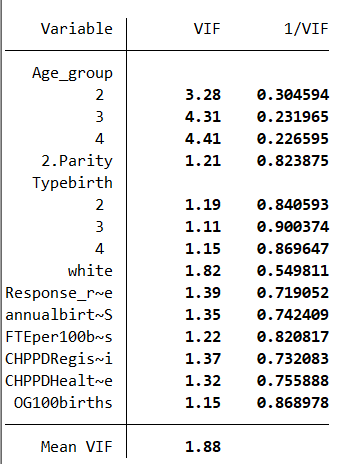
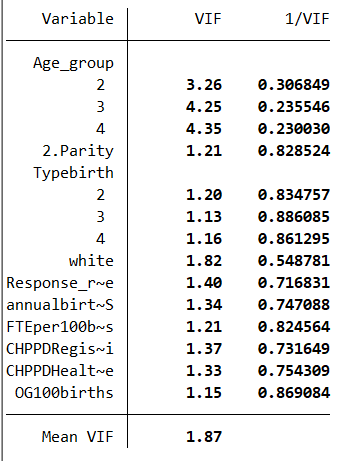
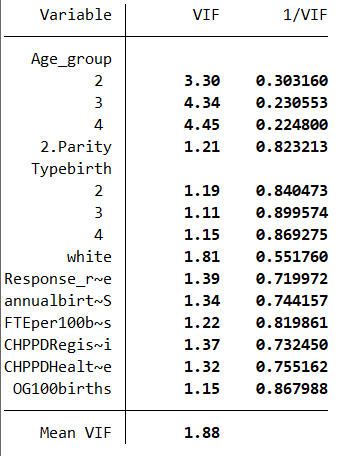
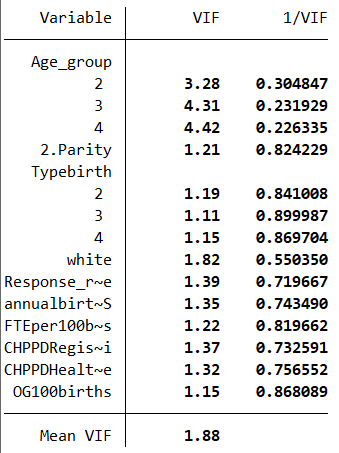
## S1. Variable selection to go into the model – testing assumption of independence

The following do not appear to be collinear as the VIF is less than 10, therefore safe to go into model together for each of these outcome measures.

Question : DELAY Question : HELP TIMELY WAY

Question : INFO Question : KINDNESS

**SELECTING MODELS OF BEST FIT :** Text in red shows model chosen for main analysis

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **NO DELAY** | TRUST MEASURED STAFFING | | |  |  |  |  | AIC | BIC | BIC(93) |  |  |
|  | null model | |  |  |  |  |  | 17558.93 | 17573.83 | 17563.98 |  |  |
|  | No\_delay\_binary ib3.Age\_group i.Parity white i.Typebirth FTEper100births | | | | | | | 16856.16 | 16937.82 | 16884.02 | Improved model fit? | |
|  | add response rate | |  |  |  |  |  | 16856.26 | 16945.34 | 16886.66 | No |  |
|  | add number births | |  |  |  |  |  | 16858.15 | 16947.23 | 16888.54 | No |  |
|  | add O&G per 100 births | | |  |  |  |  | 16858.06 | 16947.14 | 16888.45 | No |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | WARD MEASURED STAFFING | | |  |  |  |  | AIC | BIC | BIC(93) |  |  |
|  | No\_delay\_binary ib3.Age\_group i.Parity white i.Typebirth CHPPDRegisteredNursesandMi CHPPDHealthcareSupportWorke ||TrustCode:, or | | | | | | | 16989.47 | 17078.65 | 17019.86 | Improved model fit? | |
|  | add response rate | |  |  |  |  |  | 16991 | 17087.61 | 17023.93 | No |  |
|  | add number births | |  |  |  |  |  | 16991.23 | 17087.85 | 17024.16 | No |  |
|  | add O&G per 100 births | | |  |  |  |  | 16859.22 | 16955.72 | 16892.14 | Yes |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | WARD MEASURED : TOTAL STAFF AND SKILL MIX | | | | |  |  | AIC | BIC | BIC(93) |  |  |
|  | No\_delay\_binary ib3.Age\_group i.Parity white i.Typebirth OverallCHPPD PercReg ||TrustCode:, or | | | | | | | 16989.11 | 17078.29 | 17019.51 | Improved model fit? | |
|  | add response rate | |  |  |  |  |  | 16990.7 | 17087.31 | 17023.62 | No |  |
|  | add number births | |  |  |  |  |  | 16990.88 | 17087.49 | 17023.8 | No |  |
|  | add O&G per 100 births | | |  |  |  |  | 16858.7 | 16955.2 | 16891.62 | Yes |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
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| **HELP** | TRUST MEASURED | |  |  |  |  |  | AIC | BIC | BIC(93) |  |  |
|  | null model | |  |  |  |  |  | 15864.99 | 15879.78 | 15870.06 |  |  |
|  | Help\_binary ib3.Age\_group i.Parity white i.Typebirth FTEper100births | | | | | | | 15210.56 | 15291.48 | 15238.41 | Improved model fit? | |
|  | add response rate | |  |  |  |  |  | 15211.71 | 15300 | 15242.11 | No |  |
|  | add number births | |  |  |  |  |  | 15210.05 | 15298.33 | 15240.44 | No |  |
|  | add O&G per 100 births | | |  |  |  |  | 15212.54 | 15300.82 | 15242.93 | No |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | WARD MEASURED | |  |  |  |  |  | AIC | BIC | BIC(93) |  |  |
|  | Help\_binary ib3.Age\_group i.Parity white i.Typebirth CHPPDRegisteredNursesandMi CHPPDHealthcareSupportWorke ||TrustCode:, or | | | | | | | 15308.74 | 15397.13 | 15339.13 | Improved model fit? | |
|  | add response rate | |  |  |  |  |  | 15310.64 | 15406.39 | 15343.56 | No |  |
|  | add number births | |  |  |  |  |  | 15307.17 | 15402.92 | 15340.1 | No |  |
|  | add O&G per 100 births | | |  |  |  |  | 15210.85 | 15306.49 | 15243.77 | Yes |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | WARD MEASURED : TOTAL STAFF AND SKILL MIX | | | | |  |  | AIC | BIC | BIC(93) |  |  |
|  | Help\_binary ib3.Age\_group i.Parity white i.Typebirth OverallCHPPD PercReg ||TrustCode:, or | | | | | | | 15308.15 | 15396.54 | 15338.54 | Improved model fit? | |
|  | add response rate | |  |  |  |  |  | 15310.07 | 15405.82 | 15343 | No |  |
|  | add number births | |  |  |  |  |  | 15306.55 | 15402.31 | 15339.48 | No |  |
|  | add O&G per 100 births | | |  |  |  |  | 15210.03 | 15305.67 | 15242.96 | Yes |  |
|  |  | | | |  |  |  |  |  |  |  |  |
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| **INFO** | TRUST MEASURED | |  |  |  |  |  | AIC | BIC | BIC(93) |  |  |
|  | null model | |  |  |  |  |  | 16374.35 | 16389.26 | 16379.41 |  |  |
|  | Info\_binary ib3.Age\_group i.Parity white i.Typebirth FTEper100births | | | | | | | 15474.65 | 15556.26 | 15502.51 | Improved model fit? | |
|  | add response rate | |  |  |  |  |  | 15476.03 | 15565.05 | 15506.42 | No |  |
|  | add number births | |  |  |  |  |  | 15476.39 | 15565.41 | 15506.78 | No |  |
|  | add O&G per 100 births | | |  |  |  |  | 15476.51 | 15565.54 | 15506.91 | No |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | WARD MEASURED | |  |  |  |  |  | AIC | BIC | BIC(93) |  |  |
|  | Info\_binary ib3.Age\_group i.Parity white i.Typebirth CHPPDRegisteredNursesandMi CHPPDHealthcareSupportWorke ||TrustCode:, or | | | | | | | 15594.84 | 15683.96 | 15625.23 | Improved model fit? | |
|  | add response rate | |  |  |  |  |  | 15596.84 | 15693.39 | 15629.76 | No |  |
|  | add number births | |  |  |  |  |  | 15595.89 | 15692.44 | 15628.81 | No |  |
|  | add O&G per 100 births | | |  |  |  |  | 15481.7 | 15578.14 | 15514.62 | Yes |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | WARD MEASURED : TOTAL STAFF AND SKILL MIX | | | | |  |  | AIC | BIC | BIC(93) |  |  |
|  | Info\_binary ib3.Age\_group i.Parity white i.Typebirth OverallCHPPD PercReg ||TrustCode:, or | | | | | | | 15594.88 | 15684.01 | 15625.28 | Improved model fit? | |
|  | add response rate | |  |  |  |  |  | 15596.88 | 15693.44 | 15629.81 | No |  |
|  | add number births | |  |  |  |  |  | 15595.92 | 15692.48 | 15628.85 | No |  |
|  | add O&G per 100 births | | |  |  |  |  | 15481.78 | 15578.22 | 15514.7 | Yes |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
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| **KINDNESS** | TRUST MEASURED | |  |  |  |  |  | AIC | BIC | BIC(93) |  |  |
|  | null model | |  |  |  |  |  | 14288.45 | 14303.37 | 14293.51 |  |  |
|  | Kind\_binary ib3.Age\_group i.Parity white i.Typebirth FTEper100births | | | | | | | 13545.28 | 13626.94 | 13573.14 | Improved model fit? | |
|  | add response rate | |  |  |  |  |  | 13546.39 | 13635.47 | 13576.78 | No |  |
|  | add number births | |  |  |  |  |  | 13545.26 | 13634.35 | 13575.66 | No |  |
|  | add O&G per 100 births | | |  |  |  |  | 13547.26 | 13636.35 | 13577.65 | No |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | WARD MEASURED | |  |  |  |  |  | AIC | BIC | BIC(93) |  |  |
|  | Kind\_binary ib3.Age\_group i.Parity white i.Typebirth CHPPDRegisteredNursesandMi CHPPDHealthcareSupportWorke ||TrustCode:, or | | | | | | | 13622.58 | 13711.77 | 13652.98 | Improved model fit? | |
|  | add response rate | |  |  |  |  |  | 13624.31 | 13720.93 | 13657.23 | No |  |
|  | add number births | |  |  |  |  |  | 13621.84 | 13718.46 | 13654.76 | No |  |
|  | add O&G per 100 births | | |  |  |  |  | 13545.12 | 13641.63 | 13578.05 | Yes |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | WARD MEASURED : TOTAL STAFF AND SKILL MIX | | | | |  |  | AIC | BIC | BIC(93) | Improved model fit? | |
|  | Kind\_binary ib3.Age\_group i.Parity white i.Typebirth OverallCHPPD PercReg ||TrustCode:, or | | | | | | | 13622.13 | 13711.32 | 13652.52 |  |  |
|  | add response rate | |  |  |  |  |  | 13623.88 | 13720.5 | 13656.81 | No |  |
|  | add number births | |  |  |  |  |  | 13621.37 | 13717.99 | 13654.3 | No |  |
|  | add O&G per 100 births | | |  |  |  |  | 13544.51 | 13641.02 | 13577.43 | Yes |  |