## Appendix 1. Data Capture Form

nul Mage Nullgement Program Start	MEDICAL CONDITIONS AND MEDICATIONS Version 04 / December 9, 2011	Form VXX Page 4 of 6
Study ID	Staff ID	Date Form Finalized
		/ /yyyy

C. Medications						
Drug Codes (Colum	in c)					
		Medications	s (100-499 series)			Vitamins (500 series)
Analgesics 101=Narcotic 102=NSAID 103=Triptans 109=Other analgesics Antibiotics 111=Nitrofurantoin 112=Penicillins	Antivirals 131=Antivirals - flu 132=Antivirals - herpes 139=Antivirals - other Anticoagulants 141=Warfarin 142=Unfractionated heparin	Anticonvulsants 171=GABA analogs 172=Benzodiazepines 173=Caboxamides (carbamazepine) 174=Fructose derivative (topiramate) 175=Hydantoins 176=Triazines (lamotrigine)	Antihypertensives 191 = Methyldopa (Aldomet) 192 = Labetolol 193 = Ca-Channel Blocker 194 = Beta-Blocker 195 = ACE-Inhibitor 199 = Other antihypertensives	240=Hormonal contraceptives 250=Progesterone (for purpose other than contraception) <u>Thyroid Agents</u> 261=Antithyroids coveractive)	URI Agents 280=Decongestants 290=Antihistamines 300=Combined antihistamines / decongestant 310=Combined antihistamines / decongestant / analgesic	510=Prenatal Multivitamin 520=Other Multivitamin 530=Additional Iron 540=Additional Folate 599=Other Vitamin Vaccines (600 series) 610=Influenza (seasonal/novel)
113=Metronidazole 114=Macrolides 115=Sulfa drugs 116=Aminoglycosides	143=LMWH 149=Other anticoagulant 150=Antipsychotics	177=Valproate 179=Other anticonvulsant Tocolytics	200=Diuretics GI & Anti-emetic agents 211=Motility agents	262=Thyroid replacement (under-active) Asthma Medications	Other Mental Health Agents 320=Anti-anxiety medications 330=Mood stabilizers (lithium)	620=Hepatitis B 630=Rubella (German measles)
117=Clindamycin 118=Cephalosporins	Antidepressants	181=Nifedipine/Procardia 182=Indomethacin/Indocin	212=Anti-nausea 213=SHT3 antagonist	271=Bronchodilator 272=Inhaled steroid	Anti-diabetic medications 341-Insulin	640=MMR 650=Varicella-zoster
119=Other antibiotic	161=MAOI 162=TCA	183=Magnesium Sulfate 184=Terbutaline/Brethine	214=Other NVP agents 215=PPIs	273=Immune modulator	342=Metformin 343=Glyburide	immune globulin (VZI chicken pox)
Antifungals 121=Systemic antifungals	163=SSRI 164=SNRI 165=NDRI	189=Other tocolytic	216=H2 receptor agonists 219=Other GI agents		349=Other anti-diabetic medication	660=Pertussis 699=Other vaccine
122=Vaginal antifungals	166=Augmenter drug 169=Other antidepressant		220=Chemotherapeutics 230=Steroids (systemic)		499=Other medication	

## Reason Codes (Column e)

	Medical Conditions	Other Reasons	Other Reasons for Medications			
aa1 = High blood pressure (hypertension) ab1 = Asthma	ak1 = Cardiac arrhythmias al1 = Kidney disease am1= Urinary tract infection		bb1 = Mental health condition	Sexually transmitted diseases: bd1 = Gonorrhea	Other Codes: ca1 = Nausea and vomiting cb1 = Respiratory infections,	other Reasons:
ac1 = Seizure disorder ad1 = Migraine headaches ae1 = Diabetes af1 = Hyperthyroidism ag1 = Hypothyroidism	an1 = Sickle cell disease ao1 = Sickle cell trait ap1 = Thrombocytopenia (platelet count too low)	thrombophilia au1 = Systemic lupus erythematosus (SLE) av1 = Rheumatoid arthritis aw1= Other collagen	<u>Gynecological Conditions:</u> bc1 = Cervical dysplasia bc2 = Fibroids bc3 = Polycystic ovary disease (PCOS)	bd2 = Chlamydia bd3 = Herpes bd4 = Syphilis bd5 = HIV/AIDS bd6 = Hepatitis B	including influenza and other viral infections, bronchitis, etc. cc1 = Preterm birth	da1 = Provider recommendation db1 = Preventative, other
ah1 = Valvular heart disease ai1 = Other structural heart disease (heart problem other than	aq1 = Anemia ar1 = History of blood clots (thrombosis or thromboembolism) or stroke	vascular or autoimmune disease ax1 = Ulcerative colitis / Crohn's disease ay1 = Cholestasis of		bd7 = Hepatitis C bd8 = Trichomonas bd9 = Other STD be1 = Yeast infection	prevention cd1 = Preterm contractions / labor ce1 = Infertility cf1 = Trauma	dz1 = Other, not elsewhere specified
valves) aj1 = Coronary artery disease / congestive heart failure	as1 =Congenital or inherited bleeding disorder, e.g., thrombophilia, hemophilia	pregnancy az1 = Liver/gall bladder disease ba1 = Cancer/malignancy		bf1 = Bacterial vaginosis	cg1 = Skin infection (cellulitis) ch1 = Prevention of cerebral palsy	

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Study ID	Staff ID	Date Form Finalized
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1. Which medications, including multivitamins, mineral supplement, prenatal vitamin, or folate (folic acid), did you take recently, and which vaccinations were given to you recently, and for what reason? By recently, I mean during the two months prior to this pregnancy up to the time of your delivery hospitalization. Other than multivitamins, mineral supplement, prenatal vitamin, or folate (folic acid), include only medications prescribed or recommended by a health care provider. *[PROMPT FOR TIMING; ENTER DRUG AND REASON CODES AFTER INTERVIEW ENDS.]* 

	Drug/Vaccine Name	Reason(s) for	Taking		Tin	ning	So	urce*	k) Final
a) Line Number	b) Description c) Code	d) Description	e) Code (Primary)	f) Multiple?	g) Started	h) Stopped	i) MI	j) CA	Assessment: Took Med.
				01			01	01	01
		.[		01			01	01	01
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				01			01	01	01
	L.L.L	J		01			01	01	01

 Time Started / Stopped Codes (Columns g and h)

 01 = > 2 Months before pregnancy
 04 = Before second visit

 02 = During 2 months before pregnancy
 05 = Before third visit

 03 = During Pregnancy, before first visit
 06 = Before delivery

\*Source: MI = Maternal Interview; CA = Chart Abstraction

## AT VISIT 1 ONLY, IF THE PARTICIPANT TAKES A PERINATAL MULTIVITAMIN, OTHER MULTIVITAMIN OR FOLATE SUPPLEMENT, ASK:

2. How long have you been taking [PERINATAL VITAMINS/OTHER MULTIVITAMINS/ FOLATE SUPPLEMENTS (FOLIC ACID)]?

a) \_\_\_\_\_ wks OR b) \_\_\_\_ months OR c) \_\_\_\_ years [RECORD ONLY ONE OF weeks OR months, OR years, ENTER -8 FOR WEEKS IF UNKNOWN.]

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ppendix 2. I revalence of reserv				the number is conoit (B		, <b>iu</b> iiii	
Baseline Characteristic	No. of Participants	Taking medication during pregnancy*	P Value†	Taking medication in the first trimester of pregnancy*	P Value†	Polypharmacy (taking ≥ 5 medications) in pregnancy	P Value†
Overall	9546	7007 [73.4 (72.5-74.3)]		5263 [55.1 (54.1-56.1)]		1240 [13.0 (12.3-13.7)]	
Maternal age, y							
<21	1518	1123 [74.0 (71.8-76.2)]	0.794	764 [50.3 (47.8-52.8)]	<.001	192 [12.6 (11.0-14.3)]	0.022
21-34	7134	5224 [73.2 (72.2-74.3)]		3974 [55.7 (54.6-56.9)]		905 [12.7 (11.9-13.5)]	
≥35	891	658 [73.8 (71.0-76.7)]		524 [58.8 (55.6-62.0)]		142 [15.9 (13.5-18.3)]	
Maternal race/ethnicity							
White non-Hispanic	5757	4358 [75.7 (74.6-76.8)]	<.001	3440 [59.8 (58.5-61.0)]	<.001	820 [14.2 (13.3-15.1)]	<.001
Black non-Hispanic	1328	1030 [77.6 (75.3-79.8)]		727 [54.7 (52.1-57.4)]		178 [13.4 (11.6-15.2)]	
Hispanic	1598	1024 [64.1 (61.7-66.4)]		678 [42.4 (40.0-44.9)]		142 [8.9 (7.5-10.3)]	
Asian	383	224 [58.5 (53.6-63.4)]		148 [38.6 (33.8-43.5)]		31 [8.1 (5.4-10.8)]	
Other	477	369 [77.4 (73.6-81.1)]		269 [56.4 (51.9-60.8)]		68 [14.3 (11.1-17.4)]	
Education status attained							
Less than high school	773	582 [75.3 (72.3-78.3)]	0.001	404 [52.3 (48.7-55.8)]	0.029	111 [14.4 (11.9-16.8)]	0.036
Completed high school or general education diploma	1107	818 [73.9 (71.3-76.5)]		572 [51.7 (48.7-54.6)]		117 [10.6 (8.8-12.4)]	
Some college	1829	1381 [75.5 (73.5-77.5)]		1006 [55.0 (52.7-57.3)]		263 [14.4 (12.8-16.0)]	
Associate or technical Degree	964	742 [77.0 (74.3-79.6)]		560 [58.1 (55.0-61.2)]		134 [13.9 (11.7-16.1)]	
Completed college	2652	1929 [72.7 (71.0-74.4)]		1482 [55.9 (54.0-57.8)]		343 [12.9 (11.7-14.2)]	
Degree work beyond college	2211	1548 [70.0 (68.1-71.9)]		1235 [55.9 (53.8-57.9)]		271 [12.3 (10.9-13.6)]	
Method of paying for health care‡							
Commercial	6485	4760 [73.4 (72.3-74.5)]	0.886	3708 [57.2 (56.0-58.4)]	<.001	833 [12.8 (12.0-13.7)]	0.180
Government/military	2637	1937 [73.5 (71.8-75.1)]		1326 [50.3 (48.4-52.2)]		364 [13.8 (12.5-15.1)]	
Self-pay/other	358	267 [74.6 (70.1-79.1)]		201 [56.1 (51.0-61.3)]		38 [10.6 (7.4-13.8)]	

Appendix 2. Prevalence of Prescription and Other Medication Use in Pregnancy in the nuMoM2b Cohort (Excluding Vitamins)

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Income and size of household relative to federal poverty level							
>200%	5428	3935 [72.5 (71.3-73.7)]	0.002	3090 [56.9 (55.6-58.2)]	0.062	694 [12.8 (11.9-13.7)]	0.873
100-200%	1108	853 [77.0 (74.5-79.5)]		628 [56.7 (53.8-59.6)]		148 [13.4 (11.4-15.4)]	
<100%	1217	921 [75.7 (73.3-78.1)]		648 [53.2 (50.4-56.0)]		156 [12.8 (10.9-14.7)]	
Region							
Northeast	2768	1733 [62.6 (60.8-64.4)]	<.001	1239 [44.8 (42.9-46.6)]	<.001	192 [6.9 (6.0-7.9)]	<.001
Midwest	3937	3041 [77.2 (75.9-78.6)]		2420 [61.5 (59.9-63.0)]		630 [16.0 (14.9-17.1)]	
West	2841	2233 [78.6 (77.1-80.1)]		1604 [56.5 (54.6-58.3)]		418 [14.7 (13.4-16.0)]	

Data are presented as n [% (95% Confidence Interval)]

\* All women included in taking medication in the first trimester also by definition are included in the column as taking medication at any time in pregnancy.

 $\dagger$  P values shown are from  $\chi 2$  tests for medication use and the categorical baseline characteristics.

\* Women could have multiple sources of insurance. They were categorized as having "Commercial" insurance if they indicated having a commercial source of insurance. They were categorized as having "Government/Military" insurance if they indicated having insurance provided by the government or military while not indicating having a commercial source of insurance. They were categorized as having "Self-Pay/Other" insurance if they indicated having only having insurance that was not from a commercial, government, or military source.

Medication Class	Medication Name*	Women taking medication	Women taking medication during pregnancy†	Women taking medication in the first trimester of pregnancy†
Analgesics	Narcotics/Opioids	402 (4.2)	342 (3.6)	134 (1.4)
	NSAIDs	849 (8.9)	626 (6.6)	549 (5.8)
	Triptans	99 (1.0)	57 (0.6)	49 (0.5)
	Other analgesics	1785 (18.7)	1715 (18.0)	1017 (10.7)
	Any analgesic	2470 (25.9)	2265 (23.7)	1485 (15.6)
Antibiotics	Nitrofurantoin	694 (7.3)	656 (6.9)	333 (3.5)
	Penicillins	765 (8.0)	715 (7.5)	212 (2.2)
	Metronidazole	443 (4.6)	410 (4.3)	188 (2.0)
	Macrolides	479 (5.0)	431 (4.5)	174 (1.8)
	Sulfa drugs	129 (1.4)	97 (1.0)	55 (0.6)
	Aminoglycosides	28 (0.3)	26 (0.3)	3 (0.0)
	Clindamycin	160 (1.7)	144 (1.5)	78 (0.8)
	Cephalosporins	386 (4.0)	364 (3.8)	146 (1.5)
	Other antibiotics	418 (4.4)	296 (3.1)	170 (1.8)
	Any antibiotic	2701 (28.3)	2439 (25.5)	1199 (12.6)
Antifungals	Systemic antifungals	26 (0.3)	23 (0.2)	12 (0.1)
	Vaginal antifungals	794 (8.3)	731 (7.7)	294 (3.1)
	Any antifungal	814 (8.5)	749 (7.8)	304 (3.2)
Antivirals	Antivirals - flu	54 (0.6)	50 (0.5)	7 (0.1)

## Appendix 3. Prevalence of Medication Class and Individual Medications Used During Pregnancy

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	Antivirals - herpes	401 (4.2)	374 (3.9)	120 (1.3)
	Antivirals - other	10 (0.1)	8 (0.1)	6 (0.1)
	Any antiviral	461 (4.8)	428 (4.5)	133 (1.4)
Anticoagulants	Warfarin	7 (0.1)	5 (0.1)	5 (0.1)
	Unfractionated heparin	31 (0.3)	30 (0.3)	6 (0.1)
	Low Molecular Weight Heparin	67 (0.7)	60 (0.6)	42 (0.4)
	Other anticoagulants	1 (0.0)	1 (0.0)	1 (0.0)
	Any anticoagulant	79 (0.8)	72 (0.8)	49 (0.5)
Antipsychotics	Antipsychotics	55 (0.6)	44 (0.5)	38 (0.4)
Antidepressants	Monoamine Oxidase Inhibitors	0 (0.0)	0 (0.0)	0 (0.0)
	Tri-Cyclic Antidepressants	22 (0.2)	16 (0.2)	13 (0.1)
	Selective Seratonin Reuptake Inhibitors	540 (5.7)	458 (4.8)	388 (4.1)
	Selective Norepinephrine Reuptake Inhibitors	69 (0.7)	60 (0.6)	56 (0.6)
	Norepinephrine-Dopamine Reuptake Inhibitors	90 (0.9)	81 (0.8)	74 (0.8)
	Augmenter drugs	0 (0.0)	0 (0.0)	0 (0.0)
	Other antidepressants	4 (0.0)	4 (0.0)	3 (0.0)
	Any antidepressant	673 (7.1)	579 (6.1)	502 (5.3)
Anticonvulsants	GABA analogs	116 (1.2)	104 (1.1)	68 (0.7)
	Benzodiazepines	195 (2.0)	141 (1.5)	117 (1.2)
	Caboxamides (carbamazepine)	11 (0.1)	11 (0.1)	9 (0.1)
	Fructose derivatives (topiramate)	32 (0.3)	22 (0.2)	22 (0.2)
	Hydantoins	1 (0.0)	1 (0.0)	1 (0.0)
	Triazines (lamotrigine)	40 (0.4)	32 (0.3)	32 (0.3)
	Valproate	4 (0.0)	3 (0.0)	3 (0.0)
	Other anticonvulsants	20 (0.2)	20 (0.2)	15 (0.2)
	Any anticonvulsant	373 (3.9)	301 (3.2)	238 (2.5)

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Tocolytics	Nifedipine	44 (0.5)	43 (0.5)	0 (0.0)
	Indomethacin	29 (0.3)	27 (0.3)	0 (0.0)
	Magnesium Sulfate	67 (0.7)	66 (0.7)	3 (0.0)
	Terbutaline	32 (0.3)	32 (0.3)	1 (0.0)
	Other tocolytics	0 (0.0)	0 (0.0)	0 (0.0)
	Any tocolytics	151 (1.6)	147 (1.5)	4 (0.0)
Antihypertensives	Methyldopa	36 (0.4)	35 (0.4)	26 (0.3)
	Labetolol	101 (1.1)	97 (1.0)	38 (0.4)
	Calcium Channel Blockers	46 (0.5)	41 (0.4)	22 (0.2)
	Beta-Blockers	53 (0.6)	44 (0.5)	36 (0.4)
	ACE-Inhibitors	21 (0.2)	15 (0.2)	15 (0.2)
	Other antihypertensives	9 (0.1)	9 (0.1)	4 (0.0)
	Any antihypertensive	221 (2.3)	207 (2.2)	124 (1.3)
Diuretics	Diuretics	37 (0.4)	23 (0.2)	16 (0.2)
GI & Anti-emetic agents	Motility agents	174 (1.8)	168 (1.8)	98 (1.0)
	Anti-nausea agents	508 (5.3)	491 (5.1)	300 (3.1)
	5HT3 antagonists	1193 (12.5)	1167 (12.2)	817 (8.6)
	Other NVP agents	4 (0.0)	4 (0.0)	4 (0.0)
	Proton Pump Inhibitors	456 (4.8)	420 (4.4)	203 (2.1)
	H2 receptor agonists	646 (6.8)	613 (6.4)	163 (1.7)
	Other GI agents	1796 (18.8)	1714 (18.0)	803 (8.4)
	Any GI or anti-emetic agent	3402 (35.6)	3279 (34.3)	1866 (19.5)
Chemotherapeutics	Chemotherapeutics	9 (0.1)	4 (0.0)	4 (0.0)
Steroids (systemic)	Steroids (systemic)	419 (4.4)	380 (4.0)	103 (1.1)
Hormonal contraceptives	Hormonal contraceptives	347 (3.6)	90 (0.9)	90 (0.9)

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Progesterone	Progesterones (for purpose other than contraception)	377 (3.9)	319 (3.3)	242 (2.5)
Thyroid Agents	Antithyroids (overactive)	13 (0.1)	12 (0.1)	9 (0.1)
	Thyroid replacements (under- active)	465 (4.9)	443 (4.6)	422 (4.4)
	Any thyroid agent	476 (5.0)	454 (4.8)	431 (4.5)
Asthma Medications	Bronchodilators	656 (6.9)	607 (6.4)	509 (5.3)
	Inhaled steroids	415 (4.3)	376 (3.9)	286 (3.0)
	Immune modulators	136 (1.4)	120 (1.3)	103 (1.1)
	Any asthma medication	941 (9.9)	866 (9.1)	721 (7.6)
URI Agents	Decongestants	395 (4.1)	368 (3.9)	109 (1.1)
	Antihistamines	1293 (13.5)	1219 (12.8)	767 (8.0)
	Combined antihistamines / decongestants	39 (0.4)	31 (0.3)	23 (0.2)
	Combined antihistamines / decongestants / analgesics	173 (1.8)	147 (1.5)	54 (0.6)
	Any URI agent	1675 (17.5)	1567 (16.4)	889 (9.3)
Other Mental Health Agents	Anti-anxiety medications	21 (0.2)	19 (0.2)	10 (0.1)
	Mood stabilizers (lithium)	5 (0.1)	3 (0.0)	3 (0.0)
	Any other mental health agent	26 (0.3)	22 (0.2)	13 (0.1)
Anti-diabetic medications	Insulins	158 (1.7)	156 (1.6)	100 (1.0)
	Metformin	145 (1.5)	128 (1.3)	116 (1.2)
	Glyburide	69 (0.7)	65 (0.7)	6 (0.1)

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	Other anti-diabetic medications	5 (0.1)	5 (0.1)	4 (0.0)
	Any anti-diabetic medication	337 (3.5)	315 (3.3)	206 (2.2)
Other Medication	Other medication	1052 (11.0)	797 (8.3)	464 (4.9)
Vitamins	Prenatal multivitamins	9263 (97.0)	8984 (94.1)	8800 (92.2)
	Other multivitamins	692 (7.2)	613 (6.4)	543 (5.7)
	Additional iron	1643 (17.2)	1548 (16.2)	468 (4.9)
	Additional folate	695 (7.3)	656 (6.9)	589 (6.2)
	Other vitamins	2371 (24.8)	2283 (23.9)	1859 (19.5)
	Any vitamin	9433 (98.8)	9165 (96.0)	9009 (94.4)
Overall		9479 (99.3)	9272 (97.1)	9139 (95.7)

Data are presented as n (%)

\* "Any Medication" ("Any Vitamin") is the count of the number of women who had indicated taking at least one medication (vitamin) in the overall category. NSAID= nonsteroidal anti-inflammatory drugs, GABA= gamma-Aminobutyric acid, GI= gastrointestinal, URI= upper respiratory infection

<sup>†</sup> All women included in taking prescription and other medications in the first trimester also by definition are included in the column as taking medications at any time in pregnancy. The "Women taking medication" includes women who took the medication during pregnancy or during the 3 months before pregnancy.

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