

List of variables:

/**Set up**/

DHSClust = clustering variable
Weight = individual sampling weight
del = place of delivery (0 for home delivery and 1 for facility delivery)
del2 = place of delivery (1 for home delivery and 0 for facility delivery)
v021 = primary sampling unit
v022 = stratification used
residence = urban/rural (1 for rural and 0 for urban)

/**Outcomes**/

binarympnc1 = maternal postnatal care within 1 day
binarympnc7 = maternal postnatal care within 7 days
binarypnc1 = newborn postnatal care within 1 day
binarypnc7 = newborn postnatal care within 7 days

/**Facility Indicators**/

clinic5_pnc = clinic-level facilities providing postnatal care within 5 km of household cluster
hc5_pnc = health centers providing postnatal care within 5 km of household cluster
hosp5_pnc = hospitals providing postnatal care within 5 km of household cluster
clinic10_pnc = clinic-level facilities providing postnatal care between 5 km and 10 km of household cluster
hc10_pnc = health centers providing postnatal care between 5 km and 10 km of household cluster
hosp10_pnc = hospitals providing postnatal care between 5 km and 10 km of household cluster
clinic15_pnc = clinic-level facilities providing postnatal care between 10 km and 15 km of household cluster
hc15_pnc = health centers providing postnatal care between 10 km and 15 km of household cluster
hosp15_pnc = hospitals providing postnatal care between 10 km and 15 km of household cluster

/**Covariates**/

religion = women's religion
v024 = region of the country where women live
seasons = seasons in which women gave birth
tvradio = ownership of TV or radio
moneyfortreat = cost of treatment being a perceived problem
age = women's age
education = women's education
employment = women's employment
wealthrural = rural-specific household wealth quintile
birthnum = women's number of births
nsize = newborn size
nsex = newborn sex
mhealthcheckb4 = maternal health checked before facility discharge (for facility births)
newborncheckb4 = newborn health checked before facility discharge (for facility births)
csect = receipt of cesarean section

```

. /*****
> GEE analyses: Full models
> *****/
.
. /*****
> Home
> Delivery
> Only
> *****/
.
. ***Analysis commands
. xtgee binarympnc1 clinic5_pnc hc5_pnc hosp5_pnc ///
> clinic10_pnc hc10_pnc hosp10_pnc ///
> clinic15_pnc hc15_pnc hosp15_pnc ///
> i.religion i.v024 i.seasons i.tvradio i.moneyfortreat i.age i.education i.employment
i.wealthrural ///
> i.birthnum ib3.nsize i.nsex [pweight=weight] if residence == 1 & del == 0,
family(binomial) link(logit) corr(exchange
> able)

```

```

Iteration 1: tolerance = .00140315
Iteration 2: tolerance = .00007196
Iteration 3: tolerance = 3.687e-06
Iteration 4: tolerance = 1.883e-07

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GEE population-averaged model
Group variable:          DHSCLUST
Link:                   logit
Family:                 binomial
Correlation:           exchangeable

Number of obs          =          665
Number of groups       =          323
Obs per group:
    min =                1
    avg =                2.2
    max =                16
Wald chi2(33)         =          80.69
Prob > chi2           =          0.0000
Scale parameter:      1

```

(Std. Err. adjusted for clustering on DHSCLUST)

binarympnc1	Coef.	Robust Std. Err.	z	P> z	[95% Conf. Interval]	
clinic5_pnc	.470705	.7125274	0.66	0.509	-.925823	1.867233
hc5_pnc	.8026485	.3099137	2.59	0.010	.1952288	1.410068
hosp5_pnc	.2819961	.4174005	0.68	0.499	-.5360938	1.100086
clinic10_pnc	-.3242573	.4094083	-0.79	0.428	-1.126683	.4781682
hc10_pnc	.392781	.3450009	1.14	0.255	-.2834084	1.06897
hosp10_pnc	.6332002	.3250175	1.95	0.051	-.0038225	1.270223
clinic15_pnc	-.6287679	.3753036	-1.68	0.094	-1.364349	.1068136
hc15_pnc	-.118608	.4239631	-0.28	0.780	-.9495605	.7123445
hosp15_pnc	.2732141	.3137124	0.87	0.384	-.3416509	.888079
religion						
other christian	.4941456	.5300516	0.93	0.351	-.5447364	1.533028
muslim/no religion	.8285765	.6046182	1.37	0.171	-.3564533	2.013606
v024						
central region	-.55826	.4864936	-1.15	0.251	-1.51177	.3952499

southern region	-.6414323	.4718849	-1.36	0.174	-1.56631	.2834452
seasons						
winter-dry season	-1.332065	.4525548	-2.94	0.003	-2.219056	-.4450736
hot-dry season	-.3132541	.4597731	-0.68	0.496	-1.214393	.5878847
1.tvradio	.7959497	.301701	2.64	0.008	.2046266	1.387273
1.moneyfortreat	-.1840089	.3102261	-0.59	0.553	-.7920409	.424023
age						
25-34	.2444646	.4346326	0.56	0.574	-.6073996	1.096329
35-49	.1984492	.6546376	0.30	0.762	-1.084617	1.481515
education						
primary	.7201757	.4817787	1.49	0.135	-.2240933	1.664445
secondary	.0292842	1.066234	0.03	0.978	-2.060497	2.119065
1.employment	.8254441	.3354727	2.46	0.014	.1679298	1.482958
wealthrural						
2	-1.526517	.5020796	-3.04	0.002	-2.510575	-.542459
3	-.1963428	.3349082	-0.59	0.558	-.8527508	.4600653
4	-.8906297	.4562048	-1.95	0.051	-1.784775	.0035152
5	-1.688937	.6698198	-2.52	0.012	-3.00176	-.3761145
birthnum						
2-3	-.8895553	.6184754	-1.44	0.150	-2.101745	.3226342
4+	-.5621694	.6920565	-0.81	0.417	-1.918575	.7942364
nsize						
1	-1.121641	.5508621	-2.04	0.042	-2.201311	-.0419714
2	-.421961	.3735788	-1.13	0.259	-1.154162	.3102401
4	-1.22689	.441614	-2.78	0.005	-2.092438	-.3613426
5	-1.030602	.9222433	-1.12	0.264	-2.838166	.7769618
nsex						
female	.3729756	.3610229	1.03	0.302	-.3346163	1.080567
_cons	-1.916846	.7593233	-2.52	0.012	-3.405092	-.4285996

. margins, dydx(*)

Average marginal effects
Model VCE : Robust

Number of obs = 665

Expression : Pr(binarympnc1 != 0), predict()

dy/dx w.r.t. : clinic5_pnc hc5_pnc hosp5_pnc clinic10_pnc hc10_pnc hosp10_pnc clinic15_pnc
hc15_pnc hosp15_pnc

2.religion 3.religion 2.v024 3.v024 2.seasons 3.seasons 1.tvradio

1.moneyfortreat 2.age 3.age

2.education 3.education 1.employment 2.wealthrural 3.wealthrural

4.wealthrural 5.wealthrural

2.birthnum 3.birthnum 1.nsize 2.nsize 4.nsize 5.nsize 1.nsex

	Delta-method				[95% Conf. Interval]	
	dy/dx	Std. Err.	z	P> z		
clinic5_pnc	.0463535	.0701009	0.66	0.508	-.0910418	.1837487
hc5_pnc	.0790422	.0298772	2.65	0.008	.0204839	.1376005
hosp5_pnc	.02777	.0409978	0.68	0.498	-.0525841	.1081242
clinic10_pnc	-.0319318	.0398618	-0.80	0.423	-.1100594	.0461958
hc10_pnc	.0386798	.0340779	1.14	0.256	-.0281117	.1054713
hosp10_pnc	.0623555	.0320228	1.95	0.052	-.000408	.1251189
clinic15_pnc	-.061919	.0368261	-1.68	0.093	-.1340968	.0102588
hc15_pnc	-.0116801	.0417035	-0.28	0.779	-.0934174	.0700572
hosp15_pnc	.0269052	.0308744	0.87	0.384	-.0336075	.0874179
religion						
other christian	.0424677	.0407886	1.04	0.298	-.0374765	.1224118
muslim/no religion	.078621	.0548479	1.43	0.152	-.028879	.1861209
v024						
central region	-.0631866	.059939	-1.05	0.292	-.1806649	.0542918
southern region	-.0711233	.0578177	-1.23	0.219	-.1844438	.0421973
seasons						
winter-dry season	-.1121726	.0334712	-3.35	0.001	-.1777749	-.0465703
hot-dry season	-.0352254	.0499601	-0.71	0.481	-.1331455	.0626946
1.tvradio	.0854463	.034421	2.48	0.013	.0179823	.1529102
1.moneyfortreat	-.0183546	.031387	-0.58	0.559	-.0798719	.0431627
age						
25-34	.0235988	.0407565	0.58	0.563	-.0562825	.1034801
35-49	.0189112	.0623361	0.30	0.762	-.1032654	.1410878
education						
primary	.0812092	.0602208	1.35	0.177	-.0368215	.1992398
secondary	.0027447	.1007305	0.03	0.978	-.1946834	.2001729
1.employment	.0732765	.0269904	2.71	0.007	.0203762	.1261768
wealthrural						
2	-.1384912	.0438232	-3.16	0.002	-.224383	-.0525993
3	-.0251305	.0428283	-0.59	0.557	-.1090725	.0588115
4	-.0958224	.0479024	-2.00	0.045	-.1897094	-.0019355
5	-.1466126	.0477798	-3.07	0.002	-.2402592	-.0529659
birthnum						
2-3	-.0949707	.0757243	-1.25	0.210	-.2433877	.0534462
4+	-.065181	.0856991	-0.76	0.447	-.2331483	.1027862
nsize						
1	-.1030533	.0401706	-2.57	0.010	-.1817863	-.0243204
2	-.0470461	.0394563	-1.19	0.233	-.1243791	.0302869
4	-.1093896	.0333361	-3.28	0.001	-.1747271	-.0440521
5	-.0971686	.0668124	-1.45	0.146	-.2281185	.0337813
nsex						

female | .0365905 .0355701 1.03 0.304 -.0331256 .1063065

Note: dy/dx for factor levels is the discrete change from the base level.

```
.
. xtgee binarympnc7 clinic5_pnc hc5_pnc hosp5_pnc ///
> clinic10_pnc hc10_pnc hosp10_pnc ///
> clinic15_pnc hc15_pnc hosp15_pnc ///
> i.religion i.v024 i.seasons i.tvradio i.moneyfortreat i.age i.education i.employment
i.wealthrural ///
> i.birthnum ib3.nsize i.nsex [pweight=weight] if residence == 1 & del == 0,
family(binomial) link(logit) corr(exchange
> able)
```

Iteration 1: tolerance = .02825241
Iteration 2: tolerance = .00101973
Iteration 3: tolerance = .0000304
Iteration 4: tolerance = 7.726e-07

GEE population-averaged model
Group variable: DHSClust
Link: logit
Family: binomial
Correlation: exchangeable
Number of obs = 665
Number of groups = 323
Obs per group: min = 1, avg = 2.2, max = 16
Wald chi2(33) = 64.42
Prob > chi2 = 0.0009
Scale parameter: 1

(Std. Err. adjusted for clustering on DHSClust)

binarympnc7	Coef.	Robust Std. Err.	z	P> z	[95% Conf. Interval]	
clinic5_pnc	1.00931	.5667593	1.78	0.075	-.1015178	2.120138
hc5_pnc	.5973067	.2608474	2.29	0.022	.0860553	1.108558
hosp5_pnc	-.0202632	.3515284	-0.06	0.954	-.7092462	.6687198
clinic10_pnc	-.0267117	.3020294	-0.09	0.930	-.6186784	.565255
hc10_pnc	.2263657	.2656361	0.85	0.394	-.2942715	.7470029
hosp10_pnc	.5949827	.2624962	2.27	0.023	.0804996	1.109466
clinic15_pnc	-.6014747	.320047	-1.88	0.060	-1.228755	.0258058
hc15_pnc	-.2869005	.3500907	-0.82	0.412	-.9730657	.3992646
hosp15_pnc	.2040824	.2774849	0.74	0.462	-.339778	.7479429
religion						
other christian	.3825093	.4474062	0.85	0.393	-.4943907	1.259409
muslim/no religion	.5234823	.5112457	1.02	0.306	-.4785409	1.525506
v024						
central region	-.1953452	.3933448	-0.50	0.619	-.9662869	.5755965
southern region	-.3563546	.3924408	-0.91	0.364	-1.125524	.4128152
seasons						
winter-dry season	-.8471269	.3700681	-2.29	0.022	-1.572447	-.1218067
hot-dry season	-.2109849	.4248897	-0.50	0.619	-1.043753	.6217836

clinic10_pnc	-.0032782	.0370634	-0.09	0.930	-.075921	.0693647
hc10_pnc	.0277807	.0329104	0.84	0.399	-.0367224	.0922838
hosp10_pnc	.0730192	.0313325	2.33	0.020	.0116087	.1344297
clinic15_pnc	-.0738159	.0389578	-1.89	0.058	-.1501718	.0025399
hc15_pnc	-.0352098	.042893	-0.82	0.412	-.1192786	.0488589
hosp15_pnc	.025046	.0340059	0.74	0.461	-.0416043	.0916963
religion						
other christian	.0428055	.0460461	0.93	0.353	-.0474432	.1330542
muslim/no religion	.0610335	.0573495	1.06	0.287	-.0513695	.1734365
v024						
central region	-.0258924	.0535342	-0.48	0.629	-.1308175	.0790326
southern region	-.045293	.0523167	-0.87	0.387	-.1478319	.0572459
seasons						
winter-dry season	-.0950454	.0395805	-2.40	0.016	-.1726217	-.0174691
hot-dry season	-.0282237	.0555823	-0.51	0.612	-.1371631	.0807156
1.tvradio	.0647045	.0386997	1.67	0.095	-.0111456	.1405545
1.moneyfortreat	-.0015382	.0358966	-0.04	0.966	-.0718942	.0688179
age						
25-34	-.0330957	.0572277	-0.58	0.563	-.14526	.0790686
35-49	-.0245868	.0826045	-0.30	0.766	-.1864887	.1373151
education						
primary	.1325103	.0745811	1.78	0.076	-.0136659	.2786866
secondary	-.021331	.1092472	-0.20	0.845	-.2354515	.1927895
1.employment	.0760247	.0292971	2.59	0.009	.0186034	.1334459
wealthrural						
2	-.1289874	.0533877	-2.42	0.016	-.2336254	-.0243494
3	-.0302212	.0461369	-0.66	0.512	-.1206479	.0602055
4	-.0615384	.0633975	-0.97	0.332	-.1857953	.0627184
5	-.1483542	.0562482	-2.64	0.008	-.2585985	-.0381098
birthnum						
2-3	-.1118726	.0755113	-1.48	0.138	-.2598719	.0361268
4+	-.0716714	.0932664	-0.77	0.442	-.2544701	.1111273
nsize						
1	.0011801	.0738603	0.02	0.987	-.1435835	.1459436
2	-.0161292	.0452948	-0.36	0.722	-.1049053	.072647
4	-.0668912	.0430646	-1.55	0.120	-.1512961	.0175138
5	-.0862153	.0708071	-1.22	0.223	-.2249946	.052564
nsex						
female	.0562366	.0421036	1.34	0.182	-.0262849	.1387581

Note: dy/dx for factor levels is the discrete change from the base level.

. xtgee binarypnc1 clinic5_pnc hc5_pnc hosp5_pnc ///

```

> clinic10_pnc hc10_pnc hosp10_pnc ///
> clinic15_pnc hc15_pnc hosp15_pnc ///
> i.religion i.v024 i.seasons i.tvradio i.moneyfortreat i.age i.education i.employment
i.wealthrural ///
> i.birthnum ib3.nsize i.nsex [pweight=weight] if residence == 1 & del == 0,
family(binomial) link(logit) corr(exchange
> able)

```

```

Iteration 1: tolerance = .00339711
Iteration 2: tolerance = .00033524
Iteration 3: tolerance = .00003309
Iteration 4: tolerance = 3.287e-06
Iteration 5: tolerance = 3.264e-07

```

```

GEE population-averaged model
Group variable:          DHSCLUST      Number of obs   =       664
Link:                   logit          Number of groups =       323
Family:                 binomial       Obs per group:
Correlation:            exchangeable   min =           1
                                                avg =           2.2
                                                max =           16
                                                Wald chi2(33)  =       52.42
Scale parameter:        1              Prob > chi2     =       0.0172

```

(Std. Err. adjusted for clustering on DHSCLUST)

binarypnc1	Coef.	Robust Std. Err.	z	P> z	[95% Conf. Interval]	
clinic5_pnc	-.3299759	.6804758	-0.48	0.628	-1.663684	1.003732
hc5_pnc	.6330333	.309911	2.04	0.041	.025619	1.240448
hosp5_pnc	1.281857	.5954893	2.15	0.031	.1147196	2.448995
clinic10_pnc	.2811966	.3035996	0.93	0.354	-.3138476	.8762408
hc10_pnc	.2585695	.3384186	0.76	0.445	-.4047187	.9218577
hosp10_pnc	.279462	.2854076	0.98	0.327	-.2799266	.8388507
clinic15_pnc	-.0797706	.3282192	-0.24	0.808	-.7230683	.5635271
hc15_pnc	.463424	.4176652	1.11	0.267	-.3551847	1.282033
hosp15_pnc	-.0004361	.2815351	-0.00	0.999	-.5522348	.5513626
religion						
other christian	.3412232	.4220518	0.81	0.419	-.4859831	1.16843
muslim/no religion	.6752065	.5341529	1.26	0.206	-.371714	1.722127
v024						
central region	-.8252024	.4463231	-1.85	0.064	-1.69998	.0495747
southern region	-1.459214	.5446553	-2.68	0.007	-2.526719	-.3917089
seasons						
winter-dry season	-.5327801	.3652164	-1.46	0.145	-1.248591	.1830308
hot-dry season	-.0198342	.3606663	-0.05	0.956	-.7267272	.6870587
1.tvradio	.321764	.2791411	1.15	0.249	-.2253426	.8688706
1.moneyfortreat	.1988449	.2973275	0.67	0.504	-.3839063	.7815961
age						
25-34	.971951	.4051647	2.40	0.016	.1778428	1.766059

hosp15_pnc	-.0000467	.0301222	-0.00	0.999	-.0590851	.0589918
religion						
other christian	.0328173	.0378534	0.87	0.386	-.041374	.1070086
muslim/no religion	.0719507	.0578304	1.24	0.213	-.0413948	.1852962
v024						
central region	-.1192778	.072196	-1.65	0.099	-.2607794	.0222238
southern region	-.1807753	.0769364	-2.35	0.019	-.3315678	-.0299828
seasons						
winter-dry season	-.0527982	.0345377	-1.53	0.126	-.1204909	.0148946
hot-dry season	-.0022862	.0414547	-0.06	0.956	-.0835358	.0789635
1.tvradio	.0353297	.0316582	1.12	0.264	-.0267191	.0973785
1.moneyfortreat	.0210317	.0313283	0.67	0.502	-.0403707	.082434
age						
25-34	.0980925	.0377533	2.60	0.009	.0240973	.1720877
35-49	.0602945	.0558421	1.08	0.280	-.0491541	.1697431
education						
primary	-.0172492	.0364992	-0.47	0.637	-.0887862	.0542879
secondary	-.0976417	.0522117	-1.87	0.061	-.1999747	.0046914
1.employment	.0571247	.0275996	2.07	0.038	.0030305	.1112189
wealthrural						
2	.0768889	.0417739	1.84	0.066	-.0049863	.1587642
3	.1015186	.0469477	2.16	0.031	.0095028	.1935344
4	.0635574	.0459539	1.38	0.167	-.0265105	.1536253
5	.0762834	.0502049	1.52	0.129	-.0221165	.1746832
birthnum						
2-3	-.1288339	.0846712	-1.52	0.128	-.2947864	.0371186
4+	-.1742369	.100202	-1.74	0.082	-.3706293	.0221554
nsize						
1	.0909331	.0662216	1.37	0.170	-.0388588	.2207251
2	.0319564	.0363939	0.88	0.380	-.0393742	.1032871
4	-.0416719	.034184	-1.22	0.223	-.1086713	.0253275
5	-.0836829	.0401763	-2.08	0.037	-.162427	-.0049388
nsex						
female	.0003161	.0343889	0.01	0.993	-.0670849	.067717

Note: dy/dx for factor levels is the discrete change from the base level.

```

.
. xtgee binarypnc7 clinic5_pnc hc5_pnc hosp5_pnc ///
> clinic10_pnc hc10_pnc hosp10_pnc ///
> clinic15_pnc hc15_pnc hosp15_pnc ///
> i.religion i.v024 i.seasons i.tvradio i.moneyfortreat i.age i.education i.employment
i.wealthrural ///
> i.birthnum ib3.nsize i.nsex [pweight=weight] if residence == 1 & del == 0,

```

```
family(binomial) link(logit) corr(exchangeable)
> able)
```

```
Iteration 1: tolerance = .02097978
Iteration 2: tolerance = .00321883
Iteration 3: tolerance = .00051196
Iteration 4: tolerance = .00007985
Iteration 5: tolerance = .00001242
Iteration 6: tolerance = 1.932e-06
Iteration 7: tolerance = 3.004e-07
```

```
GEE population-averaged model
Group variable:          DHSCLUST
Link:                    logit
Family:                  binomial
Correlation:             exchangeable

Number of obs          =          664
Number of groups       =          323
Obs per group:
    min =                1
    avg  =                2.2
    max =               16

Wald chi2(33)          =          31.48
Prob > chi2            =          0.5428

Scale parameter:       1
```

(Std. Err. adjusted for clustering on DHSCLUST)

binarypnc7	Coef.	Robust Std. Err.	z	P> z	[95% Conf. Interval]	
clinic5_pnc	.232669	.508231	0.46	0.647	-.7634455	1.228783
hc5_pnc	.3502889	.2356009	1.49	0.137	-.1114804	.8120581
hosp5_pnc	.6490876	.4827631	1.34	0.179	-.2971106	1.595286
clinic10_pnc	.2030623	.2296658	0.88	0.377	-.2470744	.653199
hc10_pnc	.2278533	.2237012	1.02	0.308	-.210593	.6662997
hosp10_pnc	.3677732	.233187	1.58	0.115	-.0892649	.8248112
clinic15_pnc	.0316646	.2468305	0.13	0.898	-.4521144	.5154435
hc15_pnc	-.113329	.2914793	-0.39	0.697	-.684618	.4579599
hosp15_pnc	.0471521	.2275592	0.21	0.836	-.3988557	.4931599
religion						
other christian	.0547708	.3181011	0.17	0.863	-.5686959	.6782374
muslim/no religion	-.0534644	.4191666	-0.13	0.899	-.8750158	.7680871
v024						
central region	-.2863002	.3424688	-0.84	0.403	-.9575268	.3849263
southern region	-.5566088	.3511414	-1.59	0.113	-1.244833	.1316156
seasons						
winter-dry season	-.2155004	.3129236	-0.69	0.491	-.8288194	.3978187
hot-dry season	-.2865772	.2899591	-0.99	0.323	-.8548867	.2817322
1.tvradio	.0582351	.2361008	0.25	0.805	-.4045138	.5209841
1.moneyfortreat	.2234051	.2219423	1.01	0.314	-.2115937	.658404
age						
25-34	.3628272	.3537478	1.03	0.305	-.3305057	1.05616
35-49	.2912182	.4216819	0.69	0.490	-.5352632	1.1177
education						

other christian	.0098707	.0568038	0.17	0.862	-.1014627	.1212042
muslim/no religion	-.009406	.0737523	-0.13	0.899	-.1539577	.1351458
v024						
central region	-.0565169	.0697171	-0.81	0.418	-.1931599	.0801261
southern region	-.1041441	.0695006	-1.50	0.134	-.2403628	.0320746
seasons						
winter-dry season	-.0389777	.055891	-0.70	0.486	-.148522	.0705667
hot-dry season	-.0510192	.0499068	-1.02	0.307	-.1488348	.0467964
1.tvradio						
1.moneyfortreat	.0105505	.0430196	0.25	0.806	-.0737663	.0948674
	.0398575	.0394541	1.01	0.312	-.0374711	.1171861
age						
25-34	.0640403	.0611159	1.05	0.295	-.0557446	.1838252
35-49	.0505855	.0731854	0.69	0.489	-.0928553	.1940263
education						
primary	.0100748	.0626735	0.16	0.872	-.1127631	.1329127
secondary	-.1776585	.069005	-2.57	0.010	-.3129059	-.0424111
1.employment						
	.0426836	.0446857	0.96	0.339	-.0448987	.130266
wealthrural						
2	.1211664	.055411	2.19	0.029	.0125629	.22977
3	.1187122	.0606635	1.96	0.050	-.0001861	.2376105
4	.1111784	.06073	1.83	0.067	-.0078502	.230207
5	.0622487	.0684669	0.91	0.363	-.071944	.1964413
birthnum						
2-3	-.0806557	.0873229	-0.92	0.356	-.2518055	.0904941
4+	-.1376385	.103295	-1.33	0.183	-.340093	.0648161
nsize						
1	.1333436	.0872649	1.53	0.127	-.0376924	.3043796
2	.0168114	.0445729	0.38	0.706	-.0705498	.1041727
4	.0151176	.0551965	0.27	0.784	-.0930655	.1233007
5	.015469	.1029773	0.15	0.881	-.1863629	.2173008
nsex						
female	.0265077	.0461498	0.57	0.566	-.0639442	.1169595

Note: dy/dx for factor levels is the discrete change from the base level.

```

.
. /*****
> Facility
> Delivery
> Only
> *****/
.
. ***Analysis commands
. xtgee specialmpnc7 clinic5_pnc hc5_pnc hosp5_pnc ///
> clinic10_pnc hc10_pnc hosp10_pnc ///

```

```

> clinic15_pnc hc15_pnc hosp15_pnc ///
> i.religion i.mhealthcheckb4 i.v024 i.csect i.seasons i.tvradio i.moneyfortreat i.age
i.education i.employment i.wealt
> hrural ///
> i.birthnum ib3.nsize i.nsex [pweight=weight] if residence == 1 & del == 1,
family(binomial) link(logit) corr(exchange
> able)

```

```

Iteration 1: tolerance = .13177446
Iteration 2: tolerance = .01338172
Iteration 3: tolerance = .00072368
Iteration 4: tolerance = .00005913
Iteration 5: tolerance = 3.940e-06
Iteration 6: tolerance = 2.416e-07

```

```

GEE population-averaged model
Group variable:          DHSCLUST
Link:                   logit
Family:                 binomial
Correlation:            exchangeable

Number of obs          =    10,083
Number of groups       =         677
Obs per group:
    min =                3
    avg =               14.8
    max =                24

Wald chi2(35)         =    235.38
Prob > chi2           =     0.0000

Scale parameter:      1

```

(Std. Err. adjusted for clustering on DHSCLUST)

specialmpnc7	Coef.	Robust Std. Err.	z	P> z	[95% Conf. Interval]	
clinic5_pnc	-.2018192	.2482814	-0.81	0.416	-.6884418	.2848034
hc5_pnc	.2813825	.1245716	2.26	0.024	.0372266	.5255384
hosp5_pnc	.3063221	.1789242	1.71	0.087	-.0443629	.6570071
clinic10_pnc	.0135674	.1475475	0.09	0.927	-.2756203	.3027551
hc10_pnc	.3925898	.1354864	2.90	0.004	.1270413	.6581383
hosp10_pnc	-.370336	.1374954	-2.69	0.007	-.639822	-.1008501
clinic15_pnc	-.0338633	.145728	-0.23	0.816	-.319485	.2517584
hc15_pnc	.0646442	.1545474	0.42	0.676	-.2382632	.3675515
hosp15_pnc	-.0155924	.1308651	-0.12	0.905	-.2720833	.2408985
religion						
other christian	-.1220516	.0941086	-1.30	0.195	-.3065011	.0623979
muslim/no religion	-.1305404	.1362952	-0.96	0.338	-.3976742	.1365933
1.mhealthcheckb4	.8894639	.0766105	11.61	0.000	.7393101	1.039618
v024						
central region	-.6150741	.1618606	-3.80	0.000	-.9323151	-.2978332
southern region	-.3254431	.1626418	-2.00	0.045	-.6442151	-.0066711
1.csect	.1664578	.1314079	1.27	0.205	-.091097	.4240126
seasons						
winter-dry season	.0013552	.070734	0.02	0.985	-.1372809	.1399912
hot-dry season	.0517279	.091918	0.56	0.574	-.1284281	.2318839

1.tvradio	-.0053402	.0835728	-0.06	0.949	-.1691399	.1584594
1.moneyfortreat	.0646943	.087644	0.74	0.460	-.1070849	.2364734
age						
25-34	.1062255	.0969174	1.10	0.273	-.0837291	.29618
35-49	.2019327	.1236915	1.63	0.103	-.0404982	.4443636
education						
primary	.0776962	.0899057	0.86	0.387	-.0985157	.253908
secondary	.3828745	.155203	2.47	0.014	.0786823	.6870667
1.employment	.2704895	.0841596	3.21	0.001	.1055397	.4354394
wealthrural						
2	.0669983	.102315	0.65	0.513	-.1335353	.2675319
3	.0911871	.0965416	0.94	0.345	-.0980311	.2804052
4	.1314842	.1147275	1.15	0.252	-.0933776	.3563461
5	.2050108	.1366364	1.50	0.134	-.0627917	.4728133
birthnum						
2-3	.1983242	.1134783	1.75	0.081	-.0240893	.4207376
4+	.1090067	.133595	0.82	0.415	-.1528346	.3708481
nsize						
1	.2033355	.1236607	1.64	0.100	-.039035	.445706
2	.0866715	.097192	0.89	0.373	-.1038214	.2771644
4	.0132485	.1131023	0.12	0.907	-.2084279	.2349248
5	-.3980751	.2137418	-1.86	0.063	-.8170014	.0208512
nsex						
female	.0298801	.0683604	0.44	0.662	-.1041038	.163864
_cons	-2.896363	.2448884	-11.83	0.000	-3.376336	-2.416391

. margins, dydx(*)

Average marginal effects
 Model VCE : Robust

Number of obs = 10,083

Expression : Pr(specialmpnc7 != 0), predict()

dy/dx w.r.t. : clinic5_pnc hc5_pnc hosp5_pnc clinic10_pnc hc10_pnc hosp10_pnc clinic15_pnc
 hc15_pnc hosp15_pnc

2.religion 3.religion 1.mhealthcheckb4 2.v024 3.v024 1.csect 2.seasons
 3.seasons 1.tvradio

1.moneyfortreat 2.age 3.age 2.education 3.education 1.employment

2.wealthrural 3.wealthrural

4.wealthrural 5.wealthrural 2.birthnum 3.birthnum 1.nsize 2.nsize 4.nsize
 5.nsize 1.nsex

	Delta-method				[95% Conf. Interval]	
	dy/dx	Std. Err.	z	P> z		
clinic5_pnc	-.0226583	.0279112	-0.81	0.417	-.0773633	.0320467
hc5_pnc	.0315909	.0139608	2.26	0.024	.0042283	.0589535

hosp5_pnc	.0343909	.020228	1.70	0.089	-.0052554	.0740371
clinic10_pnc	.0015232	.0165633	0.09	0.927	-.0309402	.0339866
hc10_pnc	.0440762	.015478	2.85	0.004	.0137399	.0744124
hosp10_pnc	-.0415777	.0155871	-2.67	0.008	-.0721279	-.0110275
clinic15_pnc	-.0038018	.0163753	-0.23	0.816	-.0358969	.0282932
hc15_pnc	.0072576	.0173704	0.42	0.676	-.0267877	.0413029
hosp15_pnc	-.0017506	.0146845	-0.12	0.905	-.0305317	.0270306
religion						
other christian	-.0140881	.0111344	-1.27	0.206	-.0359111	.0077348
muslim/no religion	-.0150267	.01559	-0.96	0.335	-.0455826	.0155292
1.mhealthcheckb4	.1000912	.0089712	11.16	0.000	.0825079	.1176745
v024						
central region	-.0736597	.0204574	-3.60	0.000	-.1137555	-.033564
southern region	-.0425934	.0220439	-1.93	0.053	-.0857986	.0006118
1.csect	.0195982	.0161343	1.21	0.224	-.0120245	.0512209
seasons						
winter-dry season	.0001512	.0078899	0.02	0.985	-.0153128	.0156151
hot-dry season	.0058664	.010461	0.56	0.575	-.0146368	.0263696
1.tvradio	-.0005993	.009377	-0.06	0.949	-.0189779	.0177792
1.moneyfortreat	.0072422	.0098441	0.74	0.462	-.0120518	.0265362
age						
25-34	.0116715	.0105368	1.11	0.268	-.0089804	.0323233
35-49	.0229082	.0141157	1.62	0.105	-.004758	.0505743
education						
primary	.0087477	.0102212	0.86	0.392	-.0112854	.0287808
secondary	.0475832	.0213735	2.23	0.026	.0056919	.0894745
1.employment	.0293535	.0087689	3.35	0.001	.0121667	.0465402
wealthrural						
2	.0072291	.0111065	0.65	0.515	-.0145392	.0289973
3	.0099201	.0105132	0.94	0.345	-.0106854	.0305255
4	.0144998	.0127293	1.14	0.255	-.0104491	.0394487
5	.0231716	.0157453	1.47	0.141	-.0076887	.0540319
birthnum						
2-3	.0220105	.0122895	1.79	0.073	-.0020765	.0460974
4+	.0117382	.0143047	0.82	0.412	-.0162986	.0397749
nsize						
1	.0239621	.0151463	1.58	0.114	-.005724	.0536482
2	.0098308	.011179	0.88	0.379	-.0120796	.0317413
4	.0014665	.0125501	0.12	0.907	-.0231312	.0260642
5	-.0382971	.0182128	-2.10	0.035	-.0739935	-.0026007
nsex						
female	.003355	.0077029	0.44	0.663	-.0117423	.0184524

 Note: dy/dx for factor levels is the discrete change from the base level.

```
. xtgee specialpnc7 clinic5_pnc hc5_pnc hosp5_pnc ///
> clinic10_pnc hc10_pnc hosp10_pnc ///
> clinic15_pnc hc15_pnc hosp15_pnc ///
> i.religion i.newborncheckb4 i.v024 i.csect i.seasons i.tvradio i.moneyfortreat i.age
i.education i.employment i.wealt
> hrural ///
> i.birthnum ib3.nsize i.nsex [pweight=weight] if residence == 1 & del == 1,
family(binomial) link(logit) corr(exchange
> able)
```

Iteration 1: tolerance = .13836571
 Iteration 2: tolerance = .0093803
 Iteration 3: tolerance = .00042035
 Iteration 4: tolerance = .0000254
 Iteration 5: tolerance = 1.554e-06
 Iteration 6: tolerance = 9.696e-08

GEE population-averaged model
 Group variable: DHSClust
 Link: logit
 Family: binomial
 Correlation: exchangeable
 Number of obs = 10,029
 Number of groups = 677
 Obs per group: min = 3
 avg = 14.7
 max = 24
 Wald chi2(35) = 182.43
 Prob > chi2 = 0.0000
 Scale parameter: 1

(Std. Err. adjusted for clustering on DHSClust)

specialpnc7	Coef.	Robust Std. Err.	z	P> z	[95% Conf. Interval]	
clinic5_pnc	-.7629425	.2222593	-3.43	0.001	-1.198563	-.3273224
hc5_pnc	.0529879	.0933395	0.57	0.570	-.1299541	.2359299
hosp5_pnc	.1163474	.1289903	0.90	0.367	-.1364689	.3691637
clinic10_pnc	-.2677441	.1247598	-2.15	0.032	-.5122688	-.0232195
hc10_pnc	.3944186	.1034522	3.81	0.000	.191656	.5971812
hosp10_pnc	-.0555773	.0957849	-0.58	0.562	-.2433123	.1321577
clinic15_pnc	.1688052	.1166041	1.45	0.148	-.0597347	.3973451
hc15_pnc	.1730598	.1220307	1.42	0.156	-.066116	.4122356
hosp15_pnc	-.0746097	.0925828	-0.81	0.420	-.2560687	.1068494
religion						
other christian	-.0289484	.07962	-0.36	0.716	-.1850007	.127104
muslim/no religion	-.0263034	.129541	-0.20	0.839	-.2801991	.2275923
1.newborncheckb4	.4668698	.0694398	6.72	0.000	.3307703	.6029694
v024						
central region	-.7723978	.1268102	-6.09	0.000	-1.020941	-.5238543
southern region	-.6534478	.1307384	-5.00	0.000	-.9096903	-.3972052

1.csect	-.3543213	.1314997	-2.69	0.007	-.612056	-.0965867
seasons						
winter-dry season	.0323141	.0606268	0.53	0.594	-.0865122	.1511404
hot-dry season	-.0449021	.0790919	-0.57	0.570	-.1999194	.1101152
1.tvradio	-.0533907	.0613147	-0.87	0.384	-.1735653	.0667839
1.moneyfortreat	-.0036556	.0651307	-0.06	0.955	-.1313094	.1239983
age						
25-34	-.0885696	.0870673	-1.02	0.309	-.2592183	.0820791
35-49	-.1900193	.1141527	-1.66	0.096	-.4137544	.0337158
education						
primary	.1204106	.0741346	1.62	0.104	-.0248906	.2657118
secondary	.2016687	.1296364	1.56	0.120	-.0524139	.4557513
1.employment	.2046659	.0742683	2.76	0.006	.0591027	.350229
wealthrural						
2	.0571714	.0959108	0.60	0.551	-.1308104	.2451531
3	.1662652	.0966517	1.72	0.085	-.0231686	.355699
4	.2105188	.0961416	2.19	0.029	.0220848	.3989528
5	.2640491	.1021233	2.59	0.010	.0638912	.464207
birthnum						
2-3	.191254	.0941017	2.03	0.042	.0068181	.3756899
4+	.2551589	.1110702	2.30	0.022	.0374654	.4728524
nsize						
1	-.0786368	.1092832	-0.72	0.472	-.2928279	.1355543
2	.1058294	.0671539	1.58	0.115	-.0257899	.2374487
4	-.092449	.0927593	-1.00	0.319	-.274254	.0893559
5	-.2600292	.1636699	-1.59	0.112	-.5808163	.0607579
nsex						
female	-.0576239	.0502403	-1.15	0.251	-.1560931	.0408452
_cons	-1.57195	.2010945	-7.82	0.000	-1.966088	-1.177812

. margins, dydx(*)

Average marginal effects
Model VCE : Robust

Number of obs = 10,029

Expression : Pr(specialpnc7 != 0), predict()

dy/dx w.r.t. : clinic5_pnc hc5_pnc hosp5_pnc clinic10_pnc hc10_pnc hosp10_pnc clinic15_pnc
hc15_pnc hosp15_pnc

2.religion 3.religion 1.newborncheckb4 2.v024 3.v024 1.csect 2.seasons
3.seasons 1.tvradio

1.moneyfortreat 2.age 3.age 2.education 3.education 1.employment

2.wealthrural 3.wealthrural

4.wealthrural 5.wealthrural 2.birthnum 3.birthnum 1.nsize 2.nsize 4.nsize

5.nsize 1.nsex

	Delta-method				[95% Conf. Interval]	
	dy/dx	Std. Err.	z	P> z		
clinic5_pnc	-.13358	.0389629	-3.43	0.001	-.2099459	-.0572141
hc5_pnc	.0092774	.0163105	0.57	0.569	-.0226905	.0412453
hosp5_pnc	.0203707	.0225748	0.90	0.367	-.0238751	.0646165
clinic10_pnc	-.0468781	.0217493	-2.16	0.031	-.0895059	-.0042502
hc10_pnc	.0690569	.0181411	3.81	0.000	.033501	.1046128
hosp10_pnc	-.0097308	.0168011	-0.58	0.562	-.0426604	.0231988
clinic15_pnc	.0295553	.0204348	1.45	0.148	-.0104962	.0696069
hc15_pnc	.0303002	.021387	1.42	0.157	-.0116175	.072218
hosp15_pnc	-.0130631	.0162396	-0.80	0.421	-.0448921	.018766
religion						
other christian	-.0050911	.0140698	-0.36	0.717	-.0326674	.0224853
muslim/no religion	-.0046288	.0227598	-0.20	0.839	-.0492373	.0399796
1.newborncheckb4	.078868	.011404	6.92	0.000	.0565167	.1012194
v024						
central region	-.1507043	.0256906	-5.87	0.000	-.2010569	-.1003516
southern region	-.130667	.0271298	-4.82	0.000	-.1838404	-.0774937
1.csect	-.0572786	.0196147	-2.92	0.003	-.0957227	-.0188345
seasons						
winter-dry season	.0056969	.0106824	0.53	0.594	-.0152402	.0266339
hot-dry season	-.0077696	.0136549	-0.57	0.569	-.0345327	.0189935
1.tvradio	-.0093188	.0106705	-0.87	0.382	-.0302325	.0115949
1.moneyfortreat	-.0006401	.011405	-0.06	0.955	-.0229934	.0217132
age						
25-34	-.0157263	.0155092	-1.01	0.311	-.0461238	.0146713
35-49	-.0329263	.0196485	-1.68	0.094	-.0714367	.0055841
education						
primary	.0213594	.0133482	1.60	0.110	-.0048027	.0475215
secondary	.0364539	.0244533	1.49	0.136	-.0114736	.0843815
1.employment	.0351888	.0125059	2.81	0.005	.0106776	.0596999
wealthrural						
2	.0095358	.0160481	0.59	0.552	-.021918	.0409896
3	.0285107	.0165861	1.72	0.086	-.0039974	.0610189
4	.0364952	.0166591	2.19	0.028	.0038441	.0691463
5	.0463708	.0179773	2.58	0.010	.0111359	.0816058
birthnum						
2-3	.0322408	.0155041	2.08	0.038	.0018533	.0626283
4+	.0437046	.0187039	2.34	0.019	.0070457	.0803636
nsize						
1	-.0135319	.0185949	-0.73	0.467	-.0499773	.0229134

2		.0190358	.0121423	1.57	0.117	-.0047626	.0428343
4		-.0158541	.0157256	-1.01	0.313	-.0466758	.0149676
5		-.0427139	.0256007	-1.67	0.095	-.0928903	.0074625
nsex							
female		-.0100886	.0087938	-1.15	0.251	-.0273242	.0071469

Note: dy/dx for factor levels is the discrete change from the base level.

```
.
. ***Appendix analysis
. xtgee binarympnc1 clinic5_pnc hc5_pnc hosp5_pnc ///
> clinic10_pnc hc10_pnc hosp10_pnc ///
> clinic15_pnc hc15_pnc hosp15_pnc ///
> i.religion i.mhealthcheckb4 i.v024 i.csect i.seasons i.tvradio i.moneyfortreat i.age
i.education i.employment i.wealt
> hrural ///
> i.birthnum ib3.nsize i.nsex [pweight=weight] if residence == 1 & del == 1,
family(binomial) link(logit) corr(exchange
> able)
```

```
Iteration 1: tolerance = .05492604
Iteration 2: tolerance = .00628765
Iteration 3: tolerance = .00071345
Iteration 4: tolerance = .00009752
Iteration 5: tolerance = .00001345
Iteration 6: tolerance = 1.808e-06
Iteration 7: tolerance = 2.442e-07
```

```
GEE population-averaged model
Group variable:          DHSCLUST
Link:                   logit
Family:                 binomial
Correlation:            exchangeable

Number of obs          =    10,083
Number of groups       =         677
Obs per group:
   min =                 3
   avg  =                14.8
   max  =                 24

Wald chi2(35)         =    121.69
Prob > chi2           =     0.0000

Scale parameter:      1
```

(Std. Err. adjusted for clustering on DHSCLUST)

binarympnc1	Coef.	Robust Std. Err.	z	P> z	[95% Conf. Interval]	
clinic5_pnc	.7213267	.4648088	1.55	0.121	-.1896818	1.632335
hc5_pnc	-.1551871	.2079307	-0.75	0.455	-.5627237	.2523495
hosp5_pnc	-.9690941	.3623933	-2.67	0.007	-1.679372	-.2588164
clinic10_pnc	.1935191	.2879419	0.67	0.502	-.3708367	.7578749
hc10_pnc	.0083564	.2433989	0.03	0.973	-.4686966	.4854095
hosp10_pnc	-.1127109	.2294112	-0.49	0.623	-.5623486	.3369267
clinic15_pnc	-.4595652	.2368834	-1.94	0.052	-.923848	.0047176
hc15_pnc	-.3028738	.2393296	-1.27	0.206	-.7719511	.1662036
hosp15_pnc	-.3926164	.2204031	-1.78	0.075	-.8245986	.0393658
religion						
other christian	.1183318	.2110712	0.56	0.575	-.2953601	.5320238

muslim/no religion	-0.8845428	.3741159	-2.36	0.018	-1.617796	-.1512892
1.mhealthcheckb4	1.045036	.1865284	5.60	0.000	.6794467	1.410624
v024						
central region	-1.30015	.3058855	-4.25	0.000	-1.899675	-.7006254
southern region	-.1568247	.28898	-0.54	0.587	-.7232151	.4095656
1.csect	.1357371	.3444462	0.39	0.694	-.5393651	.8108393
seasons						
winter-dry season	-.4689713	.1816033	-2.58	0.010	-.8249073	-.1130353
hot-dry season	-.3066991	.2243257	-1.37	0.172	-.7463693	.1329712
1.tvradio	.2937194	.1834508	1.60	0.109	-.0658376	.6532763
1.moneyfortreat	.2809621	.1875293	1.50	0.134	-.0865885	.6485128
age						
25-34	-.0799232	.2136347	-0.37	0.708	-.4986395	.338793
35-49	-.1107844	.3143305	-0.35	0.725	-.7268608	.5052921
education						
primary	-.0832832	.192382	-0.43	0.665	-.460345	.2937786
secondary	.0059672	.5433205	0.01	0.991	-1.058921	1.070856
1.employment	-.1410728	.168207	-0.84	0.402	-.4707525	.1886069
wealthrural						
2	.2439843	.2394932	1.02	0.308	-.2254137	.7133824
3	.0747846	.2509899	0.30	0.766	-.4171466	.5667159
4	-.2102195	.2827288	-0.74	0.457	-.7643577	.3439187
5	-.0479474	.3093492	-0.15	0.877	-.6542606	.5583658
birthnum						
2-3	-.0039298	.2223776	-0.02	0.986	-.439782	.4319223
4+	-.1056672	.2890567	-0.37	0.715	-.6722079	.4608735
nsize						
1	-.236357	.3290085	-0.72	0.473	-.8812019	.4084878
2	-.2745631	.2016245	-1.36	0.173	-.6697398	.1206137
4	-.2820862	.2832901	-1.00	0.319	-.8373245	.2731521
5	-.0988556	.3926725	-0.25	0.801	-.8684795	.6707683
nsex						
female	.0927126	.1543464	0.60	0.548	-.2098009	.3952261
_cons	-3.254268	.5589815	-5.82	0.000	-4.349852	-2.158685

. margins, dydx(*)

Average marginal effects
Model VCE : Robust

Number of obs = 10,083

Expression : Pr(binarympnc1 != 0), predict()

dy/dx w.r.t. : clinic5_pnc hc5_pnc hosp5_pnc clinic10_pnc hc10_pnc hosp10_pnc clinic15_pnc

hc15_pnc hosp15_pnc
 2.religion 3.religion 1.mhealthcheckb4 2.v024 3.v024 1.csect 2.seasons
 3.seasons 1.tvradio
 1.moneyfortreat 2.age 3.age 2.education 3.education 1.employment
 2.wealthrural 3.wealthrural
 4.wealthrural 5.wealthrural 2.birthnum 3.birthnum 1.nsize 2.nsize 4.nsize
 5.nsize 1.nsex

	Delta-method				[95% Conf. Interval]	
	dy/dx	Std. Err.	z	P> z		
clinic5_pnc	.0143076	.0094904	1.51	0.132	-.0042934	.0329085
hc5_pnc	-.0030781	.0041321	-0.74	0.456	-.011177	.0050207
hosp5_pnc	-.019222	.007577	-2.54	0.011	-.0340726	-.0043715
clinic10_pnc	.0038385	.0057711	0.67	0.506	-.0074728	.0151497
hc10_pnc	.0001658	.0048301	0.03	0.973	-.0093011	.0096326
hosp10_pnc	-.0022356	.0045921	-0.49	0.626	-.011236	.0067647
clinic15_pnc	-.0091155	.0049898	-1.83	0.068	-.0188954	.0006644
hc15_pnc	-.0060075	.0047532	-1.26	0.206	-.0153236	.0033086
hosp15_pnc	-.0077876	.0044498	-1.75	0.080	-.016509	.0009338
religion						
other christian	.0025614	.0043975	0.58	0.560	-.0060576	.0111803
muslim/no religion	-.0123316	.0052788	-2.34	0.019	-.0226778	-.0019854
1.mhealthcheckb4	.0200537	.0039375	5.09	0.000	.0123364	.027771
v024						
central region	-.023727	.0076962	-3.08	0.002	-.0388113	-.0086427
southern region	-.0045818	.0087207	-0.53	0.599	-.021674	.0125104
1.csect	.0028409	.0076263	0.37	0.710	-.0121063	.0177882
seasons						
winter-dry season	-.0090584	.0034906	-2.60	0.009	-.0158999	-.0022168
hot-dry season	-.0063557	.0044843	-1.42	0.156	-.0151448	.0024334
1.tvradio	.0059821	.0039272	1.52	0.128	-.0017151	.0136792
1.moneyfortreat	.0055003	.0037023	1.49	0.137	-.0017561	.0127566
age						
25-34	-.0016054	.0043093	-0.37	0.709	-.0100514	.0068407
35-49	-.0021944	.0061354	-0.36	0.721	-.0142196	.0098307
education						
primary	-.0016194	.0036944	-0.44	0.661	-.0088602	.0056214
secondary	.0001208	.0110277	0.01	0.991	-.0214931	.0217348
1.employment	-.0028557	.0034523	-0.83	0.408	-.0096221	.0039106
wealthrural						
2	.0053119	.0051224	1.04	0.300	-.0047278	.0153517
3	.0015048	.0050297	0.30	0.765	-.0083533	.0113629
4	-.0037151	.0050463	-0.74	0.462	-.0136056	.0061755

5	-.0009119	.0058832	-0.16	0.877	-.0124427	.0106189
birthnum						
2-3	-.0000809	.0045811	-0.02	0.986	-.0090596	.0088979
4+	-.0020766	.0057545	-0.36	0.718	-.0133552	.009202
nsize						
1	-.0047123	.0060533	-0.78	0.436	-.0165767	.007152
2	-.0053823	.0038152	-1.41	0.158	-.0128599	.0020952
4	-.0055115	.005039	-1.09	0.274	-.0153877	.0043647
5	-.0020957	.0080219	-0.26	0.794	-.0178182	.0136269
nsex						
female	.00184	.0030505	0.60	0.546	-.0041389	.007819

Note: dy/dx for factor levels is the discrete change from the base level.

```
. xtgee binarypnc1 clinic5_pnc hc5_pnc hosp5_pnc ///
> clinic10_pnc hc10_pnc hosp10_pnc ///
> clinic15_pnc hc15_pnc hosp15_pnc ///
> i.religion i.newborncheckb4 i.v024 i.csect i.seasons i.tvradio i.moneyfortreat i.age
i.education i.employment i.wealt
> hrural ///
> i.birthnum ib3.nsize i.nsex [pweight=weight] if residence == 1 & del == 1,
family(binomial) link(logit) corr(exchange
> able)
```

```
Iteration 1: tolerance = .07039326
Iteration 2: tolerance = .00476555
Iteration 3: tolerance = .00041952
Iteration 4: tolerance = .00003763
Iteration 5: tolerance = 3.219e-06
Iteration 6: tolerance = 2.738e-07
```

```
GEE population-averaged model
Group variable:          DHSCLUST      Number of obs      =      10,029
Link:                   logit          Number of groups   =         677
Family:                 binomial       Obs per group:
Correlation:           exchangeable    min =                3
                                                avg =               14.7
                                                max =                24
                                                Wald chi2(35)      =       74.44
Scale parameter:       1              Prob > chi2        =       0.0001
```

(Std. Err. adjusted for clustering on DHSCLUST)

binarypnc1	Coef.	Robust Std. Err.	z	P> z	[95% Conf. Interval]	
clinic5_pnc	.1592292	.4533041	0.35	0.725	-.7292306	1.047689
hc5_pnc	-.0878108	.2072615	-0.42	0.672	-.4940359	.3184142
hosp5_pnc	-.3815608	.3348106	-1.14	0.254	-1.037778	.2746558
clinic10_pnc	.3140642	.2638555	1.19	0.234	-.2030831	.8312115
hc10_pnc	.0107584	.2246796	0.05	0.962	-.4296056	.4511224
hosp10_pnc	-.2508252	.2200244	-1.14	0.254	-.6820651	.1804148

clinic15_pnc	-.2159594	.2358621	-0.92	0.360	-.6782407	.2463218
hc15_pnc	-.0103317	.2760479	-0.04	0.970	-.5513757	.5307122
hosp15_pnc	-.5034406	.2162782	-2.33	0.020	-.9273381	-.0795432
religion						
other christian	-.0079197	.2414954	-0.03	0.974	-.4812419	.4654026
muslim/no religion	-.8244875	.3700309	-2.23	0.026	-1.549735	-.0992403
1.newborncheckb4	.8187613	.2180956	3.75	0.000	.3913018	1.246221
v024						
central region	-.1662744	.34166	-0.49	0.626	-.8359157	.5033668
southern region	.6942752	.3253216	2.13	0.033	.0566566	1.331894
1.csect	-.8705064	.5477849	-1.59	0.112	-1.944145	.2031322
seasons						
winter-dry season	-.0378576	.168134	-0.23	0.822	-.3673942	.291679
hot-dry season	-.3442228	.2252901	-1.53	0.127	-.7857833	.0973376
1.tvradio	.5112954	.1654452	3.09	0.002	.1870288	.835562
1.moneyfortreat	.222512	.1906698	1.17	0.243	-.151194	.596218
age						
25-34	-.0571585	.2497972	-0.23	0.819	-.5467521	.4324351
35-49	.0138417	.3213793	0.04	0.966	-.6160502	.6437336
education						
primary	-.2265254	.2171458	-1.04	0.297	-.6521233	.1990725
secondary	-.4866257	.4533709	-1.07	0.283	-1.375216	.401965
1.employment	.2196585	.1918304	1.15	0.252	-.1563222	.5956392
wealthrural						
2	.1244027	.2300126	0.54	0.589	-.3264137	.575219
3	-.0551581	.2331566	-0.24	0.813	-.5121367	.4018205
4	.0858332	.2563297	0.33	0.738	-.4165638	.5882303
5	-.5613781	.2962781	-1.89	0.058	-1.142072	.0193162
birthnum						
2-3	-.0420841	.2375211	-0.18	0.859	-.5076168	.4234487
4+	-.2449537	.2972758	-0.82	0.410	-.8276035	.3376962
nsize						
1	-.1144312	.3137006	-0.36	0.715	-.729273	.5004107
2	.0998381	.2140163	0.47	0.641	-.3196262	.5193024
4	.2353946	.2447188	0.96	0.336	-.2442454	.7150345
5	-.1651065	.3894495	-0.42	0.672	-.9284135	.5982006
nsex						
female	-.0734919	.1552193	-0.47	0.636	-.3777161	.2307323
_cons	-4.708283	.6046381	-7.79	0.000	-5.893352	-3.523214

. margins, dydx(*)

1.employment	.0037014	.0031482	1.18	0.240	-.002469	.0098717
wealthrural						
2	.0024107	.0044498	0.54	0.588	-.0063107	.0111322
3	-.0009822	.0041561	-0.24	0.813	-.009128	.0071636
4	.0016331	.0048891	0.33	0.738	-.0079493	.0112155
5	-.0079551	.004196	-1.90	0.058	-.0161791	.000269
birthnum						
2-3	-.0008083	.0045917	-0.18	0.860	-.0098078	.0081913
4+	-.004287	.0053209	-0.81	0.420	-.0147158	.0061418
nsize						
1	-.0018354	.0048715	-0.38	0.706	-.0113833	.0077125
2	.0017711	.0038497	0.46	0.645	-.0057741	.0093163
4	.0044565	.004936	0.90	0.367	-.0052179	.0141308
5	-.0025868	.0057046	-0.45	0.650	-.0137677	.008594
nsex						
female	-.001291	.0027339	-0.47	0.637	-.0066493	.0040673

Note: dy/dx for factor levels is the discrete change from the base level.

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end of do-file

