Table 6: Relationship between health system performance and SIA frequency across regions in survey sample.

| Indicator | Region |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | North <br> Central | North East | North West | South East | South South | South <br> West |
| Average total number of SIAs at LGA level | 75.81 | 100.17 | 113.94 | 47.07 | 47.38 | 50.61 |
| Full immunisation status (incl. polio) ${ }^{\text {a }}$ | 21.9\% | 11.7\% | 8.3\% | 40.6\% | 31.5\% | 33.4\% |
| Child exposure to SIAs | 9.11 | 13.01 | 15.06 | 4.78 | 4.71 | 5.34 |
| Mother's exposure to SIAs in pregnancy | 3.28 | 4.42 | 5.07 | 1.89 | 1.87 | 2.07 |
| Mother's average no. of ANC visits | 4.68 | 2.78 | 2.3 | 8.16 | 6.35 | 10.75 |
| Average place of delivery: home | 49.5\% | 80.1\% | 87.2\% | 17.8\% | 50.4\% | 23.2\% |
| Average place of delivery: private facility | 16.5\% | 1.5\% | 1.5\% | 45.5\% | 15.6\% | 29.3\% |
| Average place of delivery: public facility | 34.0\% | 18.4\% | 11.3\% | 36.8\% | 34.0\% | 47.4\% |
| Average survival of children under 5 years | 91.8\% | 89.6\% | 87.4\% | 91.9\% | 93.1\% | 94.1\% |
| Mothers' average years of education | 3.05 | 1.49 | 1.16 | 4.57 | 4.42 | 4.25 |
| Average household wealth index | 3.88 | 2.54 | 2.93 | 4.96 | 4.75 | 5.1 |
| Notes. Derived from DHS data. Unweighted statistics aggregated firstly at LGA and secondly at regional level, comprising full sample of children born between Oct 2000 and Dec 2017. ANC = antenatal care; DHS = Demographic and Health Survey; LGA = local government area; SIA = Supplementary Immunisation Activity. |  |  |  |  |  |  |
| ${ }^{\text {a. Full immunisation status for children aged between }}$ dose of measles vaccine, and three doses of oral po | $30 \text { months }$ <br> e. | cluding | least 1 | of BCG | doses | $\text { 'T, } 1$ |


| Dependent variables: various indicators of routine immunisation, maternal care and child survival (see right) | Non-polio full immunisation status |  | Delivery |  |  | Antenatal care |  | Child survival <br> Total exposure |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Full model | Interaction model | At home | At private facility | At public facility | No. of antenatal care | No. of tetanus injections |  |
| EXP_CHI | -0.030********) | 0.011 |  |  |  |  |  |  |
|  | [-0.044,-0.016] | [-0.015, 0.036$]$ |  |  |  |  |  |  |
| EXPxAGE |  | -0.001******** |  |  |  |  |  |  |
|  |  | [-0.001,-0.000] |  |  |  |  |  |  |
| EXP_PREG |  |  | 0.006 | -0.057*** | 0.004 | -0.020 | -0.003 |  |
|  |  |  | [-0.020,0.032] | [-0.091,-0.024] | [-0.020,0.029] | [-0.060,0.021] | [-0.014,0.007] |  |
| EXP_TOT_nod (total exposure, date approximation) |  |  |  |  |  |  |  | $\begin{gathered} -0.013^{* *} \\ {[-0.024,-0.001]} \end{gathered}$ |
| CHI_AGE | $0.033^{* * *}$ | $0.038{ }^{\text {*** }}$ |  |  |  |  |  | -0.002 |
|  | [0.026,0.039] | [0.031,0.045] |  |  |  |  |  | [-0.014,0.009] |
| CHI_AGE2 |  |  |  |  |  |  |  | 0.000 |
|  |  |  |  |  |  |  |  | [-0.000, 0.000] |
| CHI_ORD | $-0.060{ }^{\text {*** }}$ | -0.061 ${ }^{\text {*** }}$ |  |  |  |  |  | $-0.143^{* * *}$ |
|  | [-0.088,-0.033] | [-0.088,-0.034] |  |  |  |  |  | [-0.170,-0.116] |
| CHI_SEX | -0.007 | -0.006 |  |  |  |  |  |  |
|  | [-0.090,0.077] | [-0.089, 0.078] |  |  |  |  |  | [0.157,0.334] |
| MOT_ANC | $0.053{ }^{\text {+** }}$ | $0.053^{* * *}$ | -0.133********) | $0.056{ }^{\text {*** }}$ | $0.061^{* * *}$ |  |  | 0.002 |
|  | [0.043,0.062] | [0.044,0.062] | [-0.142,-0.125] | [0.047,0.064] | [0.054,0.068] |  |  | [-0.010, 0.013] |
| MOT_EDM | $0.069{ }^{* *}$ | $0.069{ }^{* * *}$ | -0.064********) | $0.057{ }^{* * *}$ | $0.053{ }^{* * *}$ | $0.105^{* *}$ | $0.031^{* * *}$ | 0.018 |
|  | [0.049,0.089] | [0.049,0.089] | [-0.081,-0.048] | [0.035,0.080] | [0.038,0.069] | [0.079,0.130] | [0.024,0.038] | [-0.006,0.041] |
| MOT_EDF | 0.006 | 0.007 | -0.028********) | $0.036{ }^{* * *}$ | $0.031^{* * *}$ | $0.090^{* * *}$ | $0.022^{* * *}$ | 0.024 ** |
|  | [-0.014, 0.027] | [-0.013,0.028] | [-0.045,-0.012] | [0.012,0.059] | [0.015,0.047] | [0.068,0.112] | [0.015,0.029] | [0.002,0.045] |
| MOT_AWE | $2.955^{* *}$ | $2.964^{* * *}$ | -0.947******** | $0.289{ }^{\text {*** }}$ | $1.021^{* * *}$ | $1.900^{* * *}$ | $0.631^{* * *}$ |  |
|  | [2.821,3.089] | [2.829,3.098] | [-1.029,-0.865] | [0.166,0.411] | [0.936,1.106] | [1.754,2.047] | [0.584,0.677] |  |
| MOT_AGE | $0.025^{* *}$ | $0.026{ }^{* *}$ | -0.002 | 0.001 | 0.002 | $0.014^{* * *}$ | 0.002 | $0.010^{* *}$ |
|  | [0.016,0.035] | [0.016,0.035] | [-0.007,0.004] | [-0.007,0.008] | [-0.003,0.007] | [0.007,0.020] | [-0.000,0.004] | [0.000,0.020] |
| HH_RUR | -0.074 | -0.076 | $0.599{ }^{* * *}$ | -0.402*** | -0.364*******) | -0.568****** | -0.168*******) | -0.266*** |
|  | [-0.191,0.044] | [-0.194,0.042] | [0.498,0.701] | [-0.526,-0.278] | [-0.458,-0.270] | [-0.836,-0.301] | [-0.226,-0.111] | [-0.395,-0.137] |
| HH_REL (ref: Catholic): Other Christian | -0.172*******) | -0.172** | 0.106 | -0.042 | -0.050 | -0.102 | -0.037 | -0.050 |
|  | [-0.329,-0.015] | [-0.330,-0.015] | [-0.029,0.242] | [-0.180,0.096] | [-0.172,0.071] | [-0.348,0.144] | [-0.096, 0.022] | [-0.245, 0.144 ] |
| HH_REL (ref: Catholic): Islam | -0.504**********) | -0.522********) | $0.205^{*}$ | $-0.218{ }^{* *}$ | -0.035 | -0.177 | -0.109*********) | 0.025 |
|  | [-0.695,-0.313] | [-0.714,-0.330] | [0.040,0.369] | [-0.397,-0.040] | [-0.184,0.113] | [-0.508,0.154] | [-0.189,-0.029] | [-0.204,0.254] |
| HH_REL (ref: Catholic): <br> Traditionalist | -0.596******** | $-0.600{ }^{* * *}$ | $1.053^{* * *}$ | $-0.863^{* * *}$ | $-0.553^{* * *}$ | $-0.589^{* *}$ | $-0.360^{* * *}$ | -0.069 |
|  | [-1.025,-0.168] | [-1.029,-0.171] | [0.680,1.426] | [-1.347,-0.380] | [-0.936,-0.171] | [-1.087,-0.091] | [-0.498,-0.221] | [-0.457,0.318] |
| HH_REL (ref: Catholic): Other | -0.733 | -0.725 | -0.555 | 0.570 | 0.388 | 0.096 | 0.022 | -0.324 |
|  | [-2.533,1.067] | [-2.524,1.075] | [-1.634,0.523] | [-0.794,1.933] | [-0.744, 1.520] | [-2.104,2.295] | [-0.697,0.741] | [-1.551,0.903] |
| HH_ETH (ref: Ekoi): Fulani | -1.040********) | -1.092*******) | $0.671^{* * *}$ | -0.058 | -0.744********) | -0.764 | -0.383******* | -0.447 |
|  | [-1.596,-0.484] | [-1.650,-0.535] | [0.201,1.141] | [-1.098,0.981] | [-1.207,-0.280] | [-2.268,0.740] | [-0.655,-0.110] | [-1.256,0.362] |
| HH_ETH (ref: Ekoi): Hausa | -0.926******** | $-1.012^{* * *}$ | $0.936^{* *}$ | -0.569 | -0.806*********) | -0.504 | $-0.293 *$ | $-0.832{ }^{* *}$ |
|  | [-1.459,-0.393] | [-1.547,-0.477] | [0.481,1.391] | [-1.557,0.419] | [-1.254,-0.357] | [-2.005,0.996] | [-0.563,-0.023] | [-1.632,-0.032] |
| HH_ETH (ref: Ekoi): Ibibio | $-0.639^{* *}$ | -0.643** | 0.296 | 0.750 | -0.263 | -0.026 | -0.163 | -0.777* |
|  | [-1.224,-0.054] | [-1.229,-0.057] | [-0.220,0.811] | [-0.270, 1.771] | [-0.767,0.242] | [-1.484, 1.433] | [-0.483,0.156] | [-1.650,0.095] |
| HH_ETH (ref: Ekoi): Igala | -0.699** | $-0.704{ }^{* *}$ | -0.532* | $1.440^{* * *}$ | 0.023 | -0.135 | $0.284^{*}$ | -0.670 |
|  | [-1.337,-0.061] | [-1.342,-0.065] | [-1.106,0.043] | [0.423,2.456] | [-0.509,0.556] | [-1.689, 1.418] | [-0.046, 0.615] | [-1.584, 0.243] |
| HH_ETH (ref: Ekoi): Igbo | $-0.542^{* *}$ | $-0.546^{* *}$ | -0.852***********) | $2.114^{\text {+"* }}$ | $-0.601^{* * *}$ | 1.096 | 0.078 | -0.917** |
|  | [-1.050,-0.035] | [-1.054,-0.037] | [-1.301,-0.403] | [1.165,3.064] | [-1.039,-0.162] | [-0.409,2.602] | [-0.184,0.340] | [-1.704,-0.130] |
| HH_ETH (ref: Ekoi): Ijaw / Izon | -0.654** | -0.651** | $0.819^{\text {*** }}$ | 0.238 | -0.751*********) | -0.915 | -0.150 | -0.766* |
|  | [-1.242,-0.066] | [-1.240,-0.061] | [0.289, 1.350] | [-0.817,1.292] | [-1.271,-0.231] | [-2.502,0.672] | [-0.444, 0.145$]$ | [-1.592,0.059] |
| HH_ETH (ref: Ekoi): Kanuri / Beriberi | $-1.146^{* * *}$ | $-1.232{ }^{* * *}$ | $1.027{ }^{\text {*** }}$ | -0.564 | -0.954********) | -0.626 | $-0.286^{*}$ | -0.628 |
|  | [-1.819,-0.474] | [-1.906,-0.557] | [0.493, 1.560] | [-1.886, 0.759] | [-1.477,-0.431] | [-2.148,0.897] | [-0.579,0.007] | [-1.471,0.215] |
|  | $-0.721^{* *}$ | $-0.734^{* *}$ | -0.803*************) | $1.933{ }^{\text {+** }}$ | 0.111 | -1.066 | $-0.392 *$ | -0.883** |



| Dependent variable: non-polio full immunisation status | Full model |  |  |  | Interaction model (EXPxAGE) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2003 | 2008 | 2013 | 2018 | 2003 | 2008 | 2013 | 2018 |
| EXP_CHI | $\begin{gathered} -0.040 \\ {[-0.289,0.209]} \end{gathered}$ | $\begin{gathered} -0.051^{* * *} \\ {[-0.079,-0.023]} \end{gathered}$ | $\begin{gathered} -0.026^{* * *} \\ {[-0.043,-0.010]} \end{gathered}$ | $\begin{gathered} -0.027 \\ {[-0.065,0.010]} \end{gathered}$ | $\begin{gathered} -0.086 \\ {[-1.046,0.874]} \end{gathered}$ | $\begin{gathered} -0.042 \\ {[-0.093,0.009]} \end{gathered}$ | $\begin{gathered} 0.027^{*} \\ {[-0.003,0.058]} \end{gathered}$ | $\begin{gathered} 0.111^{*} \\ {[-0.012,0.233]} \end{gathered}$ |
| EXPxAGE |  |  |  |  | $\begin{gathered} 0.003 \\ {[-0.051,0.057]} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[-0.001,0.001]} \end{gathered}$ | $\underset{[-0.002,-0.001]}{-0.001+"}$ | $\stackrel{-0.005^{* *}}{[-0.009,-0.001]}$ |
| CHI_AGE | $\begin{gathered} 0.117^{* *} \\ {[0.017,0.218]} \end{gathered}$ | $\begin{gathered} 0.035 * * * \\ {[0.025,0.046]} \end{gathered}$ | $\begin{gathered} 0.035^{* * *} \\ {[0.026,0.043]} \end{gathered}$ | $\begin{gathered} 0.036 " * \\ {[0.016,0.056]} \end{gathered}$ | $\begin{gathered} 0.109 \\ {[-0.087,0.305]} \end{gathered}$ | $\begin{gathered} 0.036{ }^{* * *} \\ {[0.024,0.049]} \end{gathered}$ | $\begin{gathered} 0.043 \times{ }^{* * *} \\ {[0.033,0.052]} \end{gathered}$ | $\begin{gathered} 0.042^{\text {²* }} \\ {[0.021,0.062]} \end{gathered}$ |
| CHI_ORD | $\begin{gathered} 0.018 \\ {[-0.153,0.188]} \end{gathered}$ | $\begin{gathered} -0.037^{*} \\ {[-0.080,0.007]} \end{gathered}$ | $\begin{gathered} -0.0766^{* * *} \\ {[-0.113,-0.039]} \end{gathered}$ | $\begin{gathered} -0.069^{* *} \\ {[-0.129,-0.008]} \end{gathered}$ | $\begin{gathered} 0.018 \\ {[-0.153,0.188]} \end{gathered}$ | $\begin{gathered} -0.037^{*} \\ {[-0.081,0.006]} \end{gathered}$ | $\begin{gathered} -0.076 * * \\ {[-0.113,-0.039]} \end{gathered}$ | $\begin{gathered} -0.070^{* *} \\ {[-0.131,-0.009]} \end{gathered}$ |
| CHI_SEX | $\begin{gathered} 0.031 \\ {[-0.464,0.526]} \end{gathered}$ | $\begin{gathered} 0.010 \\ {[-0.126,0.145]} \end{gathered}$ | $\begin{gathered} -0.027 \\ {[-0.137,0.083]} \end{gathered}$ | $\begin{gathered} 0.030 \\ {[-0.146,0.206]} \end{gathered}$ | $\begin{gathered} 0.031 \\ {[-0.464,0.526]} \end{gathered}$ | $\begin{gathered} 0.010 \\ {[-0.126,0.145]} \end{gathered}$ | $\begin{gathered} -0.025 \\ {[-0.135,0.085]} \end{gathered}$ | $\begin{gathered} 0.029 \\ {[-0.147,0.205]} \end{gathered}$ |
| MOT_ANC | $\begin{gathered} 0.095 \\ {[0.045,0.144]} \end{gathered}$ | $\begin{gathered} 0.061 \\ {[0.045,0.077]} \end{gathered}$ | $\begin{gathered} 0.044 * * * \\ {[0.032,0.056]} \end{gathered}$ | $\underset{[0.049,0.100]}{0.074 * *}$ | $\begin{gathered} 0.094 * * \\ {[0.044,0.144]} \end{gathered}$ | $\underset{[0.045,0.077]}{0.061 * *}$ | $\begin{gathered} 0.045 \\ {[0.032,0.057]} \end{gathered}$ | $\begin{gathered} 0.075 \\ {[0.050,0.101]} \end{gathered}$ |
| MOT_EDM | $\begin{gathered} 0.074 \\ {[-0.036,0.185]} \end{gathered}$ | $\begin{gathered} 0.064 \\ {[0.031,0.096]} \end{gathered}$ | $\stackrel{0.075}{[0.048,0.101]}$ | $\begin{gathered} 0.041^{*} \\ {[-0.003,0.085]} \end{gathered}$ | $\begin{gathered} 0.074 \\ {[-0.036,0.185]} \end{gathered}$ | $\begin{gathered} 0.064 \\ {[0.031,0.096]} \end{gathered}$ | $\begin{gathered} 0.076 * * \\ {[0.049,0.103]} \end{gathered}$ | $\begin{gathered} 0.044^{*} \\ {[-0.000,0.088]} \end{gathered}$ |
| MOT_EDF | $\begin{gathered} -0.035 \\ {[-0.159,0.088]} \end{gathered}$ | $\begin{gathered} 0.026 \\ {[-0.007,0.059]} \end{gathered}$ | $\begin{gathered} -0.009 \\ {[-0.037,0.018]} \end{gathered}$ | $\begin{gathered} 0.028 \\ {[-0.015,0.071]} \end{gathered}$ | $\begin{gathered} -0.035 \\ {[-0.159,0.088]} \end{gathered}$ | $\begin{gathered} 0.026 \\ {[-0.007,0.059]} \end{gathered}$ | $\begin{gathered} -0.007 \\ {[-0.035,0.020]} \end{gathered}$ | $\begin{gathered} 0.029 \\ {[-0.014,0.072]} \end{gathered}$ |
| MOT_AWE | $\begin{gathered} 2.968^{* * *} \\ {[1.880,4.056]} \end{gathered}$ | $\begin{gathered} 2.4533^{* * *} \\ {[2.255,2.650]} \end{gathered}$ | $\begin{gathered} 3.411^{* * *} \\ {[3.217,3.605]} \end{gathered}$ | $\begin{gathered} 3.131^{* * *} \\ {[2.779,3.484]} \end{gathered}$ | $\begin{gathered} 2.971^{* * *} \\ {[1.881,4.061]} \end{gathered}$ | $\begin{gathered} 2.4555^{* * *} \\ {[2.257,2.652]} \end{gathered}$ | $\begin{gathered} 3.422 * * * \\ {[3.228,3.615]} \end{gathered}$ | $\begin{gathered} 3.132 * * * \\ {[2.779,3.484]} \end{gathered}$ |
| MOT_AGE | $\begin{gathered} 0.012 \\ {[-0.046,0.070]} \end{gathered}$ | $\begin{gathered} 0.021+* \\ {[0.006,0.037]} \end{gathered}$ | $\begin{gathered} 0.027^{* * *} \\ {[0.014,0.040]} \end{gathered}$ | $\begin{gathered} 0.033^{* * *} \\ {[0.012,0.054]} \end{gathered}$ | $\begin{gathered} 0.012 \\ {[-0.046,0.070]} \end{gathered}$ | $\begin{gathered} 0.0211^{\text {m* }} \\ {[0.006,0.037]} \end{gathered}$ | $\begin{gathered} 0.027 * * * \\ {[0.015,0.040]} \end{gathered}$ | $\begin{gathered} 0.0344^{* * *} \\ {[0.013,0.055]} \end{gathered}$ |
| HH_RUR | $\begin{gathered} -0.056 \\ {[-0.680,0.569]} \end{gathered}$ | $\begin{gathered} -0.031 \\ {[-0.244,0.181]} \end{gathered}$ | $\begin{gathered} -0.168 * * \\ {[-0.321,-0.015]} \end{gathered}$ | $\begin{gathered} -0.232^{*} \\ {[-0.467,0.002]} \end{gathered}$ | $\begin{gathered} -0.054 \\ {[-0.680,0.571]} \end{gathered}$ | $\begin{gathered} -0.030 \\ {[-0.243,0.182]} \end{gathered}$ | $\begin{gathered} -0.176^{* *} \\ {[-0.329,-0.022]} \end{gathered}$ | $\begin{gathered} -0.235^{* *} \\ {[-0.469,-0.001]} \end{gathered}$ |
| HH_REL (ref: Catholic): Other Christian | $\begin{gathered} -0.189 \\ {[-0.895,0.517]} \end{gathered}$ | $\stackrel{-0.269^{* *}}{[-0.532,-0.007]}$ | $\begin{gathered} -0.099 \\ {[-0.310,0.112]} \end{gathered}$ | $\begin{gathered} 0.011 \\ {[-0.320,0.342]} \end{gathered}$ | $\begin{gathered} -0.188 \\ {[-0.894,0.518]} \end{gathered}$ | $\stackrel{-0.270 *}{[-0.532,-0.007]}$ | $\begin{gathered} -0.099 \\ {[-0.311,0.112]} \end{gathered}$ | $\begin{gathered} 0.018 \\ {[-0.313,0.349]} \end{gathered}$ |
| HH_REL (ref: Catholic): Islam | $\begin{gathered} -0.258 \\ {[-1.035,0.519]} \end{gathered}$ | $\begin{gathered} -0.540 * \\ {[-0.864,-0.216]} \end{gathered}$ | $\begin{gathered} -0.474^{* * *} \\ {[-0.729,-0.218]} \end{gathered}$ | $\begin{gathered} -0.432 * * \\ {[-0.848,-0.015]} \end{gathered}$ | $\begin{gathered} -0.257 \\ {[-1.034,0.520]} \end{gathered}$ | $\begin{gathered} -0.543 * * \\ {[-0.868,-0.219]} \end{gathered}$ | $\begin{gathered} -0.504 * * * \\ {[-0.760,-0.248]} \end{gathered}$ | $\begin{gathered} -0.438 * \\ {[-0.854,-0.022]} \end{gathered}$ |
| HH_REL (ref: Catholic): Traditionalist | $\begin{gathered} -0.325 \\ {[-2.215,1.565]} \end{gathered}$ | $\begin{gathered} -0.481 \\ {[-1.089,0.126]} \end{gathered}$ | $\begin{gathered} -0.757 * \\ {[-1.411,-0.104]} \end{gathered}$ | $\begin{gathered} -0.168 \\ {[-1.807,1.470]} \end{gathered}$ | $\begin{gathered} -0.322 \\ {[-2.212,1.568]} \end{gathered}$ | $\begin{gathered} -0.481 \\ {[-1.089,0.127]} \end{gathered}$ | $\begin{gathered} -0.774^{* *} \\ {[-1.428,-0.119]} \end{gathered}$ | $\begin{gathered} -0.105 \\ {[-1.755,1.545]} \end{gathered}$ |
| HH_REL (ref: Catholic): Other | $\begin{gathered} 0.000 \\ {[0.000,0.000]} \end{gathered}$ | $\begin{gathered} -0.531 \\ {[-2.432,1.370]} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[0.000,0.000]} \end{gathered}$ | $\begin{gathered} 0.162 \\ {[-1.319,1.642]} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[0.000,0.000]} \end{gathered}$ | $\begin{gathered} -0.526 \\ {[-2.428,1.377]} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[0.000,0.000]} \end{gathered}$ | $\begin{gathered} 0.191 \\ {[-1.290,1.671]} \end{gathered}$ |
| HH_ETH (ref: Ekoi): Fulani | $\begin{gathered} 0.000 \\ {[0.000,0.000]} \end{gathered}$ | $\underset{[-2.032,-0.522]}{-1.277^{*+1}}$ | $\begin{gathered} 0.058 \\ {[-1.523,1.640]} \end{gathered}$ | $\begin{gathered} -0.712 \\ {[-2.074,0.650]} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[0.000,0.000]} \end{gathered}$ | $\begin{gathered} -1.2899^{* * *} \\ {[-2.046,-0.531]} \end{gathered}$ | $\begin{gathered} 0.034 \\ {[-1.549,1.617]} \end{gathered}$ | $\begin{gathered} -0.771 \\ {[-2.133,0.591]} \end{gathered}$ |
| HH_ETH (ref: Ekoi): Hausa | $\begin{gathered} -0.297 \\ {[-2.094,1.500]} \end{gathered}$ | $\underset{[-1.956,-0.498]}{-1.227^{* * *}}$ | $\begin{gathered} 0.249 \\ {[-1.314,1.812]} \end{gathered}$ | $\begin{gathered} -0.635 \\ {[-1.952,0.682]} \end{gathered}$ | $\begin{gathered} -0.287 \\ {[-2.098,1.524]} \end{gathered}$ | $\begin{gathered} -1.245^{* * *} \\ {[-1.978,-0.511]} \end{gathered}$ | $\begin{gathered} 0.170 \\ {[-1.395,1.734]} \end{gathered}$ | $\begin{gathered} -0.691 \\ {[-2.008,0.626]} \end{gathered}$ |
| HH_ETH (ref: Ekoi): Ibibio | $\begin{gathered} 0.000 \\ {[0.000,0.000]} \end{gathered}$ | $\stackrel{-0.898 *}{[-1.695,-0.101]}$ | $\begin{gathered} 0.426 \\ {[-1.174,2.027]} \end{gathered}$ | $\begin{gathered} -0.712 \\ {[-2.124,0.700]} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[0.000,0.000]} \end{gathered}$ | $\begin{gathered} -0.899^{*} \\ {[-1.697,-0.101]} \end{gathered}$ | $\begin{gathered} 0.469 \\ {[-1.134,2.071]} \end{gathered}$ | $\begin{gathered} -0.721 \\ {[-2.133,0.690]} \end{gathered}$ |
| HH_ETH (ref: Ekoi): Igala | $\begin{gathered} -0.403 \\ {[-2.844,2.038]} \end{gathered}$ | $\begin{gathered} -1.2799^{* * *} \\ {[-2.159,-0.399]} \end{gathered}$ | $\begin{gathered} 0.926 \\ {[-0.719,2.571]} \end{gathered}$ | $\begin{gathered} -1.062 \\ {[-2.652,0.528]} \end{gathered}$ | $\begin{gathered} -0.399 \\ {[-2.844,2.046]} \end{gathered}$ | $\begin{gathered} -1.284^{* * *} \\ {[-2.165,-0.404]} \end{gathered}$ | $\begin{gathered} 0.987 \\ {[-0.660,2.633]} \end{gathered}$ | $\begin{gathered} -1.073 \\ {[-2.664,0.519]} \end{gathered}$ |
| HH_ETH (ref: Ekoi): Igbo | $\begin{gathered} 0.510 \\ {[-1.416,2.435]} \end{gathered}$ | $\begin{gathered} -0.827^{* *} \\ {[-1.481,-0.173]} \end{gathered}$ | $\begin{gathered} 0.569 \\ {[-0.981,2.120]} \end{gathered}$ | $\begin{gathered} -0.415 \\ {[-1.695,0.865]} \end{gathered}$ | $\begin{gathered} 0.512 \\ {[-1.418,2.442]} \end{gathered}$ | $\begin{gathered} -0.828 * * \\ {[-1.482,-0.174]} \end{gathered}$ | $\begin{gathered} 0.611 \\ {[-0.941,2.164]} \end{gathered}$ | $\begin{gathered} -0.433 \\ {[-1.712,0.847]} \end{gathered}$ |
| HH_ETH (ref: Ekoi): Ijaw / Izon | $\begin{gathered} 0.219 \\ {[-2.879,3.317]} \end{gathered}$ | $\begin{gathered} -1.426^{* * *} \\ {[-2.240,-0.611]} \end{gathered}$ | $\begin{gathered} 0.894 \\ {[-0.696,2.484]} \end{gathered}$ | $\begin{gathered} 0.126 \\ {[-1.326,1.578]} \end{gathered}$ | $\begin{gathered} 0.212 \\ {[-2.892,3.316]} \end{gathered}$ | $\begin{gathered} -1.425 * \\ {[-2.239,-0.610]} \end{gathered}$ | $\begin{gathered} 0.943 \\ {[-0.649,2.535]} \end{gathered}$ | $\begin{gathered} 0.110 \\ {[-1.342,1.562]} \end{gathered}$ |
| HH_ETH (ref: Ekoi): Kanuri / Beriberi | $\begin{gathered} 0.000 \\ {[0.000,0.000]} \end{gathered}$ | $\begin{gathered} -1.6066^{* * *} \\ {[-2.589,-0.624]} \end{gathered}$ | $\begin{gathered} 0.072 \\ {[-1.584,1.727]} \end{gathered}$ | $\begin{gathered} -0.521 \\ {[-2.060,1.018]} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[0.000,0.000]} \end{gathered}$ | $\begin{gathered} -1.622^{* * *} \\ {[-2.607,-0.636]} \end{gathered}$ | $\begin{gathered} -0.019 \\ {[-1.677,1.640]} \end{gathered}$ | $\begin{gathered} -0.615 \\ {[-2.154,0.925]} \end{gathered}$ |
| HH_ETH (ref: Ekoi): Tiv | $\begin{gathered} 0.636 \\ {[-1.631,2.903]} \end{gathered}$ | $\underset{[-1.777,-0.155]}{-0.966 *}$ | $\begin{gathered} 0.299 \\ {[-1.325,1.924]} \end{gathered}$ | $\begin{gathered} -0.453 \\ {[-1.861,0.955]} \end{gathered}$ | $\begin{gathered} 0.640 \\ {[-1.632,2.912]} \end{gathered}$ | $\begin{gathered} -0.972 * \\ {[-1.784,-0.161]} \end{gathered}$ | $\begin{gathered} 0.347 \\ {[-1.280,1.973]} \end{gathered}$ | $\begin{gathered} -0.511 \\ {[-1.920,0.897]} \end{gathered}$ |
| HH_ETH (ref: Ekoi): Yoruba | $\begin{gathered} 1.185 \\ {[-0.686,3.055]} \end{gathered}$ | $\begin{gathered} -0.572^{*} \\ {[-1.252,0.108]} \end{gathered}$ | $\begin{gathered} 0.193 \\ {[-1.360,1.746]} \end{gathered}$ | $\begin{gathered} -0.550 \\ {[-1.852,0.753]} \end{gathered}$ | $\begin{gathered} 1.185 \\ {[-0.689,3.060]} \end{gathered}$ | $\begin{gathered} -0.5766^{*} \\ {[-1.256,0.105]} \end{gathered}$ | $\begin{gathered} 0.228 \\ {[-1.327,1.783]} \end{gathered}$ | $\begin{gathered} -0.566 \\ {[-1.868,0.736]} \end{gathered}$ |
| HH_ETH (ref: Ekoi): Other | $\begin{gathered} 0.094 \\ {[-1.703,1.892]} \end{gathered}$ | $\begin{gathered} -0.999^{* * *} \\ {[-1.651,-0.347]} \end{gathered}$ | $\begin{gathered} 0.430 \\ {[-1.113,1.973]} \end{gathered}$ | $\begin{gathered} -0.390 \\ {[-1.670,0.890]} \end{gathered}$ | $\begin{gathered} 0.098 \\ {[-1.705,1.902]} \end{gathered}$ | $\begin{gathered} -1.008^{* * *} \\ {[-1.661,-0.354]} \end{gathered}$ | $\begin{gathered} 0.438 \\ {[-1.107,1.982]} \end{gathered}$ | $\begin{gathered} -0.448 \\ {[-1.728,0.832]} \end{gathered}$ |
| HH_SIZ | $\begin{gathered} 0.005 \\ {[-0.080,0.090]} \end{gathered}$ | $\begin{gathered} -0.026 * \\ {[-0.049,-0.004]} \end{gathered}$ | $\begin{gathered} -0.009 \\ {[-0.027,0.010]} \end{gathered}$ | $\begin{gathered} -0.012 \\ {[-0.043,0.019]} \end{gathered}$ | $\begin{gathered} 0.005 \\ {[-0.080,0.090]} \end{gathered}$ | $\begin{gathered} -0.026 * * \\ {[-0.049,-0.004]} \end{gathered}$ | $\begin{gathered} -0.008 \\ {[-0.027,0.011]} \end{gathered}$ | $\begin{gathered} -0.012 \\ {[-0.043,0.018]} \end{gathered}$ |
| HH_WEA | $\begin{gathered} 0.083 \\ {[-0.035,0.201]} \end{gathered}$ | $\begin{gathered} 0.170^{* * *} \\ {[0.130,0.209]} \end{gathered}$ | $\begin{gathered} 0.156 * * \\ {[0.127,0.185]} \end{gathered}$ | $\begin{gathered} 0.099+* \\ {[0.056,0.142]} \end{gathered}$ | $\begin{gathered} 0.083 \\ {[-0.035,0.201]} \end{gathered}$ | $\begin{gathered} 0.170+{ }^{\mathbf{+ *}} \\ {[0.131,0.209]} \end{gathered}$ | $\begin{gathered} 0.157 \\ {[0.127,0.186]} \end{gathered}$ | $\begin{gathered} 0.101 * * * \\ {[0.058,0.145]} \end{gathered}$ |
| Constant | $\begin{gathered} -7.03+* * \\ {[-9.848,-4.214]} \end{gathered}$ | $\begin{gathered} -3.237^{* * *} \\ {[-4.034,-2.439]} \end{gathered}$ | $\underset{[-6.931,-3.709]}{-5.320+\pi}$ | $\begin{gathered} -4.308 * * \\ {[-5.802,-2.814]} \end{gathered}$ | $\begin{gathered} -6.8966^{* * *} \\ {[-10.781,-3.011]} \end{gathered}$ | $\begin{gathered} -3.2866^{* * \prime} \\ {[-4.117,-2.454]} \end{gathered}$ | $\underset{[-7.327,-4.081]}{-5.704}$ | $\begin{gathered} -4.474^{* * *} \\ {[-5.974,-2.973]} \end{gathered}$ |
| Multilevel variance parameter: Level 1 | $\begin{gathered} 0.000 \\ {[-0.000,0.000]} \end{gathered}$ | $\begin{gathered} 0.520 \\ {[0.347,0.692]} \end{gathered}$ | $\begin{gathered} 0.295 \\ {[0.198,0.392]} \end{gathered}$ | $\begin{gathered} 0.398 \\ {[0.200,0.596]} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[-0.000,0.000]} \end{gathered}$ | $\begin{gathered} 0.520 \\ {[0.347,0.692]} \\ \hline \end{gathered}$ | $\begin{gathered} 0.292 \\ {[0.196,0.389]} \\ \hline \end{gathered}$ | $\begin{gathered} 0.396 \\ {[0.198,0.593]} \\ \hline \end{gathered}$ |
| Level 1 Observations (child) | 648 | 8163 | 11924 | 3629 | 648 | 8163 | 11924 | 3629 |
| Level 2 Observations (LGA) | 138 | 369 | 370 | 504 | 138 | 369 | 370 | 504 |
| Akaike Information Criterion | 450.792 | 5772.355 | 8366.43 | 3393.899 | 452.782 | 5774.188 | 8351.201 | 3390.504 |
| Prob. > $X^{2}$ | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |

* $95 \%$ confidence intervals in brackets
* $p<0.10,{ }^{* *} p<0.05,{ }^{* * *} p<0.01$

| Dependent variables: various | At home |  |  |  | At private facility |  |  |  | At public facility |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| indicators of delivery (see right) | 2003 | 2008 | 2013 | 2018 | 2003 | 2008 | 2013 | 2018 | 2003 | 2008 | 2013 | 2018 |
| EXP_PREG | $\begin{gathered} \hline 0.104 \\ {[-0.113,0.320]} \end{gathered}$ | $\begin{gathered} \hline 0.004 \\ {[-0.042,0.050]} \end{gathered}$ | $\begin{gathered} \hline 0.019 \\ {[-0.014,0.051]} \end{gathered}$ | $\begin{gathered} 0.023 \\ {[-0.012,0.058]} \end{gathered}$ | $\begin{gathered} -0.138 \\ {[-0.391,0.116]} \end{gathered}$ | $\begin{gathered} -0.065^{* *} \\ {[-0.123,-0.007]} \end{gathered}$ | $\begin{gathered} -0.0600^{* * *} \\ {[-0.103,-0.018]} \end{gathered}$ | $\begin{gathered} -0.108^{* * *} \\ {[-0.160,-0.056]} \end{gathered}$ | $\begin{gathered} 0.038 \\ {[-0.176,0.252]} \end{gathered}$ | $\begin{gathered} \hline 0.005 \\ {[-0.039,0.048]} \end{gathered}$ | $\begin{gathered} -0.005 \\ {[-0.035,0.026]} \end{gathered}$ | $\begin{gathered} 0.014 \\ {[-0.019,0.047]} \end{gathered}$ |
| MOT_ANC | $\stackrel{-0.112}{[-0.150,-0.075]}$ | $\underset{[-0.171,-0.140]}{-0.155^{* * \prime}}$ | $\begin{gathered} -0.124 * \\ {[-0.136,-0.113]} \end{gathered}$ | $\begin{gathered} -0.179 \\ {[-0.205,-0.152]} \end{gathered}$ | $\begin{gathered} 0.029^{*} \\ {[-0.004,0.062]} \end{gathered}$ | $\begin{gathered} 0.083^{* * *} \\ {[0.067,0.098]} \end{gathered}$ | $\begin{gathered} 0.049 \\ {[0.039,0.060]} \end{gathered}$ | $\begin{gathered} 0.069 \cdots \\ {[0.046,0.092]} \end{gathered}$ | $\begin{gathered} 0.071 " * \\ {[0.040,0.103]} \end{gathered}$ | $\begin{gathered} 0.070 * * \\ {[0.057,0.083]} \end{gathered}$ | $\begin{gathered} 0.054 \\ {[0.045,0.063]} \end{gathered}$ | $\begin{gathered} 0.071^{* * *} \\ {[0.051,0.090]} \end{gathered}$ |
| MOT_EDM | $\stackrel{-0.129 * *}{[-0.201,-0.058]}$ | $\begin{gathered} -0.0566^{* * *} \\ {[-0.083,-0.028]} \end{gathered}$ | $\begin{gathered} -0.0611^{+4 *} \\ {[-0.082,-0.040]} \end{gathered}$ | $\underset{[-0.122,-0.047]}{-0.085 * *}$ | $\underset{[-0.008,0.159]}{0.076^{*}}$ | $\begin{gathered} 0.057 * * * \\ {[0.020,0.094]} \end{gathered}$ | $\begin{gathered} 0.056 * * \\ {[0.026,0.086]} \end{gathered}$ | $\begin{gathered} 0.047^{*} \\ {[-0.004,0.098]} \end{gathered}$ | $\begin{gathered} 0.1022^{* * *} \\ {[0.030,0.174]} \end{gathered}$ | $\begin{gathered} 0.041 * * * \\ {[0.014,0.068]} \end{gathered}$ | $\begin{gathered} 0.055 * * * \\ {[0.034,0.075]} \end{gathered}$ | $\begin{gathered} 0.088 * * * \\ {[0.053,0.124]} \end{gathered}$ |
| MOT_EDF | $\begin{gathered} -0.012 \\ {[-0.084,0.060]} \end{gathered}$ | $\stackrel{-0.039^{* * *}}{[-0.066,-0.011]}$ | $\underset{[-0.045,-0.002]}{-0.023^{* *}}$ | $\underset{[-0.078,-0.004]}{-0.041^{* *}}$ | $\begin{gathered} 0.029 \\ {[-0.061,0.119]} \end{gathered}$ | $\begin{gathered} 0.027 \\ {[-0.012,0.065]} \end{gathered}$ | $\begin{gathered} 0.046 " * \\ {[0.014,0.078]} \end{gathered}$ | $\begin{gathered} 0.028 \\ {[-0.027,0.082]} \end{gathered}$ | $\begin{gathered} 0.009 \\ {[-0.065,0.083]} \end{gathered}$ | $\begin{gathered} 0.043^{\text {*** }} \\ {[0.016,0.069]} \end{gathered}$ | $\begin{gathered} 0.024^{* *} \\ {[0.004,0.045]} \end{gathered}$ | $\begin{gathered} 0.051 " * \\ {[0.016,0.087]} \end{gathered}$ |
| MOT_AWE | $\underset{[-1.124,-0.368]}{-0.746 * *}$ | $\stackrel{-0.934}{[-1.072,-0.795]}$ | $\begin{gathered} -0.982 * * \\ {[-1.092,-0.872]} \end{gathered}$ | $\begin{gathered} -0.765 \\ {[-0.966,-0.564]} \end{gathered}$ | $\begin{gathered} 0.229 \\ {[-0.229,0.688]} \end{gathered}$ | $\begin{gathered} 0.327 \\ {[0.128,0.526]} \end{gathered}$ | $\begin{gathered} 0.259^{* * *} \\ {[0.088,0.430]} \end{gathered}$ | $\begin{gathered} 0.238 \\ {[-0.061,0.537]} \end{gathered}$ | $\begin{gathered} 0.848 \\ {[0.446,1.249]} \end{gathered}$ | $\begin{gathered} 0.990 * * \\ {[0.846,1.133]} \end{gathered}$ | $\begin{gathered} 1.075 \\ {[0.962,1.188]} \end{gathered}$ | $\begin{gathered} 0.809 \\ {[0.609,1.010]} \end{gathered}$ |
| MOT_AGE | $\begin{gathered} -0.013 \\ {[-0.039,0.013]} \end{gathered}$ | $\begin{gathered} -0.001 \\ {[-0.010,0.008]} \end{gathered}$ | $\begin{gathered} -0.001 \\ {[-0.009,0.006]} \end{gathered}$ | $\begin{gathered} -0.006 \\ {[-0.019,0.007]} \end{gathered}$ | $\begin{gathered} -0.005 \\ {[-0.035,0.026]} \end{gathered}$ | $\begin{gathered} 0.002 \\ {[-0.010,0.015]} \end{gathered}$ | $\begin{gathered} -0.001 \\ {[-0.010,0.009]} \end{gathered}$ | $\begin{gathered} 0.002 \\ {[-0.014,0.019]} \end{gathered}$ | $\begin{gathered} 0.018 \\ {[-0.008,0.044]} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[-0.009,0.009]} \end{gathered}$ | $\begin{gathered} 0.003 \\ {[-0.004,0.009]} \end{gathered}$ | $\begin{gathered} 0.005 \\ {[-0.007,0.016]} \end{gathered}$ |
| HH_RUR | $\begin{gathered} 0.476{ }^{* *} \\ {[0.034,0.919]} \end{gathered}$ | $\begin{gathered} 0.641 \\ {[0.448,0.835]} \end{gathered}$ | $\begin{gathered} 0.709 * * * \\ {[0.572,0.846]} \end{gathered}$ | $\begin{gathered} 0.450 \\ {[0.227,0.672]} \end{gathered}$ | $\begin{gathered} -0.086 \\ {[-0.548,0.375]} \end{gathered}$ | $\underset{[-0.570,-0.089]}{-0.329+\cdots}$ | $\begin{gathered} -0.592 \\ {[-0.758,-0.426]} \end{gathered}$ | $\underset{[-0.686,-0.176]}{-0.431+"}$ | $\begin{gathered} -0.526^{* *} \\ {[-0.960,-0.092]} \end{gathered}$ | $\begin{gathered} -0.4366^{* * *} \\ {[-0.623,-0.248]} \end{gathered}$ | $\underset{[-0.479,-0.233]}{-0.356 * *}$ | $\begin{gathered} -0.241^{* *} \\ {[-0.443,-0.039]} \end{gathered}$ |
| HH_REL (ref: Catholic): Other Christian | $\begin{gathered} -0.228 \\ {[-0.756,0.299]} \end{gathered}$ | $\begin{gathered} 0.055 \\ {[-0.176,0.285]} \end{gathered}$ | $\begin{gathered} 0.199^{* *} \\ {[0.008,0.390]} \end{gathered}$ | $\begin{gathered} 0.176 \\ {[-0.132,0.485]} \end{gathered}$ | $\begin{gathered} 0.514 \\ {[0.018,1.010]} \end{gathered}$ | $\begin{gathered} 0.266 * \\ {[0.019,0.512]} \end{gathered}$ | $\stackrel{-0.283}{[-0.467,-0.099]}$ | $\begin{gathered} -0.391 \\ {[-0.669,-0.113]} \end{gathered}$ | $\begin{gathered} -0.370 \\ {[-0.876,0.136]} \end{gathered}$ | $\begin{gathered} -0.2788^{* *} \\ {[-0.493,-0.063]} \end{gathered}$ | $\begin{gathered} 0.090 \\ {[-0.073,0.254]} \end{gathered}$ | $\begin{gathered} 0.203 \\ {[-0.054,0.461]} \end{gathered}$ |
| HH_REL (ref: Catholic): Islam | $\begin{gathered} 0.347 \\ {[-0.211,0.905]} \end{gathered}$ | $\begin{gathered} -0.047 \\ {[-0.333,0.239]} \end{gathered}$ | $\begin{gathered} 0.411^{* * *} \\ {[0.182,0.640]} \end{gathered}$ | $\begin{gathered} 0.416^{* *} \\ {[0.030,0.802]} \end{gathered}$ | $\begin{gathered} 0.171 \\ {[-0.382,0.724]} \end{gathered}$ | $\underset{[-0.049,0.589]}{0.270^{*}}$ | $\underset{[-0.798,-0.319]}{-0.558 * *}$ | $\begin{gathered} -0.348^{*} \\ {[-0.737,0.042]} \end{gathered}$ | $\begin{gathered} -0.467^{*} \\ {[-1.002,0.068]} \end{gathered}$ | $\begin{gathered} -0.191 \\ {[-0.454,0.073]} \end{gathered}$ | $\begin{gathered} 0.066 \\ {[-0.134,0.267]} \end{gathered}$ | $\begin{gathered} -0.052 \\ {[-0.388,0.284]} \end{gathered}$ |
| HH_REL (ref: Catholic): <br> Traditionalist | $\begin{gathered} 2.659^{* *} \\ {[0.237,5.081]} \end{gathered}$ | $\begin{gathered} 1.275 \\ {[0.678,1.872]} \end{gathered}$ | $\begin{gathered} 0.673^{* *} \\ {[0.148,1.198]} \end{gathered}$ | $\begin{gathered} 0.535 \\ {[-0.915,1.985]} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[0.000,0.000]} \end{gathered}$ | $\underset{[-1.326,0.077]}{-0.624^{*}}$ | $\begin{gathered} -0.779^{* *} \\ {[-1.488,-0.070]} \end{gathered}$ | $\begin{gathered} -1.217 \\ {[-3.410,0.976]} \end{gathered}$ | $\begin{gathered} -1.795 \\ {[-4.091,0.500]} \end{gathered}$ | $\begin{gathered} -1.044^{* *} \\ {[-1.706,-0.383]} \end{gathered}$ | $\begin{gathered} -0.099 \\ {[-0.608,0.410]} \end{gathered}$ | $\begin{gathered} 0.332 \\ {[-1.031,1.696]} \end{gathered}$ |
| HH_REL (ref: Catholic): Other | $\begin{gathered} 0.000 \\ {[0.000,0.000]} \end{gathered}$ | $\begin{gathered} -1.175 \\ {[-2.618,0.269]} \end{gathered}$ | $\begin{gathered} 0.003 \\ {[-2.187,2.194]} \end{gathered}$ | $\begin{gathered} -0.456 \\ {[-1.750,0.838]} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[0.000,0.000]} \end{gathered}$ | $\begin{gathered} 1.580^{* *} \\ {[0.067,3.094]} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[0.000,0.000]} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[0.000,0.000]} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[0.000,0.000]} \end{gathered}$ | $\begin{gathered} 0.330 \\ {[-1.066,1.726]} \end{gathered}$ | $\begin{gathered} 0.489 \\ {[-1.708,2.685]} \end{gathered}$ | $\underset{[-0.143,2.291]}{1.074^{*}}$ |
| HH_ETH (ref: Ekoi): Fulani | $\begin{gathered} 0.000 \\ {[0.000,0.000]} \end{gathered}$ | $\begin{gathered} 1.075^{* * *} \\ {[0.394,1.756]} \end{gathered}$ | $\begin{gathered} 0.369 \\ {[-0.914,1.651]} \end{gathered}$ | $\begin{gathered} 0.357 \\ {[-0.785,1.498]} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[0.000,0.000]} \end{gathered}$ | $\begin{gathered} -0.040 \\ {[-1.341,1.262]} \end{gathered}$ | $\begin{gathered} -0.898 \\ {[-3.171,1.375]} \end{gathered}$ | $\begin{gathered} -0.153 \\ {[-1.943,1.638]} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[0.000,0.000]} \end{gathered}$ | $\begin{gathered} -1.106^{* * *} \\ {[-1.798,-0.414]} \end{gathered}$ | $\begin{gathered} -0.403 \\ {[-1.644,0.839]} \end{gathered}$ | $\begin{gathered} -0.625 \\ {[-1.722,0.471]} \end{gathered}$ |
| HH_ETH (ref: Ekoi): Hausa | $\begin{gathered} 0.924^{* *} \\ {[0.152,1.696]} \end{gathered}$ | $\begin{gathered} 1.371^{1 * *} \\ {[0.719,2.023]} \end{gathered}$ | $\begin{gathered} 0.590 \\ {[-0.682,1.862]} \end{gathered}$ | $\begin{gathered} 0.759 \\ {[-0.351,1.869]} \end{gathered}$ | $\begin{gathered} -1.297 \\ {[-2.864,0.0271]} \end{gathered}$ | $\begin{gathered} -1.110^{*} \\ {[-2.374,0.154]} \end{gathered}$ | $\begin{gathered} -0.953 \\ {[-3.152,1.247]} \end{gathered}$ | $\begin{gathered} -0.675 \\ {[-2.384,1.035]} \end{gathered}$ | $\begin{gathered} -0.617 \\ {[-1.391,0.158]} \end{gathered}$ | $\underset{[-1.736,-0.415]}{-1.075^{* * *}}$ | $\begin{gathered} -0.514 \\ {[-1.745,0.717]} \end{gathered}$ | $\begin{gathered} -0.770 \\ {[-1.834,0.295]} \end{gathered}$ |
| HH_ETH (ref: Ekoi): Ibibio | $\begin{gathered} -0.948 \\ {[-2.910,1.014]} \end{gathered}$ | $\begin{gathered} 0.178 \\ {[-0.575,0.931]} \end{gathered}$ | $\begin{gathered} 0.484 \\ {[-0.832,1.800]} \end{gathered}$ | $\begin{gathered} 0.610 \\ {[-0.601,1.821]} \end{gathered}$ | $\begin{gathered} 0.744 \\ {[-1.904,3.391]} \end{gathered}$ | $\begin{gathered} 0.846 \\ {[-0.451,2.142]} \end{gathered}$ | $\begin{gathered} -0.114 \\ {[-2.351,2.123]} \end{gathered}$ | $\begin{gathered} -0.010 \\ {[-1.848,1.828]} \end{gathered}$ | $\begin{gathered} 1.351 \\ {[-0.631,3.333]} \end{gathered}$ | $\begin{gathered} -0.198 \\ {[-0.943,0.546]} \end{gathered}$ | $\begin{gathered} -0.248 \\ {[-1.521,1.024]} \end{gathered}$ | $\begin{gathered} -0.492 \\ {[-1.656,0.673]} \end{gathered}$ |
| HH_ETH (ref: Ekoi): Igala | $\begin{gathered} -1.208 \\ {[-2.662,0.247]} \end{gathered}$ | $\begin{gathered} -0.841^{*} \\ {[-1.703,0.020]} \end{gathered}$ | $\begin{gathered} -0.481 \\ {[-1.845,0.882]} \end{gathered}$ | $\begin{gathered} -0.705 \\ {[-2.034,0.624]} \end{gathered}$ | $\begin{gathered} 1.997 * \\ {[0.298,3.695]} \end{gathered}$ | $\begin{gathered} 1.364^{*} \\ {[0.074,2.654]} \end{gathered}$ | $\begin{gathered} 0.878 \\ {[-1.350,3.106]} \end{gathered}$ | $\begin{gathered} 1.585^{*} \\ {[-0.224,3.394]} \end{gathered}$ | $\begin{gathered} 0.324 \\ {[-1.053,1.702]} \end{gathered}$ | $\begin{gathered} 0.288 \\ {[-0.516,1.093]} \end{gathered}$ | $\begin{gathered} -0.001 \\ {[-1.297,1.296]} \end{gathered}$ | $\begin{gathered} -0.234 \\ {[-1.495,1.027]} \end{gathered}$ |
| HH_ETH (ref: Ekoi): Igbo | $\begin{gathered} -0.910^{*} \\ {[-1.907,0.088]} \end{gathered}$ | $\begin{gathered} -1.046^{* * *} \\ {[-1.669,-0.424]} \end{gathered}$ | $\begin{gathered} -0.853 \\ {[-2.124,0.418]} \end{gathered}$ | $\begin{gathered} -0.730 \\ {[-1.824,0.364]} \end{gathered}$ | $\underset{[1.109,3.896]}{2.503^{* * *}}$ | $\begin{gathered} 2.415 \\ {[1.271,3.559]} \end{gathered}$ | $\begin{gathered} 1.396 \\ {[-0.776,3.568]} \end{gathered}$ | $\begin{gathered} 1.515^{*} \\ {[-0.123,3.153]} \end{gathered}$ | $\begin{gathered} -0.728 \\ {[-1.717,0.261]} \end{gathered}$ | $\begin{gathered} -0.660 \\ {[-1.289,-0.031]} \end{gathered}$ | $\begin{gathered} -0.459 \\ {[-1.685,0.767]} \end{gathered}$ | $\begin{gathered} -0.554 \\ {[-1.596,0.487]} \end{gathered}$ |
| HH_ETH (ref: Ekoi): Ijaw / Izon | $\begin{gathered} 0.012 \\ {[-1.949,1.973]} \end{gathered}$ | $\begin{gathered} 0.996{ }^{* *} \\ {[0.218,1.775]} \end{gathered}$ | $\begin{gathered} 0.881 \\ {[-0.435,2.196]} \end{gathered}$ | $\begin{gathered} 1.401^{* *} \\ {[0.175,2.628]} \end{gathered}$ | $\begin{gathered} 0.257 \\ {[-2.349,2.862]} \end{gathered}$ | $\begin{gathered} 0.102 \\ {[-1.229,1.434]} \end{gathered}$ | $\begin{gathered} -0.448 \\ {[-2.713,1.817]} \end{gathered}$ | $\begin{gathered} -0.270 \\ {[-2.136,1.597]} \end{gathered}$ | $\begin{gathered} 0.377 \\ {[-1.539,2.292]} \end{gathered}$ | $\begin{gathered} -0.640 \\ {[-1.437,0.157]} \end{gathered}$ | $\begin{gathered} -0.825 \\ {[-2.099,0.448]} \end{gathered}$ | $\begin{gathered} -1.319^{* *} \\ {[-2.502,-0.135]} \end{gathered}$ |
| HH_ETH (ref: Ekoi): Kanuri / Beriberi | $\begin{gathered} 0.656 \\ {[-0.672,1.983]} \end{gathered}$ | $\begin{gathered} 1.3300+ \\ {[0.557,2.102]} \end{gathered}$ | $\begin{gathered} 0.663 \\ {[-0.674,1.999]} \end{gathered}$ | $\begin{gathered} 0.511 \\ {[-0.775,1.797]} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[0.000,0.000]} \end{gathered}$ | $\begin{gathered} -0.880 \\ {[-2.734,0.975]} \end{gathered}$ | $\begin{gathered} -0.741 \\ {[-3.228,1.745]} \end{gathered}$ | $\begin{gathered} -0.448 \\ {[-2.686,1.790]} \end{gathered}$ | $\begin{gathered} 0.131 \\ {[-1.139,1.402]} \end{gathered}$ | $\begin{gathered} -1.285^{* * *} \\ {[-2.060,-0.510]} \end{gathered}$ | $\begin{gathered} -0.555 \\ {[-1.848,0.738]} \end{gathered}$ | $\begin{gathered} -0.644 \\ {[-1.890,0.602]} \end{gathered}$ |
| HH_ETH (ref: Ekoi): Tiv | $\underset{[-3.085,-0.091]}{-1.588^{* *}}$ | $\begin{gathered} -0.853 \\ {[-1.559,-0.146]} \end{gathered}$ | $\begin{gathered} -0.951 \\ {[-2.279,0.378]} \end{gathered}$ | $\begin{gathered} -1.013^{*} \\ {[-2.218,0.191]} \end{gathered}$ | $\begin{gathered} 2.493 \\ {[0.804,4.181]} \end{gathered}$ | $\begin{gathered} 2.198 * * \\ {[0.960,3.437]} \end{gathered}$ | $\begin{gathered} 1.302 \\ {[-0.924,3.527]} \end{gathered}$ | $\begin{gathered} 1.892 * \\ {[0.164,3.621]} \end{gathered}$ | $\begin{gathered} -0.041 \\ {[-1.477,1.395]} \end{gathered}$ | $\begin{gathered} -0.025 \\ {[-0.756,0.706]} \end{gathered}$ | $\begin{gathered} 0.358 \\ {[-0.931,1.647]} \end{gathered}$ | $\begin{gathered} 0.062 \\ {[-1.090,1.215]} \end{gathered}$ |
| HH_ETH (ref: Ekoi): Yoruba | $\begin{gathered} -0.659 \\ {[-1.615,0.297]} \end{gathered}$ | $\begin{gathered} -0.370 \\ {[-1.011,0.271]} \end{gathered}$ | $\begin{gathered} -0.137 \\ {[-1.409,1.134]} \end{gathered}$ | $\begin{gathered} -0.332 \\ {[-1.443,0.779]} \end{gathered}$ | $\begin{gathered} 1.967 \\ {[0.601,3.333]} \end{gathered}$ | $\begin{gathered} 1.501{ }^{*} \\ {[0.341,2.661]} \end{gathered}$ | $\begin{gathered} 0.855 \\ {[-1.318,3.029]} \end{gathered}$ | $\begin{gathered} 1.004 \\ {[-0.650,2.657]} \end{gathered}$ | $\begin{gathered} -0.462 \\ {[-1.400,0.476]} \end{gathered}$ | $\begin{gathered} -0.288 \\ {[-0.933,0.357]} \end{gathered}$ | $\begin{gathered} -0.408 \\ {[-1.636,0.820]} \end{gathered}$ | $\begin{gathered} -0.334 \\ {[-1.390,0.722]} \end{gathered}$ |
| HH_ETH (ref: Ekoi): Other | $\begin{gathered} -0.001 \\ {[-0.779,0.777]} \end{gathered}$ | $\begin{gathered} 0.307 \\ {[-0.299,0.913]} \end{gathered}$ | $\begin{gathered} 0.015 \\ {[-1.243,1.274]} \end{gathered}$ | $\begin{gathered} -0.015 \\ {[-1.092,1.062]} \end{gathered}$ | $\begin{gathered} 1.369^{* *} \\ {[0.075,2.663]} \end{gathered}$ | $\begin{gathered} 0.946 \\ {[-0.200,2.092]} \end{gathered}$ | $\begin{gathered} 0.373 \\ {[-1.795,2.541]} \end{gathered}$ | $\begin{gathered} 0.781 \\ {[-0.858,2.421]} \end{gathered}$ | $\begin{gathered} -0.441 \\ {[-1.240,0.359]} \end{gathered}$ | $\begin{gathered} -0.414 \\ {[-1.033,0.204]} \end{gathered}$ | $\begin{gathered} -0.089 \\ {[-1.308,1.129]} \end{gathered}$ | $\begin{gathered} -0.337 \\ {[-1.370,0.695]} \end{gathered}$ |
| HH_SIZ | $\begin{gathered} 0.030 \\ {[-0.018,0.078]} \end{gathered}$ | $\begin{gathered} 0.022^{* *} \\ {[0.004,0.040]} \end{gathered}$ | $\begin{gathered} 0.038+* * \\ {[0.023,0.052]} \end{gathered}$ | $\begin{gathered} 0.044^{* * *} \\ {[0.019,0.069]} \end{gathered}$ | $\begin{gathered} -0.043 \\ {[-0.104,0.018]} \end{gathered}$ | $\begin{gathered} -0.006 \\ {[-0.032,0.020]} \end{gathered}$ | $\begin{gathered} -0.021^{*} \\ {[-0.044,0.002]} \end{gathered}$ | $\begin{gathered} -0.035^{*} \\ {[-0.072,0.002]} \end{gathered}$ | $\begin{gathered} 0.003 \\ {[-0.045,0.051]} \end{gathered}$ | $\begin{gathered} -0.014 \\ {[-0.032,0.004]} \end{gathered}$ | $\stackrel{-0.026 * * *}{[-0.039,-0.012]}$ | $\begin{gathered} -0.021^{*} \\ {[-0.045,0.002]} \end{gathered}$ |
| HH_WEA | $\stackrel{-0.247}{[-0.334,-0.160]}$ | $\begin{gathered} -0.264 \\ {[-0.299,-0.230]} \end{gathered}$ | $\begin{gathered} -0.186 \times " \\ {[-0.210,-0.161]} \end{gathered}$ | $\begin{gathered} -0.183^{\cdots} \\ {[-0.222,-0.145]} \end{gathered}$ | $\begin{gathered} 0.177 \\ {[0.090,0.264]} \end{gathered}$ | $\begin{gathered} 0.143 * * \\ {[0.101,0.186]} \end{gathered}$ | $\begin{gathered} 0.106 * * \\ {[0.075,0.137]} \end{gathered}$ | $\begin{gathered} 0.150 * * \\ {[0.103,0.196]} \end{gathered}$ | $\begin{gathered} 0.082 * * \\ {[0.003,0.160]} \end{gathered}$ | $\begin{gathered} 0.174 * * \\ {[0.142,0.206]} \end{gathered}$ | $\begin{gathered} 0.118 \\ {[0.096,0.140]} \end{gathered}$ | $\begin{gathered} 0.086 * * \\ {[0.051,0.121]} \end{gathered}$ |
| Constant | $\begin{gathered} 2.344^{* * *} \\ {[0.986,3.702]} \end{gathered}$ | $\begin{gathered} 2.386^{* * *} \\ {[1.683,3.089]} \end{gathered}$ | $\begin{gathered} 1.702^{* *} \\ {[0.396,3.008]} \end{gathered}$ | $\begin{gathered} 1.973^{* * *} \\ {[0.767,3.180]} \end{gathered}$ | $\begin{gathered} -3.864^{* * *} \\ {[-5.696,-2.032]} \end{gathered}$ | $\begin{gathered} -4.914^{* * *} \\ {[-6.157,-3.670]} \end{gathered}$ | $\begin{gathered} -3.104^{* * *} \\ {[-5.323,-0.886]} \end{gathered}$ | $\begin{gathered} -3.415^{* *} \\ {[-5.192,-1.639]} \end{gathered}$ | $\underset{[-3.998,-1.277]}{-2.637^{* * *}}$ | $\begin{gathered} -2.205^{* * *} \\ {[-2.916,-1.493]} \end{gathered}$ | $\begin{gathered} -2.397^{* * *} \\ {[-3.658,-1.136]} \end{gathered}$ | $\begin{gathered} -2.225^{* * *} \\ {[-3.372,-1.079]} \end{gathered}$ |
| Multilevel variance parameter: Level 1 | $\begin{gathered} 0.733^{* * *} \\ {[0.226,1.240]} \end{gathered}$ | $\begin{gathered} 0.652 * * * \\ {[0.466,0.839]} \end{gathered}$ | $\begin{gathered} 0.490+* * \\ {[0.368,0.612]} \end{gathered}$ | $\begin{gathered} 0.619 \\ {[0.402,0.835]} \end{gathered}$ | $\begin{gathered} 0.439^{*} \\ {[-0.014,0.892]} \end{gathered}$ | $\begin{gathered} 1.004 \\ {[0.672,1.335]} \\ \hline \end{gathered}$ | $\begin{gathered} 0.814 \\ {[0.584,1.045]} \end{gathered}$ | $\begin{gathered} 0.606 * * * \\ {[0.351,0.861]} \end{gathered}$ | $\begin{gathered} 0.846 \\ {[0.332,1.360]} \end{gathered}$ | $\begin{gathered} 0.761 \\ {[0.570,0.952]} \\ \hline \end{gathered}$ | $\begin{gathered} 0.473 \\ {[0.364,0.581]} \end{gathered}$ | $\begin{gathered} 0.639 \\ {[0.442,0.836]} \end{gathered}$ |
| Level 1 Observations (child) | 1395 | 11609 | 16475 | 5233 | 1346 | 11609 | 16467 | 5211 | 1395 | 11609 | 16475 | 5233 |
| Level 2 Observations (LGA) | 153 | 370 | 370 | 510 | 153 | 370 | 370 | 510 | 153 | 370 | 370 | 510 |
| Akaike Information Criterion | 1147.831 | 7880.9 | 12731.565 | 4519.37 | 901.306 | 5217.905 | 8321.506 | 3169.365 | 1222.345 | 8804.345 | 14843.344 | 5370.273 |
| Prob. > $\chi^{2}$ | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |

$95 \%$ confidence intervals in brackets
${ }^{*} p<0.10,{ }^{* *} p<0.05,{ }^{* * *} p<0.01$

| Dependent variables: various indicators of maternal care and child survival (see right) | No. of antenatal care visits Antenatal care No. of tetanus injections |  |  |  |  |  |  |  | Child survival Total exposure |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2003 | 2008 | 2013 | 2018 | 2003 | 2008 | 2013 | 2018 | 2003 | 2008 | 2013 | 2018 |
| EXP_PREG | $\begin{gathered} 0.015 \\ {[-0.239,0.270]} \end{gathered}$ | $\begin{gathered} -0.051 \\ {[-0.113,0.010]} \end{gathered}$ | $\begin{gathered} -0.024 \\ {[-0.074,0.025]} \end{gathered}$ | $\begin{gathered} -0.054^{* * *} \\ {[-0.086,-0.022]} \end{gathered}$ | $\begin{gathered} 0.014 \\ {[-0.056,0.084]} \end{gathered}$ | $\begin{gathered} -0.012 \\ {[-0.030,0.006]} \end{gathered}$ | $\begin{gathered} -0.005 \\ {[-0.018,0.008]} \end{gathered}$ | $\begin{gathered} 0.006 \\ {[-0.008,0.019]} \end{gathered}$ |  |  |  |  |
| EXP_TOT_nod (total exposure, date approximation) |  |  |  |  |  |  |  |  | $\begin{gathered} -0.087 \\ {[-0.267,0.092]} \end{gathered}$ | $\begin{gathered} -0.0388^{* * *} \\ {[-0.061,-0.015]} \end{gathered}$ | $\begin{gathered} -0.006 \\ {[-0.021,0.009]} \end{gathered}$ | $\underset{[-0.052,-0.021]}{-0.037 * *}$ |
| CHI_AGE |  |  |  |  |  |  |  |  | $\begin{gathered} -0.122^{*} \\ {[-0.249,0.004]} \end{gathered}$ | $\begin{gathered} 0.007 \\ {[-0.011,0.026]} \end{gathered}$ | $\begin{gathered} 0.001 \\ {[-0.016,0.017]} \end{gathered}$ | $\begin{gathered} -0.003 \\ {[-0.019,0.014]} \end{gathered}$ |
| CHI_AGE2 |  |  |  |  |  |  |  |  | $\underset{[-0.001,0.011]}{0.005^{*}}$ | $\begin{gathered} 0.000 \\ {[-0.000,0.000]} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[-0.000,0.000]} \end{gathered}$ | $\begin{gathered} 0.000^{*} \\ {[-0.000,0.000]} \end{gathered}$ |
| CHI_ORD |  |  |  |  |  |  |  |  | $\begin{gathered} -0.159^{* * *} \\ {[-0.276,-0.043]} \end{gathered}$ | $\begin{gathered} -0.142 * * \\ {[-0.183,-0.102]} \end{gathered}$ | $\begin{gathered} -0.1388^{* * *} \\ {[-0.178,-0.099]} \end{gathered}$ | $\begin{gathered} -0.1711^{* * *} \\ {[-0.212,-0.131]} \end{gathered}$ |
| CHI_SEX |  |  |  |  |  |  |  |  | $\begin{gathered} 0.182 \\ {[-0.173,0.537]} \end{gathered}$ | $\begin{gathered} 0.283 * * * \\ {[0.149,0.418]} \end{gathered}$ | $\begin{gathered} 0.224^{* * *} \\ {[0.098,0.350]} \end{gathered}$ | $\begin{gathered} 0.1511^{*} \\ {[0.027,0.275]} \end{gathered}$ |
| MOT_ANC |  |  |  |  |  |  |  |  | $\underset{[-0.007,0.093]}{0.043^{*}}$ | $\begin{gathered} -0.009 \\ {[-0.027,0.010]} \end{gathered}$ | $\begin{gathered} 0.006 \\ {[-0.010,0.022]} \end{gathered}$ | $\begin{gathered} -0.005 \\ {[-0.025,0.015]} \end{gathered}$ |
| MOT_EDM | $\begin{gathered} 0.122^{* *} \\ {[0.000,0.244]} \end{gathered}$ | $\begin{gathered} 0.123^{* * *} \\ {[0.084,0.162]} \end{gathered}$ | $\begin{gathered} 0.0888^{* * *} \\ {[0.055,0.121]} \end{gathered}$ | $\begin{gathered} 0.074^{* * *} \\ {[0.024,0.123]} \end{gathered}$ | $\begin{gathered} 0.047{ }^{* * *} \\ {[0.016,0.078]} \end{gathered}$ | $\begin{gathered} 0.033^{* * *} \\ {[0.023,0.043]} \end{gathered}$ | $\begin{gathered} 0.028 \\ {[0.017,0.038]} \end{gathered}$ | $\begin{gathered} 0.035 * * * \\ {[0.018,0.051]} \end{gathered}$ | $\begin{gathered} 0.066 \\ {[-0.026,0.158]} \end{gathered}$ | $\begin{gathered} 0.007 \\ {[-0.028,0.043]} \end{gathered}$ | $\begin{gathered} 0.023 \\ {[-0.010,0.057]} \end{gathered}$ | $\begin{gathered} 0.003 \\ {[-0.030,0.036]} \end{gathered}$ |
| MOT_EDF | $\begin{gathered} 0.094 \\ {[-0.028,0.216]} \end{gathered}$ | $\begin{gathered} 0.075 \\ {[0.040,0.109]} \end{gathered}$ | $\begin{gathered} 0.093 \\ {[0.064,0.121]} \end{gathered}$ | $\begin{gathered} 0.025 \\ {[-0.021,0.072]} \end{gathered}$ | $\begin{gathered} 0.010 \\ {[-0.018,0.038]} \end{gathered}$ | $\begin{gathered} 0.020 \\ {[0.010,0.031]} \end{gathered}$ | $\begin{gathered} 0.026 \\ {[0.016,0.036]} \end{gathered}$ | $\begin{gathered} 0.023 \\ {[0.009,0.038]} \end{gathered}$ | $\begin{gathered} 0.092{ }^{* *} \\ {[0.009,0.176]} \end{gathered}$ | $\begin{gathered} 0.035 * \\ {[0.003,0.068]} \end{gathered}$ | $\begin{gathered} 0.003 \\ {[-0.028,0.034]} \end{gathered}$ | $\begin{gathered} 0.035 * \\ {[0.006,0.064]} \end{gathered}$ |
| MOT_AWE | $\begin{gathered} 2.141^{* *} \\ {[1.525,2.757]} \end{gathered}$ | $\begin{gathered} 1.721^{* * *} \\ {[1.483,1.959]} \end{gathered}$ | $\begin{gathered} 1.955^{* * *} \\ {[1.752,2.158]} \end{gathered}$ | $\begin{gathered} 1.5533^{* *} \\ {[1.328,1.779]} \end{gathered}$ | $\begin{gathered} 0.750 * * \\ {[0.563,0.937]} \end{gathered}$ | $\begin{gathered} 0.582 * * * \\ {[0.511,0.654]} \end{gathered}$ | $\begin{gathered} 0.640 \\ {[0.579,0.700]} \end{gathered}$ | $\begin{gathered} 0.576 " * \\ {[0.505,0.647]} \end{gathered}$ |  |  |  |  |
| MOT_AGE | $\begin{gathered} 0.035 * \\ {[0.003,0.067]} \end{gathered}$ | $\begin{gathered} 0.005 \\ {[-0.005,0.015]} \end{gathered}$ | $\begin{gathered} 0.016 * * \\ {[0.008,0.025]} \end{gathered}$ | $\begin{gathered} 0.006 \\ {[-0.009,0.022]} \end{gathered}$ | $\begin{gathered} 0.007 \\ {[-0.003,0.017]} \end{gathered}$ | $\begin{gathered} 0.002 \\ {[-0.001,0.005]} \end{gathered}$ | $\begin{gathered} 0.001 \\ {[-0.002,0.004]} \end{gathered}$ | $\begin{gathered} -0.005^{* *} \\ {[-0.009,-0.000]} \end{gathered}$ | $\begin{gathered} 0.041^{*} \\ {[-0.006,0.088]} \end{gathered}$ | $\begin{gathered} 0.013^{*} \\ {[-0.002,0.028]} \end{gathered}$ | $\begin{gathered} 0.003 \\ {[-0.012,0.017]} \end{gathered}$ | $\begin{gathered} 0.007 \\ {[-0.008,0.022]} \end{gathered}$ |
| HH_RUR | $\begin{gathered} -0.486 \\ {[-1.276,0.305]} \end{gathered}$ | $\begin{gathered} -0.4566^{*} \\ {[-0.941,0.030]} \end{gathered}$ | $\underset{[-1.070,-0.381]}{-0.726^{* * *}}$ | $\underset{[-1.048,-0.387]}{-0.717^{* * *}}$ | $\begin{gathered} -0.115 \\ {[-0.253,0.023]} \end{gathered}$ | $\begin{gathered} -0.199^{* * *} \\ {[-0.300,-0.098]} \end{gathered}$ | $\begin{gathered} -0.1711^{* * *} \\ {[-0.248,-0.095]} \end{gathered}$ | $\underset{[-0.205,-0.029]}{-0.117^{* * *}}$ | $\begin{gathered} -0.067 \\ {[-0.560,0.427]} \end{gathered}$ | $\begin{gathered} -0.236 * \\ {[-0.439,-0.033]} \end{gathered}$ | $\stackrel{-0.365^{* * *}}{[-0.550,-0.181]}$ | $\begin{gathered} -0.049 \\ {[-0.219,0.121]} \end{gathered}$ |
| HH_REL (ref: Catholic): Other Christian | $\begin{gathered} 0.320 \\ {[-0.579,1.220]} \end{gathered}$ | $\begin{gathered} -0.156 \\ {[-0.492,0.179]} \end{gathered}$ | $\begin{gathered} -0.057 \\ {[-0.424,0.310]} \end{gathered}$ | $\begin{gathered} 0.309 \\ {[-0.086,0.704]} \end{gathered}$ | $\begin{gathered} 0.197 \\ {[-0.048,0.443]} \end{gathered}$ | $\begin{gathered} -0.051 \\ {[-0.143,0.040]} \end{gathered}$ | $\begin{gathered} -0.049 \\ {[-0.133,0.034]} \end{gathered}$ | $\begin{gathered} -0.085 \\ {[-0.190,0.021]} \end{gathered}$ | $\begin{gathered} 0.083 \\ {[-0.578,0.745]} \end{gathered}$ | $\begin{gathered} 0.041 \\ {[-0.263,0.345]} \end{gathered}$ | $\begin{gathered} -0.247 \\ {[-0.546,0.052]} \end{gathered}$ | $\begin{gathered} -0.412^{* *} \\ {[-0.739,-0.086]} \end{gathered}$ |
| HH_REL (ref: Catholic): Islam | $\begin{gathered} 0.058 \\ {[-1.035,1.151]} \end{gathered}$ | $\begin{gathered} -0.153 \\ {[-0.614,0.308]} \end{gathered}$ | $\begin{gathered} -0.203 \\ {[-0.690,0.284]} \end{gathered}$ | $\begin{gathered} -0.025 \\ {[-0.545,0.495]} \end{gathered}$ | $\begin{gathered} 0.004 \\ {[-0.227,0.236]} \end{gathered}$ | $\stackrel{-0.135^{* *}}{[-0.259,-0.010]}$ | $\begin{gathered} -0.125^{* *} \\ {[-0.231,-0.019]} \end{gathered}$ | $\begin{gathered} -0.083 \\ {[-0.228,0.061]} \end{gathered}$ | $\begin{gathered} 0.682^{* *} \\ {[0.021,1.344]} \end{gathered}$ | $\begin{gathered} 0.195 \\ {[-0.167,0.557]} \end{gathered}$ | $\begin{gathered} -0.303^{*} \\ {[-0.657,0.052]} \end{gathered}$ | $\begin{gathered} -0.369^{*} \\ {[-0.748,0.009]} \end{gathered}$ |
| HH_REL (ref: Catholic): Traditionalist | $\underset{[-2.633,-0.445]}{-1.539 \times 1}$ | $\begin{gathered} -0.418 \\ {[-1.022,0.186]} \end{gathered}$ | $\begin{gathered} -0.582 \\ {[-1.401,0.238]} \end{gathered}$ | $\begin{gathered} -1.368 \\ {[-2.474,-0.262]} \end{gathered}$ | $\begin{gathered} 0.075 \\ {[-0.669,0.820]} \end{gathered}$ | $\stackrel{-0.440 \times 7}{[-0.623,-0.257]}$ | $\stackrel{-0.357 *}{[-0.585,-0.128]}$ | $\begin{gathered} -0.213 \\ {[-0.621,0.194]} \end{gathered}$ | $\begin{gathered} -0.160 \\ {[-1.352,1.031]} \end{gathered}$ | $\begin{gathered} -0.059 \\ {[-0.591,0.472]} \end{gathered}$ | $\begin{gathered} -0.187 \\ {[-0.876,0.501]} \end{gathered}$ | $\begin{gathered} 1.121 \\ {[-0.914,3.155]} \end{gathered}$ |
| HH_REL (ref: Catholic): Other | $\begin{gathered} -4.444^{* * *} \\ {[-5.625,-3.264]} \end{gathered}$ | $\begin{gathered} 1.812 \\ {[-0.963,4.587]} \end{gathered}$ | $\begin{gathered} -1.774^{* * *} \\ {[-2.603,-0.946]} \end{gathered}$ | $\begin{gathered} 0.433 \\ {[-1.236,2.102]} \end{gathered}$ | $\begin{gathered} -0.814^{* * *} \\ {[-1.099,-0.529]} \end{gathered}$ | $\begin{gathered} 0.288 \\ {[-0.732,1.307]} \end{gathered}$ | $\begin{gathered} -0.541 \\ {[-1.258,0.176]} \end{gathered}$ | $\begin{gathered} -0.017 \\ {[-0.660,0.627]} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[0.000,0.000]} \end{gathered}$ | $\begin{gathered} -0.835 \\ {[-2.150,0.481]} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[0.000,0.000]} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[0.000,0.000]} \end{gathered}$ |
| HH_ETH (ref: Ekoi): Fulani | $\begin{gathered} 0.000 \\ {[0.000,0.000]} \end{gathered}$ | $\begin{gathered} -0.658 \\ {[-2.000,0.683]} \end{gathered}$ | $\begin{gathered} 0.567 \\ {[-2.267,3.401]} \end{gathered}$ | $\begin{gathered} -0.490 \\ {[-2.077,1.096]} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[0.000,0.000]} \end{gathered}$ | $\underset{[-0.881,-0.201]}{-0.541+*}$ | $\begin{gathered} -0.336 * * \\ {[-0.521,-0.152]} \end{gathered}$ | $\stackrel{-0.281^{* *}}{[-0.542,-0.021]}$ | $\begin{gathered} 0.000 \\ {[0.000,0.000]} \end{gathered}$ | $\begin{gathered} -0.356 \\ {[-1.217,0.505]} \end{gathered}$ | $\underset{[-0.012,0.617]}{0.302^{*}}$ | $\begin{gathered} 0.472 \\ {[-0.516,1.461]} \end{gathered}$ |
| HH_ETH (ref: Ekoi): Hausa | $\begin{gathered} 0.074 \\ {[-0.470,0.619]} \end{gathered}$ | $\begin{gathered} -0.617 \\ {[-1.948,0.714]} \end{gathered}$ | $\begin{gathered} 1.027 \\ {[-1.798,3.852]} \end{gathered}$ | $\begin{gathered} 0.037 \\ {[-1.542,1.616]} \end{gathered}$ | $\begin{gathered} 0.062 \\ {[-0.137,0.260]} \end{gathered}$ | $\stackrel{-0.5399^{* * *}}{[-0.875,-0.202]}$ | $\begin{gathered} -0.179^{* *} \\ {[-0.355,-0.003]} \end{gathered}$ | $\begin{gathered} -0.164 \\ {[-0.419,0.090]} \end{gathered}$ | $\begin{gathered} -0.577 \\ {[-1.324,0.169]} \end{gathered}$ | $\begin{gathered} -0.598 \\ {[-1.448,0.252]} \end{gathered}$ | $\begin{gathered} -0.163 \\ {[-0.389,0.064]} \end{gathered}$ | $\begin{gathered} 0.263 \\ {[-0.710,1.235]} \end{gathered}$ |
| HH_ETH (ref: Ekoi): Ibibio | $\begin{gathered} 1.244 \\ {[-1.726,4.213]} \end{gathered}$ | $\begin{gathered} 1.024 \\ {[-0.267,2.314]} \end{gathered}$ | $\begin{gathered} 0.716 \\ {[-2.289,3.721]} \end{gathered}$ | $\begin{gathered} 0.064 \\ {[-1.630,1.758]} \end{gathered}$ | $\begin{gathered} 0.364 \\ {[-0.397,1.126]} \end{gathered}$ | $\begin{gathered} -0.255 \\ {[-0.619,0.110]} \end{gathered}$ | $\begin{gathered} -0.199 \\ {[-0.444,0.047]} \end{gathered}$ | $\begin{gathered} 0.119 \\ {[-0.247,0.485]} \end{gathered}$ | $\begin{gathered} -2.494^{* * *} \\ {[-4.324,-0.664]} \end{gathered}$ | $\begin{gathered} -0.137 \\ {[-1.235,0.961]} \end{gathered}$ | $\begin{gathered} -0.204 \\ {[-0.758,0.351]} \end{gathered}$ | $\begin{gathered} 0.185 \\ {[-0.906,1.275]} \end{gathered}$ |
| HH_ETH (ref: Ekoi): Igala | $\begin{gathered} 3.934 \\ {[2.295,5.573]} \end{gathered}$ | $\begin{gathered} 0.215 \\ {[-1.301,1.731]} \end{gathered}$ | $\begin{gathered} 0.941 \\ {[-1.957,3.838]} \end{gathered}$ | $\begin{gathered} 0.854 \\ {[-0.935,2.642]} \end{gathered}$ | $\begin{gathered} 2.076 * * \\ {[1.699,2.453]} \end{gathered}$ | $\begin{gathered} 0.024 \\ {[-0.375,0.424]} \end{gathered}$ | $\begin{gathered} 0.189 \\ {[-0.112,0.491]} \end{gathered}$ | $\begin{gathered} 0.193 \\ {[-0.241,0.628]} \end{gathered}$ | $\begin{gathered} -1.161 \\ {[-2.970,0.648]} \end{gathered}$ | $\begin{gathered} -0.713 \\ {[-1.709,0.282]} \end{gathered}$ | $\begin{gathered} 0.528 \\ {[-0.403,1.459]} \end{gathered}$ | $\begin{gathered} 0.114 \\ {[-1.020,1.247]} \end{gathered}$ |
| HH_ETH (ref: Ekoi): Igbo | $\begin{gathered} 2.564 * * \\ {[1.360,3.768]} \end{gathered}$ | $\begin{gathered} 1.493^{* *} \\ {[0.169,2.818]} \end{gathered}$ | $\underset{[-0.338,5.398]}{2.530^{*}}$ | $\underset{[0.844,4.073]}{2.459^{* * *}}$ | $\begin{gathered} 0.657 \\ {[0.299,1.015]} \end{gathered}$ | $\begin{gathered} -0.077 \\ {[-0.404,0.250]} \end{gathered}$ | $\begin{gathered} 0.103 \\ {[-0.043,0.249]} \end{gathered}$ | $\begin{gathered} 0.301 \cdots \\ {[0.072,0.530]} \end{gathered}$ | $\begin{gathered} -0.783 \\ {[-1.910,0.345]} \end{gathered}$ | $\begin{gathered} -0.654 \\ {[-1.467,0.159]} \end{gathered}$ | $\begin{gathered} -0.409^{* * *} \\ {[-0.695,-0.122]} \end{gathered}$ | $\begin{gathered} 0.289 \\ {[-0.675,1.252]} \end{gathered}$ |
| HH_ETH (ref: Ekoi): Ijaw / Izon | $\begin{gathered} 1.149 \\ {[-1.180,3.478]} \end{gathered}$ | $\begin{gathered} -0.127 \\ {[-1.742,1.488]} \end{gathered}$ | $\begin{gathered} 0.263 \\ {[-2.656,3.183]} \end{gathered}$ | $\begin{gathered} -0.052 \\ {[-2.106,2.002]} \end{gathered}$ | $\begin{gathered} 0.201 \\ {[-0.240,0.641]} \end{gathered}$ | $\begin{gathered} -0.184 \\ {[-0.601,0.233]} \end{gathered}$ | $\begin{gathered} -0.198^{*} \\ {[-0.422,0.025]} \end{gathered}$ | $\begin{gathered} -0.183 \\ {[-0.541,0.174]} \end{gathered}$ | $\begin{gathered} -1.101 \\ {[-3.020,0.818]} \end{gathered}$ | $\begin{gathered} -0.575 \\ {[-1.472,0.323]} \end{gathered}$ | $\begin{gathered} -0.179 \\ {[-0.592,0.234]} \end{gathered}$ | $\begin{gathered} 1.357 * \\ {[0.109,2.605]} \end{gathered}$ |
| HH_ETH (ref: Ekoi): Kanuri / Beriberi | $\begin{gathered} 1.003^{* *} \\ {[0.009,1.996]} \end{gathered}$ | $\begin{gathered} -0.914 \\ {[-2.320,0.491]} \end{gathered}$ | $\begin{gathered} 1.163 \\ {[-1.701,4.028]} \end{gathered}$ | $\begin{gathered} -0.290 \\ {[-1.924,1.345]} \end{gathered}$ | $\begin{gathered} 0.223 \\ {[-0.507,0.953]} \end{gathered}$ | $\underset{[-0.911,-0.157]}{-0.534}$ | $\begin{gathered} -0.157 \\ {[-0.405,0.091]} \end{gathered}$ | $\begin{gathered} -0.234 \\ {[-0.611,0.143]} \end{gathered}$ | $\begin{gathered} -0.102 \\ {[-1.519,1.315]} \end{gathered}$ | $\begin{gathered} -0.529 \\ {[-1.434,0.377]} \end{gathered}$ | $\begin{gathered} 0.231 \\ {[-0.391,0.854]} \end{gathered}$ | $\begin{gathered} 0.571 \\ {[-0.493,1.636]} \end{gathered}$ |
| HH_ETH (ref: Ekoi): Tiv | $\begin{gathered} -0.068 \\ {[-1.797,1.661]} \end{gathered}$ | $\begin{gathered} -0.978 \\ {[-2.399,0.443]} \end{gathered}$ | $\begin{gathered} 0.077 \\ {[-2.858,3.012]} \end{gathered}$ | $\begin{gathered} 0.280 \\ {[-1.475,2.036]} \end{gathered}$ | $\begin{gathered} 0.326 \\ {[-0.395,1.047]} \end{gathered}$ | $\begin{gathered} -0.565^{* * *} \\ {[-0.929,-0.202]} \end{gathered}$ | $\stackrel{-0.375^{* *}}{[-0.669,-0.082]}$ | $\begin{gathered} -0.197 \\ {[-0.461,0.068]} \end{gathered}$ | $\begin{gathered} -0.327 \\ {[-1.976,1.322]} \end{gathered}$ | $\begin{gathered} -0.847^{*} \\ {[-1.710,0.016]} \end{gathered}$ | $\begin{gathered} -0.142 \\ {[-0.698,0.415]} \end{gathered}$ | $\begin{gathered} 0.856 \\ {[-0.246,1.959]} \end{gathered}$ |
| HH_ETH (ref: Ekoi): Yoruba | $\underset{[4.397,7.488]}{5.94 *}$ | $\underset{[1.460,4.238]}{2.849^{* * *}}$ | $\begin{gathered} 3.553^{* *} \\ {[0.695,6.412]} \end{gathered}$ | $\begin{gathered} 3.056 \\ {[1.428,4.685]} \end{gathered}$ | $\begin{gathered} 0.767 \\ {[0.436,1.098]} \end{gathered}$ | $\begin{gathered} -0.071 \\ {[-0.401,0.258]} \end{gathered}$ | $\begin{gathered} 0.049 \\ {[-0.110,0.208]} \end{gathered}$ | $\begin{gathered} -0.027 \\ {[-0.263,0.208]} \end{gathered}$ | $\begin{gathered} -1.234^{*} \\ {[-2.477,0.009]} \end{gathered}$ | $\begin{gathered} -0.103 \\ {[-0.951,0.745]} \end{gathered}$ | $\begin{gathered} 0.168 \\ {[-0.141,0.476]} \end{gathered}$ | $\begin{gathered} 0.808 \\ {[-0.178,1.794]} \end{gathered}$ |
| HH_ETH (ref: Ekoi): Other | $\begin{gathered} 1.491^{* * *} \\ {[0.544,2.437]} \end{gathered}$ | $\begin{gathered} 0.149 \\ {[-1.149,1.447]} \end{gathered}$ | $\begin{gathered} 1.326 \\ {[-1.484,4.137]} \end{gathered}$ | $\begin{gathered} 0.679 \\ {[-0.884,2.242]} \end{gathered}$ | $\begin{gathered} 0.556+" \\ {[0.259,0.852]} \end{gathered}$ | $\begin{gathered} -0.211 \\ {[-0.536,0.114]} \end{gathered}$ | $\begin{gathered} -0.040 \\ {[-0.186,0.106]} \end{gathered}$ | $\begin{gathered} 0.059 \\ {[-0.168,0.285]} \end{gathered}$ | $\begin{gathered} -0.829^{*} \\ {[-1.679,0.021]} \end{gathered}$ | $\begin{gathered} -0.570 \\ {[-1.378,0.238]} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[0.000,0.000]} \end{gathered}$ | $\begin{gathered} 0.466 \\ {[-0.489,1.421]} \end{gathered}$ |
| HH_SIZ | $\begin{gathered} -0.070 * \\ {[-0.140,-0.001]} \end{gathered}$ | $\begin{gathered} -0.0311^{* * \prime} \\ {[-0.052,-0.010]} \end{gathered}$ | $\underset{[-0.086,-0.047]}{-0.066 * *}$ | $\underset{[-0.064,-0.008]}{-0.036}$ | $\begin{gathered} -0.009 \\ {[-0.024,0.006]} \end{gathered}$ | $\begin{gathered} -0.003 \\ {[-0.009,0.002]} \end{gathered}$ | $\underset{[-0.020,-0.007]}{-0.014 \times}$ | $\begin{gathered} -0.001 \\ {[-0.011,0.009]} \end{gathered}$ | $\begin{gathered} 0.059^{*} \\ {[-0.001,0.118]} \end{gathered}$ | $\begin{gathered} 0.134 \\ {[0.107,0.161]} \end{gathered}$ | $\begin{gathered} 0.1533^{* * *} \\ {[0.127,0.180]} \end{gathered}$ | $\begin{gathered} 0.133 * * \\ {[0.108,0.157]} \end{gathered}$ |
| HH_WEA | $\begin{gathered} 0.348{ }^{* * *} \\ {[0.212,0.484]} \end{gathered}$ | $\begin{gathered} 0.356 \\ {[0.306,0.405]} \end{gathered}$ | $\begin{gathered} 0.297 \\ {[0.250,0.345]} \end{gathered}$ | $\begin{gathered} 0.221 \\ {[0.171,0.272]} \end{gathered}$ | $\begin{gathered} 0.076 * * \\ {[0.045,0.108]} \end{gathered}$ | $\begin{gathered} 0.073 \\ {[0.058,0.087]} \end{gathered}$ | $\begin{gathered} 0.063 \\ {[0.050,0.075]} \end{gathered}$ | $\stackrel{0.037}{[0.021,0.053]}$ | $\begin{gathered} 0.109^{* *} \\ {[0.000,0.217]} \end{gathered}$ | $\begin{gathered} -0.018 \\ {[-0.060,0.024]} \end{gathered}$ | $\begin{gathered} 0.018 \\ {[-0.016,0.053]} \end{gathered}$ | $\begin{gathered} 0.015 \\ {[-0.017,0.048]} \end{gathered}$ |
| Constant | $\begin{gathered} 0.814 \\ {[-0.905,2.534]} \end{gathered}$ | $\underset{[1.257,4.132]}{2.69{ }^{* * *}}$ | $\begin{gathered} 2.145 \\ {[-0.805,5.095]} \end{gathered}$ | $\begin{gathered} 2.444^{* * *} \\ {[0.707,4.182]} \end{gathered}$ | $\begin{gathered} 0.054 \\ {[-0.379,0.487]} \end{gathered}$ | $\begin{gathered} 1.125^{* * *} \\ {[0.765,1.485]} \end{gathered}$ | $\begin{gathered} 1.010^{* * *} \\ {[0.806,1.215]} \end{gathered}$ | $\begin{gathered} 1.074^{* * *} \\ {[0.766,1.383]} \end{gathered}$ | $\begin{gathered} 2.191^{\text {t+4 }} \\ {[0.564,3.818]} \end{gathered}$ | $\underset{[1.933,3.771]}{2.852+*}$ | $\begin{gathered} 2.839^{* * *} \\ {[2.295,3.383]} \end{gathered}$ | $\underset{[1.373,3.536]}{2.454 * *}$ |
| Multilevel variance parameter: Level 1 | $\begin{gathered} 0.446 * * \\ {[0.139,0.754]} \end{gathered}$ | $\begin{gathered} 0.674 \\ {[0.535,0.812]} \end{gathered}$ | $\begin{gathered} 0.881 * * \\ {[0.773,0.988]} \end{gathered}$ | $\begin{gathered} 0.382 \\ {[0.215,0.548]} \end{gathered}$ | $\begin{gathered} -1.8477^{* * *} \\ {[-2.590,-1.104]} \end{gathered}$ | $\begin{gathered} -1.260 \\ {[-1.389,-1.131]} \end{gathered}$ | $\begin{gathered} -1.339^{* * *} \\ {[-1.463,-1.216]} \end{gathered}$ | $\begin{gathered} -1.244^{* * *} \\ {[-1.420,-1.068]} \end{gathered}$ | $\begin{gathered} 0.269 \\ {[-0.119,0.658]} \end{gathered}$ | $\begin{gathered} 0.035 \\ {[-0.022,0.092]} \end{gathered}$ | $\begin{gathered} 0.079^{* *} \\ {[0.013,0.145]} \end{gathered}$ | $\begin{gathered} 0.066 * \\ {[0.005,0.127]} \end{gathered}$ |
| Multilevel variance parameter: Residual | $\begin{gathered} 1.395^{* * *} \\ {[1.266,1.523]} \end{gathered}$ | $\underset{[1.213,1.327]}{1.270 * *}$ | $\begin{gathered} 1.350 * * \\ {[1.298,1.402]} \end{gathered}$ | $\begin{gathered} 1.173^{* * *} \\ {[1.122,1.225]} \end{gathered}$ | $\underset{[0.031,0.222]}{0.126^{* *}}$ | $\begin{gathered} 0.041^{*} \\ {[-0.005,0.086]} \end{gathered}$ | $\begin{gathered} 0.114 * * \\ {[0.078,0.150]} \end{gathered}$ | $\begin{gathered} 0.036^{*} \\ {[-0.006,0.079]} \end{gathered}$ |  |  |  |  |
| Level 1 Observations (child) | 1400 | 11781 | 16510 | 5328 | 1437 | 12654 | 17086 | 5408 | 1921 | 14275 | 18276 | 17857 |
| Level 2 Observations (LGA) | 153 | 370 | 370 | 511 | 154 | 370 | 370 | 512 | 158 | 370 | 370 | 515 |
| Akaike Information Criterion | 8042.517 | 64196.451 | 92468.14 | 28199.742 | 4511.606 | 37408.855 | 52854.597 | 16072.681 | 1014.205 | 6786.461 | 7863.049 | 8003.619 |
| Prob. > $\chi^{2}$ | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |

$95 \%$ confidence intervals in brackets
*p < 0.10, ${ }^{* *}$ p $<0.05,{ }^{* * *} p<0.01$

| Dependent variable: non-polio/measles full immunisation status | Full model | $\begin{gathered} \text { Interaction } \\ \text { model } \\ \text { (EXPxAGE) } \end{gathered}$ | Full model (by region) |  |  |  |  |  | Interaction model (EXPxAGE) (by region) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | North Central | North East | North West | South East | South South | South West | North Central | North East | North West | South East | South South | South West |
| EXP_CHI | .020" | -0.032" | $0.028^{*}$ | 61 | -0.045 | 0.0 | -0.019 | -0.00 | 0.025 | -0.065 | -0.041 | 0.057 | -0.063 | -0.085 |
|  | [-0.033,-0.008] | [-0.054,-0.010] | [-0.003,0.059] | [-0.094,-0.028] | [-0.118,0.029] | [-0.100,0.202] | [-0.131,0.093] | [-0.154, 0.026] | [-0.022,0.072] | [-0.110,-0.019] | [-0.116,0.034] | [-0.157,0.271] | [-0.245,0.118] | [-0.213,0.043] |
| EXPxAGE |  | 0.000 |  |  |  |  |  |  | 0.000 | 0.000 | 0.000 | -0.001 | 0.001 | 0.000 |
|  |  | [-0.000, 0.001$]$ |  |  |  |  |  |  | [-0.001, 0.001] | [-0.001,0.001] | [-0.001,0.001] | [-0.004,0.003] | [-0.002, 0.003] | [-0.002,0.002] |
| CHI_AGE | $0.026^{* *}$ | $0.016^{\prime \prime \prime}$ | 0.009 | $0.049^{* *}$ | 0.051 | 0.022 | 0.008 | 0.041 | -0.003 | $0.034^{\text {"* }}$ | 0.033 | 0.007 | 0.011 | $0.032^{\text {** }}$ |
|  | [0.010,0.042] | [0.009,0.023] | [-0.023,0.041] | [0.008,0.091] | [-0.015,0.117] | [-0.029,0.072] | [-0.031,0.048] | [0.005, 0.078] | [-0.019,0.014] | [0.011,0.056] | [-0.015,0.081] | [-0.028,0.042] | [-0.015,0.038] | [0.009,0.055] |
| CHI_AGE2 | 0.000 |  | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |  |  |  |  |  |  |
|  | [-0.000,0.000] |  | [-0.001, 0.000] | [-0.001, 0.000] | [-0.001,0.000] | [-0.001, 0.001] | [-0.001,0.001] | [-0.001, 0.000] |  |  |  |  |  |  |
| CHI_ORD | -0.046"'* | -0.046" | -0.018 | -0.081********* | -0.038 | 0.003 | -0.071* | -0.056 | -0.018 | -0.082*** | -0.038 | 0.004 | -0.071* | -0.056 |
|  | [-0.071,-0.020] | [-0.071,-0.020] | [-0.072,0.036] | [-0.142,-0.020] | [-0.102, 0.026] | $[-0.072,0.078]$ | [-0.136,-0.005] | [-0.131,0.020] | [-0.072,0.037] | [-0.143,-0.021] | [-0.101,0.026] | [-0.071,0.079] | -.137,-0.005] | [-0.131,0.019] |
| CHI_SEX | -0.006 | -0.006 | -0.050 | -0.038 | 0.048 | -0.026 | 0.158 | -0.073 | -0.048 | -0.039 | 0.045 | -0.026 | 0.158 | -0.072 |
|  | [-0.084,0.072] | [-0.084, 0.072] | [-0.208,0.0108] | [-0.222,0.146] | [-0.149,0.244] | [-0.279,0.228] | [-0.045, 0.362] | [-0.266,0.121] | [-0.206,0.110] | [-0.223,0.144] | [-0.151,0.242] | [-0.280,0.228] | [-0.045, 0.362] | [-0.266,0.122] |
| MOT_ANC | $0.061 \cdots$ | $0.061{ }^{1 *}$ | $0.100$ | $0.135 \cdots$ | $0.070^{\cdots+}$ | $0.027^{*}$ | $0.044^{\text {+** }}$ | $0.041^{\text {T* }}$ | $0.100^{\cdots \cdots}$ | $0.135^{\text {"** }}$ | $0.071^{\text {T* }}$ | $0.027{ }^{*}$ | 0.044 | $0.041^{\text {"** }}$ |
|  | [0.052,0.071] | [0.052, 0.071] | [0.077,0.123] | [0.101,0.169] | [0.035,0.106] | [-0.000, 0.055] | [0.022,0.066] | [0.025,0.057] | [0.077,0.123] | [0.101,0.169] | [0.035,0.106] | [-0.001, 0.054] | [0.023,0.066] | [0.025,0.058] |
| MOT_EDM | $\stackrel{0.056}{[0.037,0.074]}$ | $\begin{gathered} 0.056 * * * \\ {[0.037,0.074]} \end{gathered}$ | $\begin{gathered} 0.054 \\ {[0.019,0.090]} \end{gathered}$ | $0.049^{* *}$ <br> [0.008,0.091] | $\begin{gathered} 0.073 \\ {[0.027,0.119]} \end{gathered}$ | $\begin{gathered} 0.073^{* *} \\ {[0.005,0.142]} \end{gathered}$ | $\begin{gathered} 0.046^{*} \\ {[-0.007,0.098]} \end{gathered}$ | $0.044^{*}$ <br> [-0.006,0.094] | $\begin{gathered} 0.054 \\ {[0.019,0.089]} \end{gathered}$ | $0.049^{* *}$ <br> [0.007,0.091] | $\begin{gathered} 0.073 \\ {[0.027,0.118]} \end{gathered}$ | $0.074^{* *}$ <br> [0.006,0.143] | $\underset{[-0.008,0.098]}{0.045^{*}}$ | $0.044^{*}$ <br> [-0.006, 0.094] |
| MOT_EDF | $0.024^{*}$ | $0.024^{* *}$ | $0.035^{*}$ | 0.014 | $0.044^{\text {" }}$ | 0.014 | 0.024 | -0.033 | $0.035^{*}$ | 0.014 | $0.044^{*}$ | 0.013 | 0.024 | -0.034 |
|  | [0.006,0.043] | [0.006, 0.043] | [-0.002, 0.072] | [-0.026,0.055] | [0.002,0.085] | [-0.057,0.085] | [-0.034, 0.082] | [-0.086,0.020] | [-0.002, 0.072] | [-0.026,0.055] | [0.003, 0.085 ] | [-0.058,0.084] | [-0.034,0.082] | [-0.086,0.019] |
| MOT_AWE | $3.124$ | $3.121+\cdots$ | $2.731^{\ldots *}$ | 2.920 | $3.684^{\text {*** }}$ | $3.059 \cdots$ | $2.96{ }^{* * *}$ | $3.248{ }^{\text {+"* }}$ | $2.730^{+\cdots}$ | $2.920{ }^{\text {a** }}$ | $3.683{ }^{\text {ati }}$ | $3.053^{\text {+** }}$ | $2.964{ }^{\text {"*** }}$ | 3.240 |
|  | [3.008,3.240 | [3.005,3.237] | [2.505,2.956] | [2.644,3.196] | [3.415,3.953] | [2.682,3.4 | [2.649,3.281] | [2.892,3.604] | [2.505,2.955] | [2.644,3.196] | [3.414,3.952] | [2.677,3.430] | [2.648,3.280] | [2.885,3.595] |
| MOT_AGE | $0.021^{\text {T* }}$ | $0.021^{\text {+"* }}$ | 0.011 | $0.031{ }^{\text {** }}$ | $0.033^{\text {+** }}$ | 0.016 | $0.023^{*}$ | 0.015 | 0.011 | $0.031^{\text {"** }}$ | $0.033^{\text {"** }}$ | 0.015 | $0.023^{*}$ | 0.015 |
|  | [0.012,0.030] | [0.012,0.030] | [-0.007,0.029] | [0.008,0.054] | [0.008, 0.058] | [-0.012,0.043] | [0.001,0.045] | $\left.{ }^{-}-0.007,0.036\right]$ | [-0.007,0.029] | [0.008,0.054] | [0.008, 0.057] | [-0.012,0.043] | [0.001,0.046] | [-0.007,0.037] |
| HH_RUR | -0.150******** | -0.150**********) | -0.045 | -0.214 | -0.172 | -0.073 | -0.037 | -0.377********* | -0.044 | -0.214 | -0.173 | -0.072 | -0.036 | -0.376******** |
|  | [-0.260,-0.040] | [-0.259,-0.040] | [-0.279,0.188] | [-0.490,0.063] | [-0.484,0.140] | [-0.374,0.228] | [-0.299, 0.226] | [-0.645,-0.109] | [-0.278,0.190] | [-0.491,0.062] | [-0.485,0.138] | [-0.374,0.229] | [-0.298,0.226] | [-0.644,-0.108] |
| HH_REL (ref: Catholic): Other Christian | -0.187* | -0.188* | -0.111 | -0.611 ${ }^{\text {² }}$ | 0.389 | -0.263* | -0.345* | -0.132 | -0.112 | $-0.616^{*}$ | 0.387 | -0.261* | $-0.350^{\circ}$ | -0.132 |
|  | [-0.343,-0.031] | [-0.344,-0.032] | [-0.387,0.164] | [-1.272,0.051] | [-0.330,1.108] | [-0.542, 0.016] | [-0.726,0.036] | [-0.710,0.447] | [-0.387,0.163] | [-1.276,0.044] | [-0.332,1.106] | [-0.540,0.018] | [-0.730, 0.031] | [-0.710,0.447] |
| HH_REL (ref: Catholic): Islam | -0.575********* | -0.571" | -0.448**********) | -1.070*********) | -0.348 | -0.342 | -0.101 | -0.464 | -0.446********) | -1.080*********) | -0.348 | -0.336 | -0.103 | -0.463 |
|  | [-0.761,-0.389] | [-0.757,-0.385] | [-0.759,-0.137] | [-1.744,-0.396] | [-1.166,0.470] | [--3.017,2.333] | [-0.916,0.714] | [-1.059,0.131] | [-0.758,-0.135] | [-1.752,-0.407] | [-1.166,0.469] | [-3.009,2.336] | [-0.917,0.712] | [-1.057,0.132] |
| HH_REL (ref: Catholic): <br> Traditionalist | -0.757***********) | -0.756********* | -0.964* | -1.116* | -0.812 | -0.562 | $-0.866^{*}$ | -0.025 | -0.953* | -1.136* | -0.789 | -0.557 | -0.872 ${ }^{\text {* }}$ | -0.044 |
|  | [-1.166,-0.347] | [-1.165,-0.346] | [-2.082,0.155] | [-2.434,0.202] | [-2.396,0.773] | [-1.235,0.110] | [-1.896,0.163] | [-1.378,1.327] | [-2.070.0.163] | [-2.452,0.180] | [-2.370,0.792] | [-1.230,0.115] | [-1.903,0.158] | [-1.393,1.305] |
| HH_REL (ref: Catholic): Other | -0.098 | -0.106 | -0.138 | 0.000 | 0.000 | 0.000 | -0.301 | 0.447 | -0.137 | 0.000 | 0.000 | 0.000 | -0.306 | 0.436 |
|  | [-1.149, 0.952] | [-1.156,0.943] | [-2.341,2.065] | [0.000, 0.000$]$ | [0.000,0.000] | [0.000,0.000] | [-1.596, 0.994] | [-3.479,4.372] | [-2.338,2.065] | [0.000,0.000] | [0.000,0.000] | [0.000, 0.000] | [-1.600,0.989] | [-3.479,4.350] |
| HH_ETH (ref: Ekoi): Fulani | -0.847 ${ }^{\text {² }}$ | -0.833"* | -0.261 | -0.138 | 0.316 | 0.000 |  | -0.881 | -0.252 | -0.142 | 0.319 | 0.000 |  | -0.863 |
|  | [-1.388,-0.305] | [-1.375,-0.292] | [-0.817,0.295] | [-0.430,0.154] | [-0.343,0.975] | [0.000, 0.000$]$ |  | [-1.937,0.175] | [-0.807, 0.303] | [-0.434,0.150] | [-0.339,0.978] | [0.000, 0.000$]$ |  | [-1.918,0.193] |
| HH_ETH (ref: Ekoi): Hausa | -0.804**********) | -0.784*** | -0.461* | -0.137 | 0.410 | -0.677 | -0.163 | -0.110 | -0.459** | -0.137 | 0.412 | -0.660 | -0.164 | -0.113 |
|  | [-1.328,-0.281] | [-1.307,-0.260] | [-0.849,-0.073] | [-0.433,0.158] | [-0.106,0.925] | [-3.000, 1.646] | [-2.964,2.638] | [-1.047,0.828] | [-0.848,-0.071] | [-0.432,0.159] | [-0.103,0.928] | [-2.980, 1.660] | [-2.970,2.643] | [-1.050,0.825] |
| HH_ETH (ref: Ekoi): Ibibio | -0.582** | -0.582* | -1.077 | 0.000 | 0.000 | -0.764 | -0.963** | 0.727 | -1.082 | 0.000 | 0.000 | -0.748 | -0.960** | 0.734 |
|  | [-1.158,-0.006] | [-1.158,-0.006] | [-3.132,0.979] | [0.000, 0.000$]$ | [0.000,0.000] | [-3.466, 1.937] | [-1.527,-0.399] | [-0.674,2.128] | [-3.140,0.977] | [0.000, 0.000$]$ | [0.000,0.000] | [-3.447, 1.951] | [-1.522,-0.397] | [-0.667,2.134] |
| HH_ETH (ref: Ekoi): Igala | -0.733* | -0.731** | -0.423** | 0.000 | 0.000 | -1.131 | -1.242 | 1.297 | -0.428* | 0.000 | 0.000 | -1.134 | -1.257 | 1.306 |
|  | [-1.359,-0.106] | [-1.358,-0.105] | [-0.832,-0.014] | [0.000, 0.000] | [0.000,0.000] | [-3.896, 1.635] | [-3.919, 1.435] | [-0.300,2.894] | [-0.837,-0.019] | [0.000, 0.000] | [0.000,0.000] | [-3.897,1.630] | [-3.956, 1.441] | [-0.293,2.905] |
| HH_ETH (ref: Ekoi): Igbo | -0.031 | -0.031 | -0.312 | 0.195 | 0.011 | -0.421 | -0.199 | $0.848^{* * *}$ | -0.305 | 0.206 | 0.013 | -0.411 | -0.198 | $0.850^{* * *}$ |
|  | [-0.543,0.480] | [-0.542, 0.481] | [-0.873,0.248] | [-1.479,1.868] | [-1.068,1.090] | [-1.915,1.074] | [-0.831, 0.433] | [0.231, 1.465] | [-0.865,0.255] | [-1.466,1.877] | [-1.065, 1.091] | [-1.904,1.081] | [-0.829,0.433] | [0.233,1.466] |
| HH_ETH (ref: Ekoi): Ijaw / Izo | -0.418 | -0.419 | 0.000 |  |  | 0.000 | -0.772**********) | -1.020 | 0.000 |  |  | 0.000 | -0.767*********) | -1.030 |
|  | [-1.001,0.166] | [-1.002, 0.165] | [0.000,0.000] |  |  | [0.000,0.000] | [-1.306,-0.238] | [-2.616,0.577] | [0.000, 0.000$]$ |  |  | [0.000,0.000] | [-1.300,-0.234] | --2.626,0.567] |
| HH_ETH (ref: Ekoi): Kanuri / Beriberi | -0.940"* | -0.915***********) | -0.903 | -0.278 | 0.270 |  | 0.000 | $2.526{ }^{*}$ | -0.891 | -0.272 | 0.279 |  | 0.000 | $2.558{ }^{*}$ |
|  | [-1.569,-0.312] | [-1.544,-0.286] | [-2.583,0.778] | [-0.722,0.166] | [-0.982, 1.522] |  | [0.000, 0.000] | [-0.454,5.506] | [-2.572,0.791] | [-0.716,0.172] | [-0.973,1.530] |  | [0.000,0.000] | [-0.428,5.545] |
| HH_ETH (ref: Ekoi): Tiv | -0.529* | -0.525* | -0.187 | -0.336 | 0.000 | 0.000 | 0.000 | 1.480 | -0.189 | -0.360 | 0.000 | 0.000 | 0.000 | 1.493 |
|  | [-1.122,0.064] | -1.118,0.068] | [-0.574,0.200] | [-1.274,0.603] | [0.000,0.000] | [0.000,0.000] | [0.000, 0.000] | [-0.382,3.342] | [-0.576,0.198] | [-1.298,0.579] | [0.000,0.000] | [0.000, 0.000] | [0.000, 0.000] | [-0.363, 3.349$]$ |
| HH_ETH (ref: Ekoi): Yoruba | -0.398 | -0.395 | 0.162 | -0.053 | 0.949 | 0.000 | -2.229** | $0.313^{*}$ | 0.163 | -0.042 | 0.945 | 0.000 | -2.222*********) | $0.313^{*}$ |
|  | [-0.916,0.120] | [-0.913,0.123] | [-0.192,0.516] | [-1.510,1.403] | [-0.456,2.355] | [0.000,0.000] | [-3.204,-1.254] | [-0.007,0.633] | [-0.191,0.517] | [-1.498, 1.414] | [-0.452,2.341] | [0.000, 0.000$]$ | [-3.196,-1.248] | [-0.007, 0.633] |
| HH_ETH (ref: Ekoi): Other | -0.499* | -0.490* | 0.000 | 0.000 | 0.000 | 0.000 | -0.852**********) | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | -0.850**********) | 0.000 |
|  | [-0.999,0.001] | ${ }^{-0.0 .889,0.010]}$ | [0.000,0.000] | [0.000,0.000] | [0.000,0.000] | [0.000,0.000] | [-1.356,-0.347] | [0.000, 0.000] | [0.000,0.000] | [0.000,0.000] | [0.000,0.000] | [0.000, 0.000$]$ | [-1.353,-0.346] | [0.000,0.000] |
| HH_SI | -0.014** | -0.014" | -0.012 | -0.021* | -0.010 | -0.037 | -0.013 | 0.004 | -0.013 | -0.021* | -0.009 | -0.037 | -0.013 | 0.004 |
|  | [-0.027,-0.001] | [-0.027,-0.001] | [-0.038,0.014] | [-0.046,0.003] | [-0.038,0.019] | [-0.083, 0.009] | [-0.059,0.033] | [-0.047,0.055] | [-0.038,0.013] | [-0.046,0.003] | [-0.037,0.019] | [-0.083,0.008] | [-0.059,0.033] | [--047,0.055] |
| HH_WEA | $0.132^{* * *}$ | $0.132^{* *}$ | .140*********) | $0.112^{\text {*** }}$ | $0.120^{* *}$ | $0.152^{* * *}$ | $0.107^{\text {T* }}$ | $0.121^{\prime \prime *}$ | $0.139^{\text {T* }}$ | $0.112^{* * *}$ | $0.120^{+\prime *}$ | $0.152^{* *}$ | $0.107^{* *}$ | $0.122^{\text {** }}$ |
|  | [0.111,0.153] | [0.111,0.153] | [0.095,0.184] | [0.059,0.165] | [0.067,0.173] | [0.090,0.214] | [0.057,0.157] | [0.064,0.179] | [0.095,0.184] | [0.059,0.165] | [0.067,0.173] | [0.090, 0.214$]$ | [0.057,0.157] | [0.065,0.179] |
| YEAR (ref: 2003): 2008 | $0.784^{\text {"** }}$ | $0.812^{\text {** }}$ | $1.026^{\prime \prime *}$ | $0.798^{*}$ | $1.350^{\text {"** }}$ | $1.354^{* *}$ | $0.961^{\text {** }}$ | -0.273 | $1.044^{\text {+"* }}$ | $0.826{ }^{*}$ | $1.352^{\text {** }}$ | $1.355^{* *}$ | $0.952^{\text {** }}$ | -0.237 |
|  | [0.524,1.044] | [0.551,1.073] | [0.528,1.525] | [0.030, 1.567] | [0.502,2.198] | [0.679,2.029] | [0.237,1.685] | [-0.981,0.436] | [0.543,1.545] | [0.054, 1.598] | [0.501,2.203] | [0.680, 2.029] | [0.228,1.676] | [-0.948, 0.473] |
| YEAR (ref: 2003): 2013 | $1.032{ }^{\text {+** }}$ | 1.064***********) | $0.870^{* * *}$ | $1.389{ }^{\text {º* }}$ | $1.696{ }^{\text {*** }}$ | $1.767^{+1 *}$ | $1.833^{\text {"** }}$ | $-0.659^{*}$ | $0.894^{\text {T* }}$ | $1.419^{\text {** }}$ | $1.673^{\text {T* }}$ | $1.787^{+7}$ | $1.859^{+\prime *}$ | $-0.617^{*}$ |
|  | [0.773,1.290] | [0.804,1.324] | [0.375,1.365] | $[0.625,2.153]$ | [0.745, 2.647] | [1.092,2.442] | [1.113,2.552] | [-1.375,0.056] | [0.397,1.391] | [0.652,2.186] | [0.725,2.621] | [1.111,2.463] | [1.137,2.582] | [-1.333, 0.099$]$ |
| YEAR (ref: 2003): 2018 | $1.237^{\text {"** }}$ | $1.252^{\text {"** }}$ | $1.389^{* *}$ | $1.753^{\text {"** }}$ | $1.447^{\text {"* }}$ | $2.088^{\text {"** }}$ | $1.779^{* * *}$ | -0.572 | $1.410^{* *}$ | $1.789^{\text {"* }}$ | $1.490^{\text {"* }}$ | $2.084^{\text {"** }}$ | $1.711^{\prime \prime}$ | -0.585 |
|  | [0.970, 1.505] | [0.985,1.518] | [0.874,1.904] | [0.978,2.528] | [0.609,2.285] | [1.281,2.896] | [0.959,2.599] | [-1.341,0.197] | [0.896, 1.923] | [1.014,2.563] | [0.659,2.322] | [1.257,2.911] | [0.864,2.559] | [-1.356,0.186] |
| Constant | -4.445**********) | -4.303*** | -4.563**********) | -5.058**********) | -7.592**********) | $-4.376^{\text {"** }}$ | -3.903*** | -3.203*** | -4.425"*******) | -4.860"**********) | -7.380"*********) | -4.239"*********) | -3.851** | -3.074***********) |
|  | [-5.084,-3.806] | [-4.926,-3.680] | [-5.376,-3.750] | [-6.190,-3.926] | [-8.962,-6.223] | [-6.286,-2.466] | [-5.111,-2.694] | [-4.375,-2.032] | [-5.190,-3.660] | [-5.941,-3.779] | [-8.692,-6.067] | [-6.113,-2.365] | [-5.017,-2.685] | [-4.216,-1.932] |
| Multilevel variance parameter: Level 1 | $0.354^{* * *}$ | $0.353^{* * *}$ | $0.213^{* *}$ | $0.250^{* * *}$ | $0.695^{* *}$ | $0.305$ | $0.045$ | $0.296^{* * *}$ | $0.214$ | $0.252^{* * *}$ | $0.692^{* *}$ | $0.304^{* * *}$ | $0.043$ | $0.293$ |
| Level 1 Observations (child) | 24367 | 24367 | 4346 | 5015 | 7248 | 2034 | 2511 | 3195 | 4346 | 5015 | 7248 | 2034 | 2511 | 3195 |
| Level 2 Observations (LGA) | 684 | 684 | 113 | 100 | 166 | 85 | 111 | 121 | 113 | 100 | 166 | 85 | 111 | 121 |
| Akaike Information Criterion | 17045.336 | 17044.81 | 4014.257 | 3048.336 | 2966.083 | 1700.836 | 2421.769 | 2826.662 | 4014.885 | 3048.749 | 2966.498 | 1701.332 | 2421.402 | 2826.912 |
| Prob. $>X^{2}$ | $<0.001$ | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |

$p<0.10$ ** $p<0.05$,** $p<0.01$

| Dependent variables: various indicators of routine immunisation, maternal care and child survival (see right) | Non-polio full immunisation (full model) | Delivery |  |  | Antenatal care |  | Child survival (total exposure | Non-polio full immunisation status (by region) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | At home | At private facility | At public facility | No. of antenatal care visits | No. of tetanus injections |  | North Central | North East | Full North West | South East | South South | South West |
| $\begin{gathered} \text { EXP_CHI } \\ \text { (NIDs and sNIDs) } \end{gathered}$ | $\begin{gathered} -0.037^{*} \\ {[-0.070,-0.004]} \end{gathered}$ |  |  |  |  |  |  | $\begin{gathered} 0.008 \\ {[-0.063,0.080]} \end{gathered}$ | $\begin{gathered} -0.151^{* * *} \\ {[-0.233,-0.069]} \end{gathered}$ | $\begin{gathered} -0.056 \\ --0.191,0.07 \end{gathered}$ | $\begin{gathered} 0.038 \\ {[-0.125,0.202]} \end{gathered}$ | $\begin{gathered} \hline 0.118^{*} \\ -0.021,0.256] \end{gathered}$ | $\begin{gathered} -0.103^{*} \\ {[-0.216,0.011]} \end{gathered}$ |
| EXP_CHI (IPDs and sIPDs) | $\stackrel{-0.025 *}{[-0.037,-0.012]}$ |  |  |  |  |  |  | $\begin{gathered} 0.043^{* 1]} \\ {[0.006,0.080]} \end{gathered}$ | $\begin{gathered} -0.093^{\cdots} \\ {[-0.128,-0.05]} \end{gathered}$ | $\begin{gathered} -0.078^{+} \\ {[-0.167,0.010]} \end{gathered}$ | $\begin{gathered} 0.119 \\ {[-0.029,0.268]} \end{gathered}$ | $\begin{gathered} 0.189 \\ {[0.061,0.317]} \end{gathered}$ | $\begin{gathered} -0.072 \\ {[-0.165,0.021]} \end{gathered}$ |
| EXP_CHI | -0.007 |  |  |  |  |  |  | -0.011 | 0.027 | -0.139" | 0.000 | 0.000 | 0.303 |
| (mop-up campaigns) | [-0.048, 0.035] |  |  |  |  |  |  | [-0.103, 0.082] | -0.048,0 | -0.0.247,-0.03 | [0.000,0.000] | [0.000, 0.000] | [-0.418, 1.024] |
| EXP_CHI (MNCHW) | $\begin{gathered} -0.047 \\ {[-0.146,0.052]} \end{gathered}$ |  |  |  |  |  |  | $\begin{gathered} -0.175 \\ {[-0.393,0.044]} \end{gathered}$ | $\begin{gathered} -0.102 \\ {[-0.359,0.155]} \end{gathered}$ | $\begin{gathered} 0.117 \\ {[-0.197,0.431]} \end{gathered}$ | $\begin{gathered} -0.034 \\ {[-0.340,0.272]} \end{gathered}$ | $\stackrel{-0.348 * * *}{[-0.610,-0.085}$ | $\begin{gathered} -0.030 \\ 0.267,0.206] \end{gathered}$ |
| EXP_PREG (NIDs and sNIDs) |  | $\begin{gathered} 0.014 \\ {[-0.018 .0 .0461} \end{gathered}$ | $-0.063^{\cdots}$ | $0.003$ | $\underset{[-0.086 .0 .0001}{-0.043^{*}}$ | $\begin{gathered} 0.002 \\ \Gamma-0.0010 .0 .0131 \end{gathered}$ |  |  |  |  |  |  |  |
| EXP_PREG |  | 0.004 | -0.093 ${ }^{\text {" }}$ | $0.020^{\circ}$ | -0.059 ${ }^{\text {² }}$ | -0.007 |  |  |  |  |  |  |  |
| (IPDs and sIPDs) |  | [-0.021,0.029] | [-0.127,-0.058] | [-0.003, 0.043] | 0955,-0.023] | [-0.017,0.003] |  |  |  |  |  |  |  |
| EXP_PREG (mop-up campaigns) |  | $\begin{gathered} -0.012 \\ {[-0.049,0.025]} \end{gathered}$ | $\begin{gathered} -0.021 \\ {[-0.093,0.051]} \end{gathered}$ | $\begin{gathered} 0.017 \\ {[-0.019,0.053]} \end{gathered}$ | $\begin{gathered} 0.022 \\ {[-0.015,0.058]} \end{gathered}$ | $\begin{gathered} 0.013^{*} \\ {[-0.002,0.029]} \end{gathered}$ |  |  |  |  |  |  |  |
| EXP PREG (MNCHW) |  | $\begin{gathered} 0.088^{\prime \prime} \\ {[0.009,0.167]} \end{gathered}$ | $\begin{gathered} 0.024 \\ {[-0.066,0.114]} \end{gathered}$ | $\begin{gathered} -0.075^{*} \\ {[-0.146,-0.004]} \end{gathered}$ | $\begin{gathered} 0.111^{*} \\ {[-0.009,0.230]} \end{gathered}$ | $\begin{gathered} 0.027^{*} \\ {[-0.002,0.057]} \end{gathered}$ |  |  |  |  |  |  |  |
| EXP_TOT_nod (NIDs and sNIDs) |  |  |  |  |  |  | $\stackrel{-0.0355^{* * *}}{[-0.057,-0.014]}$ |  |  |  |  |  |  |
| EXP_TOT_nod <br> (IPDs and sIPDs) |  |  |  |  |  |  | $\underset{[-0.024,-0.004]}{-0.014^{* * \prime}}$ |  |  |  |  |  |  |
|  |  |  |  |  |  |  | -0.018 $[-0.041,0.005]$ 0.040 [-0.052,0.133] |  |  |  |  |  |  |
| CHI_AGE | $\begin{gathered} 0.079 \cdots \\ {[0.062,0.095]} \end{gathered}$ |  |  |  |  |  | $\begin{gathered} -0.004 \\ {[-0.015,0.007]} \end{gathered}$ | $\begin{gathered} 0.072 \cdots \\ {[0.038,0.107]} \end{gathered}$ | $\begin{gathered} 0.082 \cdots \\ {[0.036,0.129]} \end{gathered}$ | $\begin{gathered} 0.109 \cdots \\ {[0.034,0.0183]} \end{gathered}$ | $\begin{gathered} 0.1211^{* * *} \\ {[0.075,0.168]} \end{gathered}$ | $\begin{gathered} 0.100^{\ldots \prime} \\ {[0.059,0.142]} \end{gathered}$ | $\begin{gathered} 0.081 \cdots \\ {[0.043,0.119]} \end{gathered}$ |
| CHI_AGE2 | $\begin{gathered} -0.001 \cdots \\ {[-0.001,-0.001]} \end{gathered}$ |  |  |  |  |  | $\begin{gathered} 0.000 \\ {[-0.000,0.000]} \end{gathered}$ | $\underset{[-0.002,-0.000]}{-0.001 \cdots}$ | 0.000 | $\underset{ }{-0.0001^{11}}[-0.002,-0.00$ | $\begin{gathered} -0.0020^{2 \times 1} \\ {[-0.003,-0.00} \end{gathered}$ | $\begin{gathered} -0.002 \\ -0.002,-0.001] \end{gathered}$ | $\begin{gathered} -0.0011^{\prime \prime} \\ 0.001,-0.00 \end{gathered}$ |
| CHI_ORD | $-0.060^{\prime \prime}$ |  |  |  |  |  | $\begin{gathered} -0.1544^{\cdots \cdots} \\ {[-0.176,-0.131]} \end{gathered}$ | -0.034 | $-0.071^{\cdots}$ $-0.133,-0.008$ | $-0.063^{*}$ $=0.129,0,000$ | $-0.036$ <br> -0.099.0.027 | $\begin{gathered} -0.074 \\ -0.137,-0.011 \end{gathered}$ | $\begin{gathered} -0.087^{* *} \\ 0.157,-0.017] \end{gathered}$ |
| CHI_SEX | $\begin{gathered} -0.004 \\ {[-0.078,0.071]} \end{gathered}$ |  |  |  |  |  | $\begin{gathered} 0.212+{ }^{*+*} \\ {[0.140,0.284]} \end{gathered}$ | $\begin{gathered} -0.075 \\ {[-0.229,0.079]} \end{gathered}$ | $\begin{gathered} 0.022 \\ {[-0.168,0.211]} \end{gathered}$ | $\begin{gathered} 0.045 \\ {[-0.155,0.245]} \end{gathered}$ | $\begin{gathered} -0.147 \\ {[-0.359,0.066]} \end{gathered}$ | $\begin{gathered} 0.196 * * \\ {[0.003,0.390]} \end{gathered}$ | $\begin{gathered} -0.006 \\ {[-0.183,0.170]} \end{gathered}$ |
| MOT_ANC | $\begin{aligned} & 0.055 \cdots \\ & {[0.046,0.064]} \end{aligned}$ | $\begin{gathered} -0.138 \times \cdots \\ {[-0.146,-0.129]} \end{gathered}$ | $\begin{gathered} 0.057 \cdots \\ {[0.049,0.064]} \end{gathered}$ | $\begin{gathered} 0.062+* \\ {[0.055,0.069]} \end{gathered}$ |  |  | $\begin{gathered} -0.001 \\ {[-0.011,0.009]} \end{gathered}$ | $\begin{aligned} & 0.094 \\ & {[0.072,0.115]} \end{aligned}$ | $\begin{gathered} 0.145 \\ {[0.110,0.180]} \end{gathered}$ | $\begin{gathered} 0.064 \\ {[0.028,0.101]} \end{gathered}$ | $\begin{gathered} 0.0311^{\prime \prime \prime} \\ {[0.008,054]} \end{gathered}$ | $\begin{gathered} 0.041 \cdots \\ {[0.020,0.061]} \end{gathered}$ | $\begin{gathered} 0.039 \\ {[0.024,0.054]} \end{gathered}$ |
|  | $0.061{ }^{\text {+" }}$ | $-0.065{ }^{\text {* }}$ | $0.052^{\prime \prime}$ | 0.057"' | 0.097 | $0.031{ }^{\text {"' }}$ | 0.013 | $0.070{ }^{\text {* }}$ | $0.072{ }^{\text {²* }}$ | $0.067{ }^{\text {² }}$ | $0.054^{*}$ | $0.053^{\prime \prime}$ | $0.043^{*}$ |
|  | [0.043, 0.079] | -0.079,-0.05 | [0.032,.0.072] | $1]$ | [0.074,0.120] | 10.024,0.0 | [-0.006, 0.032] | [0.035,0.105] | [0.030,0.1 | [0.021,0.114] | ${ }^{-0.005,0}$ | [0.002,0,104] | -.003, |
| MOT_EDF | $\begin{gathered} 0.010 \\ {[-0.008,0.028]} \end{gathered}$ | $\stackrel{-0.030+*}{[-0.045,-0.016]}$ | $\begin{gathered} 0.033^{\cdots \cdots} \\ {[0.011,0.054]} \end{gathered}$ | $\underset{[0.020,0.049]}{0.035^{\ldots \ldots}}$ | $\begin{gathered} 0.083^{* * *} \\ {[0.063,0.102]} \end{gathered}$ | $\begin{gathered} 0.023^{\cdots \prime} \\ {[0.017,0.029]} \end{gathered}$ | $\begin{gathered} 0.028^{\cdots} \\ {[0.010,0.045]} \end{gathered}$ | $\begin{gathered} 0.006 \\ {[-0.030,0.043]} \end{gathered}$ | $\begin{gathered} 0.006 \\ {[-0.036,0.048]} \end{gathered}$ | $\begin{gathered} 0.029 \\ {[-0.013,0.071]} \end{gathered}$ | $\begin{gathered} 0.016 \\ {[-0.046,0.079]} \end{gathered}$ | $\begin{gathered} 0.007 \\ {[-0.050,0.063]} \end{gathered}$ | $\begin{gathered} -0.030 \\ {[-0.079,0.019]} \end{gathered}$ |
| MOT_AWE | $\begin{gathered} 2.972 \\ {[2.848,3.096]} \end{gathered}$ | $\begin{gathered} -0.916 * \\ {[-0.991,-0.840]} \end{gathered}$ | $\begin{gathered} 0.275 \\ {[0.162,0.387]} \end{gathered}$ | $\begin{gathered} 0.988^{* 1} \\ {[0.007,1.061]} \end{gathered}$ | $\begin{gathered} 1.937 \\ {[1.804,2.069]} \end{gathered}$ | $\begin{gathered} 0.640 " \\ {[0.600,0.680]} \end{gathered}$ |  | $\begin{gathered} 2.561 \cdots \\ {[2.321,2.800]} \end{gathered}$ | $\begin{gathered} 2.882 \\ {[2.574,3.189]} \end{gathered}$ | $\begin{aligned} & 3.549 \cdots \\ & {[3.267,3.831]} \end{aligned}$ | $\underset{[2.241,3.018]}{2+6}$ | $\begin{gathered} 2.927 \\ {[2.580,3.273]} \end{gathered}$ | $\begin{gathered} 2.959^{\cdots \prime} \\ {[2.586,3.333]} \end{gathered}$ |
| MOT_AGE | $\begin{gathered} 0.026 \\ {[0.018,0.035]} \end{gathered}$ | $\begin{gathered} -0.002 \\ {[-0.007,0.003]} \end{gathered}$ | $\begin{gathered} 0.001 \\ {[-0.005,0.008]} \end{gathered}$ | $\begin{gathered} 0.002 \\ {[-0.002,0.007]} \end{gathered}$ | $\begin{gathered} 0.011^{1 *} \\ {[0.005,0.018]} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[-0.001,0.002]} \end{gathered}$ | $\begin{gathered} 0.010^{\prime \prime} \\ {[0.001,0.018]} \end{gathered}$ | $\begin{gathered} 0.017^{*} \\ {[-0.001,0.034]} \end{gathered}$ | $\begin{gathered} 0.031^{11} \\ {[0.007,0.054]} \end{gathered}$ | $\begin{gathered} 0.037 \\ {[0.012,0.062]} \end{gathered}$ | $\begin{gathered} 0.013 \\ {[-0.011,0.036]} \end{gathered}$ | $\begin{gathered} 0.027^{7} \\ {[0.006,0.048]} \end{gathered}$ | $\begin{gathered} 0.031+1 \\ {[0.011,0.051]} \end{gathered}$ |
|  | -0.087 | $0.538^{\prime \prime \prime}$ | -0.375" | -0.325" | $-0.591^{\text {¹* }}$ | -0.156"' | -0.179"' | -0.038 | -0.155 | -0.093 | -0.092 | -0.038 | $-0.239^{*}$ |
| HH_RUR | [-0.190,0.016] | 10.4 | [-0.485,-0.265] | I- | 54] | [-0.206,-0.006] | [-0.282,-0.077] | $[-0.259,0.184]$ | [-0.429,0.119] | [-0.410,0.024] | --0.342,0 | 3] | . 486 |
| HH_REL (ref: Catholic): Other | -0.126 | 0.095 | -0.095 | 0.011 | -0.055 | -0.047 | -0.137 | -0.105 | $-0.562^{\circ}$ | . 465 | -0.109 | -0.409" | -0.093 |
| Christian | ${ }^{-0.2677,0.015]}$ | $1-0$ | [-0.217,0.027] | -0. | [-0.027, , .167] | [-0.099, 0.006] | [-0.303,0.028] | 4,0, | [-1.218,0.094] | [-0.245, 1.175] | [-0.337,0.119] | [-0.760,-0.059] | [-0.592, 0.405] |
| HH REL (ref: Catholic) : Isam | -0.472"' | 0.229 ${ }^{\text {" }}$ | -0.238*' | -0.028 | -0.167 | -0.100" | -0.069 | -0.379" | -1.077" | -0.301 | -0.073 | 0.020 | -0.403 |
| HH_REL (rer. Cannoic). Islam | [-0.644-0.0.300] | [0.079,0.379] | -0.399,-0.077] | -0.163,0.106] | -0.465,0.132] | 0.172,-0.027] | -0.263,0.126] | ${ }^{-0.6822,0}$ | -1.745,-0.409] | 16,0.514] | --2.570,2.424] | -0.754,0, | 920,0.114] |
| HH_REL (ref: Catholic): Traditionalist | $\stackrel{-0.5488^{* *}}{[-0.955,-0.141]}$ | $\begin{gathered} 1.008 \cdots \\ {[0.650,1.366]} \end{gathered}$ | $\begin{gathered} -0.9144^{\cdots \cdots} \\ {[-1.383,-0.445]} \end{gathered}$ | $\begin{gathered} -0.4788^{\cdots \prime} \\ {[-0.842,-0.115]} \end{gathered}$ | $\begin{gathered} -0.650 \cdots \\ -1.127,-0.173] \end{gathered}$ | $\underset{[-0.480,-0.218]}{-0.349 \cdots}$ | $\begin{gathered} -0.091 \\ {[-0.463,0.281]} \end{gathered}$ | $\begin{gathered} -0.697 \\ {[-1.815,0.421]} \end{gathered}$ | $\begin{gathered} -1.628^{* *} \\ {[-3.137,-0.120]} \end{gathered}$ | $\begin{gathered} -0.649 \\ {[-2.242,0.944]} \end{gathered}$ | $\begin{gathered} -0.246 \\ {[-0.881,0.389]} \end{gathered}$ | $\begin{gathered} -0.724 \\ {[-1.736,0.288]} \end{gathered}$ | $\begin{aligned} & -0.190 \\ & {[-1.479,1.099]} \end{aligned}$ |
| HH_REL (ref: Catholic): Other | $\left[\begin{array}{c} -0.224 \\ {[-1.244,0.795]} \end{array}\right.$ | $\begin{gathered} -0.259 \\ {[-1.018,0.500]} \end{gathered}$ | $\begin{gathered} 0.021 \\ -1.253,1.294] \end{gathered}$ | $\begin{gathered} 0.383 \\ {[-0.377,1.144]} \end{gathered}$ | $\begin{gathered} -0.057 \\ {[-1.495,1.382]} \end{gathered}$ | $\begin{gathered} -0.135 \\ {[-0.672,0.401]} \end{gathered}$ | $\begin{gathered} 0.573 \\ {[-0.601,1.747]} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[0.000,0.000]} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[0.000,0.000]} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[0.000,0.000]} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[0.000,0.000]} \end{gathered}$ | $\begin{gathered} -0.301 \\ {[-1.532,0.929]} \end{gathered}$ | $\begin{gathered} 0.946 \\ {[-3.331,5.223]} \end{gathered}$ |
| HH_ETH (ref: Ekoi): Fulani | $\underset{[-0.926,-0.48]}{[-143,-0.418]}$ | $\begin{gathered} 0.673 \cdots] \\ {[0.240,1.105]} \end{gathered}$ | $\begin{gathered} -0.070 \\ {[-0.974,0.834]} \end{gathered}$ | $\stackrel{-0.768}{-1.192,-0.343]}$ | $\begin{gathered} -0.745 \\ {[-2.016,0.527]} \end{gathered}$ | $\begin{gathered} -0.347 \\ {[-0.587,-0.107]} \end{gathered}$ | $\begin{gathered} -0.186 \\ {[-0.813,0.440]} \end{gathered}$ | $\begin{gathered} -0.085 \\ {[-0.631,0.460]} \end{gathered}$ | $\begin{gathered} -0.060 \\ {[-0.361,0.242]} \end{gathered}$ | $\begin{gathered} 0.110 \\ {[-0.568,0.787]} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[0.000,0.000]} \end{gathered}$ |  | $\begin{gathered} -0.692 \\ {[-1.755,0.371]} \end{gathered}$ |
| ETH (ref. Ekoi): | ${ }^{-0.847 *}$ | $0.945^{\prime \prime \prime}$ | -0.572 | -0.828** | -0.437 | -0.250** | -0.504 | -0.483** | -0.073 | 0.361 | -1.194 | -1.657 | -0.229 |
| HH_ETH (ref. Ekoi). Hausa | [-1.334-0.0.361] | 10.5 | [-1.433,0.290] | [-1.239,-0.416] | 9 | [-0.487,-0.013] | 22,0.15] | 5] | 378,0,231] | 83] | [-3.028,0.639] | [-3.999,0.005] | [-1.129,0 |
| HH_ETH (ref: Ekoi): : bibio | $\underset{[-1.168,-0.098]}{-0.63^{*}}$ | $\begin{gathered} 0.372 \\ {[-0.101,0.844]} \end{gathered}$ | $\begin{gathered} 0.555 \\ {[-0.341,1.451]} \end{gathered}$ | $\begin{gathered} -0.301 \\ {[-0.762,0.160]} \end{gathered}$ | $\begin{gathered} -0.212 \\ {[-1.478,1.055]} \end{gathered}$ | $\begin{gathered} -0.103 \\ {[-0.385,0.178]} \end{gathered}$ | $\begin{gathered} -0.477 \\ {[-1.159,0.204]} \end{gathered}$ | $\begin{gathered} -0.665 \\ {[-2.776,1.446]} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[0.000,0.000]} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[0.000,0.000]} \end{gathered}$ | $\begin{gathered} -0.358 \\ {[-2.952,2.236]} \end{gathered}$ | $\underset{[-1.429,-0.374]}{-0.90 \cdots}$ | $\begin{gathered} 1.125 \\ {[-0.229,2.479]} \end{gathered}$ |
| HH_ETH (ref: Ekoi): Igala | $\underset{[-1.243,-0.071]}{-0.657^{*}}$ | $\begin{gathered} -0.513^{*} \\ {[-1.038,0.012]} \end{gathered}$ | $\begin{gathered} 1.298 \\ {[0.405,2.190]} \end{gathered}$ | $\begin{gathered} 0.040 \\ {[-0.448,0.528]} \end{gathered}$ | $\begin{gathered} 0.004 \\ {[-1.313,1.322]} \end{gathered}$ | $\begin{gathered} 0.276^{*} \\ {[-0.016,0.568]} \end{gathered}$ | $\begin{gathered} -0.400 \\ {[-1.122,0.313]} \end{gathered}$ | $\begin{gathered} -0.132 \\ {[-0.525,0.260]} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[0.000,0.000]} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[0.000,0.000]} \end{gathered}$ | $\begin{gathered} -0.644 \\ {[-3.219,1.932]} \end{gathered}$ | $\begin{gathered} -0.762 \\ {[-3.465,1.941]} \end{gathered}$ | $\begin{gathered} 0.698 \\ {[-0.640,2.036]} \end{gathered}$ |
| HH_ETH (ref: Ekoi): Igbo | $\begin{gathered} -0.450^{*} \\ {[-0.919,0.019]} \end{gathered}$ | $\begin{aligned} & -0.7955^{* *} \\ & -1.211,-0.379] \end{aligned}$ | $\begin{aligned} & 1.881 \times " \\ & {[1.051,2.711]} \end{aligned}$ | $\begin{gathered} -0.568 \times=1 \\ {[-0.972,-0.164]} \end{gathered}$ | $\begin{gathered} 1.248^{*} \\ {[-0.035,2.531]} \end{gathered}$ | $\begin{gathered} 0.120 \\ {[-0.111,0.351]} \end{gathered}$ | $\begin{gathered} -0.528^{*} \\ {[-1.138,0.081]} \end{gathered}$ | $\begin{gathered} -0.163 \\ {[-0.690,0.364]} \end{gathered}$ | $\begin{gathered} 0.534 \\ {[-1.143,2.211]} \end{gathered}$ | $\begin{gathered} 0.274 \\ {[-0.817,1.364]} \end{gathered}$ | $\begin{gathered} -0.896 \\ {[-2.200,0.408]} \end{gathered}$ | $\begin{gathered} -0.502^{*} \\ {[-1.066,0.062]} \end{gathered}$ | $\begin{gathered} 0.524 \\ {[0.017,1.032]} \end{gathered}$ |
| HH_ETH (ref: Ekoi): ljaw / Izon | $\begin{gathered} -0.486^{*} \\ {[-1.027,0.055]} \end{gathered}$ | $\begin{aligned} & 0.183= \\ & {[0.397,1.369]} \end{aligned}$ | $\begin{gathered} 0.118 \\ {[-0.807,1.042]} \end{gathered}$ | $\begin{gathered} -0.806 \\ {[-1.282,-0.331]} \end{gathered}$ | $\begin{gathered} -0.696 \\ {[-2.066,0.675]} \end{gathered}$ | $\begin{gathered} -0.134 \\ {[-0.396,0.127]} \end{gathered}$ | $\begin{gathered} -0.260 \\ {[-0.915,0.395]} \end{gathered}$ | $\begin{gathered} 0.000 \\ {[0.000,0.000]} \end{gathered}$ |  |  | $\begin{gathered} 0.000 \\ {[0.000,0.000]} \end{gathered}$ | $\begin{gathered} -0.656^{* *} \\ {[-1.158,-0.153]} \end{gathered}$ | $\begin{gathered} -0.636 \\ {[-2.153,0.882]} \end{gathered}$ |
| HH_ETH (ref: Ekoi): Kanuri/ Beriberi | $\begin{gathered} -0.987 \cdots] \\ {[-1.591,-0.382]} \end{gathered}$ | $\begin{aligned} & 1.001=1 \\ & {[0.511,1.492]} \end{aligned}$ | $\begin{gathered} -0.518 \\ {[-1.659,0.622]} \end{gathered}$ | $\begin{gathered} -0.956 \\ {[-1.436,-0.476]} \end{gathered}$ | $\begin{gathered} -0.512 \\ {[-1.801,0.777]} \end{gathered}$ | $\begin{gathered} -0.237^{*} \\ {[-0.500,0.026]} \end{gathered}$ | $\begin{gathered} -0.271 \\ {[-0.930,0.388]} \end{gathered}$ | $\begin{gathered} -0.661 \\ {[-2.271,0.948]} \end{gathered}$ | $\begin{gathered} -0.178 \\ {[-0.644,0.287]} \end{gathered}$ | $\begin{gathered} 0.639 \\ {[-0.618,1.895]} \end{gathered}$ |  | $\begin{gathered} 0.000 \\ {[0.000,0.000]} \end{gathered}$ | $\begin{gathered} 2.778^{\circ} \\ {[-0.171,5.727]} \end{gathered}$ |
|  | $-0.601^{\prime \prime}$ | -0.775*' | $1.727^{\prime \prime}$ | 0.134 | -0.904 | -0.343" | -0.365 | -0.104 | -0.251 | 0.000 | 0.000 | 0.000 | $1.786^{\circ}$ |
| HH_ETH (ref: Ekoi): Tiv | [-1.158,-0.045] | [-1.247-0.0.303] | [0.847,.608] | [-0.333,.0601] | [-2.245,0.437] | [-0.609,-0.077] | [-1.017,0.287] | [-0.480,0.272] | [-1.192,0.690] | [0.000,0.000] | [0.000,0.000] | [0.000,0.000] | [-0.016,3.588] |
|  | -0.570" | -0.165 | $1.300 \cdot \cdots$ | $-0.413^{\prime \prime}$ | $2.235^{\ldots}$ | 0.059 | -0.048 | 0.18 | 0.329 | 0.6 | 0.00 | -2.187" | $0.292^{\circ}$ |
| HH_ETH (ref: Ekoi): Yoruba | [-1.048,-0.093] | ${ }^{-0.588,0.257]}$ | [0.465,2.136] | [-0.822,-0.004] | 19] | [-0.174,0.291] | [-0.669,0.574] | [-0.1420.0.516] | 801] | [-0.692, 1.989] | [0.000, 0.000] | [-3.154,-1.221] | 900] |
| HH_ETH (ref: Ekii): Other | ${ }_{\substack{-0.61 \omega^{\cdots} \\[-1.067 .-0.154] \\-0.013^{*}}}$ | $\begin{gathered} 0.206 \\ {[-0.196,0.607]} \\ 0.033^{+4 * *} \end{gathered}$ | $\begin{gathered} 0.912^{\prime \prime \prime} \\ {[0.083,1.740]} \\ -0.017^{* \prime} \end{gathered}$ | $\begin{gathered} -0.349^{*} \\ {[-0.744,0.045]} \\ -0.020^{\circ \prime} \end{gathered}$ | $\begin{gathered} 0.030 \\ {\left[\begin{array}{c} {[1.220,1.299]} \\ -0.043 \cdots \end{array}\right.} \end{gathered}$ | $\begin{gathered} -0.017 \\ {[-0.247,0.213]} \\ -0.006{ }^{-13]} \end{gathered}$ | $\begin{gathered} -0.361 \\ {[-0.967,0.245]} \\ 0.132 \times 1 \end{gathered}$ | $\begin{gathered} 0.000 \\ {[0.000,0.000]} \\ -0.011 \end{gathered}$ | 0.000 [0.000,0.000] $-0.021^{*}$ | $\begin{gathered} 0.000 \\ {[0.000,0.000]} \\ -0.008 \end{gathered}$ | $\begin{gathered} 0.000 \\ {[0.000,0.000]} \\ -0.011 \end{gathered}$ | $\begin{gathered} -0.887 \cdots \\ {[-1.377-0.0417]} \\ -0.019] \end{gathered}$ | $\begin{gathered} 0.000 \\ {[0.000,0.000]} \\ -0.011 \end{gathered}$ |
| HH_SIZ | ${ }_{-0.026,-0.000]}$ | [0.023, 0.042] | -0.032, -0.003 |  | , | ,0.0. | [0.118,0.14 | --0.036,0.0 | -0.047,0.0 | -0.036,0.021 | [-0.051,0.0 | [-0.063, | [-0.058,0.0 |
| HH_WEA | $\begin{gathered} 0.142 \cdots \\ {[0.122,0.162]} \end{gathered}$ | ${ }_{[-0.223,-0.189]}^{-0.200 \cdots}$ | $\begin{gathered} 0.120 * * \\ {[0.099,0.141]} \end{gathered}$ | $\begin{gathered} 0.129 \cdots \\ {[0.114,0.145]} \end{gathered}$ | $\begin{gathered} 0.287 * * * \\ {[0.256,0.318]} \end{gathered}$ | ${ }_{[0.050,0.067]}^{0.059 \cdots}$ | $\begin{gathered} 0.016 \\ {[-0.004,0.036]} \end{gathered}$ | $\begin{gathered} 0.149 \cdots \\ {[0.106,0.192]} \end{gathered}$ | $\begin{gathered} 0.102{ }^{(0.7} \\ {[0.048,0.155]} \end{gathered}$ | $\begin{gathered} 0.132 \cdots \\ {[0.078,0.185]} \end{gathered}$ | $\begin{gathered} 0.165^{\cdots \prime \prime} \\ {[0.113,0.216]} \end{gathered}$ | $\begin{gathered} 0.121 \cdots \\ {[0.074,0.168]} \end{gathered}$ | $\begin{gathered} 0.142 \cdots \\ {[0.090,0.195]} \end{gathered}$ |
| YEAR (ref: 2003): 2008 | $\begin{gathered} 0.578 \\ {[0.302,0.854]} \end{gathered}$ | $\begin{gathered} 0.021 \\ {[-0.164,0.206]} \end{gathered}$ | $\begin{gathered} -0.203^{*} \\ {[-0.416,0.009]} \end{gathered}$ | $\begin{gathered} 0.056 \\ {[-0.120,0.232]} \end{gathered}$ | $\stackrel{-0.569^{+\cdots \prime}}{[-0.967,-0.170]}$ | $\begin{gathered} -0.080^{\circ} \\ {[-0.169,0.008]} \end{gathered}$ | $\begin{gathered} 0.268^{\prime \prime} \\ {[0.062,0.43]} \end{gathered}$ | $\begin{gathered} 0.808^{\cdots} \\ {[0.258,1.358]} \end{gathered}$ | $\begin{gathered} 0.797^{*} \\ {[-0.064,1.659]} \end{gathered}$ | $\begin{gathered} 1.4111 \\ {[0.469,2.352]} \end{gathered}$ | $\begin{gathered} 0.666^{*} \\ {[-0.076,1.407]} \end{gathered}$ | $\underset{[-0.121,1,472]}{0.675^{*}}$ | $\begin{gathered} -0.271 \\ {[-0.966,0.425]} \end{gathered}$ |
| YEAR (ref: 2003): 2013 | $\begin{gathered} 0.7266^{*+\prime} \\ {[0.457,0.996]} \end{gathered}$ | $\begin{gathered} -0.033 \\ {[-0.226,0.159]} \end{gathered}$ | $\begin{gathered} -0.354 \\ {[-0.576,-0.132]} \end{gathered}$ | $\begin{gathered} 0.131 \\ {[-0.051,0.312]} \end{gathered}$ | $\begin{gathered} -0.217 \\ {[-0.635,0.201]} \end{gathered}$ | $\begin{gathered} -0.005 \\ {[-0.097,0.088]} \end{gathered}$ | $\begin{gathered} 0.330 \\ {[0.110,0.550]} \end{gathered}$ | $\begin{gathered} 0.760 \\ {[0.231,1.289]} \end{gathered}$ | $\begin{gathered} 1.279^{* * *} \\ {[0.434,2.125]} \end{gathered}$ | $\begin{gathered} 1.883^{* *} \\ {[0.837,2.928]} \end{gathered}$ | $\begin{gathered} 0.724^{* *} \\ {[0.003,1.445]} \end{gathered}$ | $\begin{gathered} 1.410 \\ {[0.626,2.195]} \end{gathered}$ | $\begin{gathered} -0.820^{* *} \\ {[-1.492,-0.148]} \end{gathered}$ |
| YEAR (ref: 2003): 2018 | $\begin{gathered} 0.808 \\ {[0.532,1.083]} \end{gathered}$ | $\begin{gathered} -0.228^{* *} \\ {[-0.417,-0.038]} \end{gathered}$ | $\begin{gathered} -0.412 \\ {[-0.637,-0.188]} \end{gathered}$ | $\begin{gathered} 0.342 \\ {[0.162,0.522]} \end{gathered}$ | $\stackrel{-1.275}{[-1.685,-0.866]}$ | $\begin{gathered} -0.051 \\ {[-0.145,0.043]} \end{gathered}$ | $\begin{gathered} 0.282 \\ {[0.075,0.488]} \end{gathered}$ | $\begin{gathered} 1.141 \\ {[0.583,1.699]} \end{gathered}$ | $\begin{gathered} 1.521 \\ {[0.685,2.356]} \end{gathered}$ | $\begin{gathered} 1.159 * \\ {[0.248,2.070]} \end{gathered}$ | $\begin{gathered} 1.034^{* *} \\ {[0.246,1.823]} \end{gathered}$ | $\begin{gathered} 1.843^{\cdots} \\ {[0.981,2.705]} \end{gathered}$ | $\stackrel{-0.801{ }^{*}}{[-1.517,-0.086]}$ |
|  | -5.234*******) | $2.038^{\prime \prime \prime}$ | -3.645"' | ${ }^{-2.427}{ }^{\text {™ }}$ | $3.586^{\prime \prime \prime}$ | $0.980^{+\prime}$ | $2.596{ }^{\text {m }}$ | -5.701** | -5.778 ${ }^{\text {"] }}$ | -8.231 ${ }^{\text {" }}$ | -4.939 ${ }^{\text {"'] }}$ | -5.672" | -4.425 ${ }^{\text {"* }}$ |
| Constant |  |  |  |  |  | [0.718,1.243] |  |  |  |  |  |  |  |
| Multilevel variance parameter: Level 1 | $\begin{gathered} 0.285 \cdots \\ {[0.218,0.352]} \end{gathered}$ | $\stackrel{0.451 \cdots}{[0.364,0.538]}$ | $\begin{gathered} 0.710 \cdots \\ {[0.552,0.868]} \end{gathered}$ | $\begin{gathered} 0.4663 * \\ {[0.384,0.543]} \end{gathered}$ | $\begin{gathered} 0.672 \cdots \\ {[0.585,0.759]} \end{gathered}$ | $\begin{gathered} -1.4377^{* * *} \\ {[-1.535,-1.340]} \end{gathered}$ | $\begin{gathered} 0.041 \cdots \\ {[0.013,0.068]} \end{gathered}$ | $\begin{gathered} 0.171 \cdots \\ {[0.065,0.277]} \end{gathered}$ | $\begin{gathered} 0.146{ }^{*} \\ {[0.032,0.261]} \end{gathered}$ | $\begin{gathered} 0.705 \cdots \\ {[0.388,1.021]} \end{gathered}$ | $\begin{gathered} 0.168^{* *} \\ {[0.034,0.303]} \end{gathered}$ | $\begin{gathered} 0.029 \\ {[-0.038,0.097]} \end{gathered}$ | $\begin{gathered} 0.243 \cdots \\ {[0.088,0.398]} \end{gathered}$ |
| Multilevel variance parameter: Residual |  |  |  |  | $\begin{gathered} 1.322 \\ {[1.282,1.361]} \\ \hline \end{gathered}$ | $\begin{array}{r} 0.090 \\ {[0.064,0.016]} \end{array}$ |  |  |  |  |  |  |  |
| Level 1 Observations (child) | 24381 | 34713 | 34713 | 34713 | 35019 | 36585 | 52431 | 4342 | 5017 | 7249 | 2036 | 2514 | 3196 |
| Level 2 Observations (LGA) | 684 | 686 | 686 | 686 | 686 | 687 | 689 | 113 | 100 | 166 | 85 | 111 | 121 |

[^0]| ```Dependent variables: various indicators of routine immunisation, maternal care and child survival (see right)``` | Non-polio full immunisation Delivery |  |  |  |  | Antenatal care |  | Child <br> Total exposure |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Full model | Interaction model (EXPxAGE) | At home | At private facility | At public facility | No. of antenatal care visits | No. of tetanus injections |  |
| EXP_CHI | $-0.020^{* *}$ | $0.034^{\text {** }}$ |  |  |  |  |  |  |
|  | [-0.036,-0.004] | [0.006,0.062] |  |  |  |  |  |  |
| EXPxAGE |  | -0.001** |  |  |  |  |  |  |
|  |  | [-0.002,-0.001] |  |  |  |  |  |  |
| EXP_PREG |  |  | -0.016 | 0.007 | 0.011 | 0.023 | $0.012^{* * *}$ |  |
|  |  |  | [-0.038,0.006] | [-0.023,0.037] | [-0.009,0.032] | [-0.005,0.052] | [0.004,0.021] |  |
| EXP_TOT_nod (total exposure, date approximation) |  |  |  |  |  |  |  | $\begin{gathered} -0.029^{* * *} \\ {[-0.041,-0.017]} \end{gathered}$ |
|  | $0.080^{* *}$ | 0.036 "* |  |  |  |  |  | 0.001 |
| CHI_AGE | [0.064,0.095] | [0.028,0.043] |  |  |  |  |  | [-0.010, 0.011] |
| CHI_AGE2 | -0.001*** |  |  |  |  |  |  | 0.000 |
|  | [-0.001,-0.001] |  |  |  |  |  |  | [-0.000, 0.000 ] |
| CHI_ORD | -0.059******* | -0.060*** |  |  |  |  |  | -0.148******** |
|  | [-0.085,-0.034] | [-0.085,-0.034] |  |  |  |  |  | [-0.171,-0.125] |
| CHI_SEX | -0.001 | -0.003 |  |  |  |  |  | $0.212^{* * *}$ |
|  | [-0.078, 0.076$]$ | [-0.080,0.074] |  |  |  |  |  | [0.139,0.285] |
| MOT_ANC | $0.059{ }^{\text {** }}$ | $0.059{ }^{\text {*** }}$ | $-0.133^{* * *}$ | $0.047^{* * *}$ | $0.063^{\text {*** }}$ |  |  | 0.003 |
|  | [0.049,0.068] | [0.049,0.068] | [-0.142,-0.125] | [0.039,0.055] | [0.056,0.070] |  |  | [-0.008,0.013] |
| MOT_EDM | 0.060 "* | $0.060{ }^{* *}$ | -0.059** | $0.040^{* *}$ | $0.053^{* \cdots}$ | $0.091^{* * *}$ | $0.027^{* *}$ | 0.015 |
|  | [0.042,0.079] | [0.042,0.079] | [-0.074,-0.044] | [0.019,0.061] | [0.038,0.067] | [0.070,0.112] | [0.021,0.033] | [-0.005,0.035] |
| MOT_EDF | 0.002 | 0.002 | -0.028*******) | 0.018 | $0.033^{\text {+** }}$ | $0.078{ }^{* * *}$ | $0.019^{* * *}$ | $0.033^{* * *}$ |
|  | [-0.017,0.021] | [-0.017,0.021] | [-0.043,-0.013] | [-0.004,0.040] | [0.019,0.048] | [0.059,0.097] | [0.014,0.025] | [0.015,0.051] |
| MOT_AWE | $2.988^{* *}$ | $2.984^{* * *}$ | -0.904********) | $0.237^{* * *}$ | $0.951^{\text {** }}$ | $1.899^{* * *}$ | $0.615^{* * *}$ |  |
|  | [2.858,3.117] | [2.854,3.113] | [-0.982,-0.827] | [0.123,0.352] | [0.873,1.030] | [1.796,2.002] | [0.586, 0.645$]$ |  |
| MOT_AGE | $0.026{ }^{* *}$ | $0.027{ }^{* *}$ | -0.002 | -0.002 | 0.002 | $0.010^{* * *}$ | 0.000 | $0.008{ }^{*}$ |
|  | [0.018,0.035] | [0.018,0.036] | [-0.007,0.004] | [-0.009,0.005] | [-0.002,0.007] | [0.003,0.016] | [-0.002,0.002] | [-0.000,0.017] |
| HH_RUR | -0.088 | -0.091 | $0.531^{* * *}$ | $-0.261^{* * *}$ | -0.368*********) | -0.527*********) | -0.169*** | -0.174** |
|  | [-0.211,0.035] | [-0.214,0.033] | [0.430,0.632] | [-0.381,-0.141] | [-0.459,-0.276] | [-0.662,-0.391] | [-0.207,-0.131] | [-0.308,-0.041] |
| HH_REL (ref: Catholic): Other Christian | -0.117 | -0.119 | 0.036 | -0.034 | 0.001 | -0.063 | -0.029 | -0.113 |
|  | [-0.267,0.032] | [-0.268,0.031] | [-0.093,0.164] | [-0.159,0.091] | [-0.112,0.113] | [-0.240,0.113] | [-0.079,0.021] | [-0.292,0.066] |
| HH_REL (ref: Catholic): Islam | -0.407*** | -0.406******** | $0.150{ }^{*}$ | -0.073 | -0.041 | -0.041 | -0.033 | -0.054 |
|  | [-0.594,-0.219] | [-0.593,-0.218] | [-0.009,0.309] | [-0.240,0.094] | [-0.182,0.100] | [-0.258,0.175] | [-0.094,0.029] | [-0.273,0.165] |
| HH_REL (ref: Catholic): <br> Traditionalist | $-0.530^{* *}$ | -0.528** | $0.952^{* * *}$ | -0.899*********) | -0.492******** | -0.577*********) | -0.305******** | -0.101 |
|  | [-0.953,-0.107] | [-0.951,-0.105] | [0.582,1.322] | [-1.369,-0.428] | [-0.864,-0.121] | [-0.985,-0.169] | [-0.421,-0.188] | [-0.492,0.290] |
| HH_REL (ref: Catholic): Other | -0.430 | -0.433 | -0.411 | 0.109 | 0.395 | -0.065 | -0.093 | 0.670 |
|  | [-1.507,0.648] | [-1.508,0.641] | [-1.197,0.375] | [-1.200,1.418] | [-0.393,1.182] | [-1.222,1.093] | [-0.417,0.231] | [-0.529,1.868] |
| HH_ETH (ref: Ekoi): Fulani | -0.669** | -0.681** | $0.762{ }^{\text {+** }}$ | 0.142 | -0.693*********) | -0.693* | -0.300** | 0.219 |
|  | [-1.279,-0.059] | [-1.292,-0.071] | [0.276,1.248] | [-0.903,1.187] | [-1.167,-0.219] | [-1.442,0.057] | [-0.516,-0.085] | [-0.607,1.046] |
| HH_ETH (ref: Ekoi): Hausa | -0.527* | -0.537* | $0.919^{\text {+** }}$ | -0.152 | -0.675*** | -0.249 | -0.149 | -0.066 |
|  | [-1.124,0.069] | [-1.134,0.061] | [0.440,1.397] | [-1.158,0.854] | [-1.140,-0.210] | [-0.995,0.496] | [-0.363,0.065] | [-0.888,0.757] |
| HH_ETH (ref: Ekoi): Ibibio | -0.385 | -0.388 | 0.236 | 0.322 | -0.106 | -0.354 | -0.180 | -0.203 |
|  | [-1.021,0.251] | [-1.025,0.248] | [-0.298,0.770] | [-0.712,1.356] | [-0.620,0.407] | [-1.185,0.477] | [-0.418,0.057] | [-1.114,0.707] |
| HH_ETH (ref: Ekoi): Igala | -0.482 | -0.492 | 0.020 | 0.699 | -0.098 | -0.410 | 0.190 | 0.130 |
|  | [-1.206,0.241] | [-1.215,0.232] | [-0.569,0.609] | [-0.330,1.729] | [-0.643,0.448] | [-1.317,0.498] | [-0.070,0.451] | [-0.847,1.108] |
| HH_ETH (ref: Ekoi): Igbo | -0.167 | -0.167 | -0.526** | $1.189{ }^{*}$ | -0.333 | $0.831{ }^{*}$ | -0.034 | 0.017 |
|  | [-0.751, 0.417$]$ | [-0.752,0.418] | [-1.007,-0.045] | [0.223,2.156] | [-0.792,0.125] | [0.082,1.581] | [-0.249,0.181] | [-0.821,0.855] |
| HH_ETH (ref: Ekoi): Ijaw / Izon | -0.302 | -0.306 | $0.708{ }^{*}$ | -0.017 | -0.599** | -0.842* | -0.163 | 0.490 |
|  | [-0.987,0.384] | [-0.992,0.380] | [0.147,1.269] | [-1.095,1.060] | [-1.143,-0.056] | [-1.688,0.005] | [-0.404,0.078] | [-0.445, 1.425] |
| HH_ETH (ref: Ekoi): Kanuri / Beriberi | -0.488 | -0.497 | $1.038{ }^{\text {"** }}$ | -0.045 | $-0.887^{* *}$ | -0.382 | -0.149 | -0.082 |
|  | [-1.194,0.218] | [-1.203,0.209] | [0.495,1.581] | [-1.336,1.246] | [-1.415,-0.359] | [-1.176,0.412] | [-0.378,0.079] | [-0.945,0.780] |
| HH_ETH (ref: Ekoi): Tiv | -0.357 | -0.373 | -0.297 | $0.992{ }^{*}$ | 0.087 | -0.814* | -0.362*** | 0.209 |
|  | [-1.084,0.369] | [-1.100,0.354] | [-0.841,0.248] | [-0.036,2.020] | [-0.447, 0.621] | [-1.670,0.042] | [-0.608,-0.116] | [-0.722,1.139] |
| HH_ETH (ref: Ekoi): Yoruba | -0.230 | -0.238 | 0.291 | 0.702 | -0.428* | $1.347^{\text {** }}$ | 0.048 | 0.139 |
|  | [-0.826,0.365] | [-0.834,0.358] | [-0.194,0.776] | [-0.273,1.677] | [-0.894,0.038] | [0.589,2.104] | [-0.169,0.266] | [-0.710,0.988] |
| HH_ETH (ref: Ekoi): Other | -0.393 | -0.395 | 0.372 | 0.595 | -0.317 | -0.007 | -0.006 | -0.023 |
|  | [-0.958,0.171] | [-0.960,0.170] | [-0.083,0.828] | [-0.372,1.561] | [-0.761,0.126] | [-0.731,0.717] | [-0.214,0.202] | [-0.831,0.786] |

H_SIZ $-0.016^{* *} \quad-0.016^{* *} \quad 0.033^{* * *} \quad-0.014^{*} \quad-0.022^{* * *} \quad-0.039^{* * *} \quad-0.007^{* * *} \quad 0.137^{* * *}$ $[-0.030,-0.003][-0.030,-0.003][0.023,0.043][-0.029,0.001][-0.032,-0.013][-0.052,-0.027][-0.011,-0.004][0.123,0.152]$

HH_WEA

$$
\begin{array}{lllllll}
0.141^{* * *} & 0.140^{* * *} & -0.204^{* * *} & 0.108^{* * *} & 0.131^{* * *} & 0.276^{* * *} & 0.058^{* * *}
\end{array} 0.008
$$ $[0.120,0.163][0.118,0.161][-0.221,-0.186][0.086,0.130][0.115,0.147][0.253,0.299][0.051,0.064][-0.014,0.030]$ $\begin{array}{llllllll}0.517^{* * *} & 0.495^{* * *} & 0.040 & -0.251^{* *} & 0.087 & -0.670^{* * *} & -0.108^{* * *} & 0.323^{* * *}\end{array}$ YEAR (ref: 2003): $2008[0.235,0.799][0.211,0.778][-0.156,0.236][-0.472,-0.030][-0.097,0.270][-0.921,-0.420][-0.180,-0.037]$ [0.097,0.549] $\begin{array}{lllllllll}\text { YEAR (ref: 2003): } 2013 & 0.673^{* * *} & 0.635^{* * *} & -0.042 & -0.388^{* * *} & 0.170^{*} & -0.314^{* *} & -0.029 & 0.547^{* * *}\end{array}$ $[0.394,0.952][0.353,0.916][-0.237,0.153][-0.607,-0.169][-0.011,0.351][-0.563,-0.065][-0.100,0.043][0.313,0.780]$

|  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Hen (ref. 2003): 2018 | $0.800^{* * *}$ | $0.890^{* * *}$ | $-0.267^{* * *}$ | $-0.385^{* * *}$ | $0.391^{* * *}$ | $-1.272^{* * *}$ | -0.059 | $0.314^{* * *}$ |


|  | $[0.512,1.087]$ | $[0.603,1.177]$ | $[-0.468,-0.066]$ | $[-0.617,-0.153]$ | $[0.203,0.578]$ | $[-1.530,-1.013]$ | $[-0.133,0.016]$ | $[0.094,0.535]$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Observations | 24381 | 24381 | 34713 | 34713 | 34713 | 35019 | 36585 | 52431 |
| Akaike Information Criterion | 18032.806 | 18053.939 | 26153.968 | 17075.688 | 29973.334 | 192578.24 | 111031.373 | 24062.176 |
| Prob. $>X^{2}$ | $<0.001$ | $<0.001$ | $<0.001$ | $<0.001$ | $<0.001$ | $<0.001$ | $<0.001$ | $<0.001$ |
| Hausman test | 0.068 | 0.023 | $<0.001$ | $<0.001$ | $<0.001$ | $<0.001$ | $<0.001$ | $<0.001$ |


${ }^{*} p<0.10,{ }^{* *} p<0.05,{ }^{* * *} p<0.01$


[^0]:    $\begin{array}{lllllllllllllllll}\text { Akaike Information Criterion } & 18035.652 & 26423.512 & 17597.951 & 30317.164 & 193631.04 & 111221.63 & 23679.445 & 4154.682 & 2852.628 & 2871.344 & 2200.745 & 2604.453 & 3247.815\end{array}$
    $\begin{array}{lllllllllll}\text { Prob. }>X^{2} & <0.001 & <0.001 & <0.001 & <0.001 & <0.001 & <0.001 & <0.001 & <0.001 & <0.001 & <0.001<0.001\end{array}$ MNCHW = Maternal, Neonatal, and Child Health Week; SIA = Supplementary Immunisation Activity. $* p<0.10, * * p<0.05, * * *<0.01$

