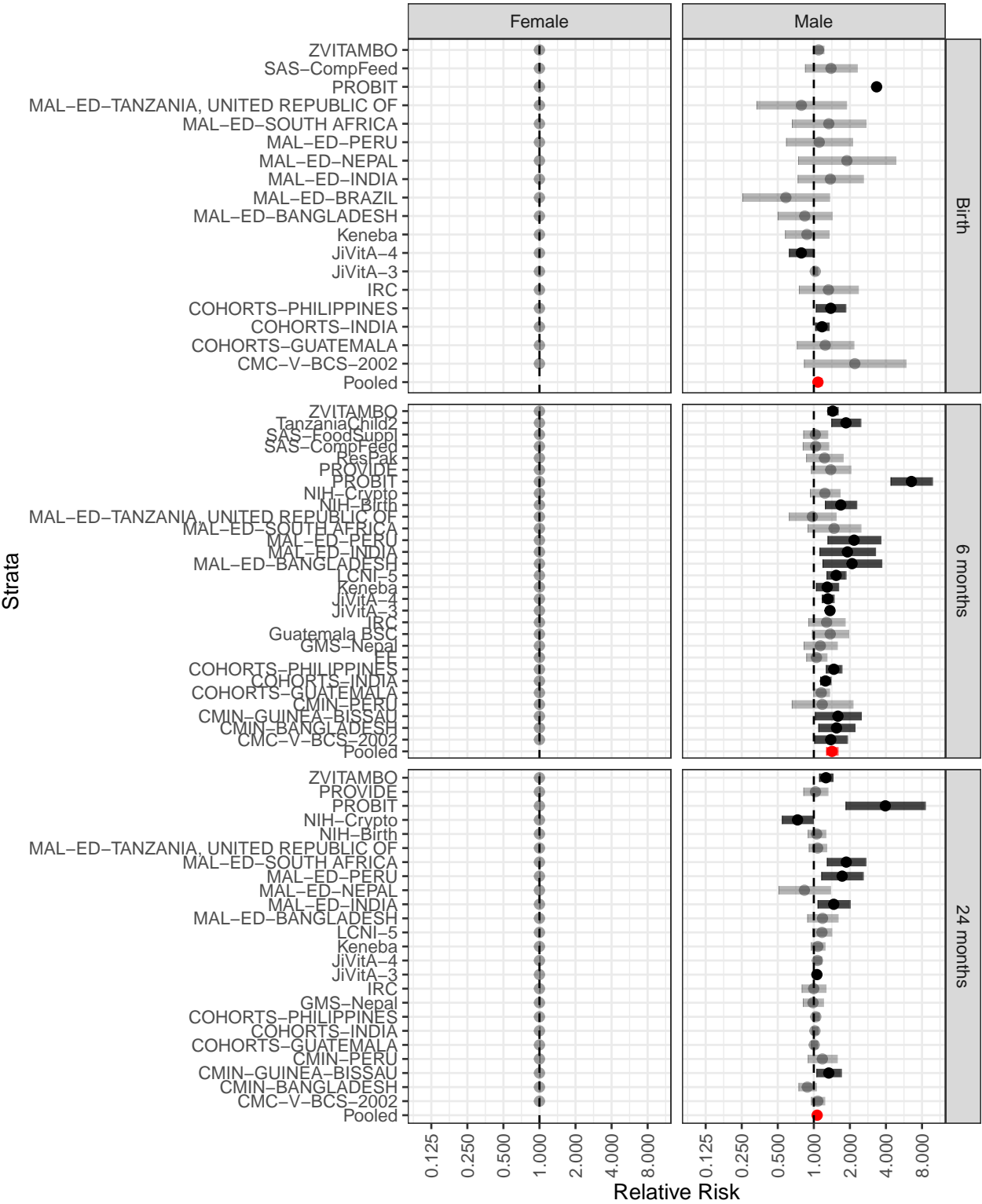


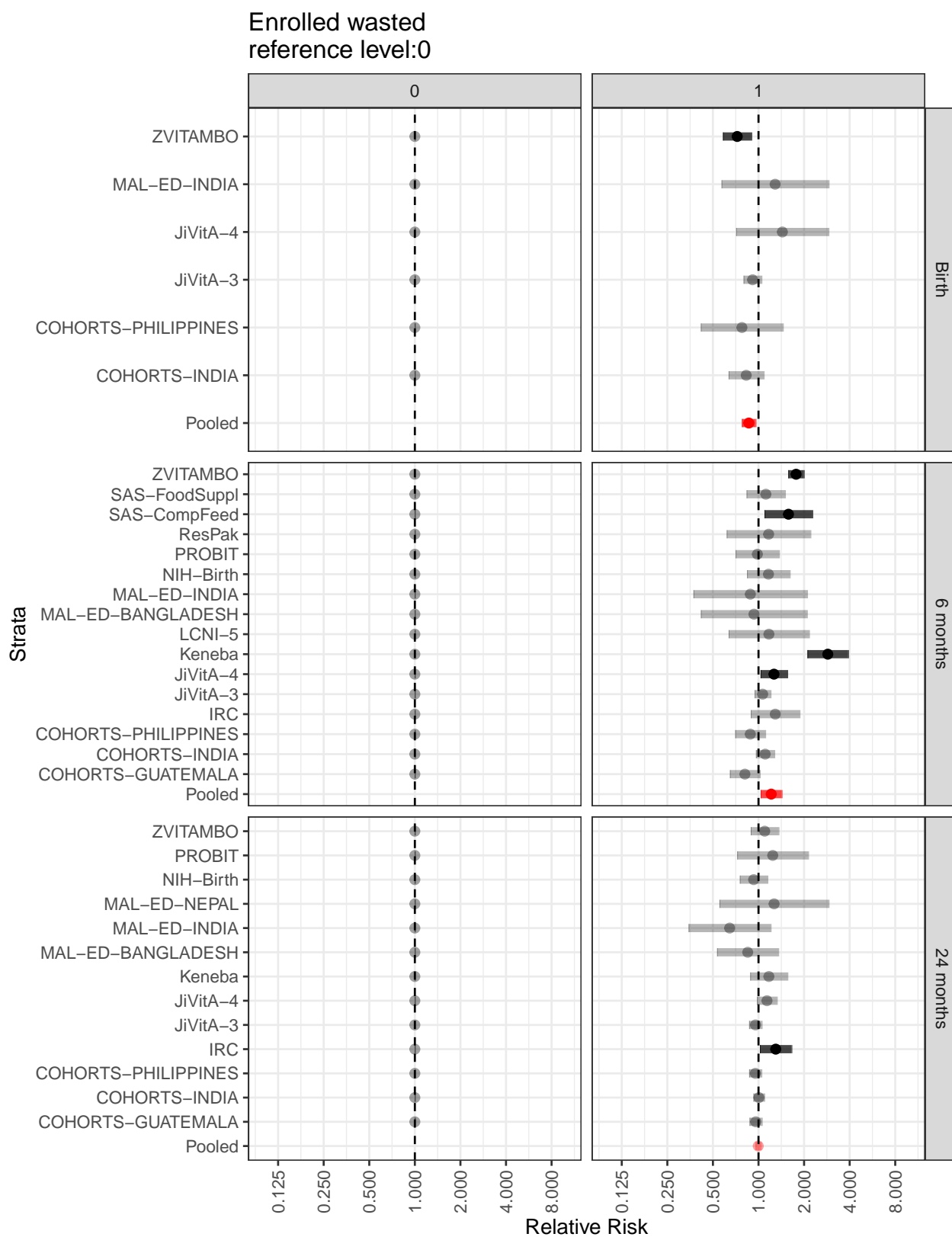


Child delivered at home
reference level:0

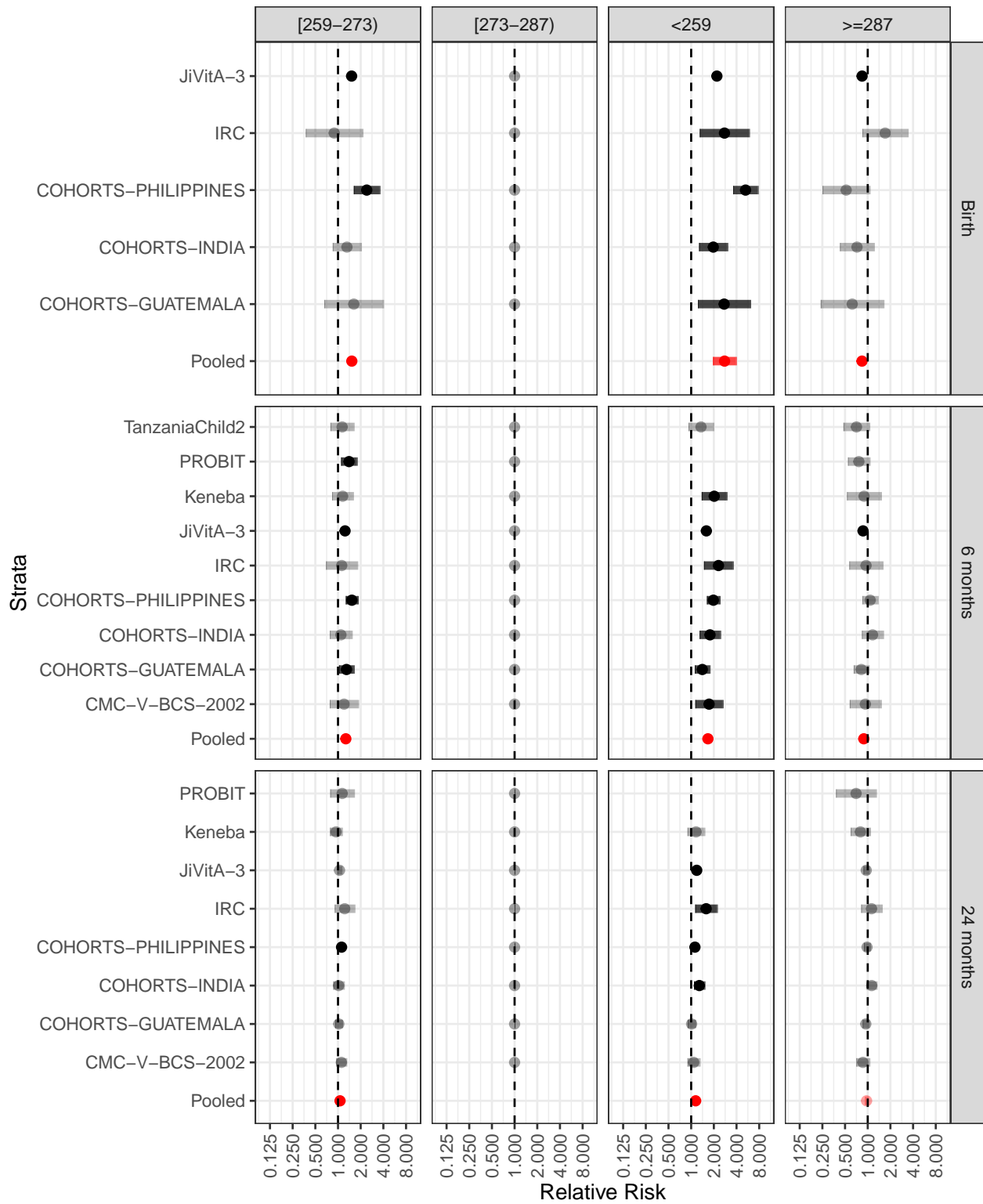


Child's sex
reference level:Female

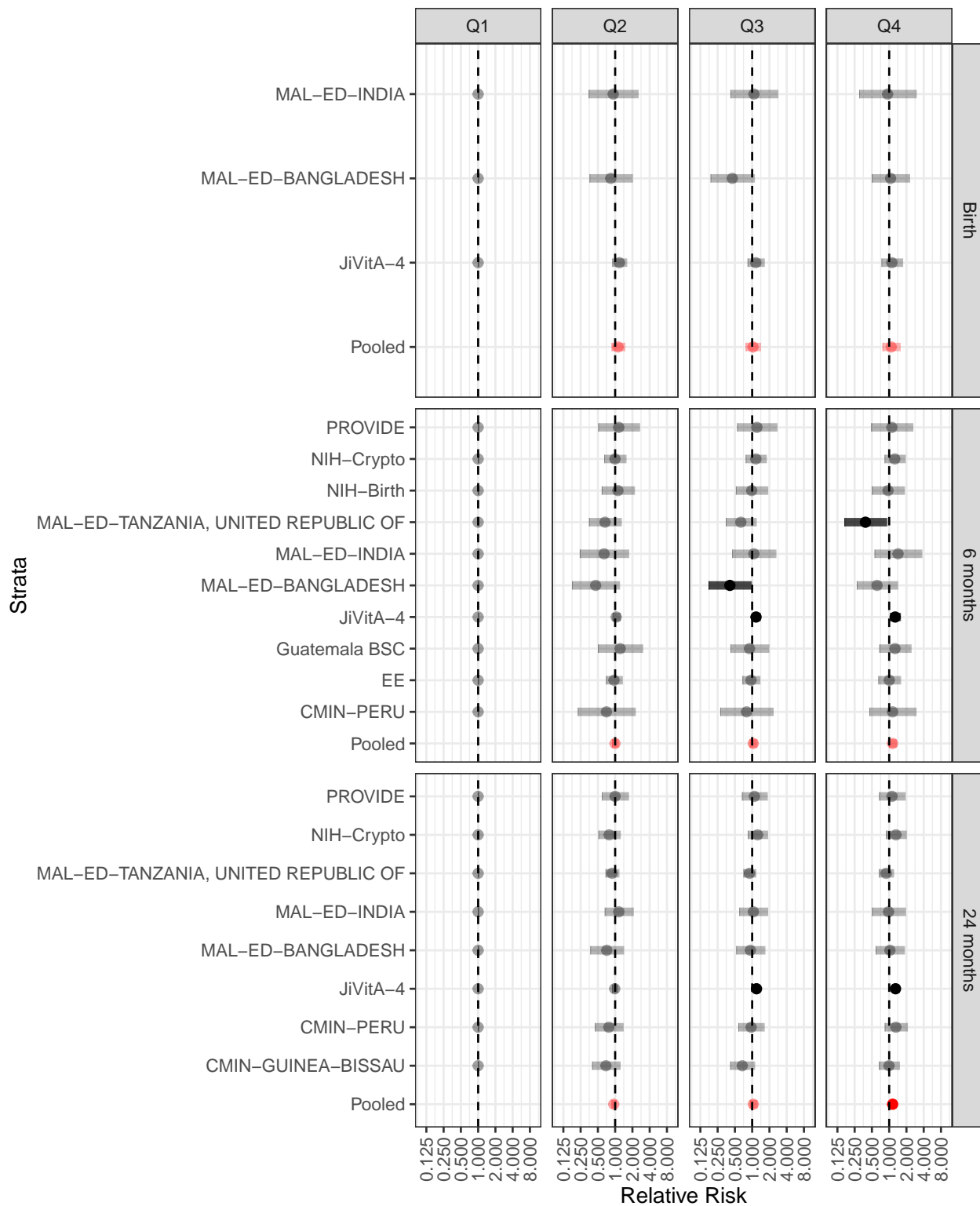




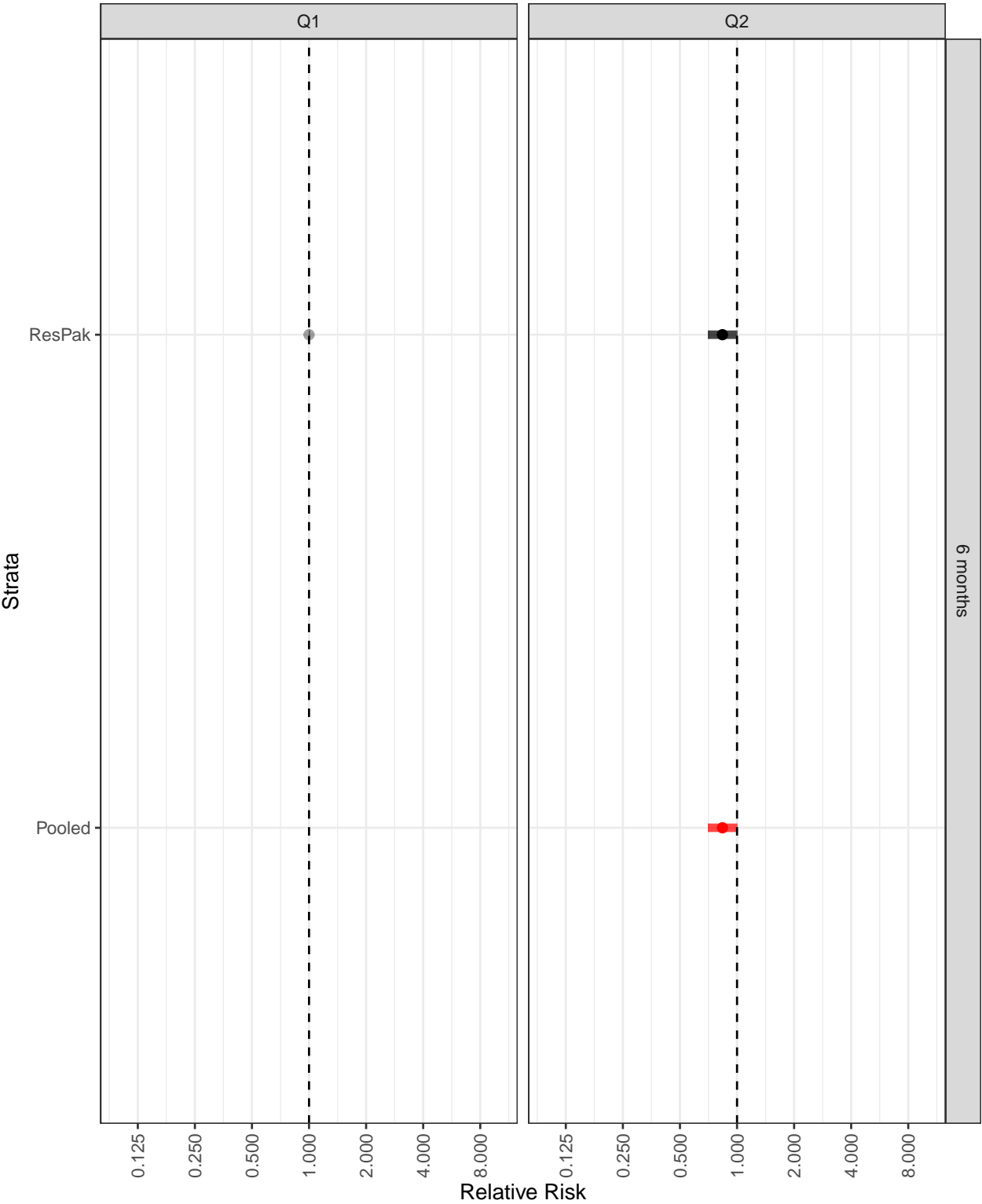
Gestational age at birth in days
reference level:[273–287)

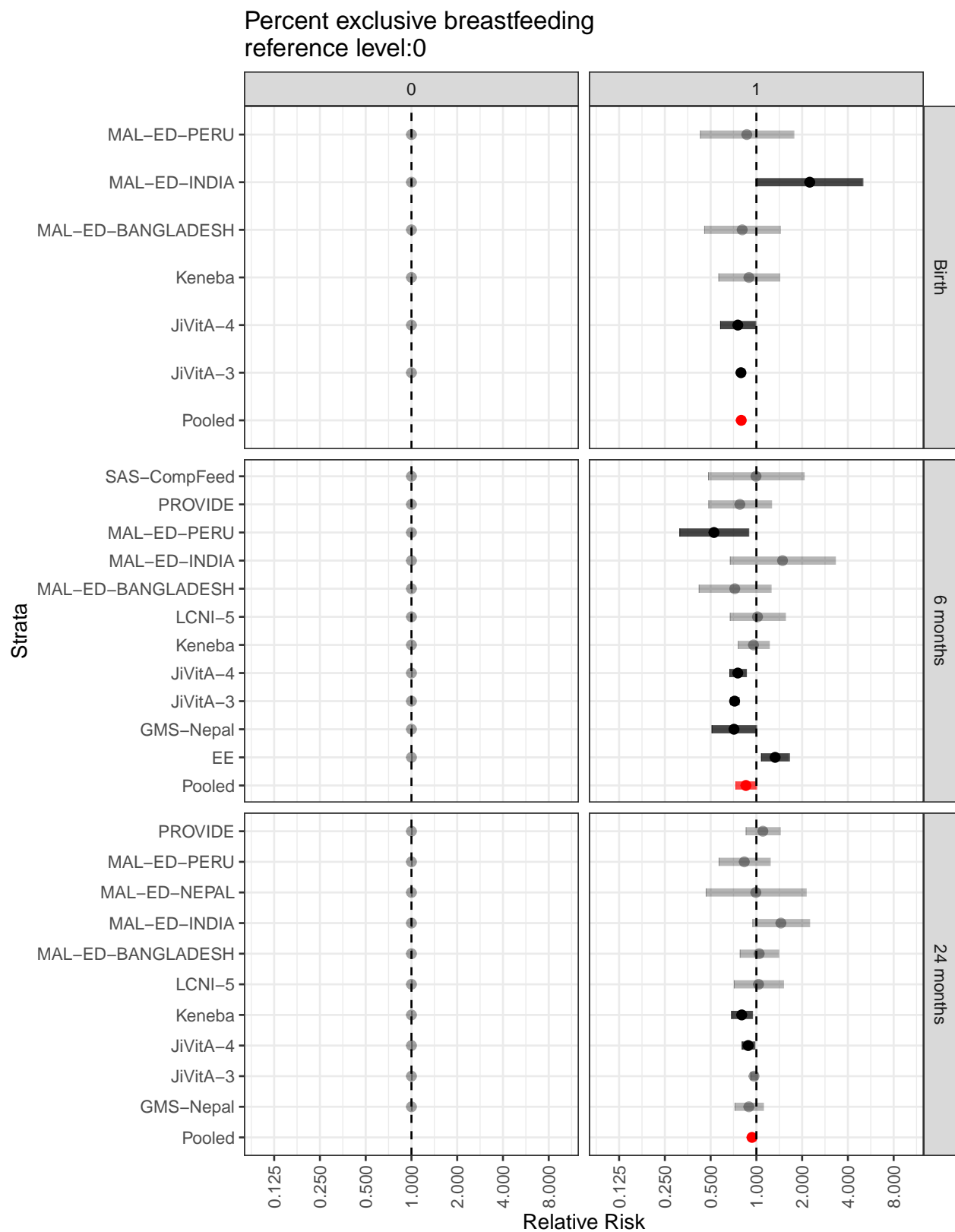


Percent diarrhea in first 24 months
reference level:Q1

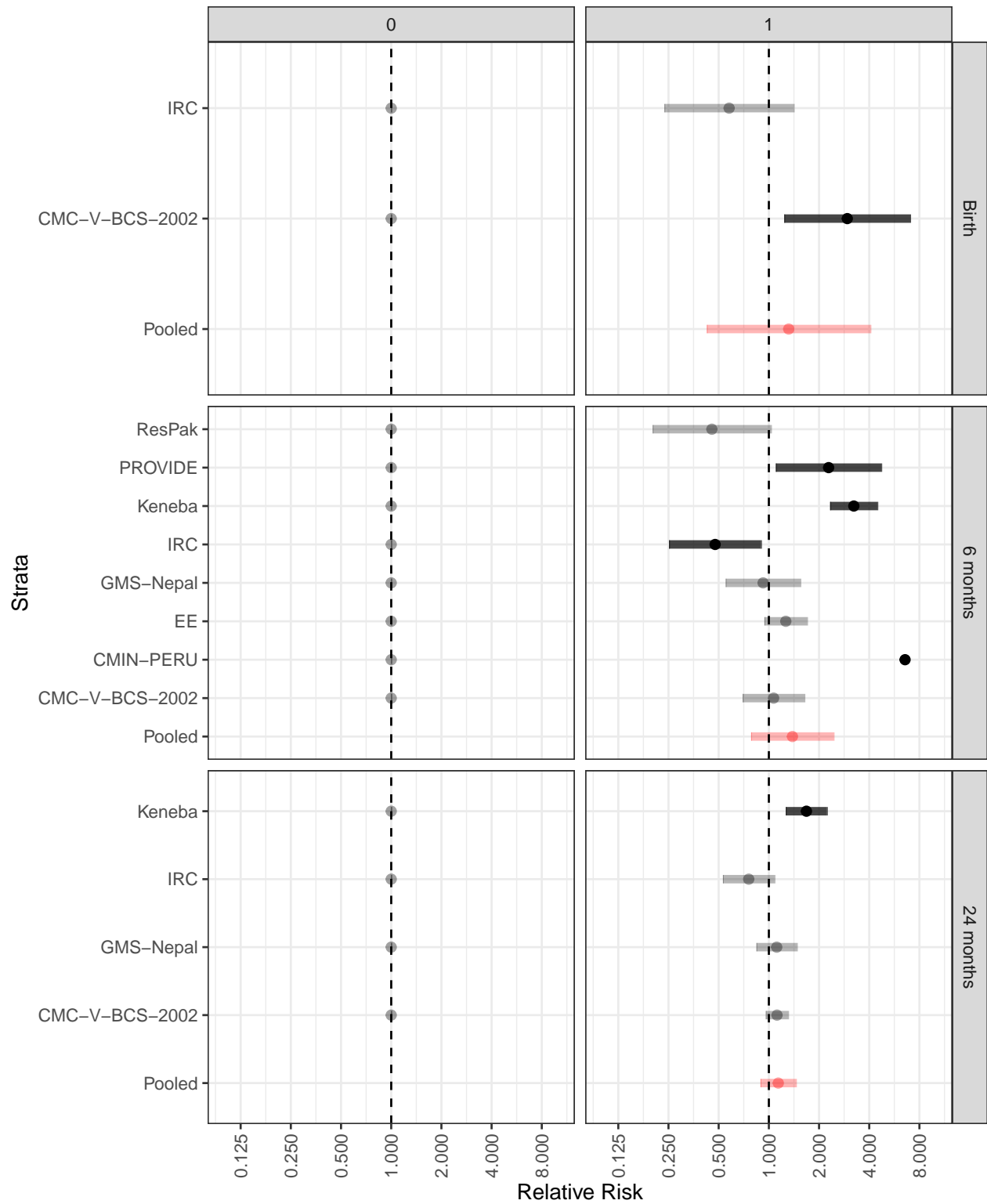


Percent diarrhea in first 6 months
reference level:Q1

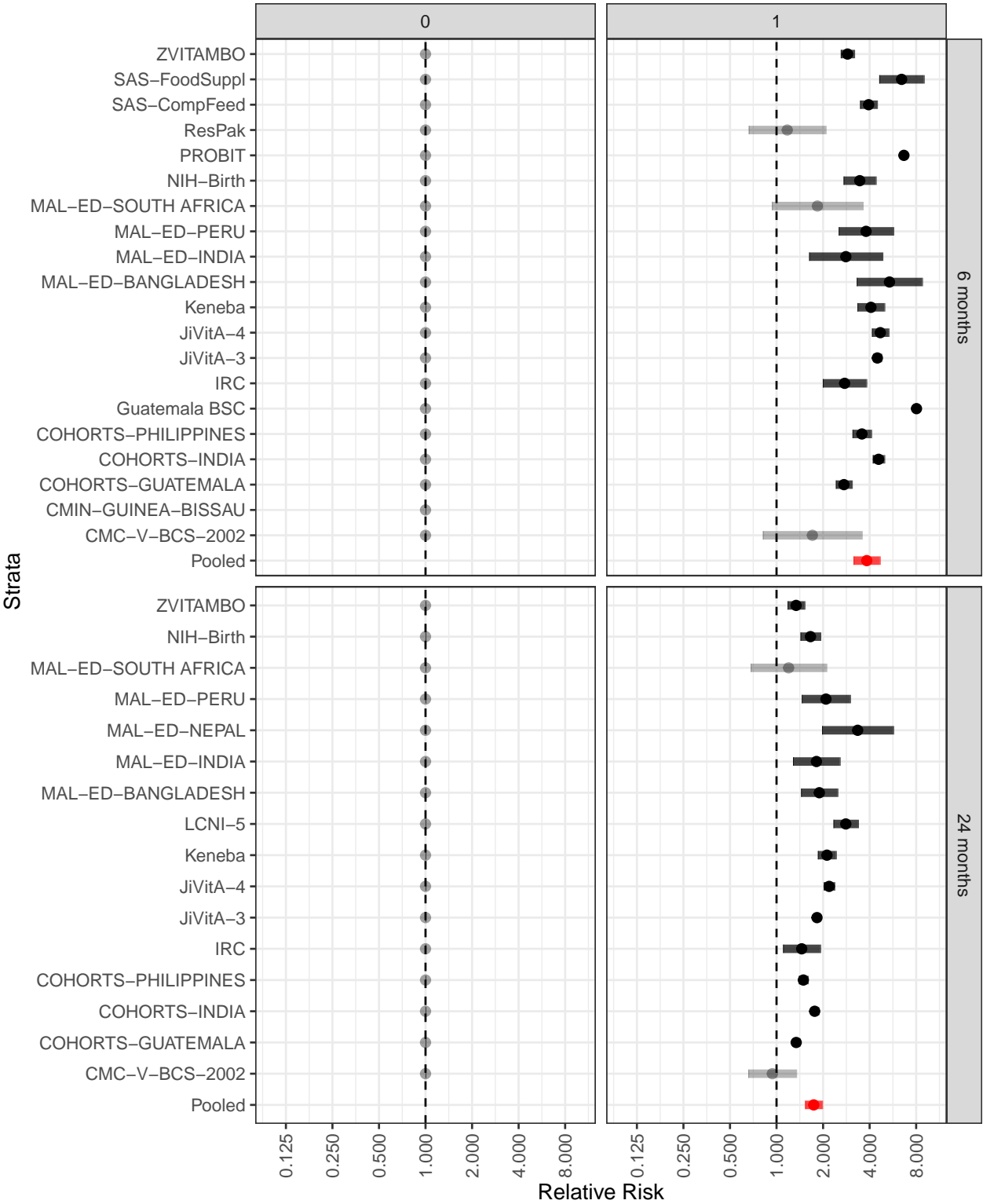


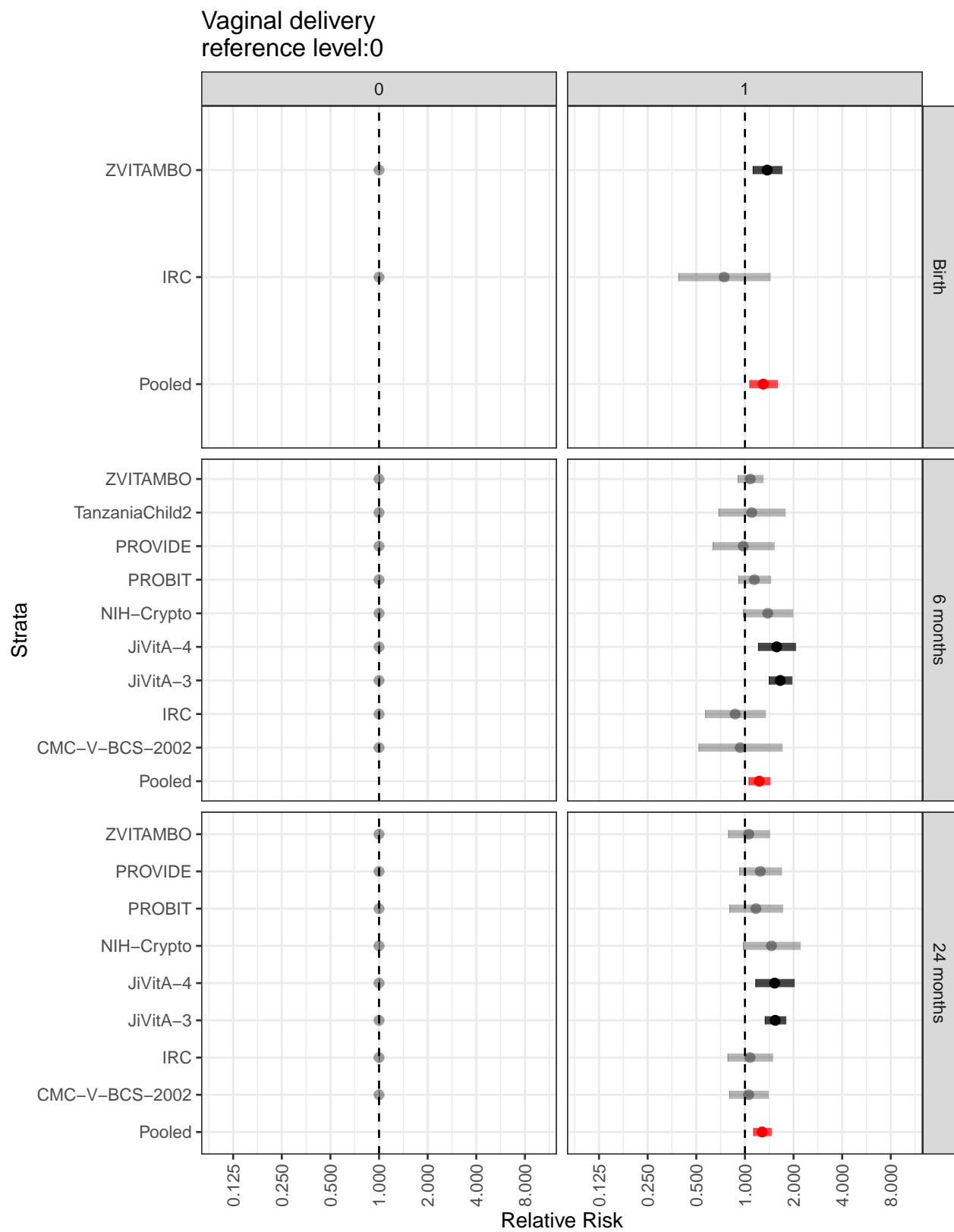


Persistent wasting in first 6 months
reference level:0

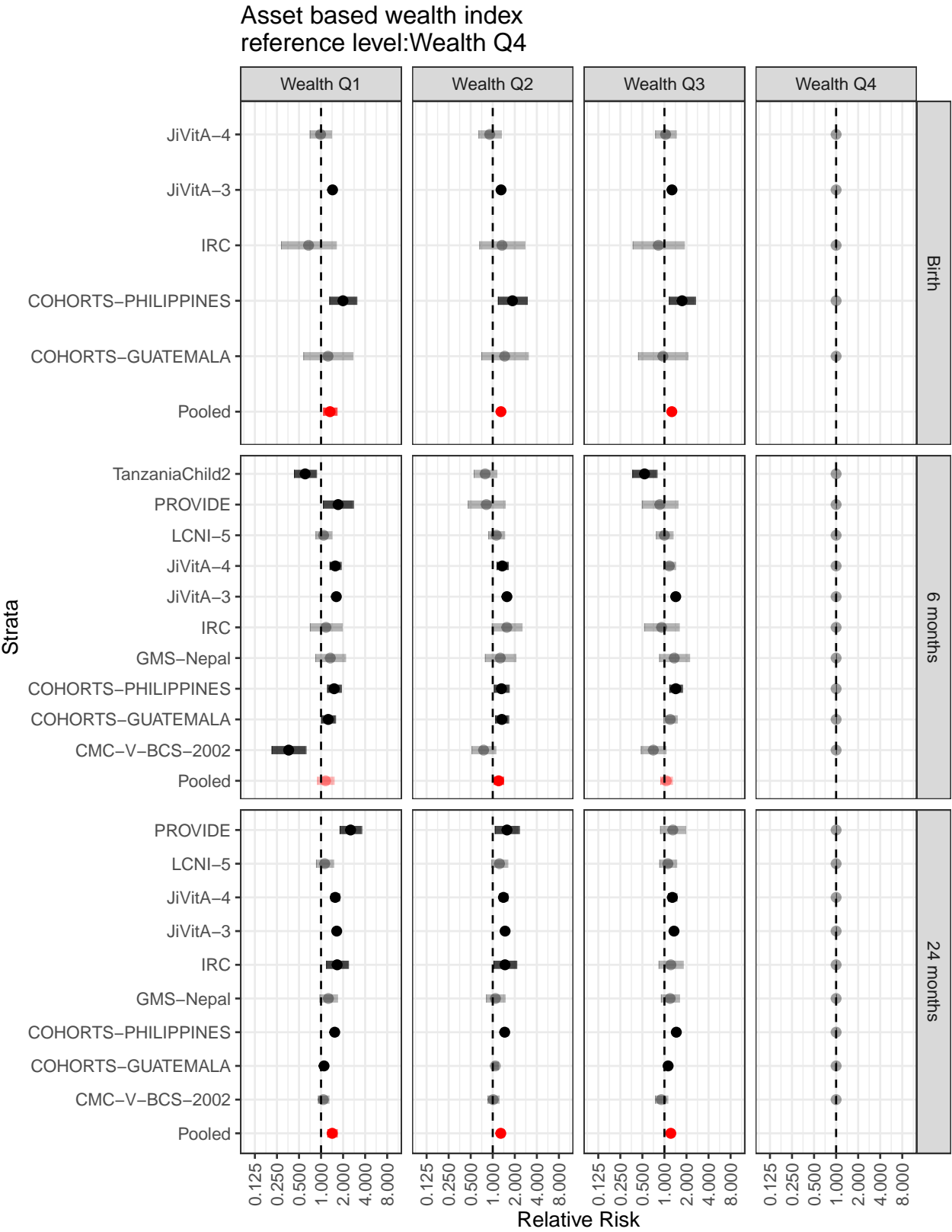


Stunted at enrollment
reference level:0

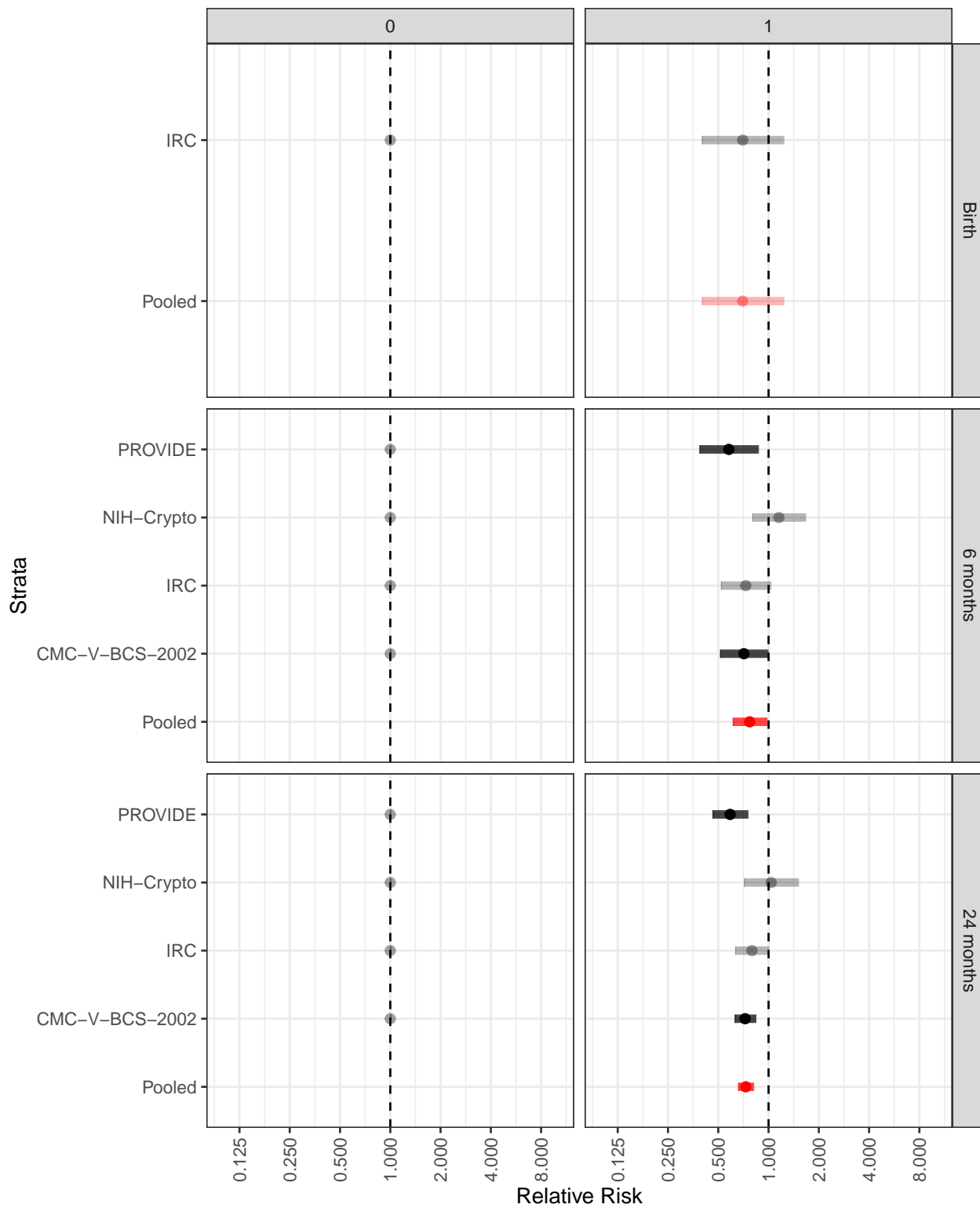


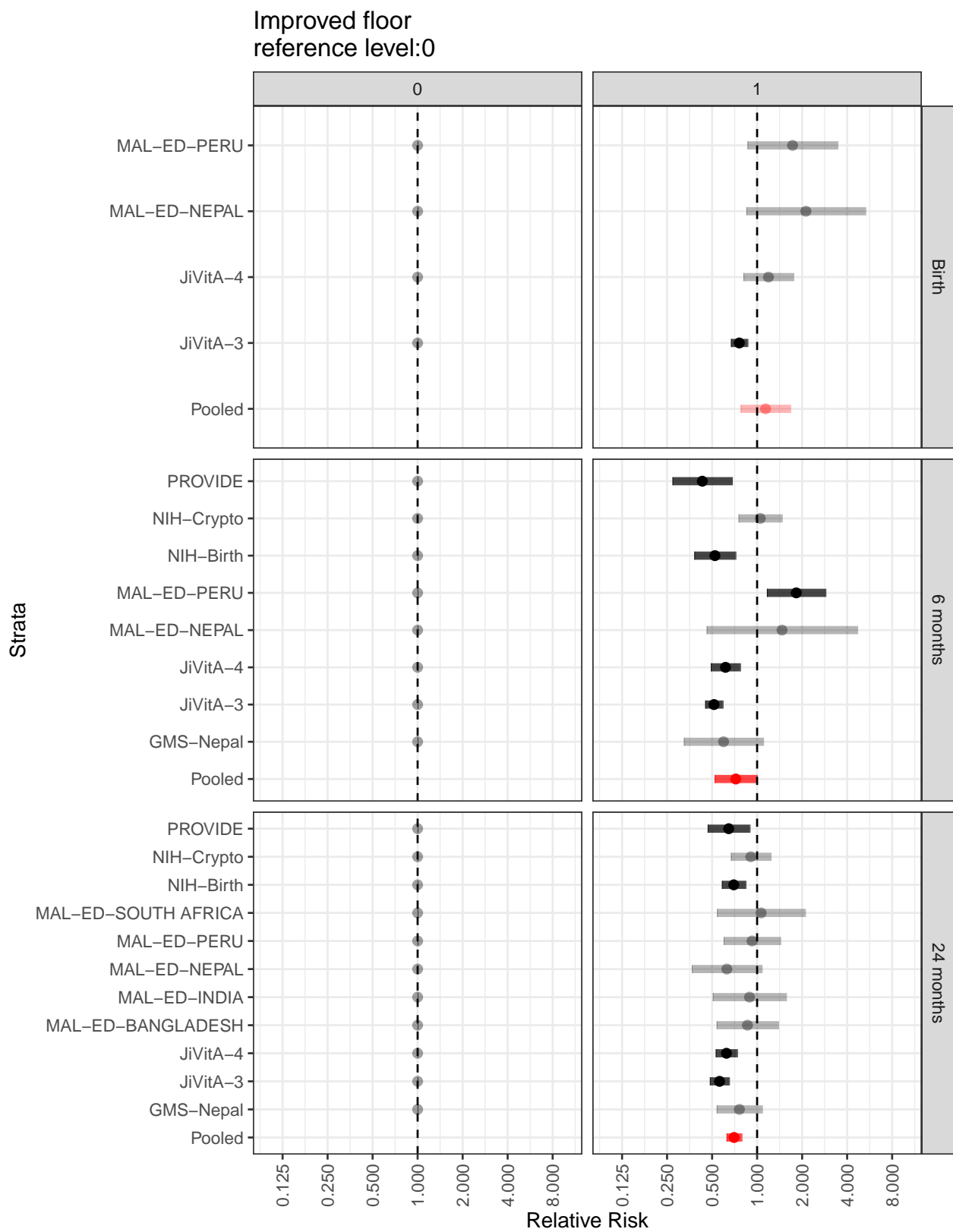


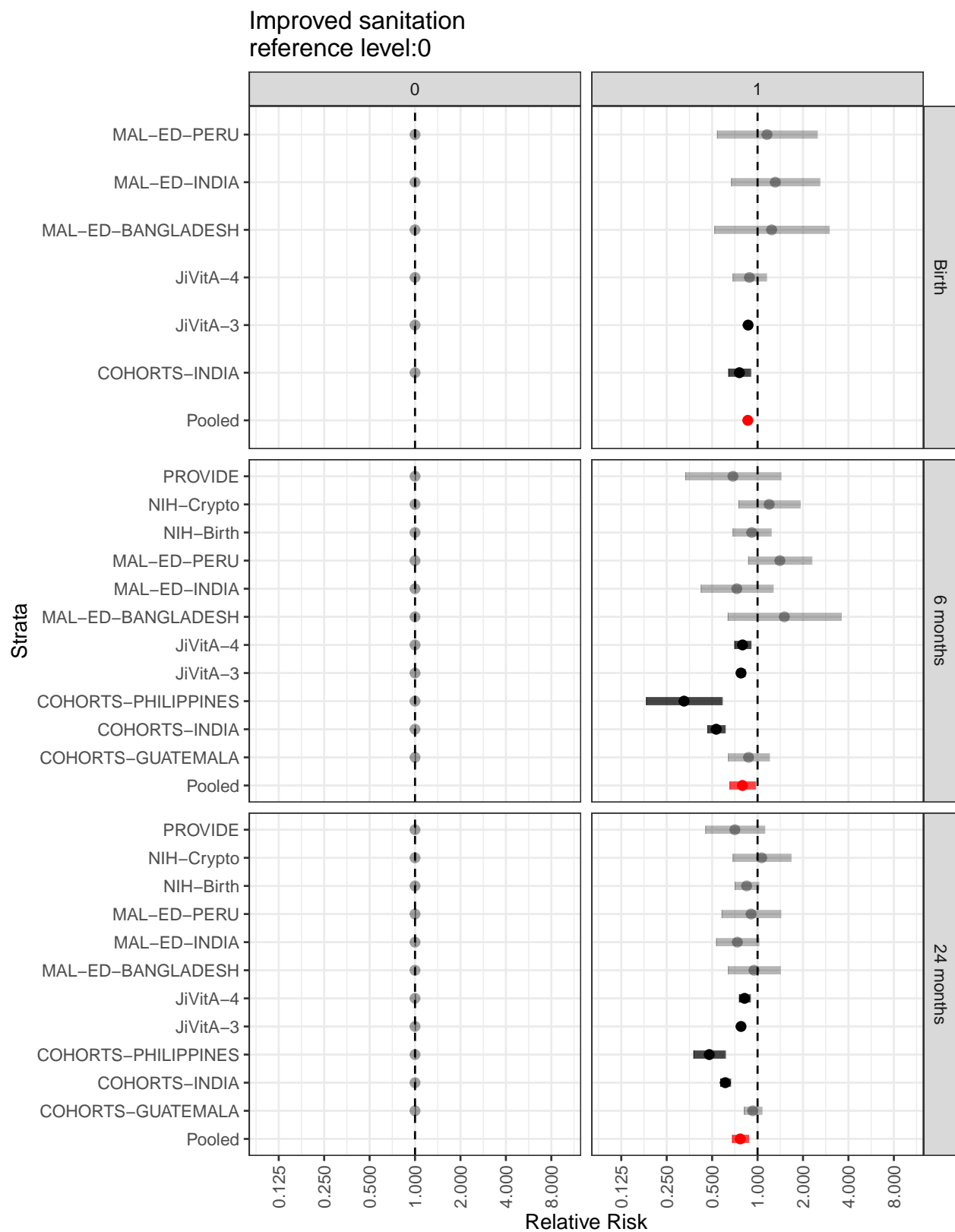
Household characteristics



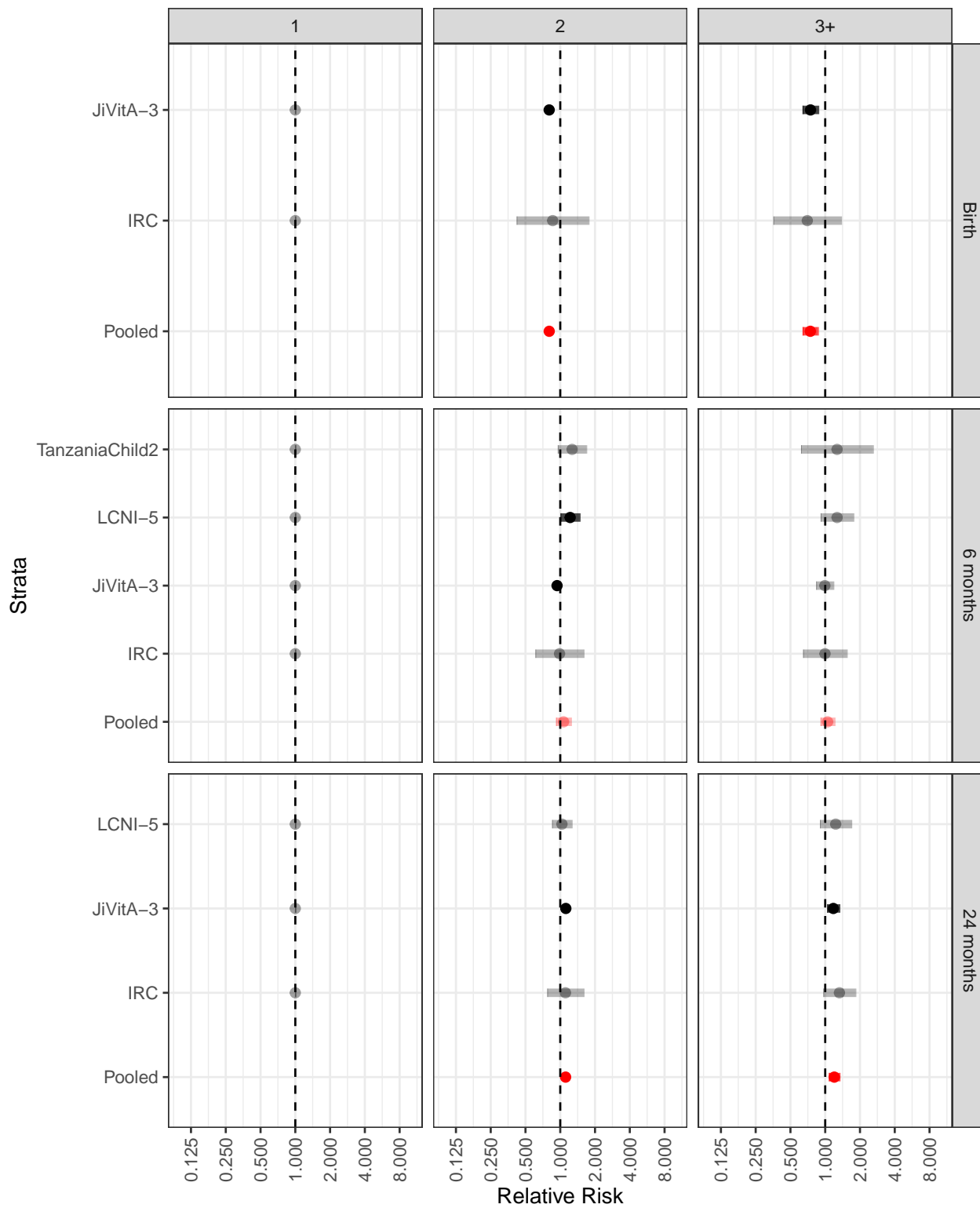
Clean cook
reference level:0



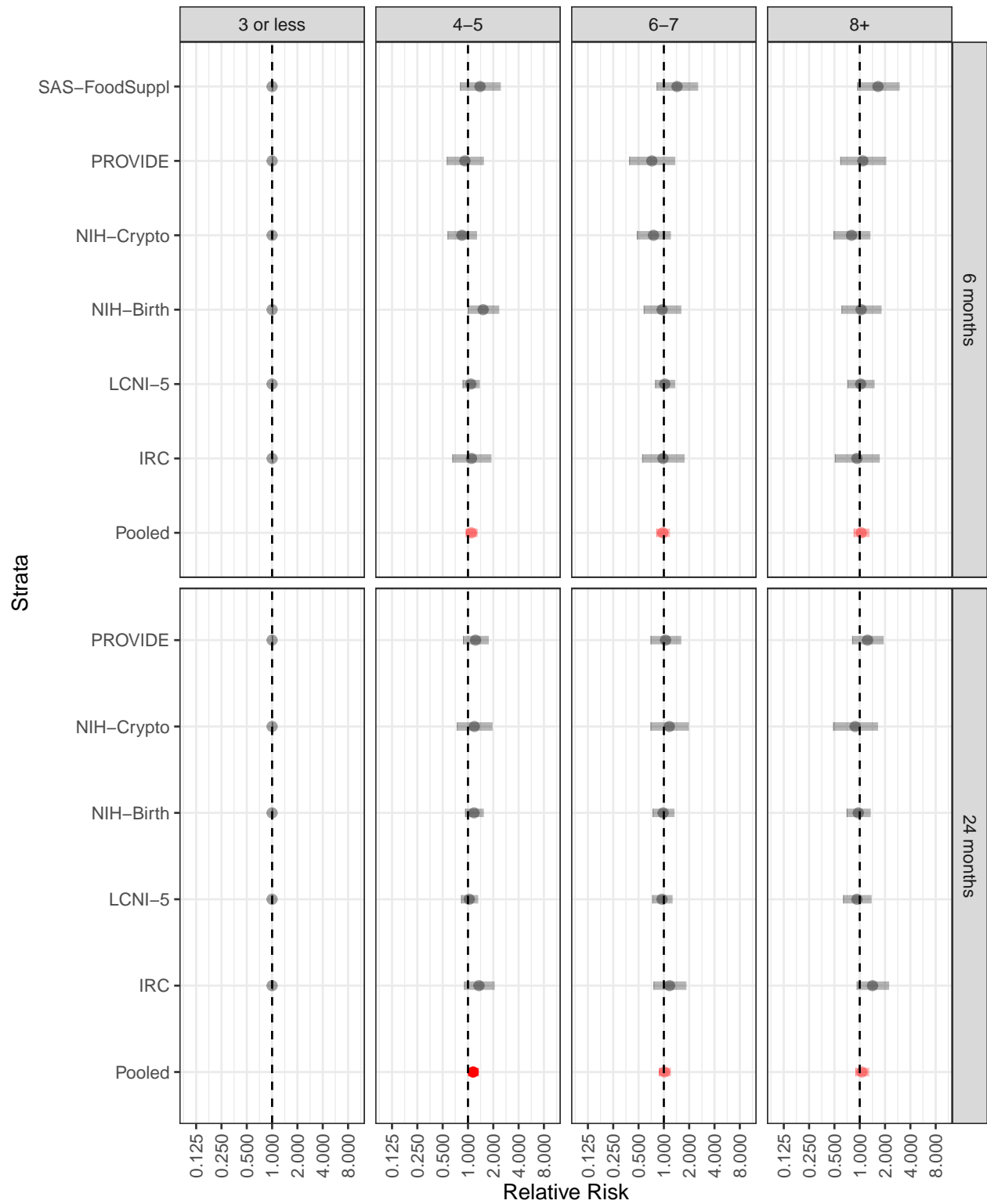




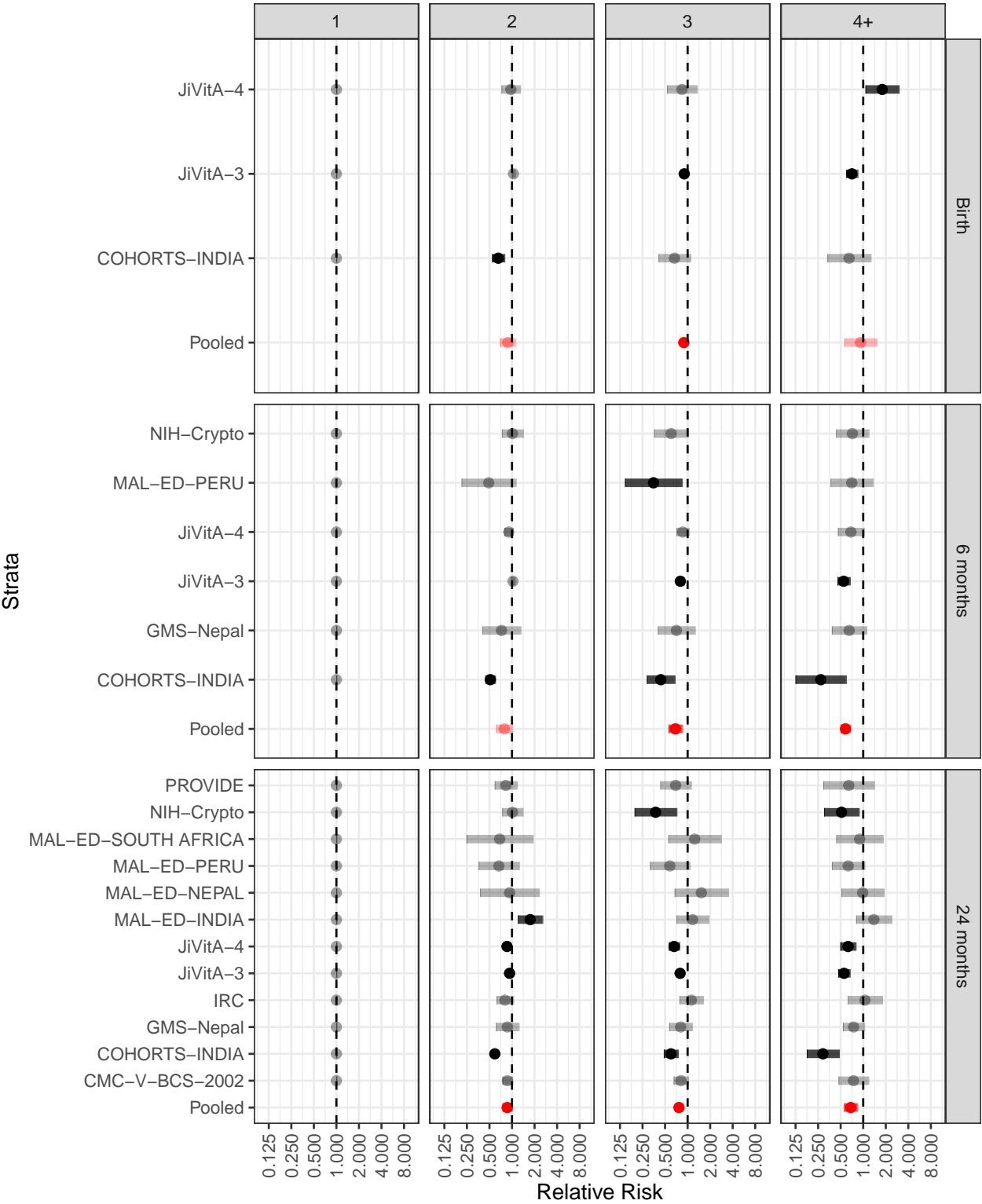
Number of children in the household under 5 years
reference level:1

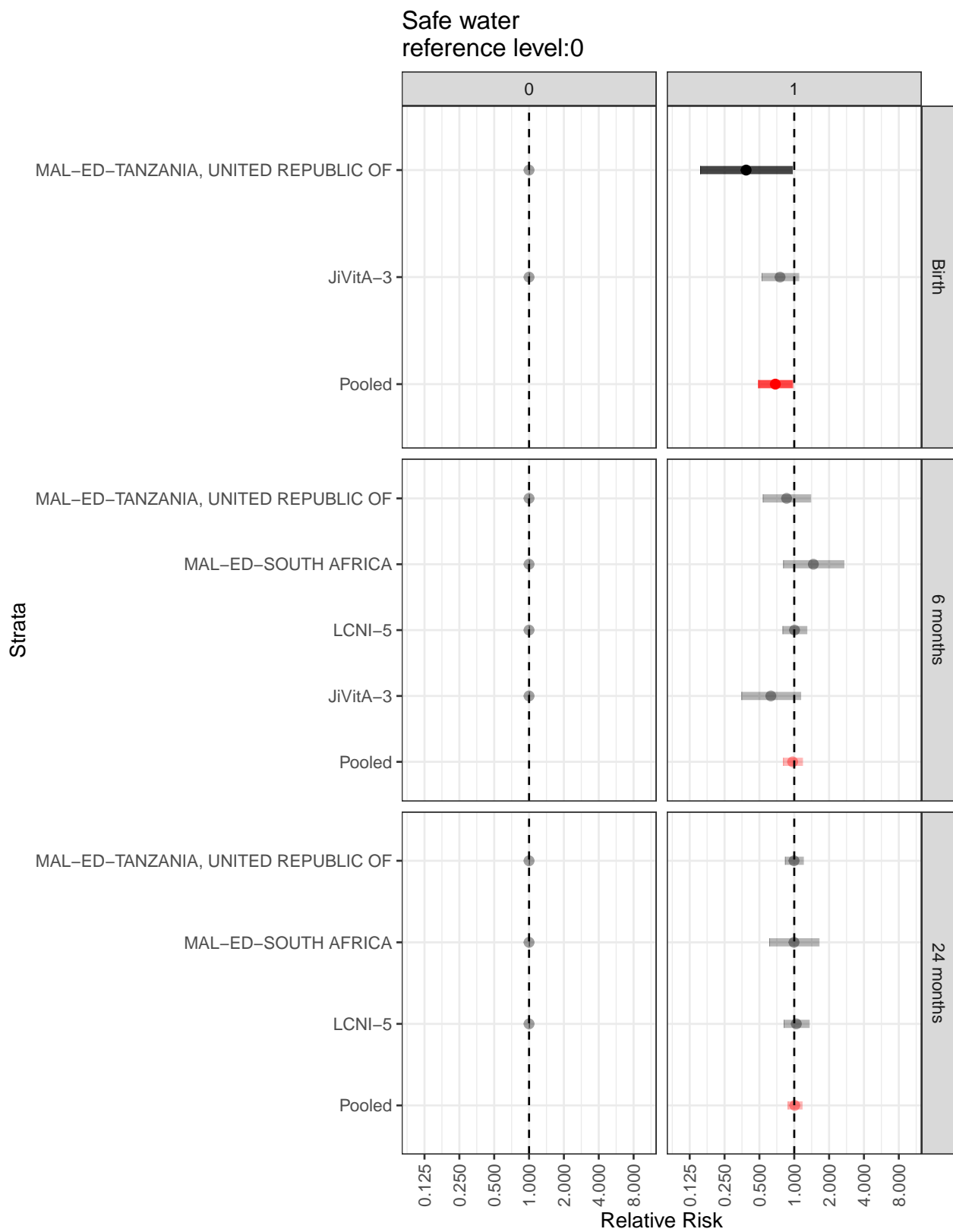


Number of people in the household
reference level:3 or less

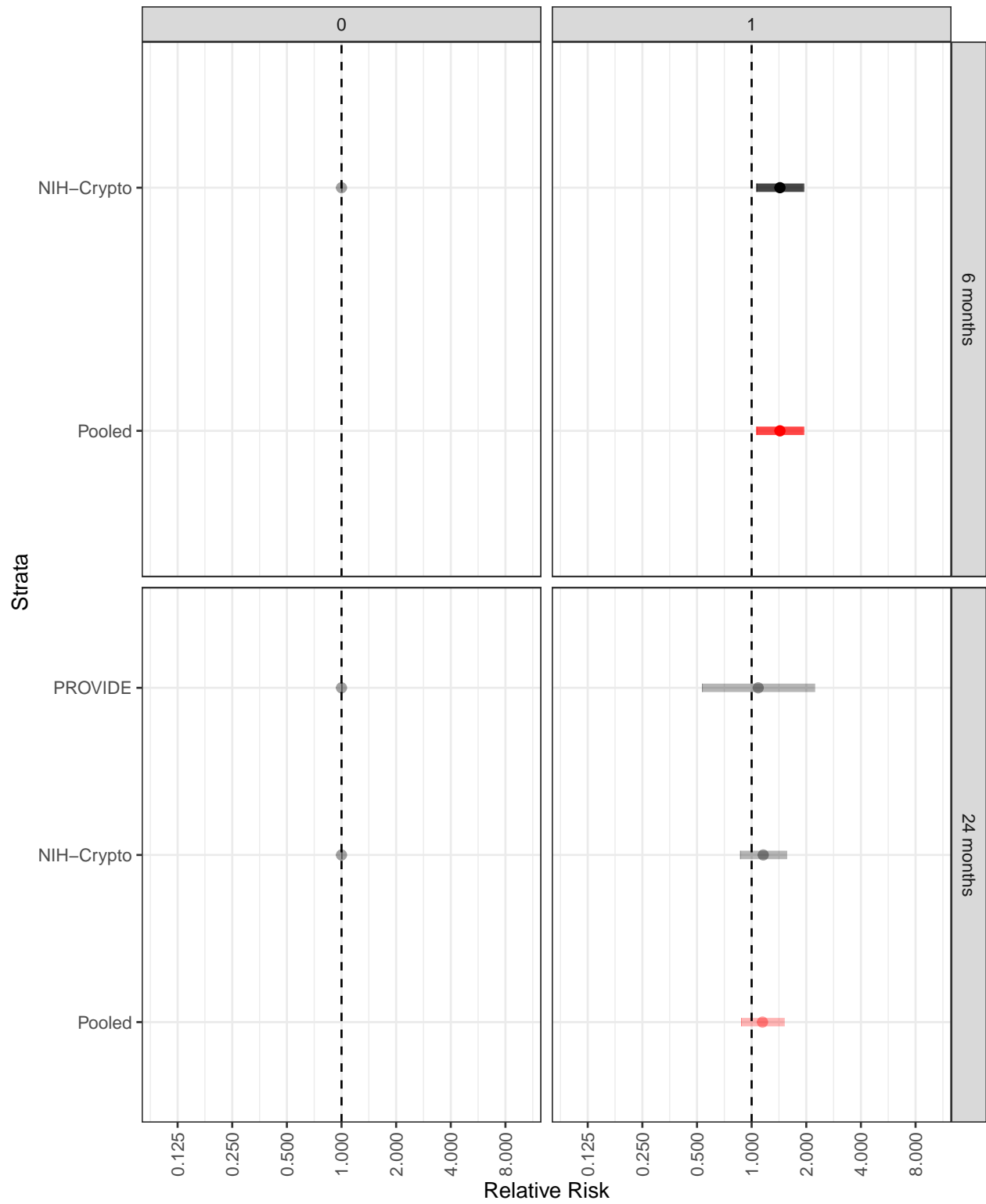


Number of rooms in household
reference level:1

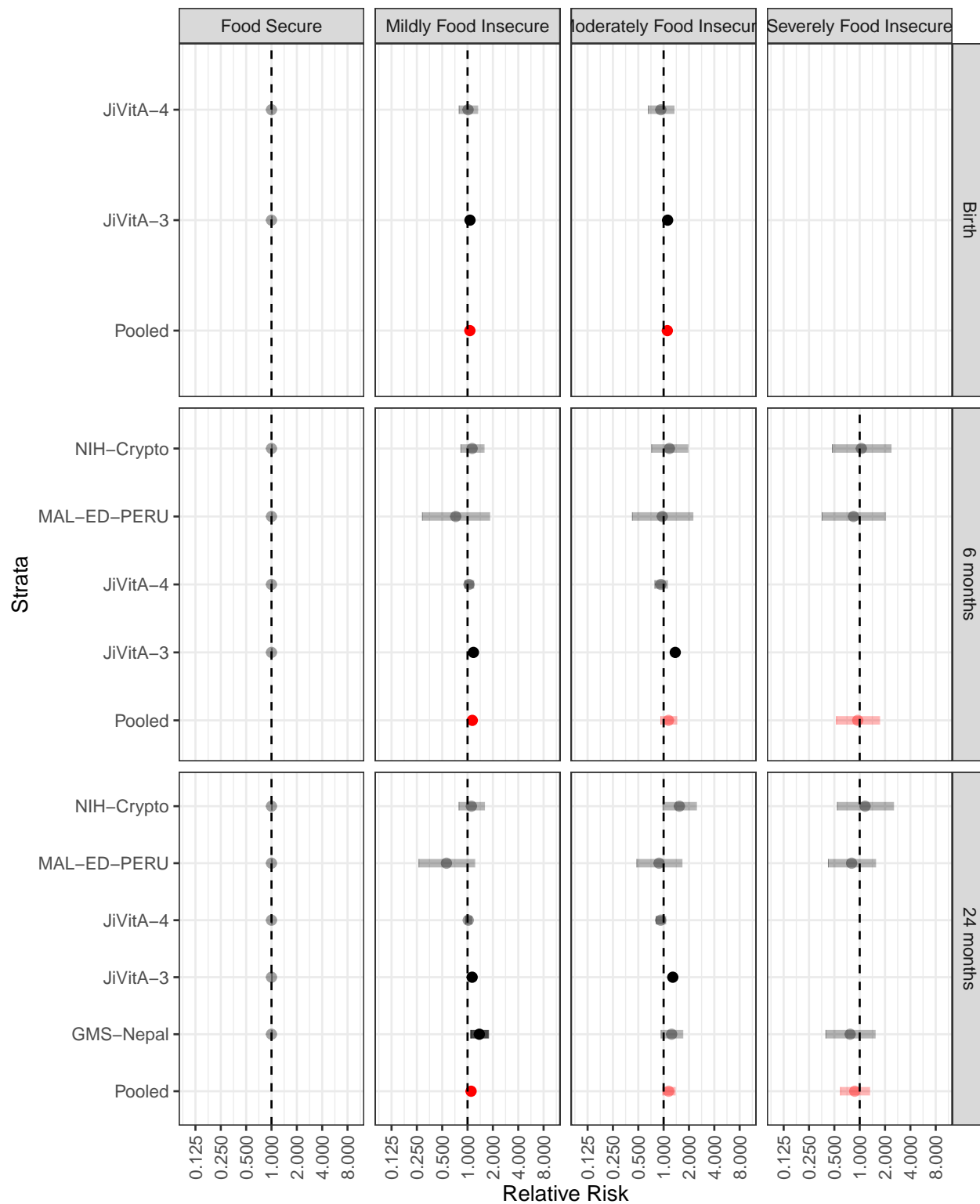




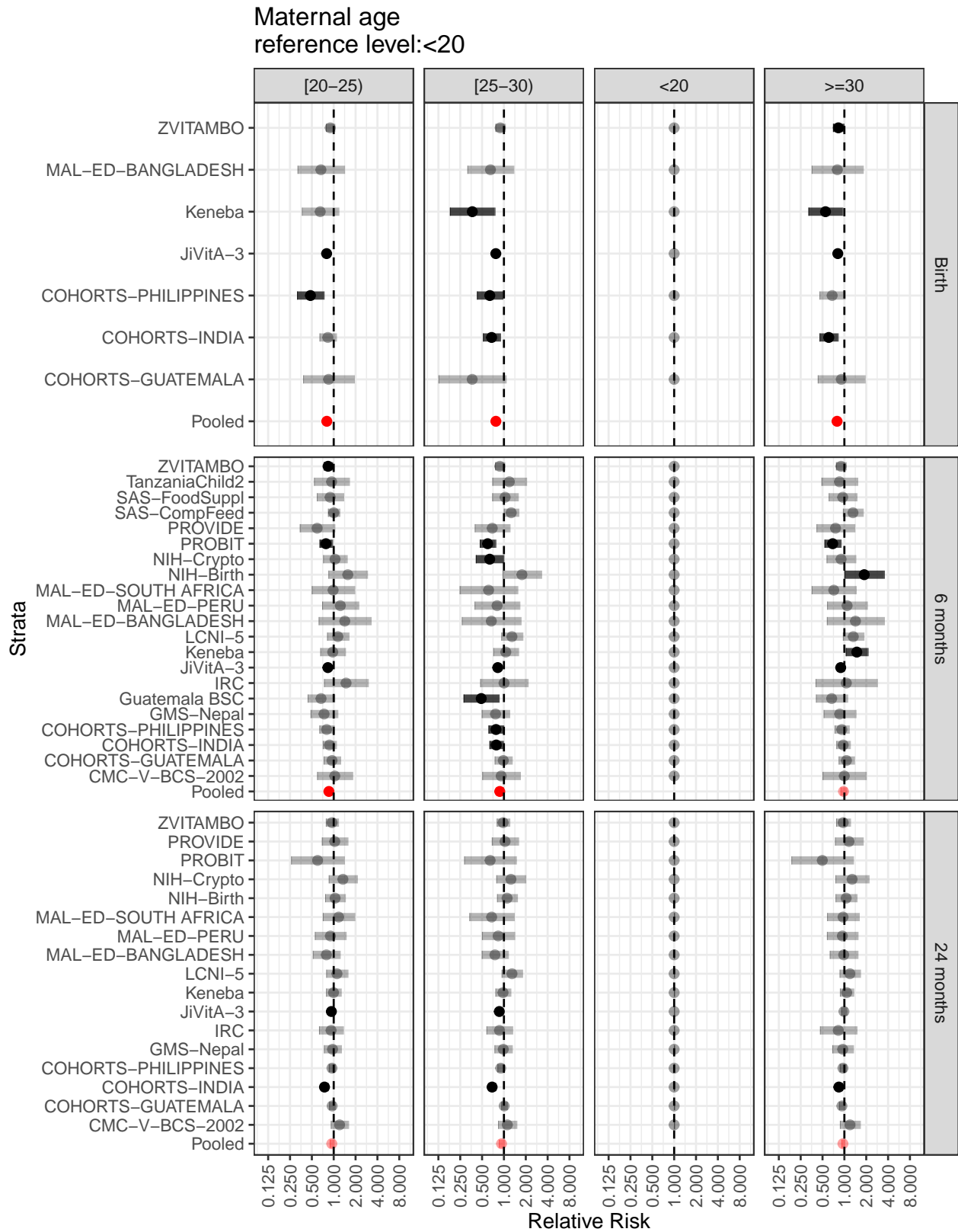
Treats water
reference level:0



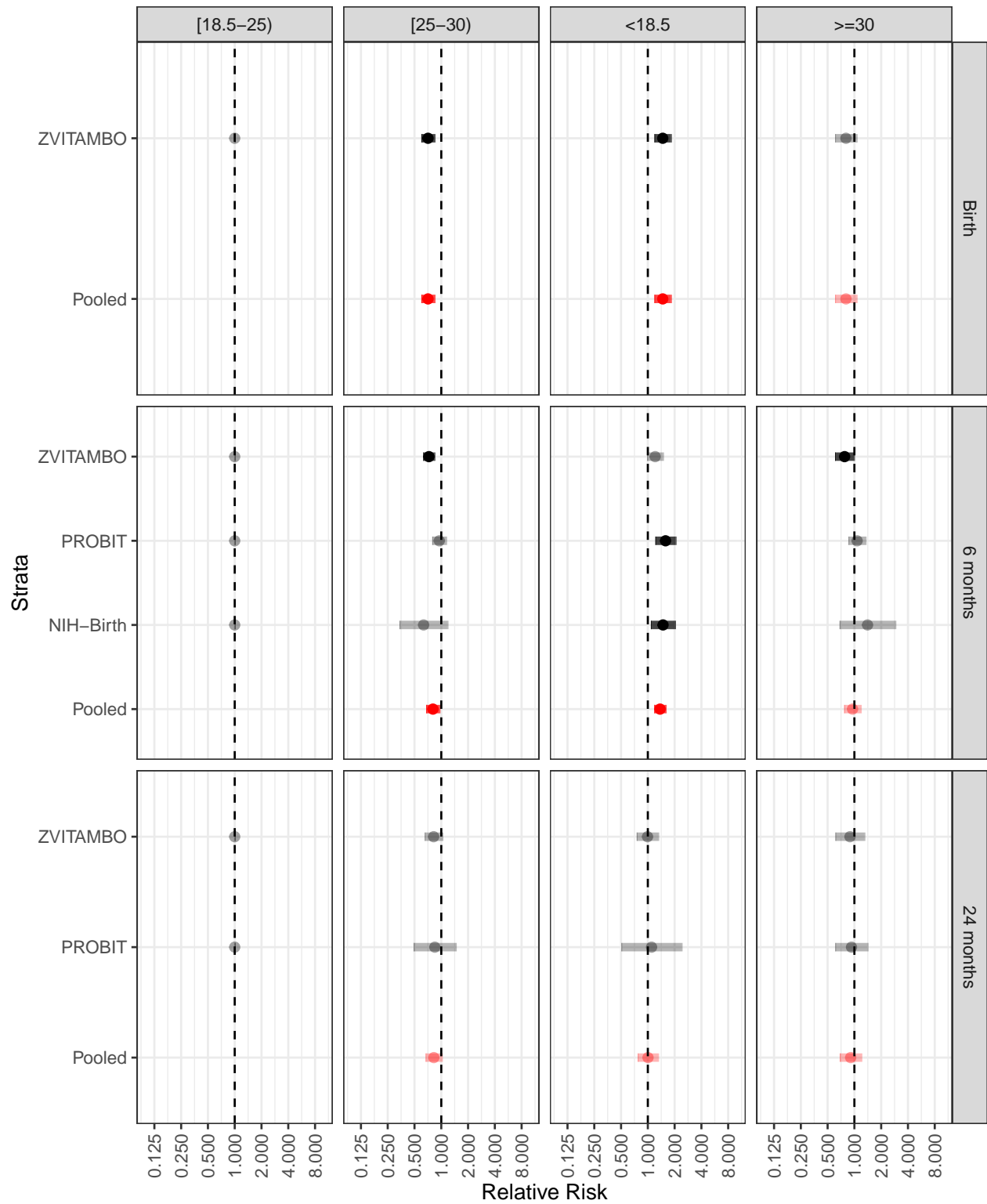
USAID Household Food Insecurity Access Scale (HFIAS) category
reference level: Food Secure



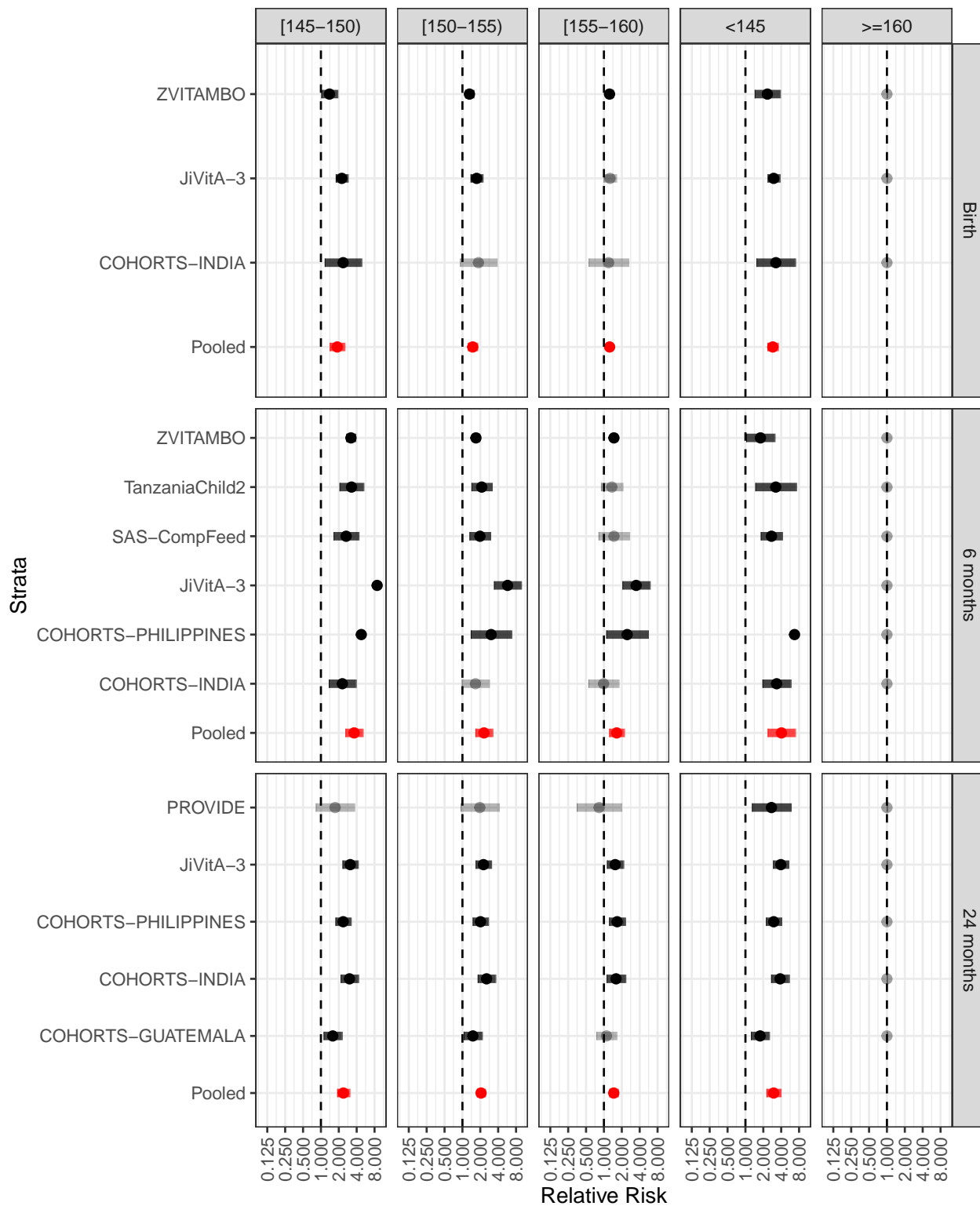
Maternal characteristics

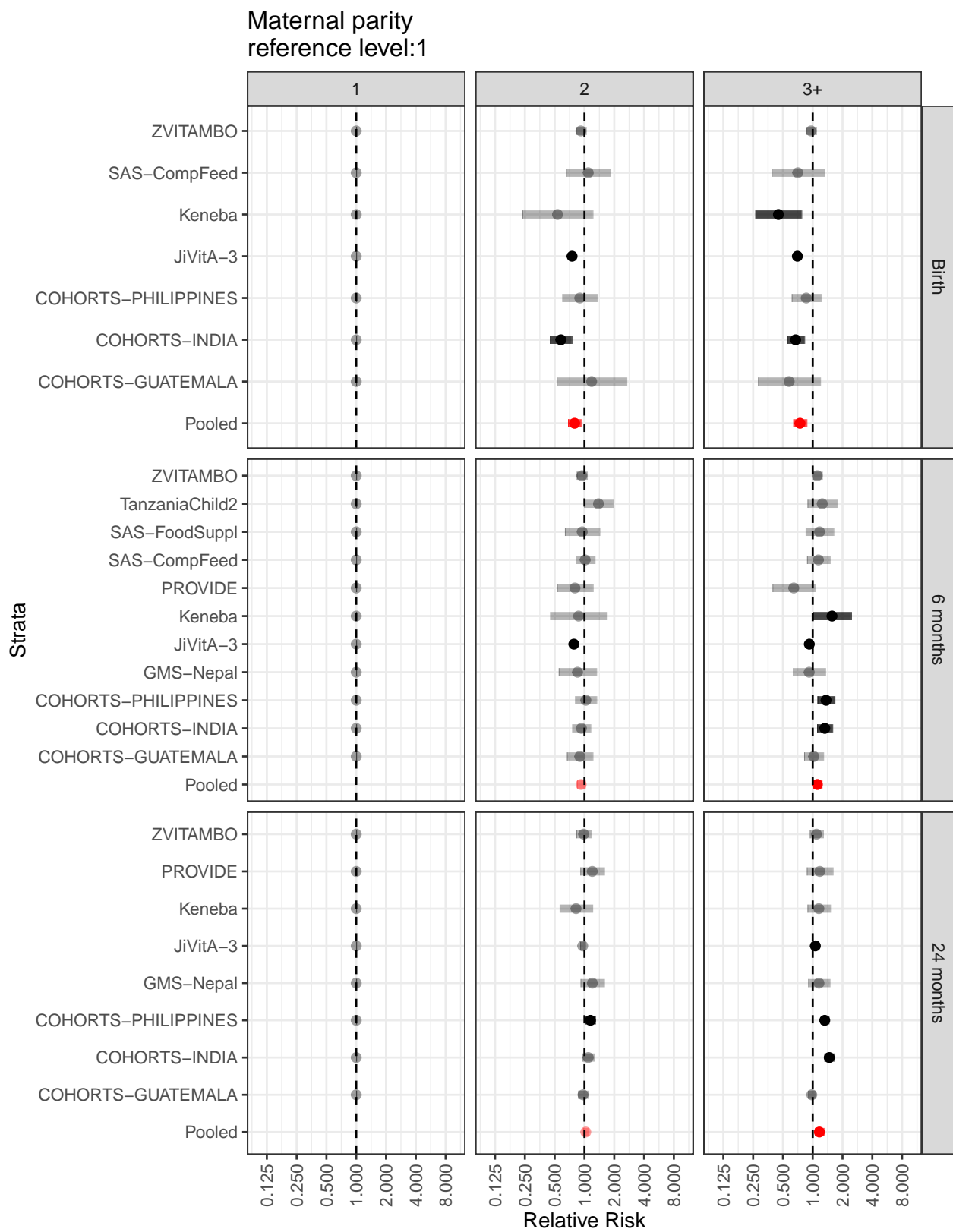


Maternal BMI
reference level:[18.5–25)

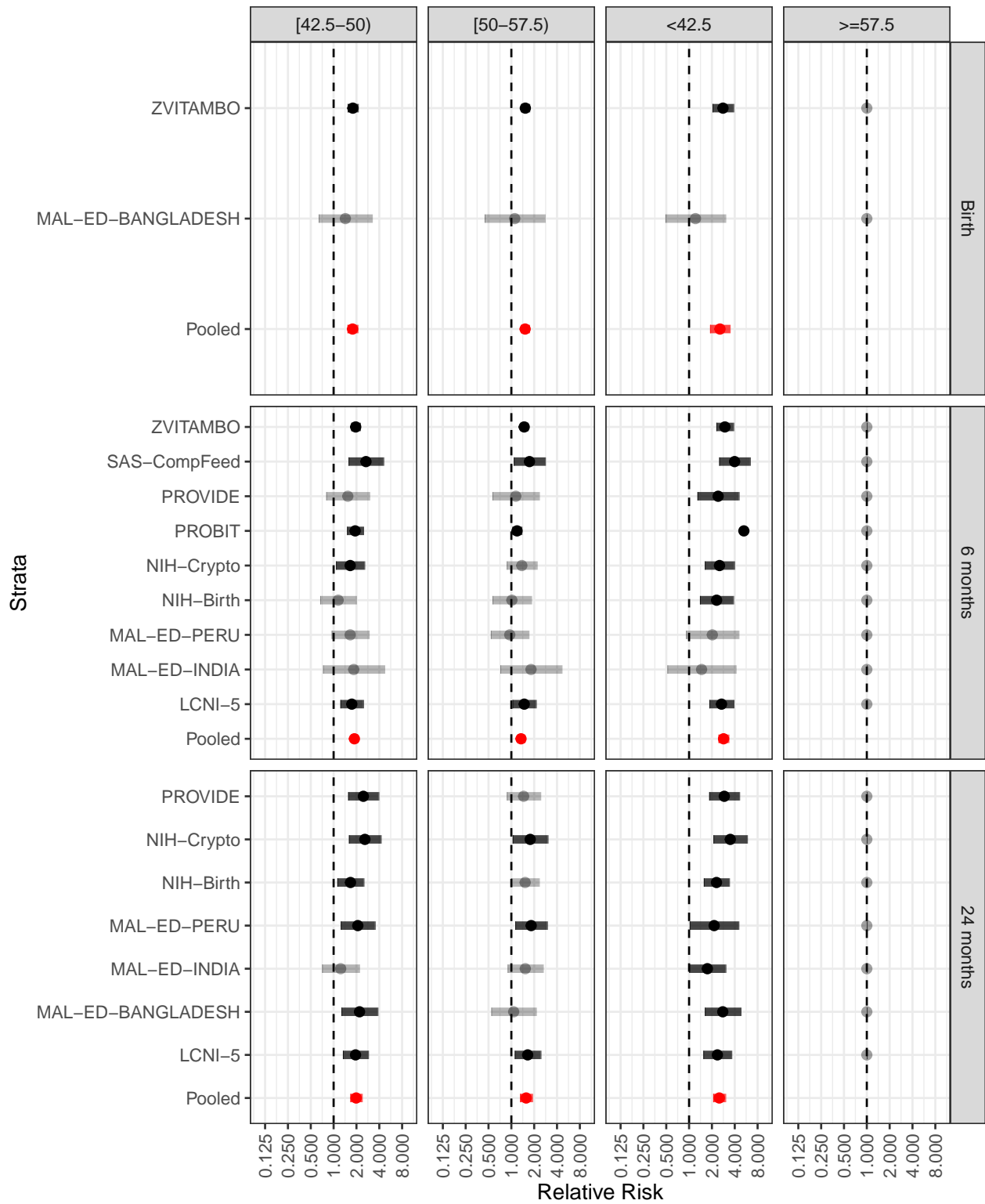


Maternal height
reference level: ≥ 160

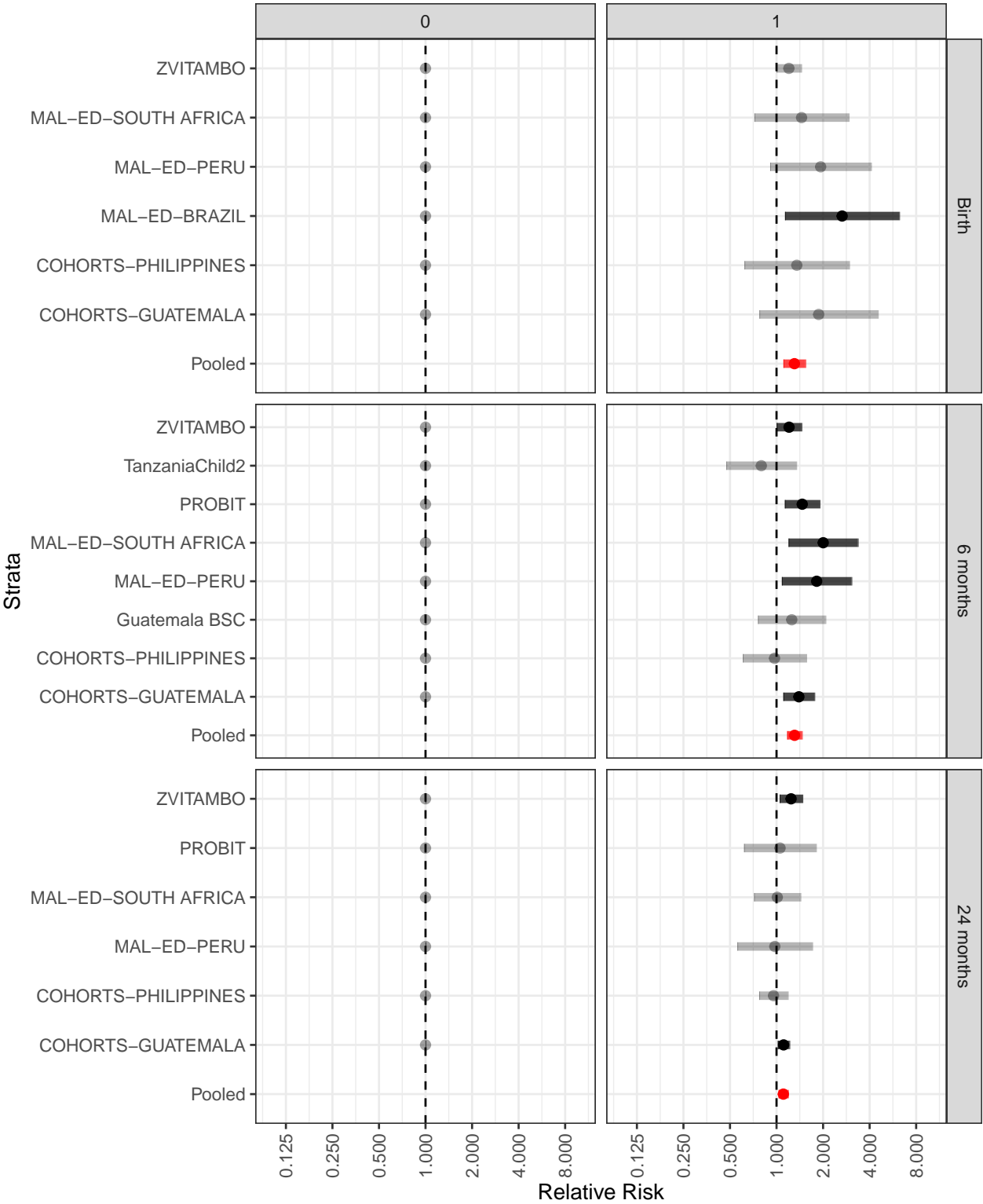




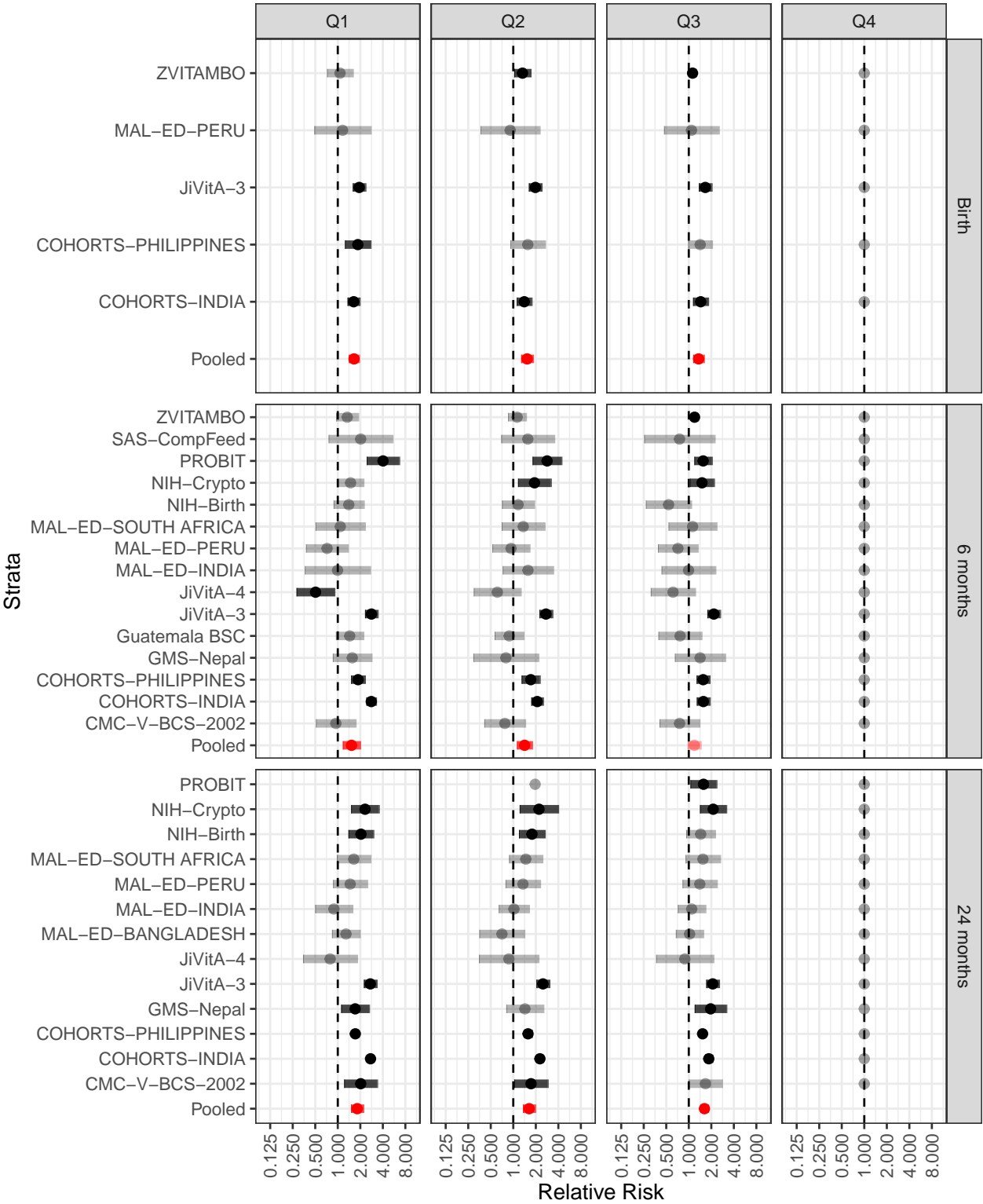
Maternal weight
reference level: ≥ 57.5



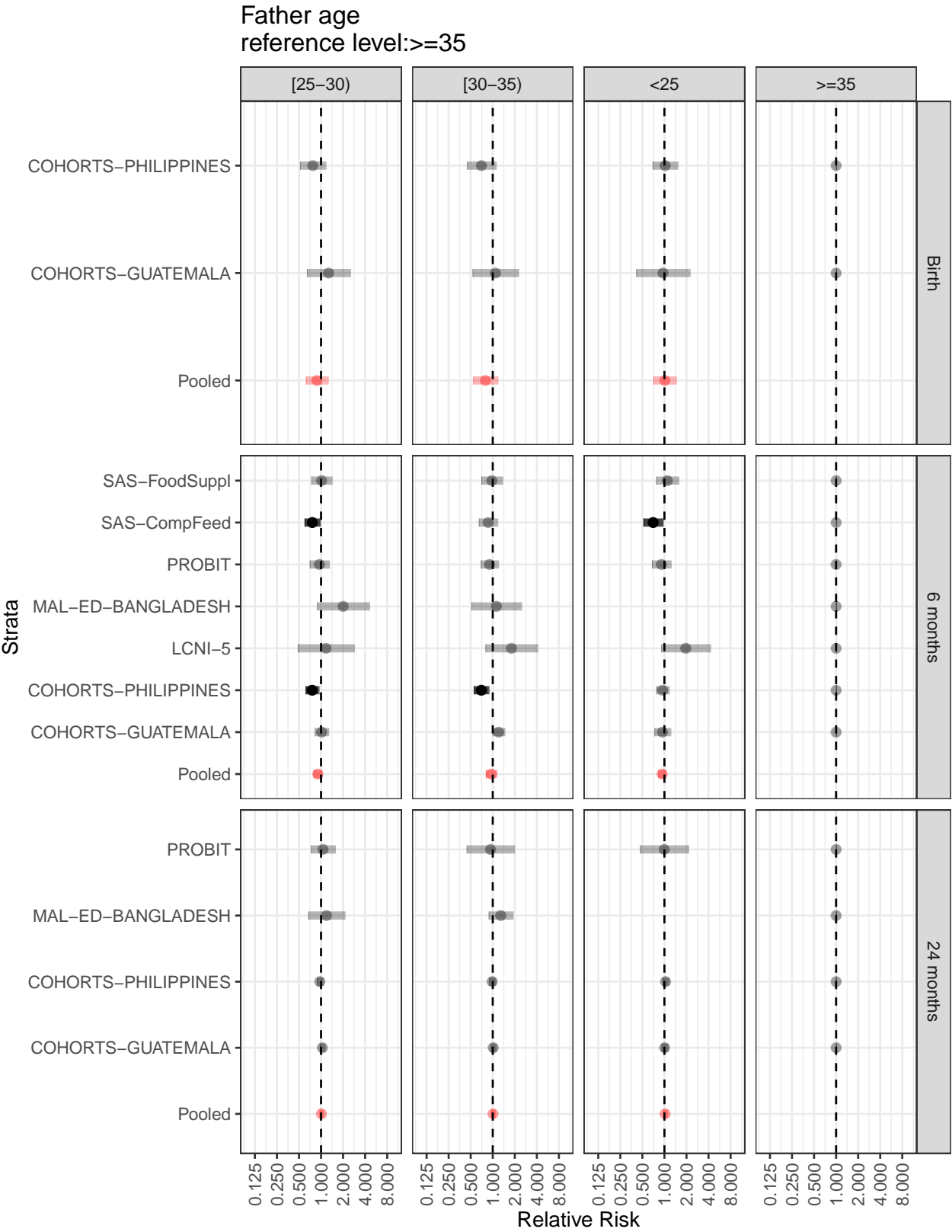
Mother is unmarried
reference level:0

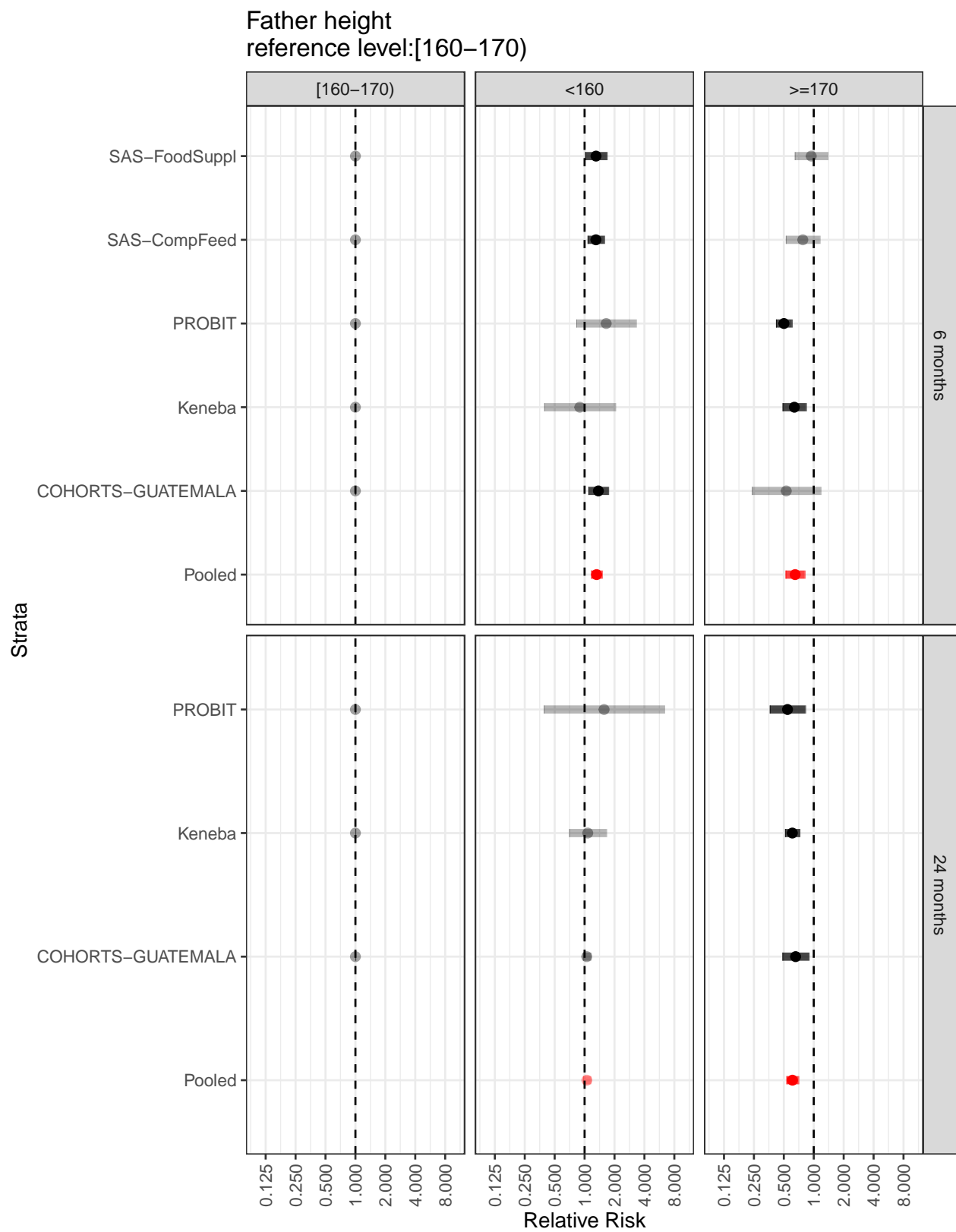


Mother's education
reference level:Q4

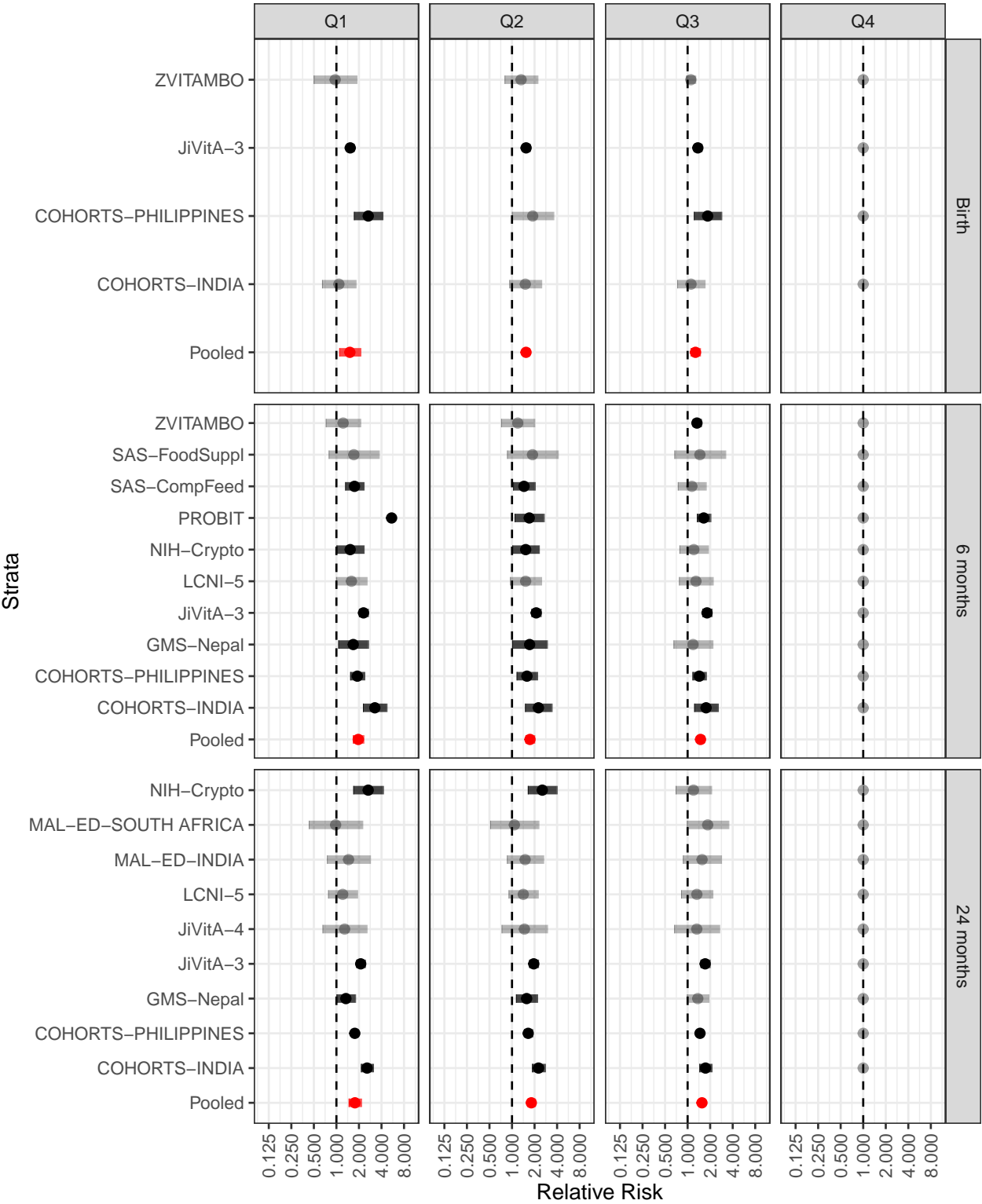


Paternal characteristics





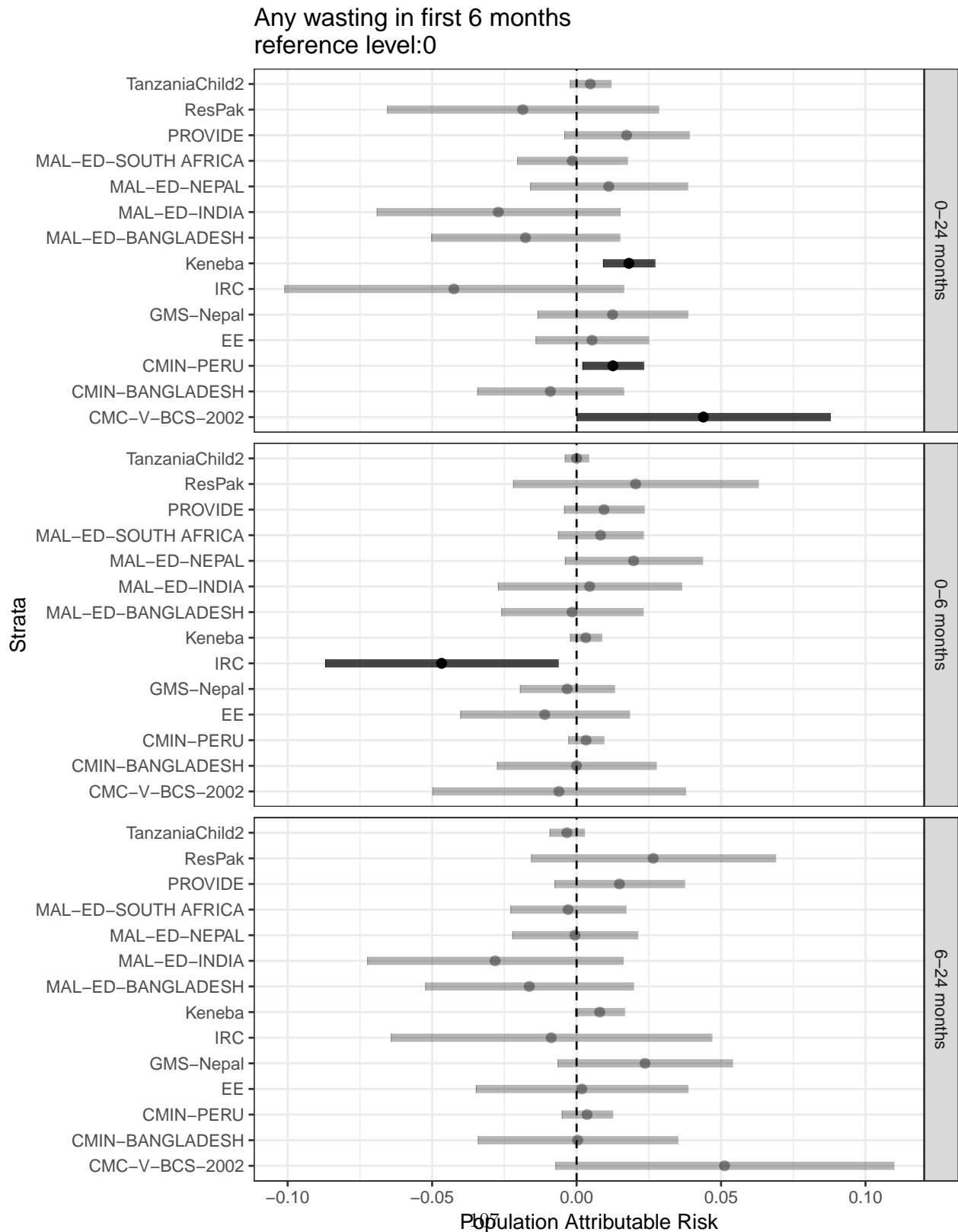
Father's education
reference level:Q4

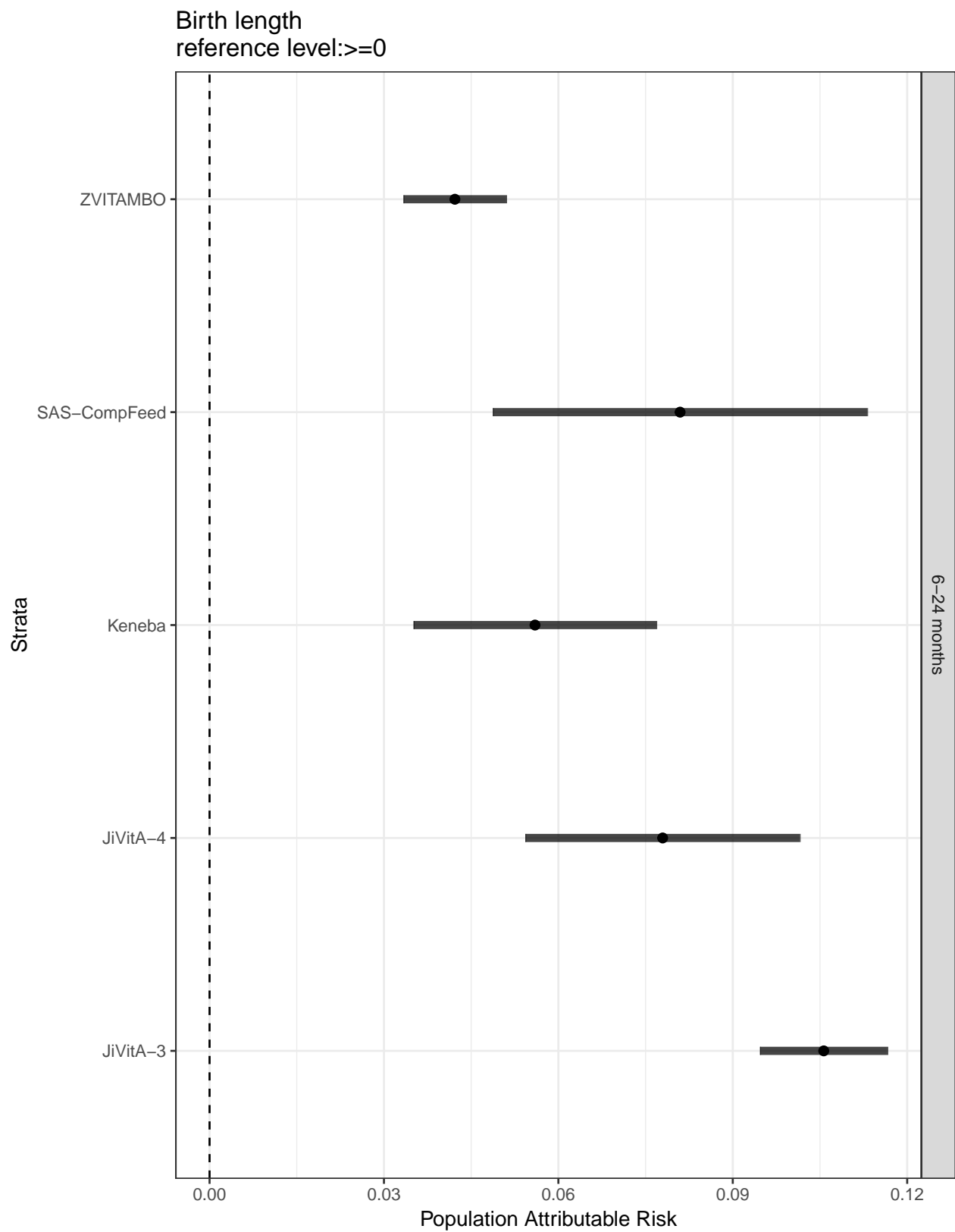


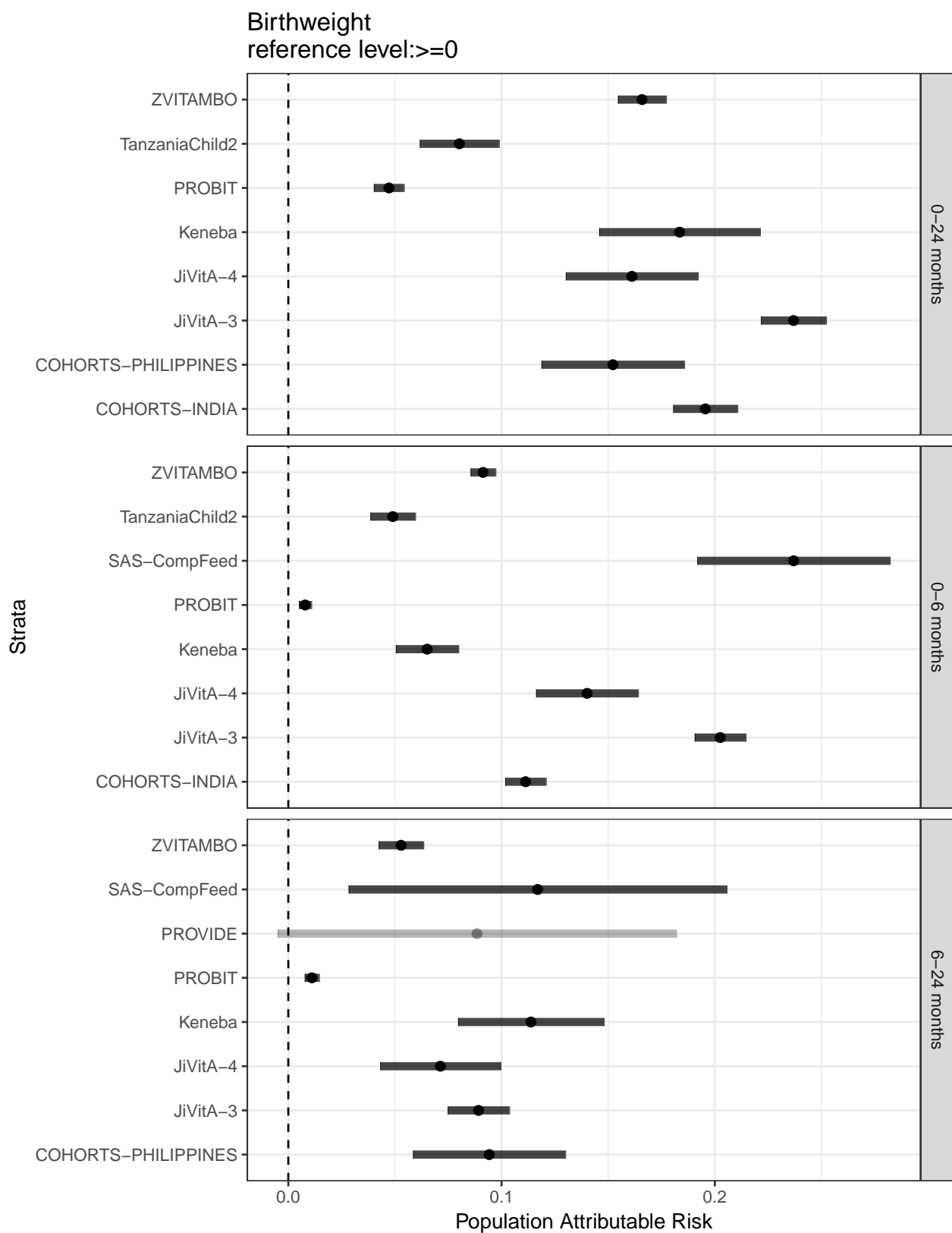
Appendix 2 - Population Attributable Risk stratified by cohort

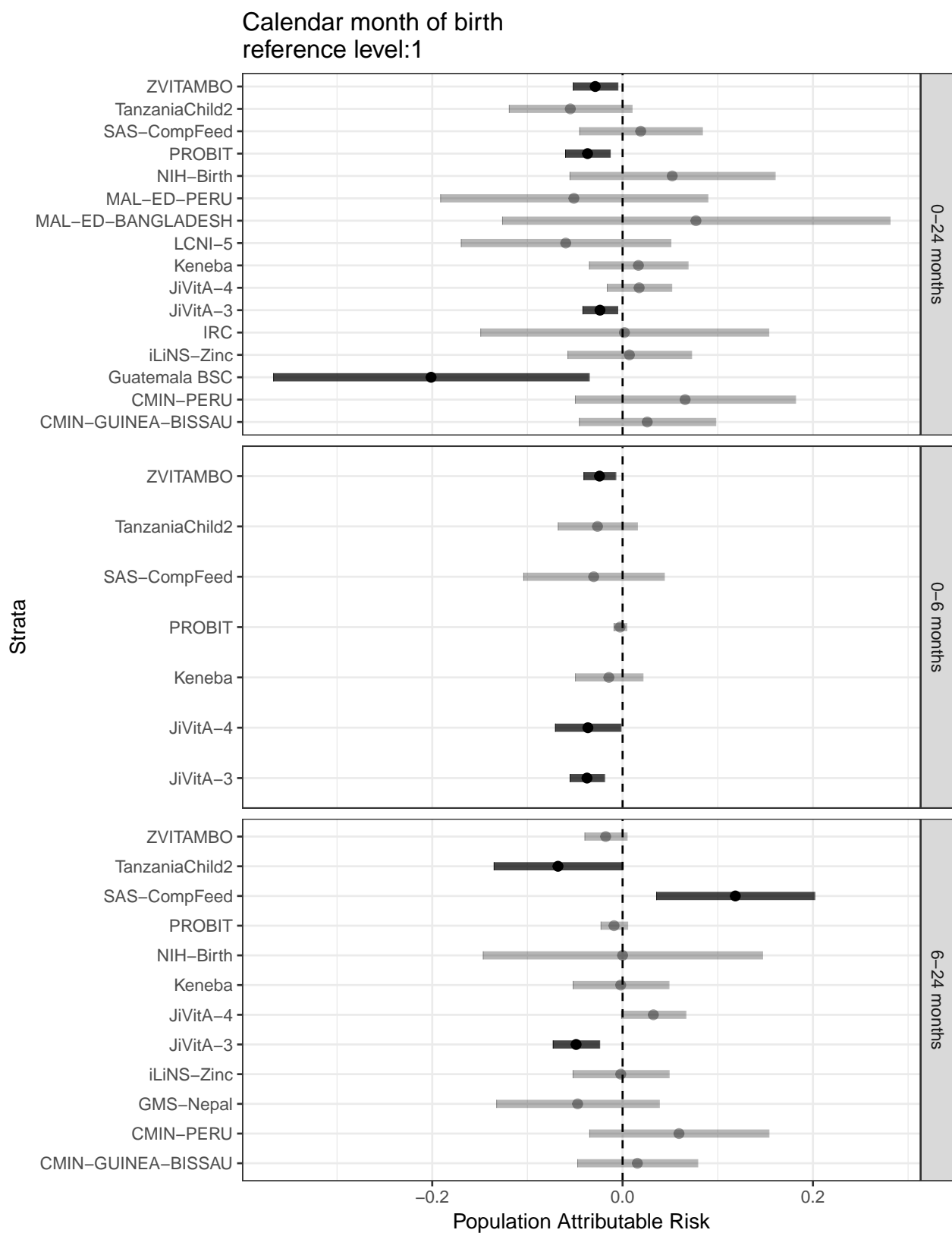
Cumulative incidence of stunting from birth to 24 months

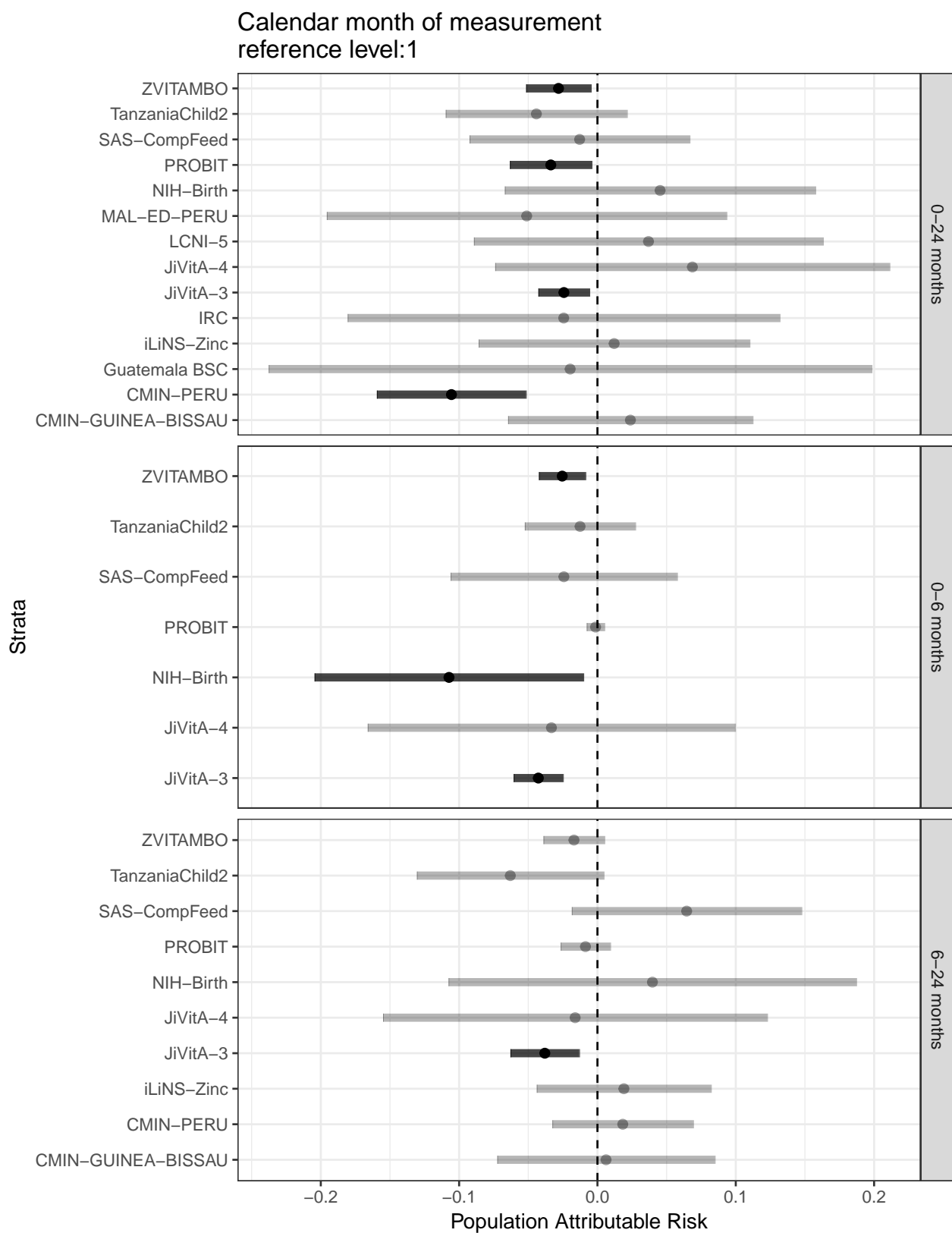
Child characteristics



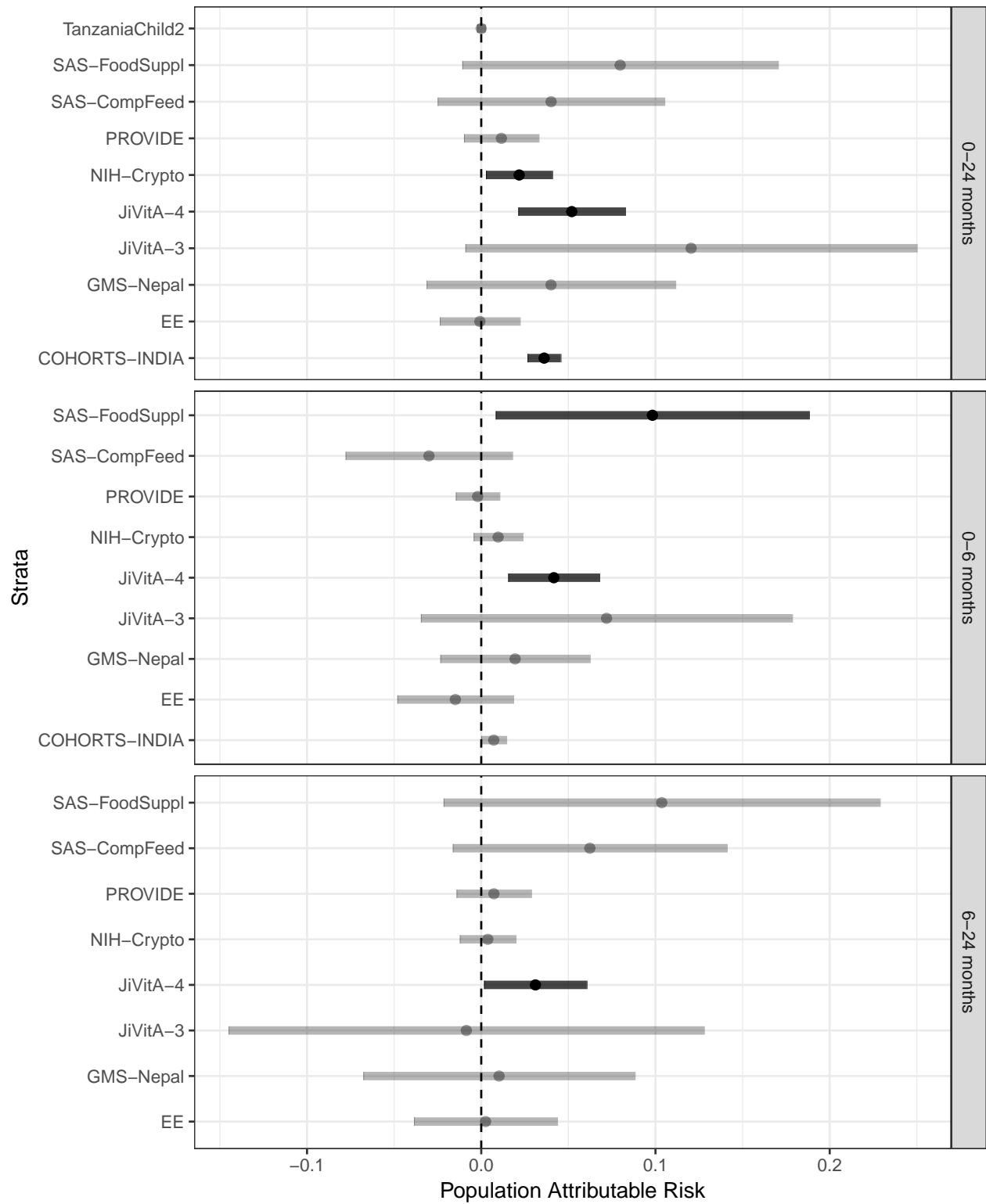




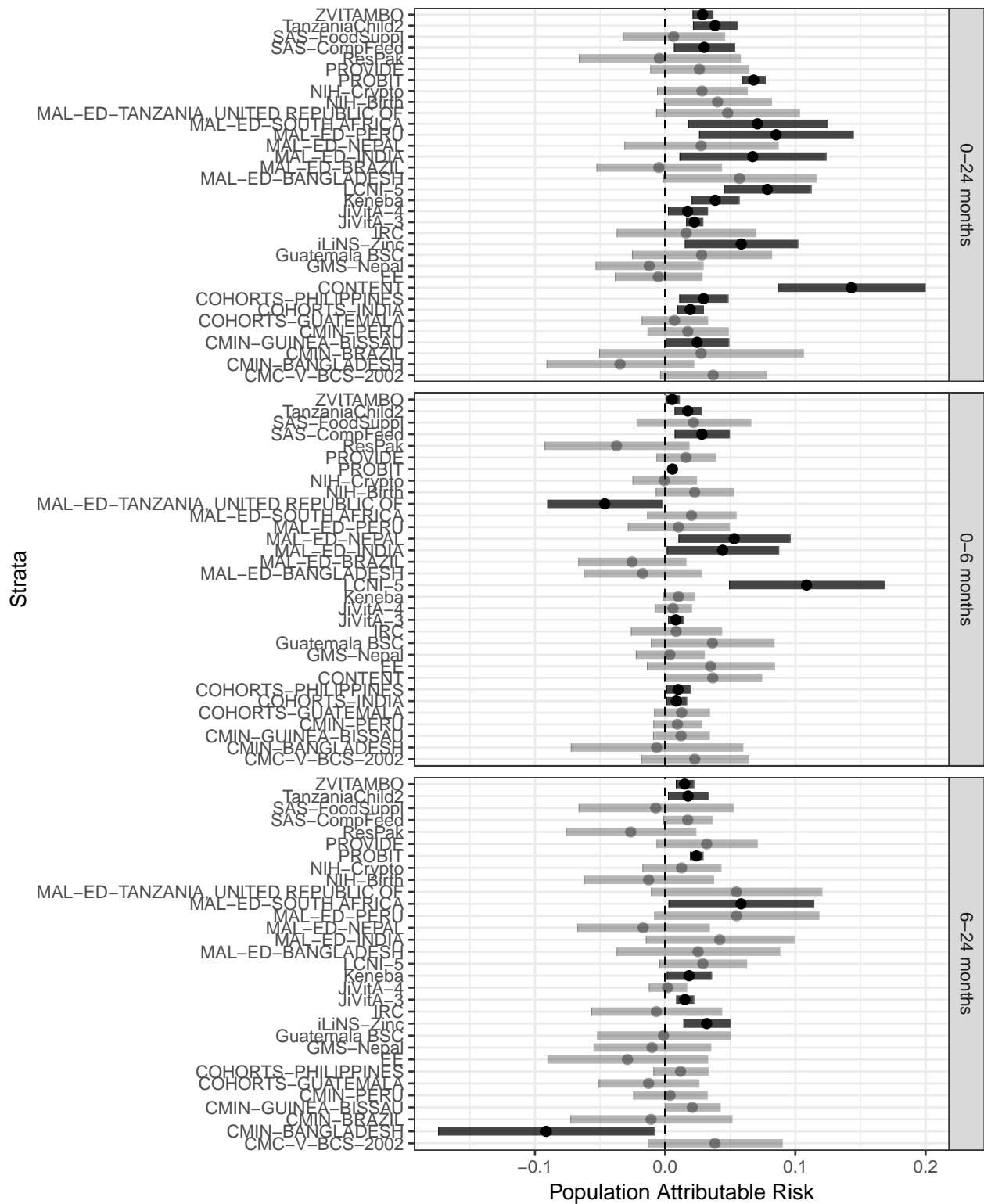


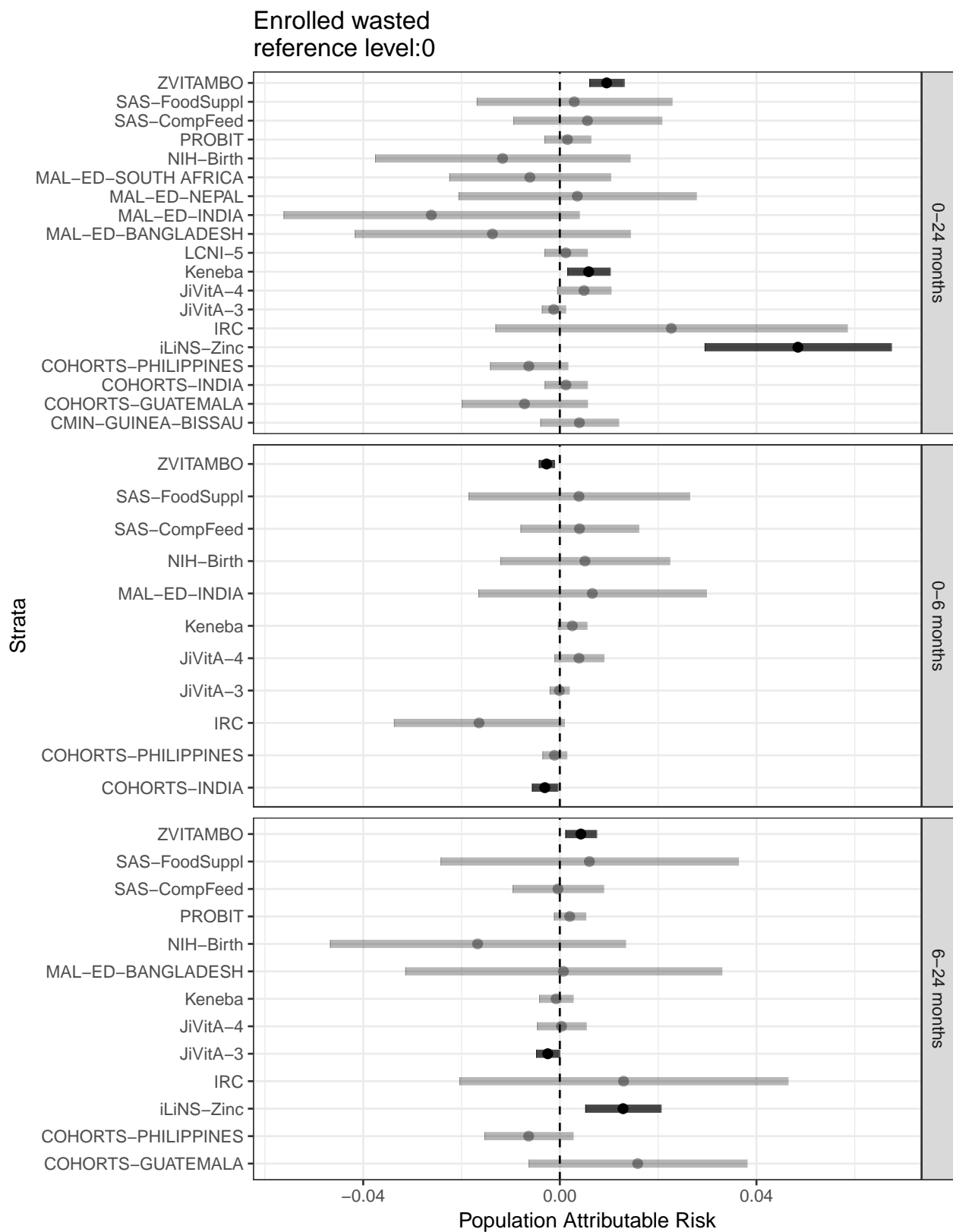


Child delivered at home
reference level:0

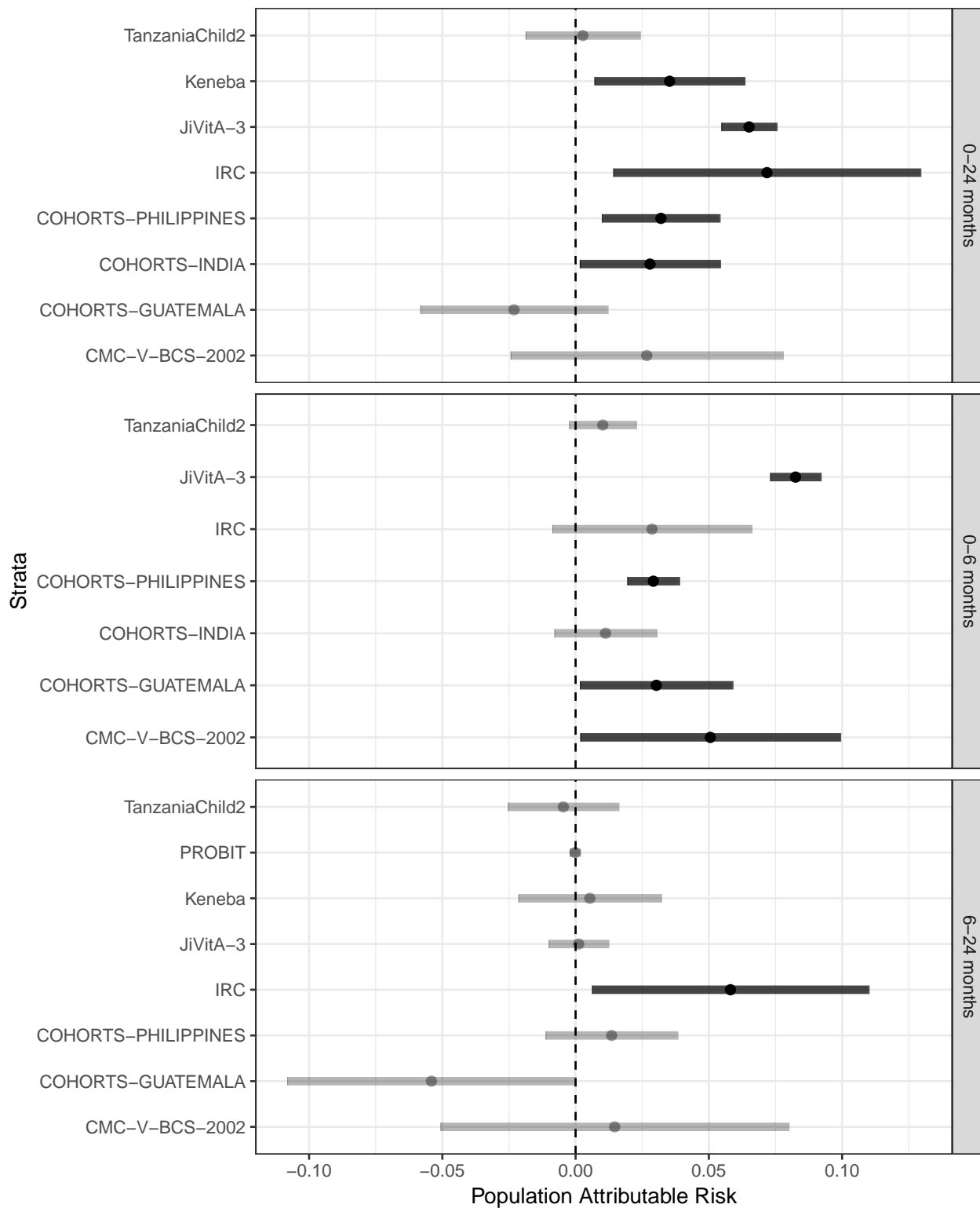


Child's sex
reference level:Female

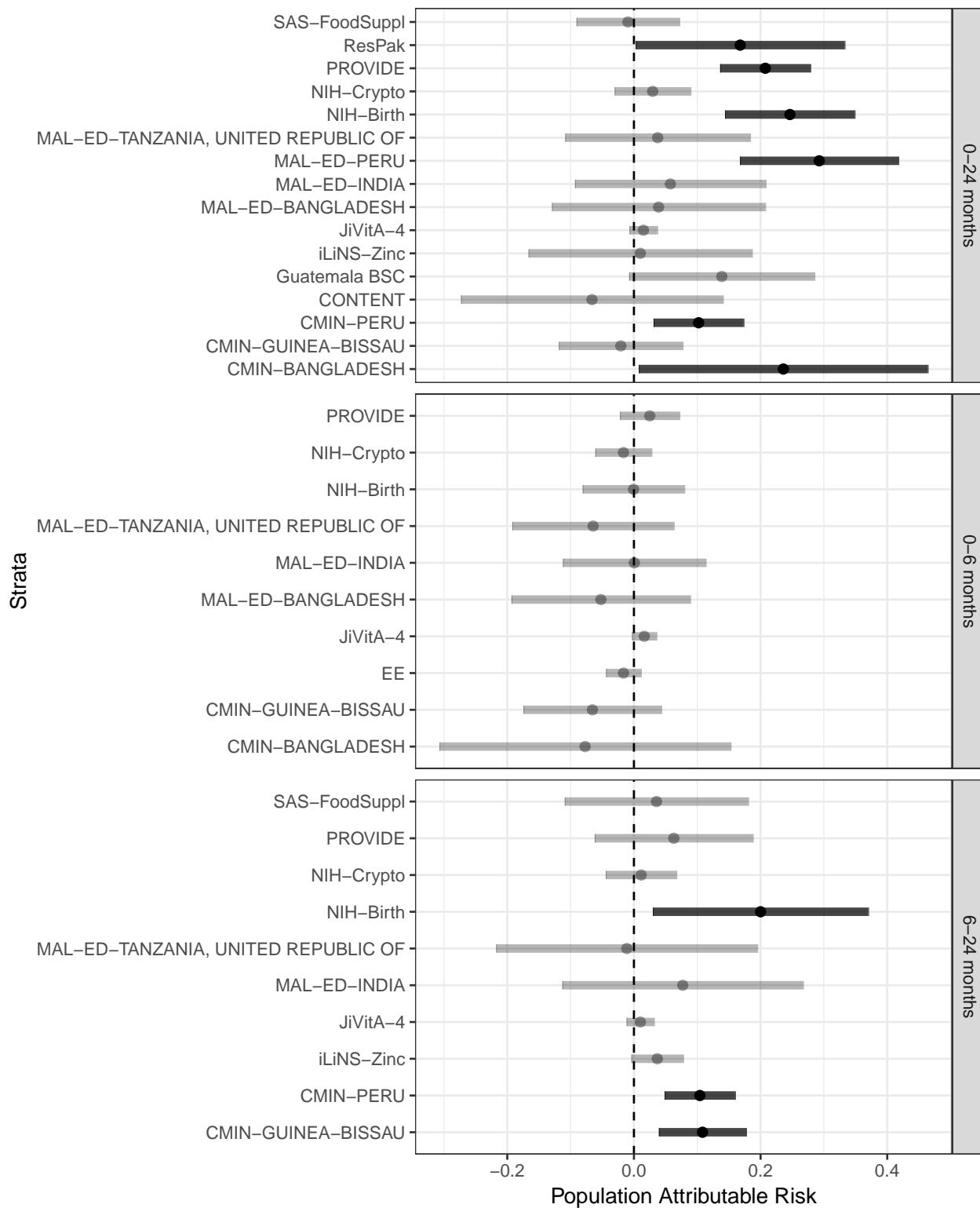




Gestational age at birth in days
reference level:[273–287)

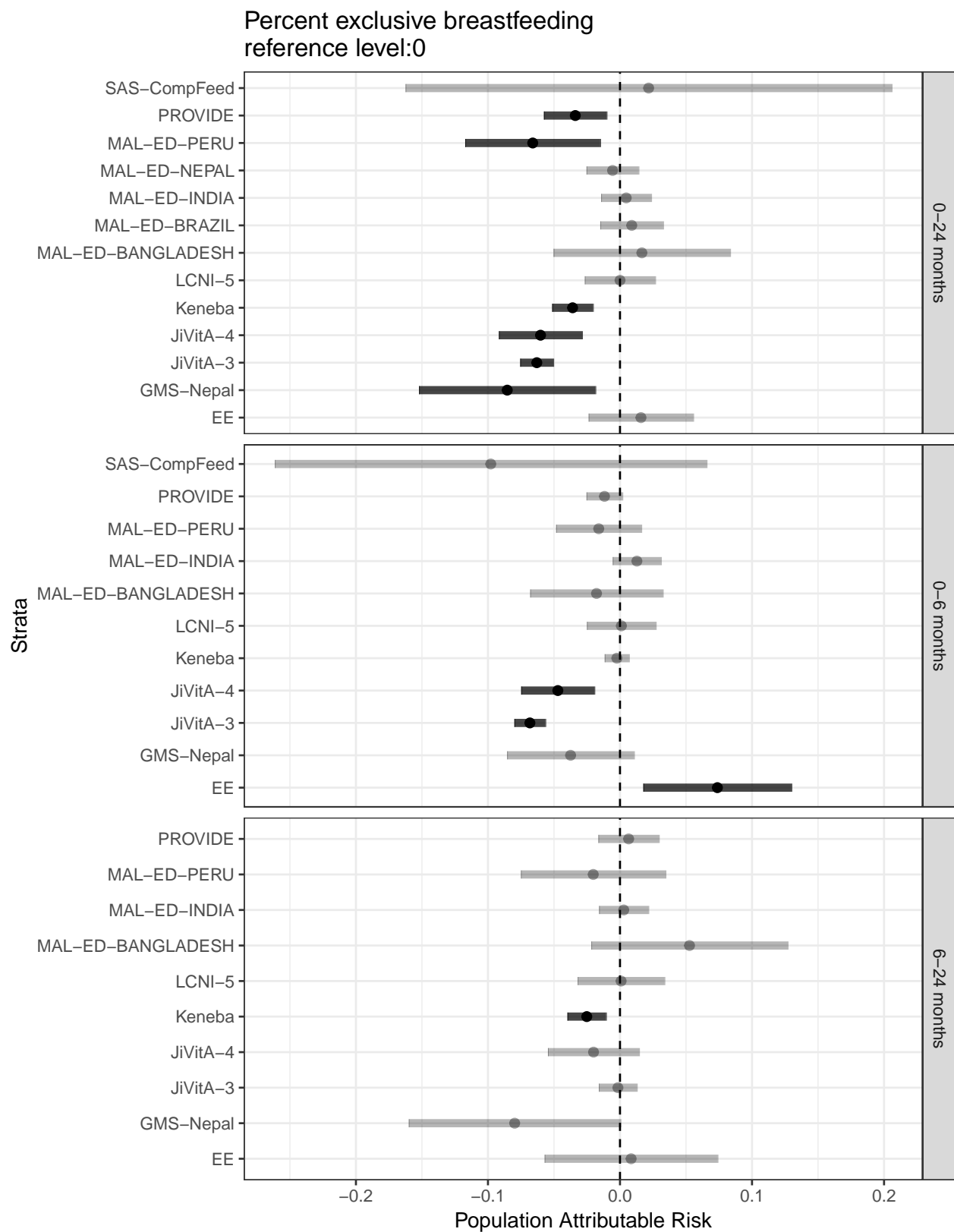


Percent diarrhea in first 24 months
reference level:Q1

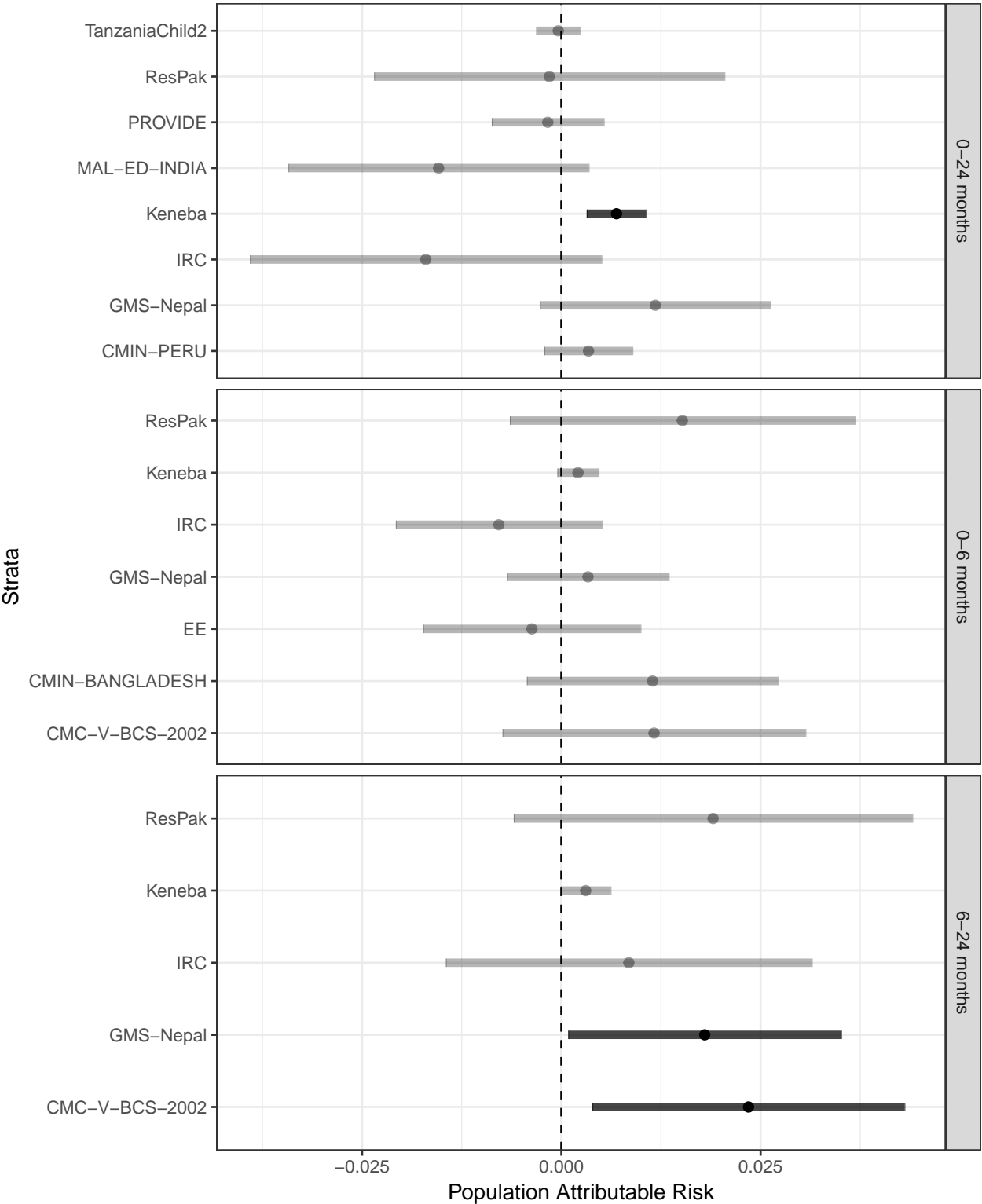


Percent diarrhea in first 6 months
reference level:Q1

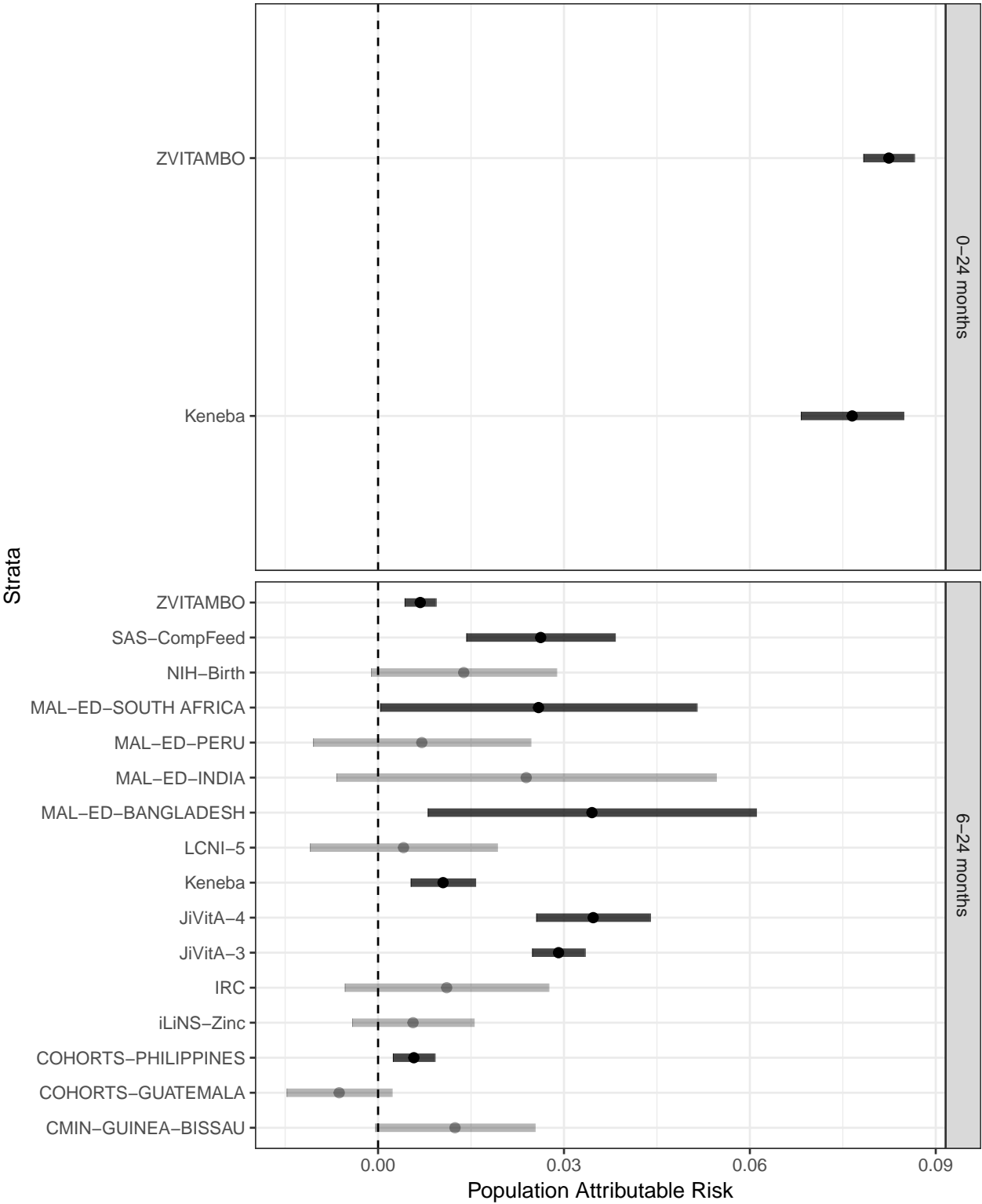




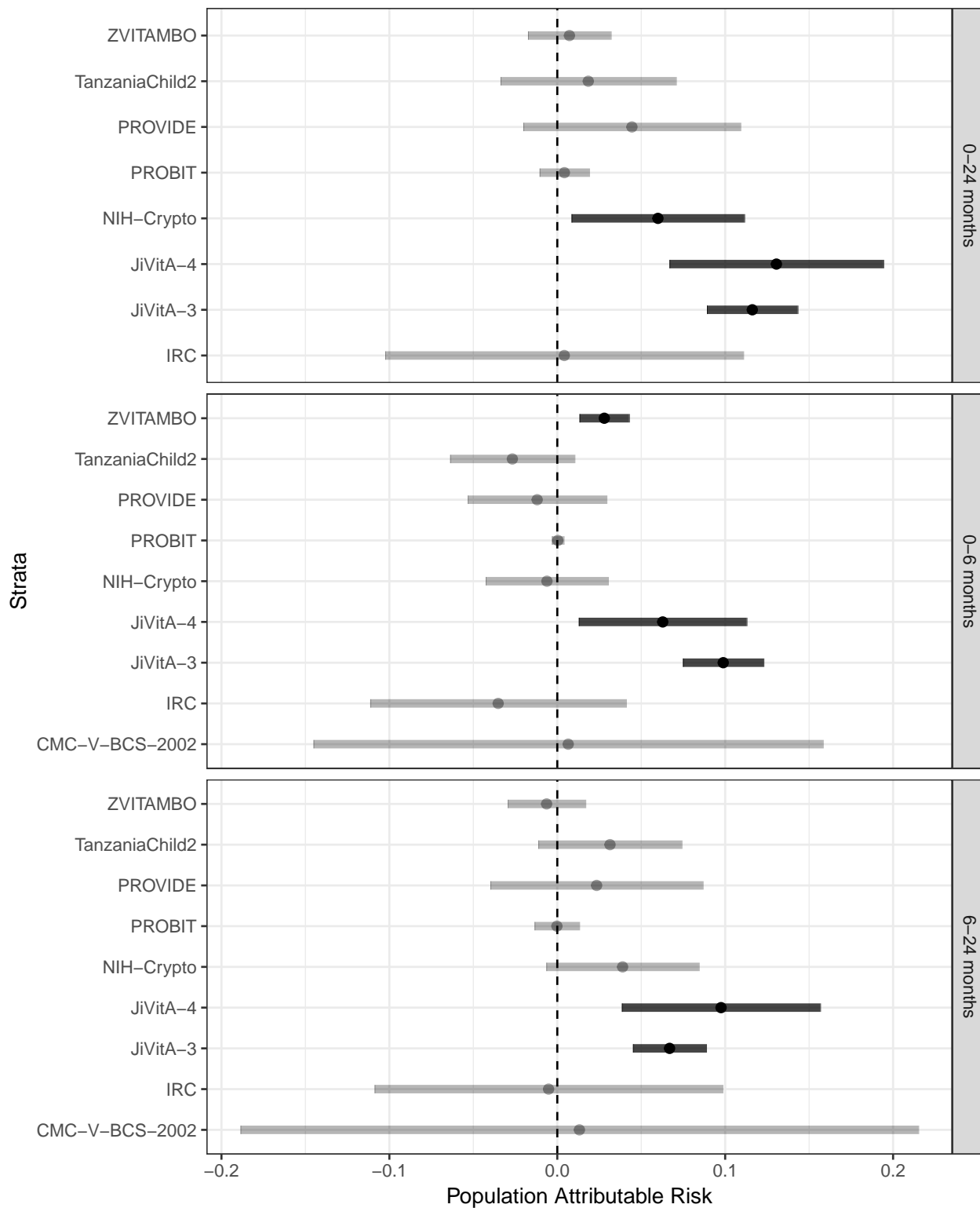
Persistent wasting in first 6 months
reference level:0



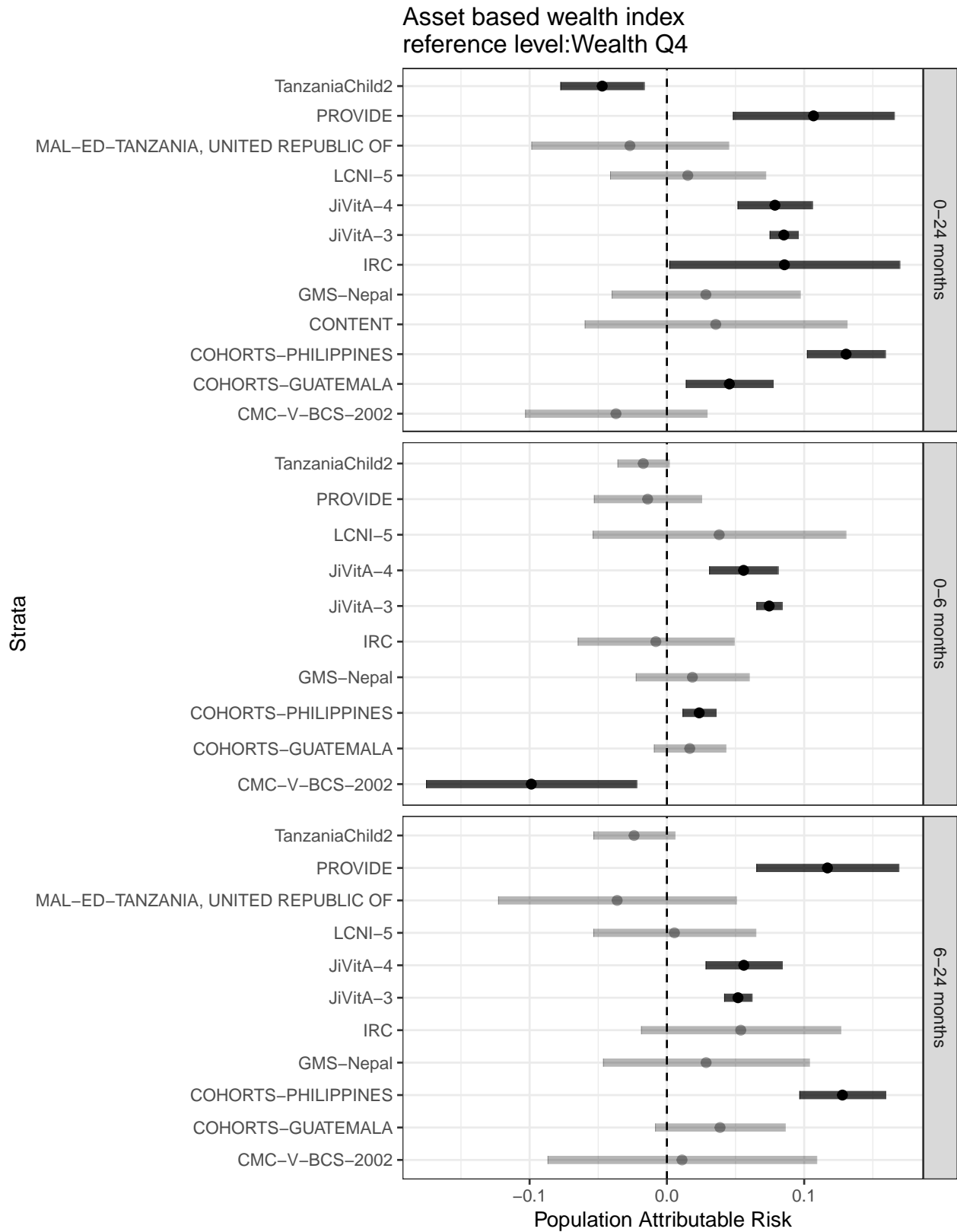
Stunted at enrollment
reference level:0



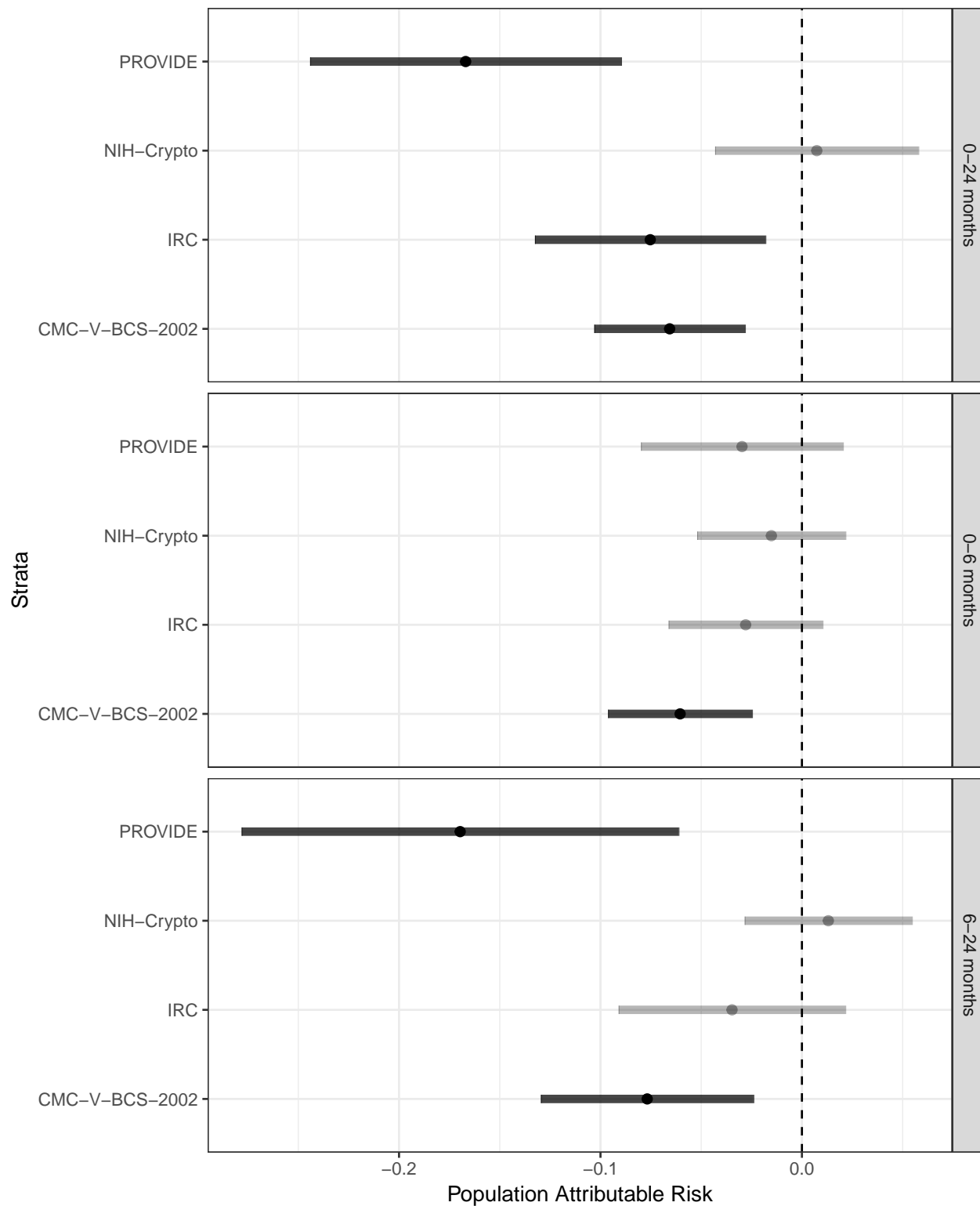
Vaginal delivery
reference level:0



Household characteristics

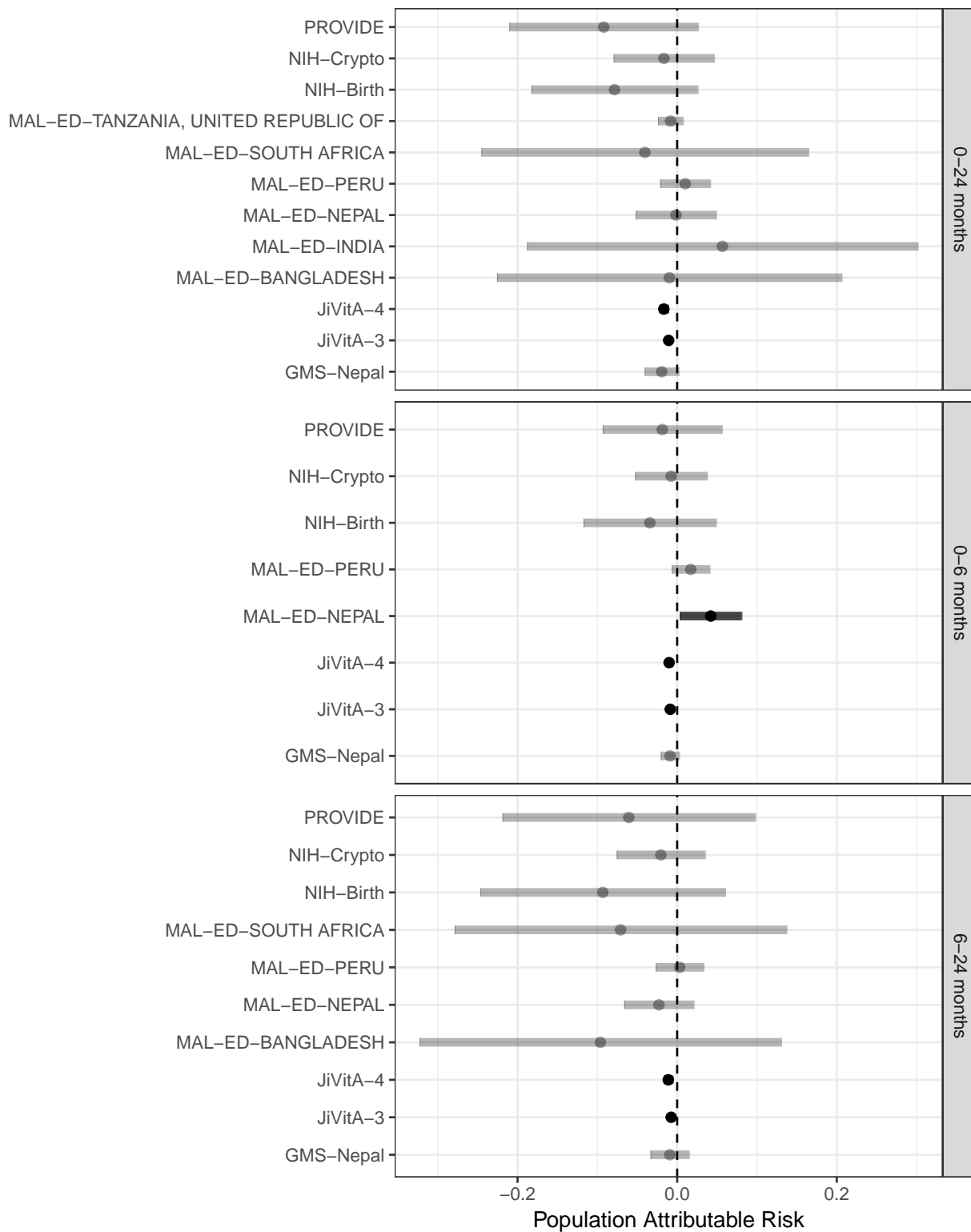


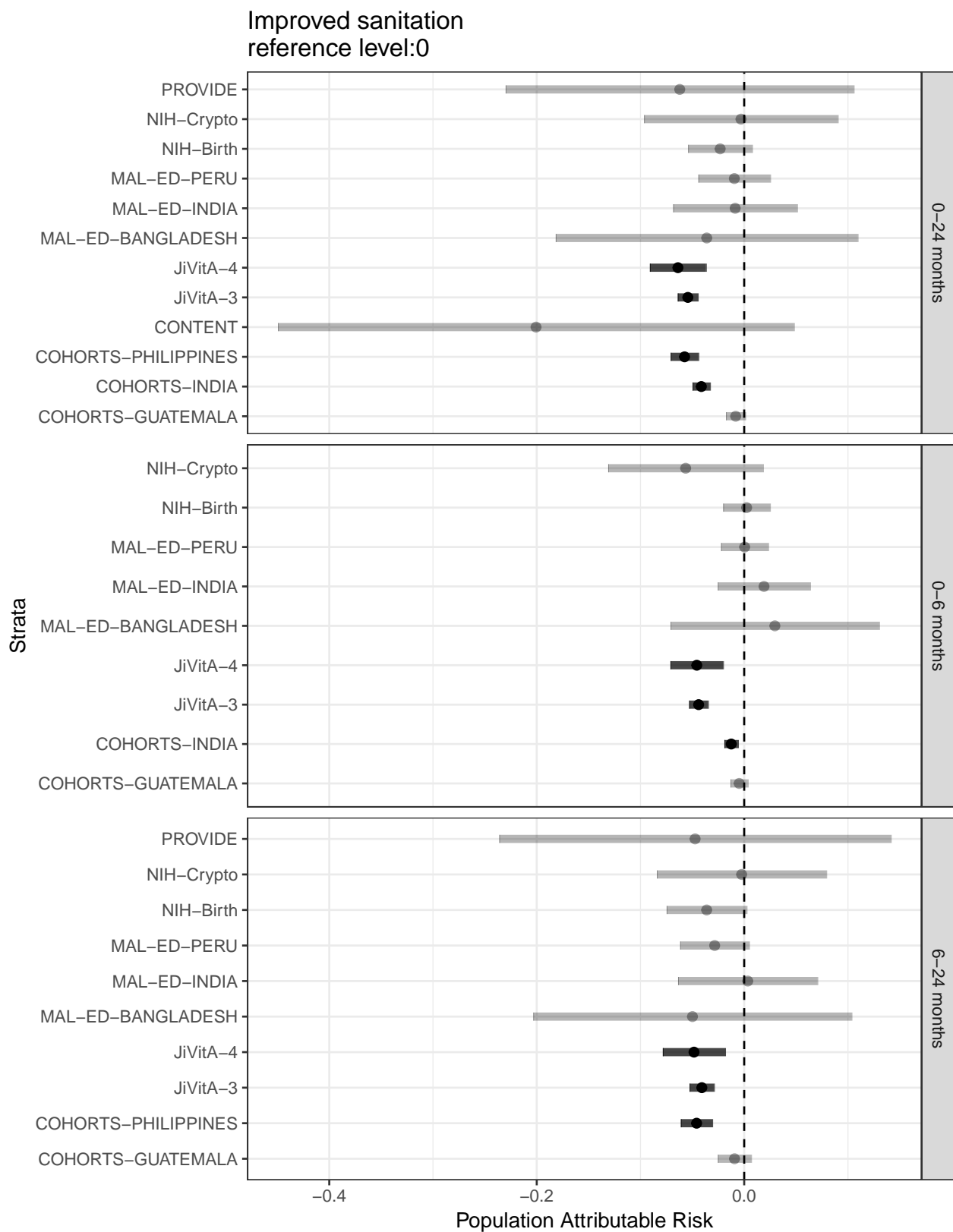
Clean cook
reference level:0



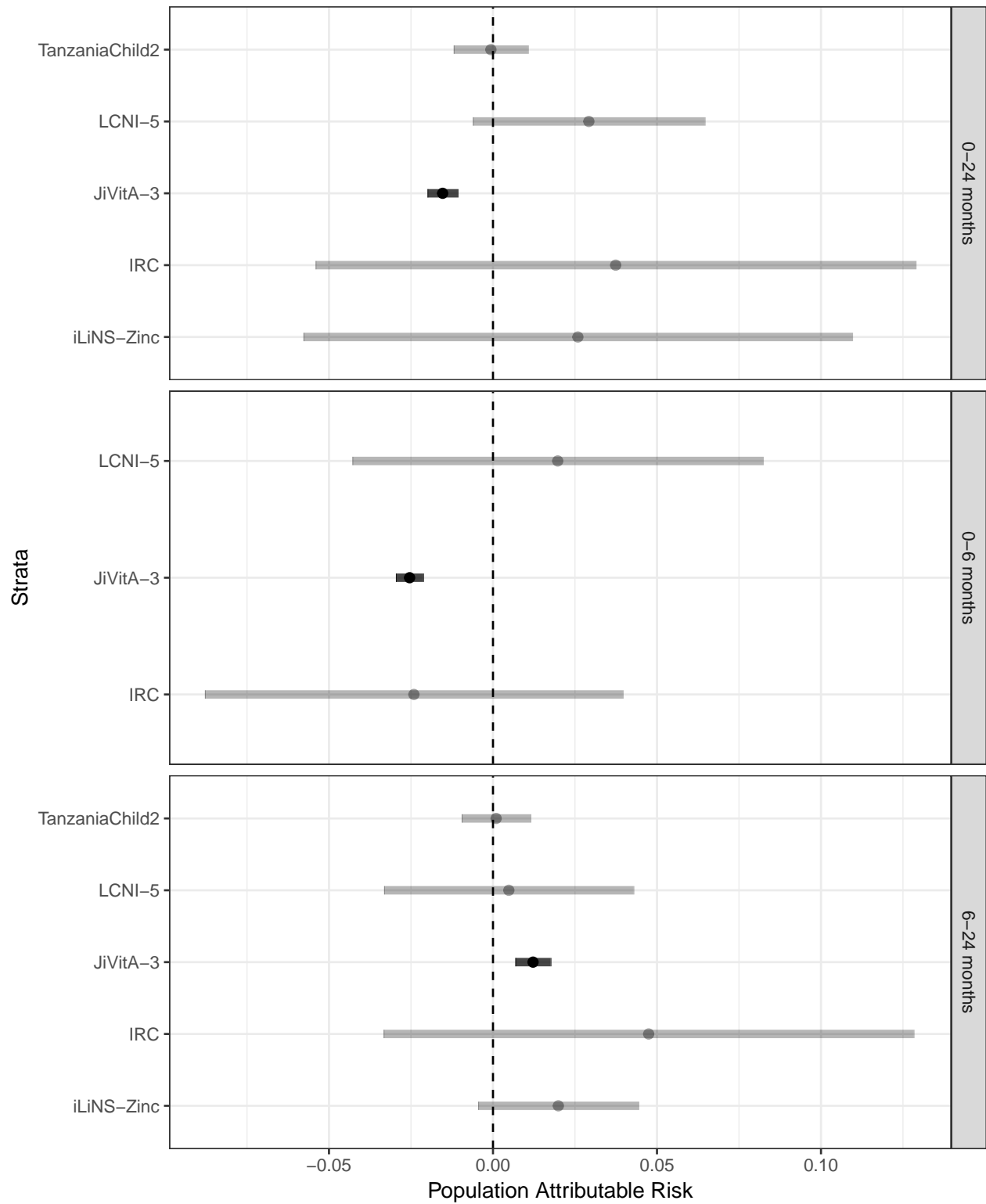
Strata

Improved floor
reference level:0

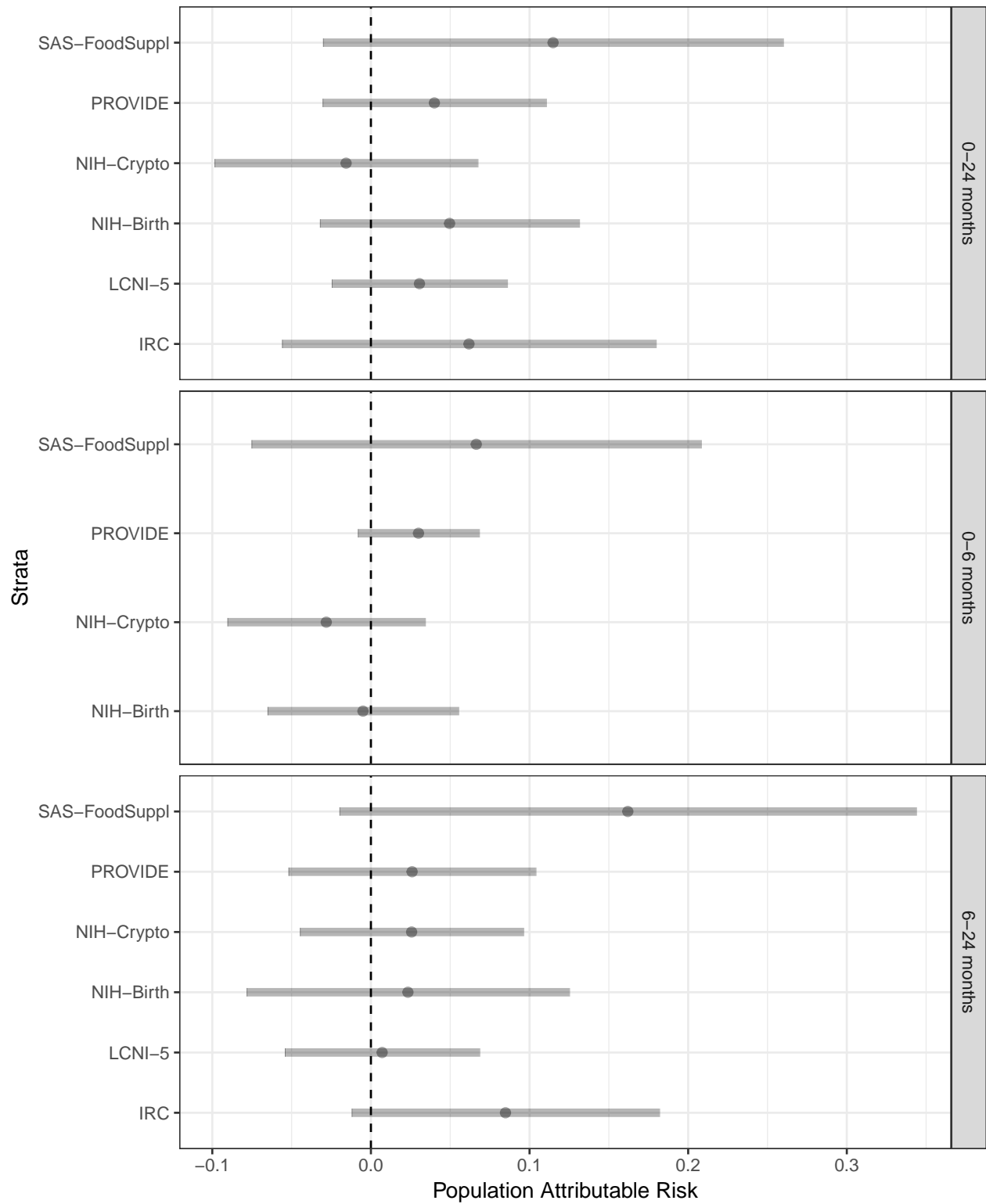




Number of children in the household under 5 years
reference level:1

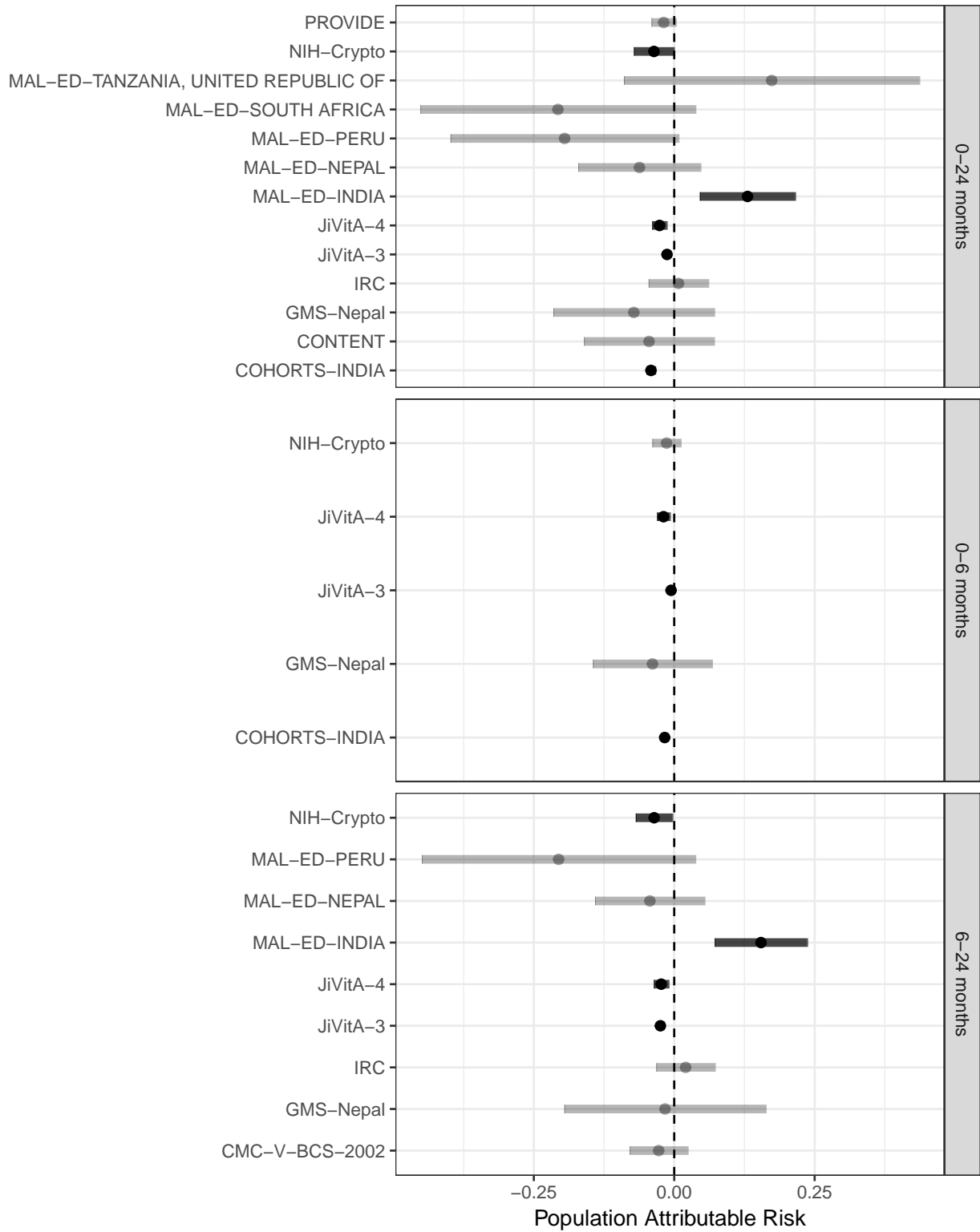


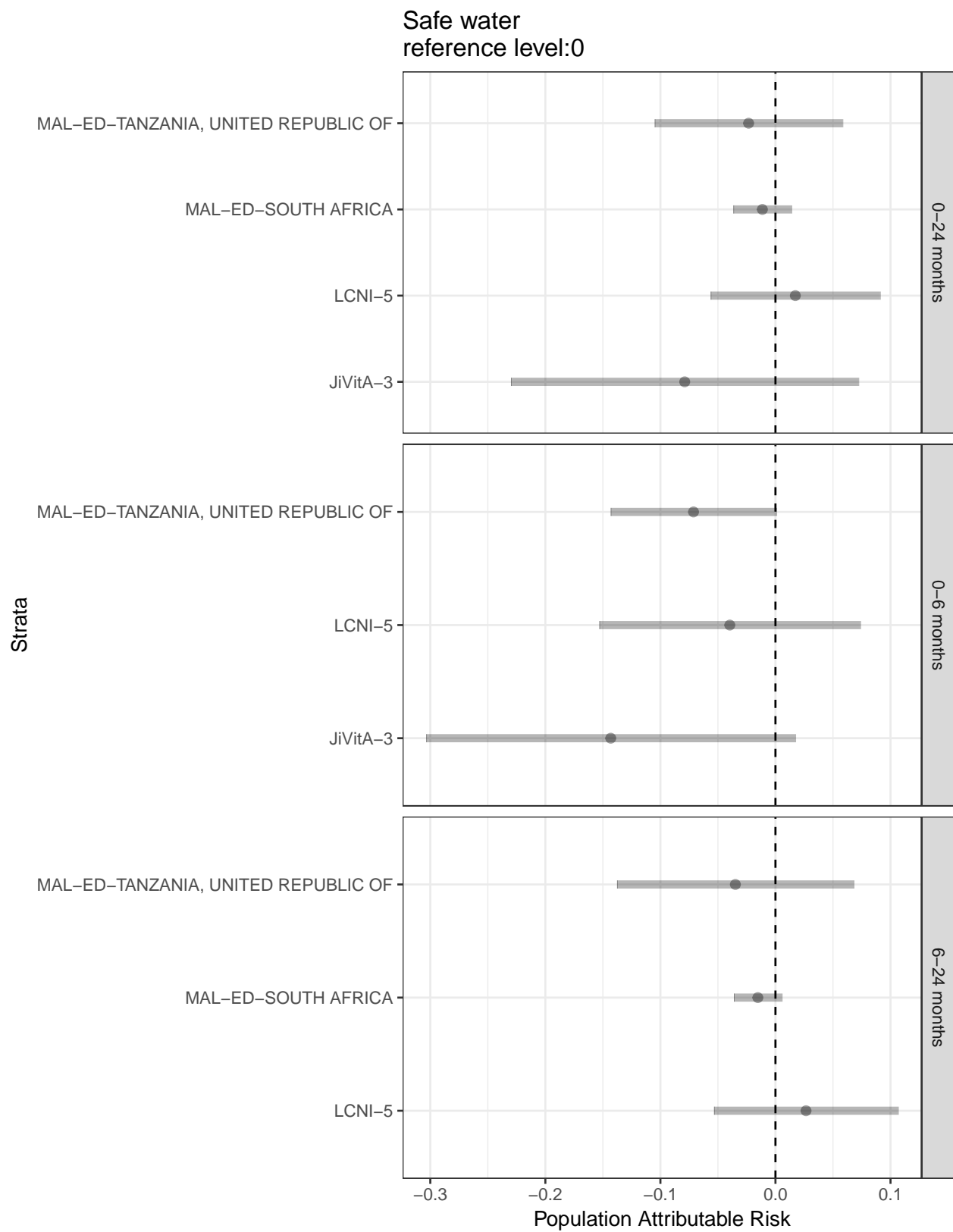
Number of people in the household
reference level:3 or less

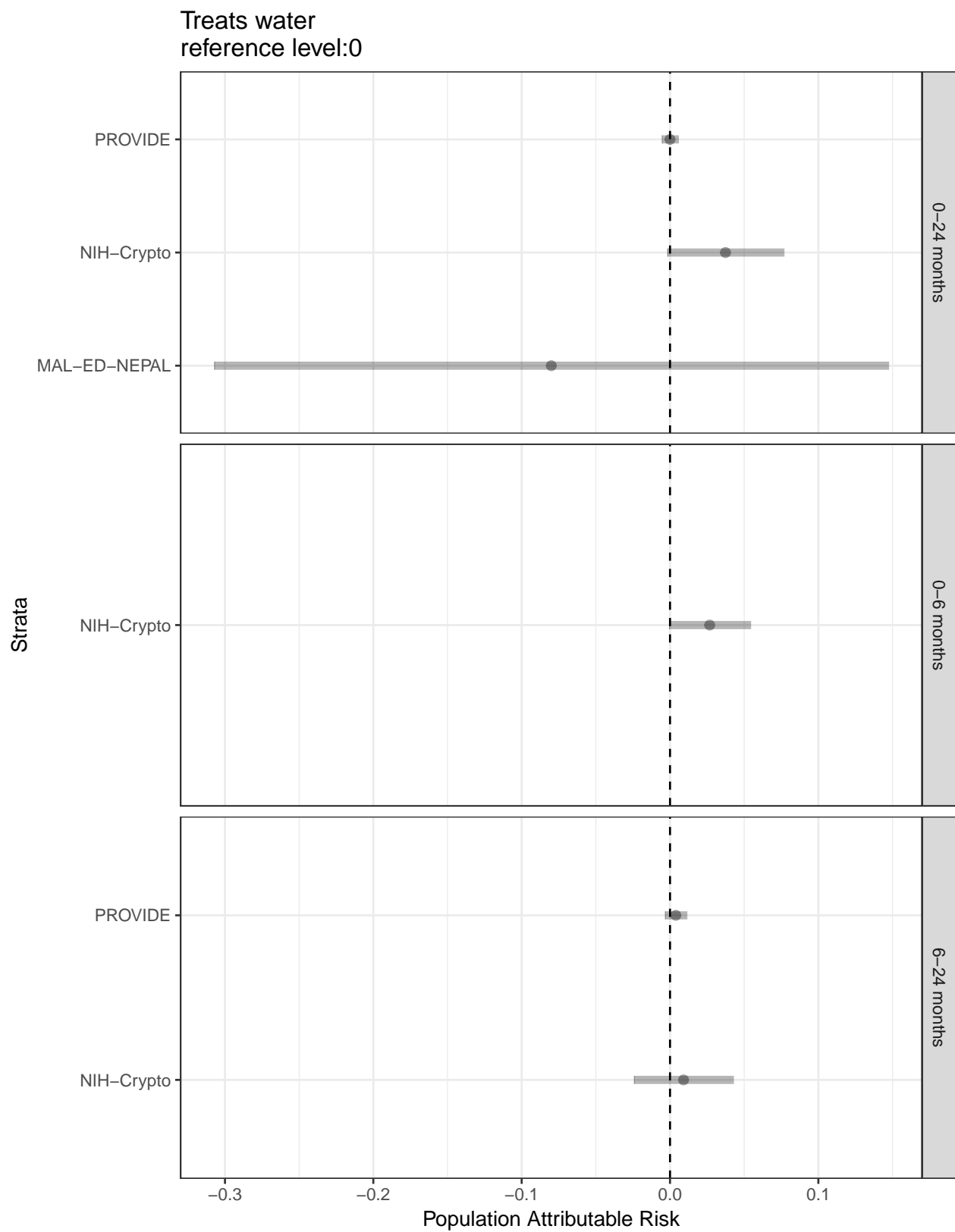


Number of rooms in household reference level:1

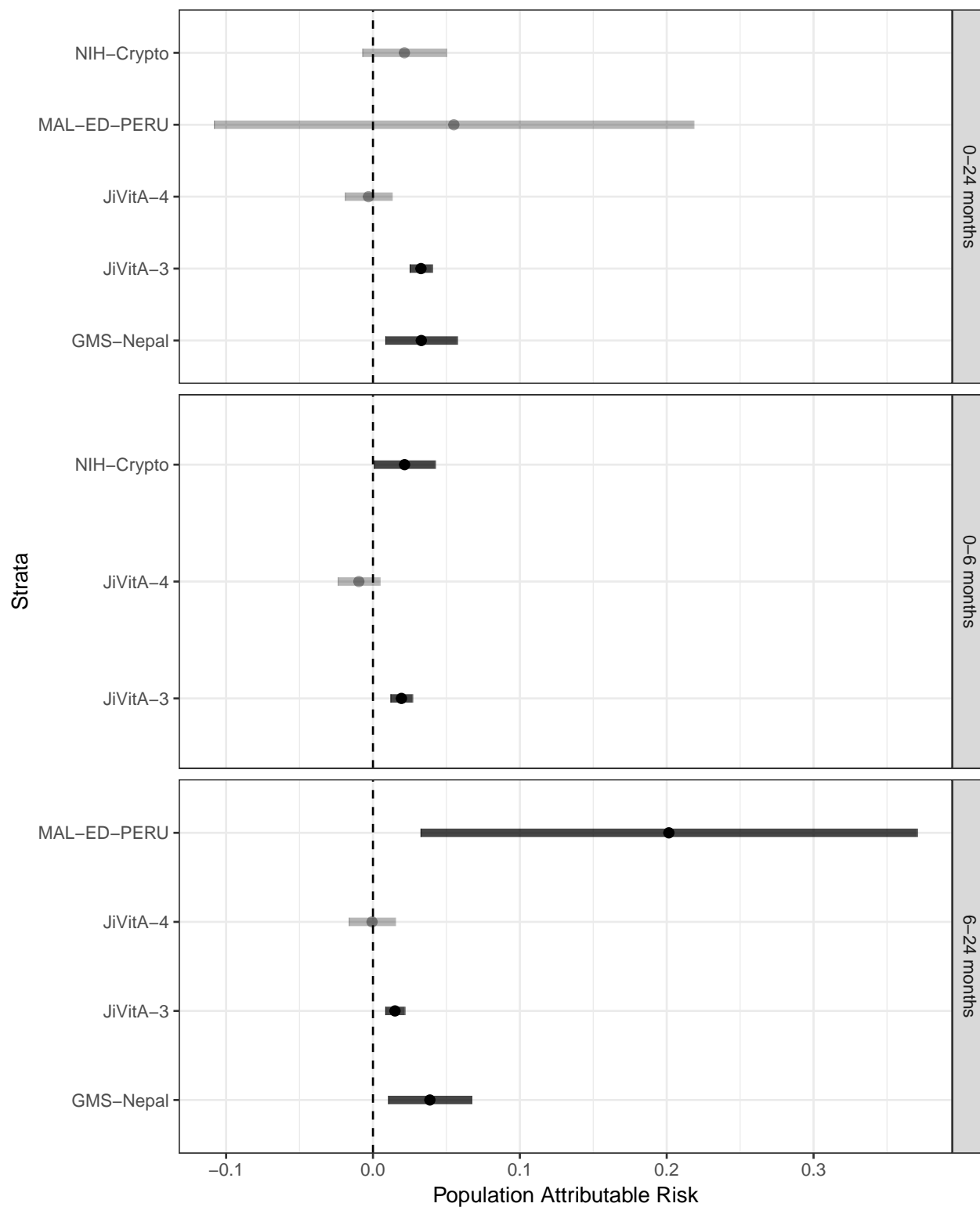
Strata





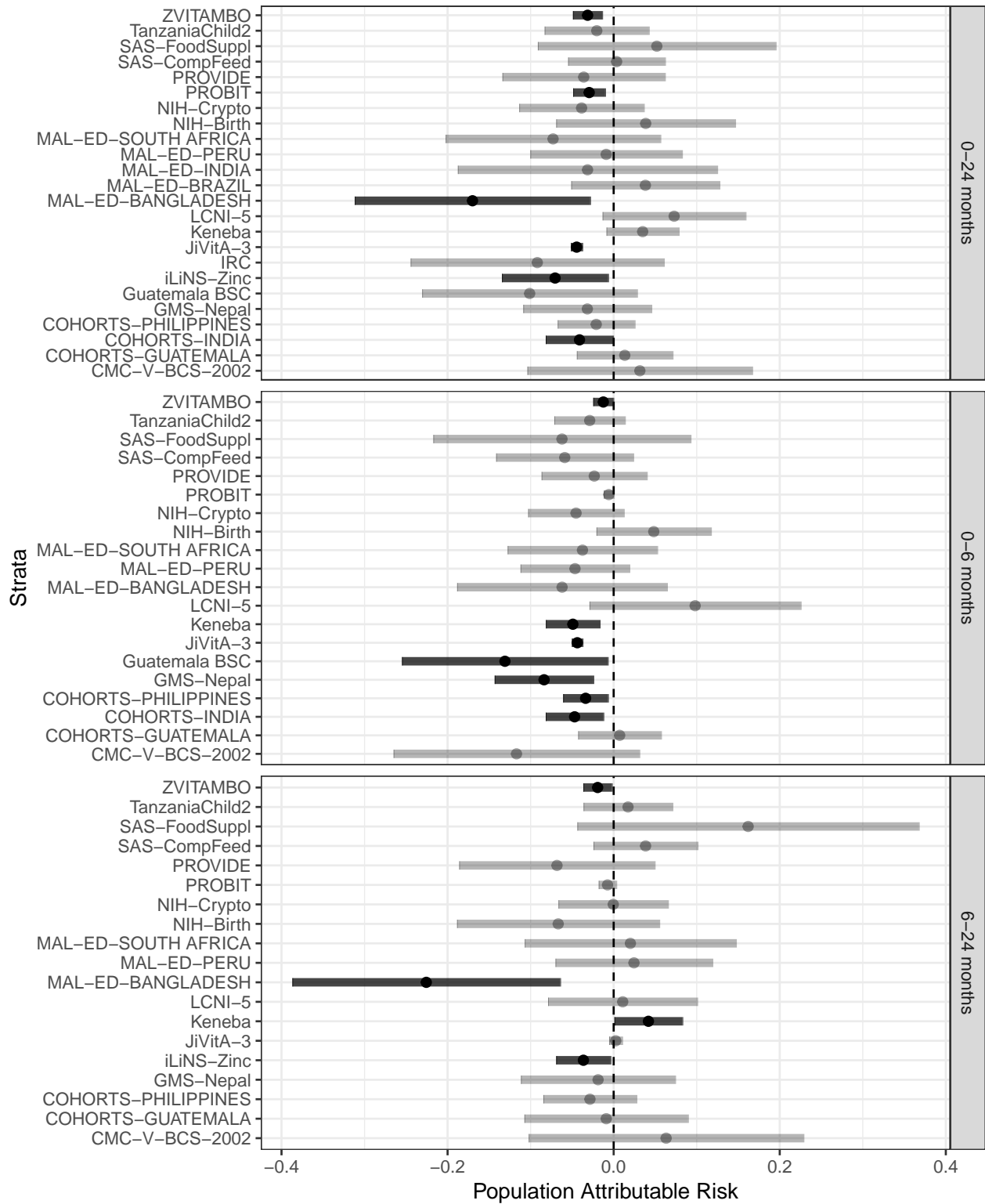


USAID Household Food Insecurity Access Scale (HFIAS) category
reference level: Food Secure

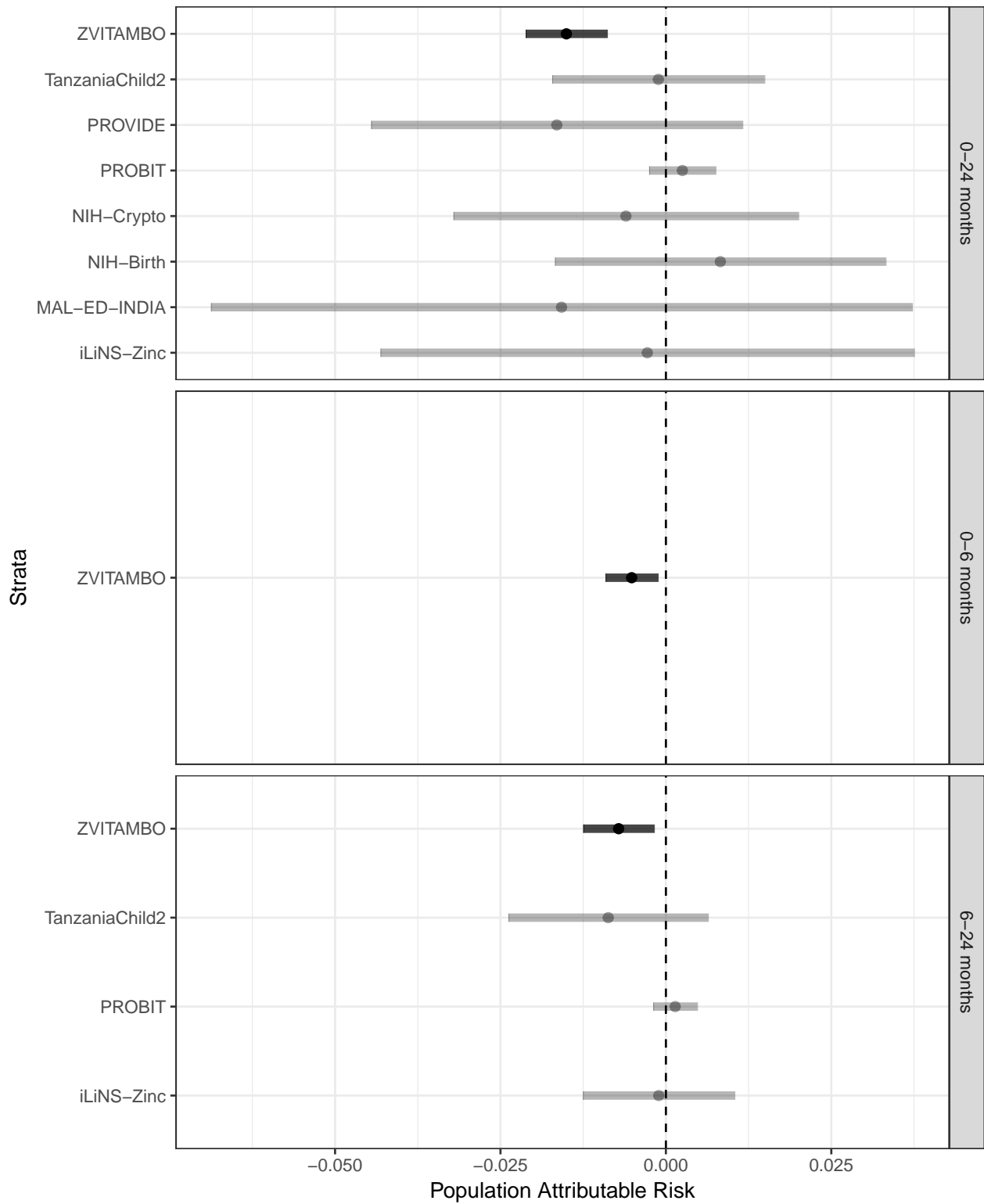


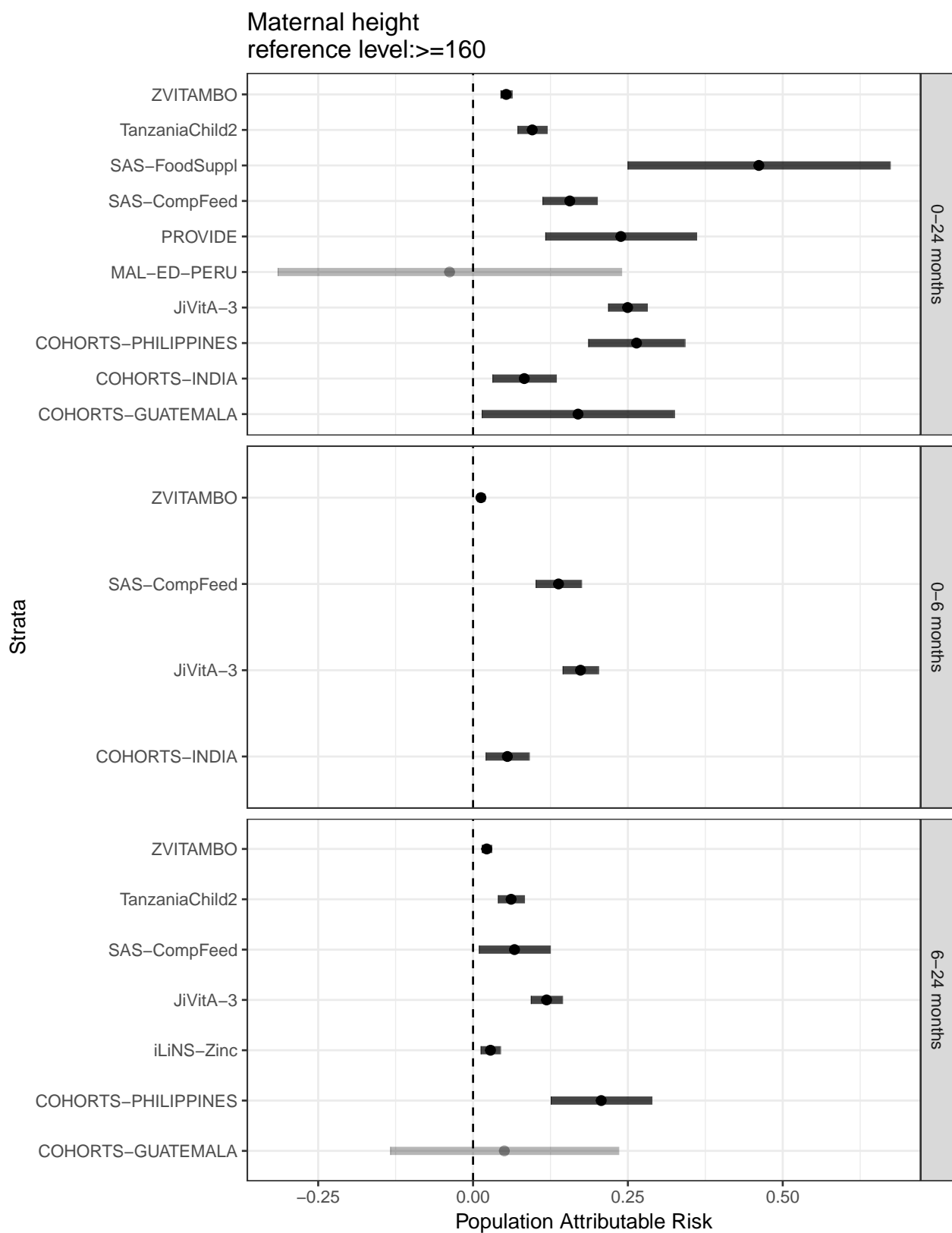
Maternal characteristics

Maternal age
reference level: <20

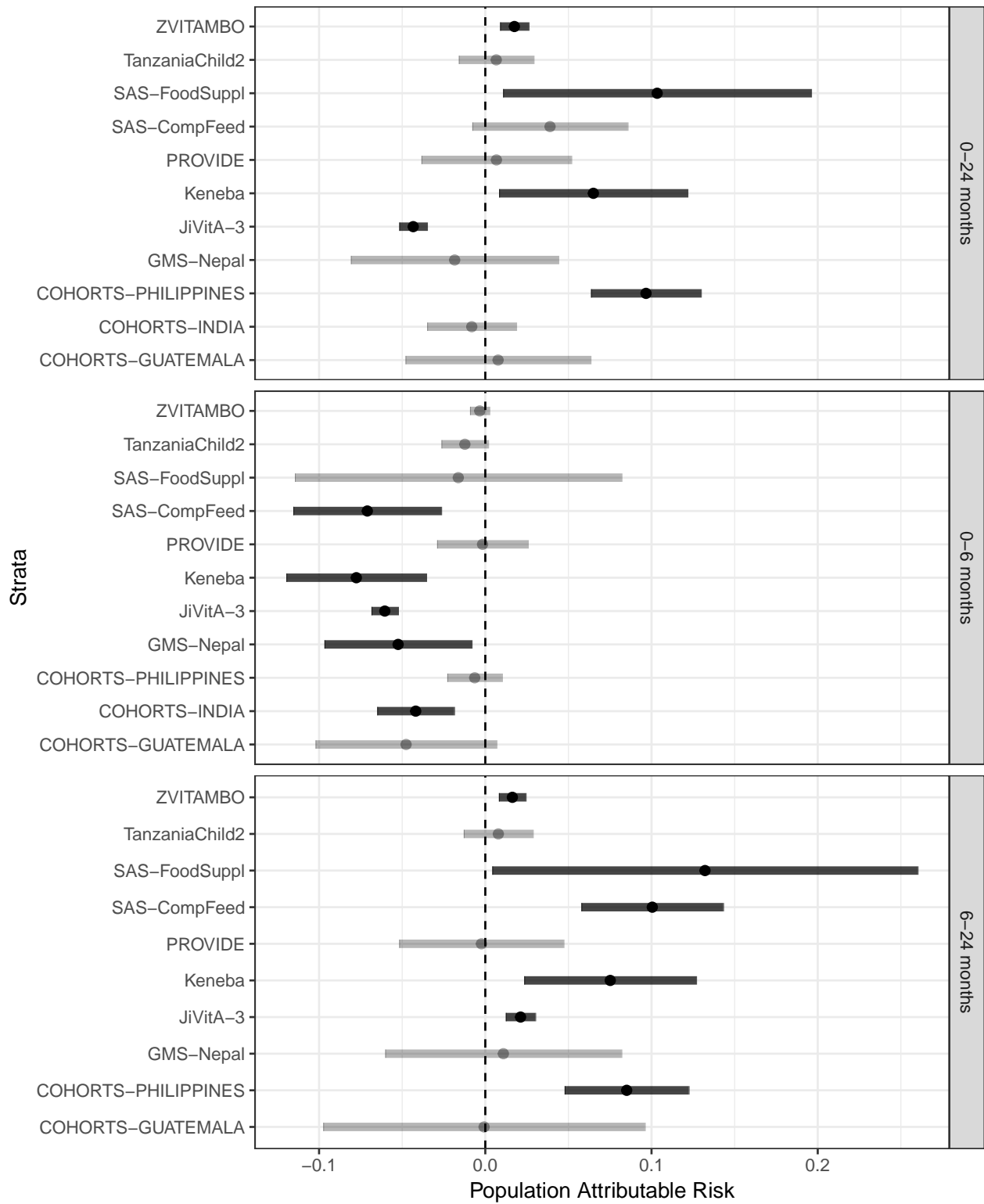


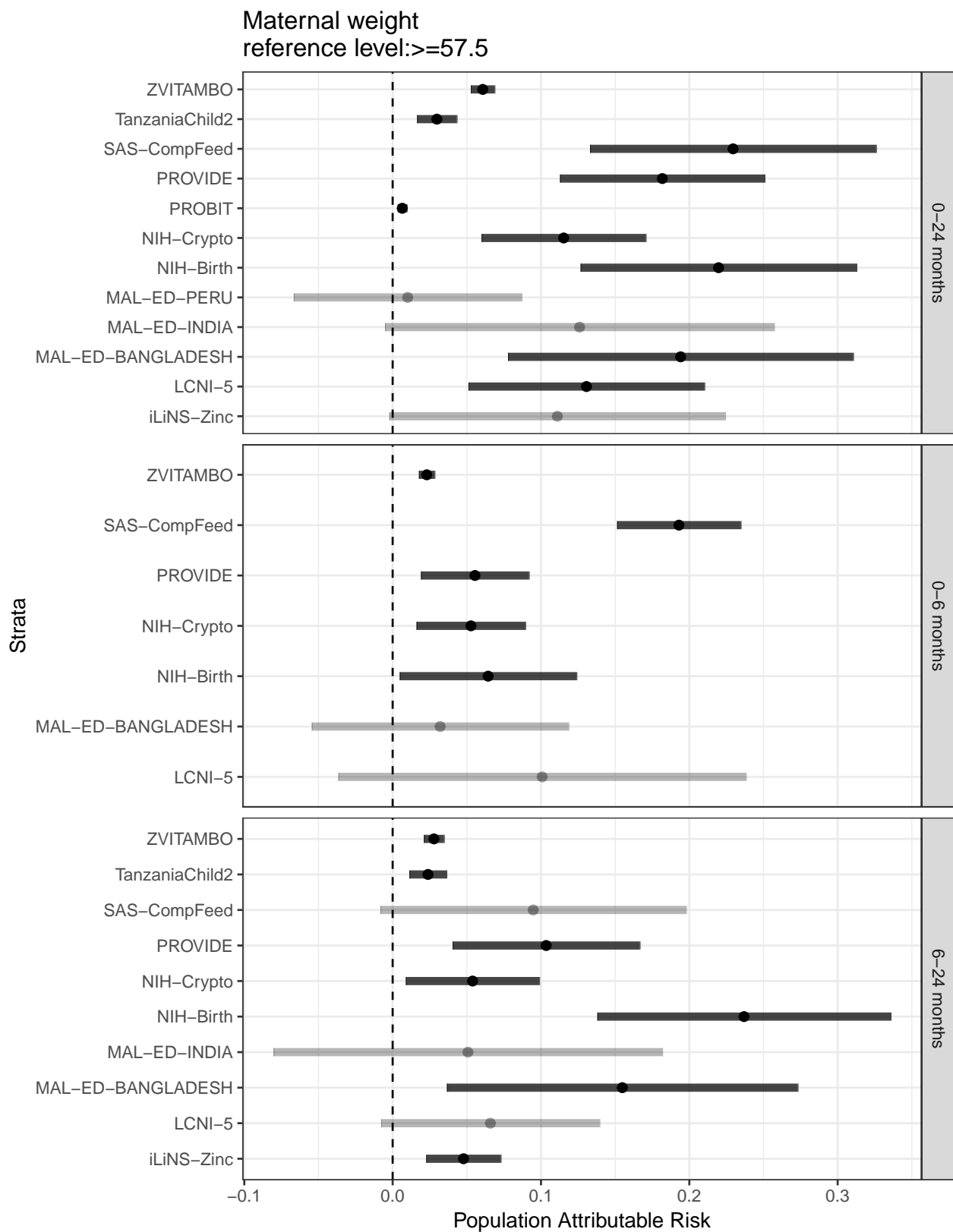
Maternal BMI
reference level:[18.5–25)



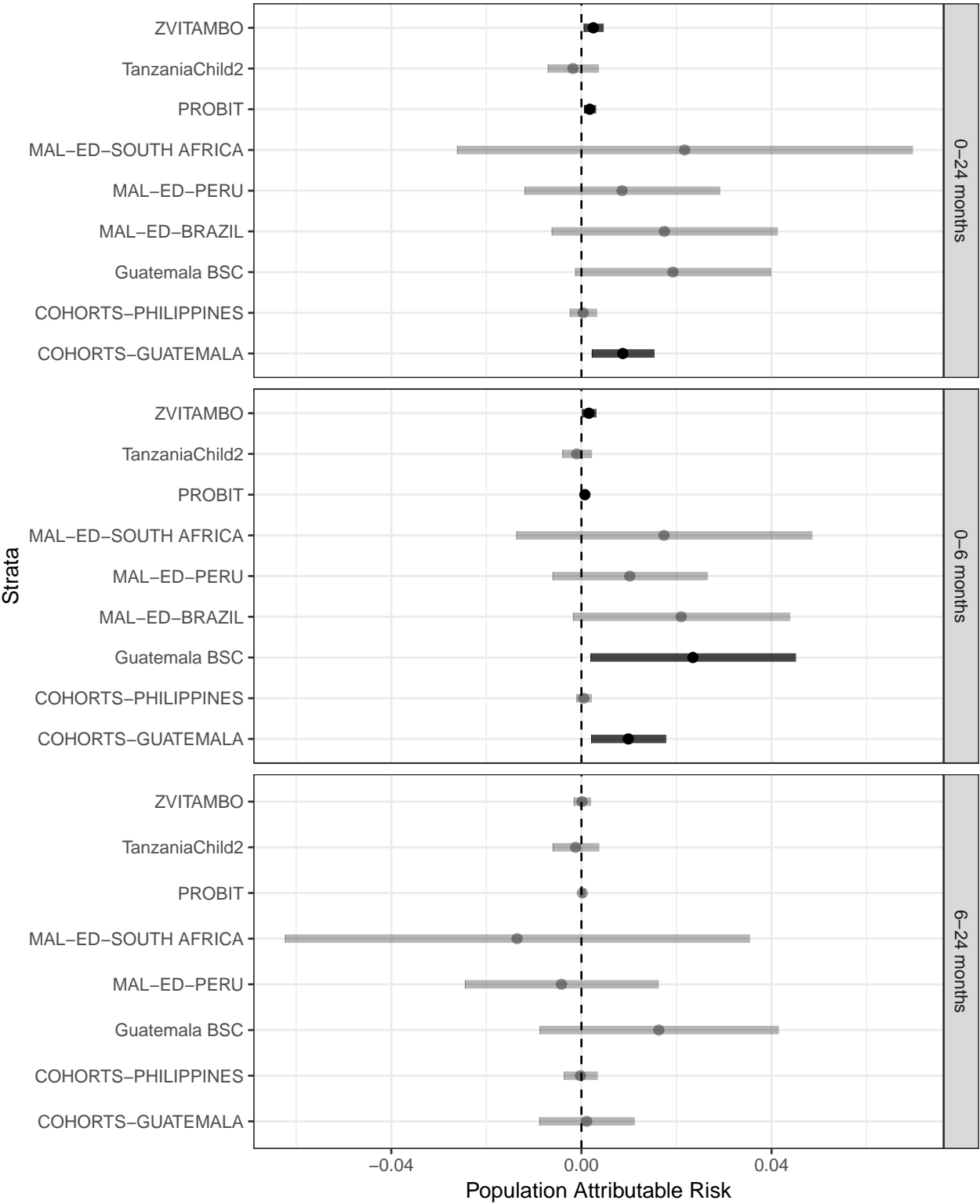


Maternal parity
reference level:1

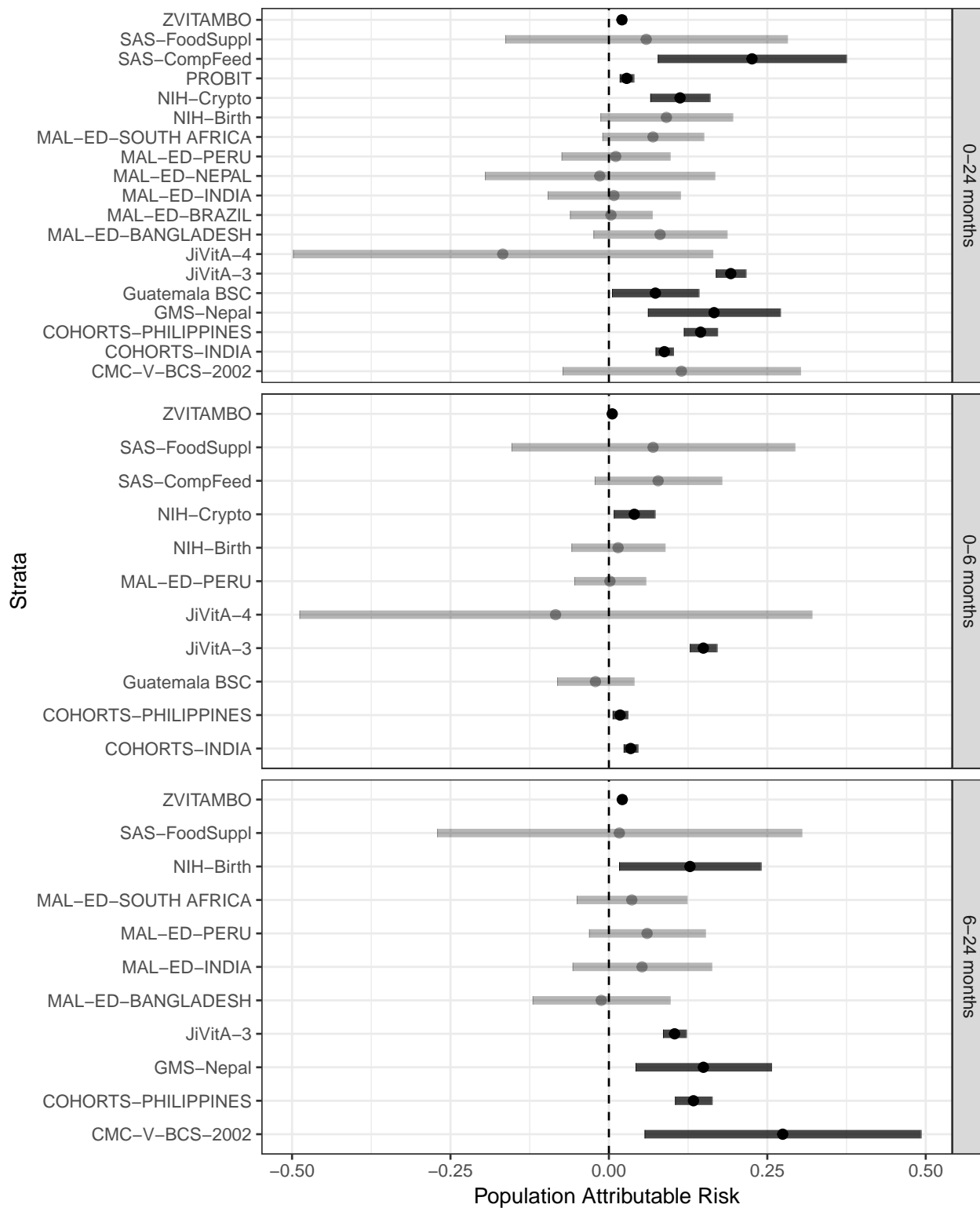




Mother is unmarried
reference level:0

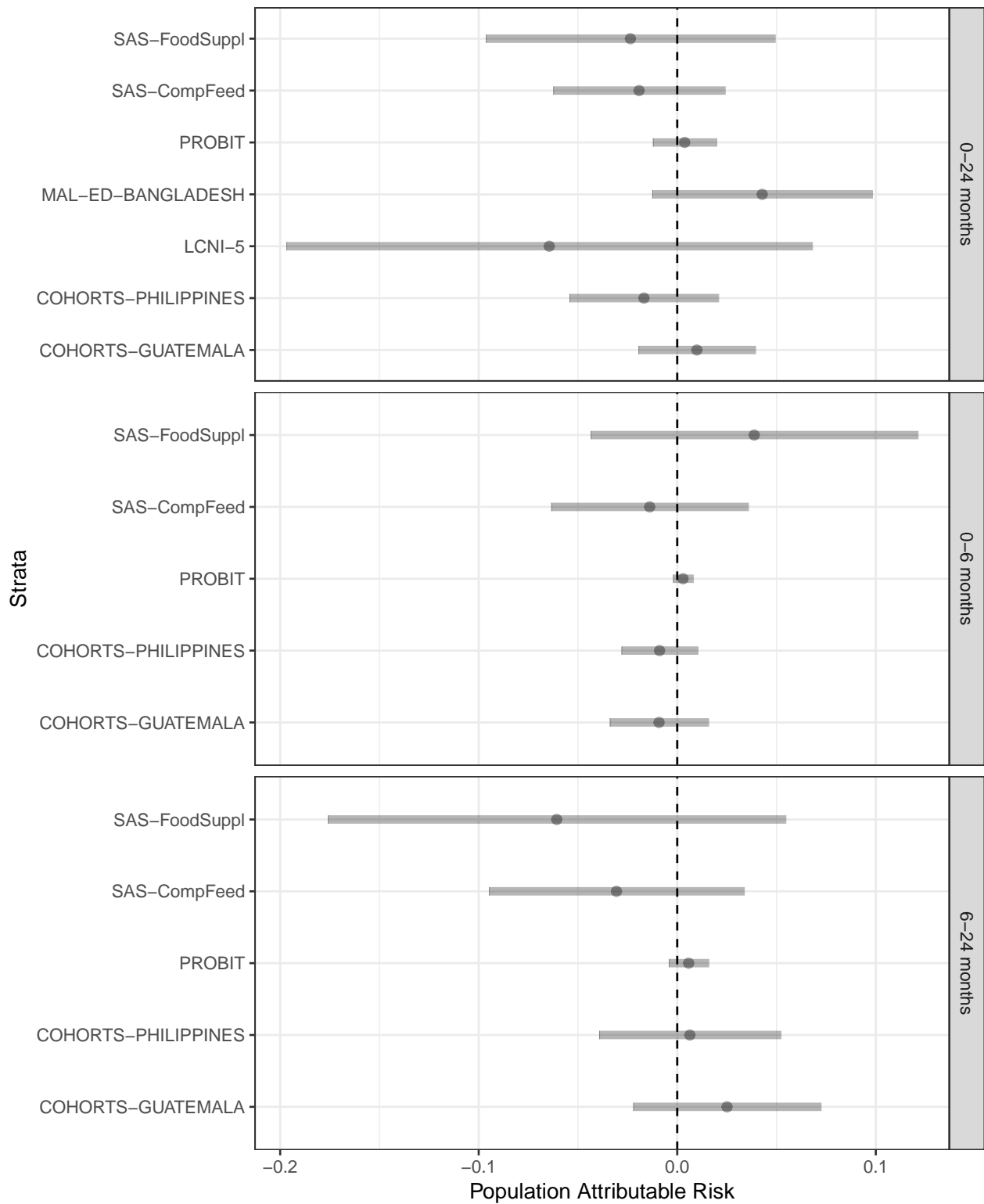


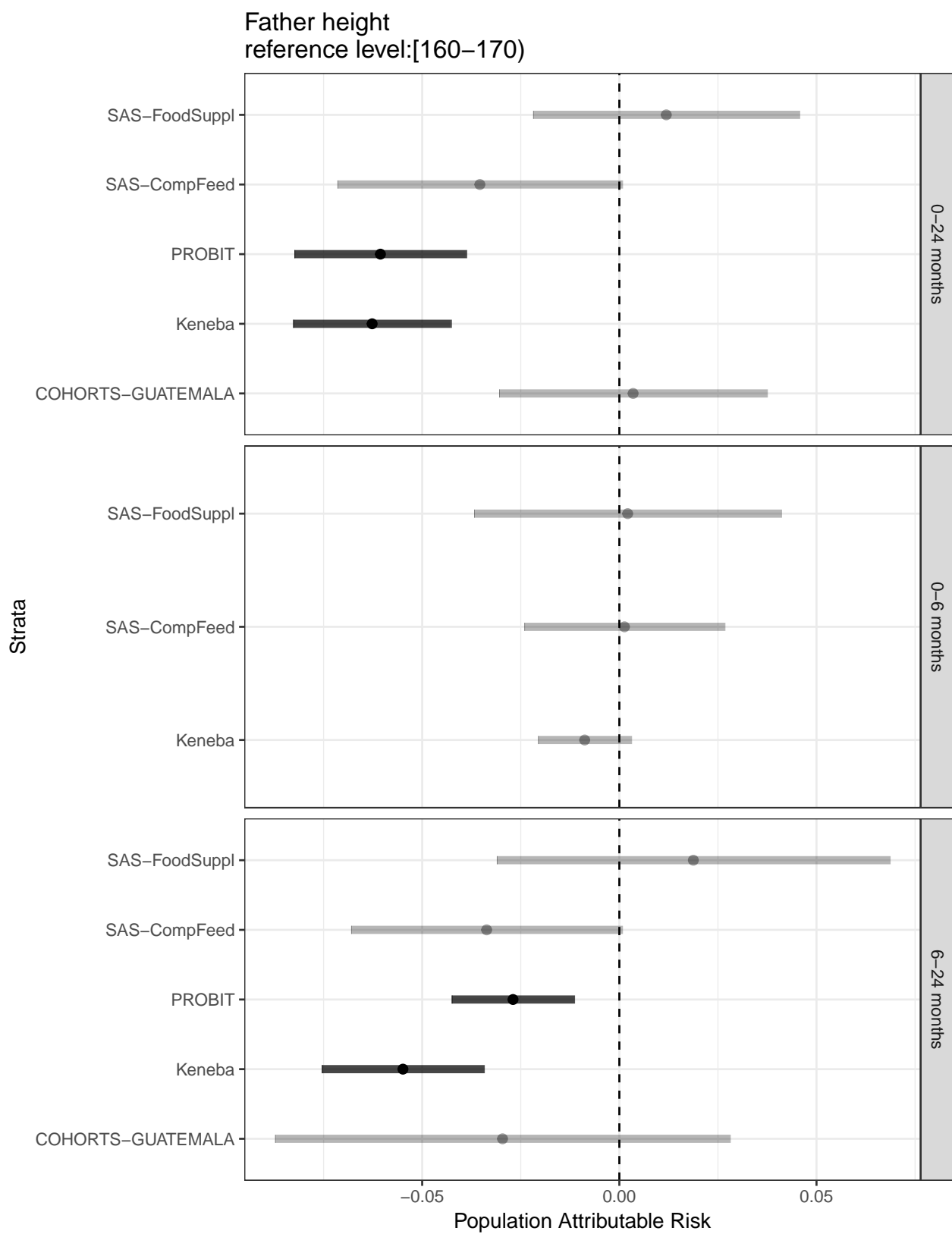
Mother's education
reference level:Q4



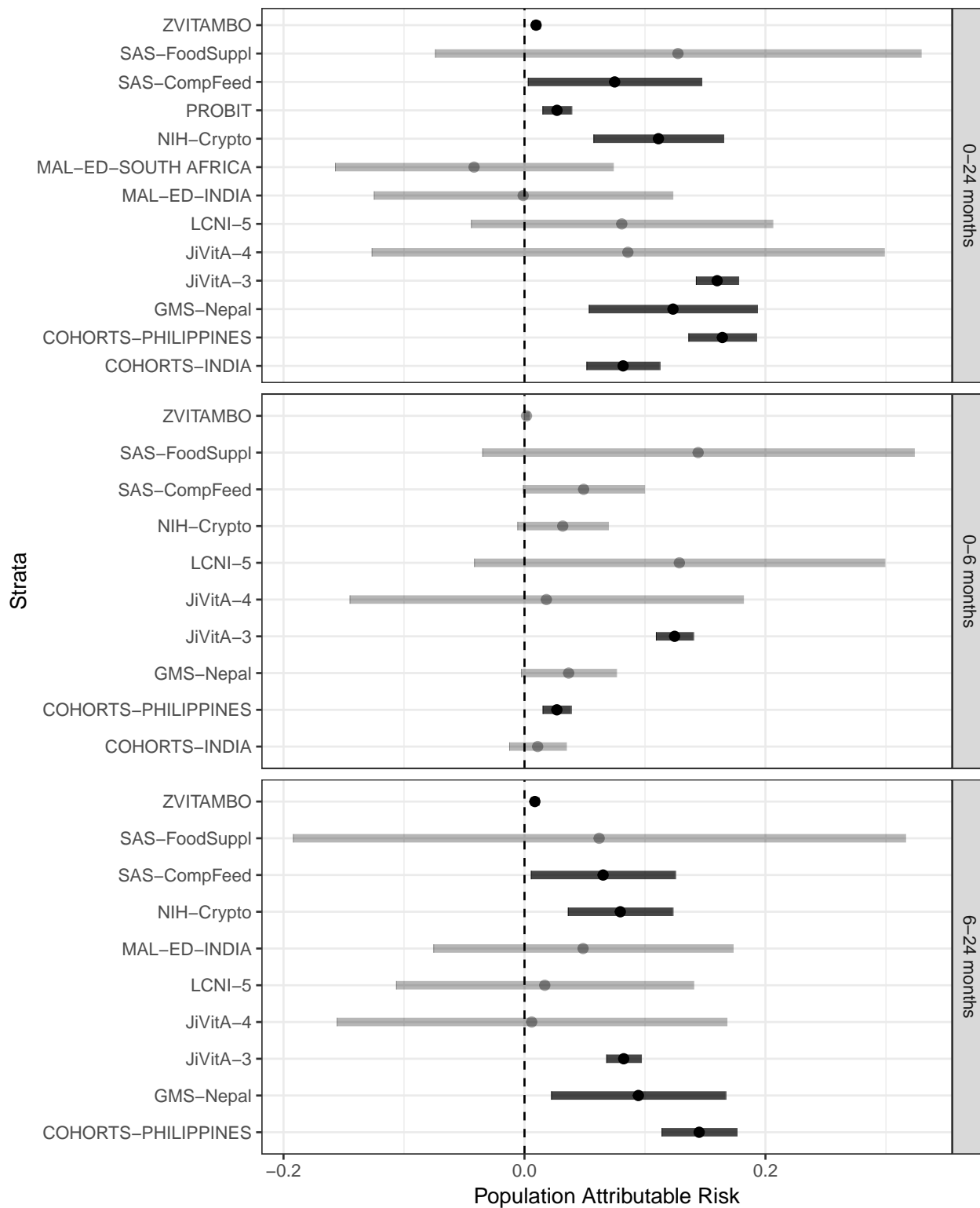
Paternal characteristics

Father age
reference level: ≥ 35





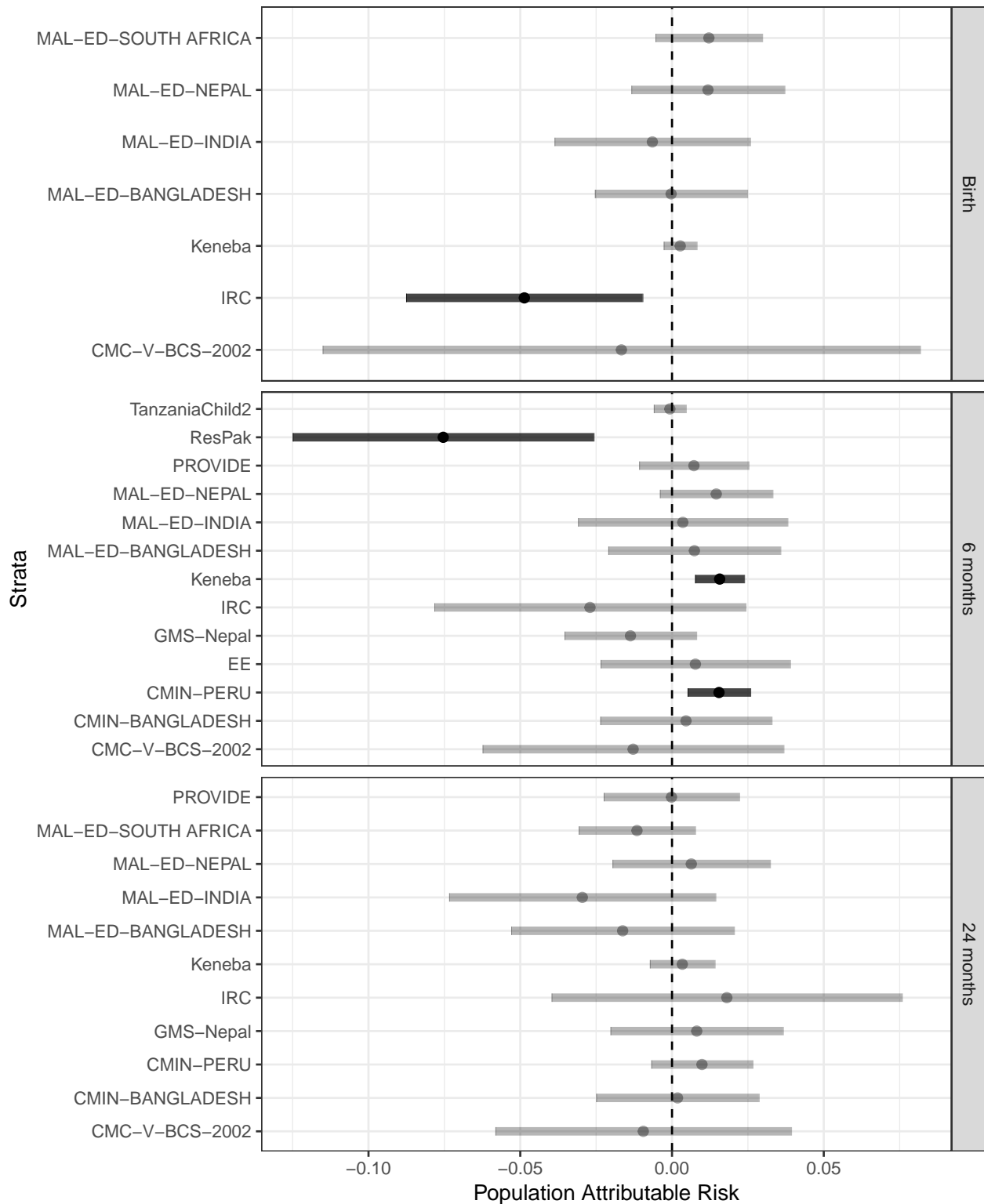
Father's education
reference level:Q4

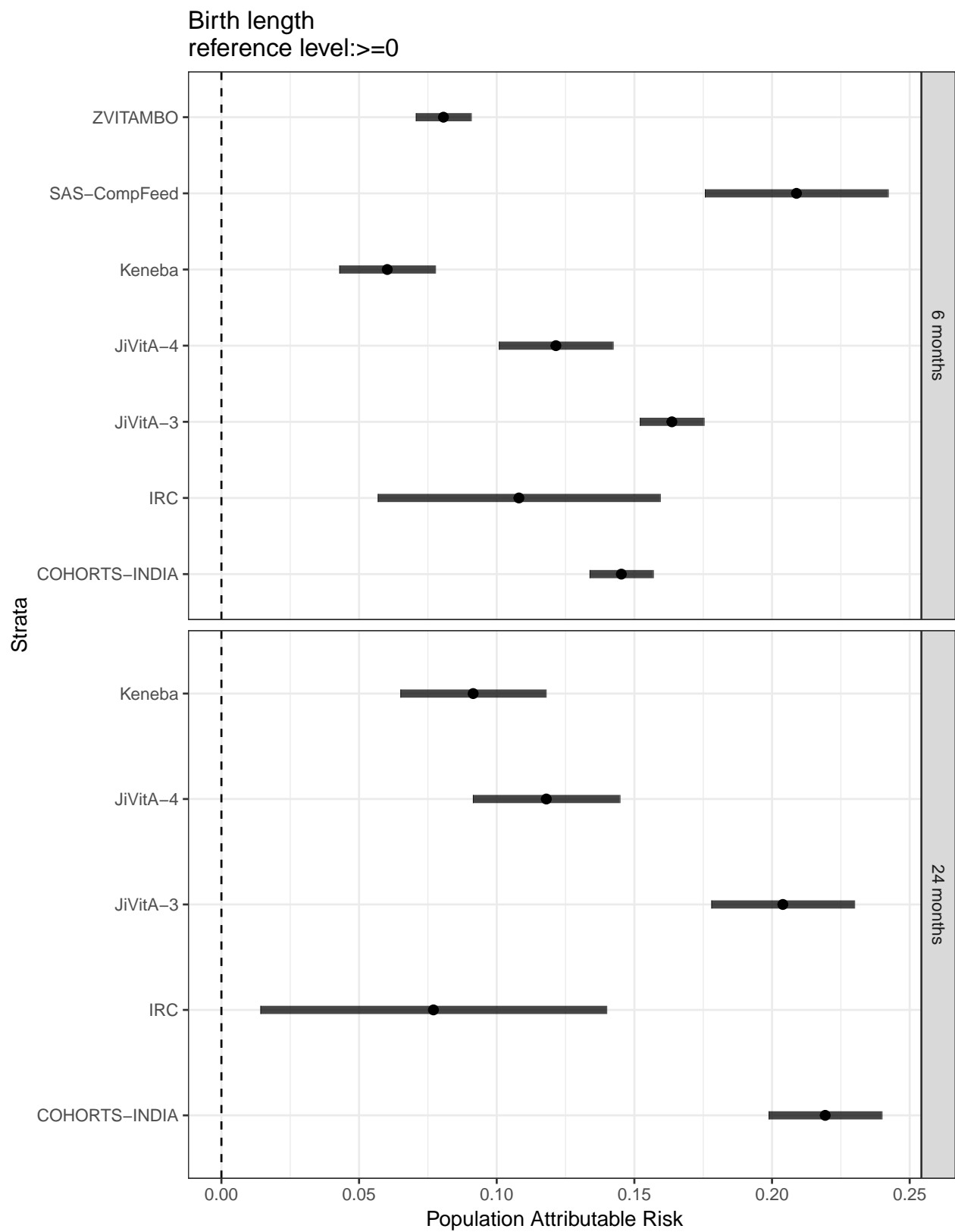


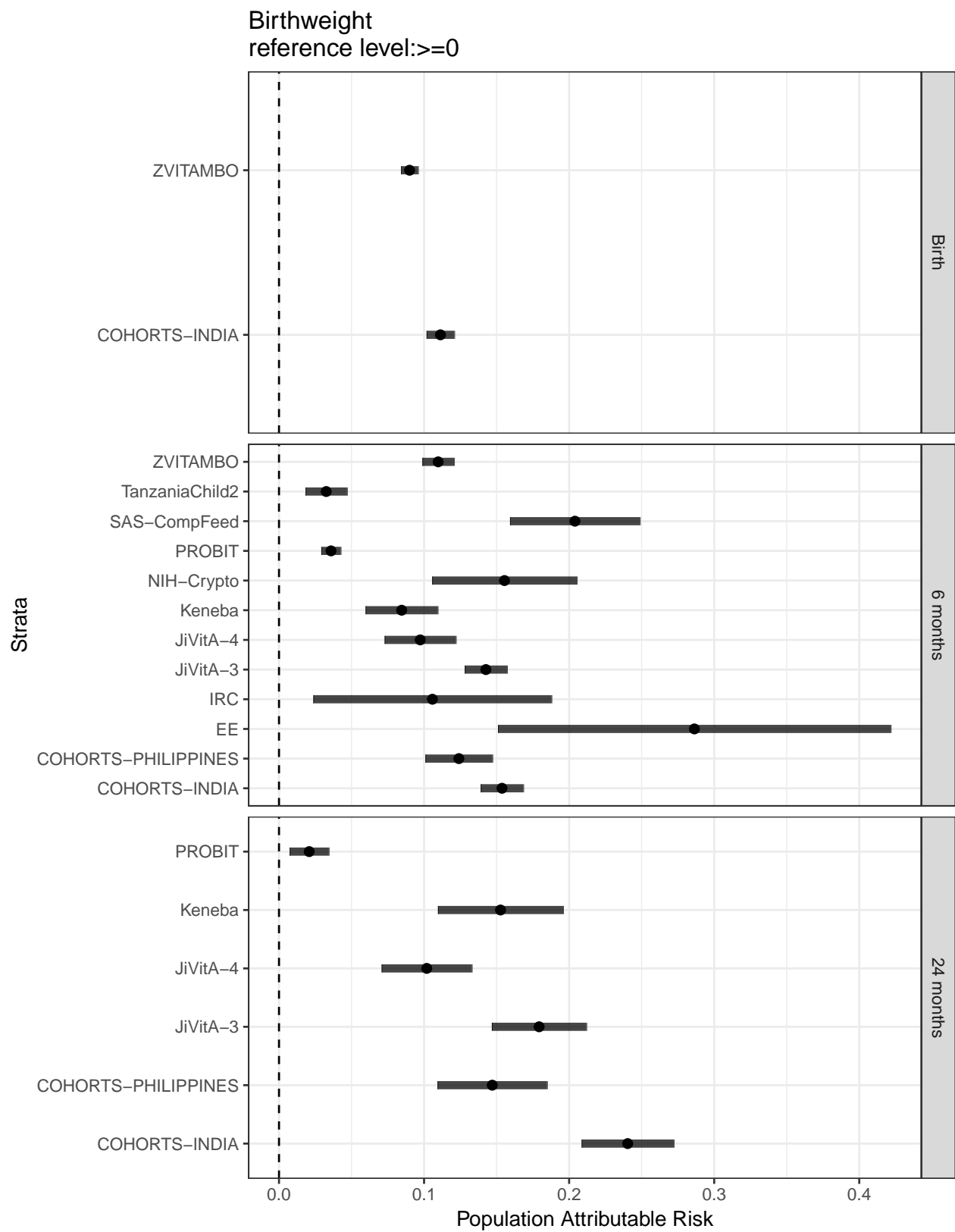
Point prevalence of stunting

Child characteristics

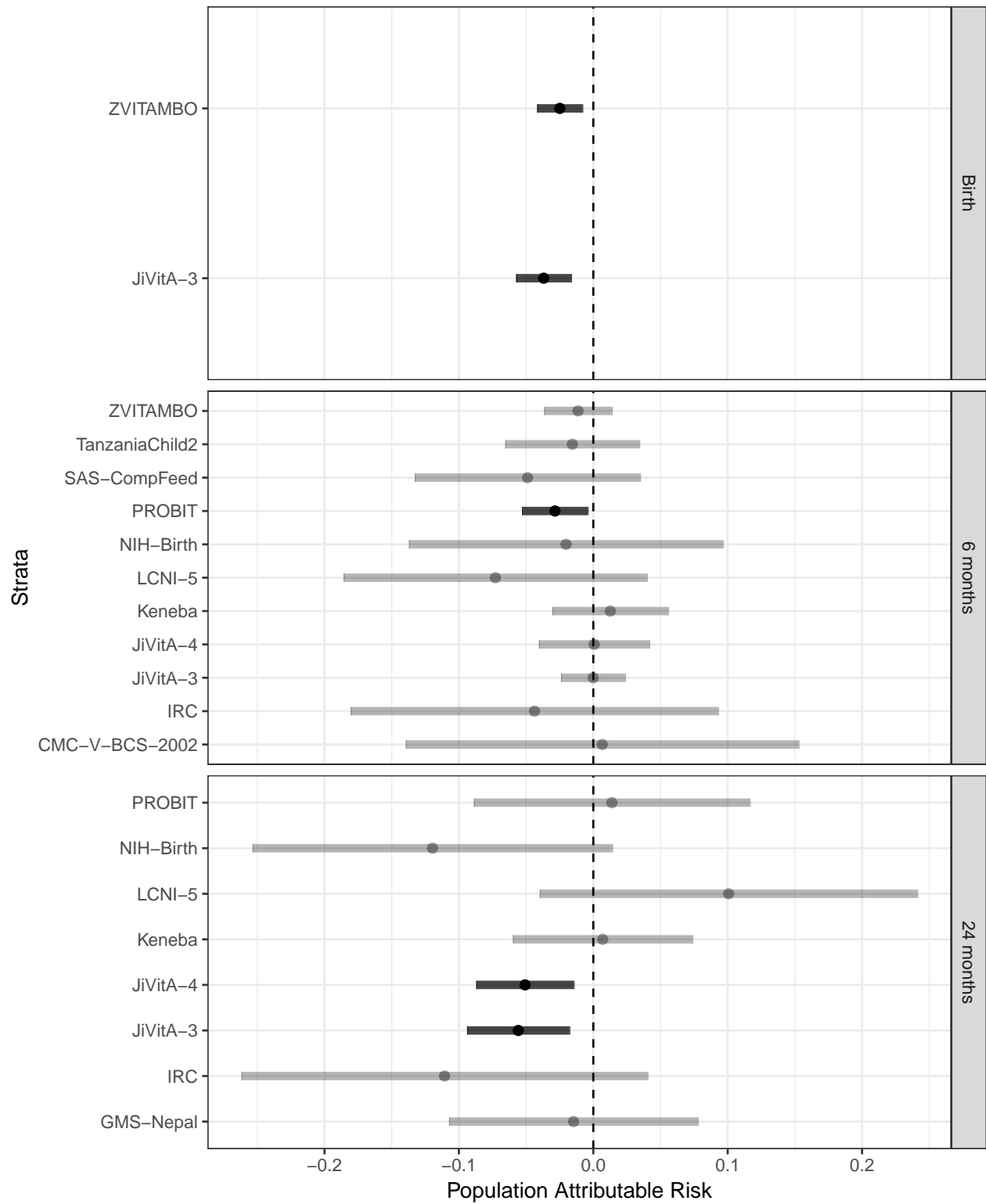
Any wasting in first 6 months
reference level:0



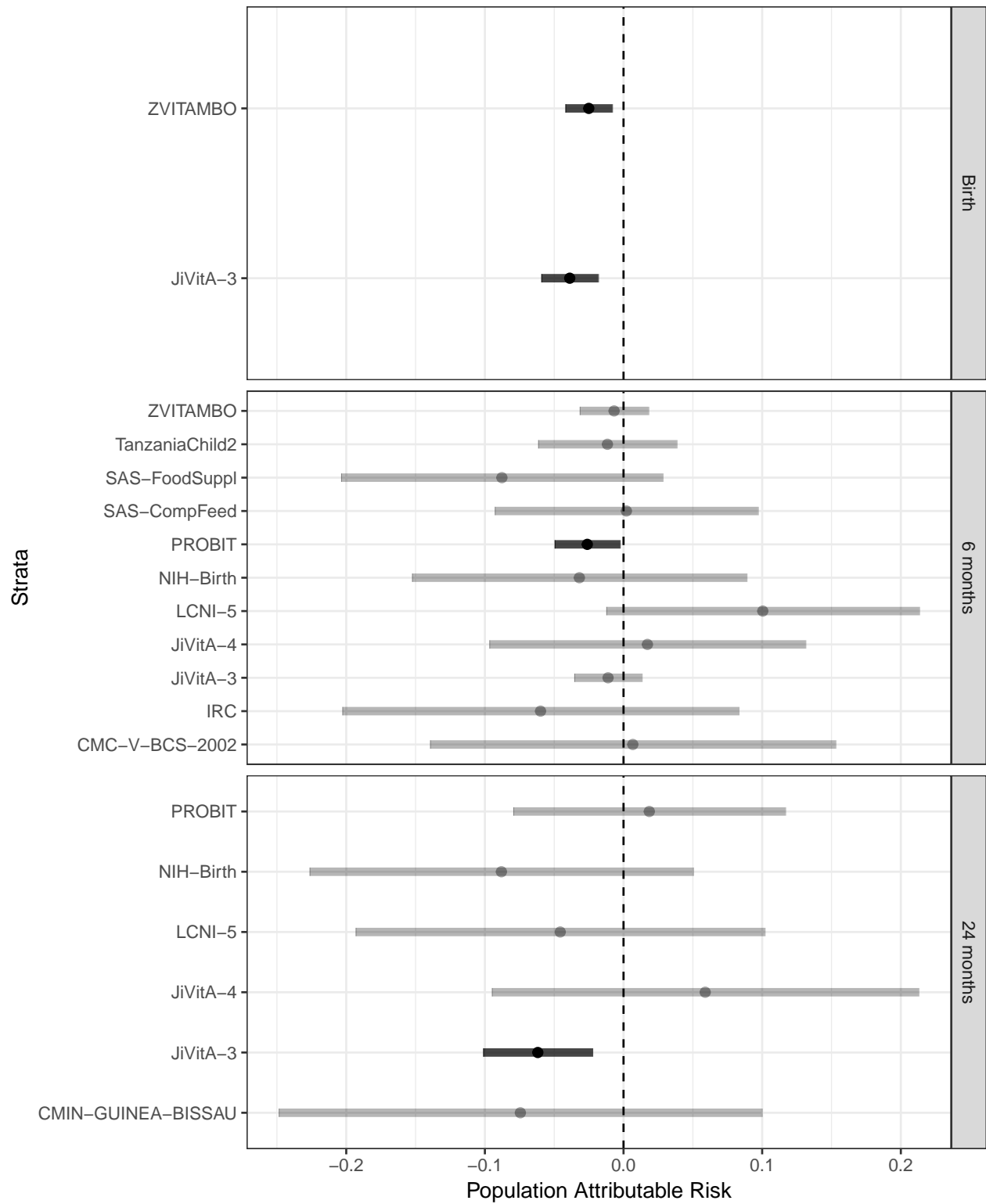




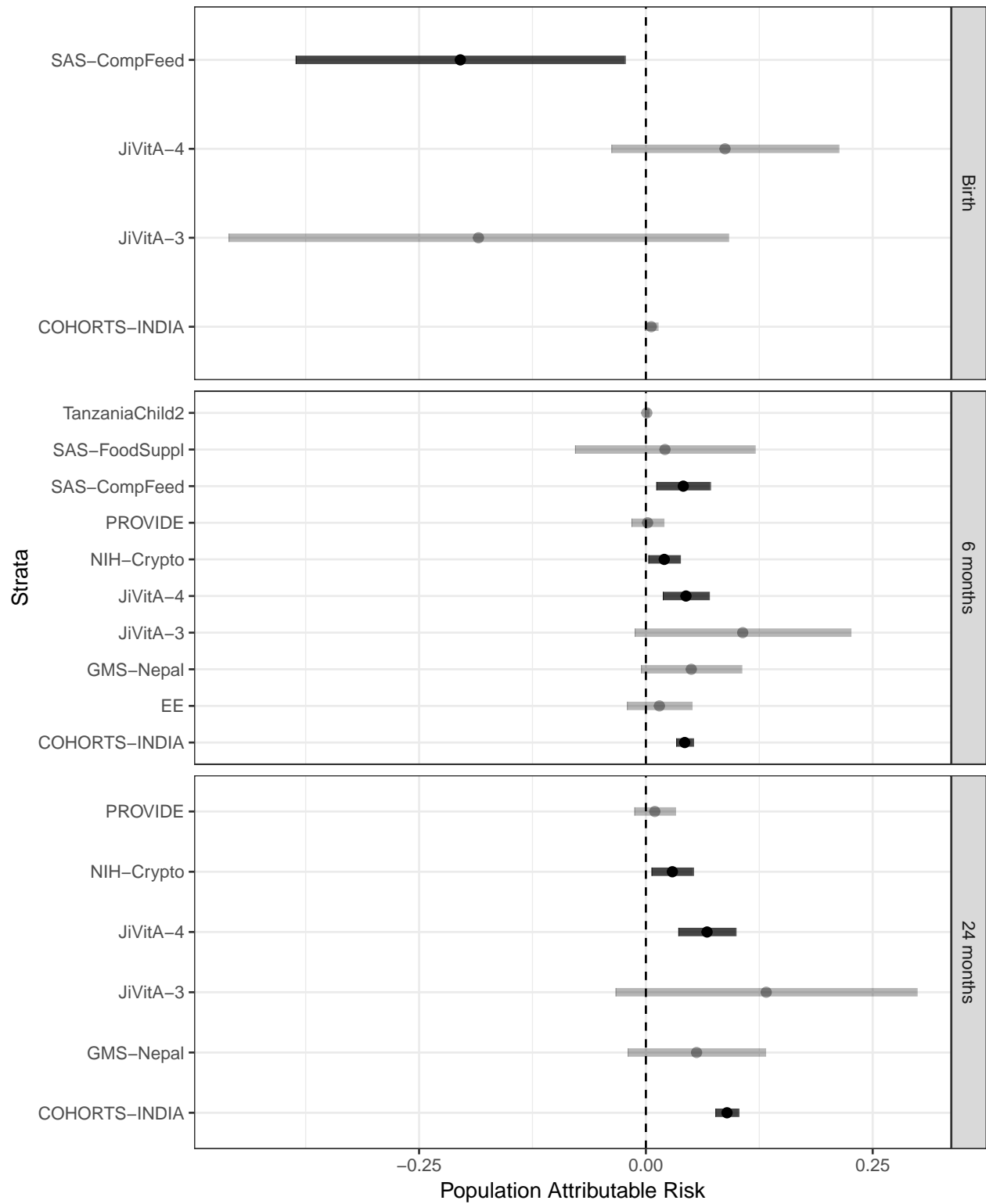
Calendar month of birth
reference level:1



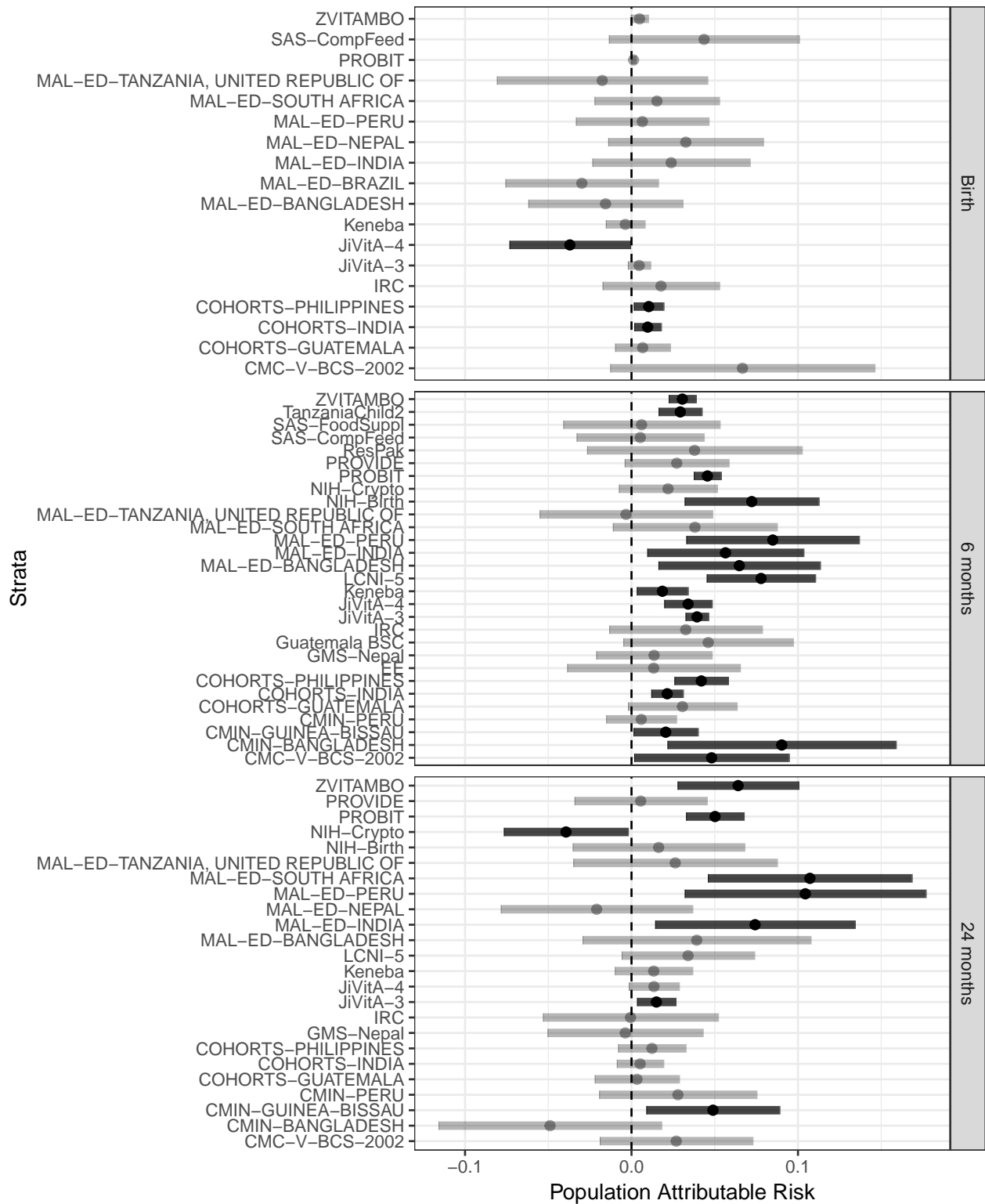
Calendar month of measurement
reference level:1

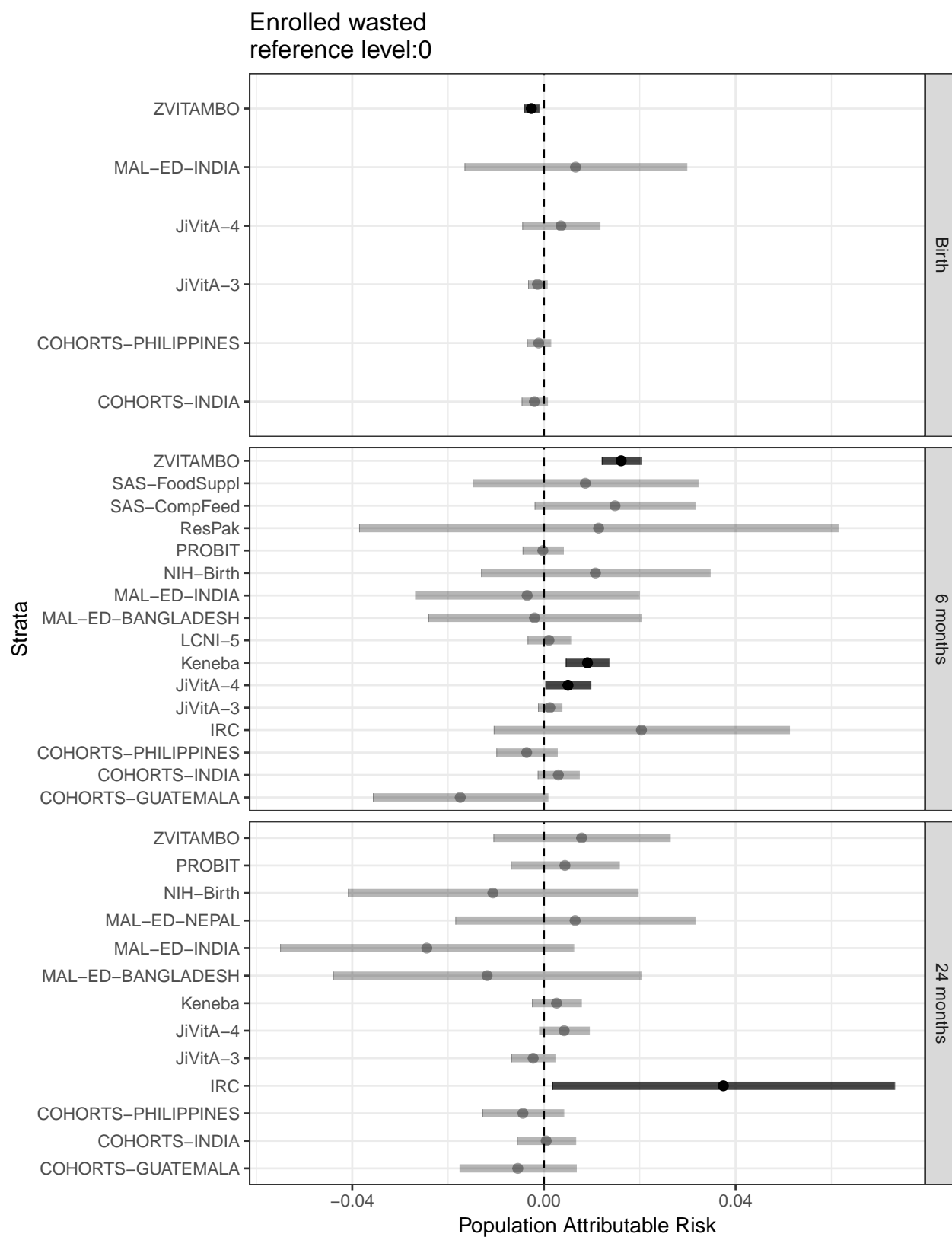


Child delivered at home
reference level:0

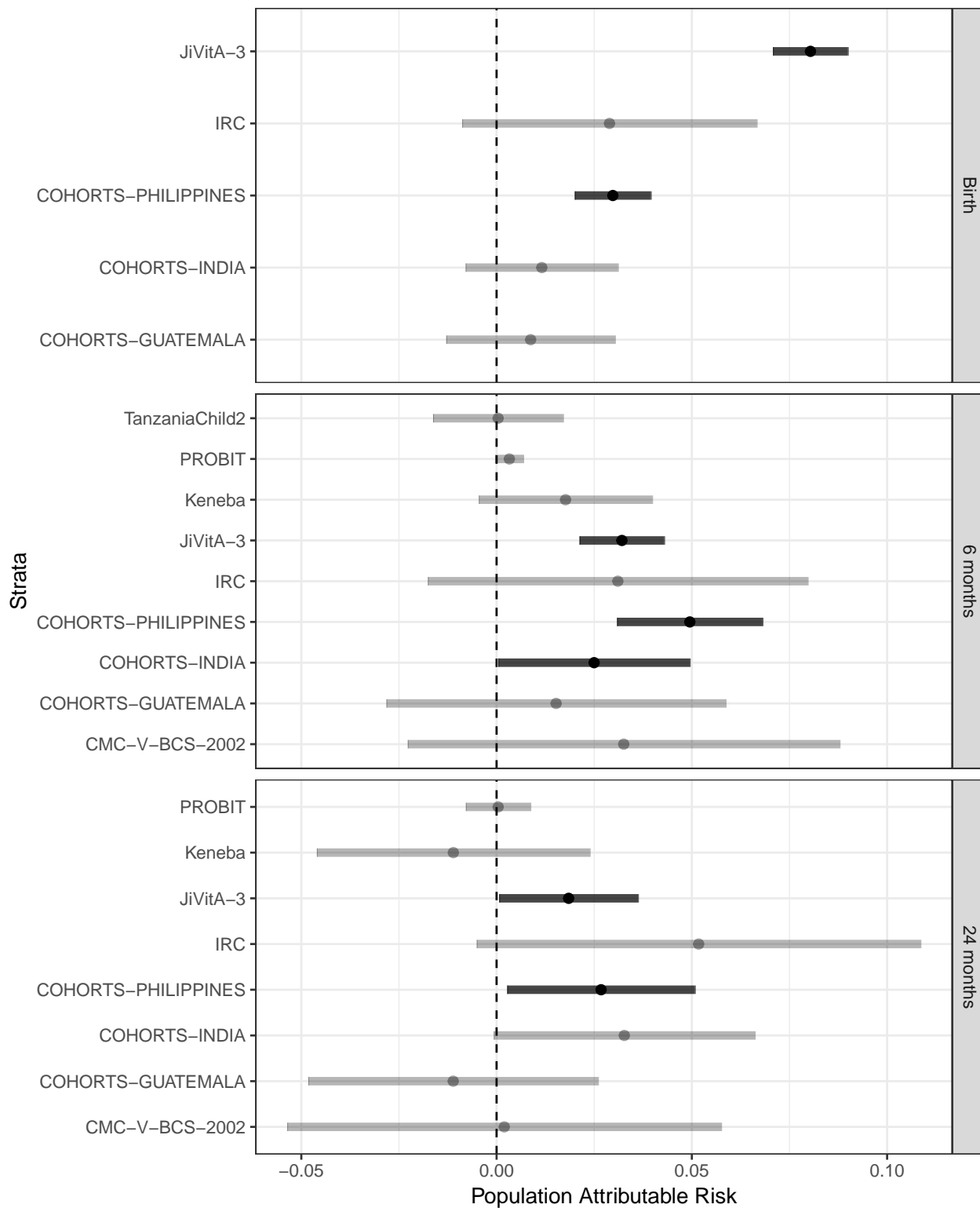


Child's sex
reference level:Female

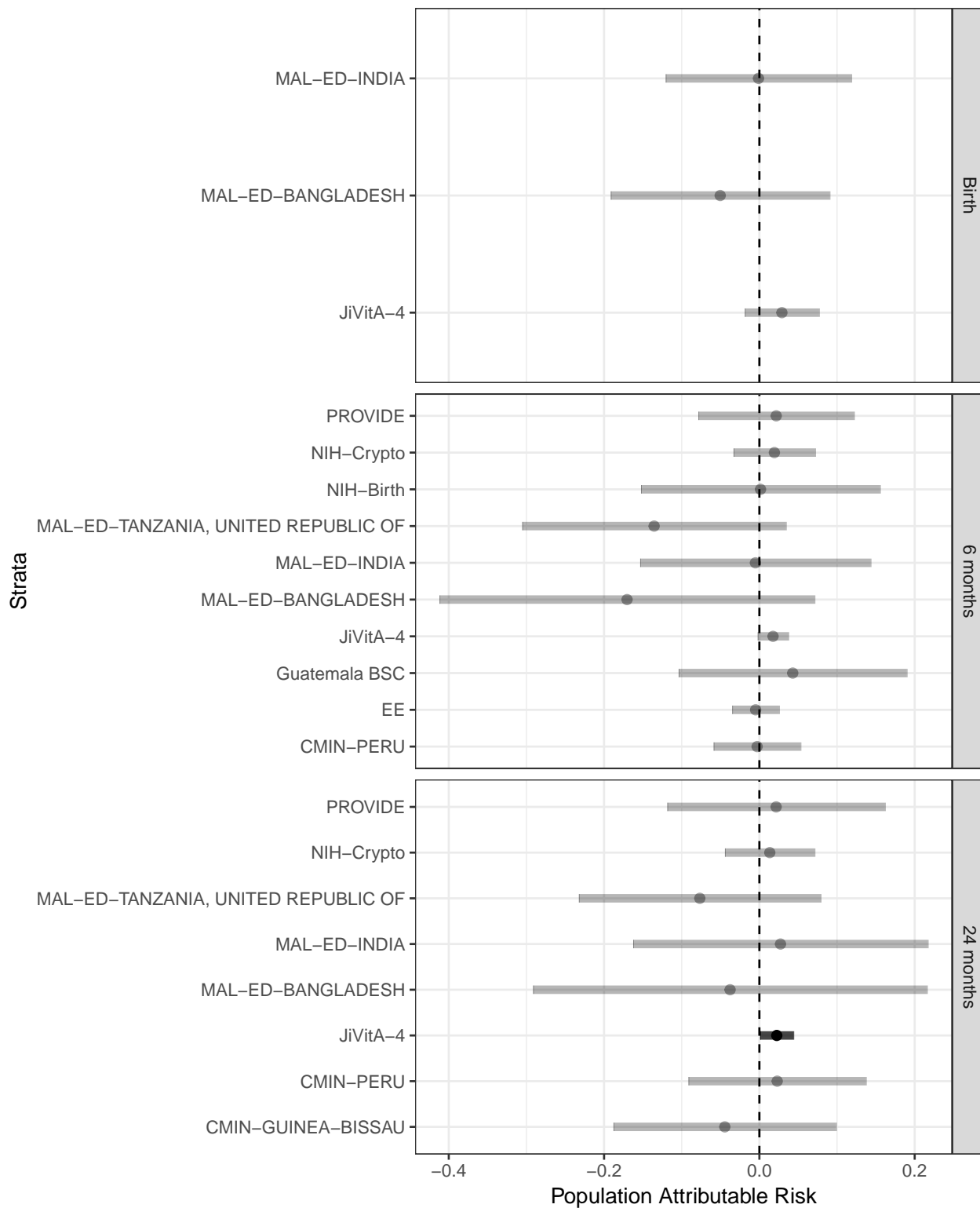




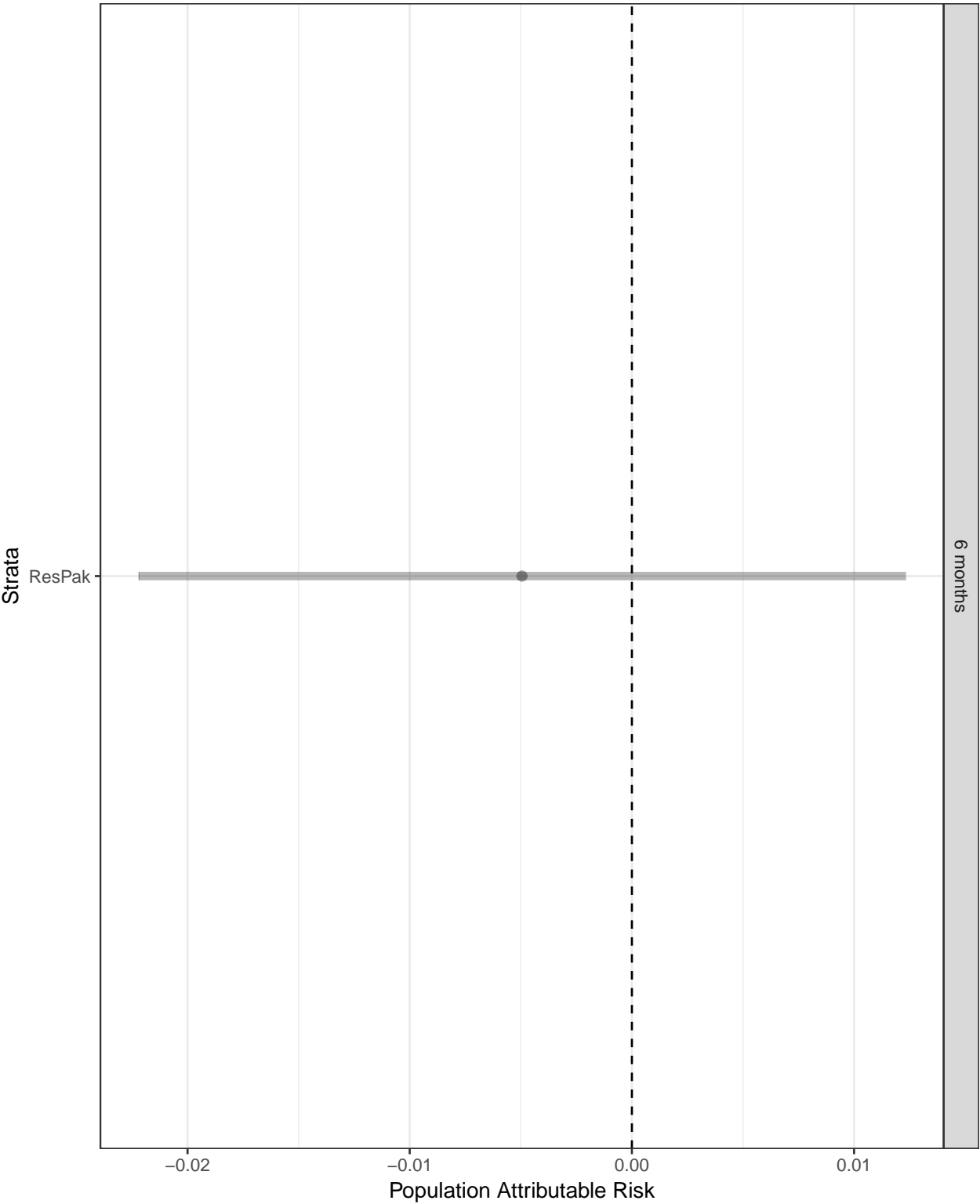
Gestational age at birth in days
reference level:[273–287)

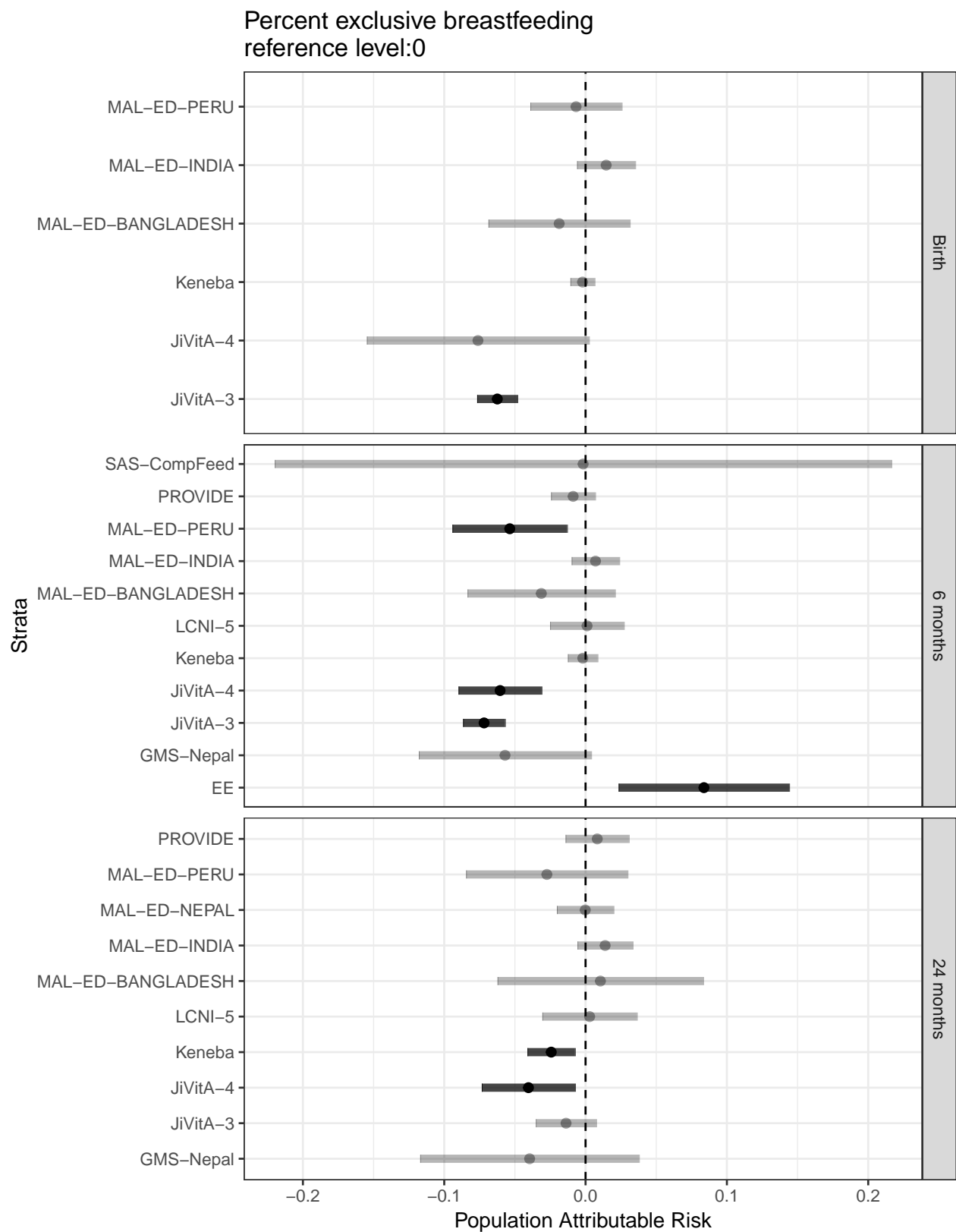


Percent diarrhea in first 24 months
reference level:Q1

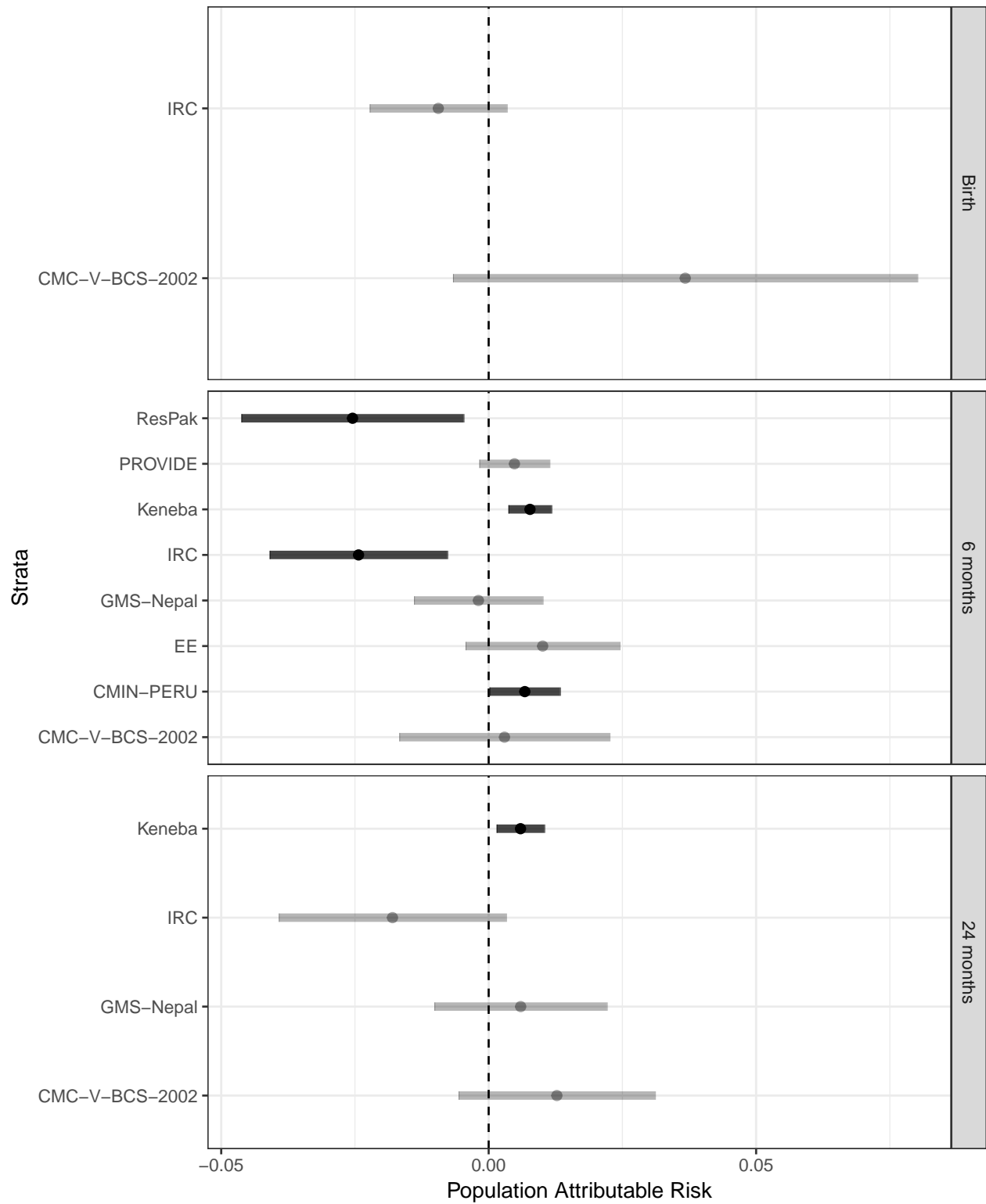


Percent diarrhea in first 6 months
reference level:Q1

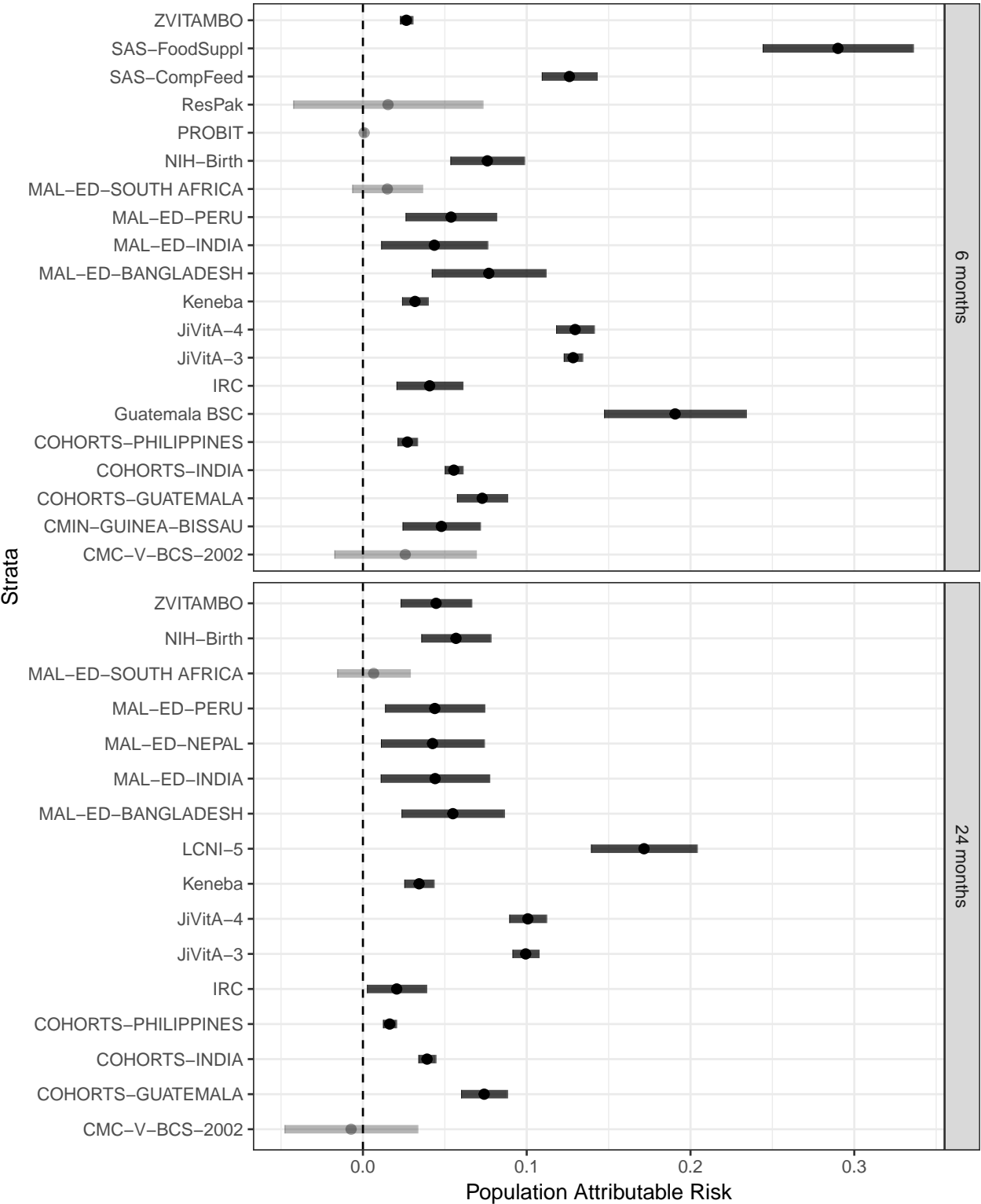




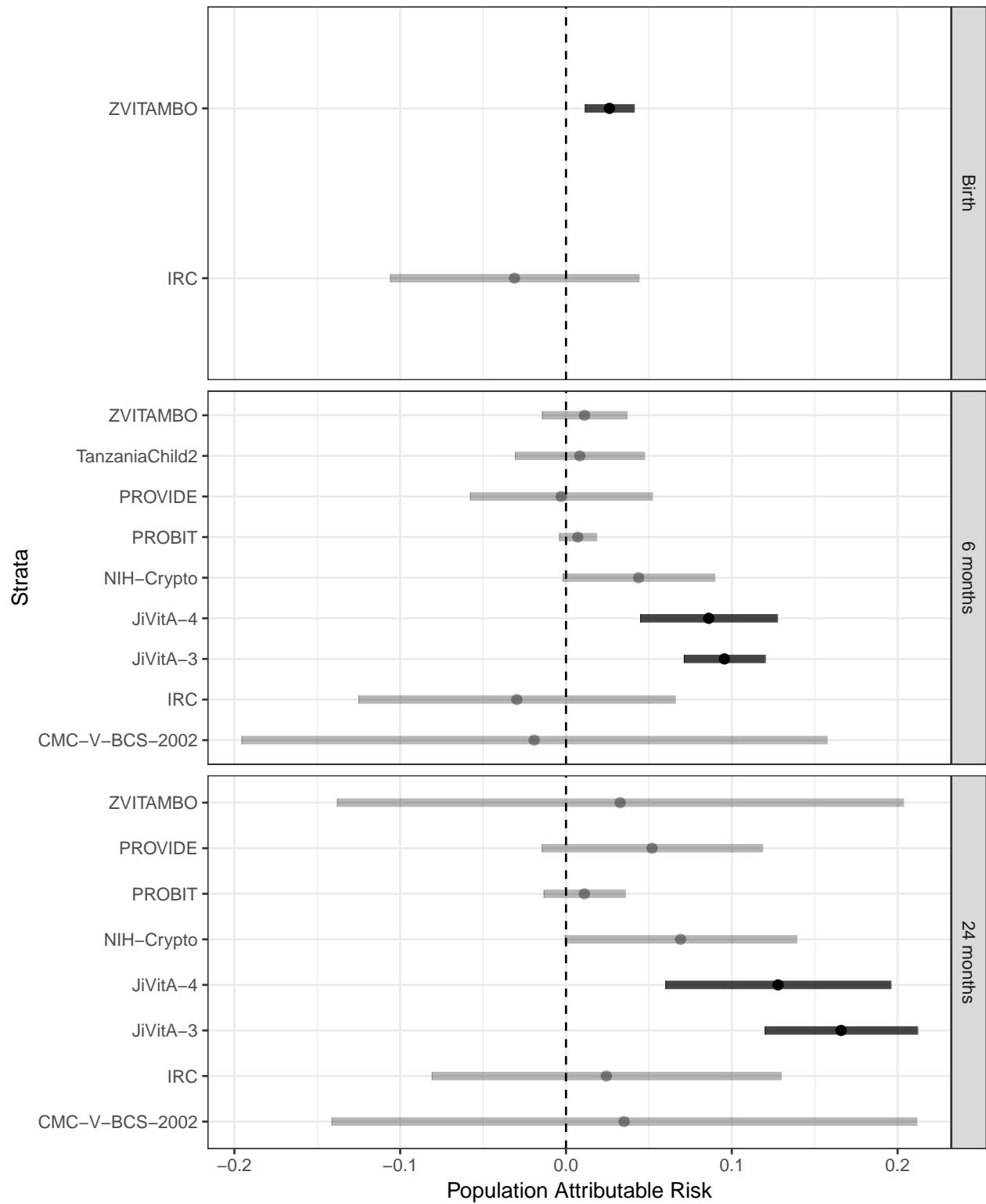
Persistent wasting in first 6 months
reference level:0



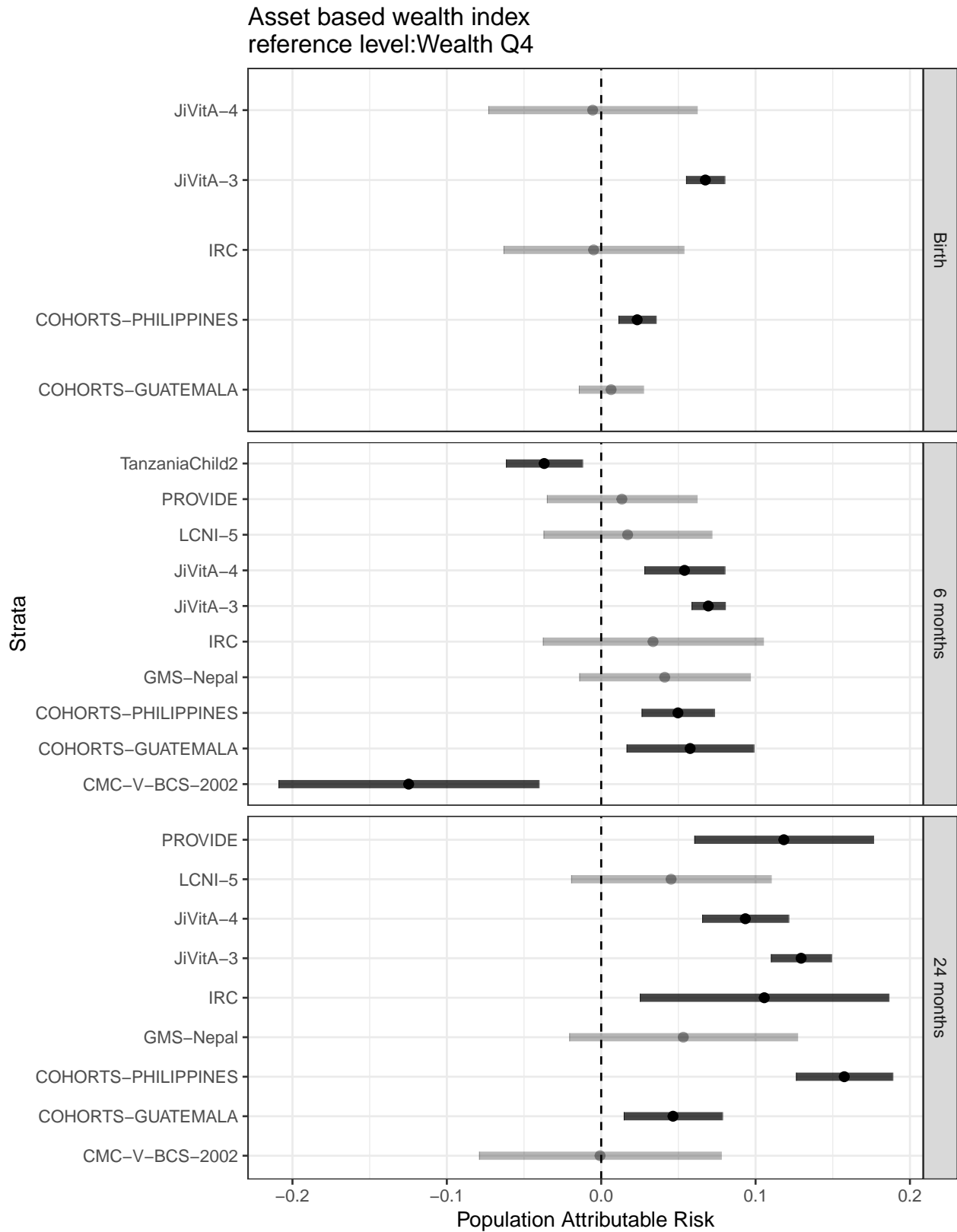
Stunted at enrollment
reference level:0



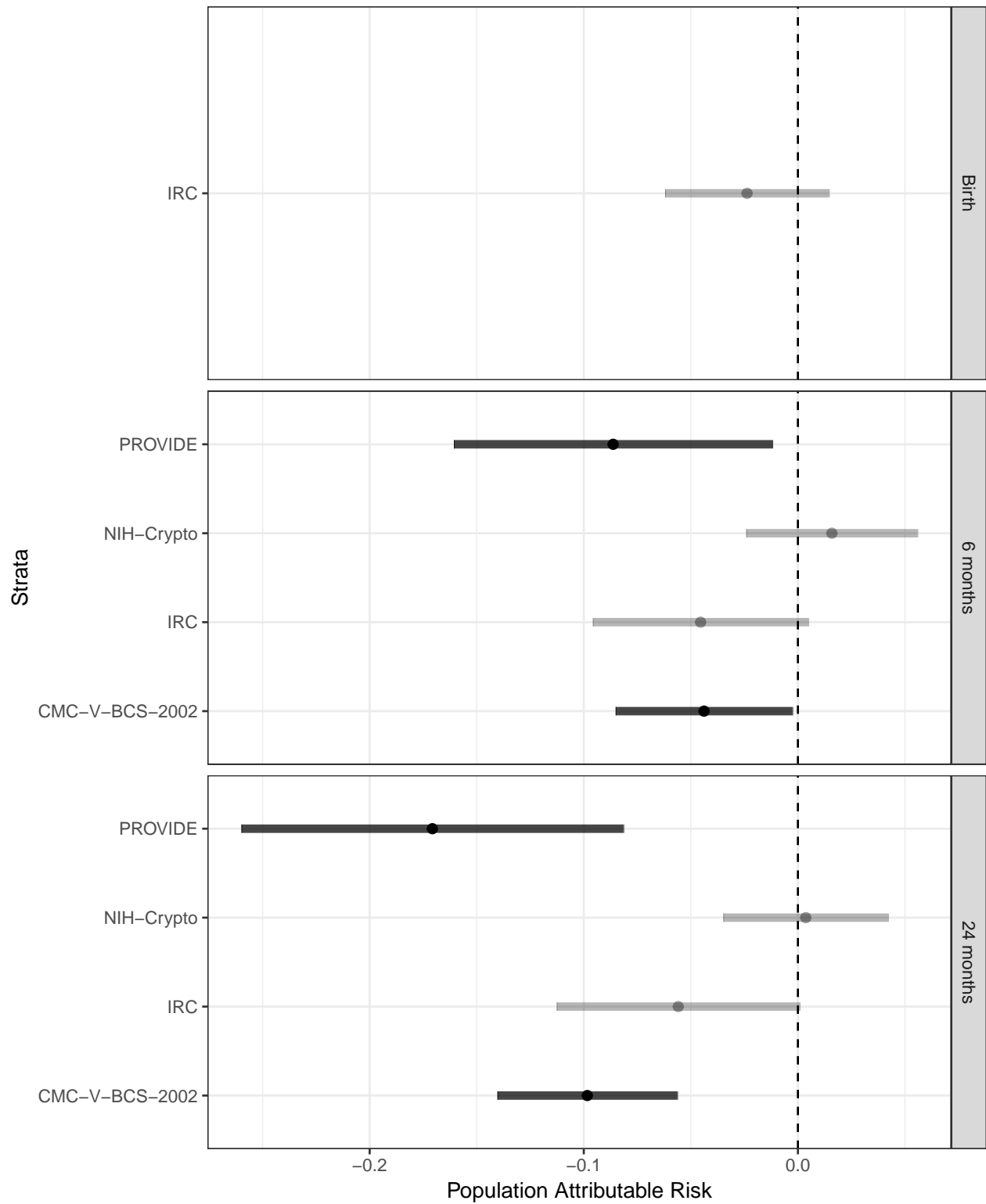
Vaginal delivery
reference level:0

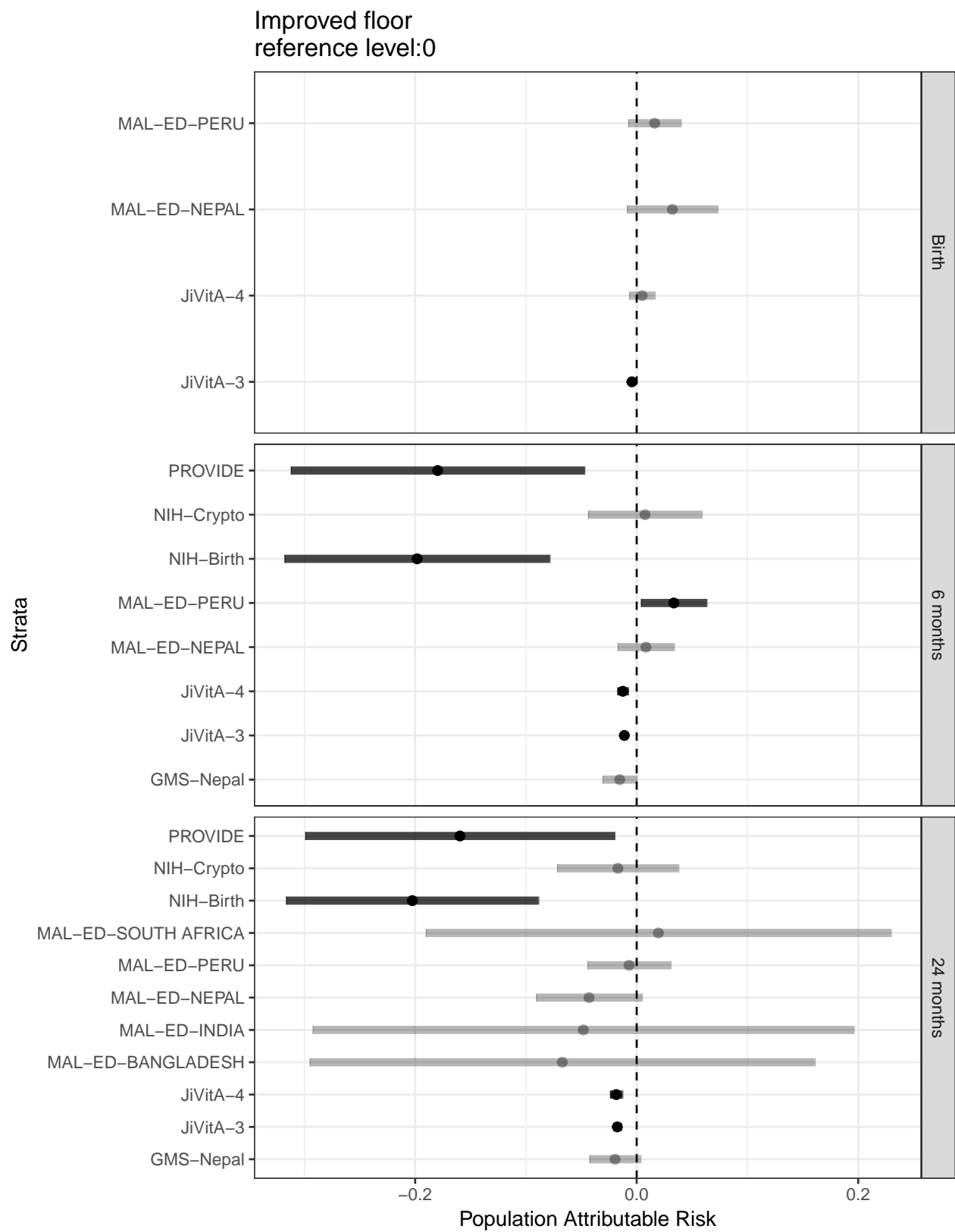


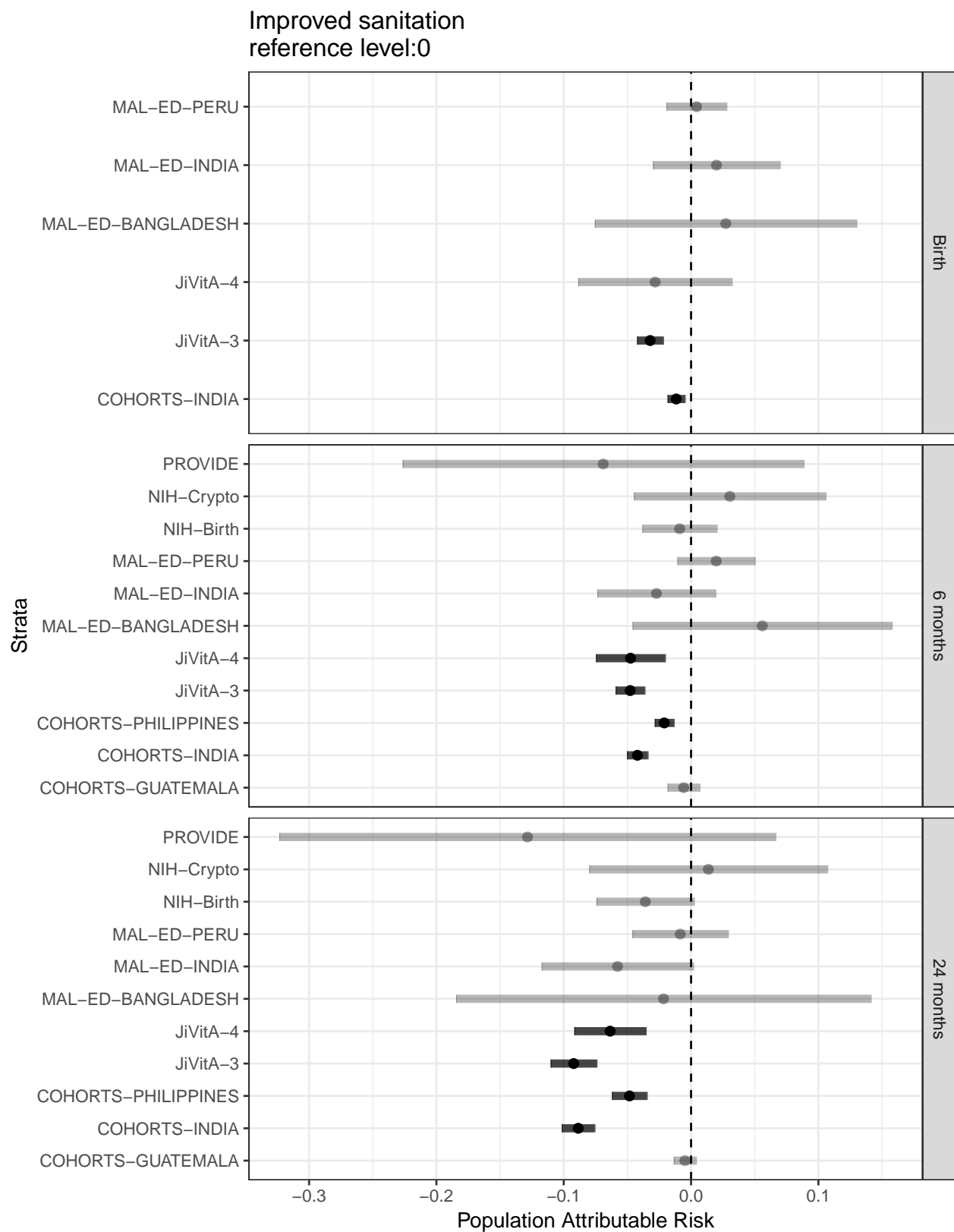
Household characteristics



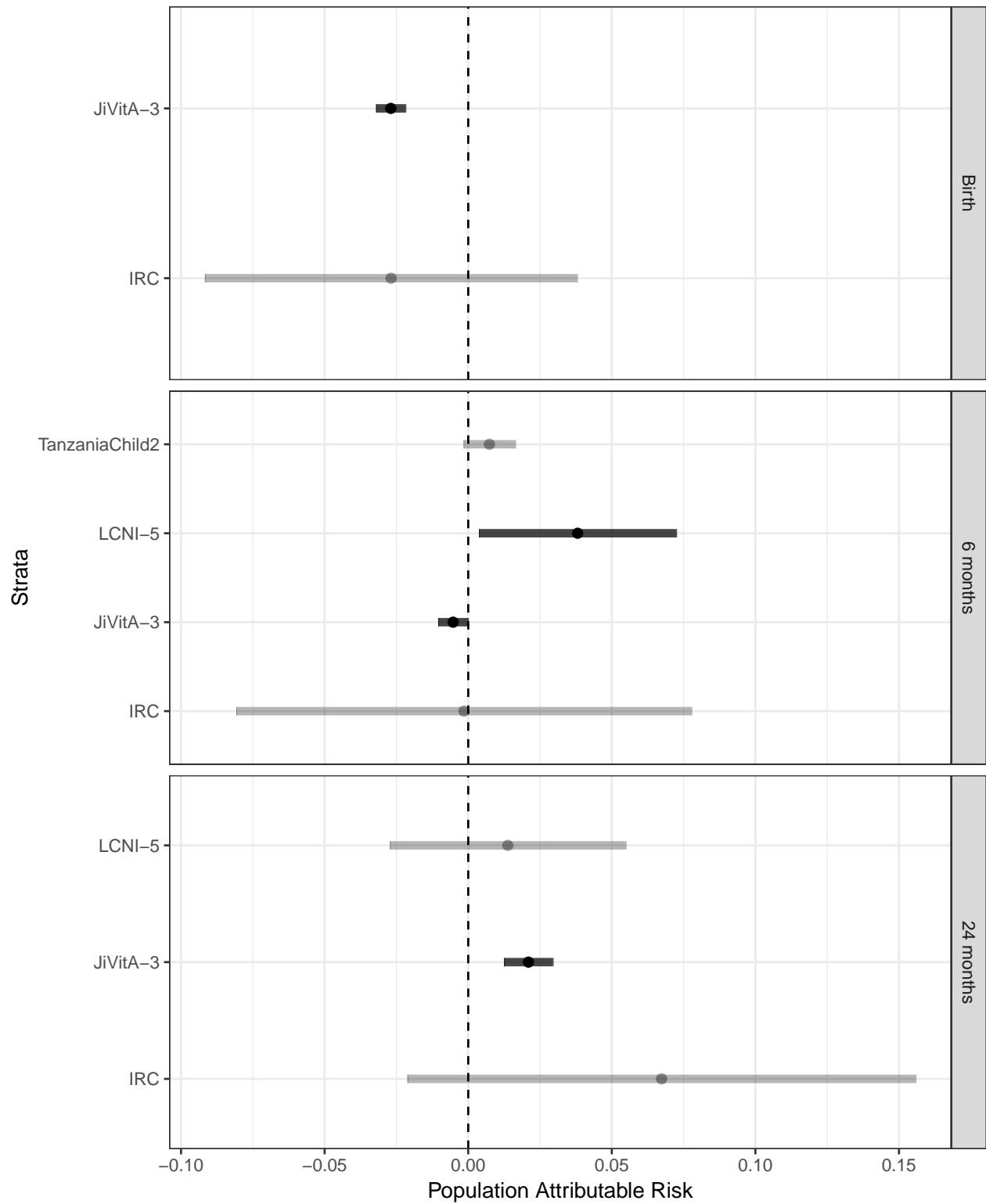
Clean cook
reference level:0



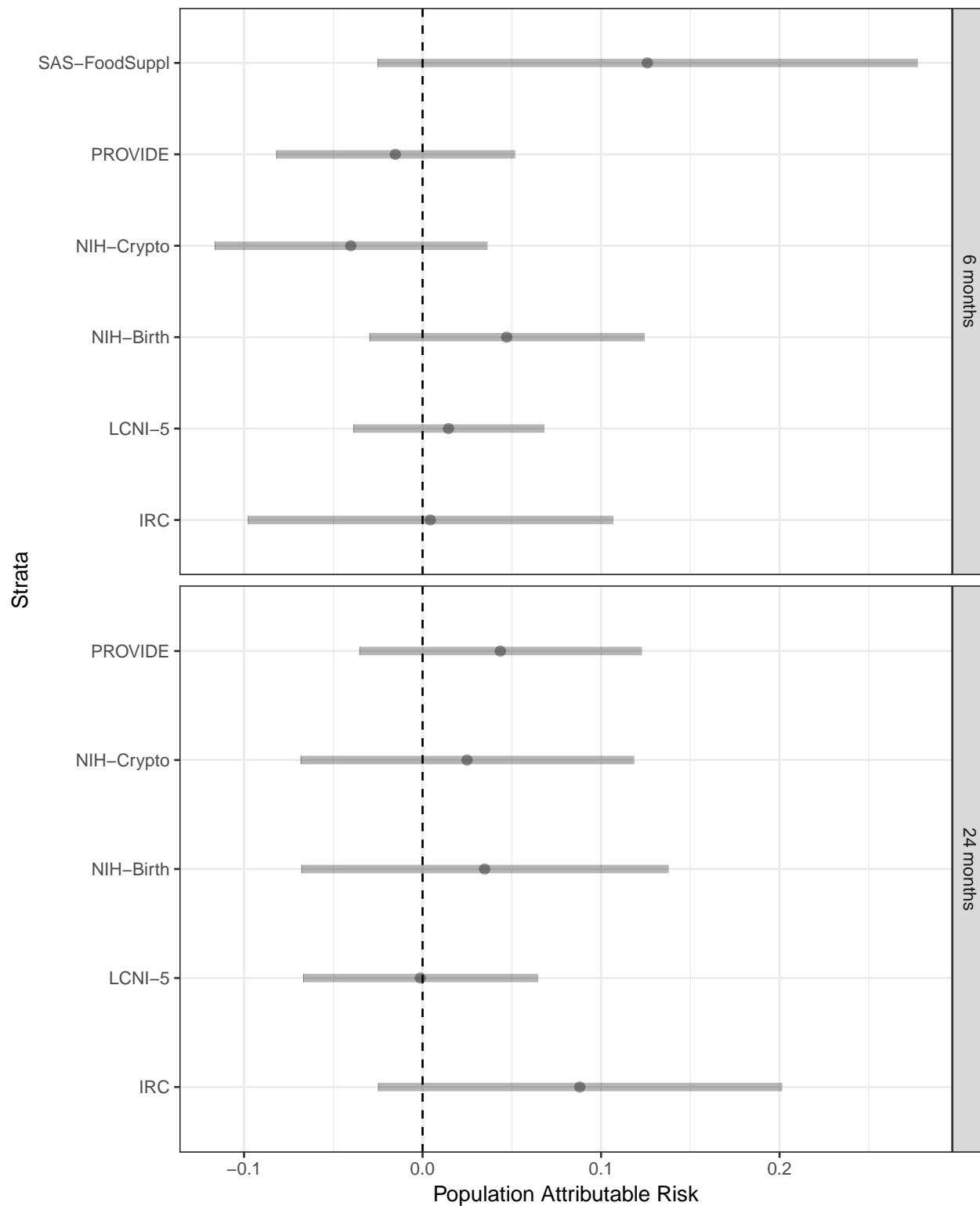




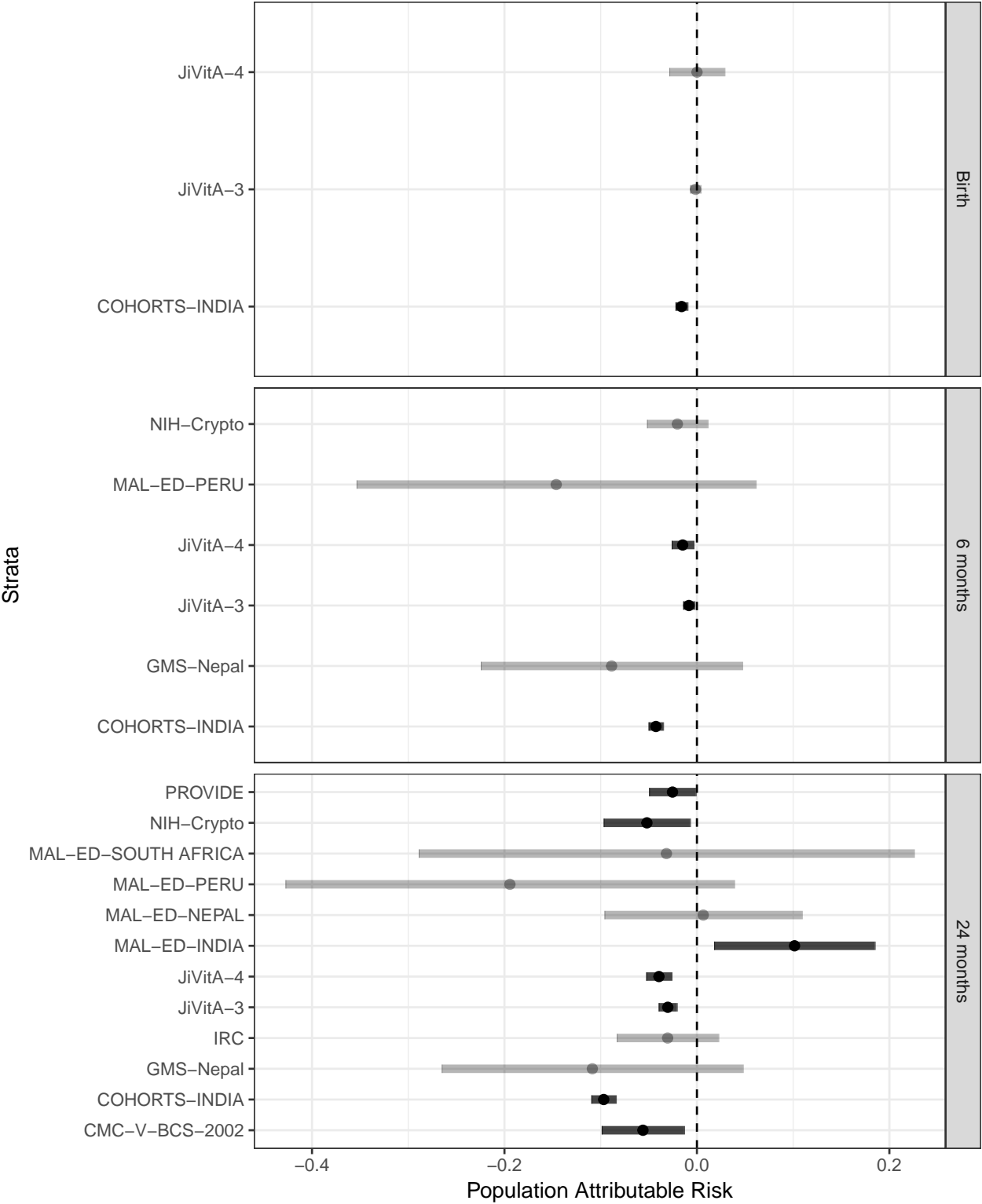
Number of children in the household under 5 years
reference level:1

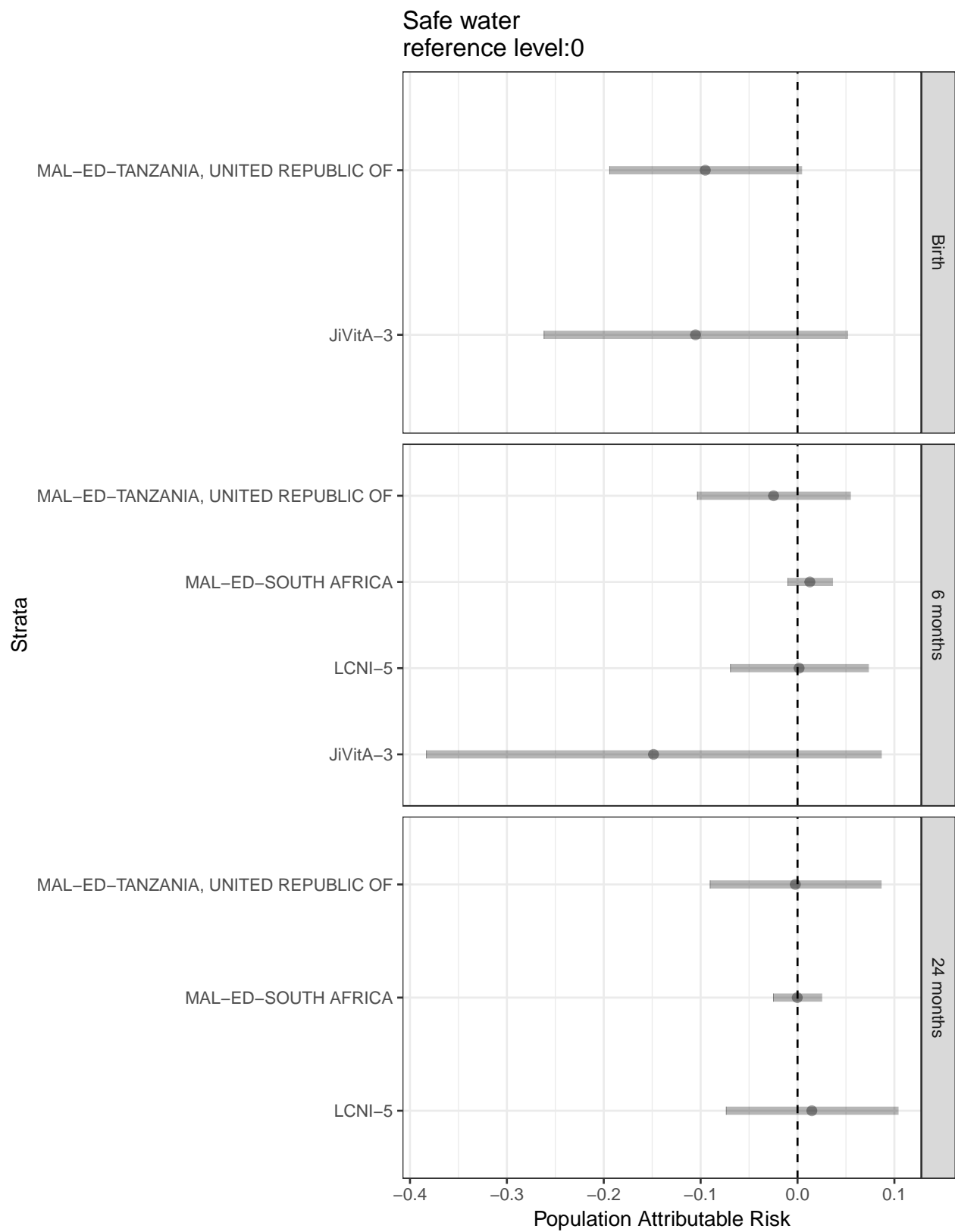


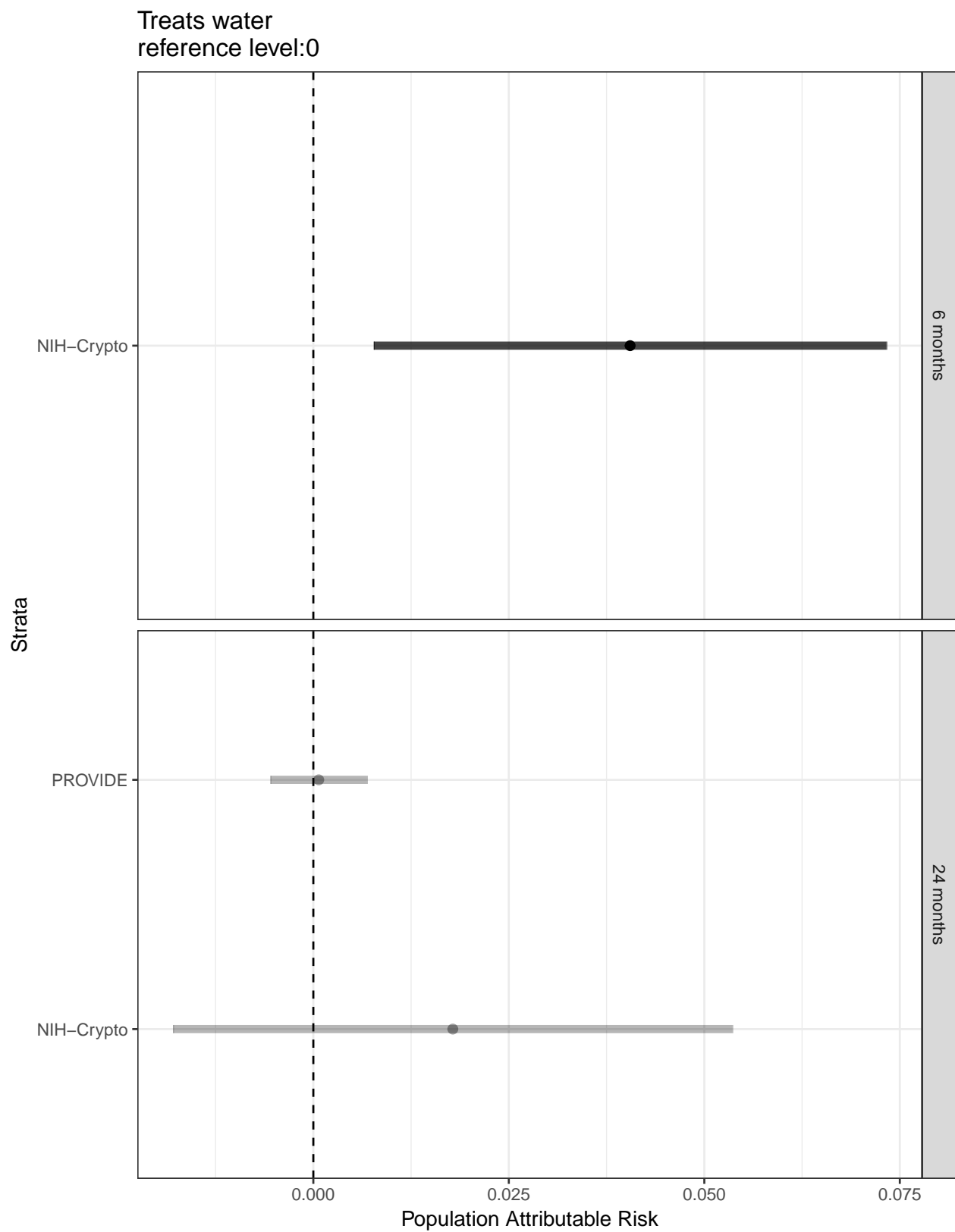
Number of people in the household
reference level:3 or less



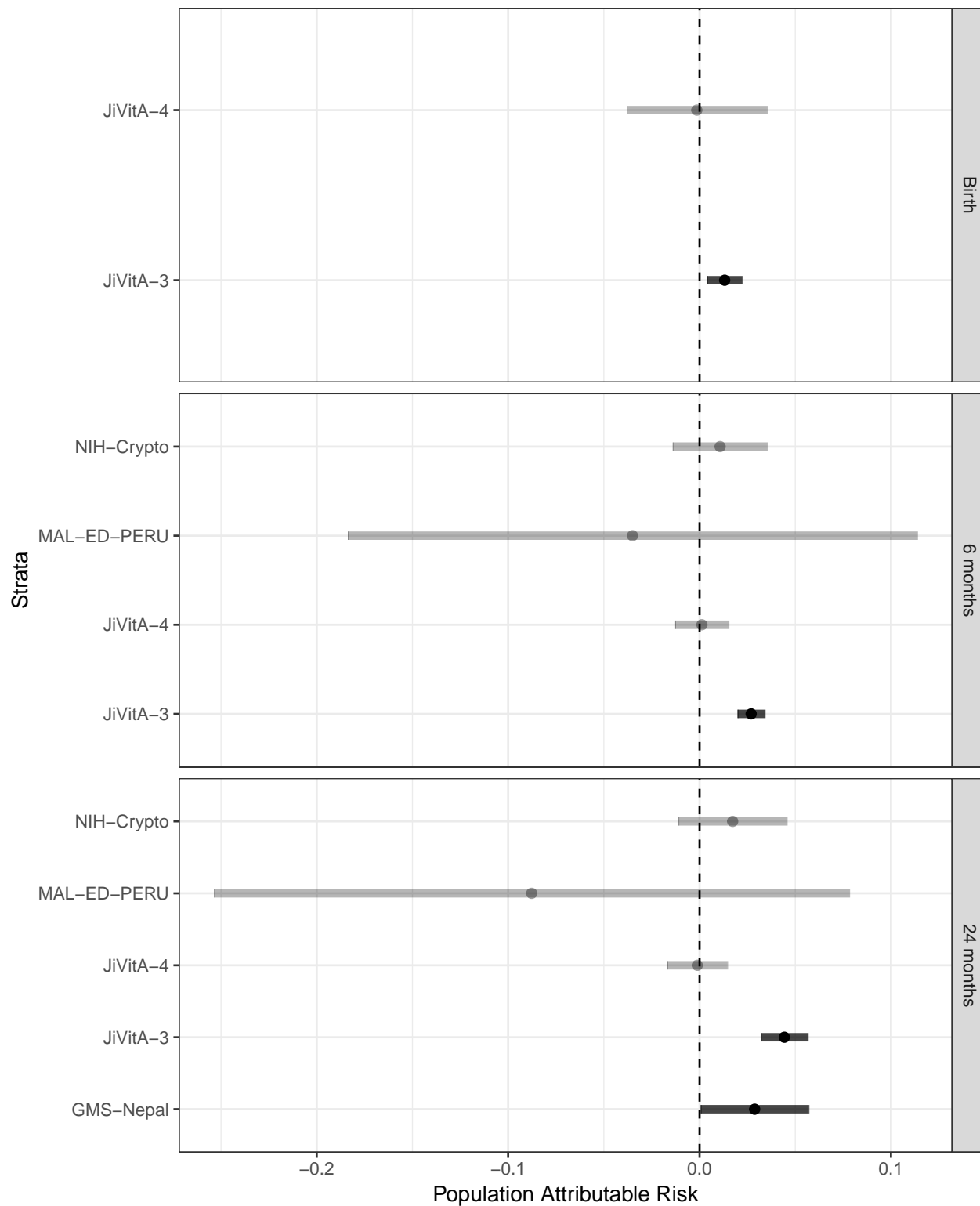
Number of rooms in household
reference level:1



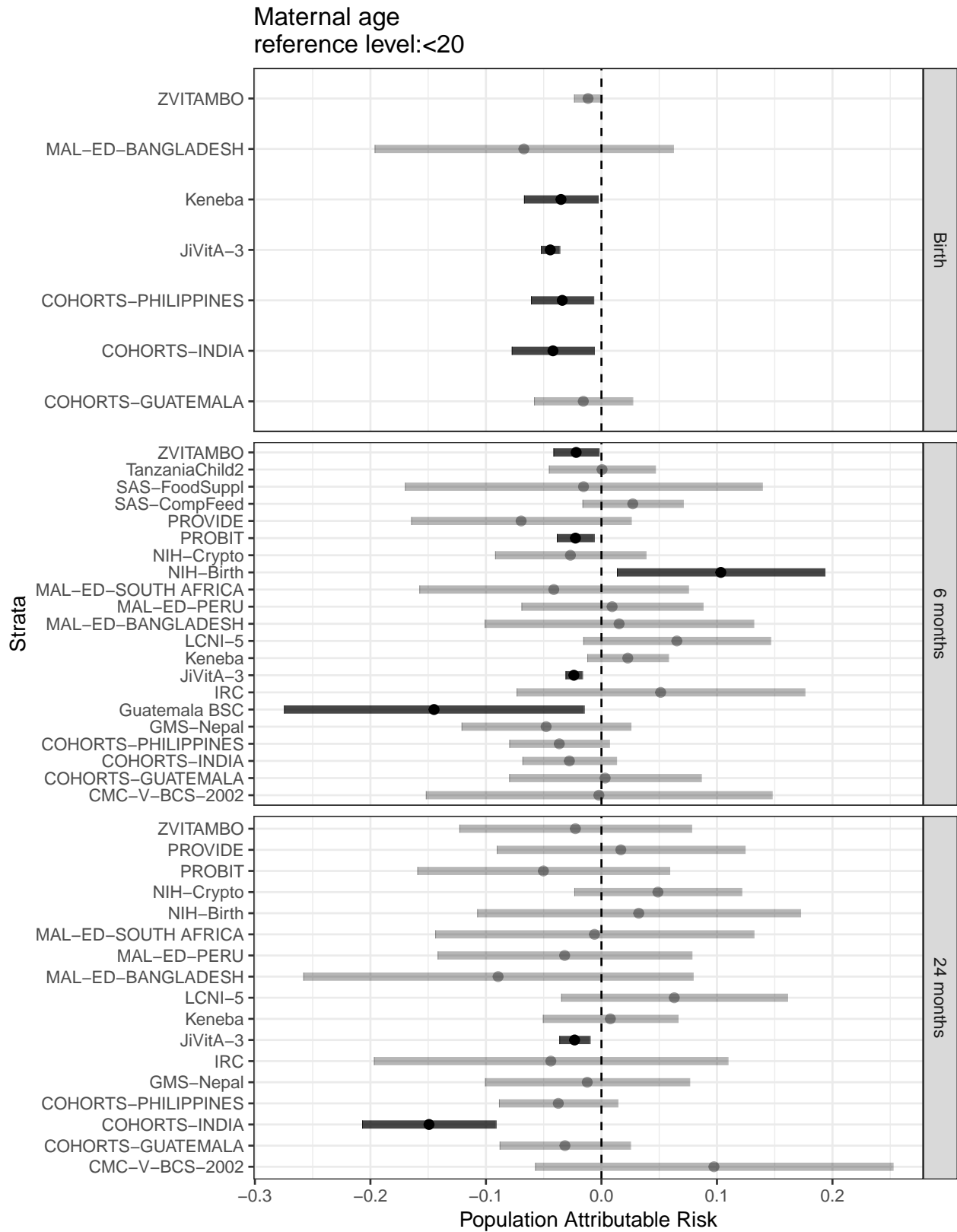




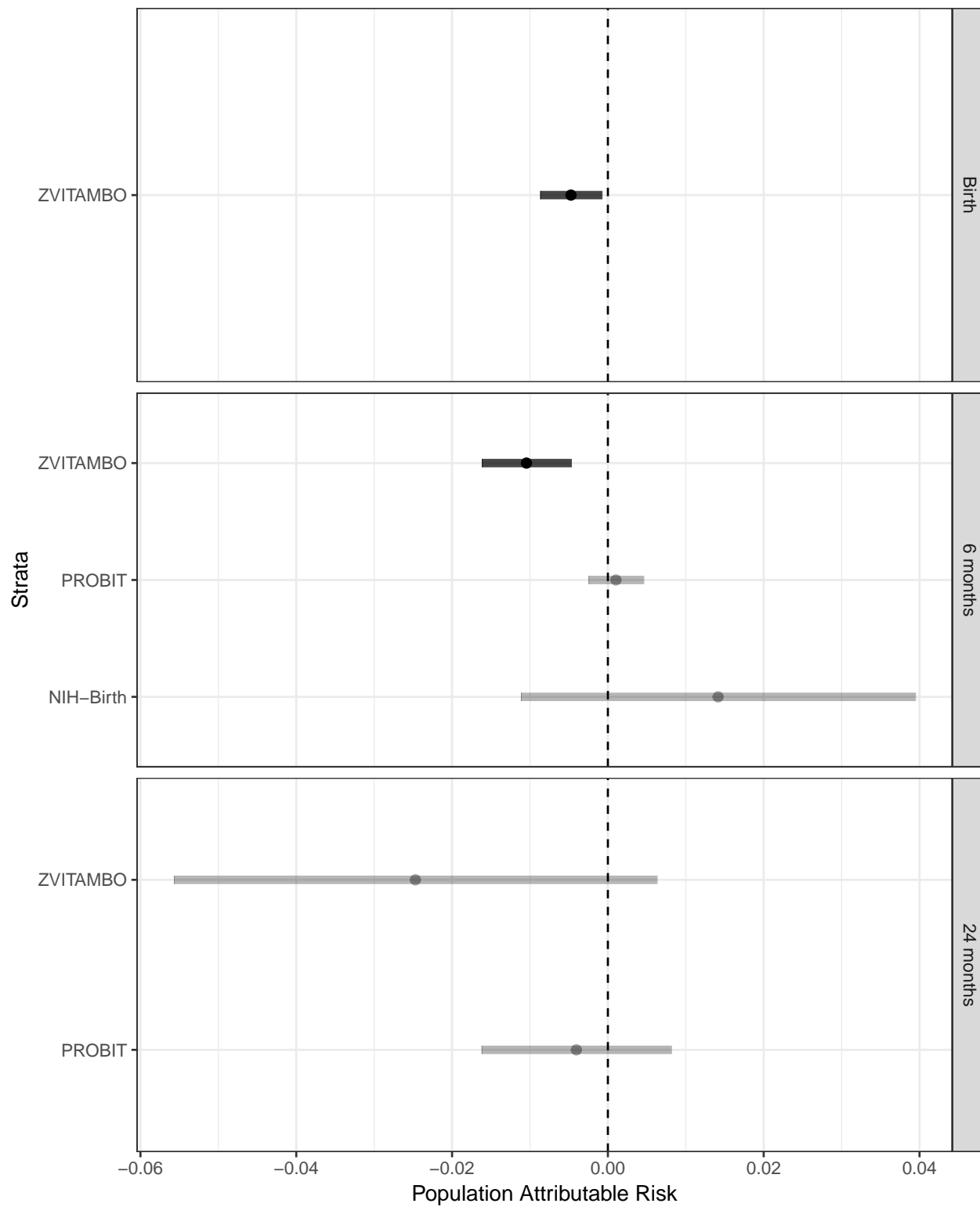
USAID Household Food Insecurity Access Scale (HFIAS) category
reference level: Food Secure

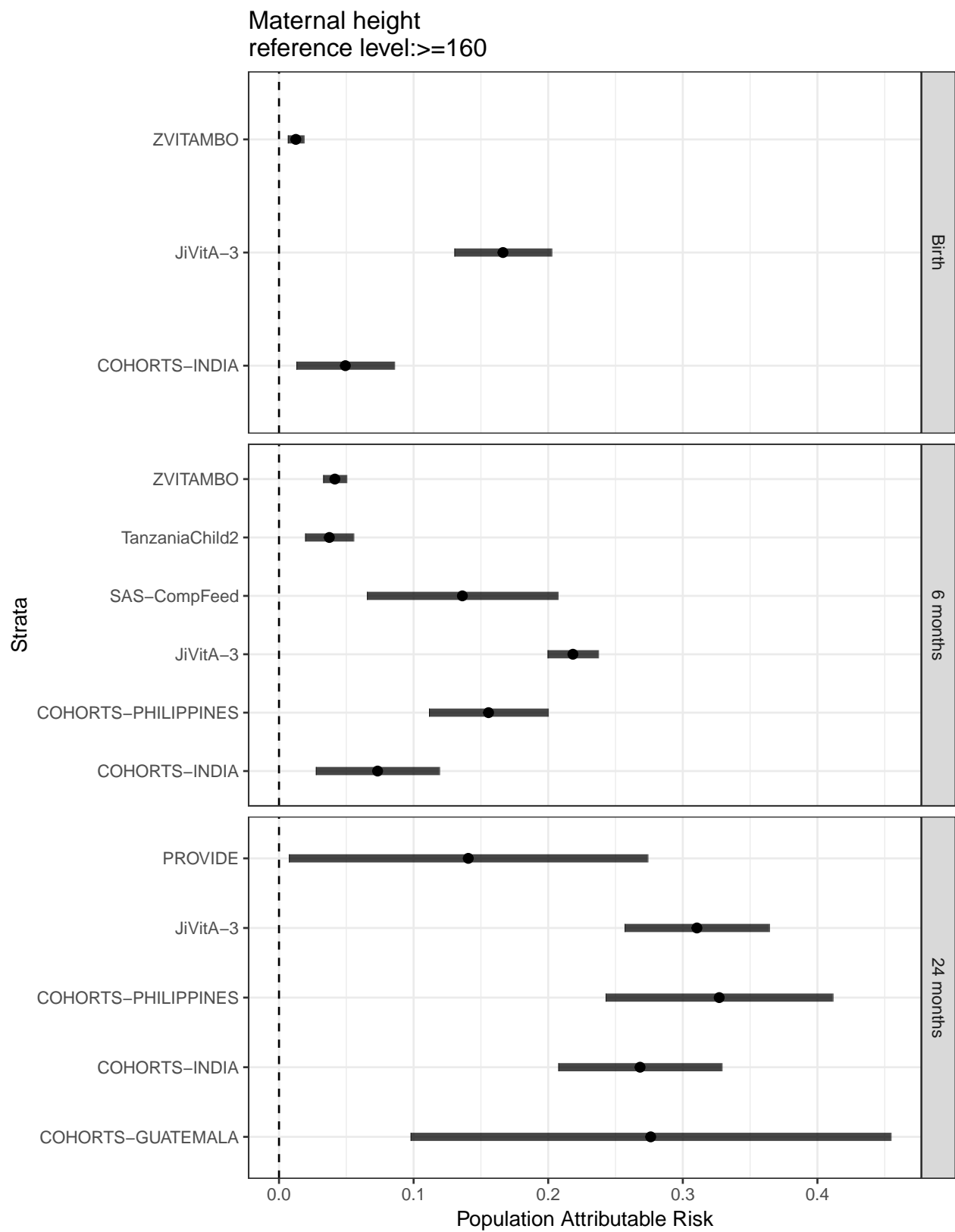


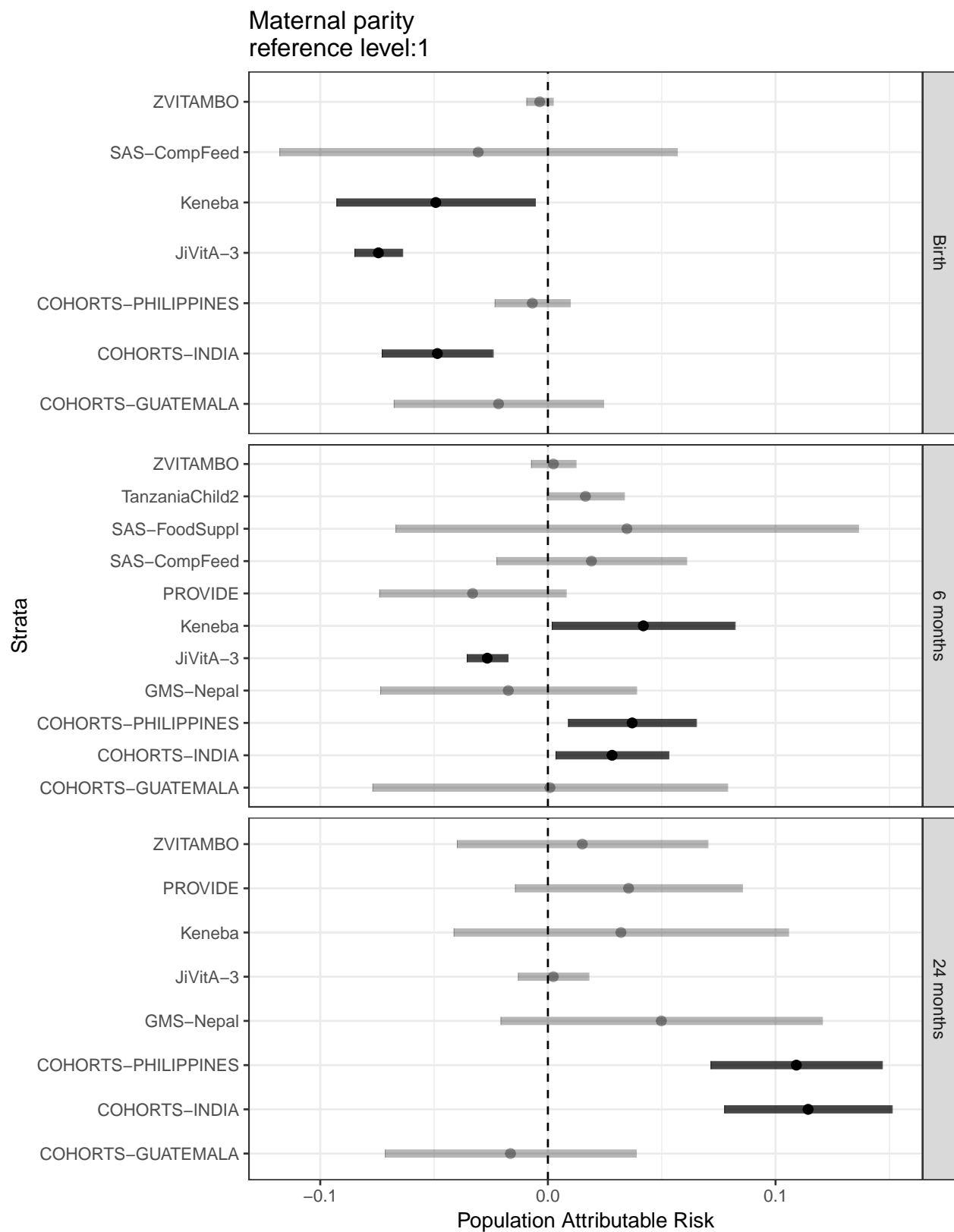
Maternal characteristics

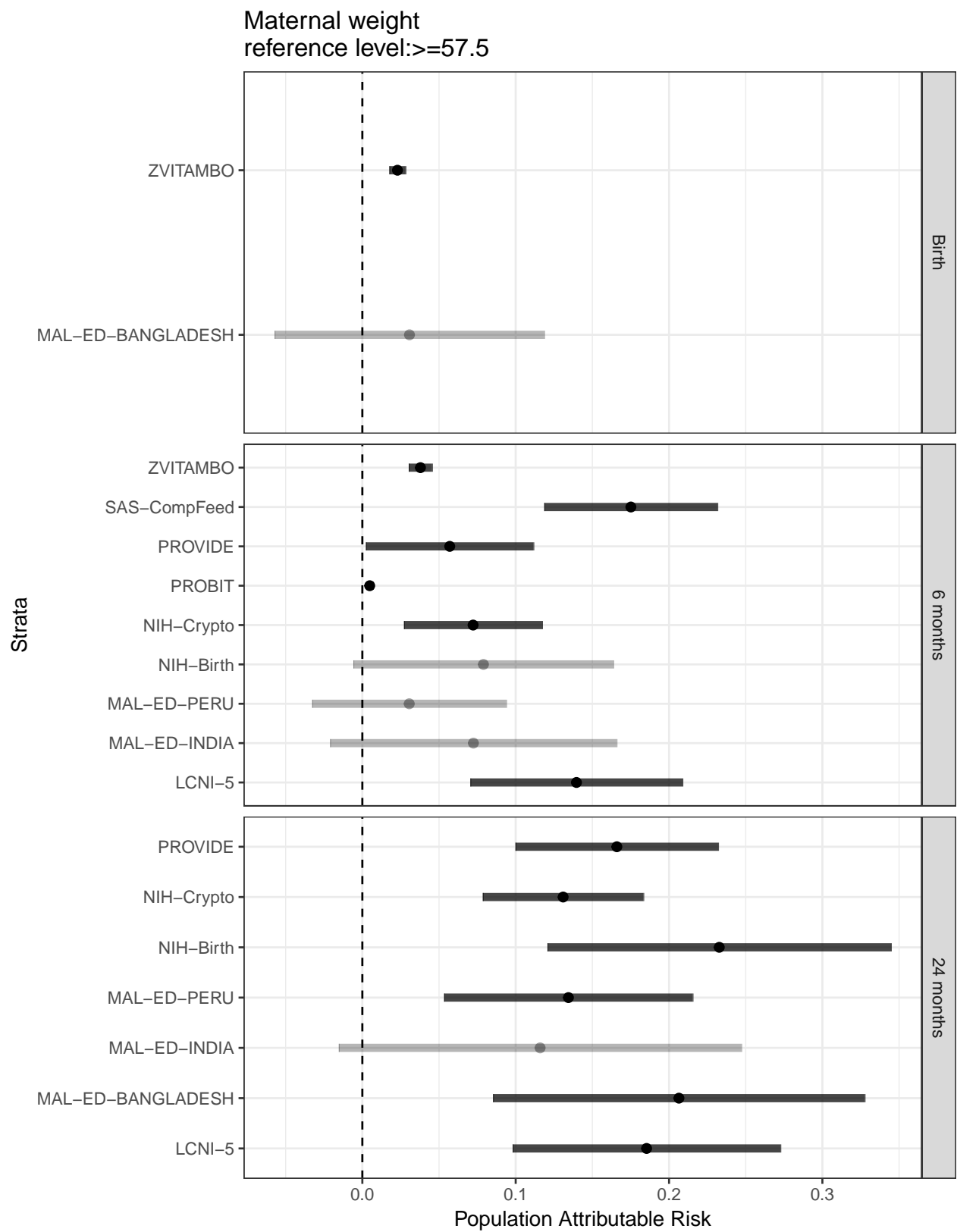


Maternal BMI
reference level:[18.5–25)

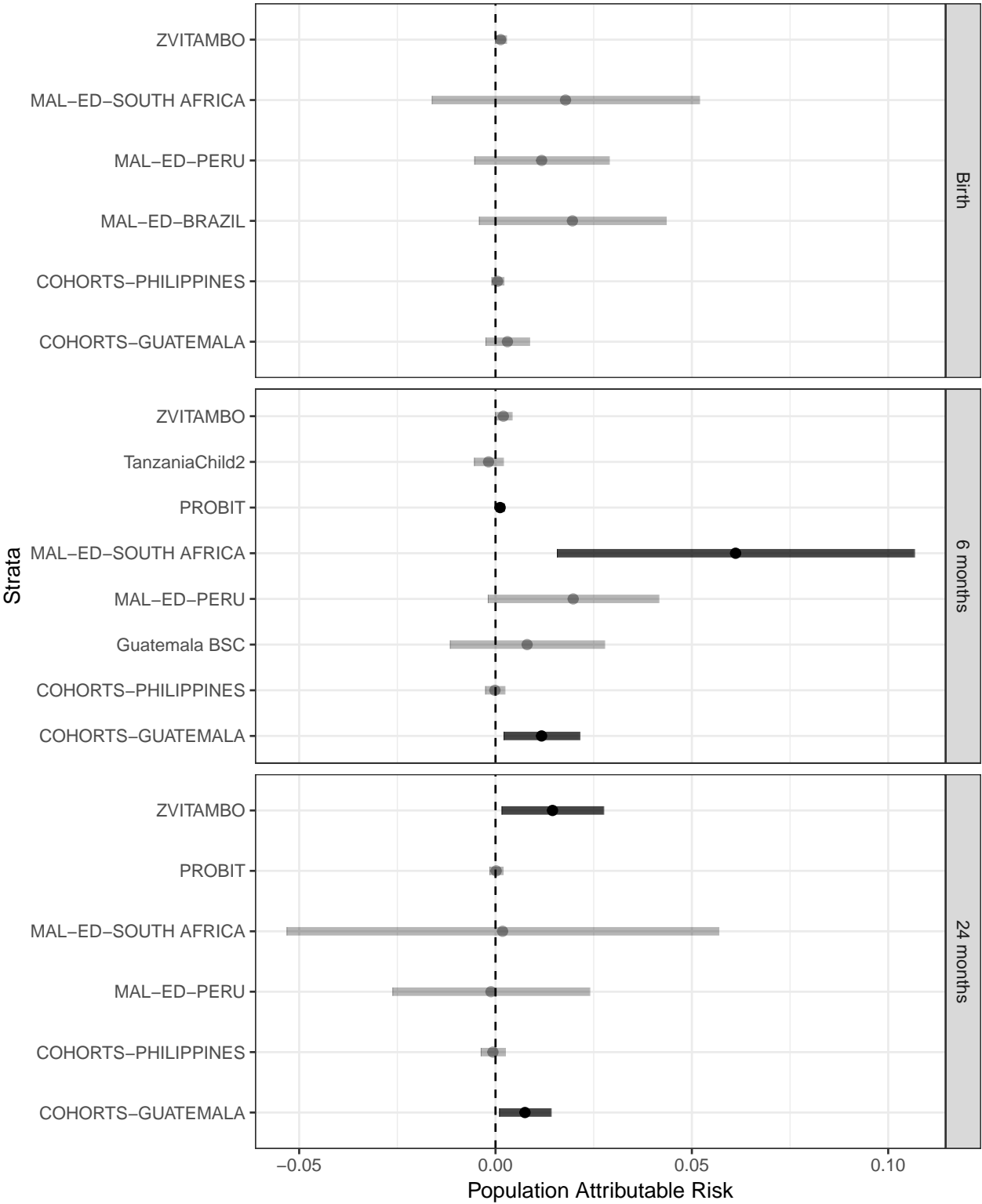




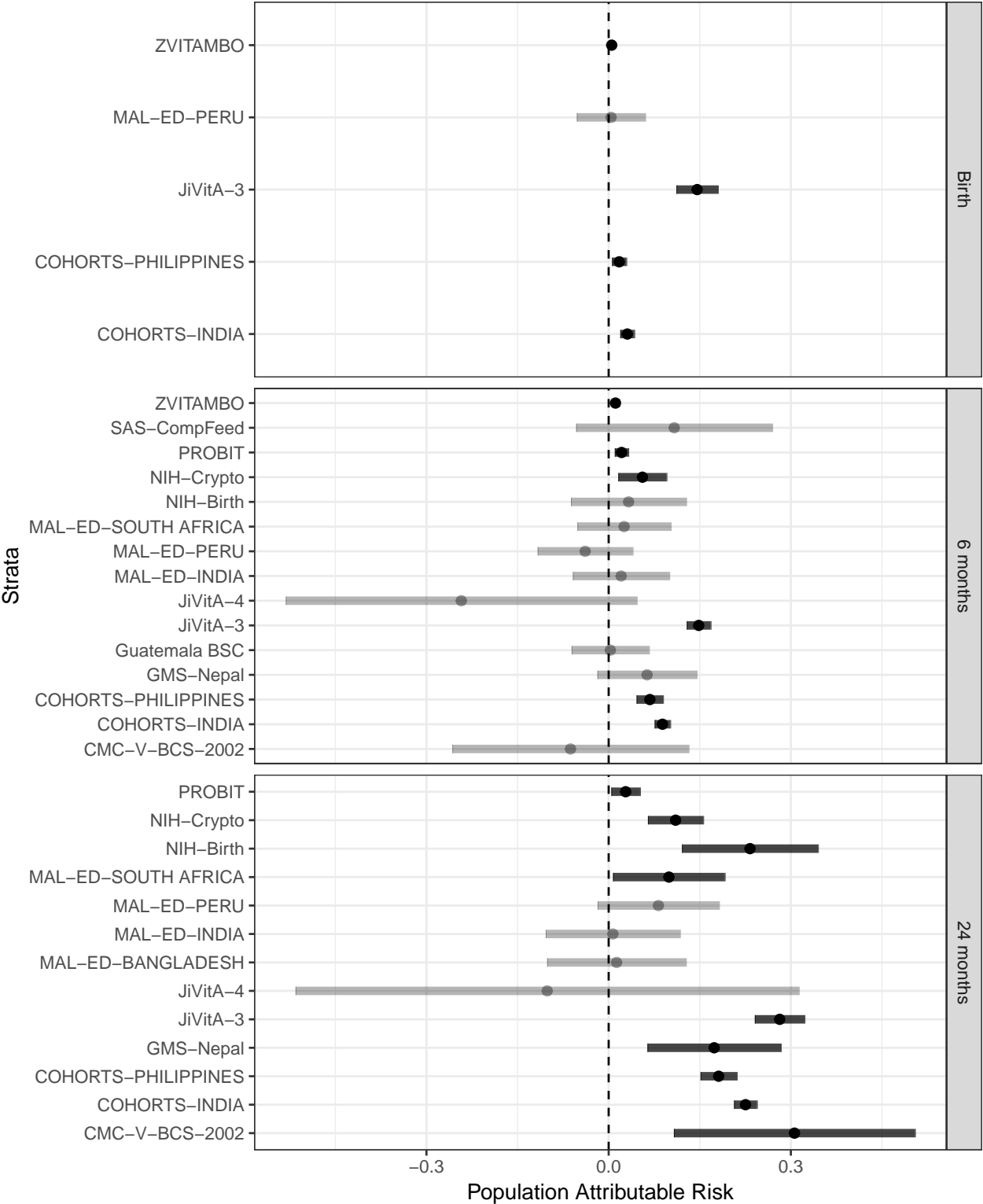




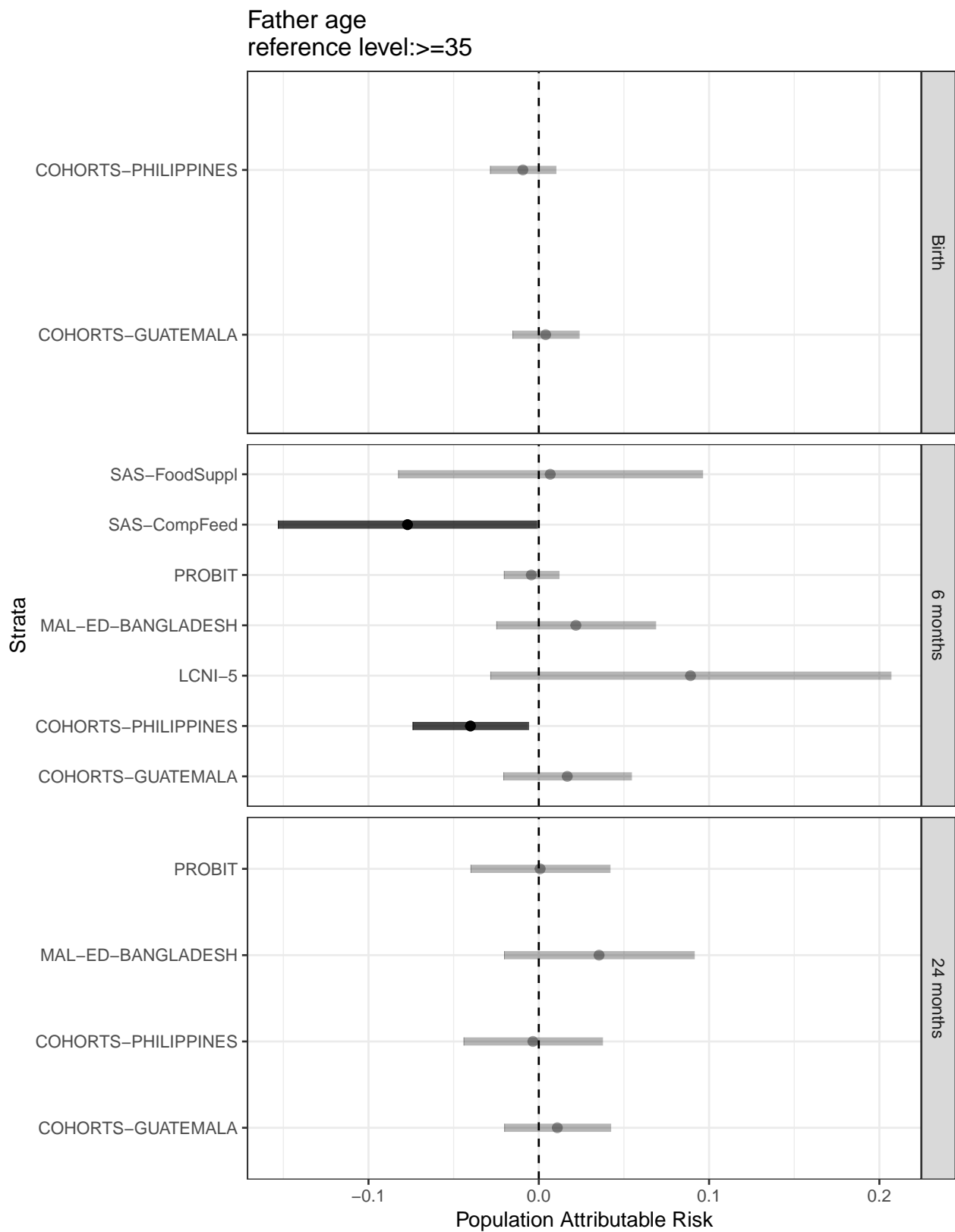
Mother is unmarried
reference level:0

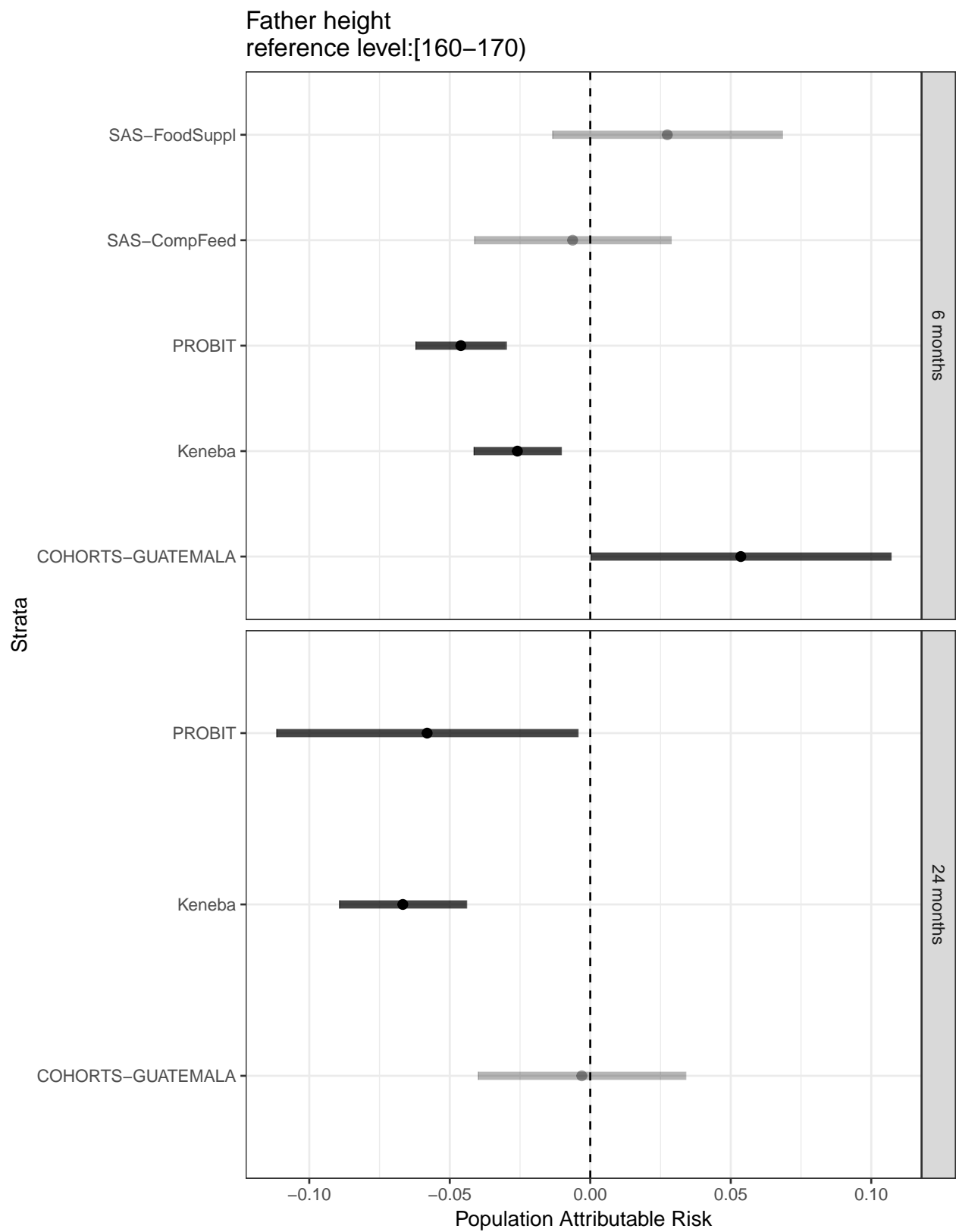


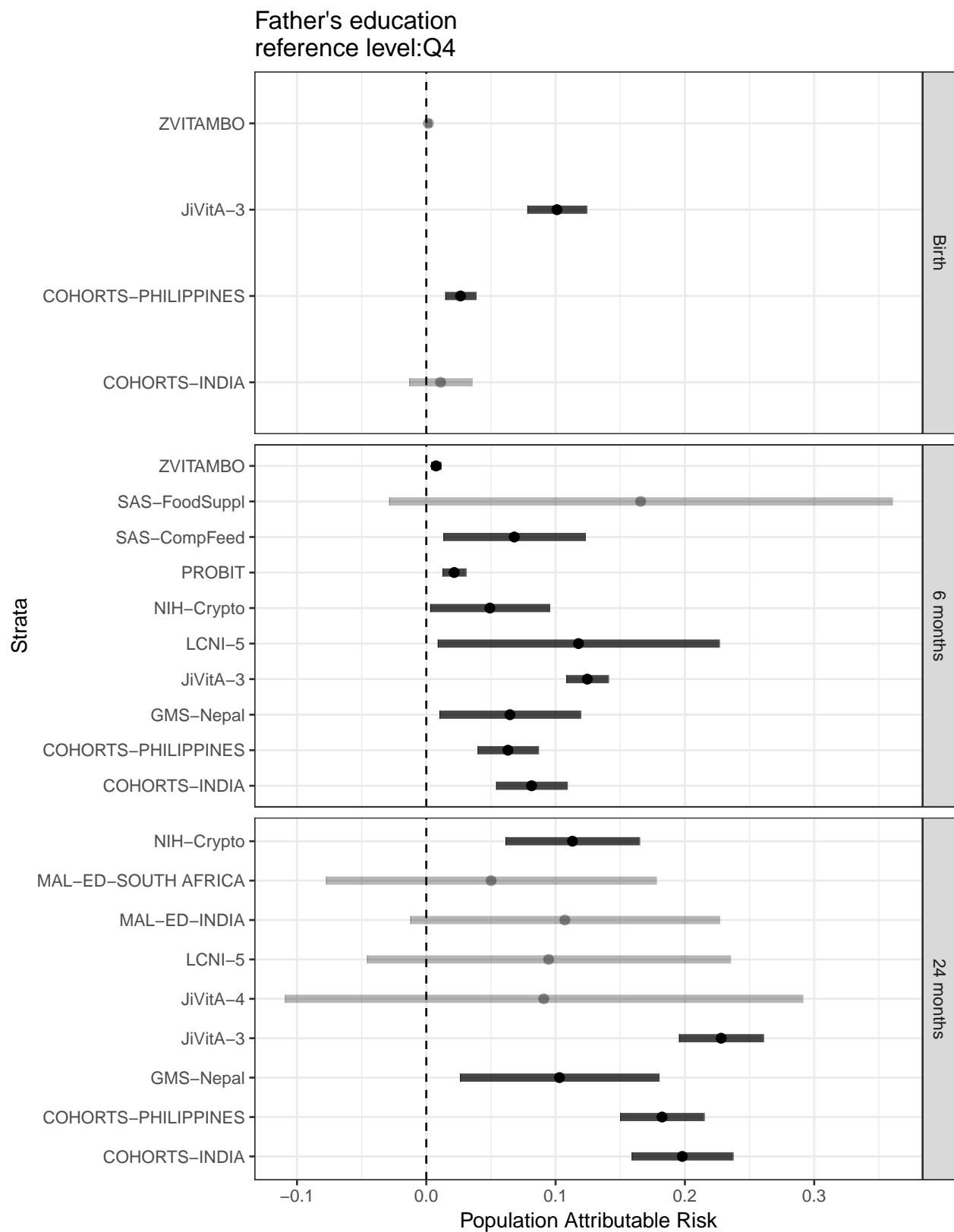
Mother's education
reference level:Q4



Paternal characteristics



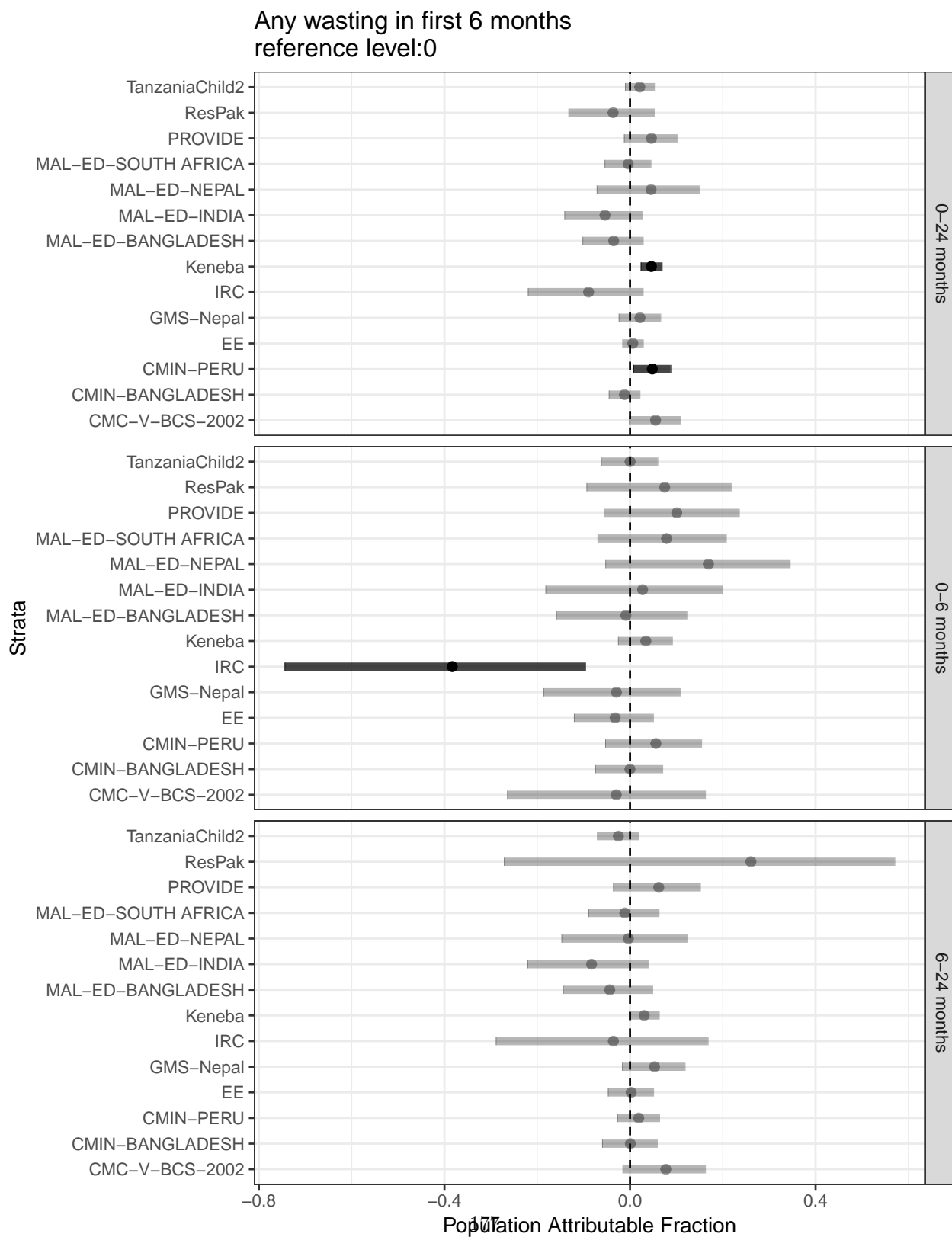


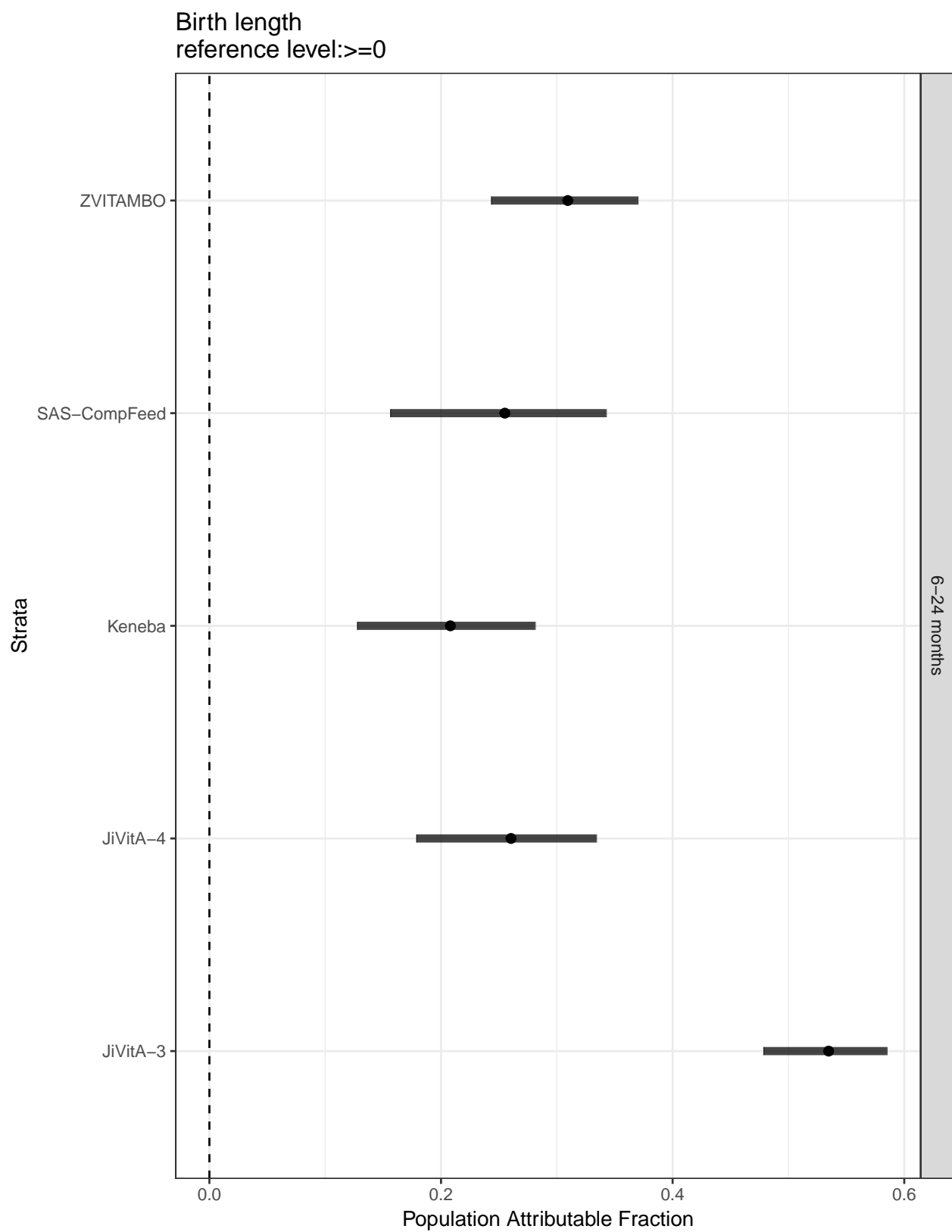


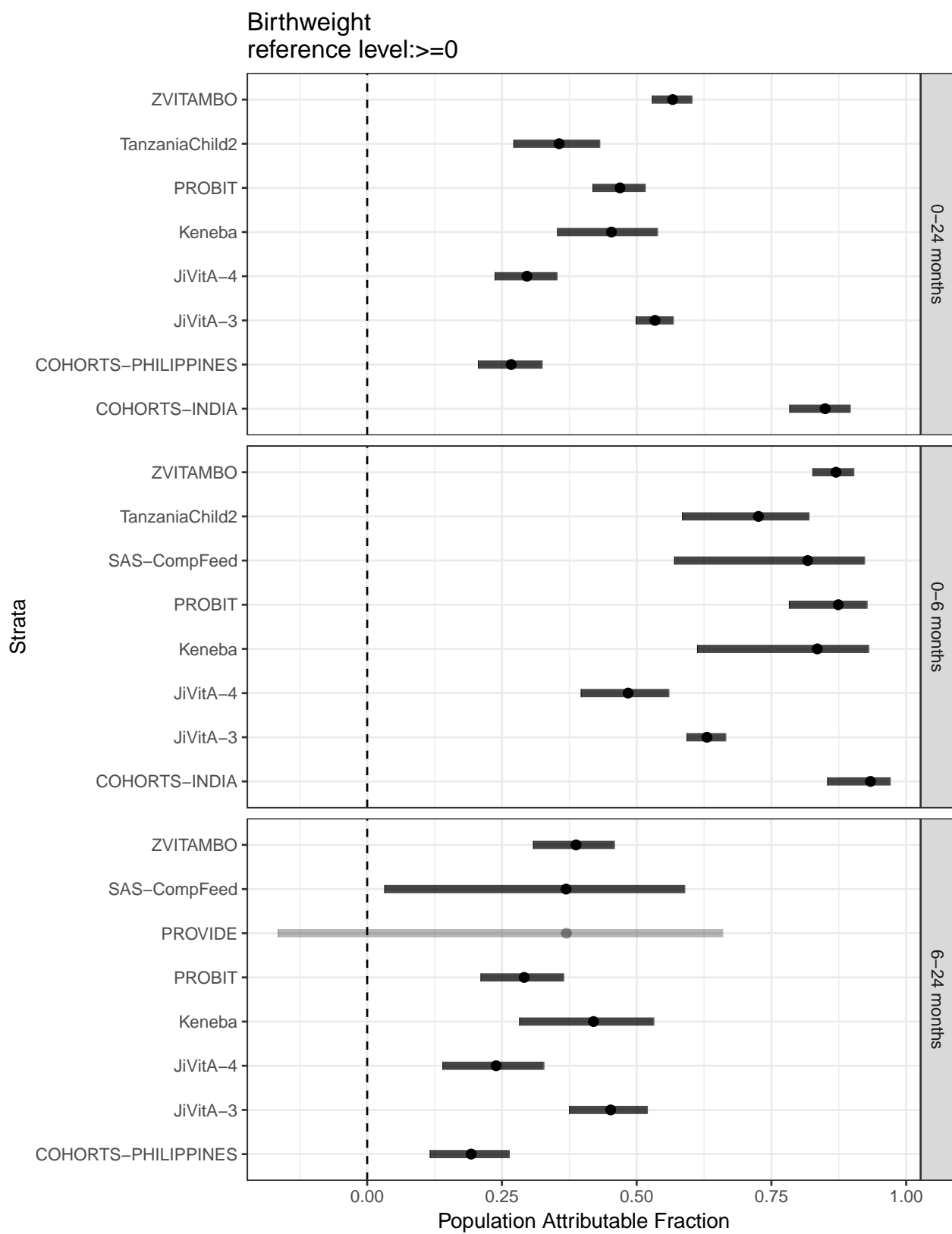
Appendix 3 - Population Attributable Fraction stratified by cohort

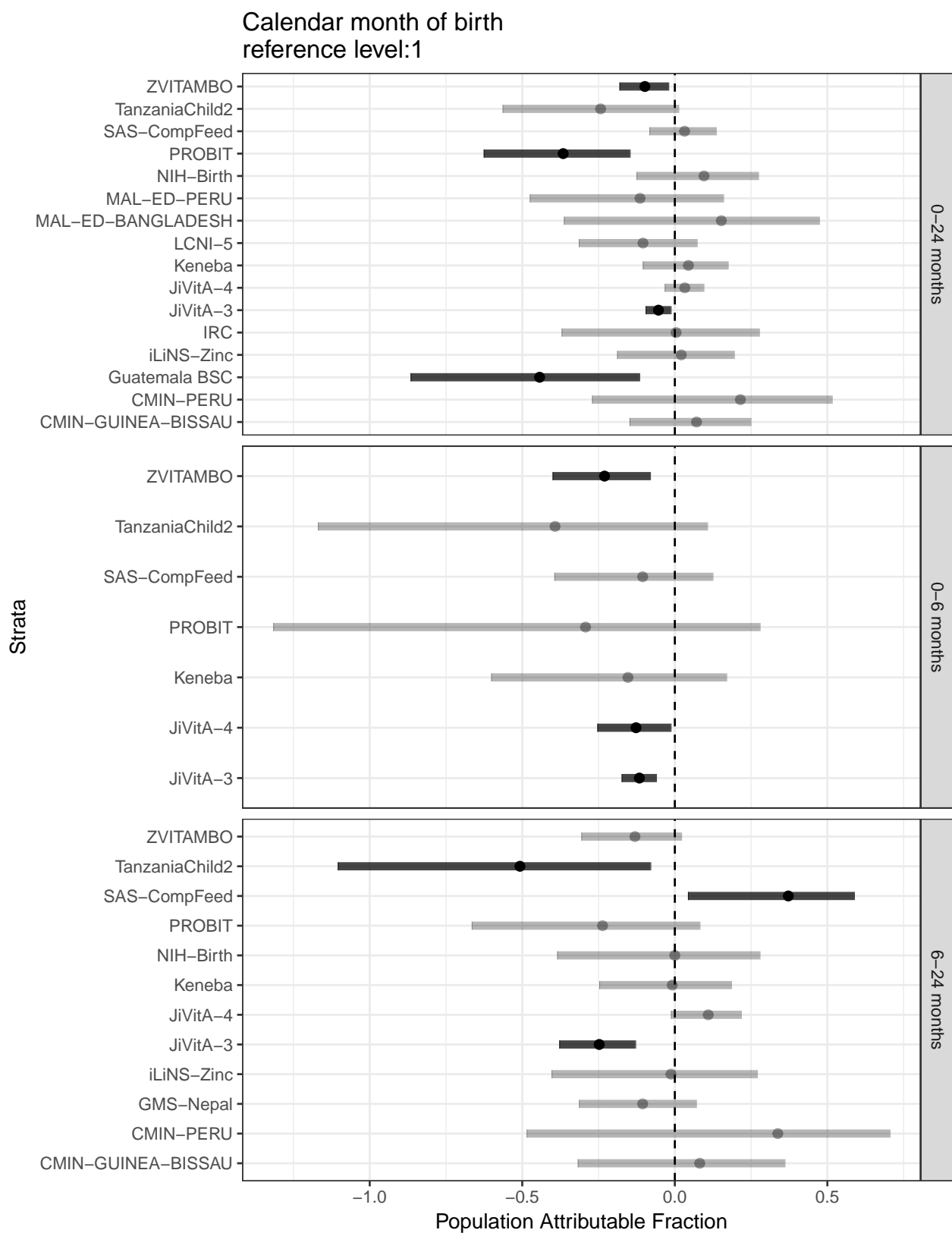
Cumulative incidence of stunting from birth to 24 months

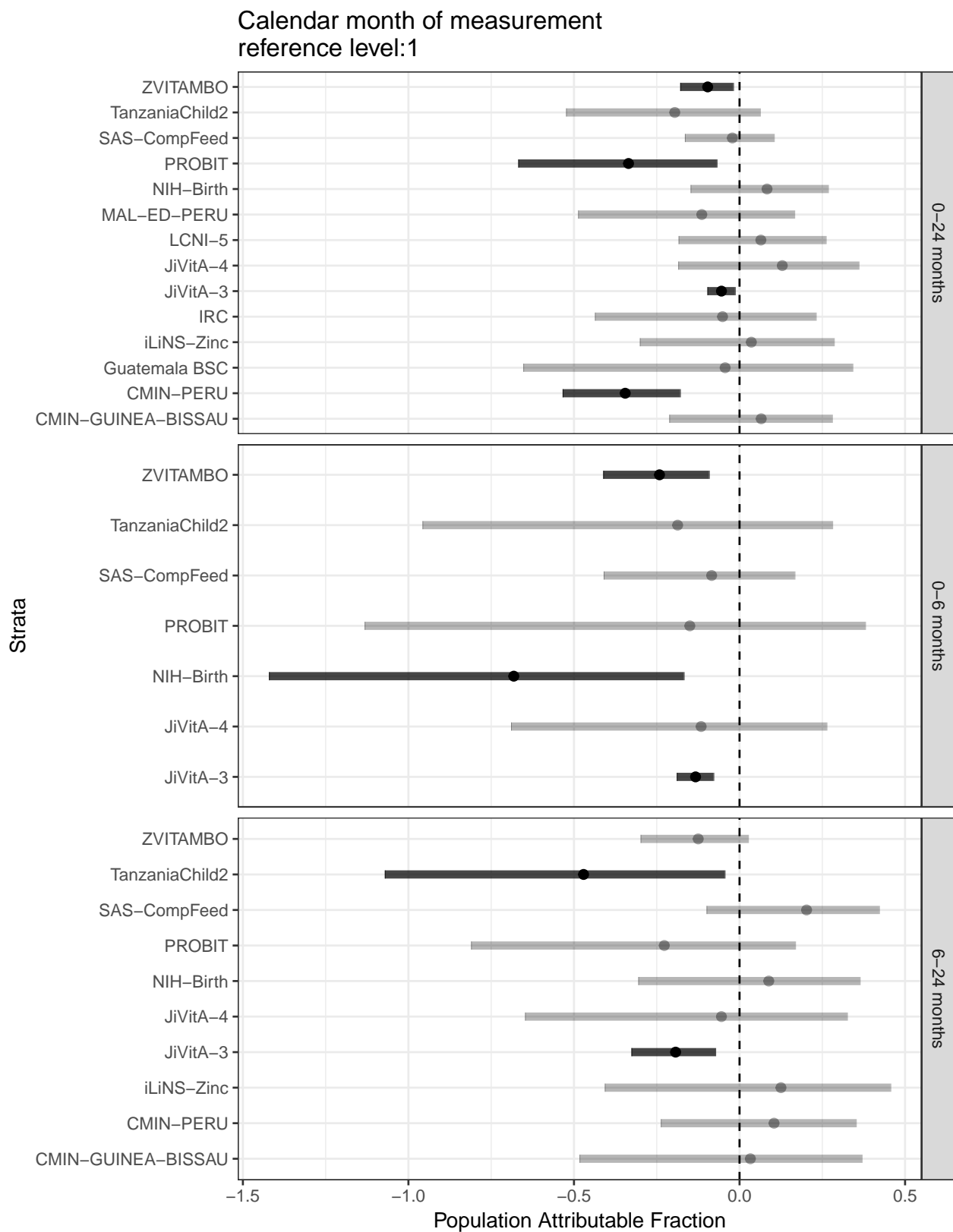
Child characteristics



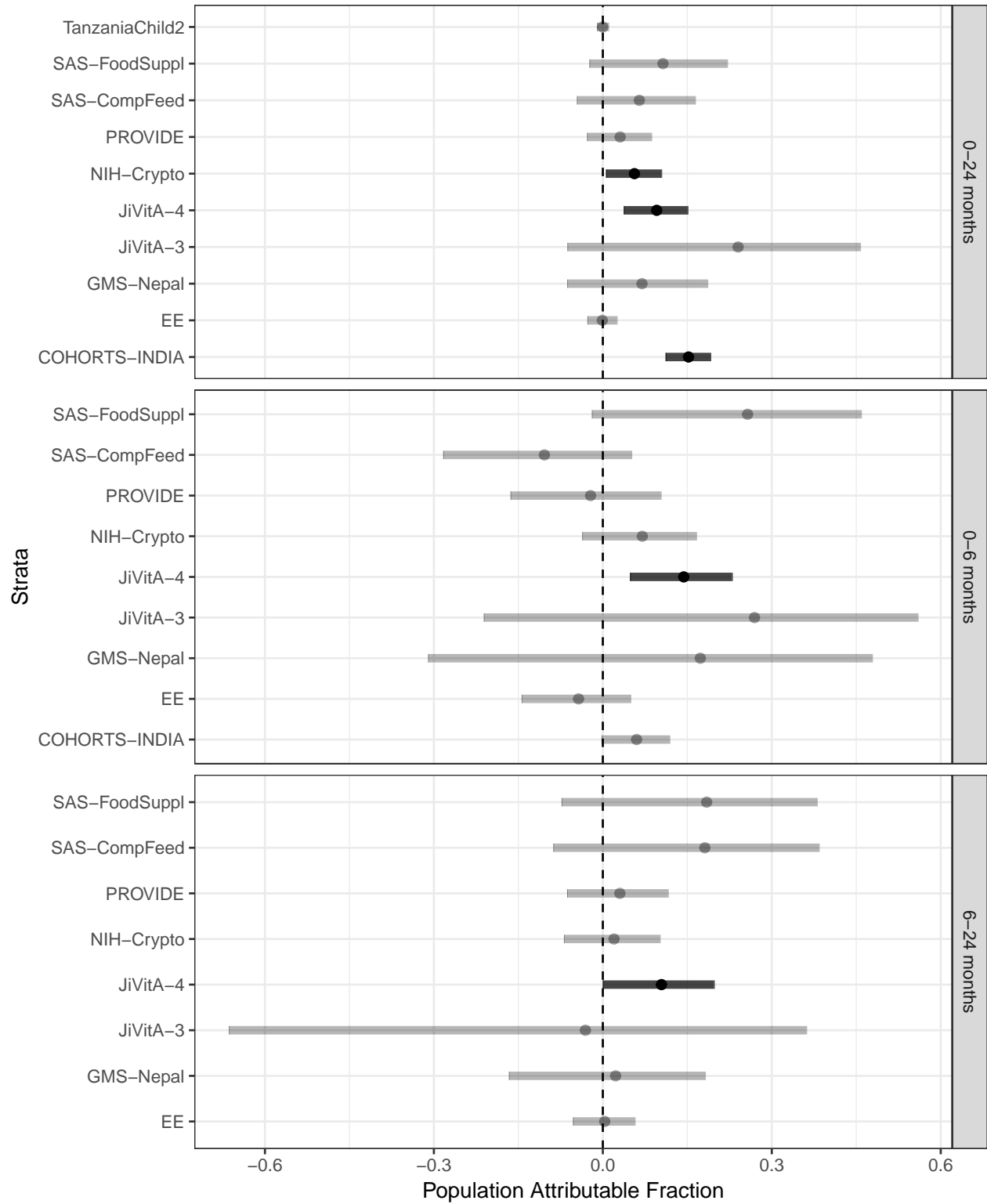




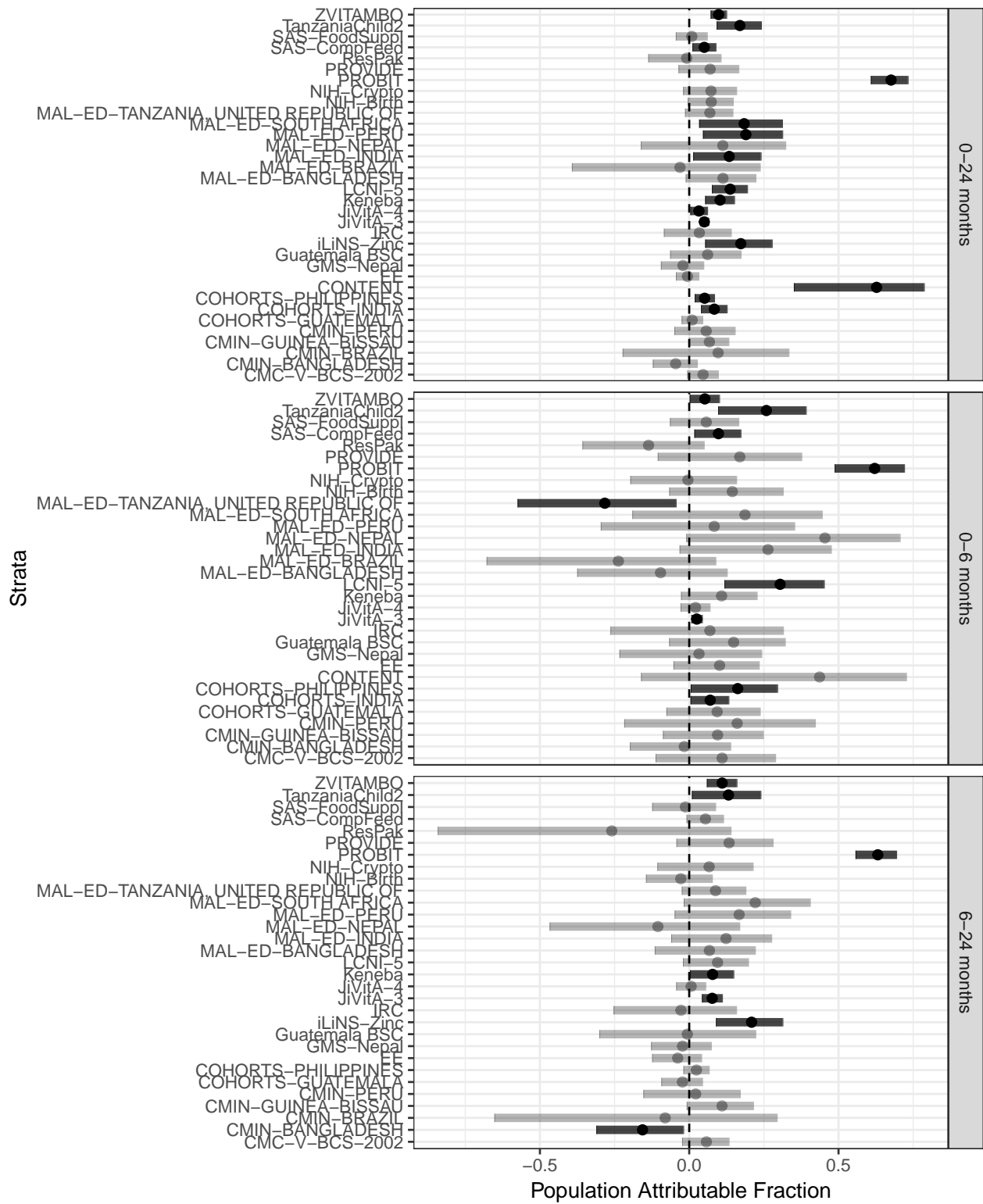


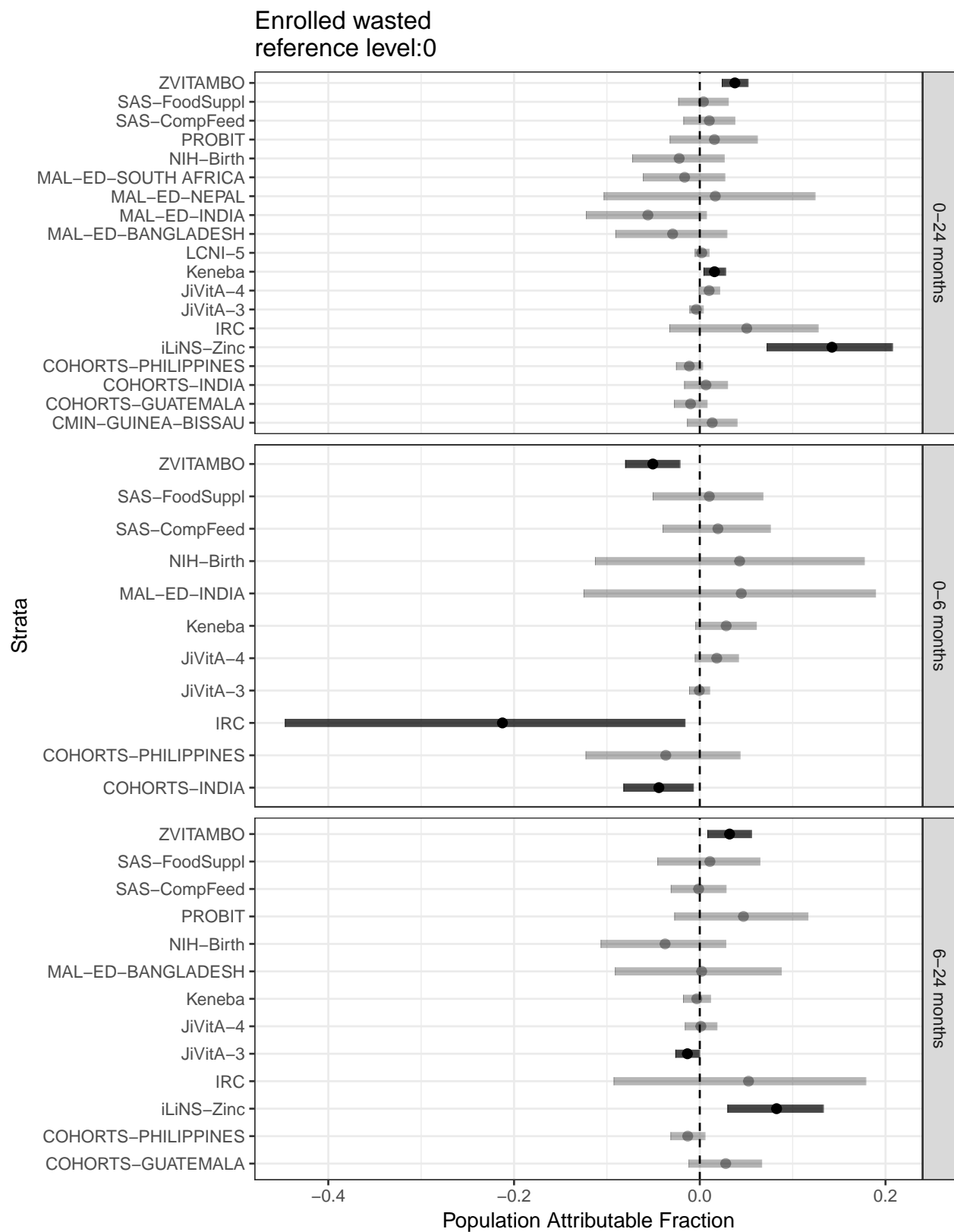


Child delivered at home
reference level:0

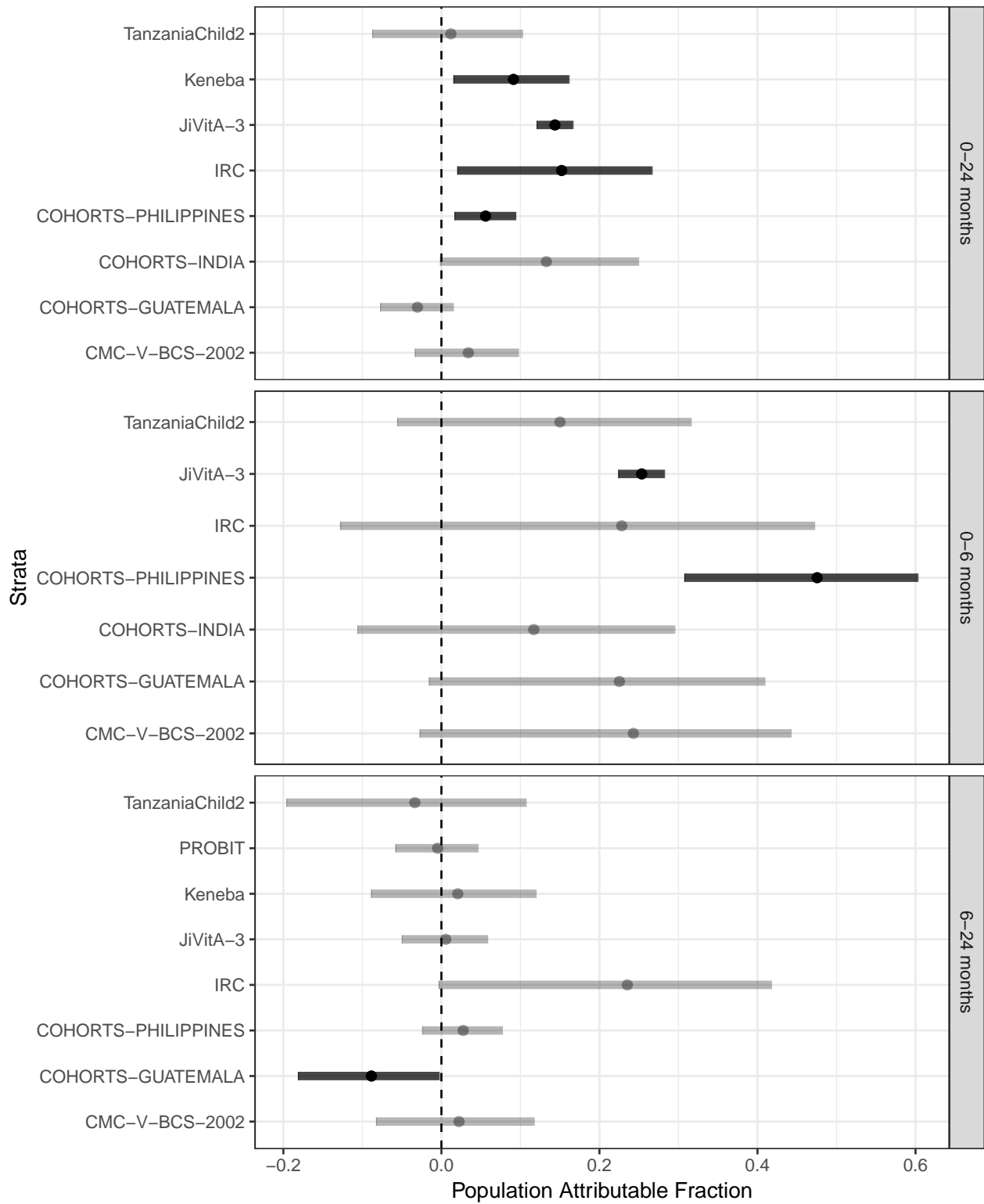


Child's sex
reference level:Female

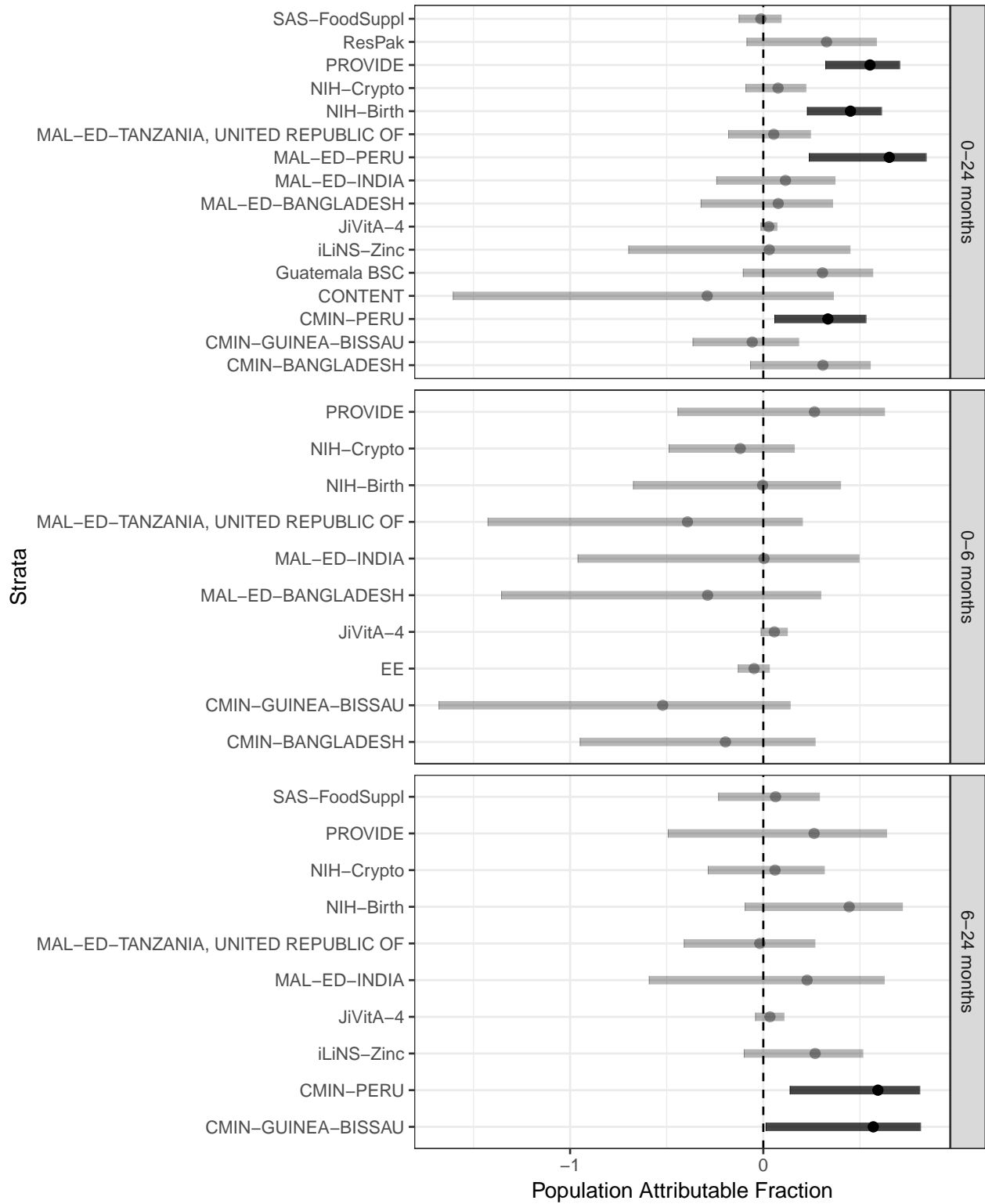




Gestational age at birth in days
reference level:[273–287)

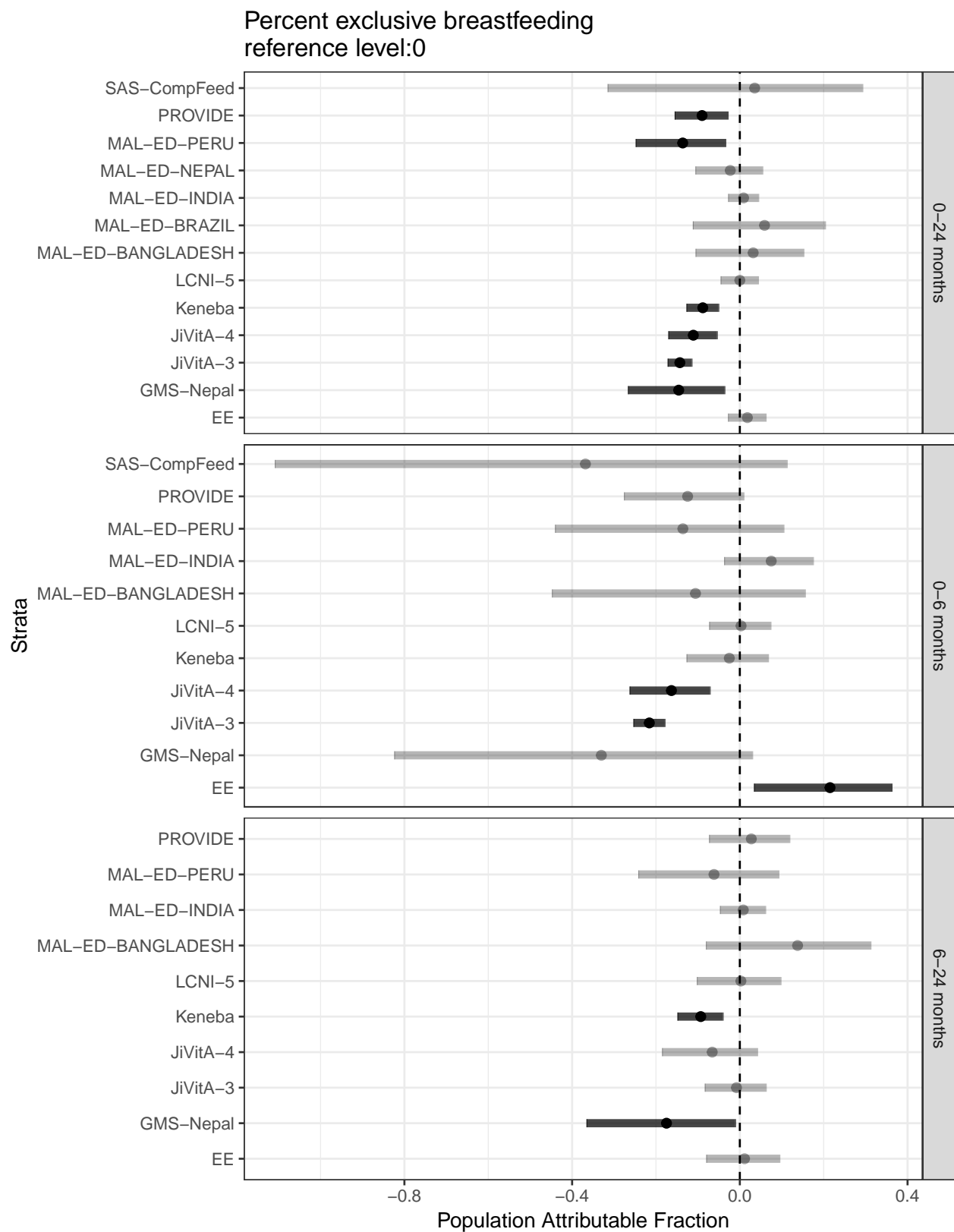


Percent diarrhea in first 24 months
reference level:Q1

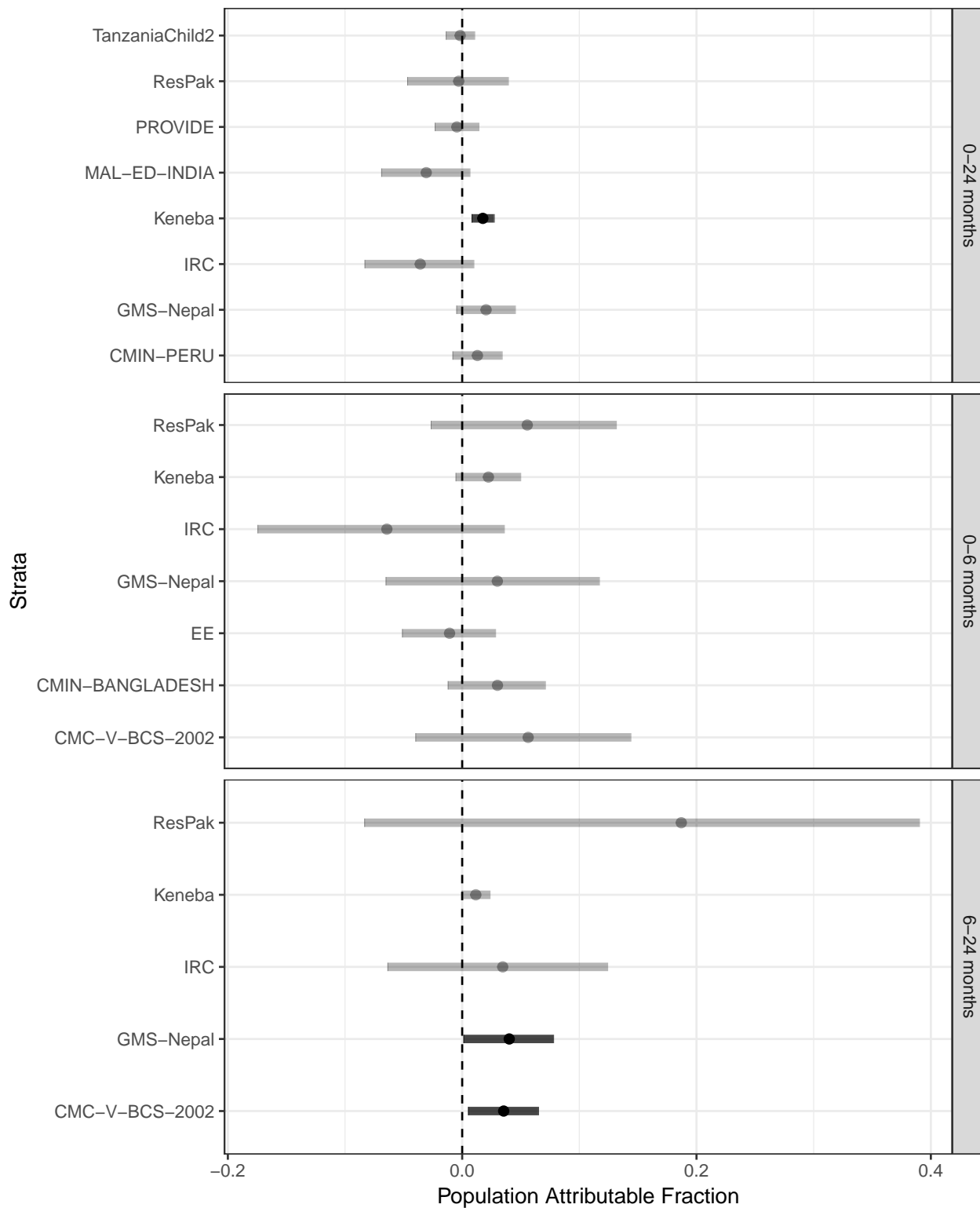


Percent diarrhea in first 6 months
reference level:Q1

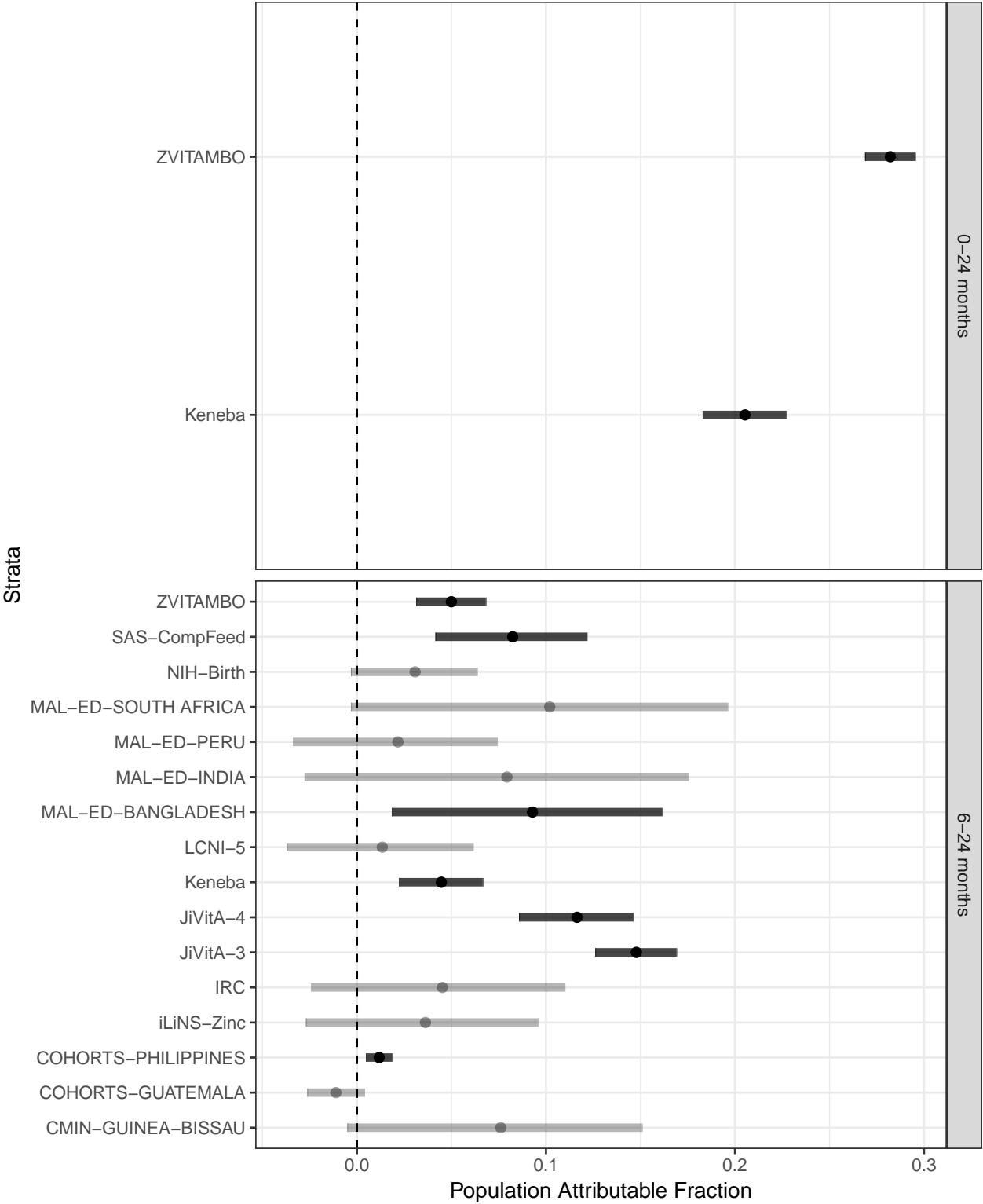




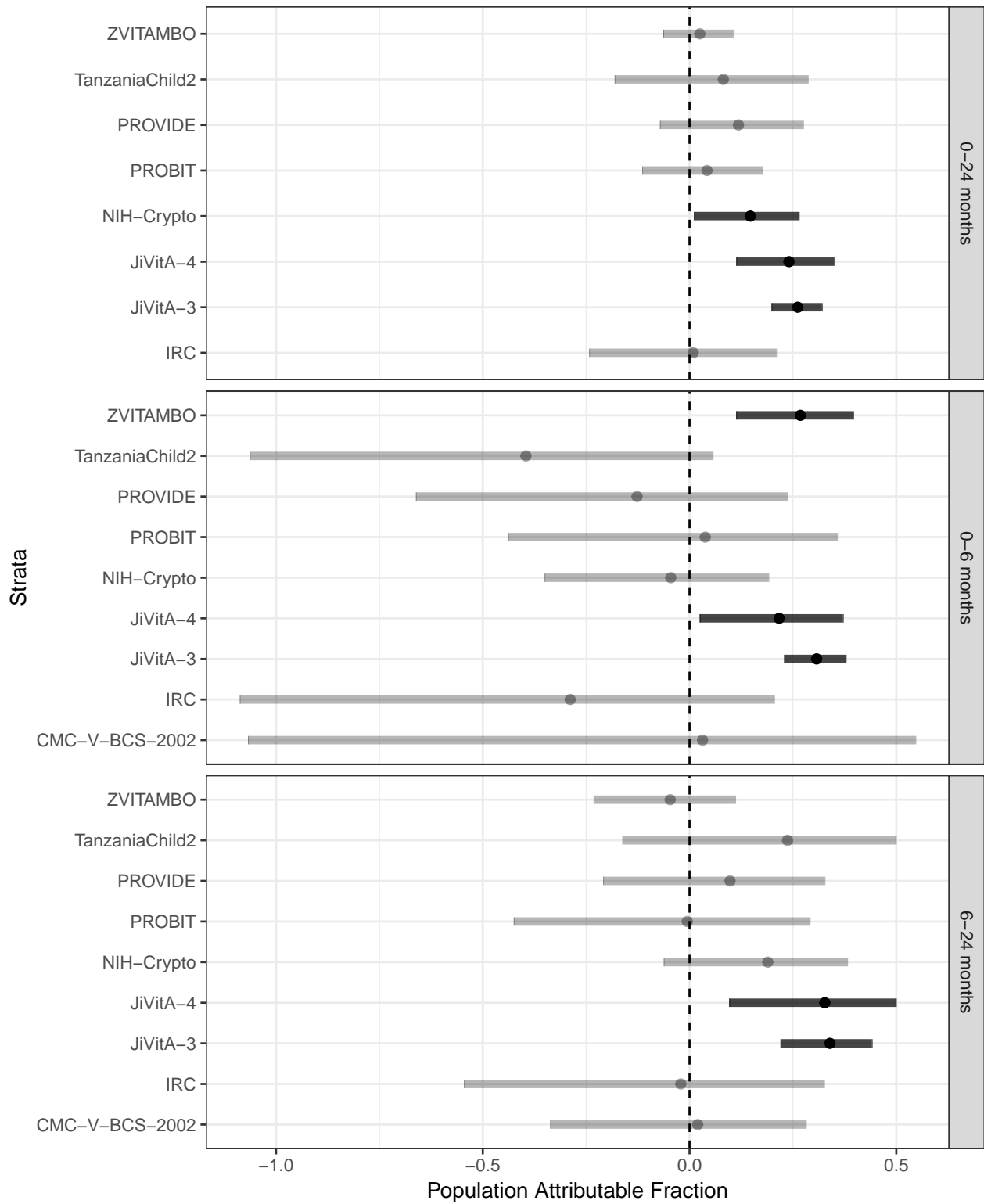
Persistent wasting in first 6 months reference level:0



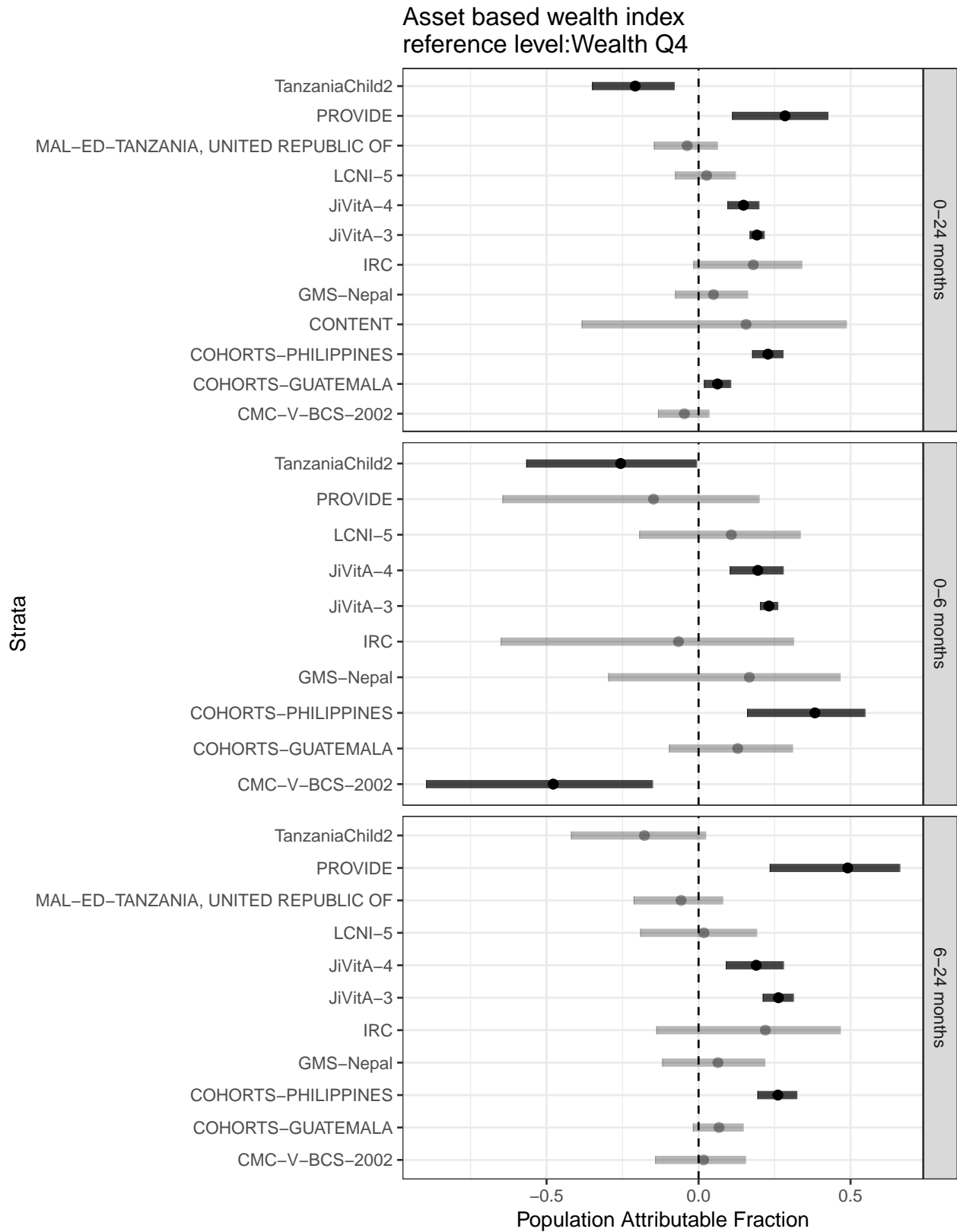
Stunted at enrollment
reference level:0



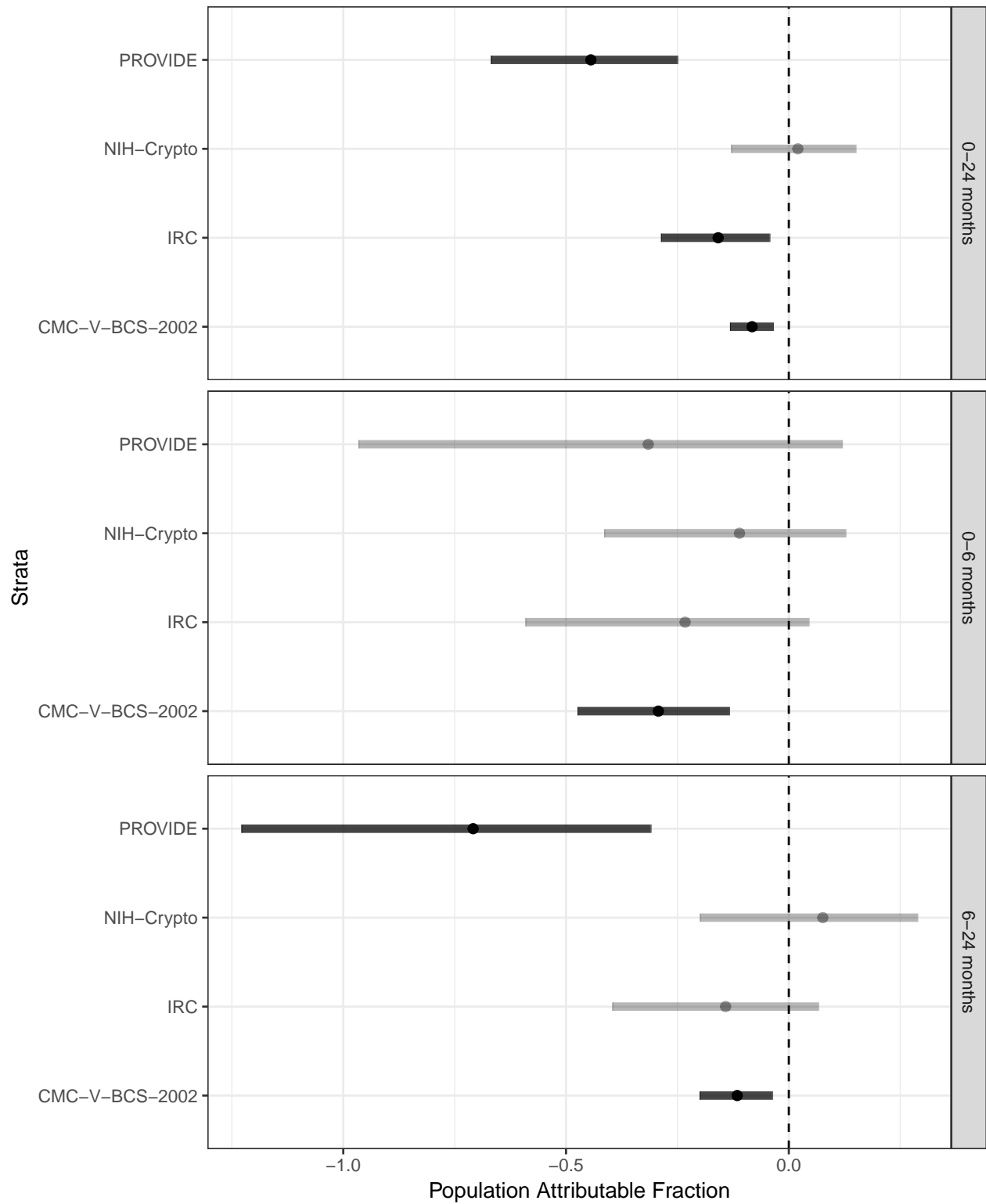
Vaginal delivery
reference level:0

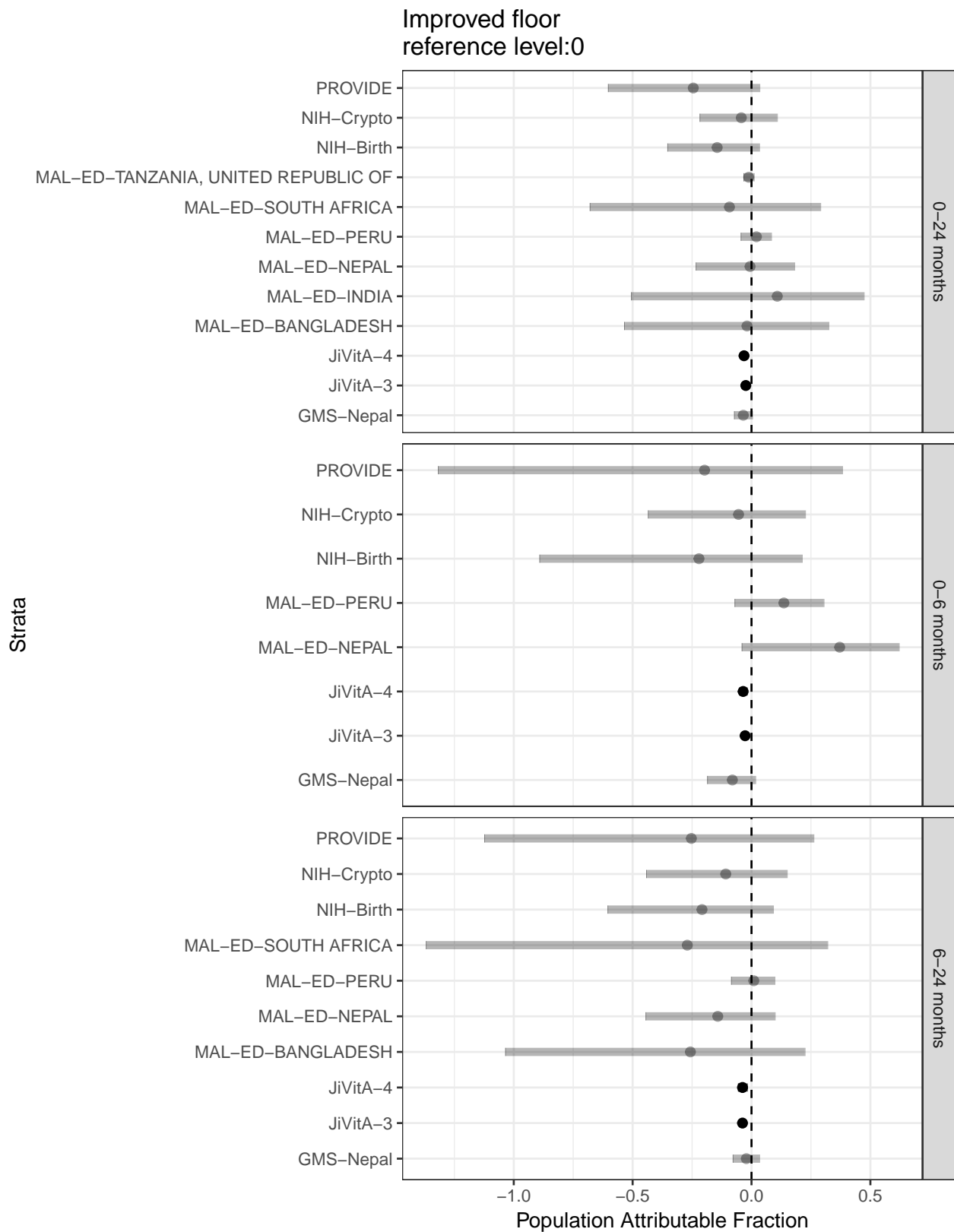


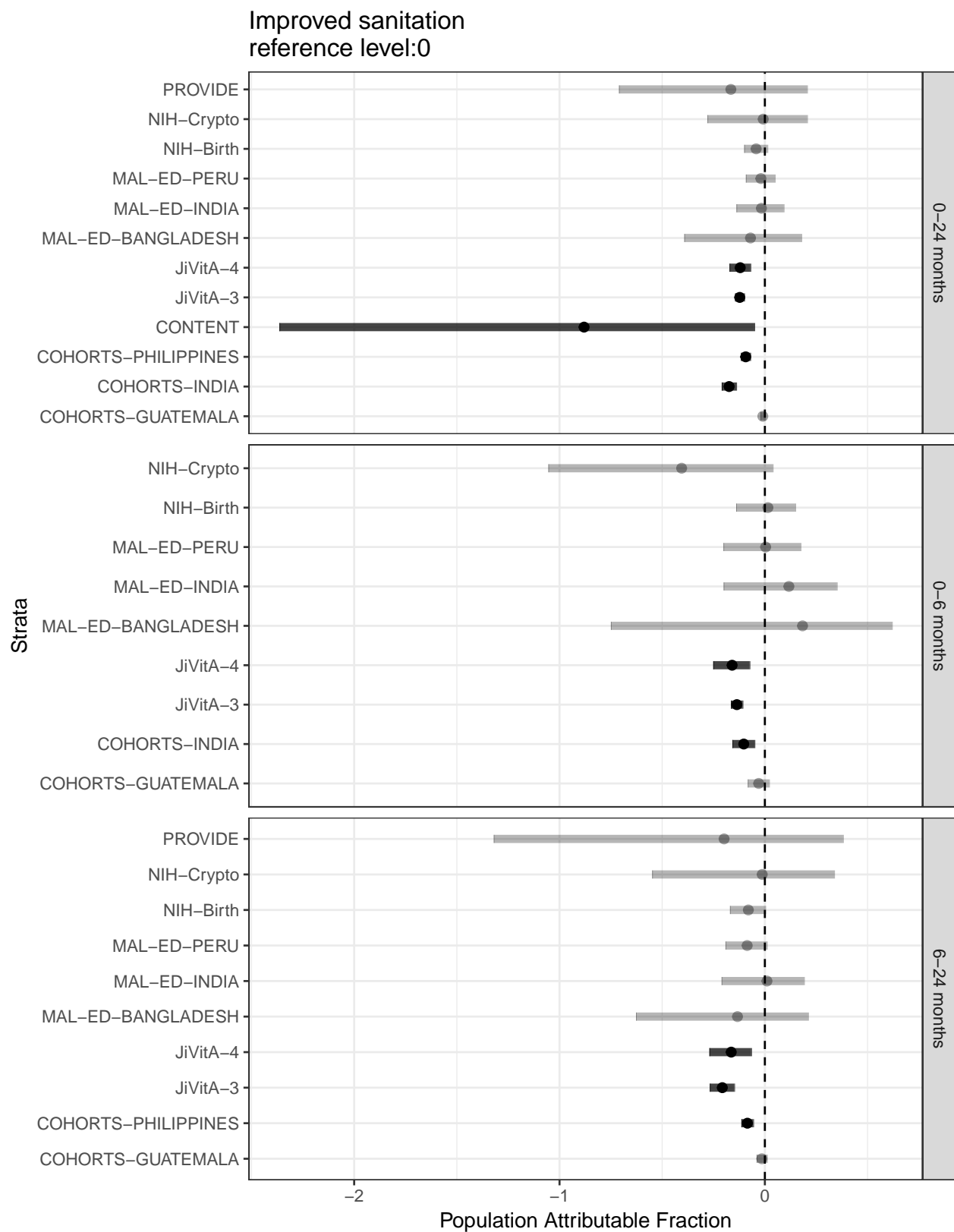
Household characteristics



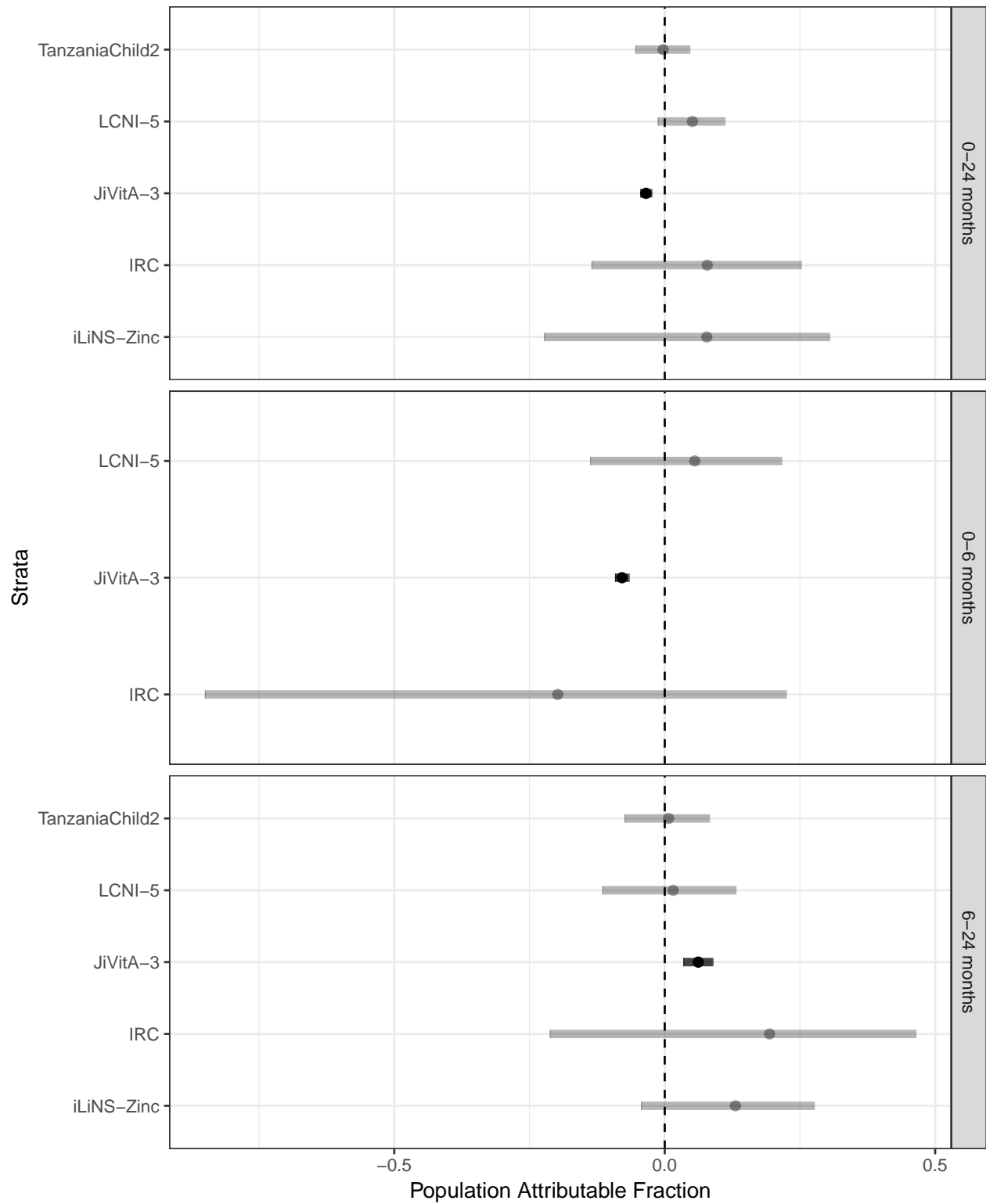
Clean cook
reference level:0



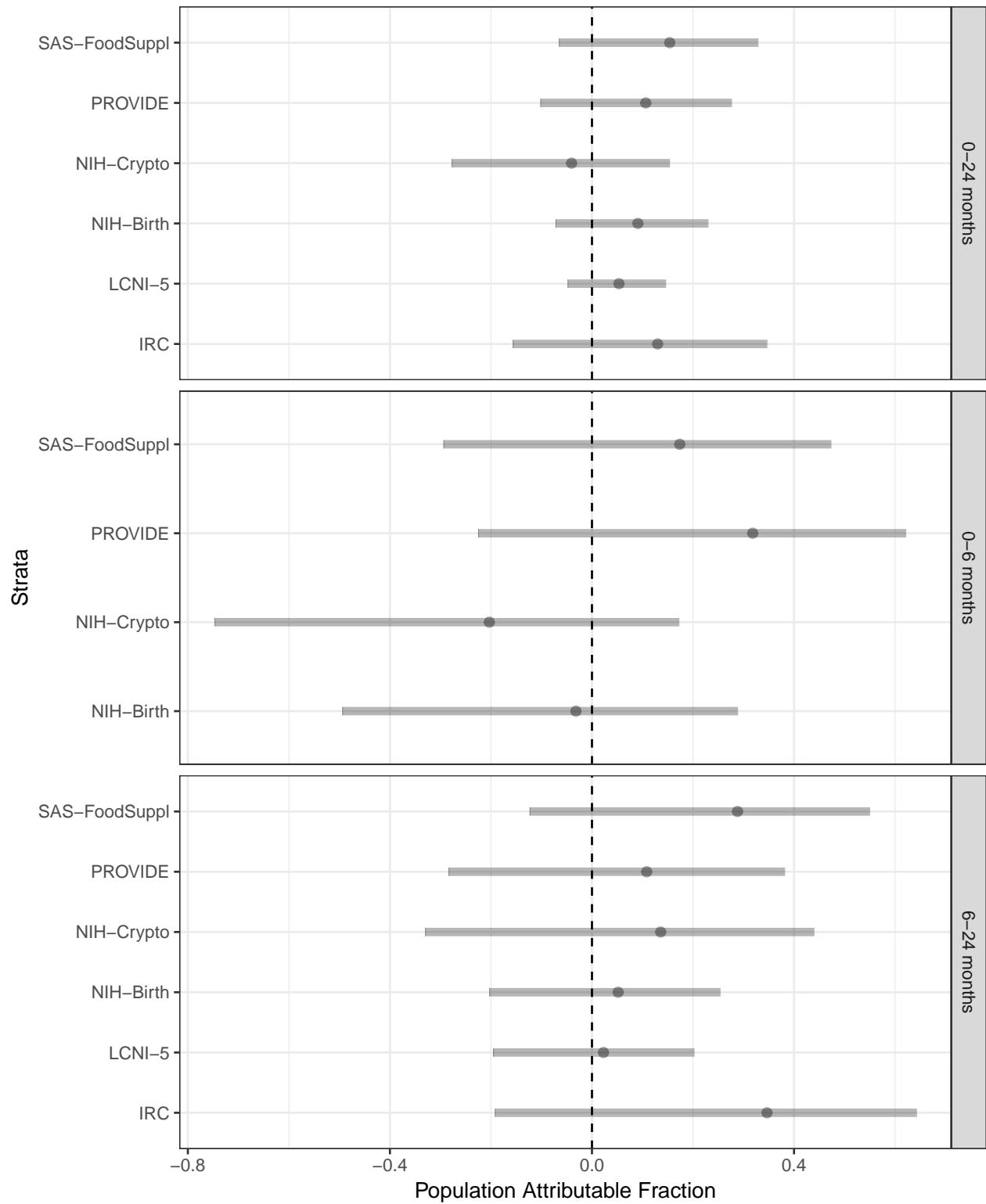




Number of children in the household under 5 years
reference level:1

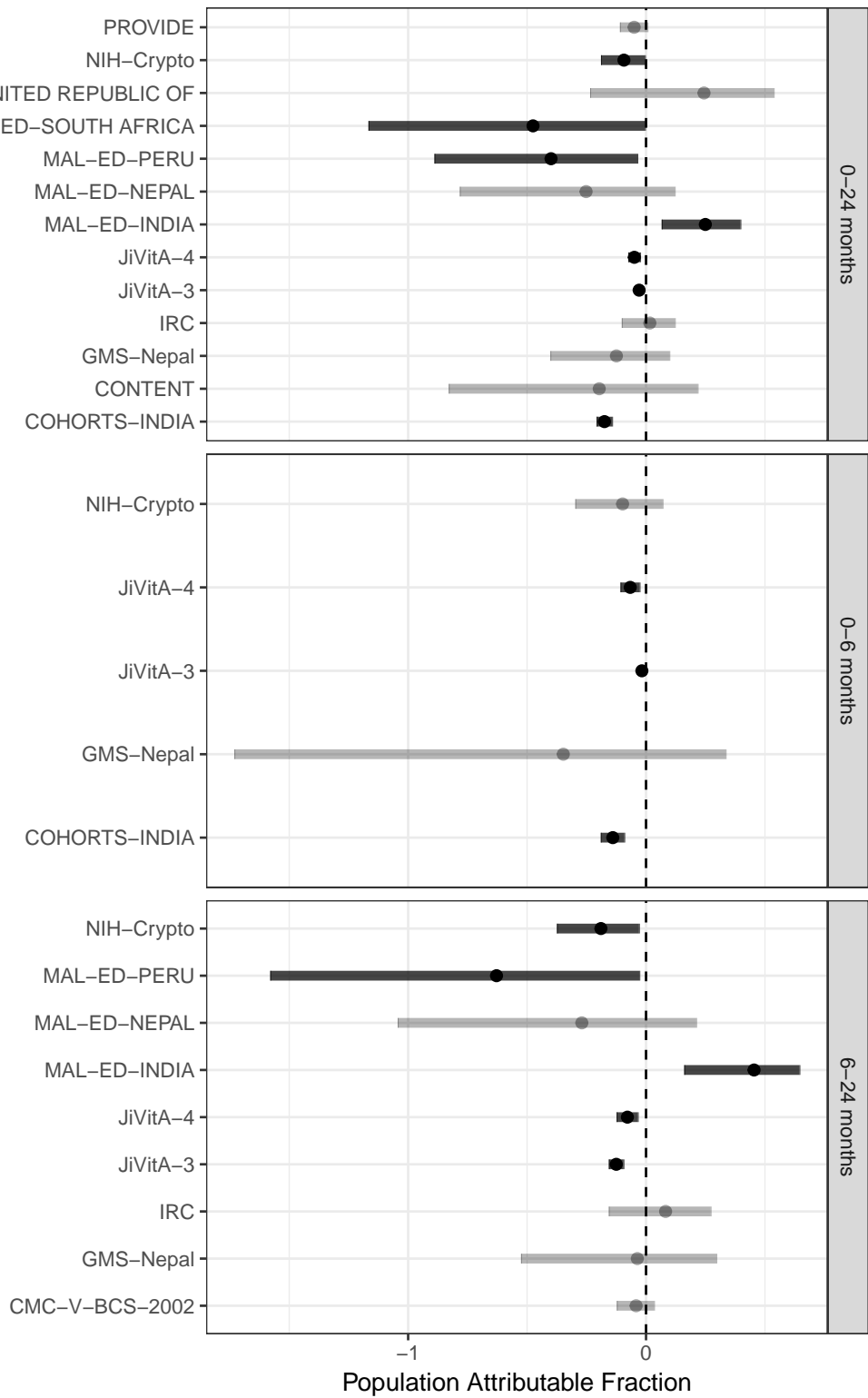


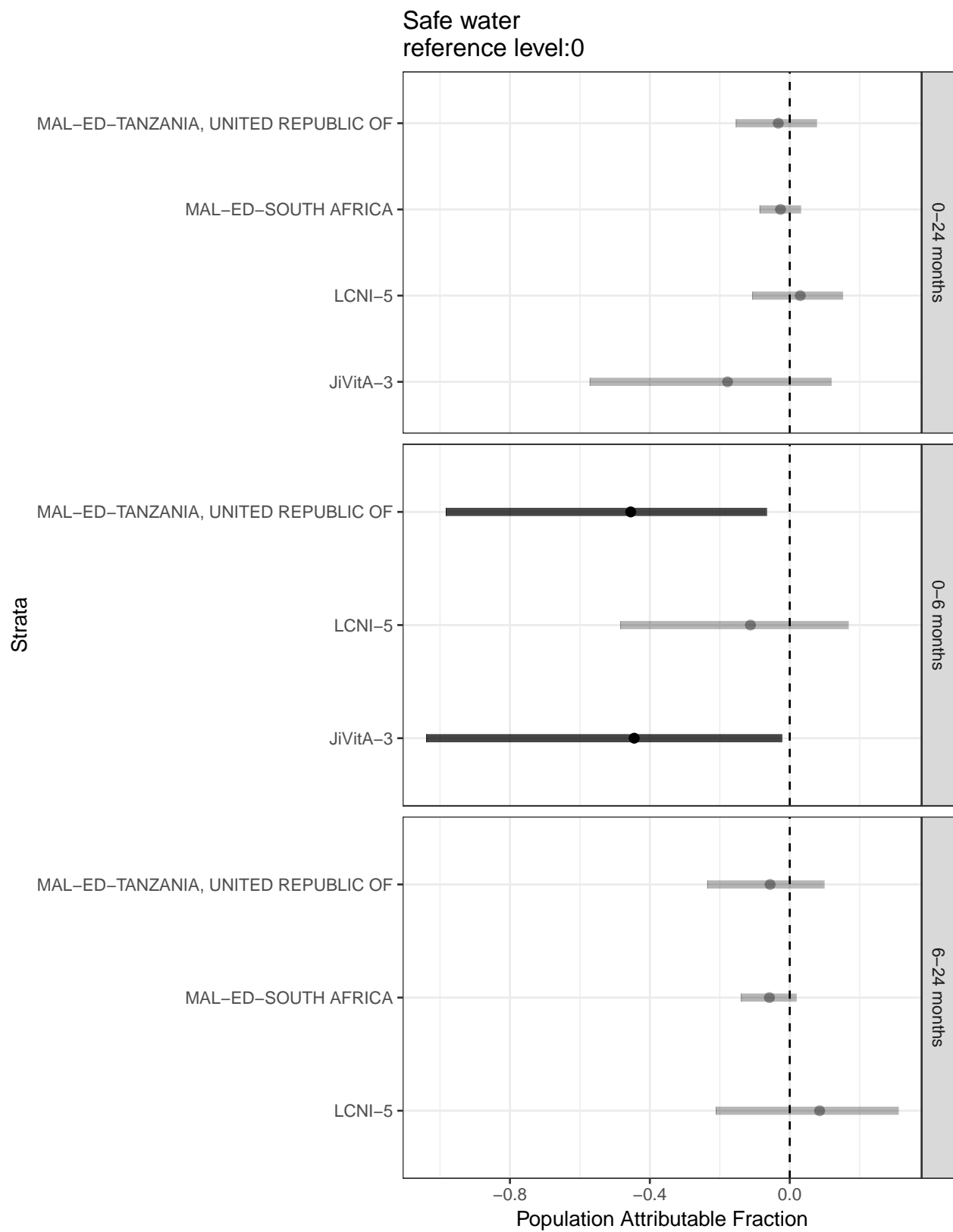
Number of people in the household
reference level:3 or less

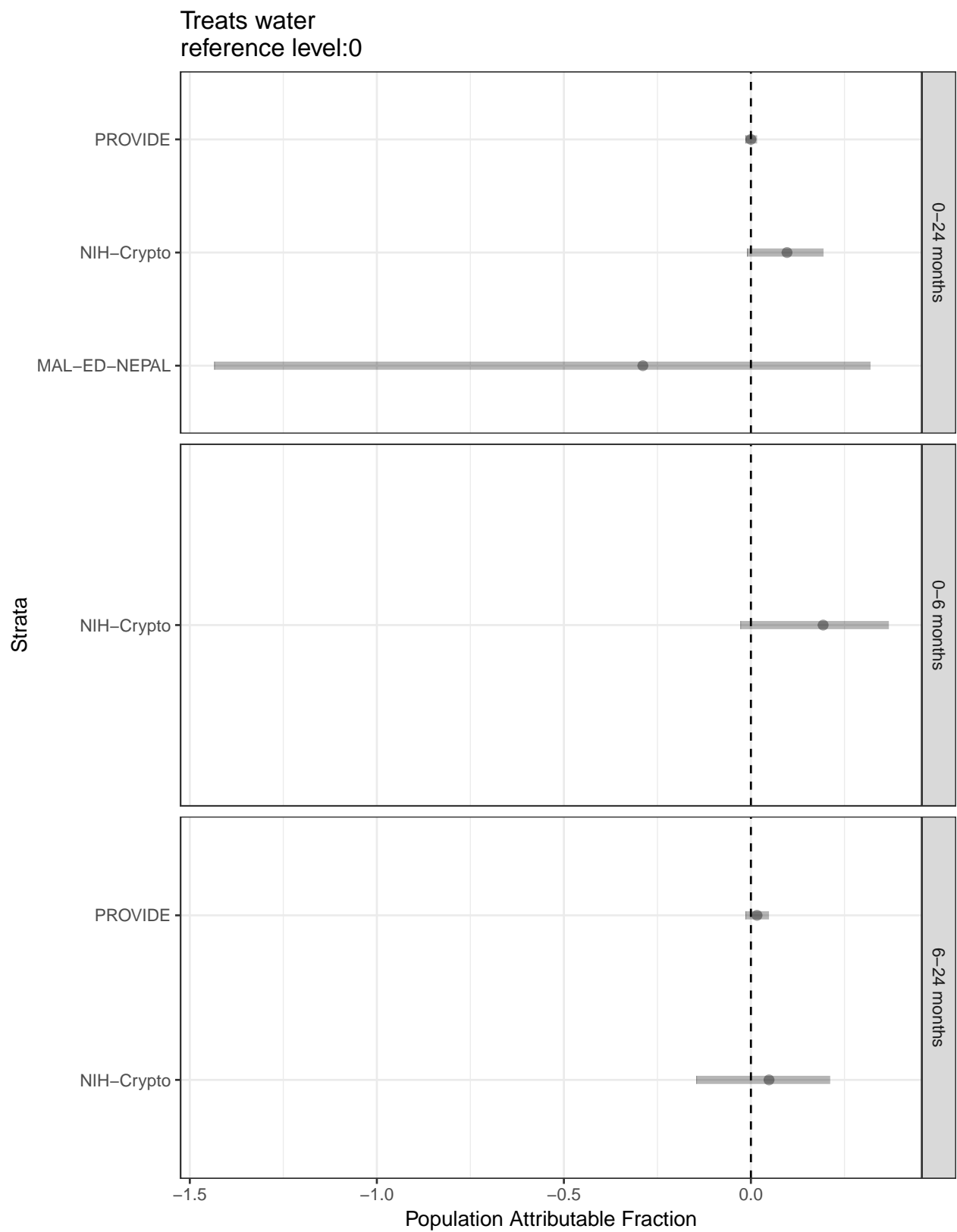


Number of rooms in household
reference level:1

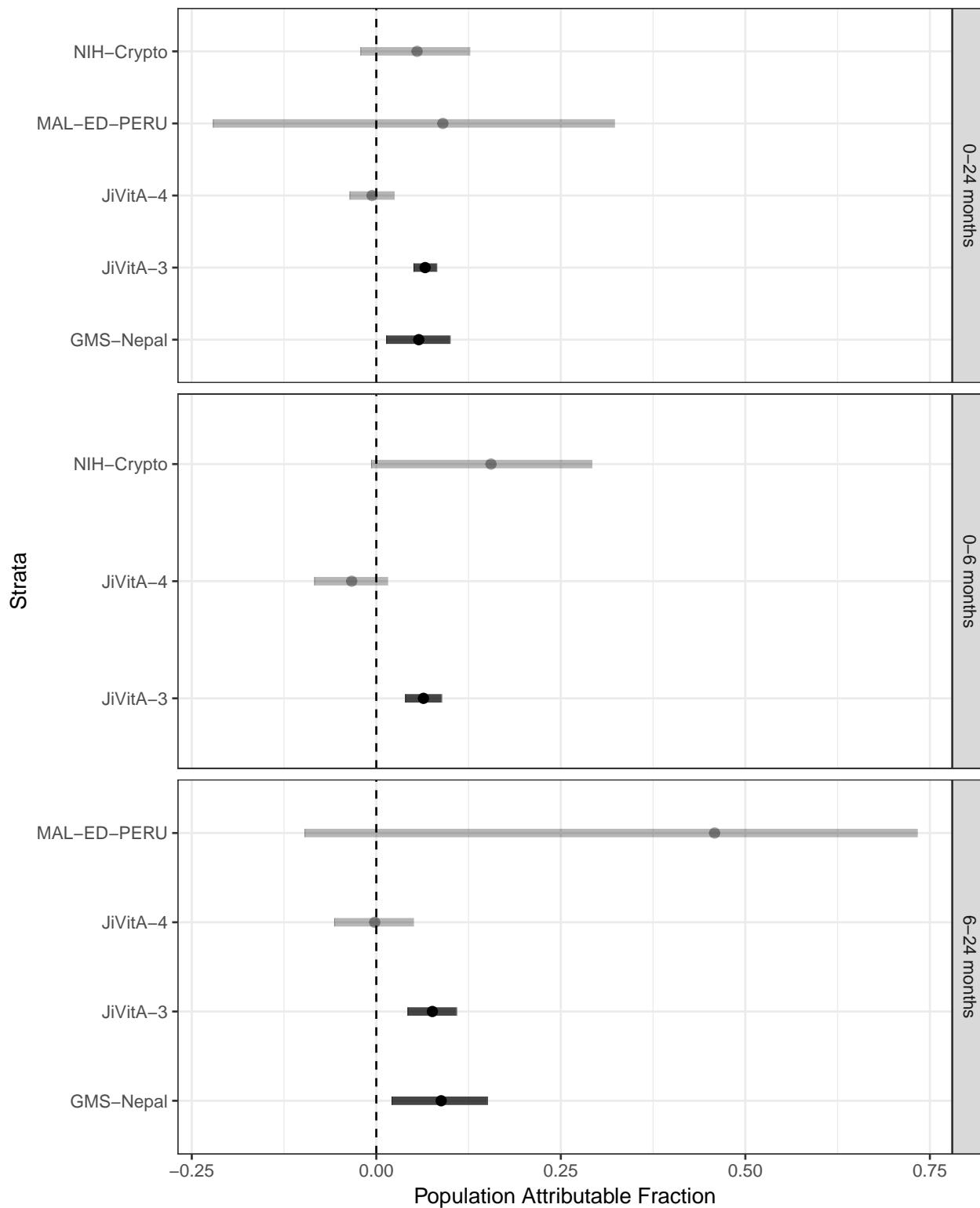
Strata





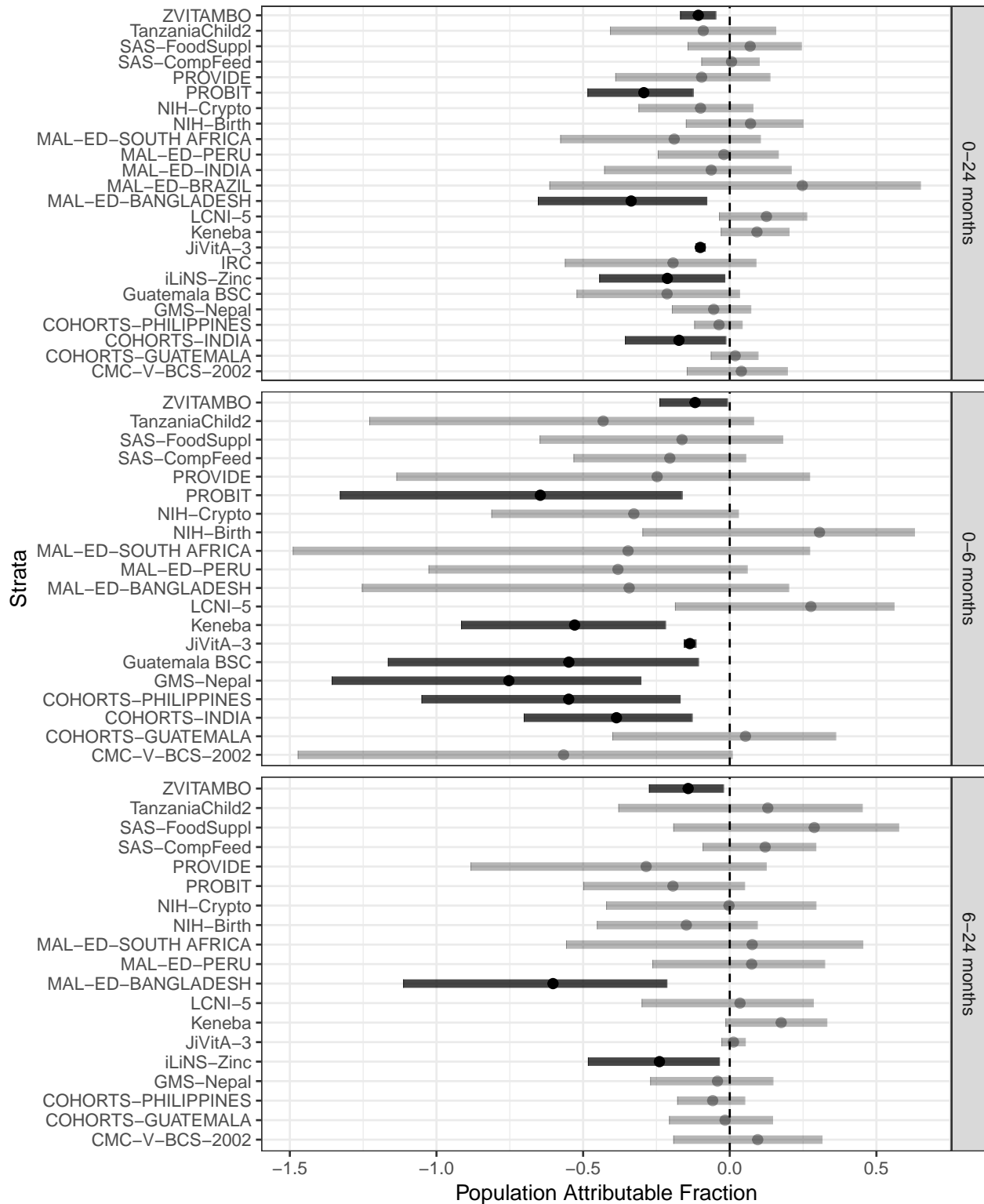


USAID Household Food Insecurity Access Scale (HFIAS) category reference level: Food Secure

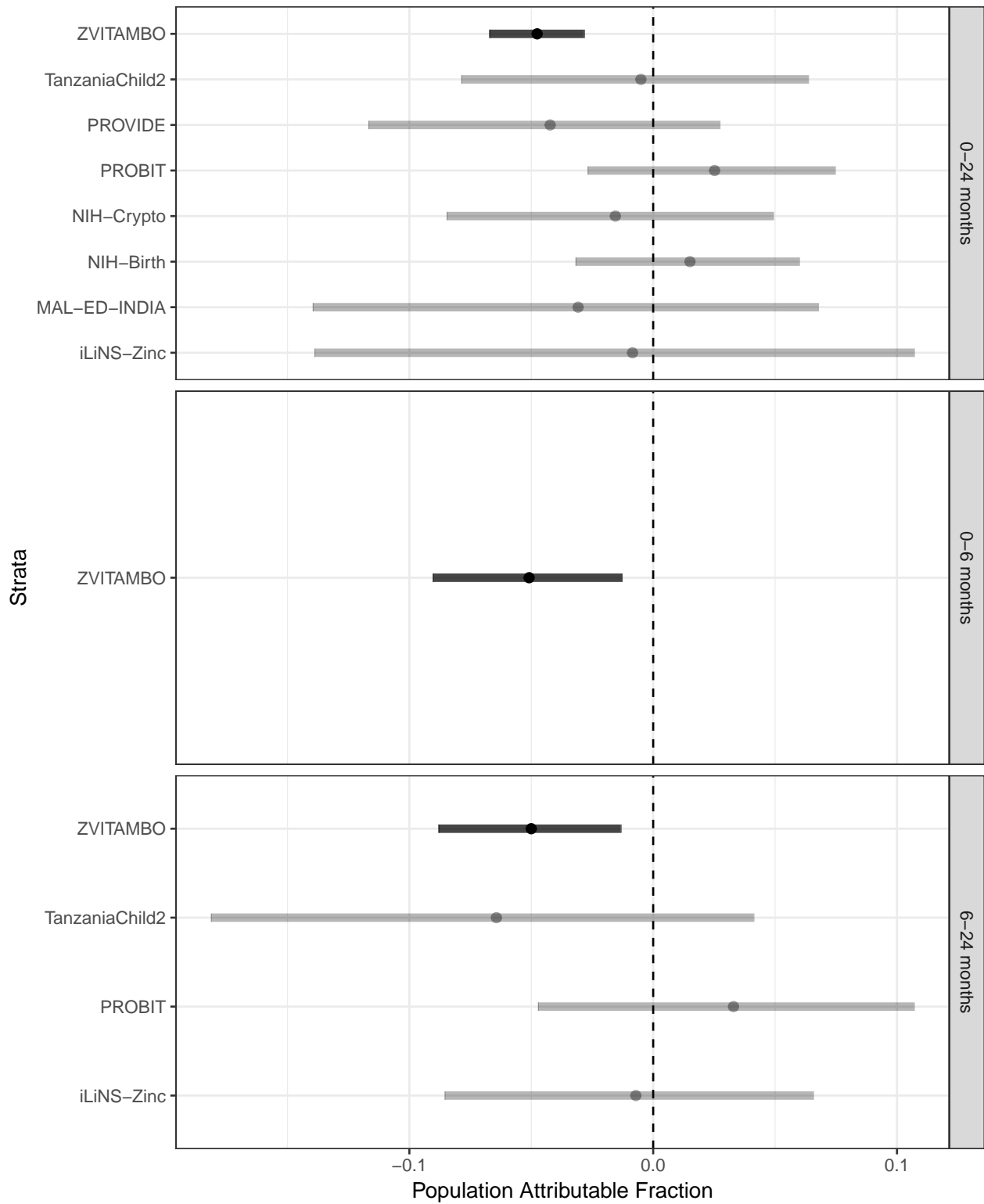


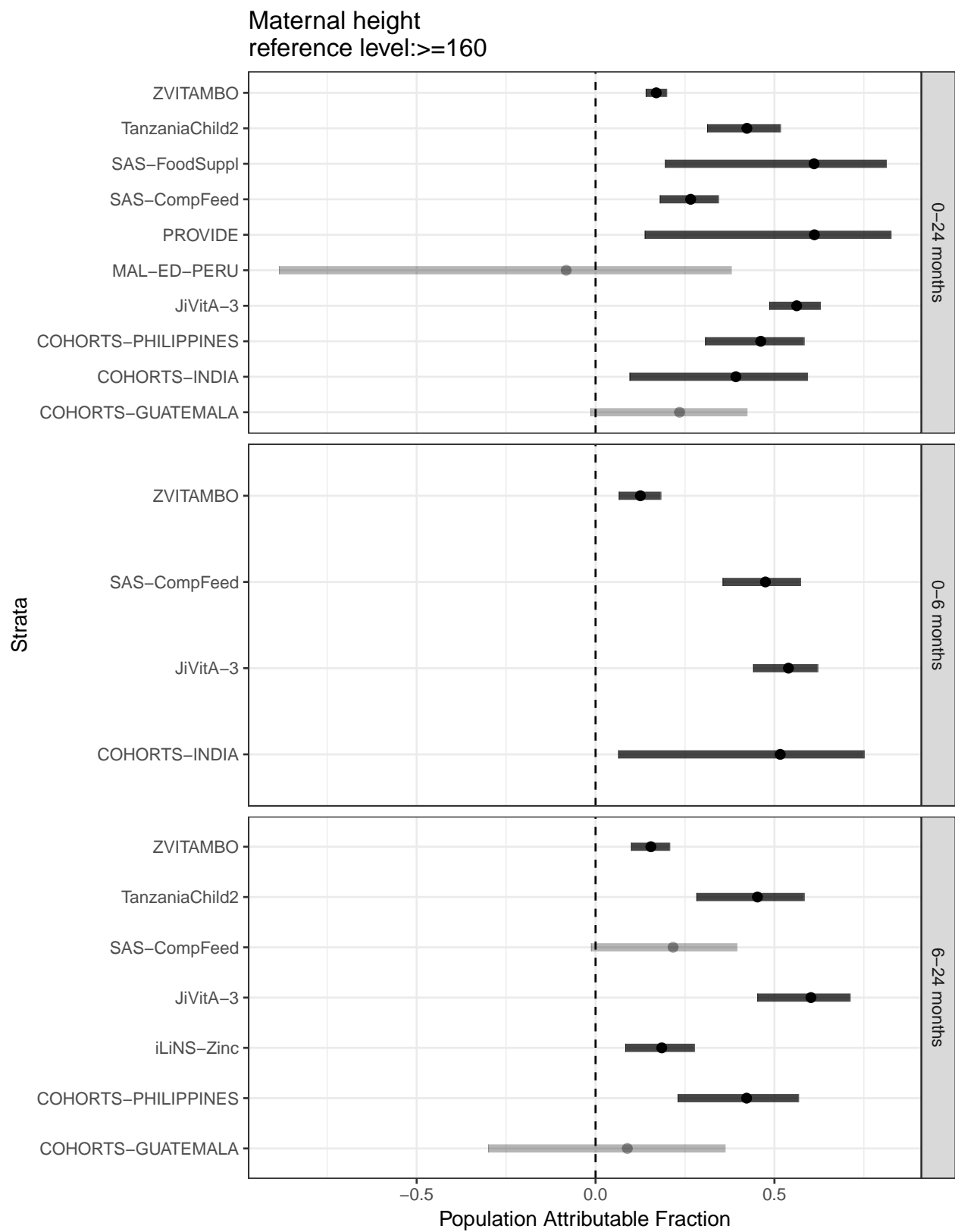
Maternal characteristics

Maternal age
reference level: <20

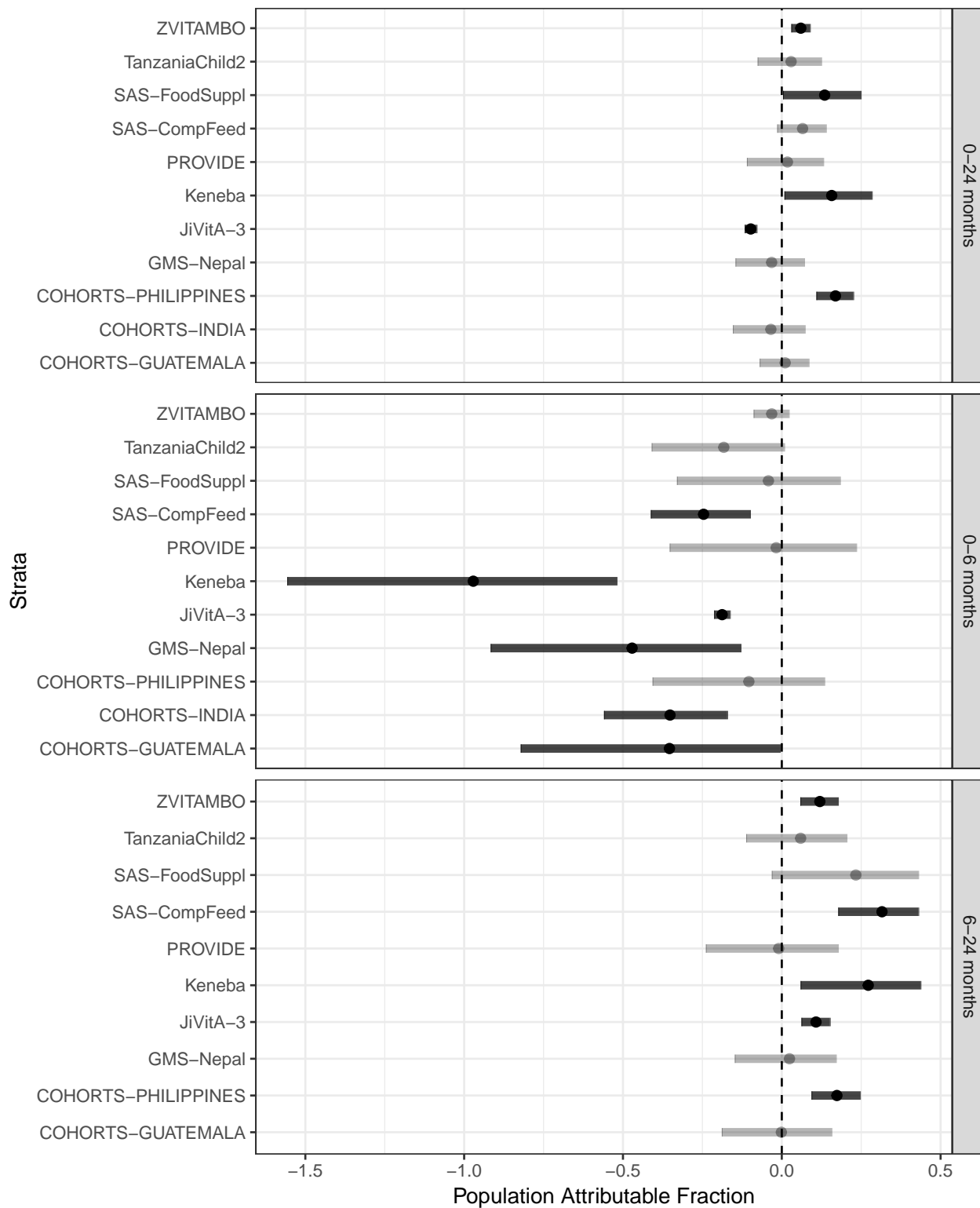


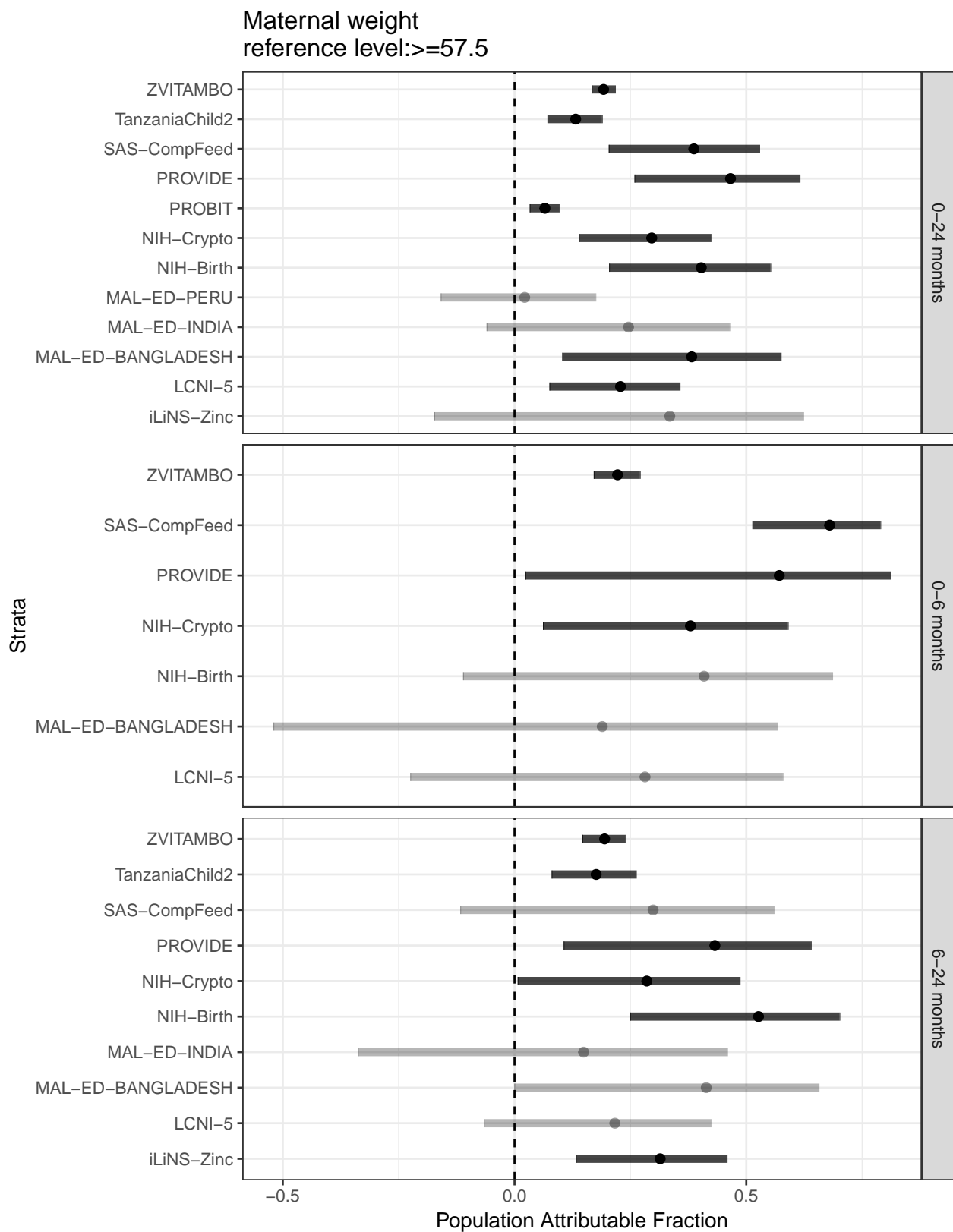
Maternal BMI
reference level:[18.5–25)



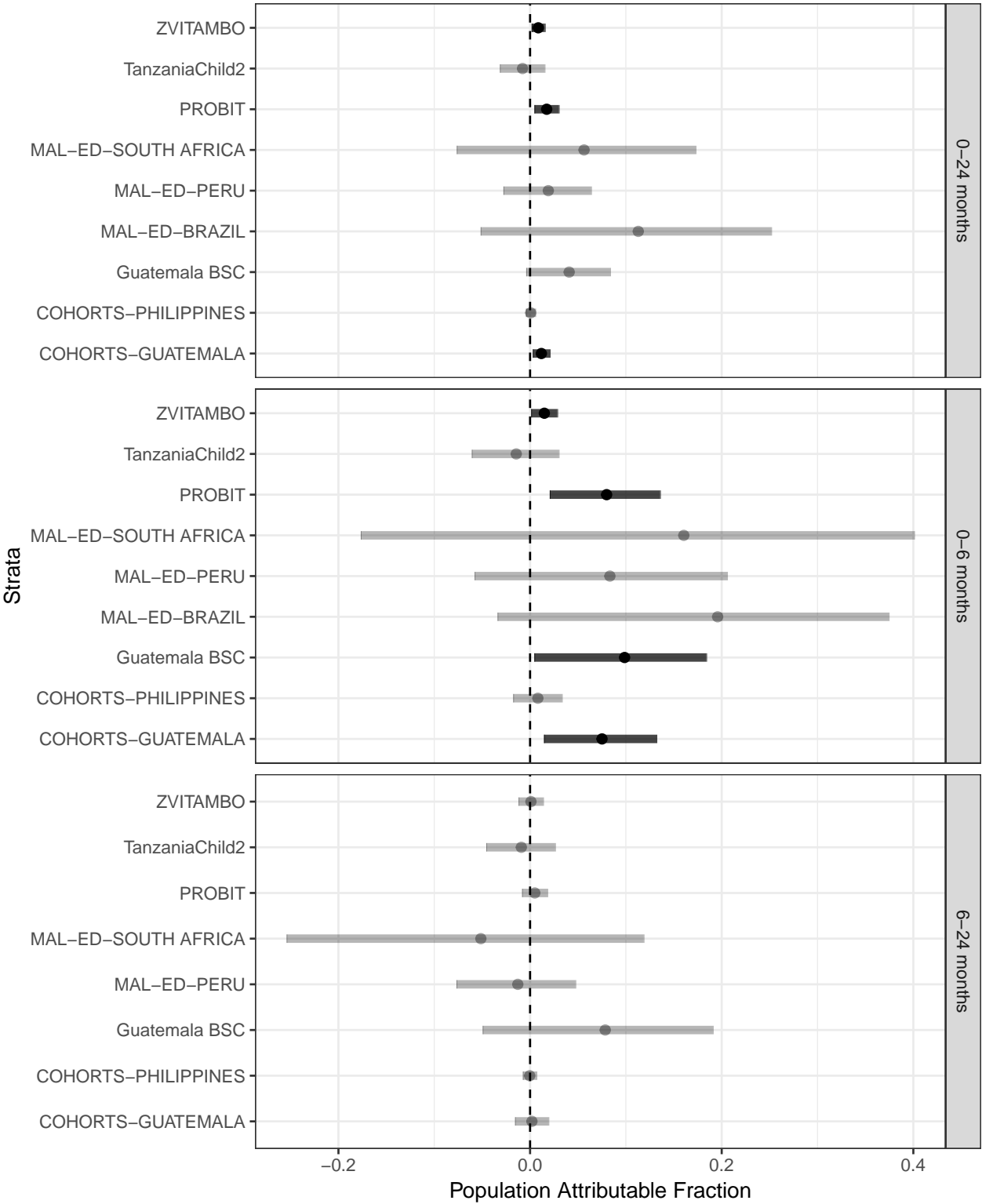


Maternal parity
reference level:1

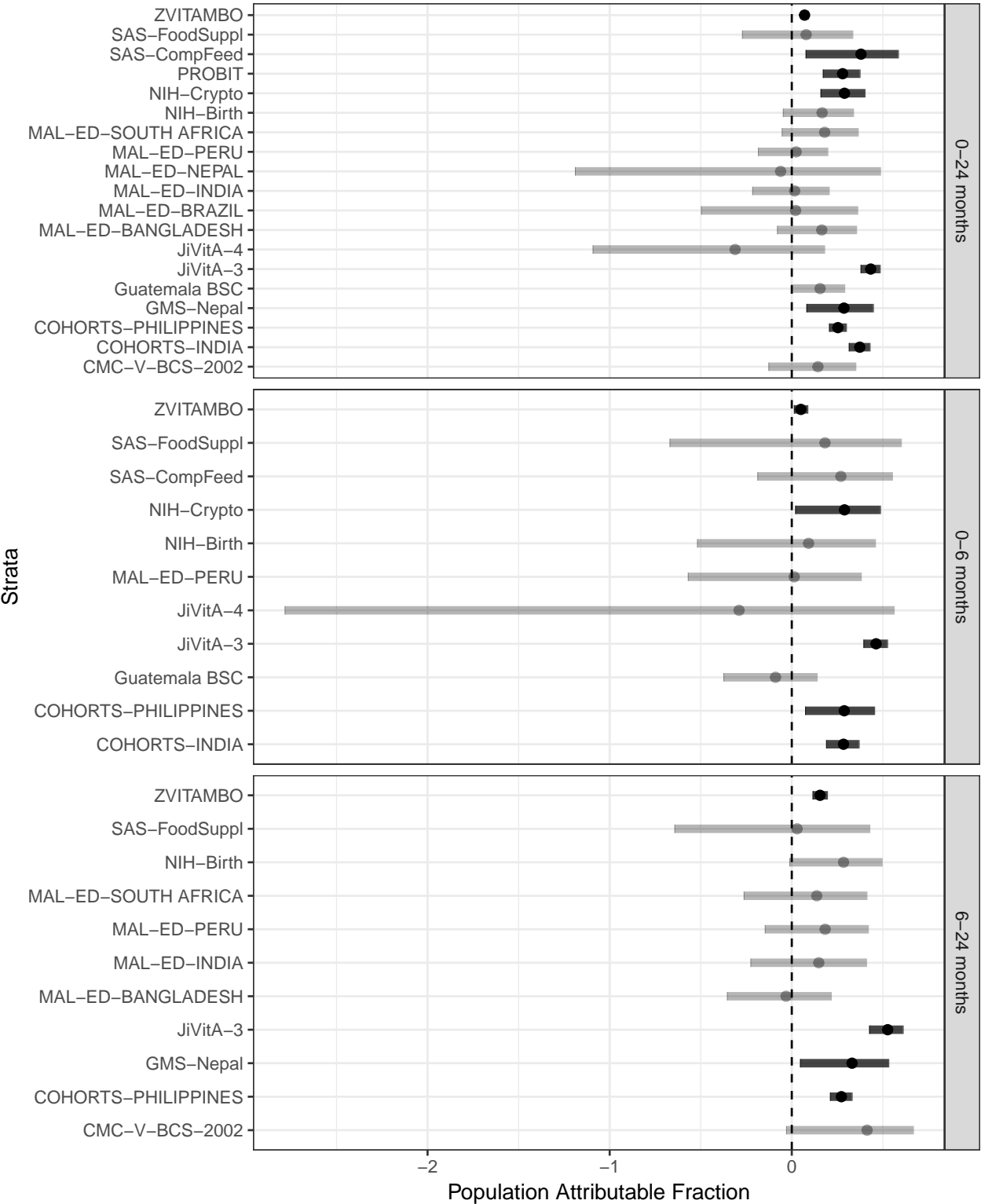




Mother is unmarried
reference level:0

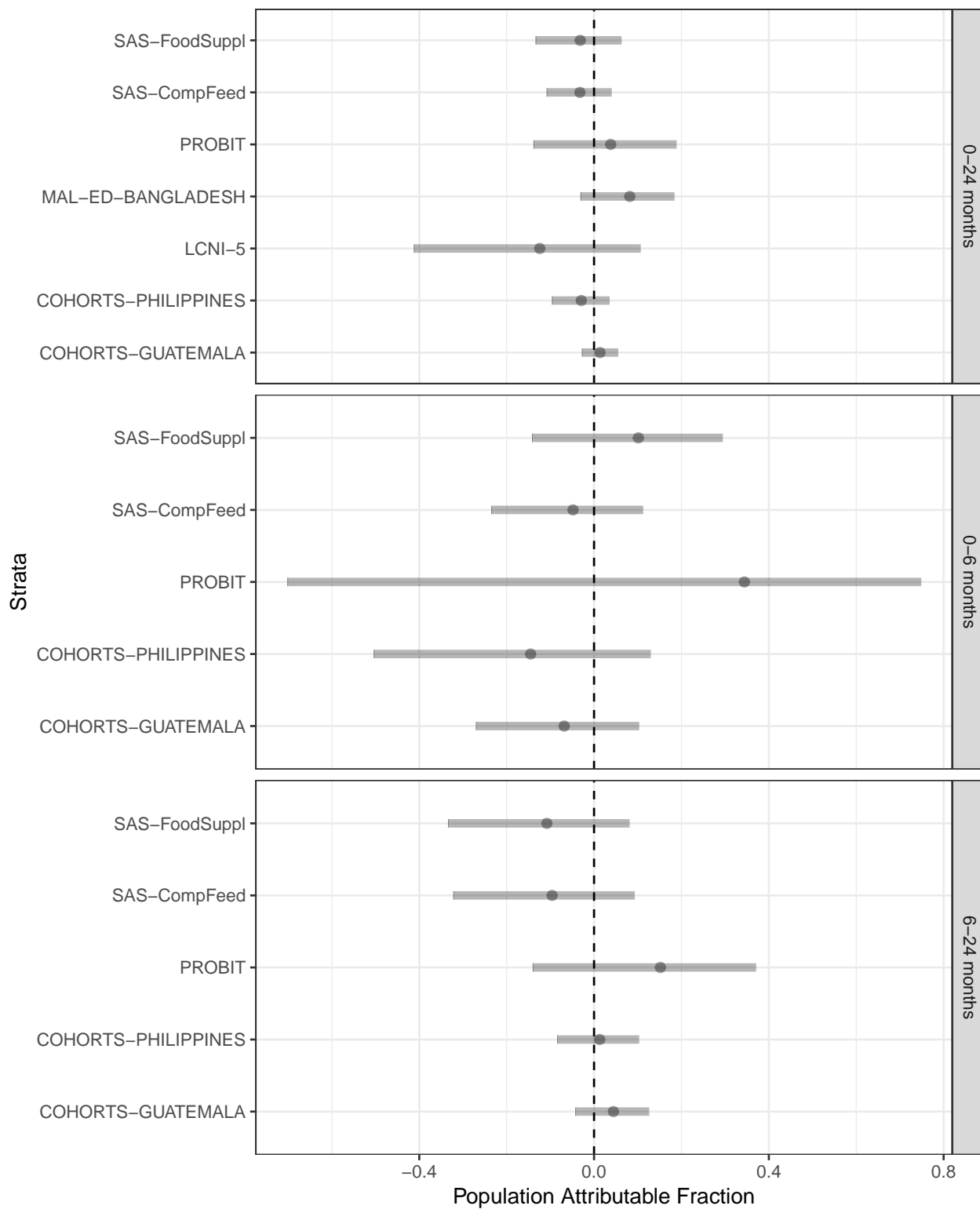


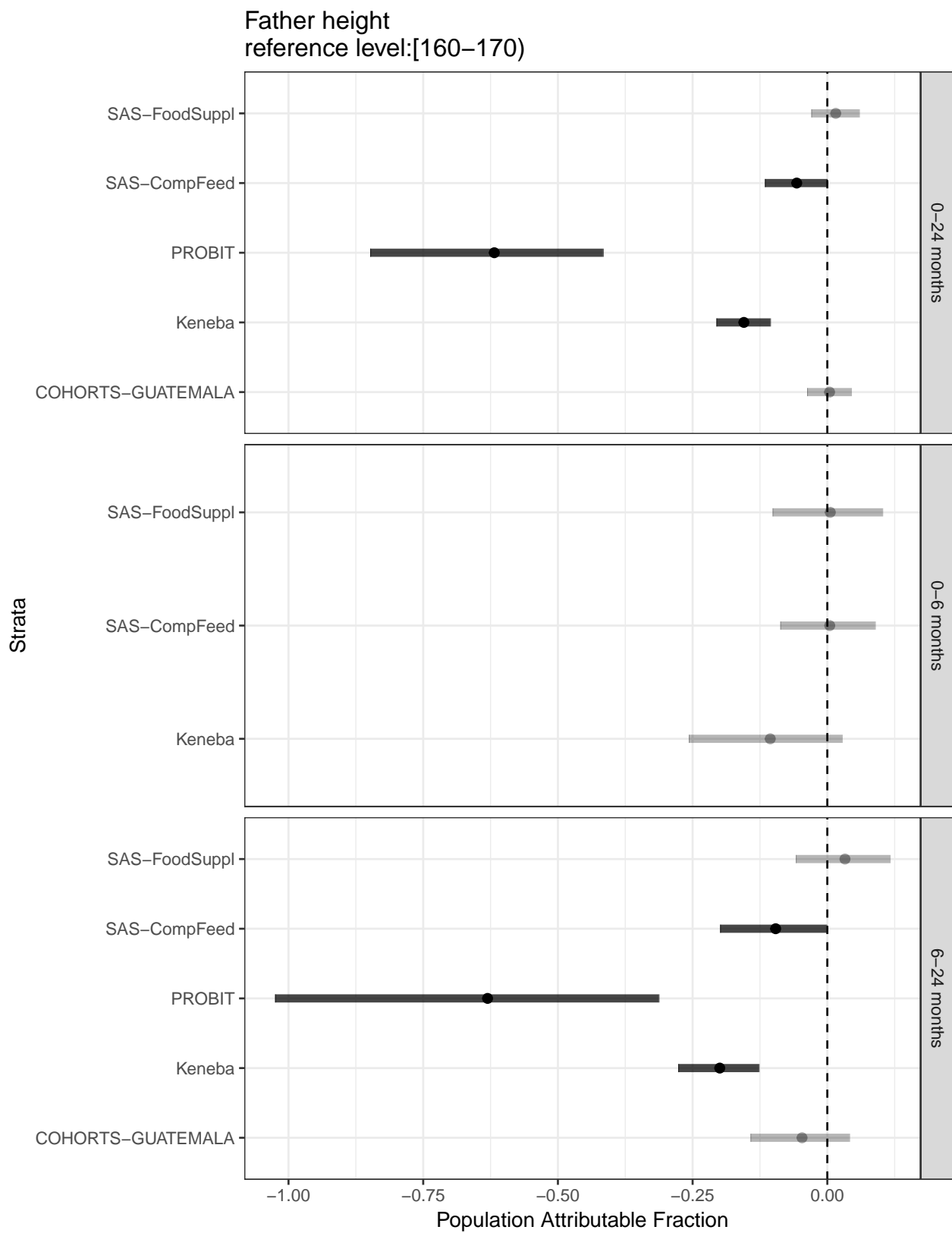
Mother's education
reference level:Q4

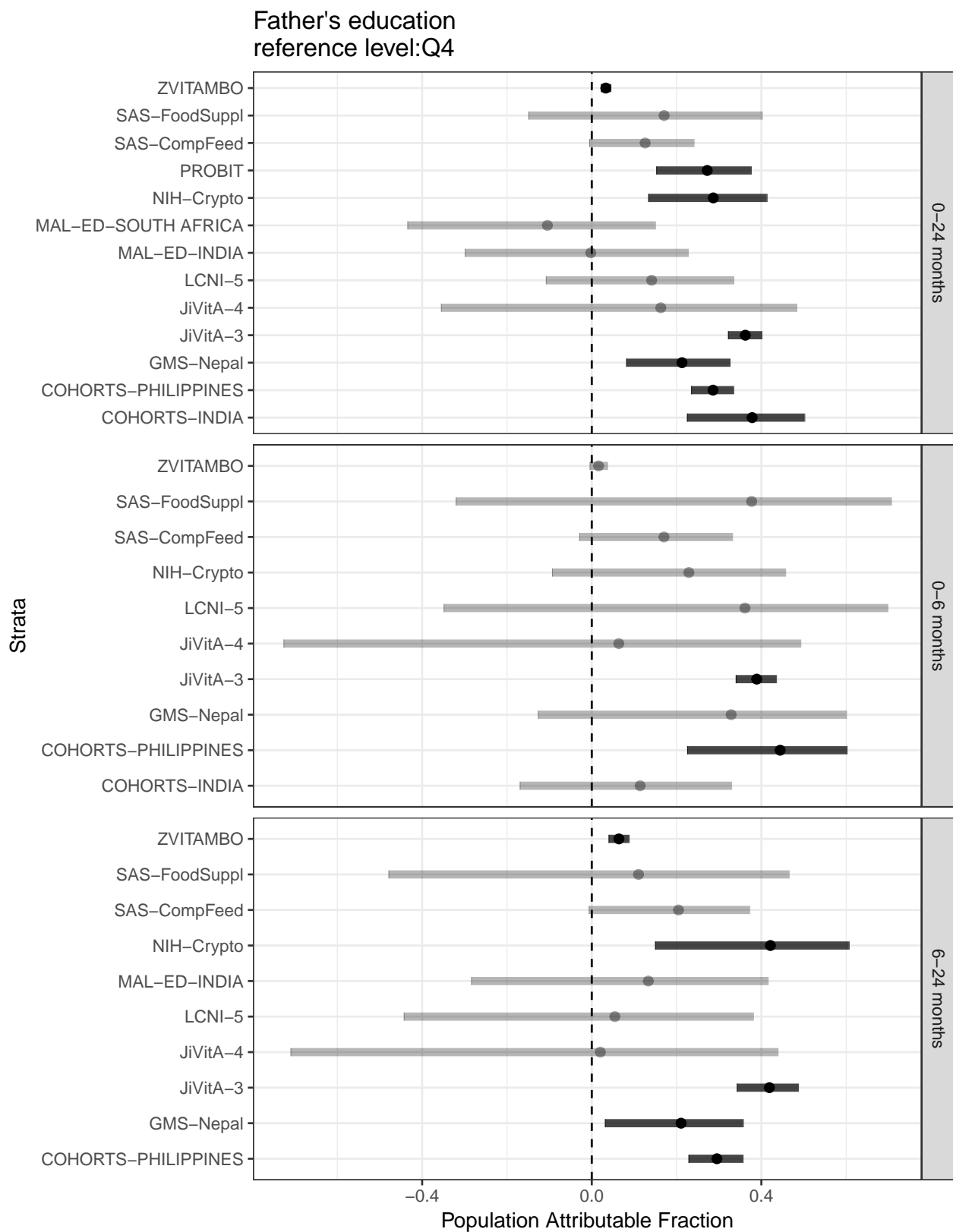


Paternal characteristics

Father age
reference level: ≥ 35

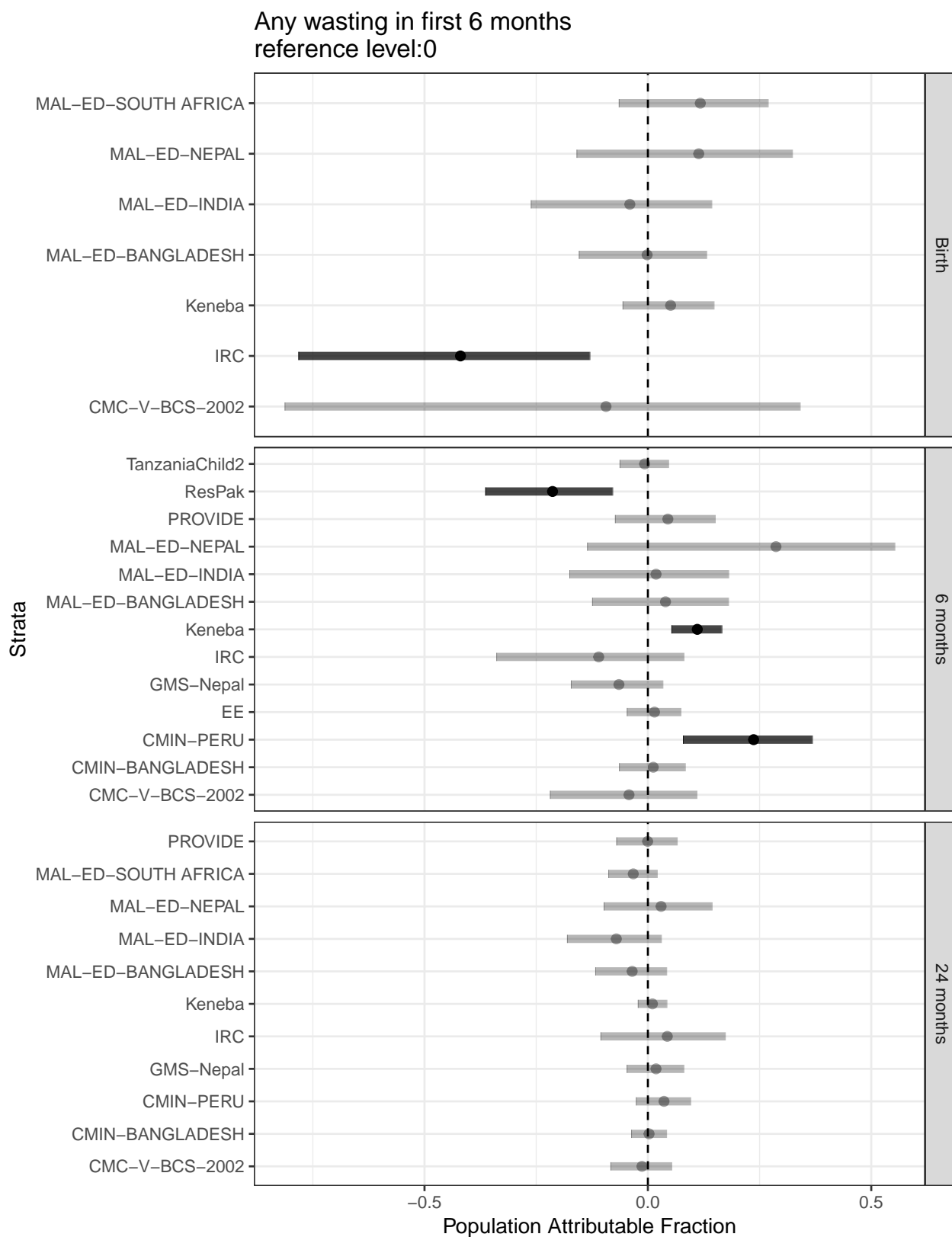


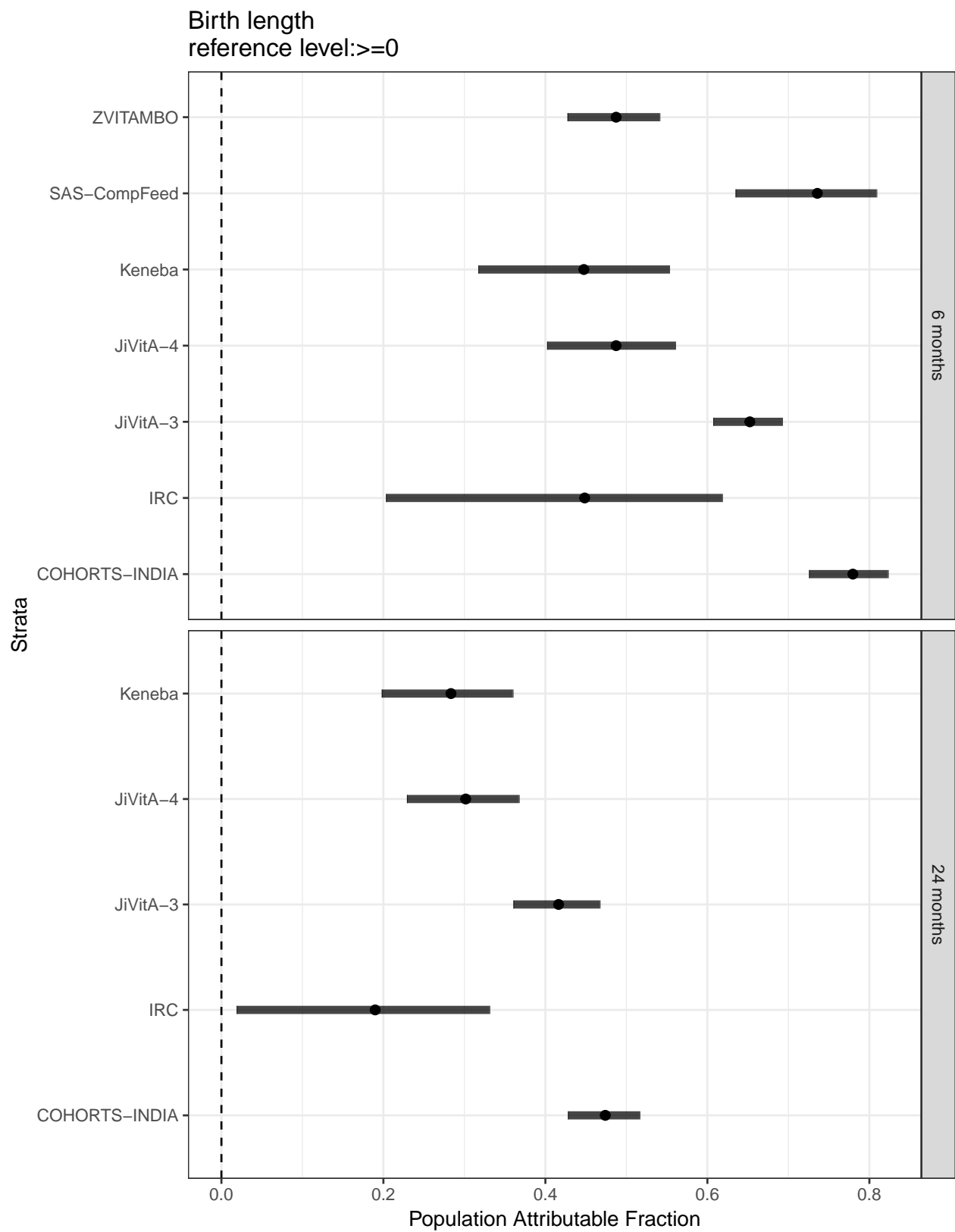


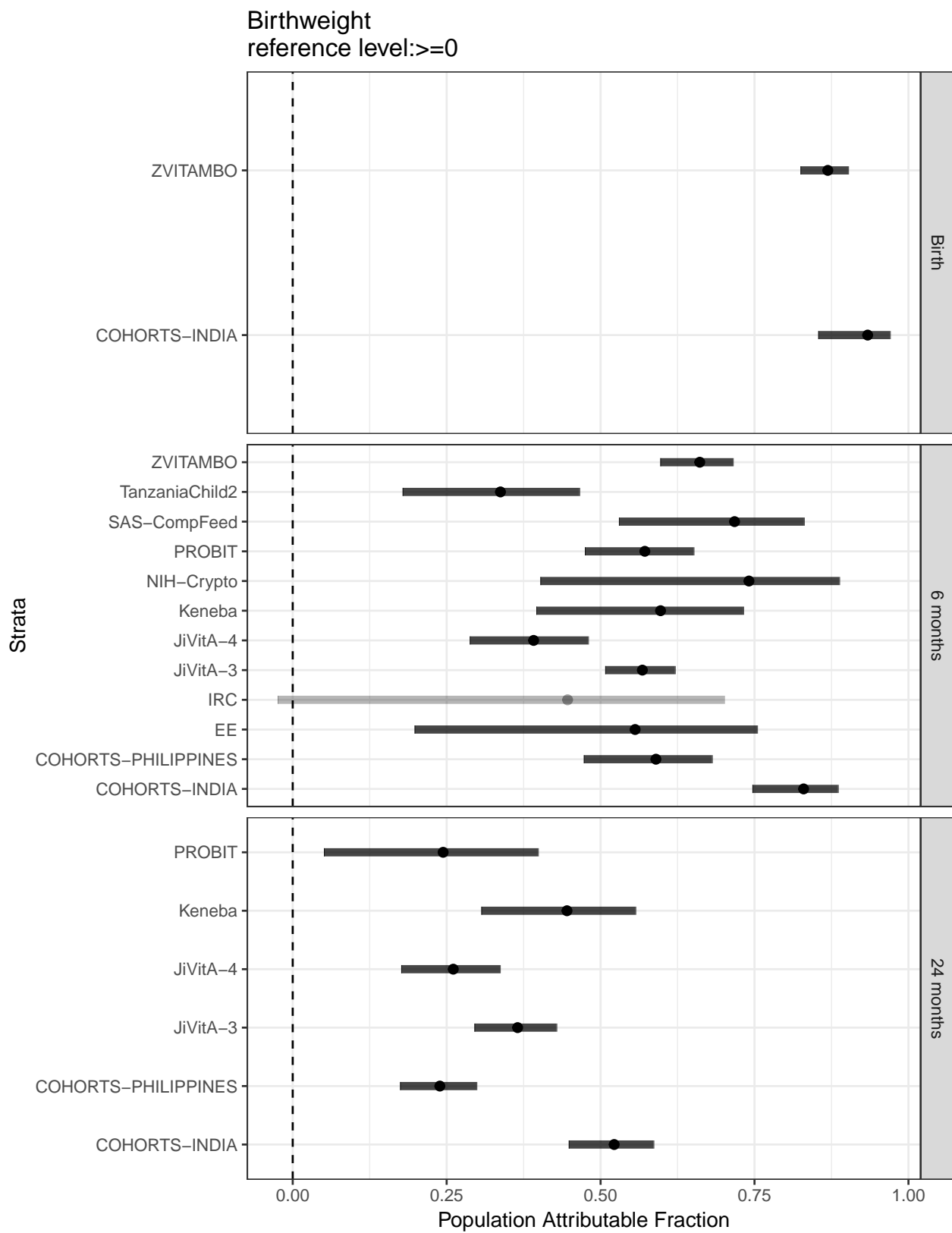


Point prevalence of stunting

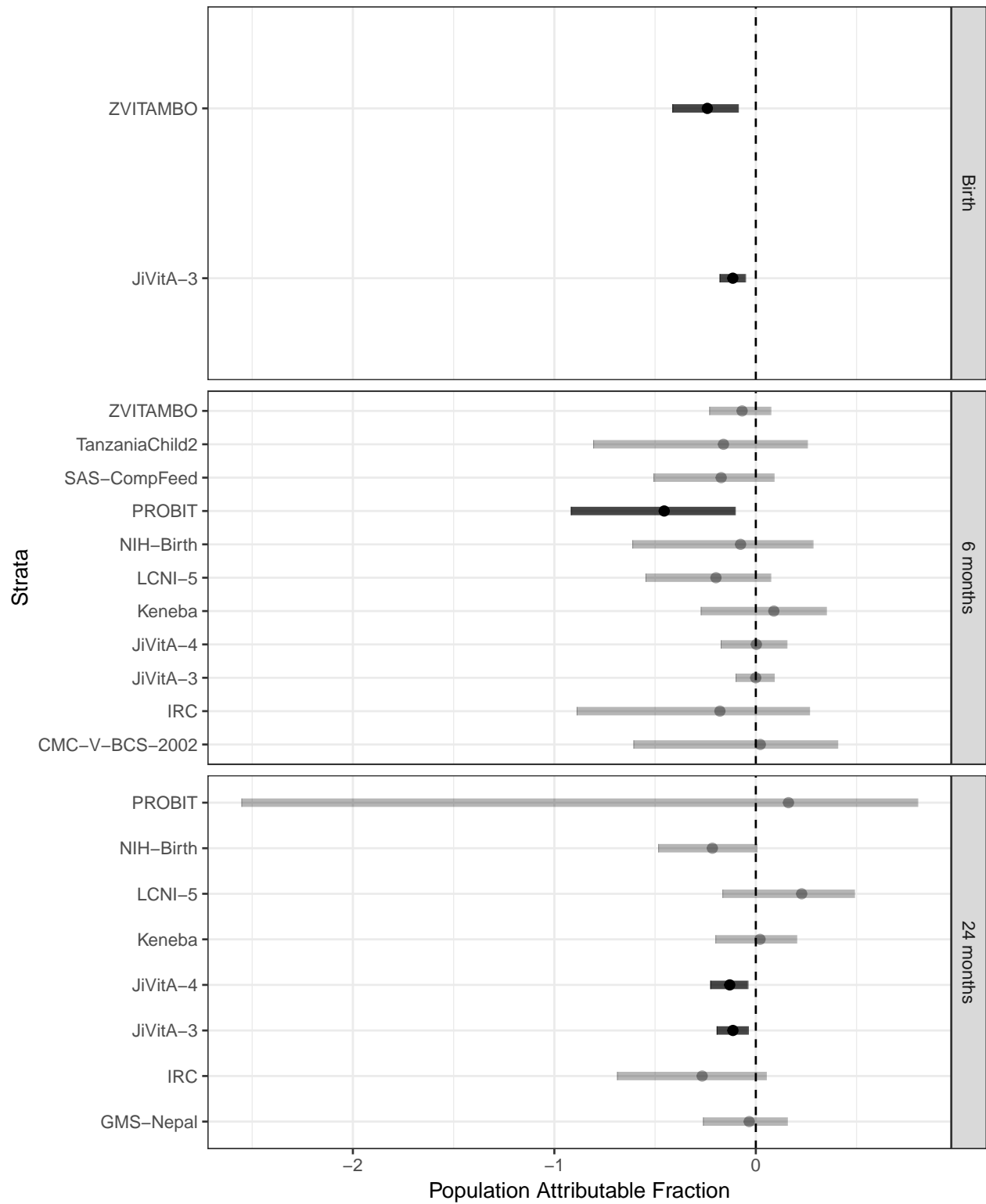
Child characteristics

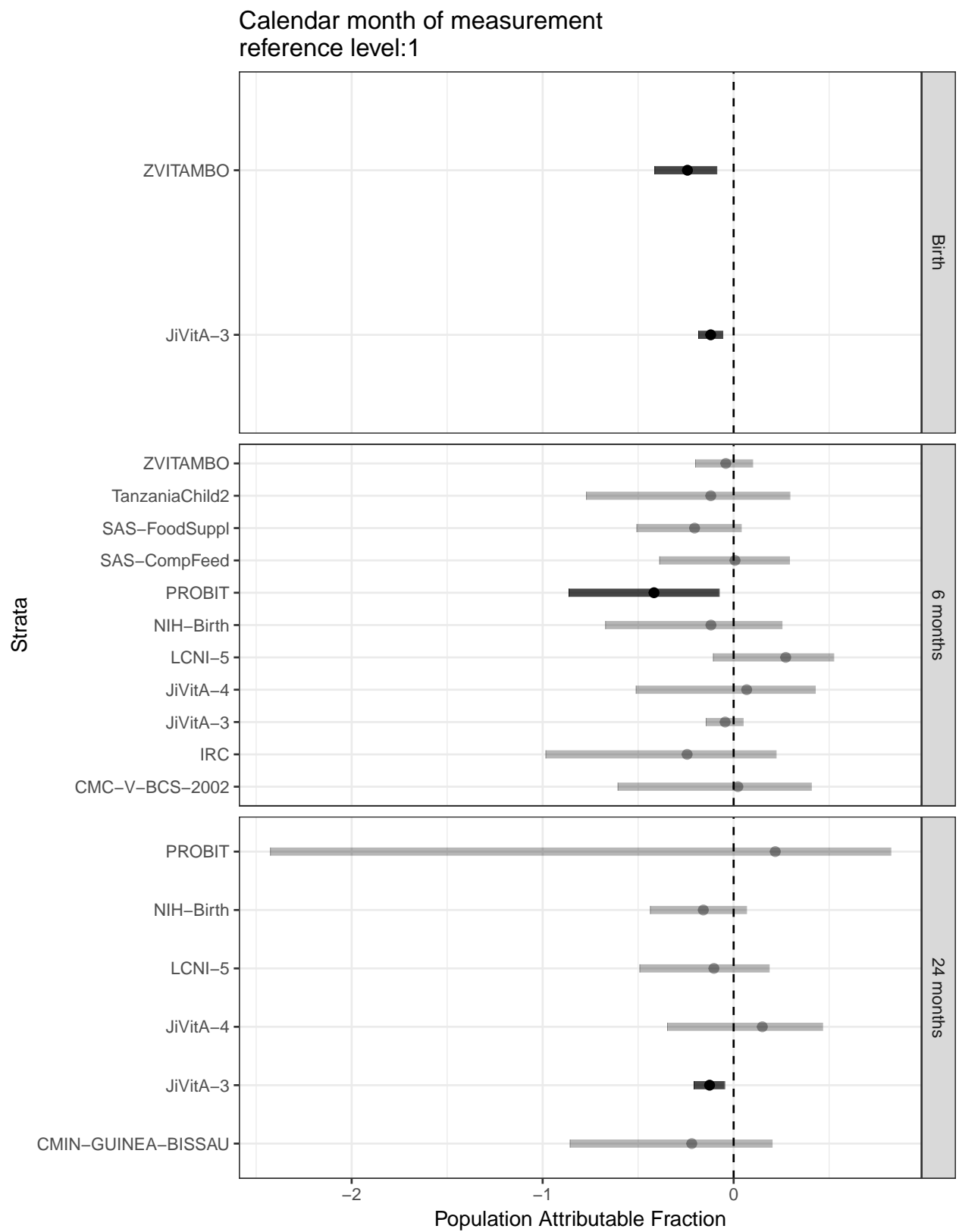




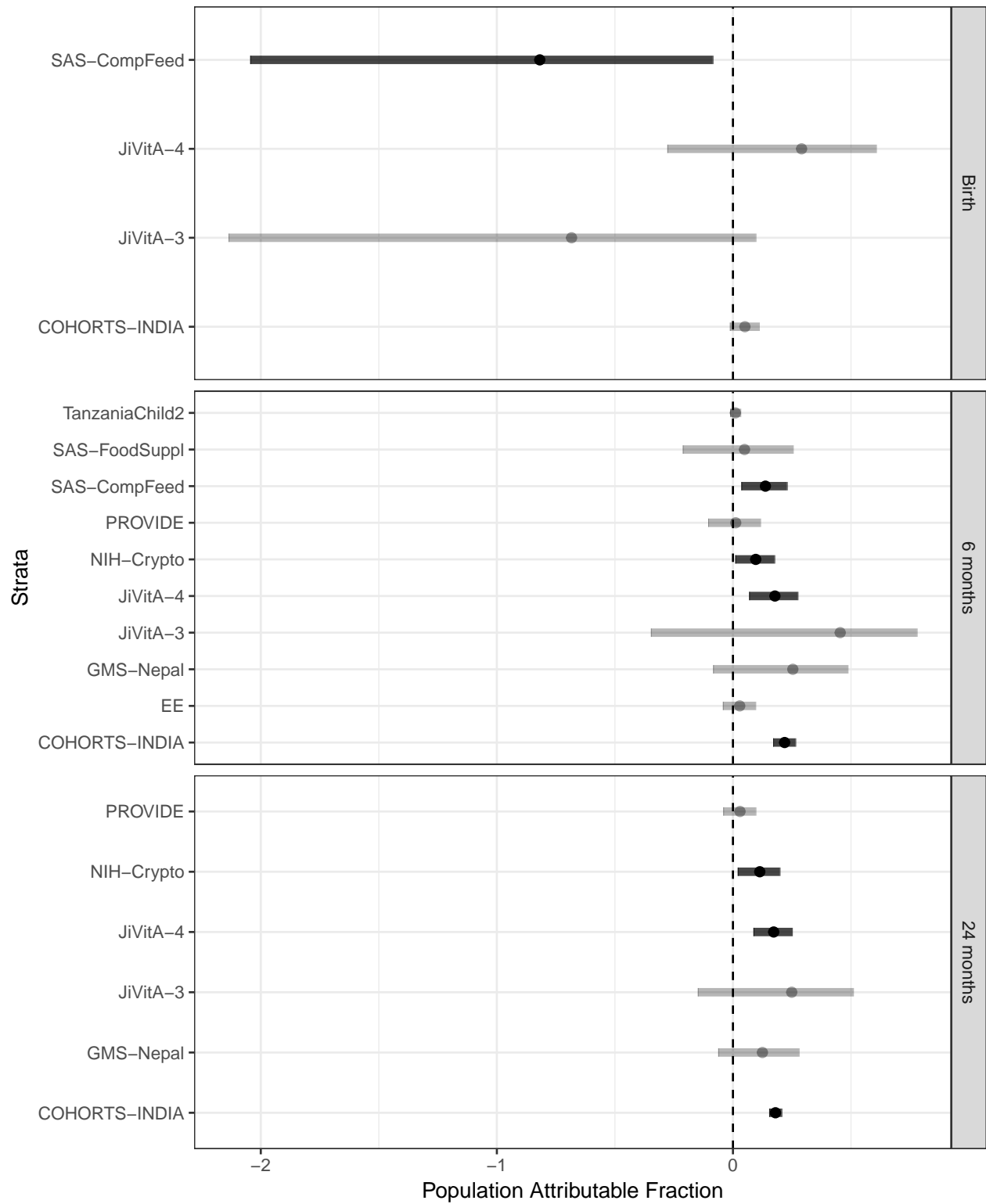


Calendar month of birth
reference level:1

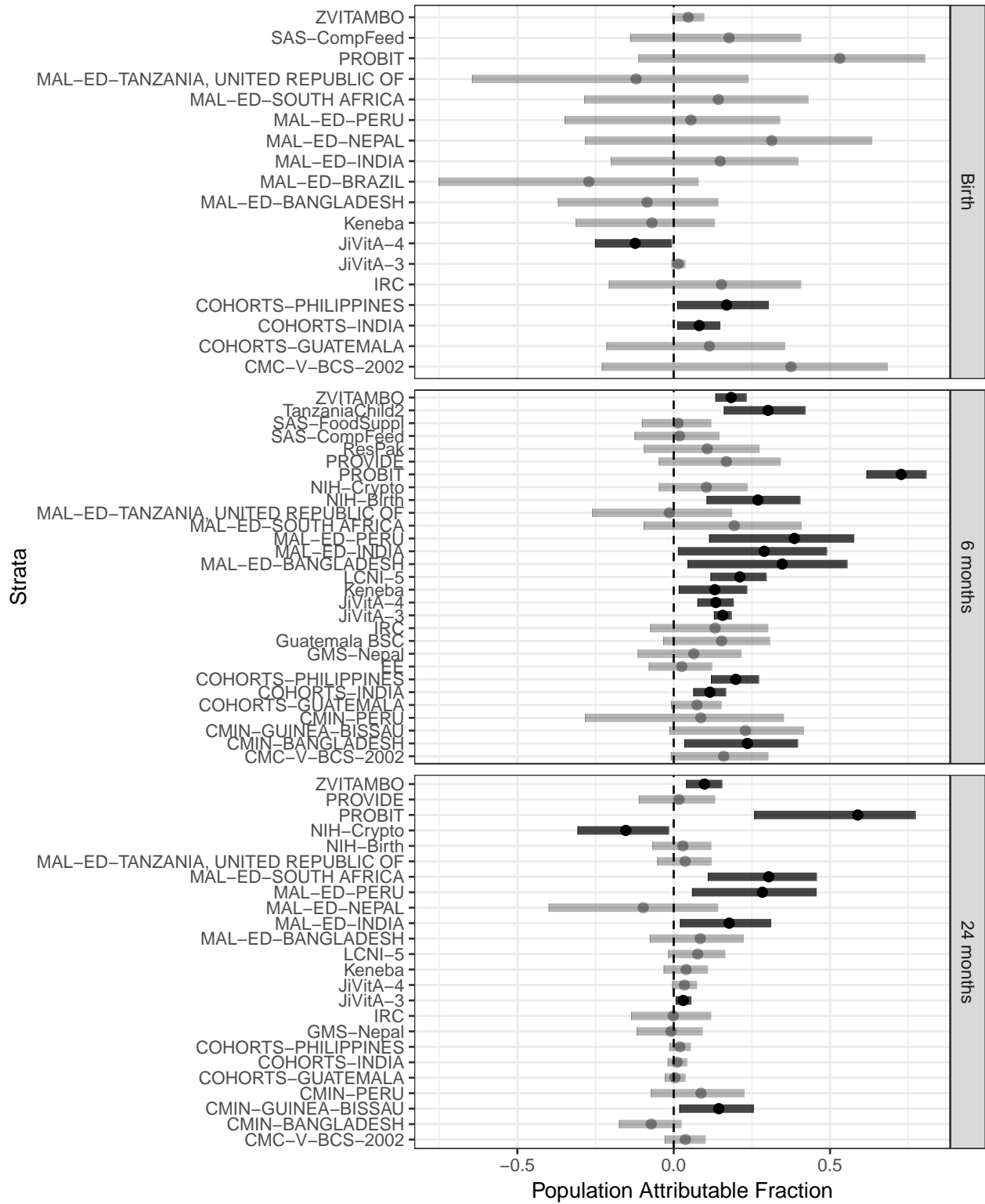




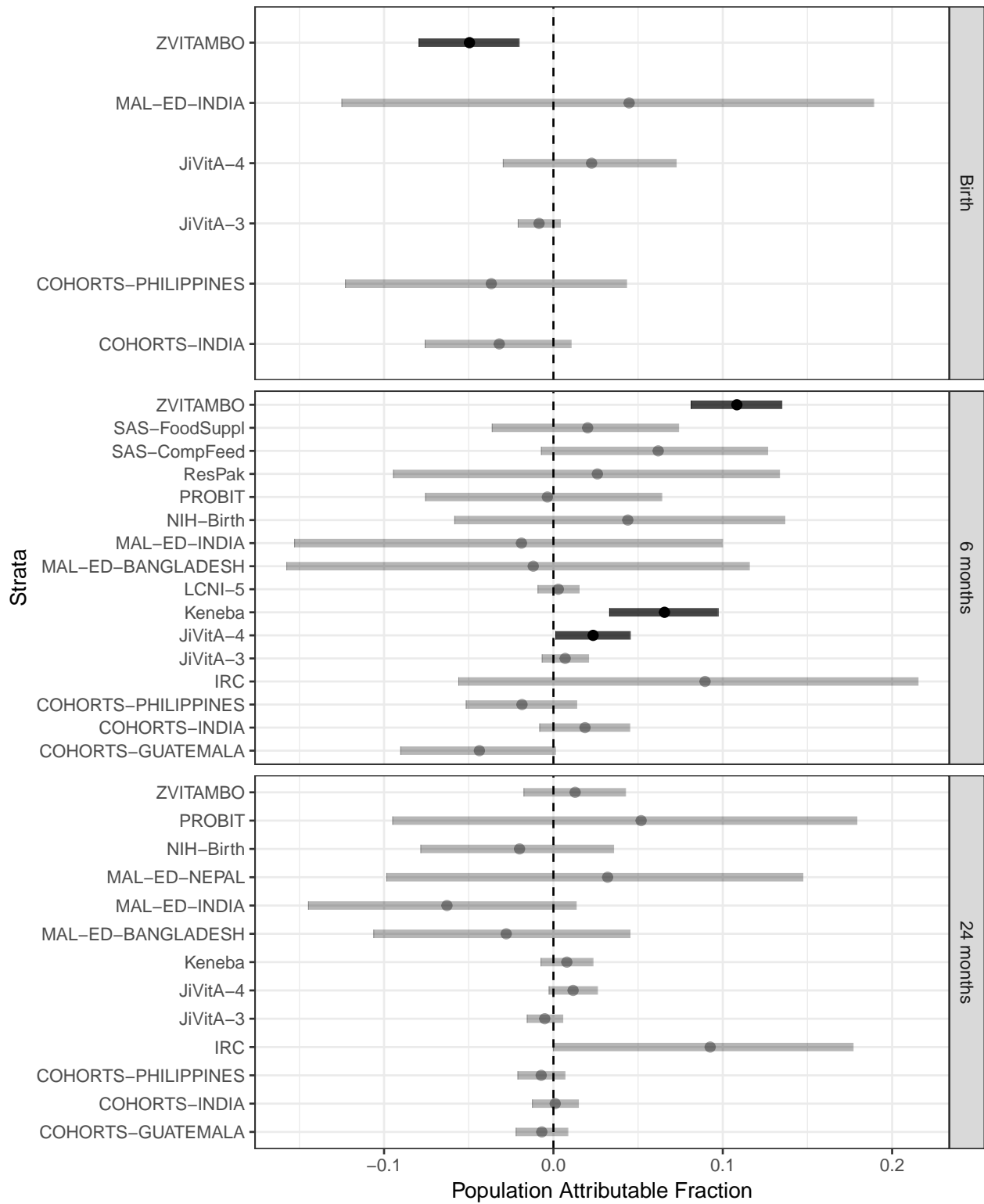
Child delivered at home
reference level:0



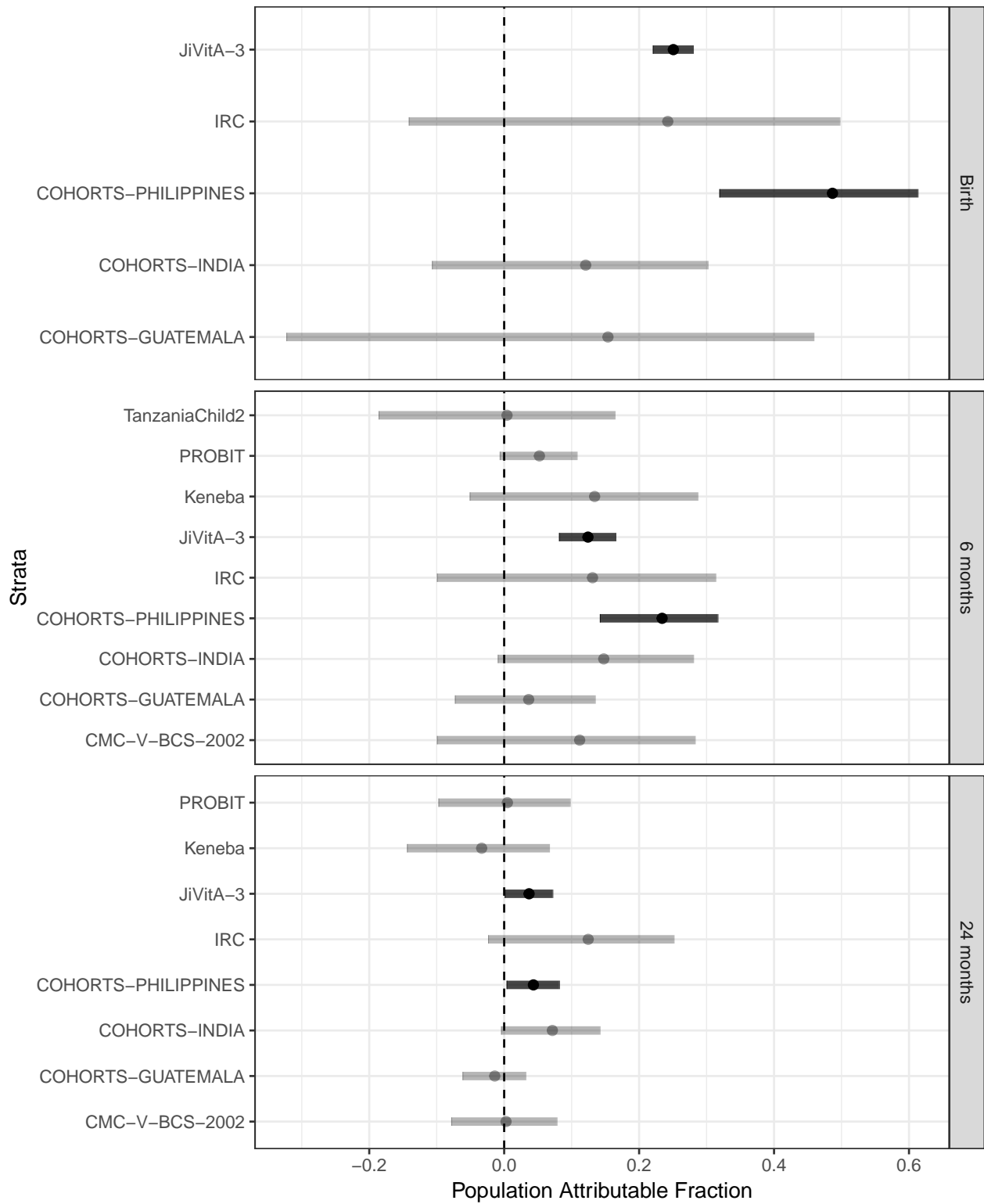
Child's sex
reference level:Female



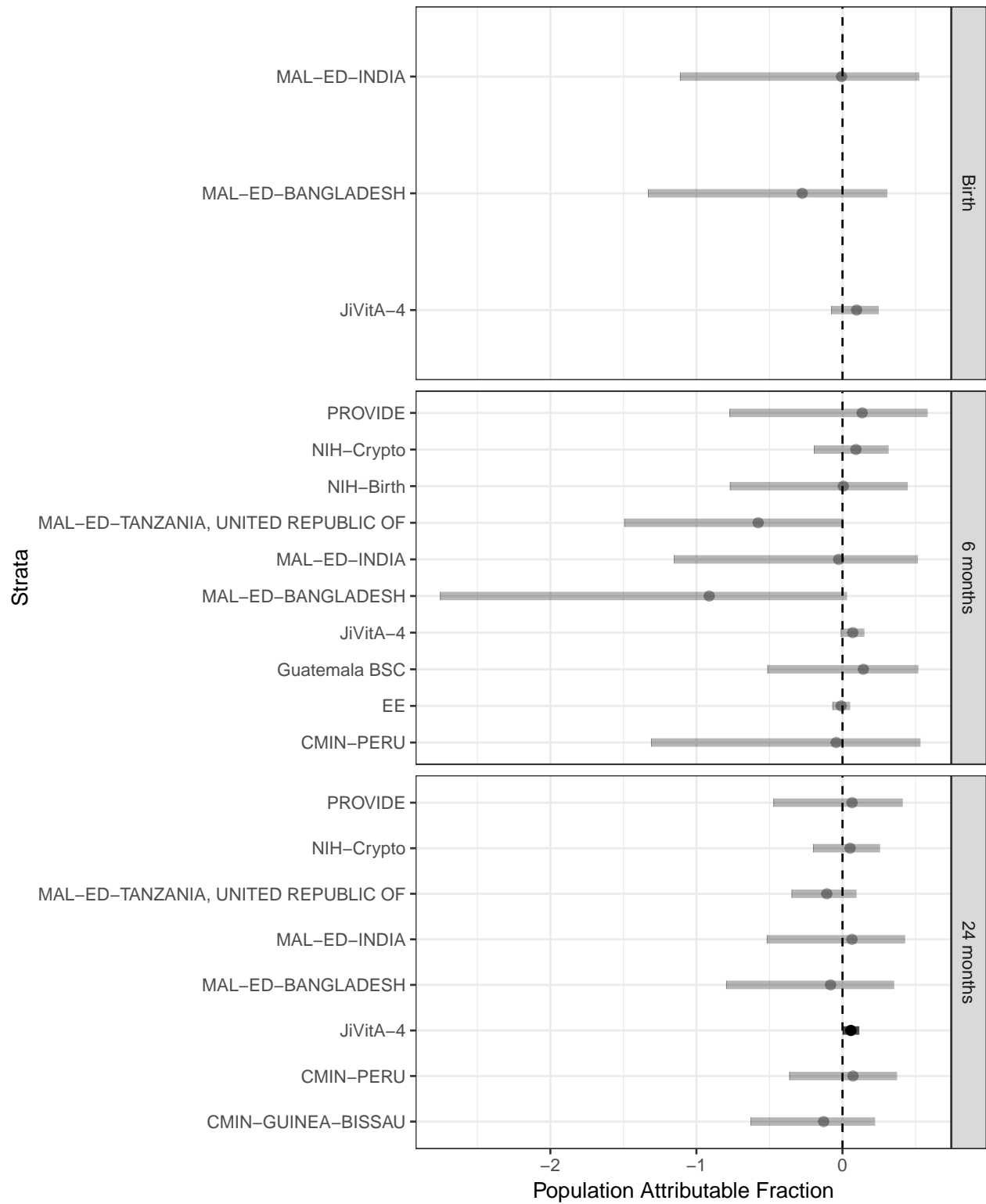
Enrolled wasted
reference level:0



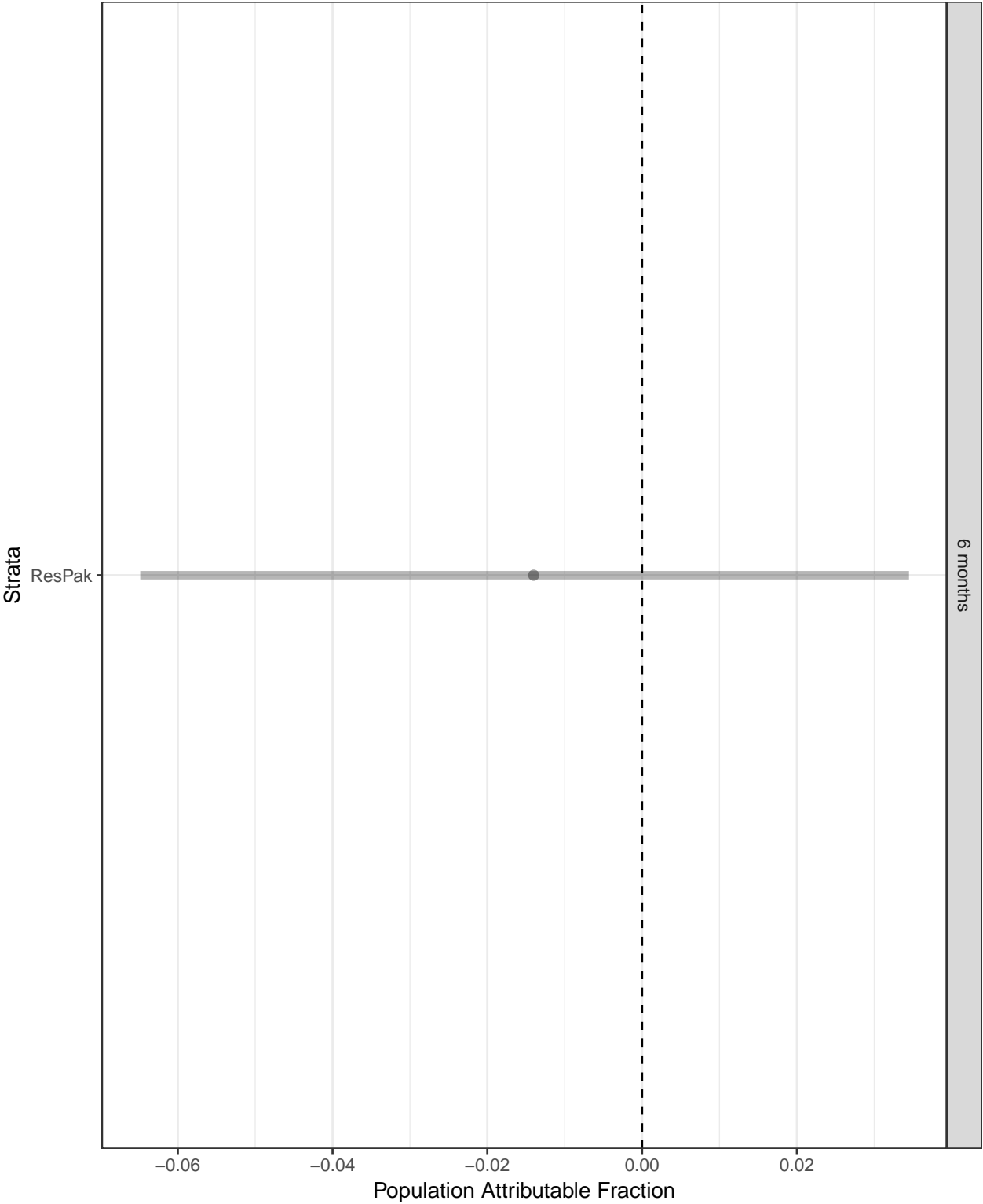
Gestational age at birth in days
reference level:[273–287)

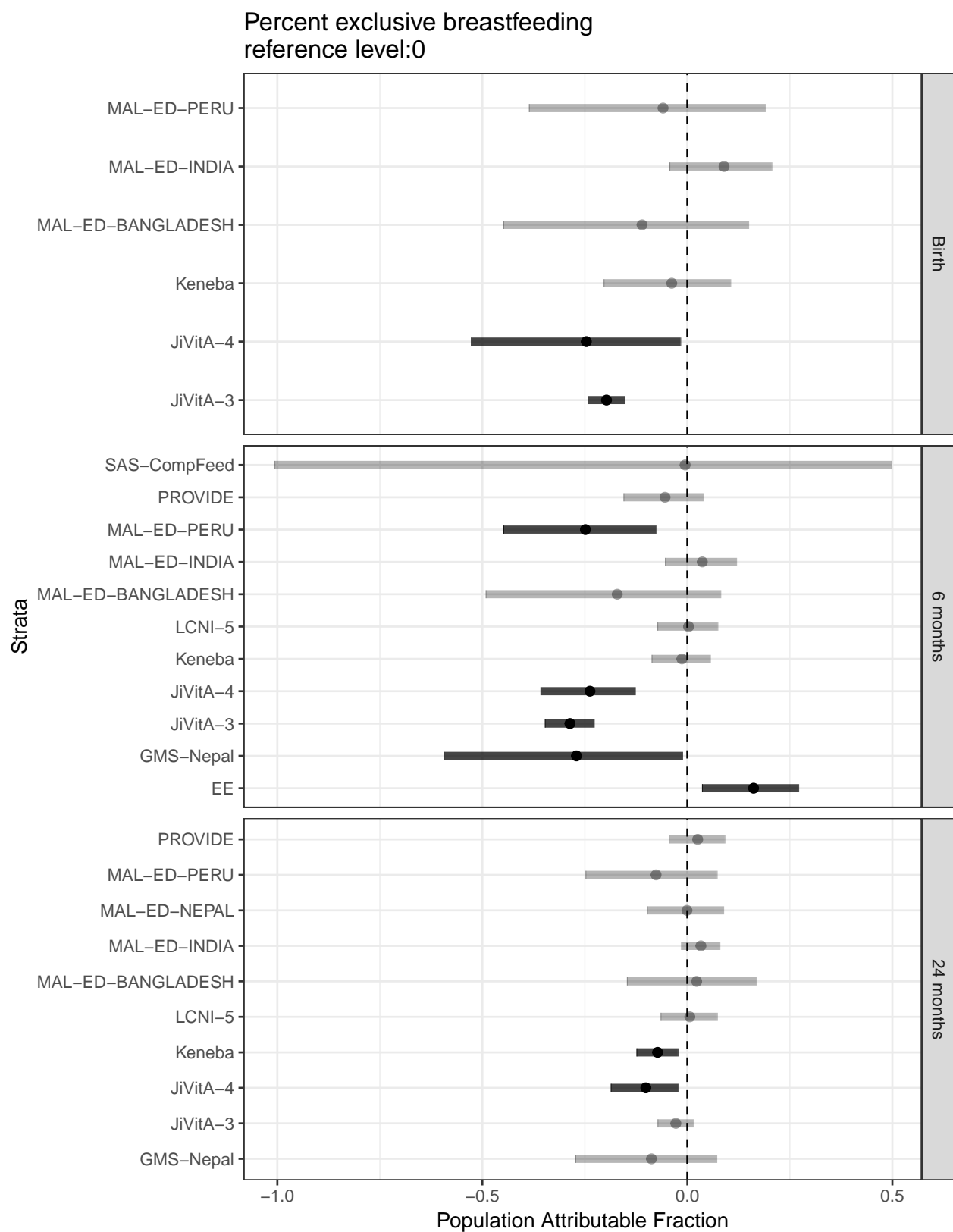


Percent diarrhea in first 24 months
reference level:Q1

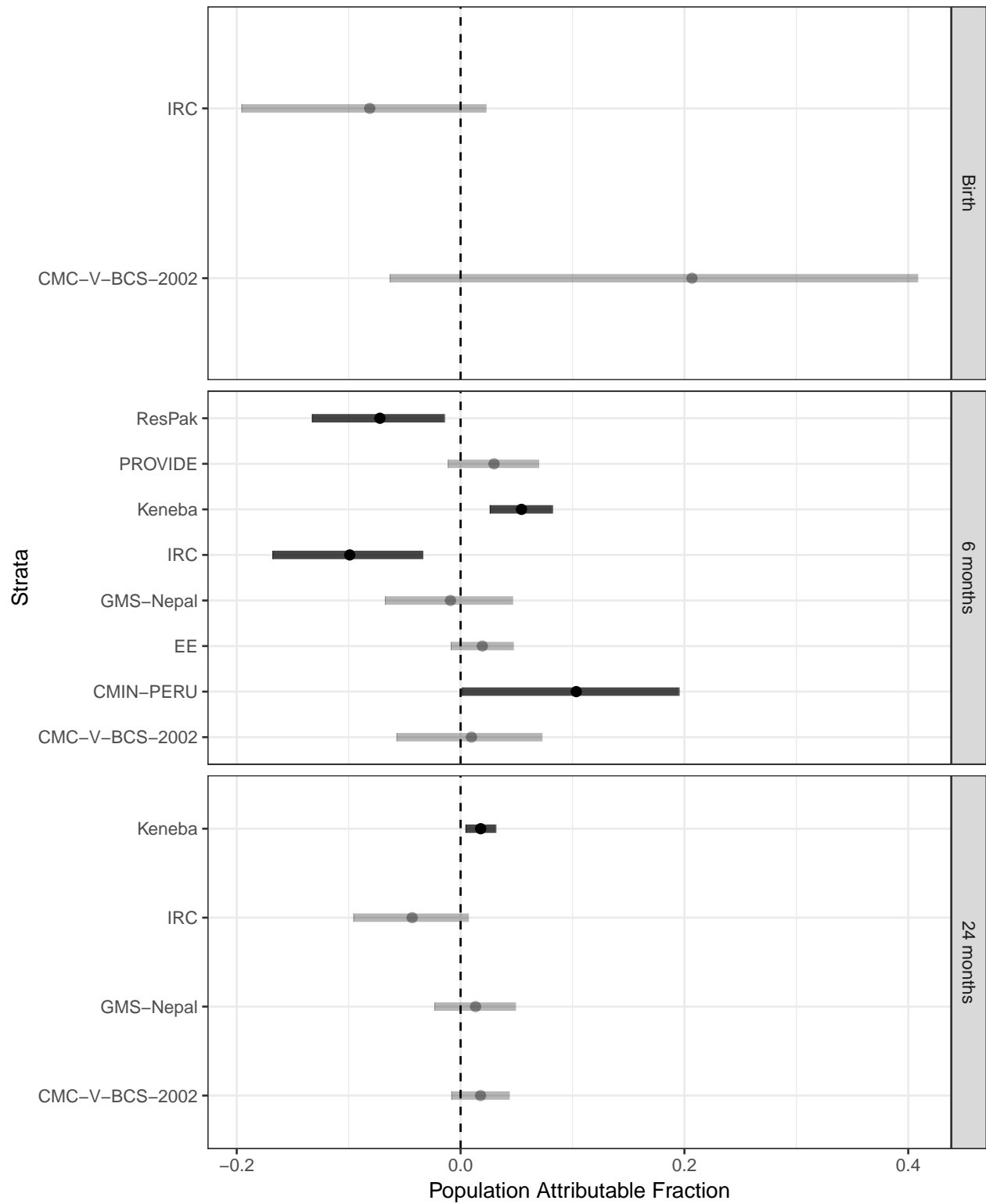


Percent diarrhea in first 6 months
reference level:Q1

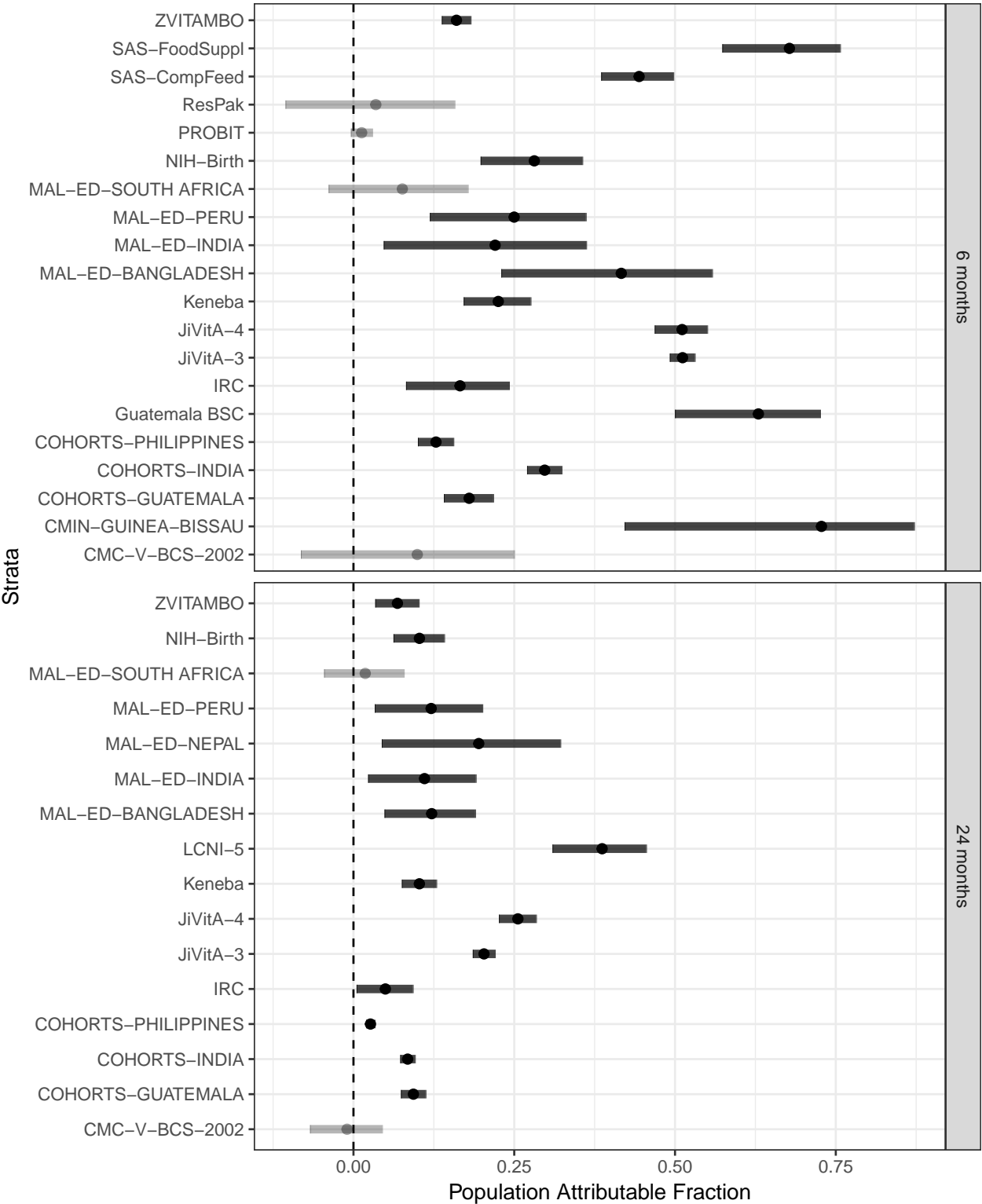


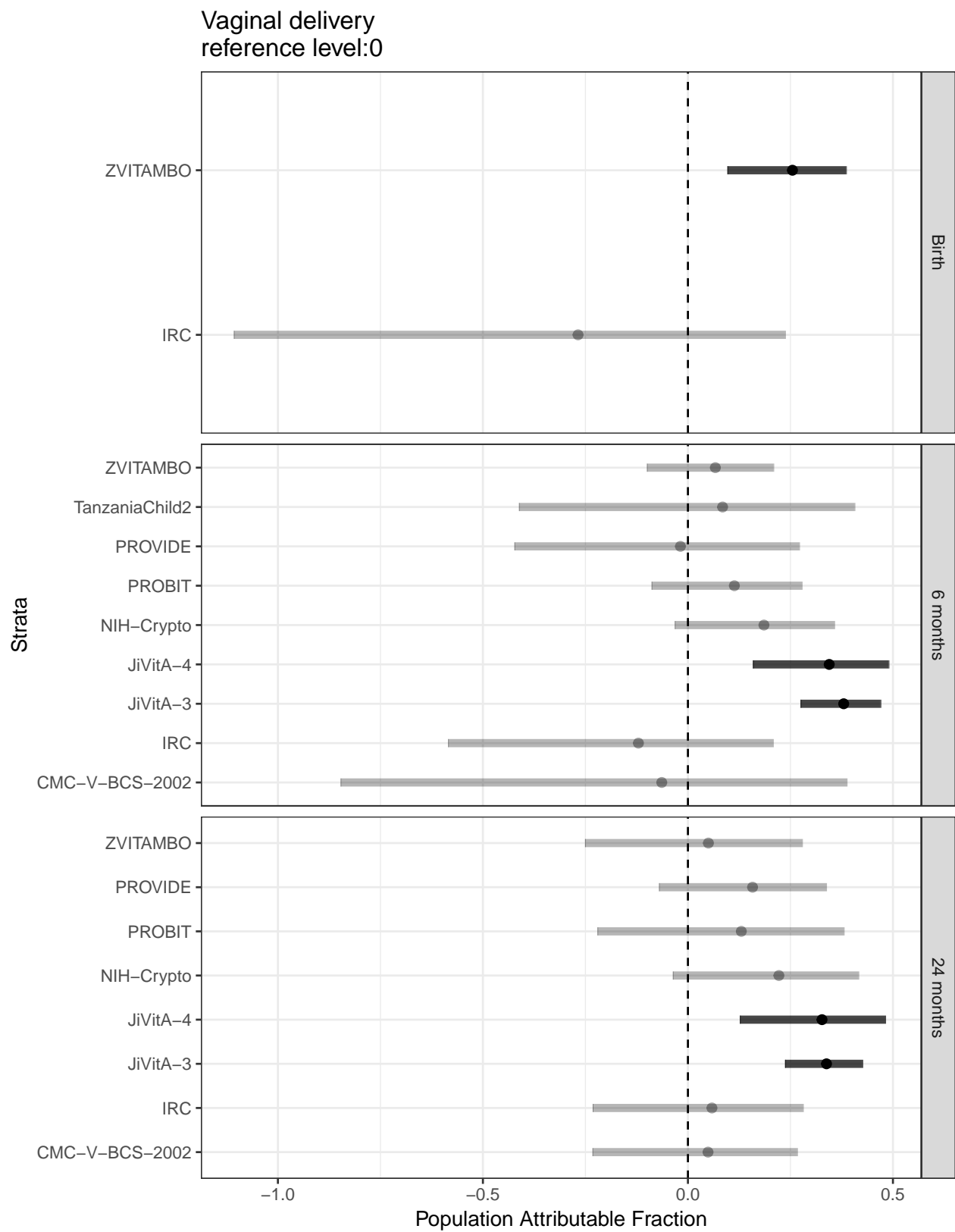


Persistent wasting in first 6 months
reference level:0

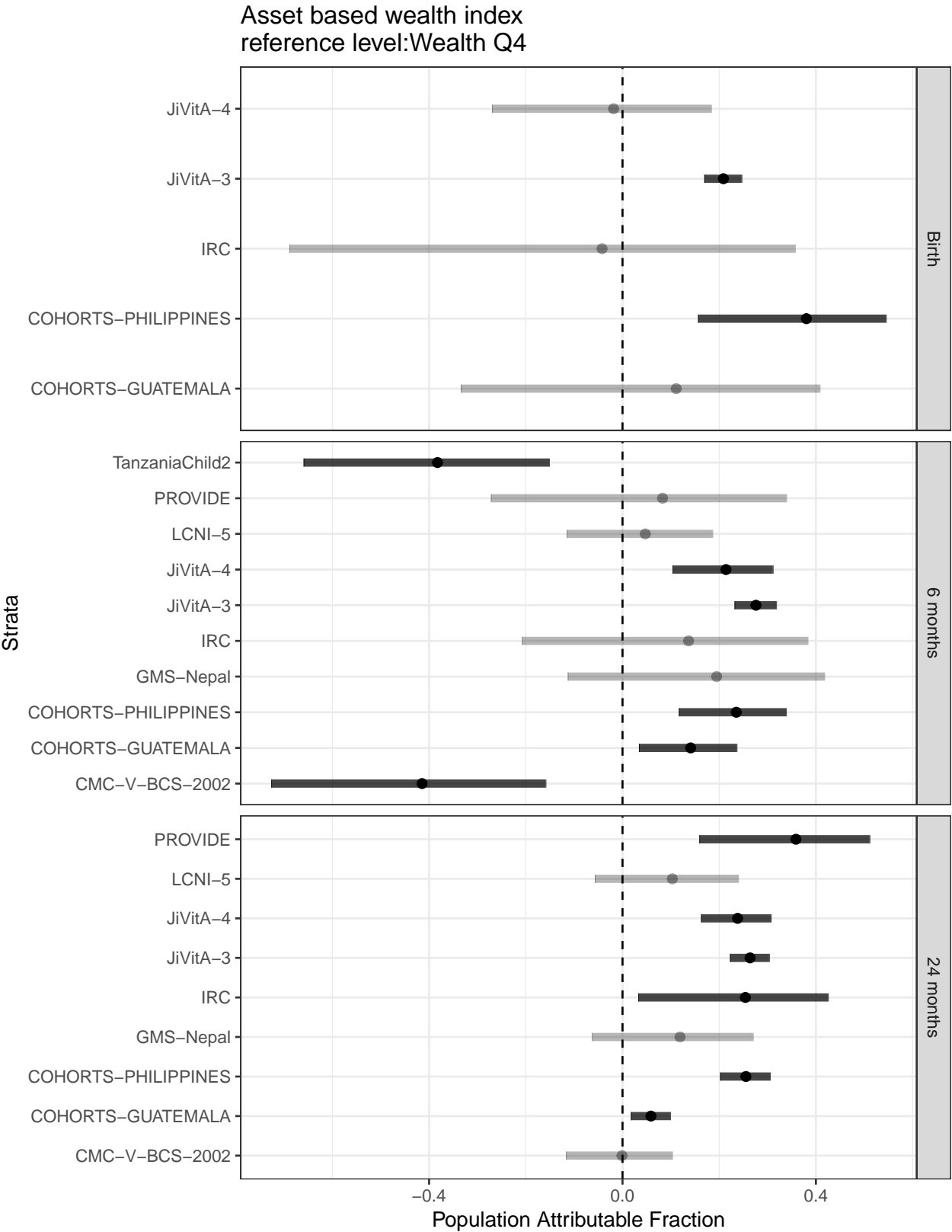


Stunted at enrollment
reference level:0

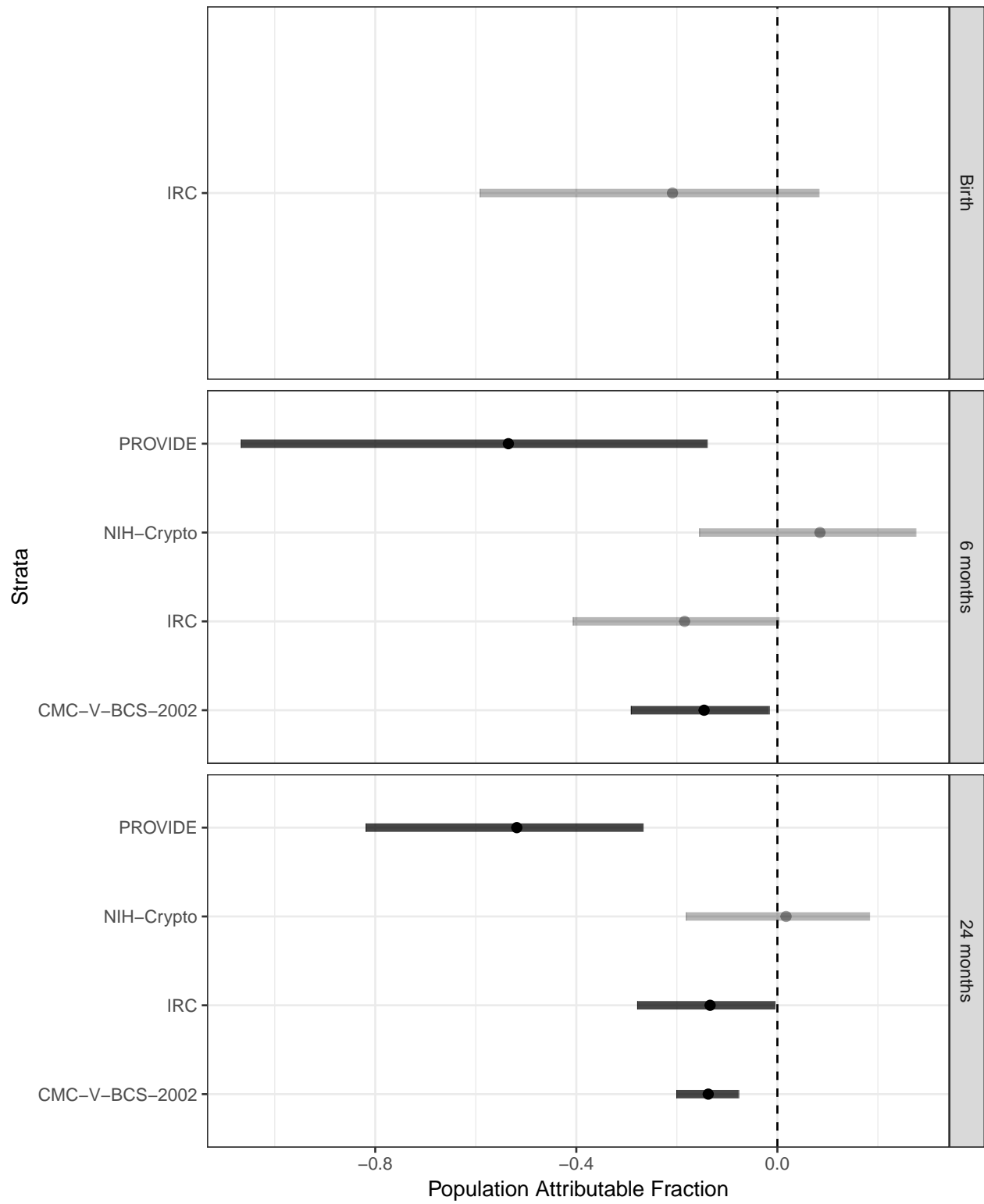


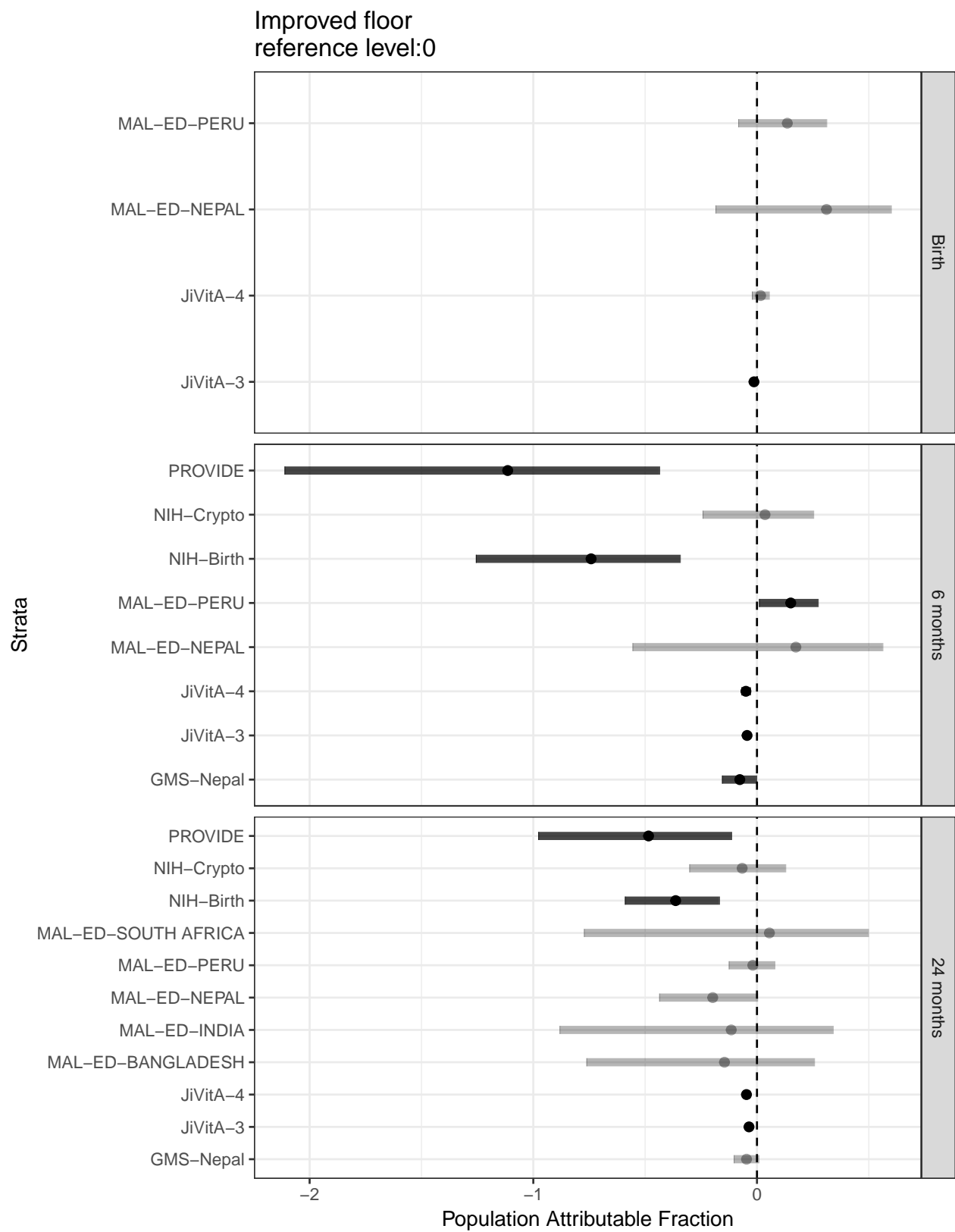


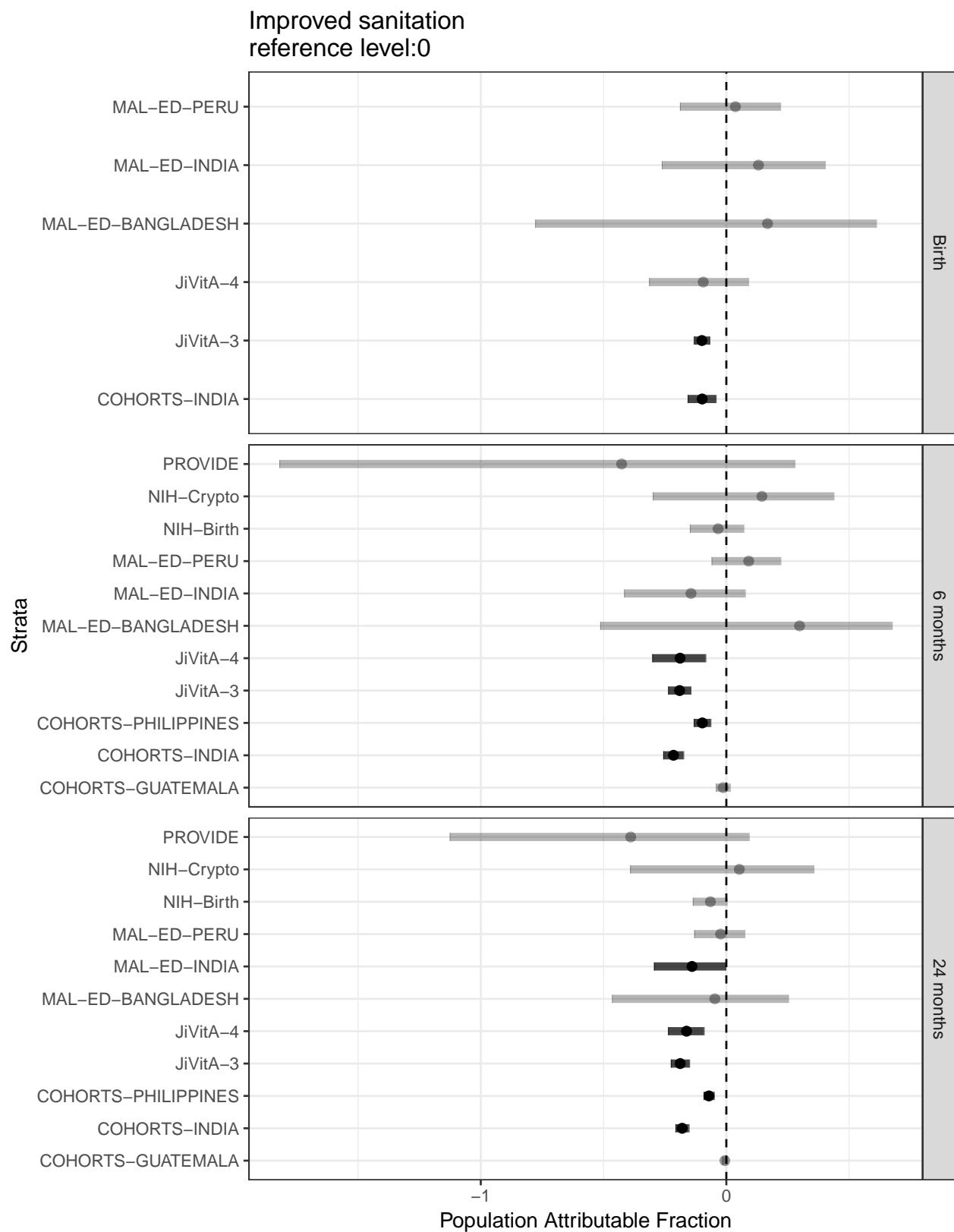
Household characteristics



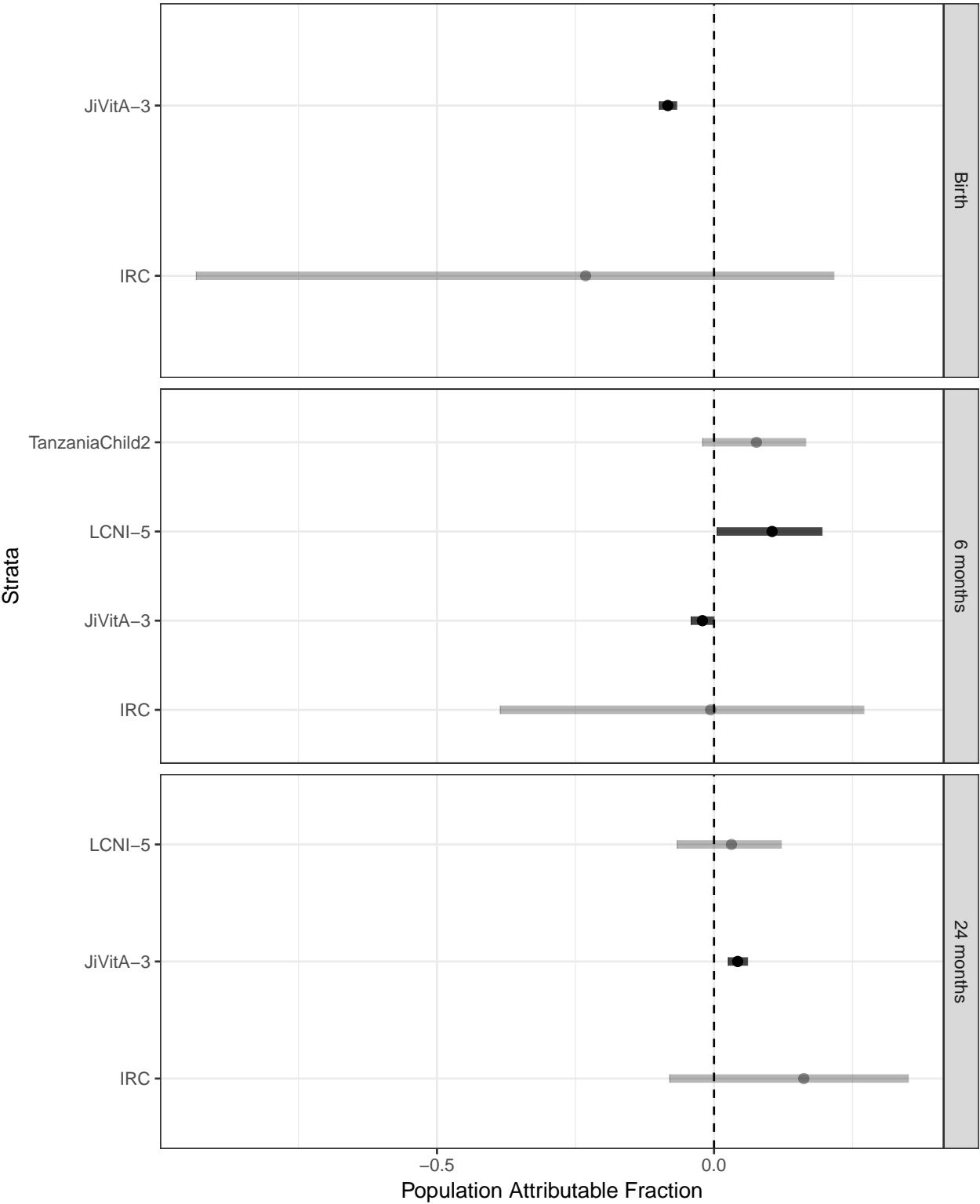
Clean cook
reference level:0



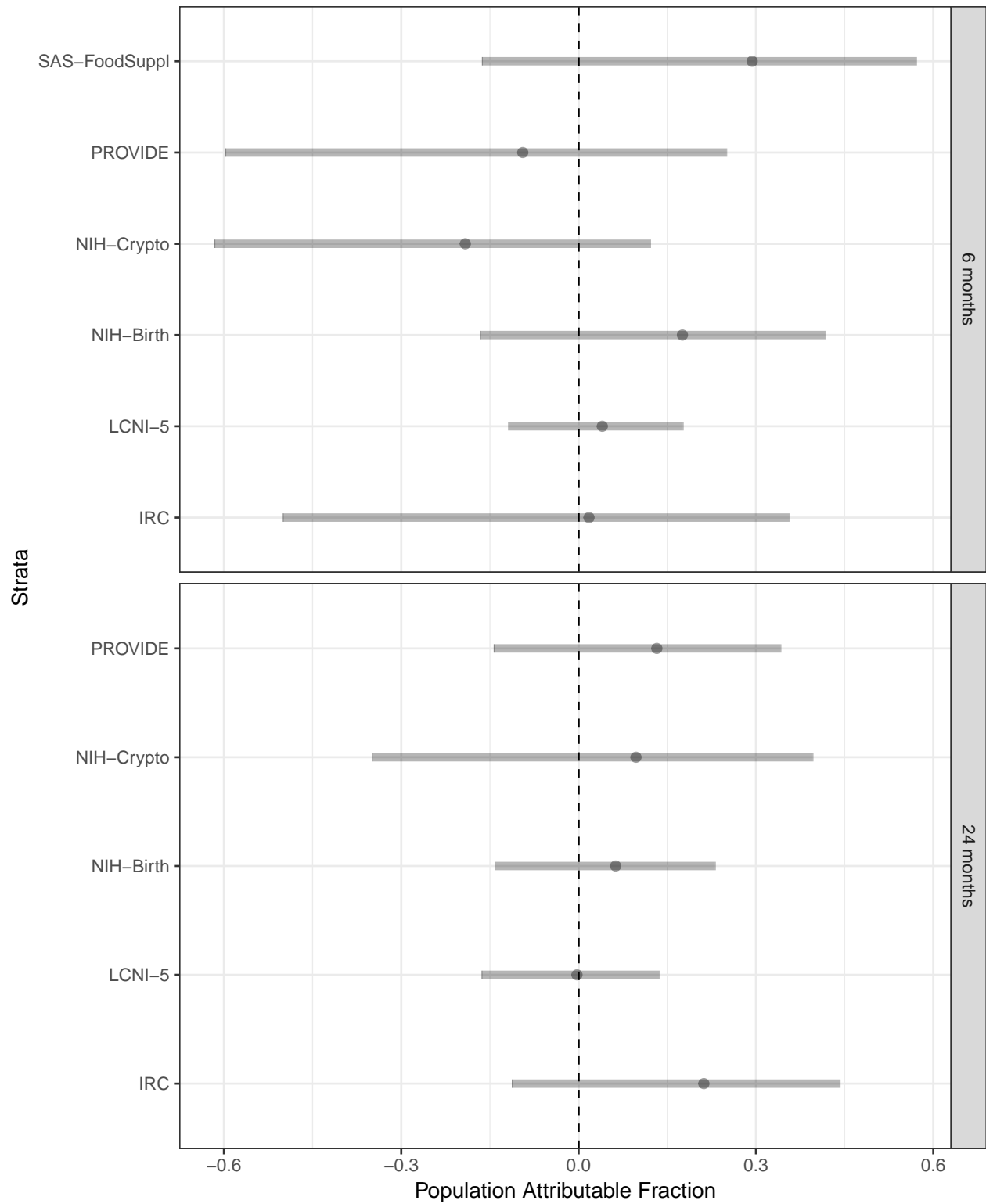


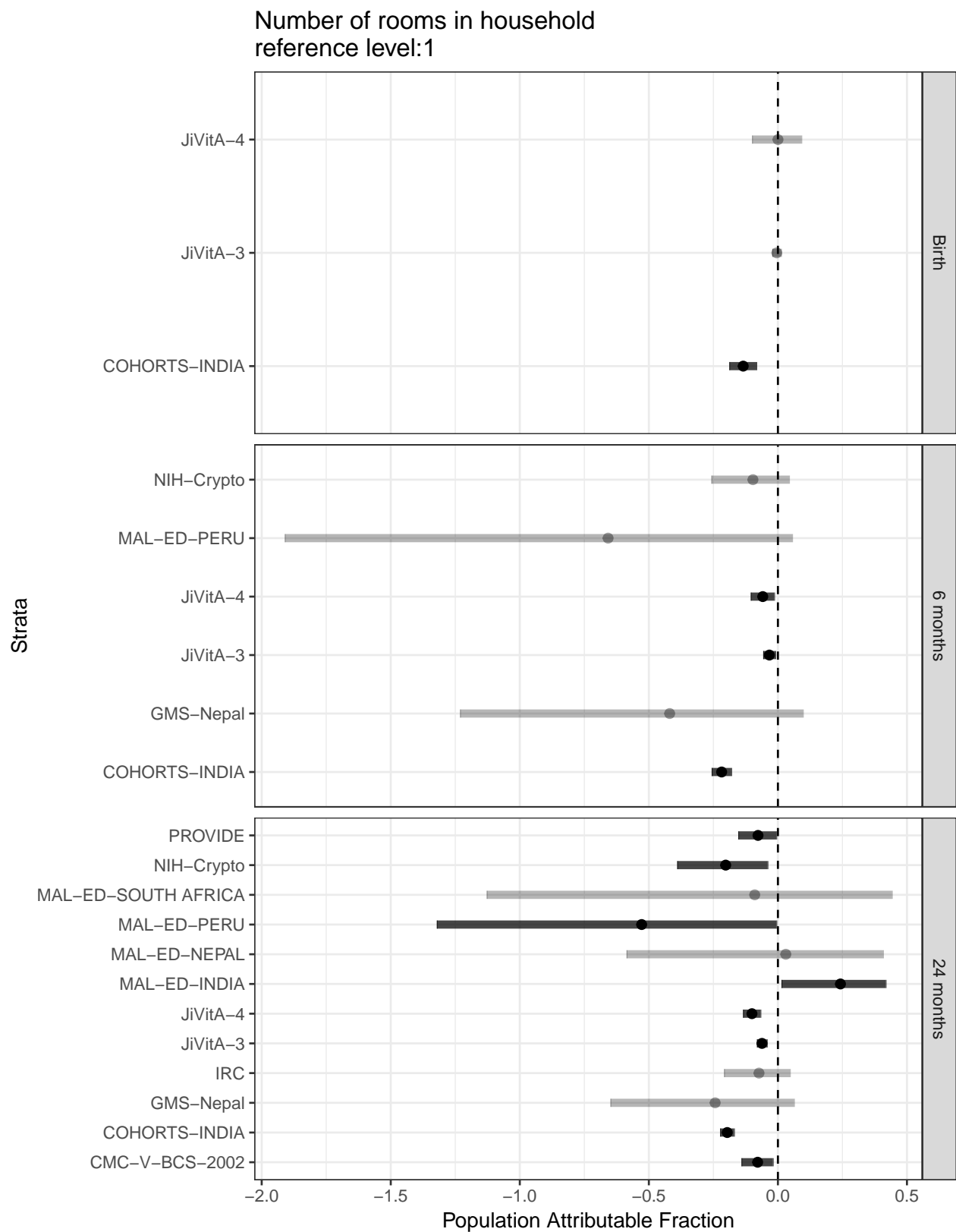


Number of children in the household under 5 years
reference level:1

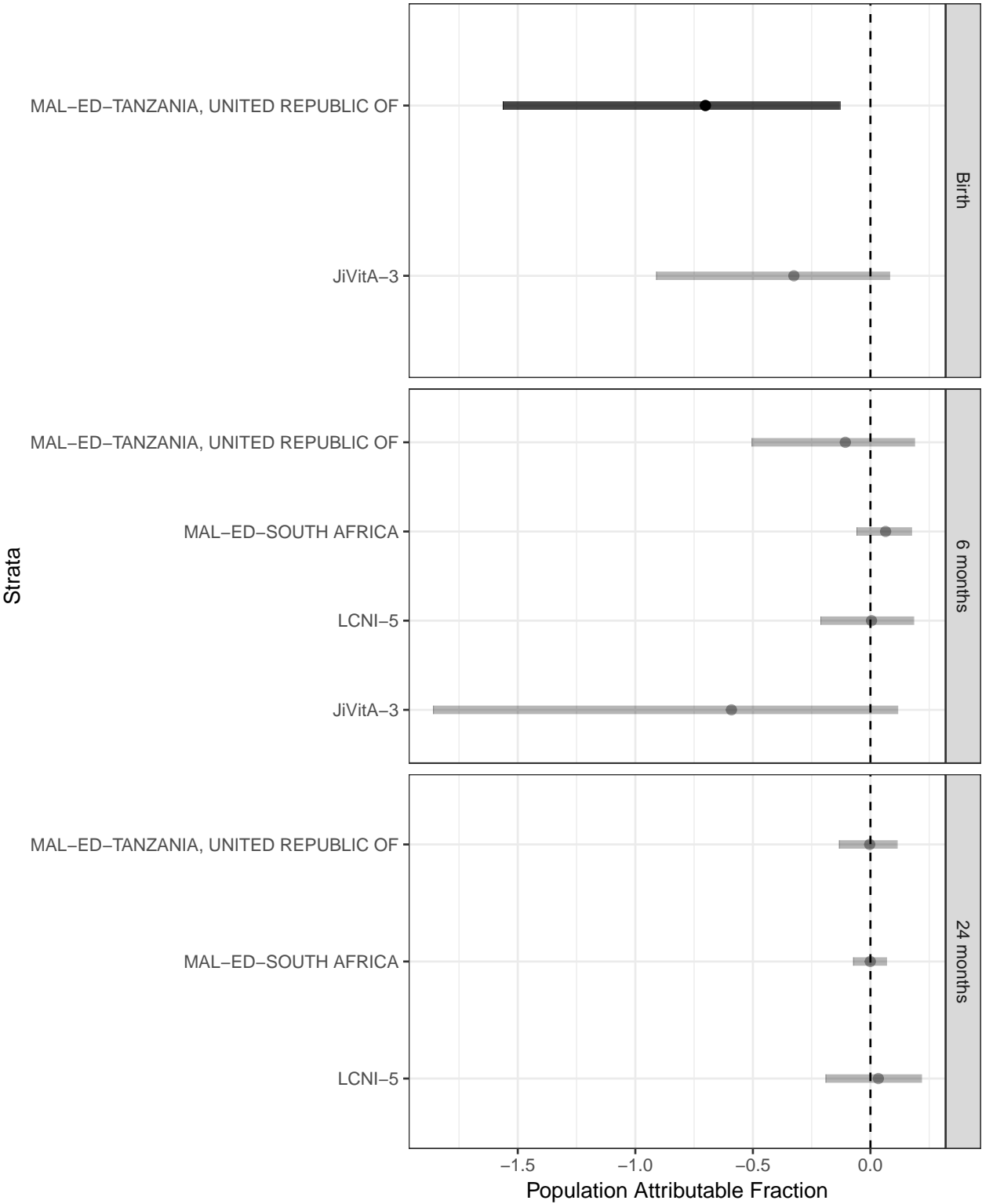


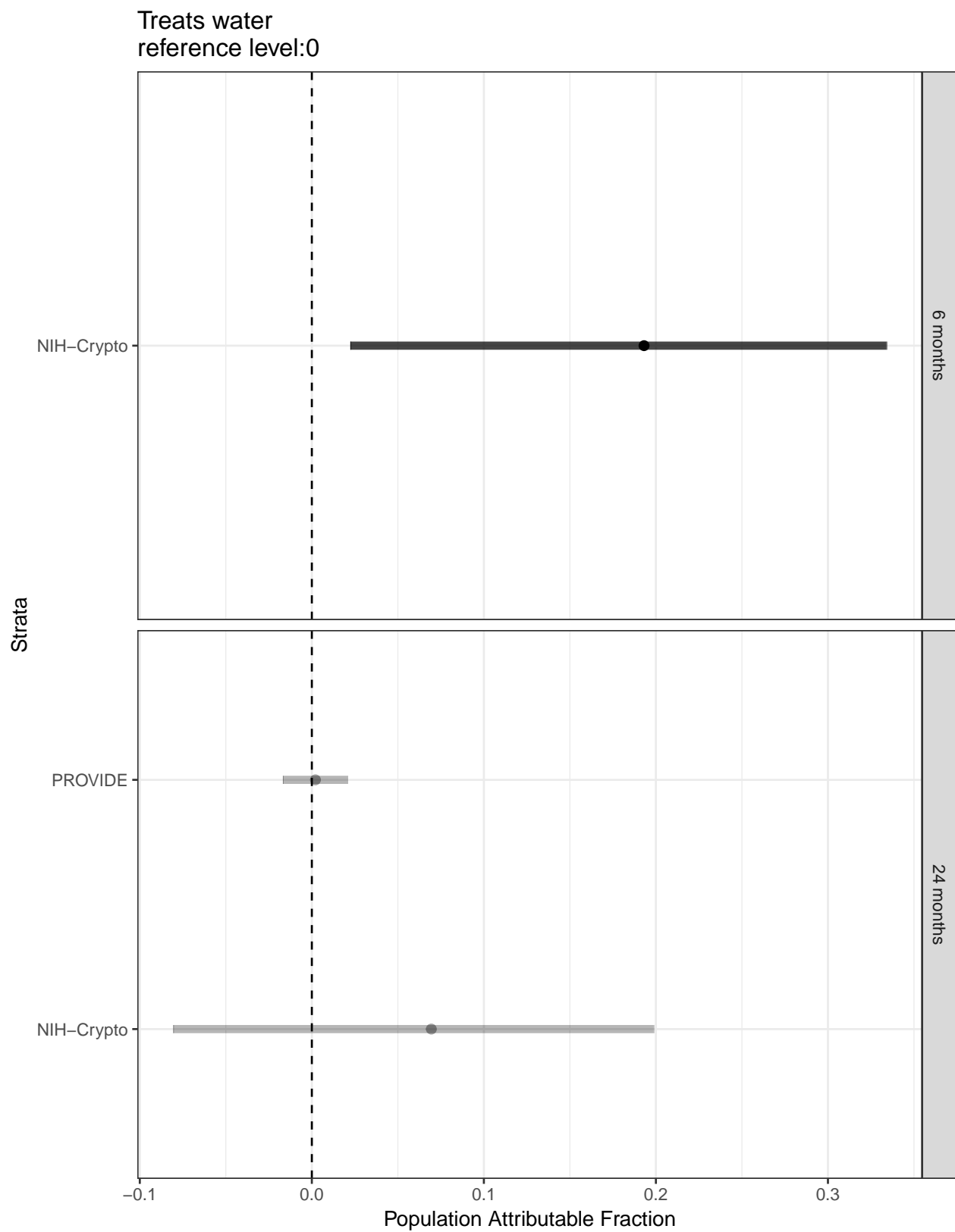
Number of people in the household
reference level:3 or less



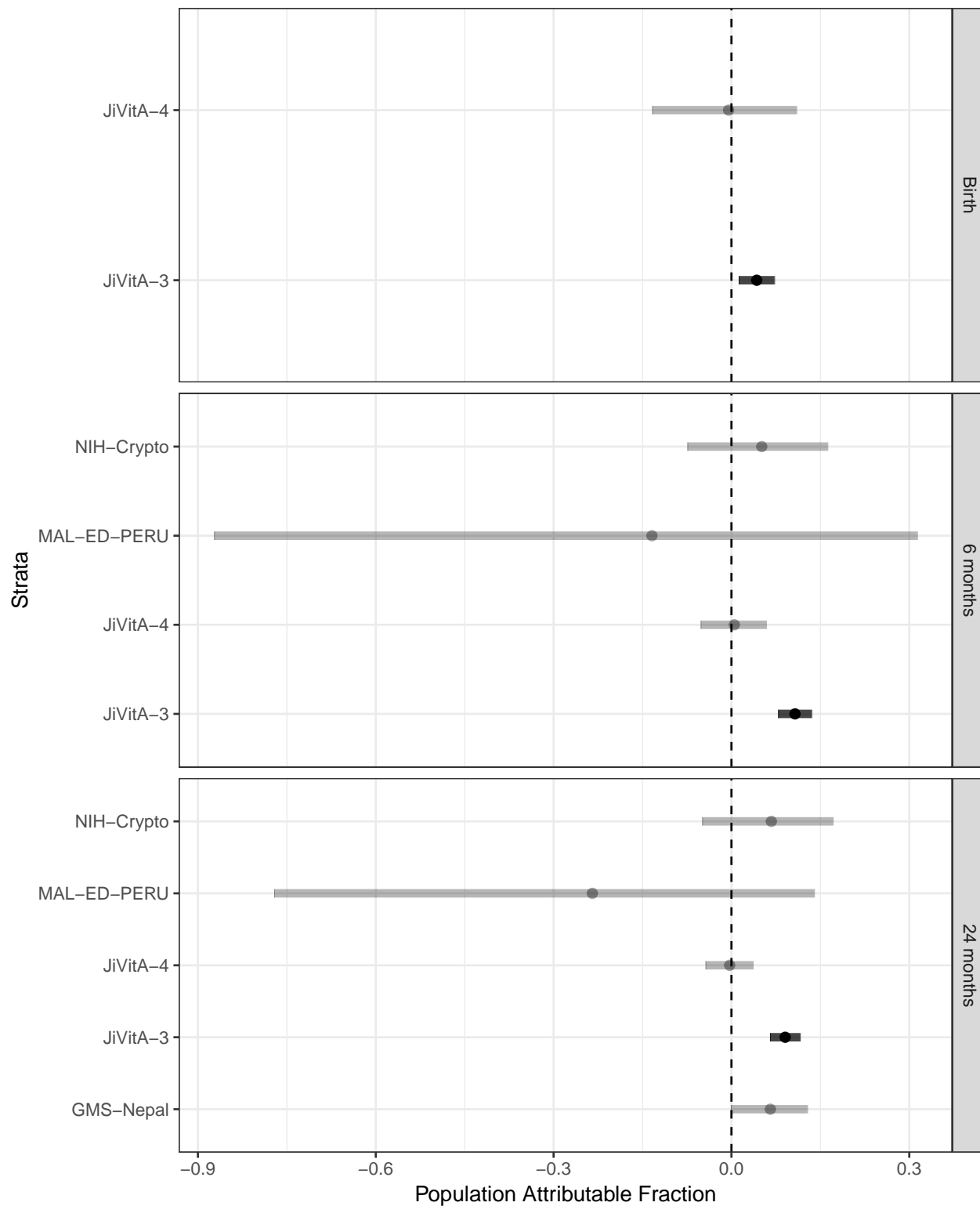


Safe water
reference level:0

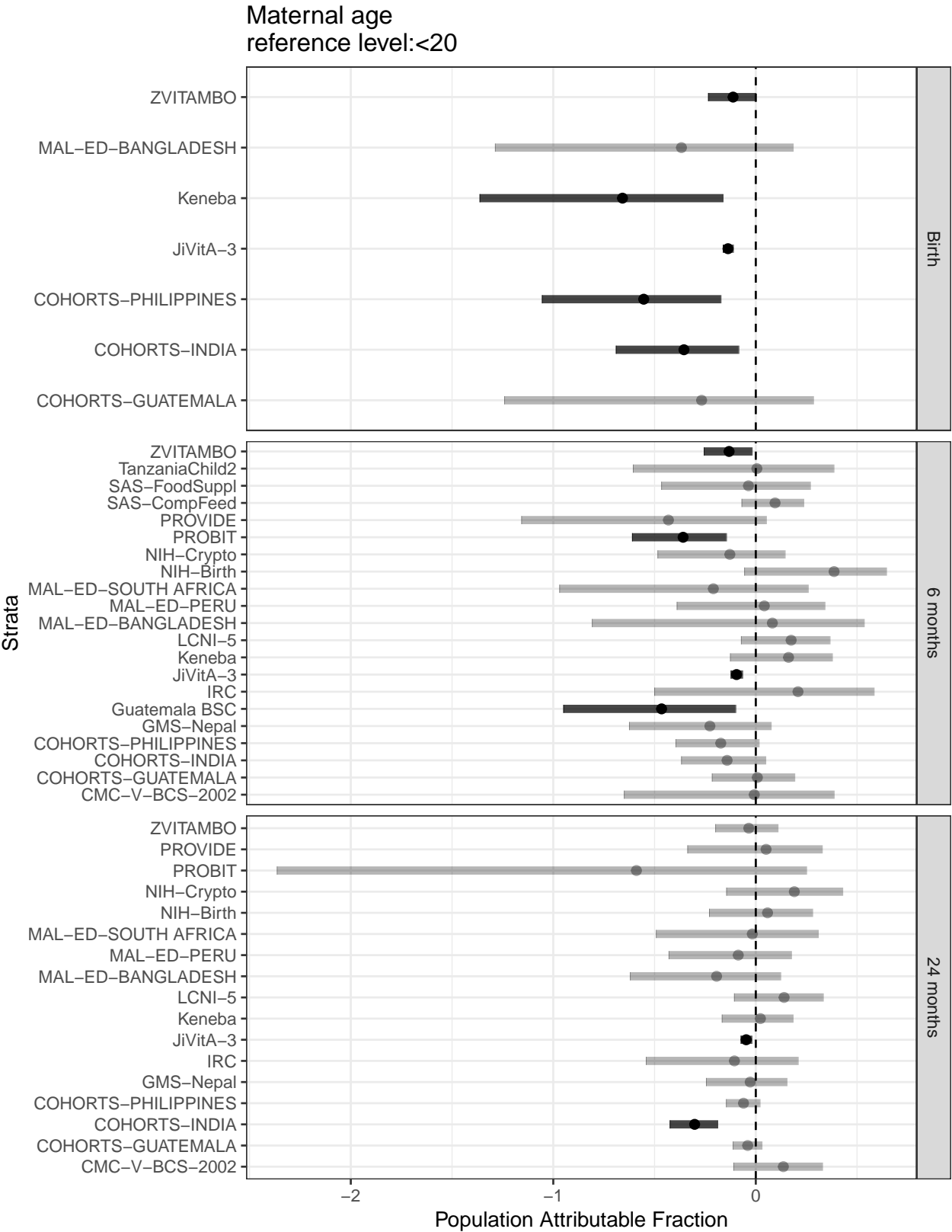




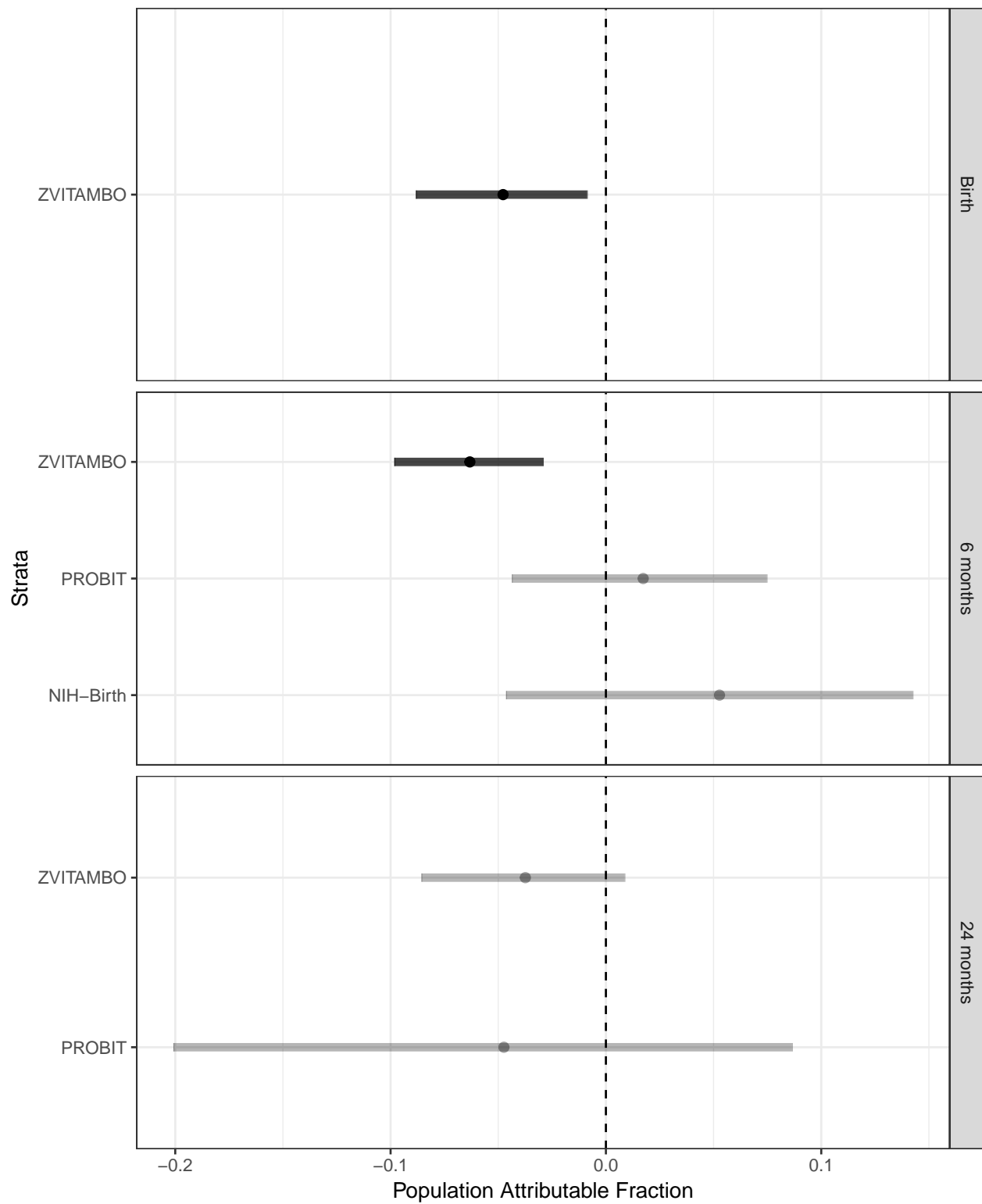
USAID Household Food Insecurity Access Scale (HFIAS) category
reference level: Food Secure



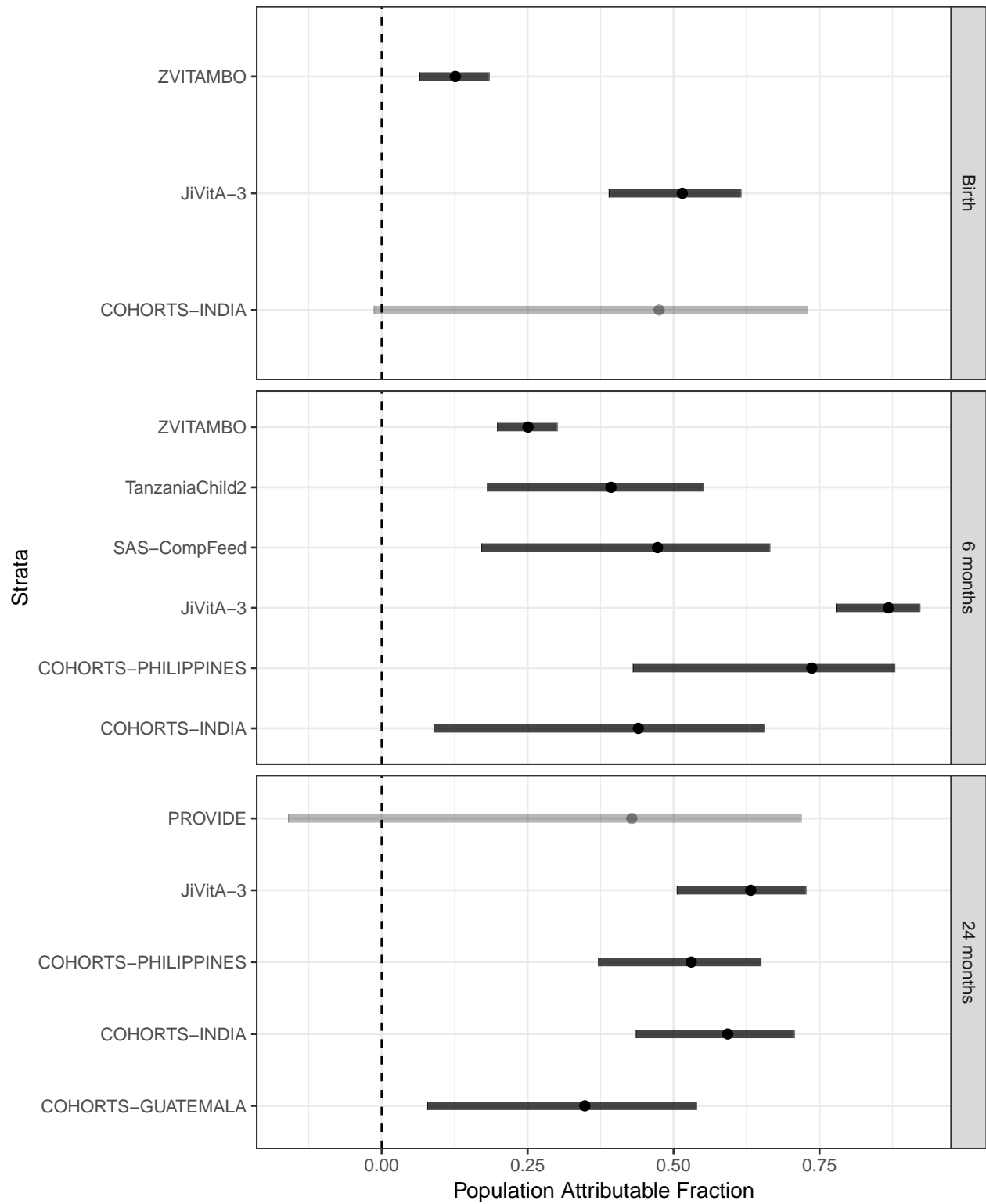
Maternal characteristics

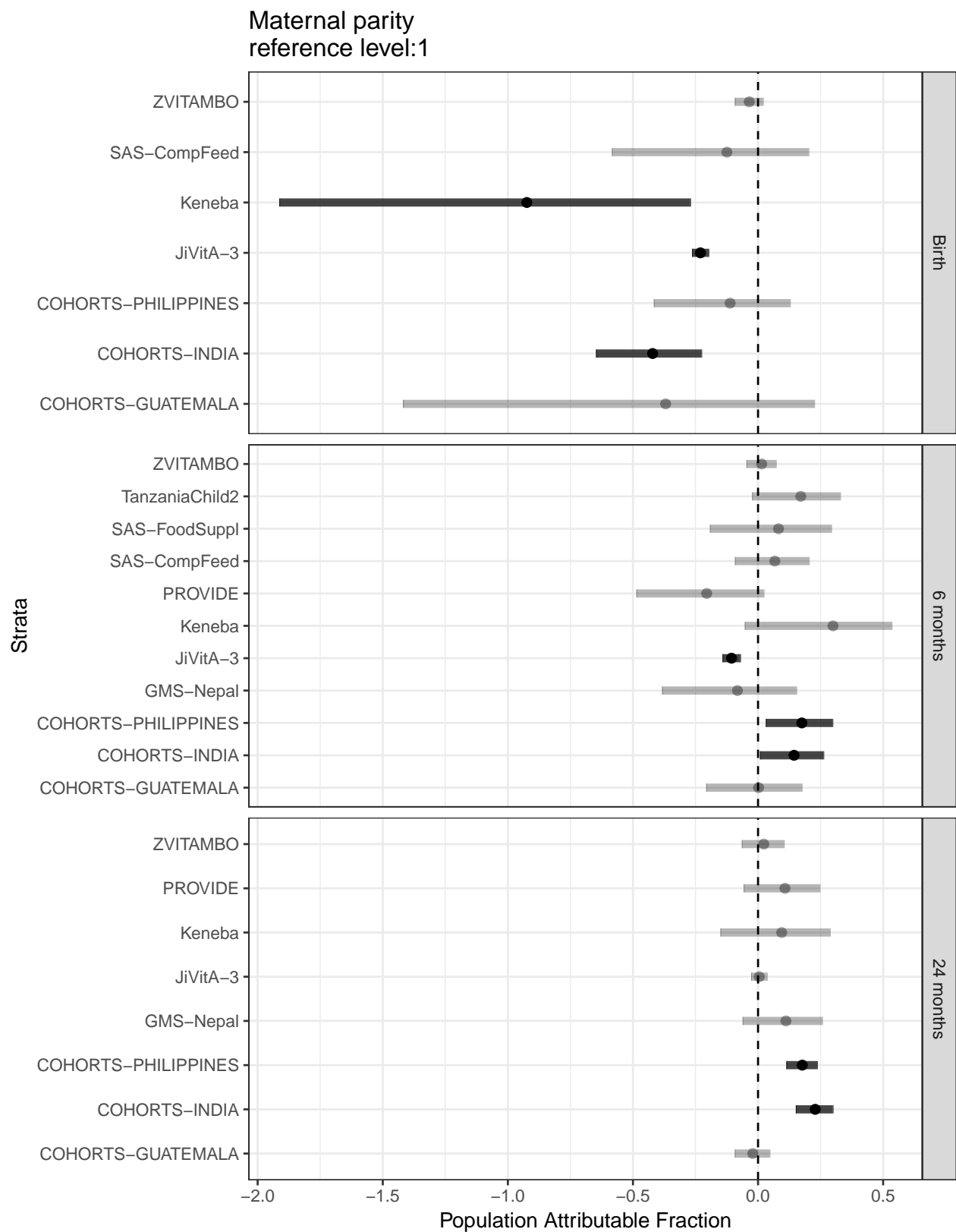


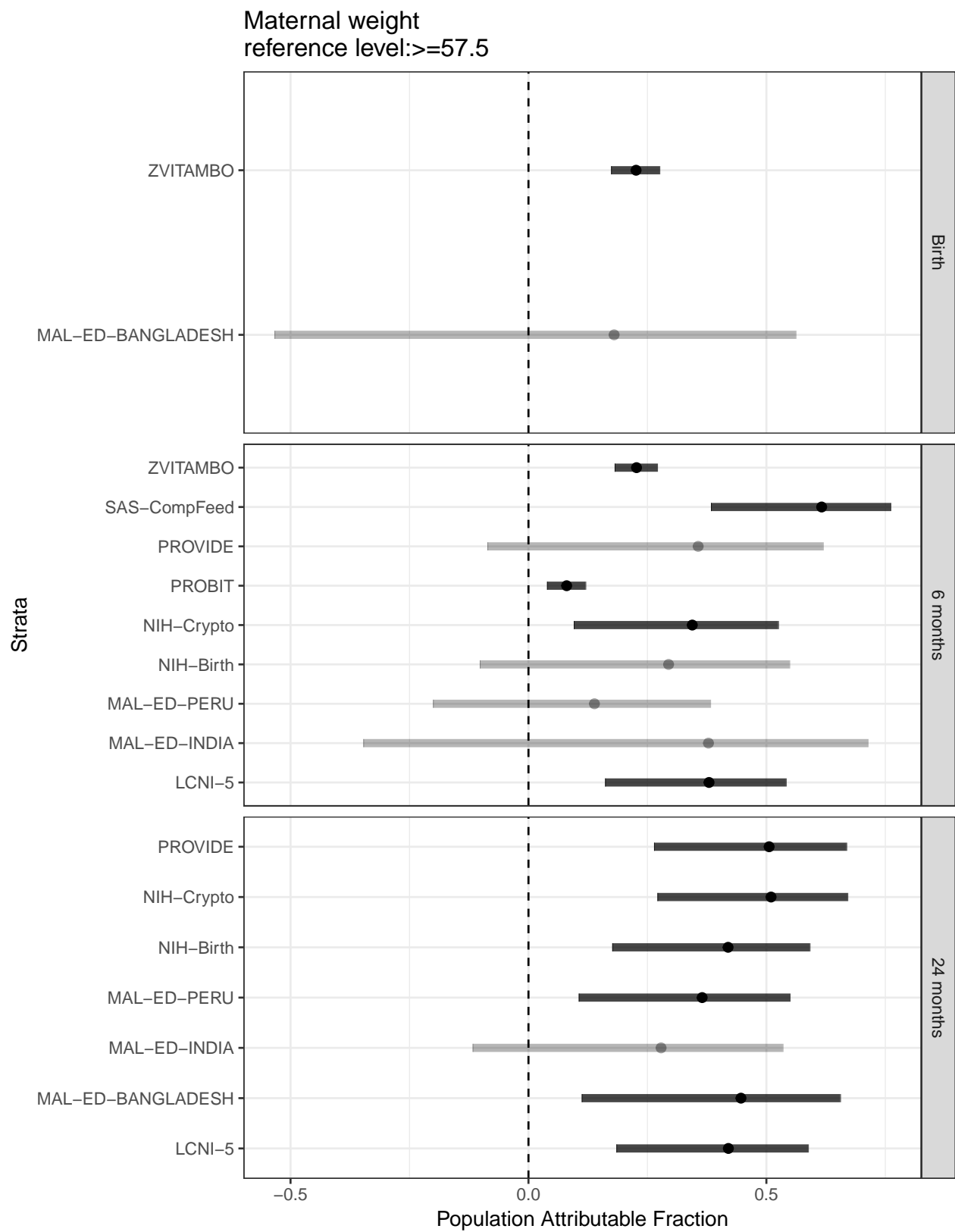
Maternal BMI
reference level:[18.5–25)



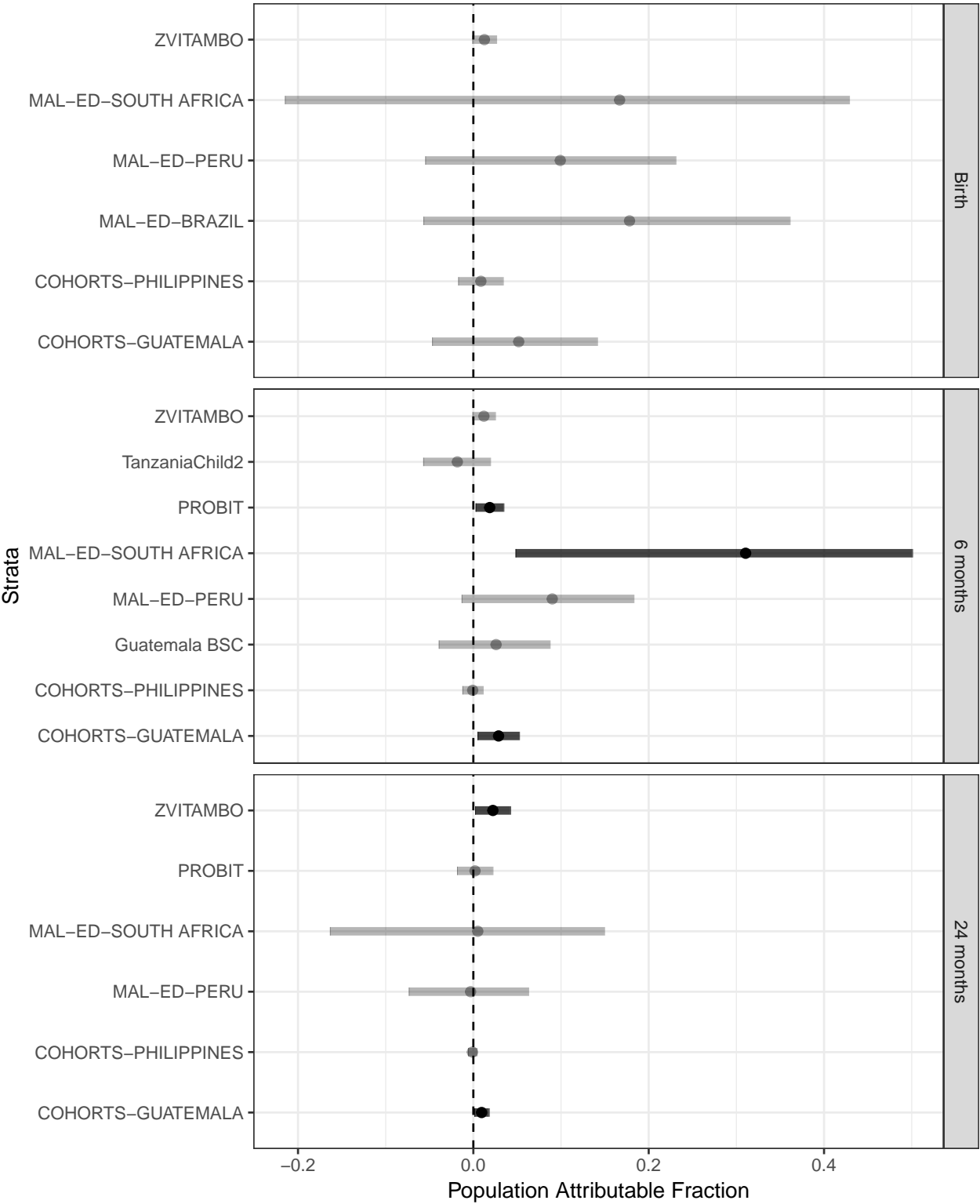
Maternal height
reference level: ≥ 160



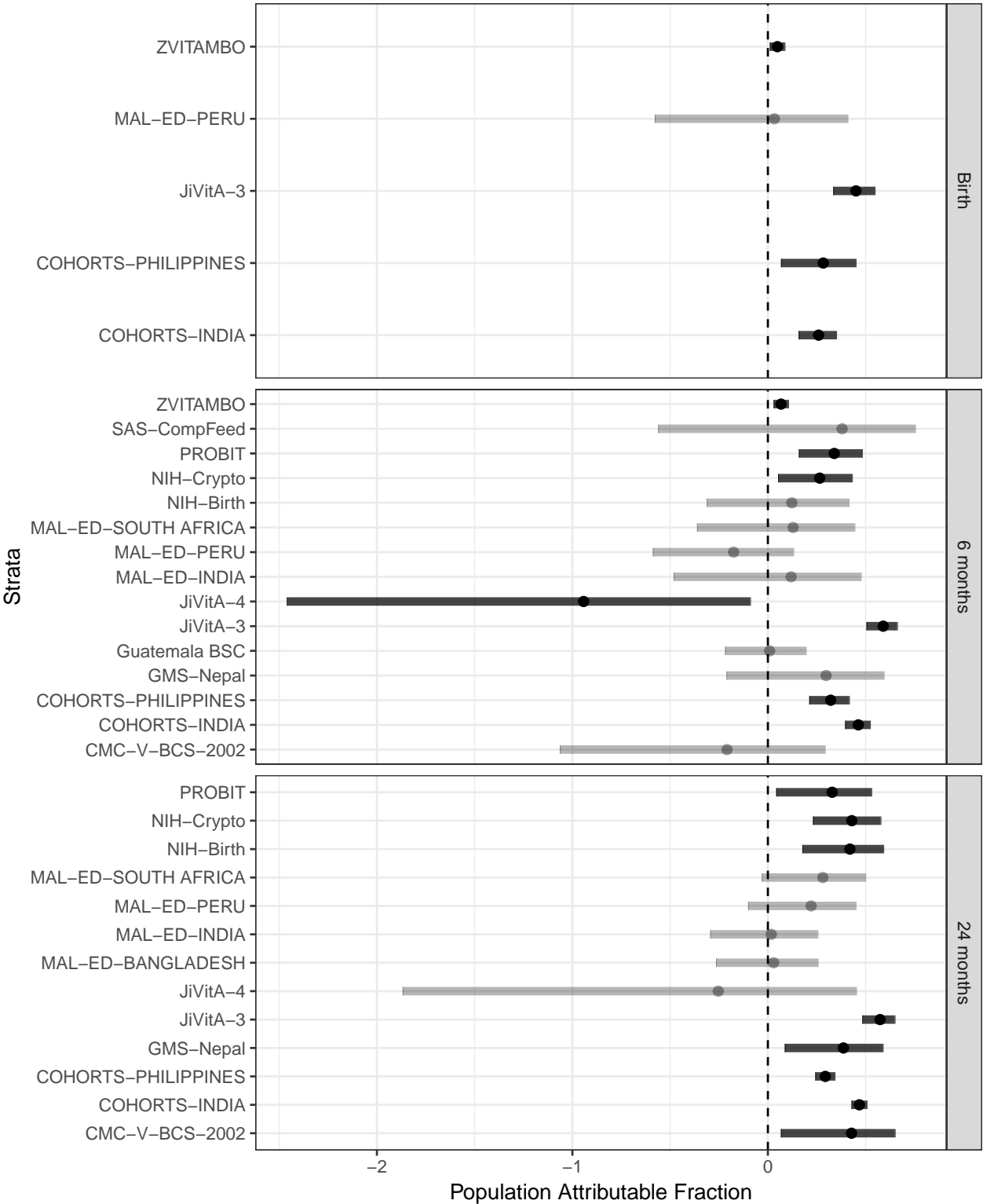




Mother is unmarried
reference level:0



Mother's education
reference level:Q4



Paternal characteristics

