

**Supplemental Table 1.** Distribution of the outcomes by categories of the explanatory variables.

	Any antenatal care (n = 8,567)		Four or more total antenatal visits (n = 8,575)		First antenatal visit in the first trimester (n = 5,373)		Institutional delivery (n = 7,922)	
	No	Yes	No	Yes	No	Yes	No	Yes
Age in years 20-34	2,051	3,555	5,097	514	2,075	1,455	3,182	2,007
15-19	118	225	316	27	130	93	166	153
35-49	984	1,634	2,412	209	966	654	1,512	902
Married and monogamous	1,763	2,978	4,353	394	1,750	1,205	2,664	1,745
Polygamous with 1 <sup>st</sup> wife	635	1,161	1,633	163	680	469	1,035	619
Polygamous with 2 <sup>nd</sup> or higher order wife	681	1,202	1,701	184	708	490	1,090	653
Single, widowed, divorced or separated	74	73	138	9	33	38	71	45
Ethnicity Dogon	2,896	5,115	7,329	690	3,012	2,065	4,519	2,879
Peulh	207	161	333	35	83	77	256	95
Others	50	138	163	25	76	60	85	88
No formal education	3,030	4,929	7,298	661	2,937	1,946	4,626	2,736
Education any school (Madrasah or French)	123	485	521	87	230	252	228	325
Occupation Housewife	2,841	4,588	6,849	587	2,714	1,840	4,370	2,488
Small business or trader	312	826	976	163	457	362	490	574
SES Poorest	631	1,063	1,580	114	615	436	1,027	564
Poor	654	1,087	1,581	164	624	451	1,024	590
Middle	669	1,118	1,631	157	685	432	986	660
Rich	662	1,061	1,581	144	627	432	973	615
Richest	537	1,085	1,452	171	620	451	850	633
Season Heat (Mar-May)	700	1,295	1,790	206	741	544	1,173	668
June	187	410	539	59	221	186	315	228
July	159	299	414	44	173	124	230	186
August	190	373	518	47	227	146	308	221
Sept	182	377	512	47	216	157	310	207
Oct-Nov	435	801	1,118	118	461	330	697	456
Cold (Dec-Feb)	1,300	1,859	2,934	229	1,132	715	1,827	1,096
Birth year 2012	572	945	1,380	139	585	354	885	514
2013	694	1,117	1,663	152	673	436	1,056	613
2014	686	1,146	1,690	143	653	483	1,041	654
2015	597	1,104	1,527	175	628	469	947	635
2016	589	1,080	1,530	139	619	451	902	639
2017	15	22	35	2	13	9	29	7

**Supplemental Table 2.** Adjusted\* associations for antenatal care seeking indicators and place of delivery amongst those who delivered between 2012 and 2017 in different distance categories. The distance is between the residences and the nearest primary health facility in rural Mali.

	<b>Distances categories (in kilometers)</b>	<b>OR</b>	<b>95% CI</b>		<b>p-val</b>
<b><i>Any antenatal care (yes vs. no)</i></b>	<2	1.00			
	≥2 - <5	0.56	0.41	0.75	0.000
	≥5 - <7	0.66	0.43	1.01	0.054
	≥7 - <10	0.59	0.40	0.85	0.005
	≥10	0.45	0.29	0.70	0.000
<b><i>Four or more total antenatal visits (yes vs. no)</i></b>	<2	1.00			
	≥2 - <5	0.66	0.51	0.86	0.002
	≥5 - <7	0.57	0.40	0.82	0.002
	≥7 - <10	0.44	0.30	0.66	0.000
	≥10	0.39	0.23	0.65	0.000
<b><i>First antenatal visit in the first trimester (yes vs. no)</i></b>	<2	1.00			
	≥2 - <5	0.71	0.53	0.94	0.016
	≥5 - <7	0.60	0.43	0.83	0.002
	≥7 - <10	0.55	0.38	0.78	0.001
	≥10	0.60	0.44	0.82	0.002
<b><i>Number of antenatal visits (count)</i></b>	<2	1.00			
	≥2 - <5	0.75	0.67	0.84	0.000
	≥5 - <7	0.79	0.67	0.93	0.006
	≥7 - <10	0.69	0.59	0.80	0.000
	≥10	0.62	0.50	0.76	0.000
<b><i>Delay in seeking first ANC (in days)</i></b>	<2	0.00			
	≥2 - <5	0.30	0.10	0.51	0.004
	≥5 - <7	0.39	0.16	0.62	0.001
	≥7 - <10	0.47	0.22	0.72	0.000
	≥10	0.44	0.19	0.69	0.001
<b><i>Facility delivery (yes vs. no)</i></b>	<2	1.00			
	≥2 - <5	5.51	3.46	8.77	0.000
	≥5 - <7	9.22	4.39	19.40	0.000
	≥7 - <10	11.25	5.77	21.93	0.000
	≥10	8.86	4.23	18.58	0.000

\* Adjusted for year of delivery, season of delivery, maternal age, marital status, ethnicity, maternal education, maternal occupation, wealth index and clustering of women in villages.