

Supplementary Online Content

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eTable 1. *International Classification of Diseases (ICD) Codes Used in the Analysis, Excluding Codes for the Charlson-Deyo Comorbidity Index*

eTable 2. Frequencies of Hepatitis C–Positive Pregnancies in the US by Year, From 1998 to 2018

eTable 3. Pregnancies in the US With and Without Opioid Use by Year, From 1998 to 2018

This supplementary material has been provided by the authors to give readers additional information about their work.

eTable 1. International Classification of Diseases (ICD) codes used in the analysis, excluding codes for the Charlson-Deyo Comorbidity Index

Diagnosis		ICD-9-CM codes	ICD-10-CM/PCS codes
Childbirth (vaginal and Cesarean)		<u>Diagnosis codes:</u> 641.*1, 642.*1, 642.*2, 643.*1, 644.21, 645.*1, 646.*1, 646.*2, 647.*1, 647.*2, 648.*1, 648.*2, 649.*1, 649.*2, 650, 651.*1, 652.*1, 653.*1, 654.*1, 654.*2, 655.*1, 656.*1, 657.01, 658.*1, 659.*1, 660.*1, 661.*1, 662.*1, 663.*1, 664.*1, 665.*1, 665.22, 666.*2, 667.*2, 668.*1, 668.*2, 669.*1, 669.*2, 670.*2, 671.*1, 671.*2, 672.02, 673.*1, 673.*2, 674.*1, 674.*2, 675.*1, 675.*2, 676.*1, 676.*2, 678.*1, 679.*1, 679.*2, V27.*, V30.*-V37.*, V39.* <u>Procedure codes:</u> 72.*, 73.*, 74.0-74.2, 74.4, 74.9*, 75.4	<u>CM:</u> O10.*2, O11.4, O12.*4, O13.4, O14.*4, O16.4, O24.*2, O25.2, O26.62, O26.72, O42.*2, O60.22*, O60.23*, O63.2, O66.5, O67.*, O68, O69.*, O70.0-O70.3, O70.9, O74.*, O75.0, O75.1, O75.5, O75.8*, O75.9, O76, O77.*, O80, O82.*, O88.*2, O98.*2, O99.12, O99.214, O99.284, O99.3*4, O99.42, O99.52, O99.62, O99.72, O99.8*4, O9A.*2, Z37.0, Z37.2, Z37.3, Z37.5*, Z37.6*, Z37.9, Z38.* <u>PCS:</u> 0W8N*, 1090*, 10D0*, 10D1*, 10E0*
Viral hepatitis C		070.41, 070.44, 070.51, 070.54, 070.7*, V02.62	B17.1*, B18.2, B18.8, B19.2*, Z22.52
Covariates:			
Substance use	Tobacco	305.1, 649.0*	F17.*, T65.2*, O99.33*, Z72.0
	Alcohol	291.*, 303.*, 305.0*, 790.3, 980.0, E860.0, E860.1, V11.3	F10.*, O99.31*, R78.0, T51.0*
	Opioids	304.0*, 304.7*, 305.5*, 965.0*, E850.0-E850.2	F11.*, P04.14, R78.1, T40.0*-T40.4*, T40.6*
	Cannabis	304.3*, 305.2*	F12.*, P04.81, T40.7*
	Sedatives, hypnotics, or anxiolytics	304.1*, 305.4*, 967.*, 969.1-969.5, E851.*-E853.*, E950.1-E950.3, E980.1-E980.3	F13.*, T42.3*-T42.4*, T42.6*-T42.7*, P04.17, P04.1A
	Cocaine	304.2*, 305.6*, 760.75, 970.81	F14.*, R78.2, T40.5*, P04.41
	Other stimulants	304.4*, 305.7*, 969.7*, E854.2	F15.*, T43.6*, P04.16
	Hallucinogens	304.5*, 305.3*, 969.6, E854.1	F16.*, P04.42, R78.3, T40.8*-T40.9*
	Inhalants	Not available	F18.*
	Other psychoactives	304.8*, 305.8*, E854.8, 969.0*, 969.8, 969.9	F19.*, R78.5, T43.8*, T43.9*
HIV		042, 043, 044	B20, B21, B22, B23, B24
On hemodialysis		585.6, V45.11	N18.6, Z99.2

Diabetes mellitus	250.0*-250.7*	E10.1*-E10.5*, E10.9, E11.1*-E11.5*, E11.9, E13.1*-E13.5*, E13.9, E14.1*-E14.5*, E14.9
Thyroid disorders	240.*-246.*	E00.*-E07.*
Hypertension	401.*-405.*	I10.*, I15.*, I16.*
Anemia	280.*-285.*	D50.*-D64.*
Maternal outcomes:		
Anemia complicating pregnancy	648.2*	O99.0*
Gestational diabetes	648.0*, 648.8*	O24.*
Hypertension complicating pregnancy, minus preeclampsia	642.0*-642.3*, 642.9*	O10.*, O13.*, O16.*
Preeclampsia/eclampsia	642.4*-642.7*	O11.*, O14.*, O15.*
Thyroid dysfunction complicating pregnancy	648.1*	O99.28*
Perinatal outcomes:		
Cesarean delivery	<u>Diagnosis codes</u> : 669.7* <u>Procedure codes</u> : 74.0-74.2, 74.4, 74.99	<u>CM</u> : O82.*, O84.2 <u>PCS</u> : 10D00Z*
Stillbirth	656.4*, V27.1, V27.4, V27.7	O36.4X*, Z37.1, Z37.4, Z37.7
Spontaneous abortion	631.0, 631.8, 632, 634.*, 637.*, 638.*, V27.1, V27.3, V27.4, V27.7	O02.*, O03.1, O03.30-O03.36, O03.38, O03.39, O03.4, O03.6, O03.7, O03.80-O03.86, O03.88, O03.89, O03.9
Preterm labor	644.*	O60.*
Long labor	662.*	O63.*
Poor fetal growth	656.5*	O36.5*
Fetal distress	656.3*, 656.8*, 659.7*	O68.*, O76.*, O77.*
PROM	658.1*	O42.*

Abbreviations: CM, Clinical Modification; PCS, Procedure Coding System; HIV, human immunodeficiency virus; PROM, premature rupture of membranes

eTable 2. Frequencies of hepatitis C-positive pregnancies* in the US by year, from 1998 to 2018

	Deliveries	Stillbirths	Spontaneous Abortions	Caesarean sections
1998	1206	6	22	313
1999	1584	16	41	495
2000	1794	0	24	569
2001	2168	14	35	759
2002	2377	30	65	843
2003	2530	31	62	974
2004	3946	44	76	1428
2005	6226	63	166	2476
2006	7265	56	176	3001
2007	8262	101	153	3396
2008	7476	60	97	2853
2009	7913	50	95	3300
2010	8389	94	176	3403
2011	8692	94	195	3450
2012	2760	45	65	1085
2013	3985	55	90	1435
2014	5965	70	115	2215
2015	8190	80	155	3165
2016	11535	80	95	4605
2017	14775	140	160	5915
2018	19085	210	200	7365
Total	136121	1339	2263	53047

*Due to overlapping codes, the categories of deliveries, stillbirths, spontaneous abortions, and Caesarean sections are not mutually exclusive.

eTable 3. Pregnancies* in the US with and without opioid use by year, from 1998 to 2018

	Opioid use	No opioid use	%
1998	6738	3625028	0.185529574
1999	5929	3726197	0.158863875
2000	4786	3967743	0.120477409
2001	4201	3883489	0.108059027
2002	5116	4032284	0.126715213
2003	4811	3955628	0.121476432
2004	6279	4117468	0.152264433
2005	7172	4090242	0.175037231
2006	9376	4154669	0.225165674
2007	9726	4405200	0.220298143
2008	10232	4106097	0.248570996
2009	12182	4011639	0.302747066
2010	15293	3774610	0.403519562
2011	15118	3743456	0.402227015
2012	5165	938805	0.547157219
2013	7075	1121360	0.626974527
2014	10390	1445980	0.713417607
2015	14130	1853945	0.756393614
2016	19485	2342868	0.824813226
2017	25015	2906857	0.853209144
2018	30010	3600239	0.826665058

*Includes deliveries and spontaneous abortions