Population level trends over a decade in geographical inequality for opportunity in access to maternal care services: findings from the National Family Health Surveys in India

Supplementary file

Correspondence to: Prof. Rakhi Dandona; rakhi.dandona@phfi.org

Supplementary Table 1. Number of districts by state in the National Family Health Survey (NFHS) rounds 4 and 5.

Number of districts								
	NFHS-4	NFHS-5						
India	628	695						
Less developed	363	395						
Arunachal Pradesh	16	20						
Assam	27	33						
Bihar	38	38						
Chhattisgarh	18	27						
Jharkhand	24	24						
Madhya Pradesh	50	51						
Manipur	9	9						
Meghalaya	7	11						
Mizoram	8	8						
Nagaland	11	11						
Odisha	30	30						
Rajasthan	33	33						
Sikkim	4	4						
Tripura	4	8						
Uttar Pradesh	71	75						
Uttarakhand	13	13						
More developed	265	300						
Andhra Pradesh	13	13						
Delhi	9	11						
Goa	2	2						
Gujarat	26	33						
Haryana	21	22						
Himachal Pradesh	12	12						
Jammu & Kashmir [§]	22	22						
Karnataka	30	30						
Kerala	14	14						
Maharashtra	35	36						
Punjab	20	22						
Tamil Nadu	32	32						
Telangana	10	31						
West Bengal	19	20						

Supplemental material

Supplementary Table 2. Coverage of four of more antenatal care (ANC) visits, institutional delivery with skilled birth attendant (SBA), and post-natal care within 48 hours of delivery, and continuum of care for the most recent livebirth in the last 5 years in the National Family Health Survey (NFHS) 4 and NFHS 5 for India and its states. CI denotes confidence interval.

NFHS-4 NFHS-5 (N) (N) % of N (95% CI)	NFHS-5 % of N (95% CI)	Percent change from NFHS-4 to	NFHS-4 % of N	NFHS-5	Percent	NFHS-4	NFHS-5	Percent	NFHS-4	NFHS-5	Percent change
		NFHS-5 (95% CI)	% OI N (95% CI)	% of N (95% CI)	change from NFHS- 4 to NFHS-5 (95% CI)	% of N (95% CI)	% of N (95% CI)	change from NFHS- 4 to NFHS-5 (95% CI)	% of N (95% CI)	% of N (95% CI)	from NFHS-4 to NFHS-5 (95% CI)
India 188,506 [†] 174,796 46.4 (46.2-46.7)	57.0 (56.8-57.3)	22.8 (22.1-23.5)	75.5 (75.3-75.7)	85.0 (84.9-85.2)	12.6 (12.2-12.9)	61.4 (61.2 - 61.6)	78.9 (78.7-79.1)	28.5 (28.0-29.0)	32.9 (32.7-33.1)	45.6 (45.4-45.9)	38.6 (37.6-39.6)
Less 132,809 113,519 36.0 developed (35.7-36.3)	48.0 (47.7-48.3)	33.3 (32.3-34.3)	70.6 (70.3-70.8)	80.9 (80.7-81.2)	14.6 (14.1-15.1)	57.0 (56.7-57.2)	75.1 (74.8-75.3)	31.8 (31.1-32.4)	24.8 (24.6- 25.1)	36.5 (36.3-36.8)	47.2 (45.7-48.6)
Arunachal 3,858 4,570 24.6	37.2	51.2	52.7	80.6	52.9	27.5	55.4	101.5	11.8	25.3	114.7
Pradesh (23.3- 26.0)	(35.8-38.6)	(45.1-57.4)	(51.1-54.2)	(79.4-81.7)	(49.8-56.1)	(26.1-28.9)	(53.9-56.8)	(95.7-107.2)	(10.8- 12.8)	(24.1-26.6)	(104.4-124.4)
Assam 8,534 9,247 45.4	50.9	12.1	72.5	84.8	17.0	56.9	67.8	19.1	29.9	35.5	18.7
(44.3-46.4)	(49.8-51.9)	(9.5-14.7)	(71.5-73.4)	(84.1-85.5)	(15.6-18.4)	(55.8-57.9)	(66.8-68.7)	(17.1-21.2)	(20.9-30.9)	(34.5-36.5)	(15.1-22.4)
Bihar 16,822 13,874 14.6	25.5	74.7	66.0	75.1	13.8	47.8	65.4	36.8	9.0	17.8	97.8
(14.1 -15.2)	(24.7-26.2)	(70.0-79.3)	(65.3-66.7)	(74.4-75.8)	(12.5-15.0)	(47.1-48.6)	(64.6-66.2)	(35.0-38.7)	(8.6- 9.4)	(17.2-18.4)	(91.5-104.1)
Chhattisgarh 6,805 6,526 56.9	61.2	7.6	71.8	82.1	14.3	67.2	87.2	29.8	37.6	47.3	25.8
(55.7 - 58.0)	(60.0-62.4)	(5.3-9.9)	(70.7-72.8)	(81.2-83.0)	(12.7-16.0)	(66.0-68.3)	(86.3-87.9)	(28.0-31.5)	(36.4-38.7)	(46.1-48.5)	(22.4-29.2)
Jharkhand 8,947 7,465 29.9	38.6	29.1	63.8	74.5	16.8	46.8	74.0	58.1	17.0	27.0	58.8
(29.0 - 30.9)	(37.5-39.7)	(25.4-32.8)	(62.8-64.8)	(73.5-75.5)	(15.0-18.5)	(45.8-47.8)	(73.0-75.0)	(55.6-60.6)	(16.2-17.8)	(26.0-28.0)	(53.3-64.4)
Madhya 17,406 11,700 34.9	57.0	63.3	75.9	86.6	14.1	55.9	85.1	52.2	23.1	46.1	99.6
Pradesh (34.1-35.6)	(56.1-57.9)	(60.9-65.7)	(75.2-76.5)	(86.0-87.2)	(13.2-15.0)	(55.1-56.6)	(84.4-85.7)	(50.8-53.7)	(22.4 -23.7)	(45.2-47.0)	(96.2-102.9)
Manipur 4,429 2,511 65.1 (63.7-66.5)	68.7 (66.8-70.4)	5.5 (2.9-8.2)	67.9 (66.5-69.3)	70.9 (69.1-72.6)	4.4 (1.9-6.9)	62.8 (61.4-64.2)	64.9 (62.9-66.7)	3.3 (0.5-6.2)	49.2 (47.7 -50.7)	50.9 (48.9-52.8)	3.5 (-0.3-7.2)
Meghalaya 3,119 4,602 50.1	50.3	0.4	56.0	58.6	4.6	58.0	58.3	0.5	32.1	23.9	-25.5
(48.4-51.9)	(48.8-51.7)	(-3.5-4.3)	(54.3-57.8)	(57.2-60.0)	(1.2-8.1)	(56.3-59.8)	(56.8-59.7)	(-2.8-3.8)	(30.4 -33.7)	(22.7-25.1)	(-31.1 to -20.0)
Mizoram 3,681 1,896 56.4	52.4	-7.1	78.1	79.3	1.5	62.8	68.1	8.4	41.5	42.1	1.4
(54.8-58.0)	(50.2-54.7)	(-10.6 to - 3.6)	(76.7-79.4)	(77.4-81.0)	(-0.5- 3.6)	(61.2-64.3)	(65.9-70.1)	(5.4-11.5)	(39.9 -43.1)	(39.9-44.4)	(-3.3-6.2)
Nagaland 3,136 2,205 13.5	15.6	15.6	33.8	42.5	25.7	22.6	43.2	91.2	7.6	9.4	23.7
(12.3-14.7)	(14.1-17.2)	(5.2-25.9)	(32.2-35.5)	(40.5-44.6)	(20.0-31.4)	(21.2-24.1)	(41.2-45.3)	(83.3-99.0)	(6.7- 8.6)	(8.3-10.7)	(9.3-38.1)
Odisha 9,015 7,141 64.7	80.0	23.6	83.3	90.1	8.1	77.4	92.1	19.0	47.8	69.4	45.2
(63.7-65.7)	(79.1-80.9)	(22.0-25.3)	(82.5-84.0)	(89.4-90.7)	(7.1-9.2)	(76.5-78.3)	(91.5-92.7)	(17.8-20.2)	(46.8 -48.8)	(68.4-70.5)	(42.8-47.6)
Rajasthan 11,950 10,831 38.3	56.5	47.5	85.0	95.0	11.8	65.2	85.2	30.7	29.1	49.4	69.8
(37.5-39.2) Sikkim 899 569 74.9	(55.6-57.5) 65.4	(44.9-50.1) -12.7	(84.4-85.6) 95.2	(94.5-95.4) 96.3	(11.0-12.6) 1.2	(64.3-66.0) 75.0	(84.5-85.9) 73.5	(28.3-32.1) -2.1	(28.2 -29.9) 56.0	(48.5-50.4) 52.0	(66.5-73.0) -7.1
(71.9-77.6)	(61.4-69.2)	(-17.0 to - 8.3)	(93.6-96.4)	(94.4-97.5)	(-0.5-2.8)	(72.0-77.7)	(69.7-76.9)	(-6.3-2.3)	(52.7-59.2)	(47.9-56.1)	(-13.7 to -0.6)
Tripura 1,169 1,860 63.5 (60.7-66.2)	54.0 (51.7-56.2)	-15.0 (-19.7 to - 10.3)	80.3 (77.9-82.5)	86.8 (85.2-88.3)	8.1 (5.1-11.1)	61.2 (58.4-64.0)	68.6 (66.4-70.7)	12.1 (7.2-17.0)	45.9 (43.0 -48.7)	39.7 (37.5-42.0)	-13.5 (-20.2 to -6.8)
Uttar 28,741 25,556 27.4	41.5	51.5	68.1	81.1	19.1	59.1	76.9	30.1	20.0	31.1	55.5
Pradesh (26.9-27.9)	(40.9-42.1)	(49.3-53.7)	(67.5-68.6)	(80.6-81.5)	(18.2-20.0)	(58.6 - 59.7)	(76.4-77.4)	(29.1-31.2)	(19.5 -20.4)	(30.5-31.7)	(52.8-58.2)
Uttarakhand 4,298 2,966 29.7 (28.3-31.1)	60.6 (58.8-62.3)	104.0 (98.7- 109.4)	67.9 (66.5-69.2)	80.1 (78.6-81.5)	18.0 (15.7-20.3)	56.9 (55.4-58.4)	84.2 (82.8-85.4)	48.0 (45.2-50.8)	20.5 (19.3 -21.7)	47.7 (45.9-49.5)	132.7 (125.5-139.9)
More 55,697 61,277 71.3	73.7	3.4	87.2	92.6	6.2	71.9	86.0	19.6	52.3	62.5	19.5
developed (70.9-71.7)	(73.4-74.1)	(2.6-4.1)	(86.9-87.5)	(92.4-92.8)	(5.8-6.6)	(71.5-72.3)	(85.7-86.3)	(19.0-20.3)	(51.9- 52.7)	(62.2-62.9)	(18.4-20.6)
Andhra 4,055 2,092 75.7	69.3	-8.5	89.5	95.7	6.9	79.3	90.8	14.5	57.8	62.2	7.6
Pradesh (73.9 - 77.4)	(67.2-71.2)	(-11.0 to - 5.9)	(88.2-90.7)	(94.8-96.5)	(5.5-8.4)	(77.6 – 80.9)	(89.5-91.9)	(12.3-16.7)	(55.7–59.8)	(60.1-64.3)	(3.8-11.5)
Delhi 1,258 2,379 71.4	79.9	11.9	88.0	91.7	4.2	63.3	87.2	37.8	46.6	69.6	49.4

State	ate Sample size		Four of more ANC visits			Institutional delivery with SBA*			Post-natal care within 48 hours of delivery			Continuum of care			
	NFHS-4	NFHS-5 (N)	NFHS-4 % of N	NFHS-5 % of N	Percent change from	NFHS-4 % of N	NFHS-5 % of N	Percent change from NFHS-	NFHS-4 % of N	NFHS-5 % of N	Percent change from NFHS-	NFHS-4 % of N	NFHS-5 % of N	Percent change from NFHS-4 to NFHS-5 (95% CI)	
	(N)	(N)	% OI N (95% CI)	% OI N (95% CI)	NFHS-4 to NFHS-5 (95% CI)	% OI N (95% CI)	% OT N (95% CI)	4 to NFHS-5 (95% CI)	% OT N (95% CI)	% OF N (95% CI)	4 to NFHS-5 (95% CI)	(95% CI)	% OI N (95% CI)	NFH3-3 (93% CI)	
			(68.8 - 73.8)	(78.2-81.4)	(8.3-15.6)	(86.1-89.7)	(90.5-92.7)	(2.1-6.3)	(60.6 - 66.0)	(85.8-88.5)	(33.3-42.1)	(43.9 - 49.4)	(67.7-71.4)	(43.2-55.5)	
Goa	347	322	87.6 (83.7 - 90.7)	93.2 (89.8-95.4)	6.4 (2.2-10.5)	96.8 (94.4-98.2)	98.8 (96.7-99.5)	2.1 (0.1-4.0)	91.4 (87.9 - 93.9)	96.3 (93.5-97.9)	5.4 (2.0-8.7)	80.7 (76.2 - 84.5)	90.1 (86.3-92.9)	11.6 (6.3-17.0)	
Gujarat	5,827	7,575	66.4 (65.2 - 67.6)	77.7 (76.7-78.6)	17.0 (15.1-19.0)	83.9 (82.9-84.8)	90.3 (89.6-90.9)	7.6 (6.4-8.8)	62.9 (61.7 - 64.2)	89.4 (88.6-90.0)	42.1 (40.1-44.2)	42.3 (41.0- 43.5)	66.3 (65.3-67.4)	56.7 (53.5-60.0)	
Haryana	5,719	5,162	45.4 (44.1 - 46.7)	60.8 (59.4-62.1)	33.9 (30.7-37.1)	82.1 (81.1-83.1)	93.4 (92.6-94.0)	13.8 (12.5-15.0)	68.3 (67.0 - 69.5)	91.3 (90.5-92.0)	33.7 (31.8-35.5)	34.3 (33.1 - 35.6)	55.6 (54.3-57.0)	62.1 (58.0-66.2)	
Himachal Pradesh	2,292	2,145	66.2 (64.3 - 68.1)	71.8 (69.8-73.6)	8.5 (5.3-11.7)	75.9 (74.1-77.6)	84.3 (82.7-85.8)	11.1 (8.6-13.6)	73.6 (71.8 - 75.4)	88.9 (87.5-90.2)	20.8 (18.2-23.4)	49.5 (47.4 - 51.5)	59.3 (57.261.3)	19.8 (15.2-24.4)	
Jammu & Kashmir [§]	6,280	5,367	79.5 (78.5 - 80.5)	80.7 (79.6-81.7)	1.5 (0.1-2.9)	83.2 (82.2-84.1)	91.0 (90.2-91.7)	9.4 (8.2-10.6)	73.0 (71.9 - 74.1)	80.3 (79.2-81.3)	10.0 (8.4-11.6)	61.8 (60.6 - 63.0)	65.1 (63.8-66.4)	5.3 (3.2-7.5)	
Karnataka	5,876	6,389	73.5 (72.3 - 74.6)	70.8 (69.6-71.9)	-3.7 (-5.4 to - 2.0)	90.7 (90.0-91.5)	92.5 (91.8-93.1)	2.0 (1.1-2.9)	60.5 (59.2 - 61.7)	86.4 (85.5-87.2)	42.8 (40.6-45.0)	44.6 (43.3 - 45.9)	59.1 (57.9-60.3)	32.5 (29.4-35.6)	
Kerala	2,128	2,360	90.3 (89.0 - 91.5)	82.2 (80.6-83.7)	-9.0 (-10.6 to - 7.4)	99.9 (99.6-100.0)	99.8 (99.5-99.9)	-0.1 (-0.3-0.1)	86.3 (84.7 - 87.7)	92.8 (91.7-93.8)	7.5 (5.7-9.3)	78.4 (76.6 - 80.1)	77.9 (76.2-79.5)	-0.6 (-3.1-1.8)	
Maharashtra	7,143	7,415	72.3 (71.3 - 73.3)	71.3 (70.3-72.3)	-1.4 (-3.0- 0.2)	86.7 (85.9-87.5)	91.0 (90.3-91.6)	5.0 (4.0-5.9)	76.9 (75.9 - 77.9)	84.1 (83.3-84.9)	9.4 (8.0-10.7)	54.4 (53.2 - 55.5)	60.2 (59.1-61.3)	10.7 (8.3-13.0)	
Punjab	4,132	4,520	68.2 (66.7 - 69.6)	58.3 (56.8-59.7)	-14.5 (-16.8 to - 12.2)	92.0 (91.2-92.8)	94.1 (93.4-94.7)	2.3 (1.3-3.2)	88.4 (87.4 - 89.3)	87.1 (86.1-88.0)	-1.5 (-2.7 to -0.3)	59.1 (57.6 - 60.6)	50.2 (48.7-51.6)	-15.1 (-17.8 to -12.3)	
Tamil Nadu	6,181	5,228	80.7 (79.7 - 81.7)	91.6 (90.8-92.3)	13.5 (12.2-14.8)	98.8 (98.5-99.1)	99.5 (99.3-99.7)	0.7 (0.4-1.0)	72.4 (71.3 - 73.5)	92.2 (91.4-92.9)	27.3 (25.7-29.0)	60.8 (59.6 - 62.0)	84.9 (84.0-85.9)	39.6 (37.5-41.8)	
Telangana	NA	5,429	73.1 (71.0 - 75.1)	69.7 (68.5-70.9)	-4.7 (-7.6 to - 1.7)	87.2 (85.6-88.7)	91.4 (90.6-92.1)	4.8 (3.0-6.6)	81.7 (79.8 - 83.4)	86.6 (85.7-87.5)	6.0 (3.7-8.2)	57.6 (55.3– 59.9)	56.9 (55.6-58.2)	-1.2 (-5.3-2.9)	
West Bengal	4,459	4,894	74.2 (72.9 - 75.5)	75.7 (74.4-76.9)	2.0 (0.1-3.9)	77.0 (75.8-78.2)	91.2 (90.4-91.9)	18.4 (16.8-20.1)	63.1 (61.7 - 64.5)	68.2 (66.9-69.5)	8.1 (5.6-10.5)	47.4 (46.0 - 48.9)	52.0 (50.6-53.4)	9.7 (6.3-13.1)	

^{*}Includes doctor, auxiliary nurse midwife, nurse, midwife, and lady health visitor

Supplemental material

[†]Data missing on 101 women for institutional delivery with SBA, PNC within 48 hours of delivery, and continuum of care in NFHS-4

 $^{^{\}S}$ Ladakh is combined with Jammu & Kashmir in NFHS-5; NFHS 4 did not provide separate data for Ladakh

Supplementary Table 3. Human Opportunity Index for geographic inequality for four of more antenatal care (ANC) visits, institutional delivery with skilled birth attendant (SBA), post-natal care within 48 hours of delivery and continuum of care for the most recent livebirth in the last 5 years in the National Family Health Survey (NFHS) rounds 4 and 5 for India and its states. CI denotes confidence interval.

	Human Opportunity Index											
		Four of n	nore ANC visits	Institutional delivery with SBA			Post-na	atal care wit	hin 48 hours of delivery	Continuum of care		
	NFHS-4	NFHS-5	Percent change from NFHS 4 to NFHS-5 (95% CI)	NFHS-4	NFHS-5	Percent change from NFHS 4 to NFHS-5 (95% CI)	NFHS-4	NFHS-5	Percent change from NFHS 4 to NFHS-5 (95% CI)	NFHS-4	NFHS-5	Percent change from NFHS 4 to NFHS-5 (95% CI)
India	35.8	48.4	35.2 (34.5 to 35.9)	68.9	80.4	16.7 (16.4 to 17.0)	54.6	73.5	34.6 (34.2 to 35.1)	24.4	37.1	52.2 (51.1 to 53.0)
Less developed states	27.9	40.7	45.9 (44.9 to 46.9)	64.5	76.2	18.1 (17.7 to 18.6)	50.6	69.4	37.2 (36.6 to 37.8)	18.5	29.7	60.5 (59.2 to 61.9)
Arunachal Pradesh	20.2	34.3	69.8 (62.7 to 76.9)	47.0	77.5	64.9 (61.3 to 68.5)	22.7	51.9	128.6 (122.1 to 135.2)	8.2	21.9	167.1 (154.4 to 179.8)
Assam	40.7	45.6	12.0 (9.2 to 14.9)	66.5	82.3	23.8 (22.1 to 25.4)	51.1	64.7	26.6 (24.3 to 28.9)	24.9	31.0	24.5 (20.3 to 28.7)
Bihar	12.8	22.9	78.9 (73.9 to 83.9)	61.0	72.1	18.2 (16.8 to 19.6)	43.1	59.6	38.3 (36.2 to 40.3)	7.7	15.3	98.7 (91.8 to 105.6)
Chhattisgarh	52.0	57.2	10.0 (7.5 to 12.5)	68.6	78.5	14.4 (12.7 to 16.2)	63.0	85.3	35.4 (33.5 to 37.3)	33.1	43.3	30.8 (27.0 to 34.6)
Jharkhand	25.0	36.0	44.0 (39.7 to 48.3)	59.5	70.4	18.3 (16.4 to 20.3)	43.2	70.9	64.1 (61.4 to 66.8)	13.8	24.1	74.6 (68.3 to 81.0)
Madhya Pradesh	29.4	52.2	77.6 (74.8 to 80.3)	70.8	84.1	18.8 (17.7 to 19.8)	51.3	82.8	61.4 (59.8 to 63.0)	19.1	41.2	115.7 (111.9 to 119.5)
Manipur	54.9	61.2	11.5 (8.2 to 14.8)	58.0	62.0	6.9 (3.8 to 10.0)	54.4	57.7	6.1 (2.7 to 9.4)	39.2	41.5	5.9 (1.3 to 10.4)
Meghalaya	44.3	45.4	2.5 (-1.9 to 6.9)	49.6	52.5	5.8 (1.9 to 9.8)	52.0	53.4	2.7 (-1.1 to 6.4)	26.4	20.5	-22.3 (-28.8 to -15.9)
Mizoram	52.4	46.6	-11.1 (-14.8 to -7.3)	72.1	72.4	0.4 (-2.0 to 2.9)	59.0	63.9	8.3 (5.0 to 11.6)	37.9	36.6	-3.4 (-8.5 to 1.6)
Nagaland	8.3	11.3	36.1 (22.3 to 50.0)	26.2	37.4	42.7 (35.8 to 49.7)	17.2	37.5	118.0 (108.5 to 127.5)	4.4	6.5	47.7 (28.0 to 67.5)
Odisha	59.2	76.2	28.7 (26.8 to 30.6)	79.2	87.3	10.2 (9.1 to 11.4)	74.4	90.7	21.9 (20.6 to 23.2)	42.6	64.8	52.1 (49.4 to 54.8)
Rajasthan	33.0	51.2	55.2 (52.2 to 58.1)	81.8	93.9	14.8 (13.9 to 15.7)	61.2	82.6	35.0 (33.4 to 36.5)	24.6	44.2	79.7 (76.0 to 83.3)
Sikkim	71.3	60.1	-15.7 (-20.5 to -10.9)	94.4	95.2	0.8 (-0.9 to 2.6)	71.9	70.4	-2.1 (-6.7 to 2.5)	52.1	48.3	-7.3 (-14.4 to -0.2)
Tripura	60.4	50.4	-16.6 (-21.6 to -11.5)	76.4	83.5	9.3 (5.9 to 12.7)	58.2	64.2	10.3 (5.1 to 15.5)	42.9	35.3	-17.7 (-24.8 to -10.6)
Uttar Pradesh	21.9	38.1	74.0 (71.4 to 76.6)	64.0	78.0	21.9 (20.9 to 22.8)	53.5	73.2	36.8 (35.6 to 38.0)	15.6	27.9	78.8 (75.6 to 82.1)
Uttarakhand	25.9	55.7	115.1 (109.0 to 121.1)	65.2	78.5	20.4 (18.0 to 22.8)	54.3	81.5	50.1 (47.1 to 53.1)	17.5	43.3	147.4 (139.3 to 155.5)
More developed states	65.2	68.2	4.6 (3.9 to 5.3)	82.8	90.1	8.8 (8.4 to 9.2)	66.2	82.6	24.8 (24.1 to 25.4)	45.7	56.3	23.2 (22.2 to 24.2)
Andhra Pradesh	74.3	68.3	-8.1 (-10.8 to -5.4)	88.0	95.4	8.4 (6.8 to 10.0)	77.6	90.4	16.5 (14.2 to 18.8)	56.1	59.3	5.7 (1.7 to 9.7)
Goa	86.0	92.4	7.4 (3.0 to 11.9)	96.7	98.5	1.9 (-0.2 to 3.9)	90.5	95.6	5.6 (2.1 to 9.2)	79.0	88.8	12.4 (6.7 to 18.1)
Gujarat	59.7	73.1	22.4 (20.2 to 24.7)	80.1	87.5	9.2 (7.9 to 10.6)	59.9	87.1	45.4 (43.2 to 47.6)	36.7	61.2	66.8 (63.1 to 70.4)
Haryana	37.3	56.6	51.7 (47.9 to 55.5)	75.6	90.5	19.7 (18.1 to 21.3)	61.3	88.7	44.7 (42.5 to 46.9)	27.2	51.2	88.2 (83.3 to 93.1)
Himachal Pradesh	61.7	67.1	8.8 (5.2 to 12.3)	72.7	82.5	13.5 (10.8 to 16.2)	69.8	87.3	25.1 (22.2 to 27.9)	45.4	54.3	19.6 (14.6 to 24.6)
Jammu & Kashmir*	71.9	76.3	6.1 (4.4 to 7.8)	77.8	87.9	13.0 (11.6 to 14.4)	67.1	77.2	15.1 (13.2 to 16.9)	53.3	59.5	11.6 (9.1 to 14.2)
Karnataka	69.3	65.1	-6.1(-7.9 to -4.2)	88.4	90.3	2.1 (1.1 to 3.1)	55.3	83.6	51.2 (48.8 to 53.6)	39.6	52.6	32.8 (29.4 to 36.3)
Kerala	88.9	77.3	-13.0 (-14.8 to -11.3)	99.8	99.7	-0.1 (-0.3 to 0.1)	84.2	91.5	8.7 (6.7 to 10.6)	75.7	72.9	-3.7 (-6.3 to -1.1)
Maharashtra	69.3	66.7	-3.8(-5.5 to -2.0)	83.9	88.2	5.1 (4.0 to 6.2)	74.2	80.8	8.9 (7.4 to 10.4)	50.0	54.5	9.0 (6.4 to 11.6)
Delhi	68.8	75.3	9.4 (5.5 to 13.3)	86.0	90.2	4.9 (2.6 to 7.2)	59.1	85.1	44.0 (39.3 to 48.7)	42.7	65.3	52.9 (46.2 to 59.7)
Punjab	64.6	54.7	-15.3 (-17.8 to -12.8)	91.1	92.9	2.0 (1.0 to 3.0)	86.9	85.4	-1.7 (-3.0 to -0.4)	55.5	46.9	-15.5 (-18.5 to -12.5)
Tamil Nadu	77.5	89.6	15.6 (14.2 to 17.0)	98.4	99.2	0.8 (0.5 to 1.1)	68.4	90.4	32.2 (30.4 to 33.9)	56.4	82.0	45.4 (43.0 to 47.7)
Telangana	71.8	68.2	-5.0 (-8.0 to -2.0)	85.6	90.4	5.6 (3.7 to 7.6)	79.9	85.4	6.9 (4.5 to 9.3)	55.7	54.9	-1.4 (-5.7 to 2.8)
West Bengal	69.4	72.2	4.0 (1.9 to 6.2)	71.3	89.2	25.1 (23.2 to 27.1)	58.0	63.8	10.7 (7.3 to 12.7)	42.0	47.3	12.6 (8.8 to 16.4)

^{*}Ladakh is combined with Jammu & Kashmir in NFHS-5; NFHS 4 did not provide separate data for Ladakh.

Supplemental material

Supplementary Table 4. Ratio of Human opportunity index (HOI) between wealth index quintiles I and V for the maternal services for India and its states, National Family Health Survey-5.

	Ratio of HOI between wealth index quintiles I and V									
	Four of more antenatal care visits	Institutional delivery with skilled birth attendant	Post-natal care within 48 hours of delivery	Continuum of care						
India	0.52	0.69	0.73	0.38						
Less developed states	0.55	0.69	0.74	0.41						
Arunachal Pradesh	0.43	0.58	0.70	0.38						
Assam	0.63	0.75	0.79	0.52						
Bihar	0.32	0.72	0.71	0.25						
Chhattisgarh	0.89	0.72	0.93	0.70						
Jharkhand	0.51	0.64	0.81	0.36						
Madhya Pradesh	0.72	0.83	0.91	0.60						
Manipur	0.40	0.40	0.48	0.30						
Meghalaya	0.66	0.47	0.88	0.50						
Mizoram	0.16	0.28	0.36	0.12						
Nagaland	0.27	0.35	0.47	0.06						
Odisha	0.84	0.81	0.94	0.69						
Rajasthan	0.77	0.92	0.92	0.73						
Sikkim	1.41	0.94	1.17	1.27						
Tripura	0.81	0.79	0.68	0.38						
Uttar Pradesh	0.60	0.76	0.80	0.44						
Uttarakhand	0.51	0.68	0.81	0.41						
More developed states	0.83	0.80	0.76	0.63						
Andhra Pradesh	0.66	0.75	0.73	0.50						
Goa	1.07	1.01	1.01	1.09						
Gujarat	0.79	0.83	0.96	0.71						
Haryana	0.52	0.67	0.70	0.39						
Himachal Pradesh	0.70	0.60	0.77	0.49						
Jammu and Kashmir	0.76	0.74	0.78	0.61						
Karnataka	0.75	0.90	0.91	0.64						
Kerala	0.95	1.00	0.89	0.95						
Maharashtra	0.68	0.73	0.78	0.51						
Delhi	0.34	0.24	0.36	0.02						
Punjab	0.54	0.84	0.80	0.57						
Tamil Nadu	1.01	0.96	0.94	0.96						
Telangana	0.78	0.83	0.89	0.63						
West Bengal	0.85	0.90	0.70	0.57						

Supplemental material

Ratio of HOI
Less than 0.50
0.51-0.89
0.90-1.09
1.10-1.49
 1.50 or more