

Supplemental table 3. Risk of late entry into prenatal care by race or ethnicity and payer for delivery

	Timing of entry into prenatal care		
	Less than 4 months	More than 6 months	cRR (95%CI)
	n (row %)	n (row %)	
White non-Hispanic, private insurance (n = 550,265)	503,803 (91.6)	4,150 (0.8)	
Maternal age (years)			
Less than 18 (n = 2,272)	1,521 (67.0)	121 (5.3)	7.9 (6.6, 9.5)
18 to 34 (n = 397,967)	362,415 (91.1)	3,402 (0.9)	Reference
More than 34 (n = 150,012)	139,855 (93.2)	627 (0.4)	0.5 (0.4, 0.5)
Maternal education (years)			
Less than 12 (n = 8,476)	6,213 (73.3)	376 (4.4)	3.5 (3.1, 3.9)
12 (n = 80,183)	69,442 (86.6)	1,147 (1.4)	Reference
More than 12 (n = 452,580)	420,283 (92.9)	2,521 (0.6)	0.4 (0.3, 0.4)
Parity			
Nulliparous (n = 254,271)	233,488 (91.8)	2,059 (0.8)	1.1 (1.1, 1.2)
Multiparous (n = 295,810)	270,234 (91.4)	2,089 (0.7)	Reference
Smoked			
No (n = 533,189)	490,103 (91.9)	3,666 (0.7)	Reference
Yes (n = 17,076)	13,700 (80.2)	484 (2.8)	4.6 (4.2, 5.1)
Drugs or alcohol use			
No (n = 545,077)	499,825 (91.7)	3,954 (0.7)	Reference
Yes (n = 5,188)	3,978 (76.7)	196 (3.8)	6.0 (5.2, 6.9)
Mental illness			
No (n = 529,398)	485,182 (91.7)	3,849 (0.7)	Reference
Yes (n = 20,867)	18,621 (89.2)	301 (1.4)	2.0 (1.8, 2.3)
WIC participant			
No (n = 493,458)	456,339 (92.5)	3,073 (0.6)	Reference
Yes (n = 48,582)	40,201 (82.8)	1,017 (2.1)	3.7 (3.4, 4.0)
FIPS Code			
1 (most urban) (n = 328,498)	304,191 (92.6)	1,960 (0.6)	Reference
2 (n = 85,393)	78,454 (91.9)	737 (0.9)	1.5 (1.3, 1.6)
3 (n = 98,401)	89,266 (90.7)	861 (0.9)	1.5 (1.4, 1.6)
4, 5 or 6 (n = 35,406)	29,610 (83.6)	551 (1.6)	2.9 (2.6, 3.1)
White non-Hispanic, public insurance (n = 185,271)	131,436 (70.9)	8,730 (4.7)	

Maternal age (years)			
Less than 18 (n = 4,678)	2,866 (61.3)	308 (6.6)	1.6 (1.4, 1.8)
18 – 34 (n = 163,069)	116,201 (71.3)	7,457 (4.6)	Reference
More than 34 (n = 17,522)	12,359 (70.5)	965 (5.5)	1.2 (1.1, 1.3)
Maternal education (years)			
Less than 12 (n = 33,421)	20,975 (62.8)	2,335 (7.0)	1.6 (1.6, 1.7)
12 (n = 73,729)	52,177 (70.8)	3,394 (4.6)	Reference
More than 12 (n = 73,890)	55,446 (75.0)	2,793 (3.8)	0.8 (0.7, 0.8)
Parity			
Nulliparous (n = 77,417)	55,731 (72.0)	3,276 (4.2)	0.8 (0.8, 0.9)
Multiparous (n = 107,755)	75,669 (70.2)	5,452 (5.1)	Reference
Smoked			
No (n = 147,993)	108,737 (73.5)	6,014 (4.1)	Reference
Yes (n = 37,278)	22,699 (60.9)	2,716 (7.3)	2.0 (1.9, 2.1)
Drugs or alcohol use			
No (n = 170,877)	123,280 (72.2)	7,465 (4.4)	Reference
Yes (n = 14,394)	8,156 (56.7)	1,265 (8.8)	2.4 (2.2, 2.5)
Mental illness			
No (n = 168,129)	120,762 (71.8)	7,473 (4.4)	Reference
Yes (n = 16,553)	10,674 (62.3)	1,257 (7.3)	1.8 (1.7, 1.9)
WIC participant			
No (n = 51,630)	35,761 (69.3)	2,838 (5.7)	Reference
Yes (n = 129,265)	92,710 (71.7)	5,652 (4.4)	0.8 (0.7, 0.8)
FIPS Code			
1 (most urban) (n = 79,726)	58,145 (72.9)	3,582 (4.5)	Reference
2 (n = 24,496)	17,627 (72.0)	1,158 (4.7)	1.1 (1.0, 1.1)
3 (n = 46,435)	33,285 (71.7)	2,056 (4.4)	1.0 (0.9, 1.1)
4, 5 or 6 (n = 33,903)	21,966 (64.8)	1,881 (5.6)	1.4 (1.3, 1.4)
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Hispanic, private insurance (n = 408,372)	349,023 (85.5)	6,965 (1.7)	
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Maternal age (years)			
Less than 18 (n = 9,740)	6,030 (61.9)	608 (6.2)	4.7 (4.4, 5.2)
18 – 34 (n = 323,316)	276,961 (85.7)	5,462 (1.7)	Reference
More than 34 (n = 75,311)	66,030 (87.7)	895 (1.2)	0.7 (0.6, 0.7)
Maternal education (years)			
Less than 12 (n = 60,798)	46,560 (76.6)	2,095 (3.5)	2.0 (1.9, 2.1)

12 (n = 124,027)	103,920 (83.8)	2,318 (1.9)	Reference
More than 12 (n = 217,159)	193,519 (89.1)	2,395 (1.1)	0.6 (0.5, 0.6)
Parity			
Nulliparous (n = 153,763)	131,130 (85.3)	2,953 (1.9)	1.2 (1.2, 1.3)
Multiparous (n = 254,417)	217,825 (85.6)	4,011 (1.6)	Reference
Smoked			
No (n = 401,722)	343,849 (85.6)	6,786 (1.7)	Reference
Yes (n = 6,650)	5,174 (77.8)	179 (2.7)	1.7 (1.5, 2.0)
Drugs or alcohol use			
No (n = 405,101)	346,614 (85.6)	6,827 (1.7)	Reference
Yes (n = 3,271)	2,409 (73.7)	138 (4.2)	2.8 (2.4, 3.3)
Mental illness			
No (n = 398,832)	340,955 (85.5)	6,769 (1.7)	Reference
Yes (n = 9,247)	8,068 (84.6)	196 (2.1)	1.2 (1.1, 1.4)
WIC participant			
No (n = 234,488)	206,873 (88.2)	3,020 (1.3)	Reference
Yes (n = 168,711)	137,979 (81.8)	3,855 (2.3)	1.9 (1.8, 2.0)
FIPS Code			
1 (most urban) (n = 258,411)	223,131 (86.4)	4,190 (1.6)	Reference
2 (n = 55,700)	48,302 (86.7)	852 (1.5)	0.9 (0.9, 1.0)
3 (n = 73,272)	62,104 (84.8)	1,085 (1.5)	0.9 (0.9, 1.0) ^a
4, 5 or 6 (n = 20,038)	14,704 (73.4)	811 (4.1)	2.8 (2.6, 3.1)
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Hispanic, public insurance (n = 966,351)	741,649 (76.8)	35,297 (3.7)	
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Maternal age (years)			
Less than 18 (n = 49,866)	31,223 (62.6)	3,308 (6.6)	2.2 (2.1, 2.3)
18 – 34 (n = 808,417)	624,937 (77.3)	28,633 (3.5)	Reference
More than 34 (n = 108,034)	85,476 (79.1)	3,350 (3.1)	0.9 (0.8, 0.9)
Maternal education (years)			
Less than 12 (n = 498,275)	377,476 (75.8)	19,819 (4.0)	1.2 (1.2, 1.3)
12 (n = 290,589)	225,518 (77.6)	9,593 (3.3)	Reference
More than 12 (n = 150,398)	118,754 (79.0)	4,853 (3.2)	1.0 (0.9, 1.0) ^a
Parity			
Nulliparous (n = 322,295)	243,718 (75.6)	13,312 (4.1)	1.2 (1.2, 1.3)
Multiparous (n = 643,801)	497,740 (77.3)	21,978 (3.4)	Reference
Smoked			

No (n = 933,027)	719,283 (77.1)	33,296 (3.6)	Reference
Yes (n = 32,375)	22,366 (67.1)	2,001 (6.0)	1.9 (1.8, 1.9)
Drugs or alcohol use			
No (n = 951,808)	732,972 (77.0)	34,236 (3.6)	Reference
Yes (n = 14,543)	8,677 (59.7)	1,061 (7.3)	2.4 (2.3, 2.6)
Mental illness			
No (n = 947,856)	729,364 (77.0)	34,233 (3.6)	Reference
Yes (n = 18,495)	12,285 (66.4)	1,064 (5.8)	1.8 (1.7, 1.9)
WIC participant			
No (n = 83,529)	56,812 (68.0)	4,911 (5.9)	Reference
Yes (n = 868,835)	674,704 (77.7)	29,970 (3.5)	0.5 (0.5, 0.6)
FIPS Code			
1 (most urban) (n = 585,278)	468,122 (80.0)	17,861 (3.1)	Reference
2 (n = 93,400)	72,476 (77.6)	2,974 (3.2)	1.1 (1.0, 1.1) ^a
3 (n = 232,950)	166,763 (71.6)	10,622 (4.6)	1.6 (1.6, 1.7)
4, 5 or 6 (n = 52,653)	32,865 (62.4)	3,722 (7.1)	2.8 (2.7, 2.9)
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Black, private insurance (n = 56,060)	46,702 (83.3)	1,107 (2.0)	
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Maternal age (years)			
Less than 18 (n = 1,262)	694 (55.0)	106 (8.4)	5.6 (4.6, 6.8)
18 – 34 (n = 43,006)	35,665 (82.9)	869 (2.0)	Reference
More than 34 (n = 11,790)	10,342 (87.7)	132 (1.1)	0.5 (0.4, 0.6)
Maternal education (years)			
Less than 12 (n = 3,021)	1,895 (62.7)	200 (6.6)	3.0 (2.5, 3.6)
12 (n = 13,270)	10,506 (79.2)	350 (2.6)	Reference
More than 12 (n = 38,840)	33,581 (86.5)	537 (1.4)	0.5 (0.4, 0.6)
Parity			
Nulliparous (n = 24,678)	20,603 (83.5)	509 (2.1)	1.1 (1.0, 1.2)
Multiparous (n = 31,352)	26,084 (83.2)	589 (1.9)	Reference
Smoked			
No (n = 54,027)	45,238 (83.7)	1,042 (1.9)	Reference
Yes (n = 2,033)	1,464 (72.0)	65 (3.2)	1.9 (1.5, 2.4)
Drugs or alcohol use			
No (n = 54,596)	45,662 (83.6)	1,045 (1.9)	Reference
Yes (n = 1,464)	1,040 (71.0)	62 (4.2)	2.5 (1.9, 3.2)
Mental illness			

No (n = 53,421)	44,613 (83.5)	1,023 (1.9)	Reference
Yes (n = 2,639)	2,089 (79.2)	84 (3.2)	1.7 (1.4, 2.2)
WIC participant			
No (n = 32,146)	27,861 (86.7)	481 (1.5)	Reference
Yes (n = 23,229)	18,300 (78.8)	618 (2.7)	1.9 (1.7, 2.2)
FIPS Code			
1 (most urban) (n = 40,312)	33,862 (84.0)	722 (1.8)	Reference
2 (n = 8,720)	7,424 (83.0)	186 (2.1)	1.2 (1.0, 1.4)
3 (n = 5,884)	4,800 (81.6)	143 (2.4)	1.4 (1.2, 1.7)
4, 5 or 6 (n = 772)	497 (64.4)	53 (6.9)	4.6 (3.5, 6.1)
Black, public insurance (n = 89,886)	63,675 (70.8)	4,043 (4.5)	
Maternal age (years)			
Less than 18 (n = 4,388)	2,503 (57.0)	335 (7.6)	2.1 (1.9, 2.3)
18 – 34 (n = 77,892)	55,801 (71.6)	3,344 (4.3)	Reference
More than 34 (n = 7,600)	5,370 (70.7)	364 (4.8)	1.1 (1.0, 1.3) ^a
Maternal education (years)			
Less than 12 (n = 20,459)	12,662 (61.9)	1,344 (6.6)	1.8 (1.7, 1.9)
12 (n = 35,552)	25,763 (72.5)	1,461 (4.1)	Reference
More than 12 (n = 31,589)	23,774 (75.3)	1,127 (3.6)	0.8 (0.8, 0.9)
Parity			
Nulliparous (n = 35,935)	26,053 (72.5)	2,524 (4.7)	0.9 (0.8, 0.9)
Multiparous (n = 53,898)	37,608 (69.8)	1,516 (4.2)	Reference
Smoked			
No (n = 77,755)	56,406 (72.5)	3,225 (4.2)	Reference
Yes (n = 11,803)	7,269 (59.9)	818 (6.7)	1.9 (1.7, 2.0)
Drugs or alcohol use			
No (n = 83,381)	59,741 (71.7)	3,621 (4.3)	Reference
Yes (n = 6,505)	3,934 (60.5)	422 (6.5)	1.7 (1.5, 1.9)
Mental illness			
No (n = 83,077)	59,417 (71.5)	3,629 (4.4)	Reference
Yes (n = 6,809)	4,258 (62.5)	414 (6.1)	1.5 (1.4, 1.7)
WIC participant			
No (n = 14,193)	9,187 (64.7)	805 (5.7)	Reference
Yes (n = 73,957)	53,338 (72.1)	3,171 (4.3)	0.7 (0.6, 0.8)
FIPS Code			

1 (most urban) (n = 62,048)	44,070 (71.0)	2,712 (4.4)	Reference
2 (n = 11,665)	8,831 (74.0)	468 (3.9)	0.9 (0.8, 1.0) ^a
3 (n = 14,011)	9,680 (69.1)	716 (5.1)	1.2 (1.1, 1.3)
4, 5 or 6 (n = 1,587)	916 (57.7)	122 (7.7)	2.0 (1.7, 2.4)
Asian, private insurance (n = 256,998)	232,318 (90.4)	2,251 (0.9)	
Maternal age (years)			
Less than 18 (n = 358)	129 (36.0)	56 (15.6)	28.3 (21.7, 37.0)
18 – 34 (n = 176,977)	159,329 (90.0)	1,721 (1.0)	Reference
More than 34 (n = 79,661)	72,860 (91.5)	474 (0.6)	0.6 (0.5, 0.7)
Maternal education (years)			
Less than 12 (n = 3,568)	2,671 (74.9)	116 (3.3)	2.3 (1.9, 2.8)
12 (n = 22,008)	18,379 (83.5)	337 (1.5)	Reference
More than 12 (n = 226,670)	207,281 (91.5)	1,725 (0.8)	0.5 (0.4, 0.5)
Parity			
Nulliparous (n = 122,301)	111,088 (90.8)	1,186 (1.0)	1.2 (1.1, 1.3)
Multiparous (n = 134,624)	121,206 (90.0)	1,065 (0.8)	Reference
Smoked			
No (n = 254,491)	230,249 (90.5)	2,208 (0.9)	Reference
Yes (n = 2,446)	2,069 (82.5)	43 (1.7)	2.1 (1.6, 2.9)
Drug or alcohol use			
No (n = 256,624)	232,029 (90.4)	2,235 (0.9)	Reference
Yes (n = 361)	289 (77.3)	16 (4.3)	5.5 (3.4, 9.0)
Mental illness			
No (n = 254,384)	229,985 (90.4)	2,220 (0.9)	Reference
Yes (n = 2,512)	2,333 (89.3)	31 (1.2)	1.4 (1.0, 2.0)
WIC participant			
No (n = 228,153)	208,249 (91.3)	1,762 (0.8)	Reference
Yes (n = 25,398)	21,594 (83.1)	459 (1.8)	2.5 (2.2, 2.7)
FIPS Code			
1 (most urban) (n = 199,418)	181,612 (91.1)	1,539 (0.8)	Reference
2 (n = 32,254)	29,331 (90.9)	317 (1.0)	1.3 (1.1, 1.4)
3 (n = 21,159)	18,298 (86.5)	275 (1.3)	1.8 (1.5, 2.0)
4, 5 or 6 (n = 3,544)	2,540 (71.7)	102 (2.9)	4.6 (3.8, 5.6)
Asian, public insurance (n = 81,390)	59,065 (72.6)	3,148 (3.9)	
Maternal age (years)			

Less than 18 (n = 1,425)	636 (44.6)	143 (10.0)	3.6 (3.0, 4.2)
18 – 34 (n = 64,452)	46,647 (72.4)	2,525 (3.9)	Reference
More than 34 (n = 15,510)	11,779 (75.9)	480 (3.1)	0.8 (0.7, 0.8)
Maternal education (years)			
Less than 12 (n = 11,284)	7,400 (65.6)	552 (4.9)	1.4 (1.3, 1.6)
12 (n = 26,974)	19,385 (71.9)	992 (3.7)	Reference
More than 12 (n = 40,122)	30,339 (75.6)	1,489 (3.7)	1.0 (0.9, 1.0)
Parity			
Nulliparous (n = 34,804)	25,024 (71.9)	1,527 (4.4)	1.3 (1.2, 1.4)
Multiparous (n = 46,563)	34,028 (73.1)	1,619 (3.5)	Reference
Smoked			
No (n = 78,777)	57,480 (73.0)	2,980 (3.8)	Reference
Yes (n = 2,544)	1,585 (60.7)	168 (6.4)	1.9 (1.7, 2.3)
Drugs or alcohol use			
No (n = 80,624)	58,711 (72.8)	3,067 (3.8)	Reference
Yes (n = 744)	354 (46.2)	81 (10.6)	3.8 (3.0, 4.7)
Mental illness			
No (n = 80,229)	58,409 (72.8)	3,058 (3.8)	Reference
Yes (n = 1,127)	656 (56.5)	90 (7.8)	2.4 (2.0, 3.0)
WIC participant			
No (n = 19,435)	13,719 (70.6)	946 (4.8)	Reference
Yes (n = 60,875)	44,650 (73.4)	2,154 (3.5)	0.7 (0.7, 0.8)
FIPS Code			
1 (most urban) (n = 56,255)	42,292 (75.2)	1,996 (3.6)	Reference
2 (n = 5,134)	3,686 (71.8)	247 (4.8)	1.4 (1.2, 1.6)
3 (n = 16,317)	11,232 (68.8)	676 (4.1)	1.3 (1.2, 1.4)
4, 5 or 6 (n = 3,506)	1,734 (49.5)	220 (6.3)	2.5 (2.2, 2.9)

cRR: crude relative risk; CI: confidence interval; WIC: Women, Infants and Children's program; FIPS: Federal Information Processing Standard, scale of 1 (most urban) to 6 (most rural)

^a p < 0.05