## **Supplementary Online Content**

Shehab N, Lovegrove MC, Geller AI, Rose KO, Weidle NJ, Budnitz DS. US emergency department visits for outpatient adverse drug events, 2013-2014. *JAMA*. doi:10.1001/jama.2016.16201

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eTable 1. US Emergency Department (ED) Visits for Adverse Drug Events (ADEs) by Patient Age and Year, 2005-2014<sup>a</sup>

Patient age group, y	2005-2006		2007-2008 <sup>c</sup>		200	9-2010 <sup>c</sup>	2011-2012		2013-2014 <sup>c</sup>	
	No. of Cases	National Estimate, % (95% CI) <sup>b</sup>	No. of Cases	National Estimate, % (95% CI) <sup>b</sup>	No. of Cases	National Estimate, % (95% CI) <sup>b</sup>	No. of Cases	National Estimate, % (95% CI) <sup>b</sup>	No. of Cases	National Estimate, % (95% CI) <sup>b</sup>
≤5	4,581	14.6 (12.4- 16.8)	5,382	13.1 (11.2-15.1)	6,017	12.8 (10.9-14.6)	5,982	11.0 (9.2-12.9)	5,133	9.7 (7.7-11.6)
6-19	2,652	8.9 (7.8-10.2)	3,114	8.2 (7.2-9.3)	3,550	8.0 (7.1-8.9)	3,933	7.9 (6.9-8.9)	3,452	6.8 (5.7-7.9)
20-34	3,669	15.9 (14.0- 17.8)	4,639	15.8 (14.4-17.2)	5,272	15.5 (14.3-16.8)	6,032	15.0 (13.8-16.2)	5,638	13.7 (12.4- 15.0)
35-49	4,043	18.2 (16.5- 19.9)	4,914	16.6 (15.4-17.8)	5,606	16.3 (15.0-17.6)	6,328	15.7 (14.6-16.8)	5,928	14.3 (13.0- 15.6)
50-64	3,701	16.8 (15.5- 18.1)	5,265	18.0 (17.0-19.0)	6,482	18.1 (16.9-19.3)	7,874	19.8 (18.5-21.1)	8,797	21.0 (19.4- 22.6)
≥65	5,152	25.6 (21.1- 30.0)	7,956	28.2 (24.7-31.7)	10,160	29.3 (25.8-32.7)	11,845	30.5 (27.4-33.6)	13,636	34.5 (30.3- 38.8)
Total	23,798	100.0	31,271	100.0	37,088	100.0	41,994	100.0	42,585	100.0

<sup>&</sup>lt;sup>a</sup> Data are from the National Electronic Injury Surveillance System–Cooperative Adverse Drug Event Surveillance project, US Centers for Disease Control and Prevention.
<sup>b</sup> Calculated from statistical weighting of cases based on the sample design.

<sup>&</sup>lt;sup>c</sup> Patient age missing for one case.

eTable 2. US Population Rates of Emergency Department (ED) Visits for Adverse Drug Events (ADEs) by Patient Age and Year, 2005-2014<sup>a</sup>

Patient age group, y	2005-2006		2007-2008 <sup>c</sup>		2009-2010 <sup>c</sup>		2011-2012		2013-2014 <sup>c</sup>	
	No. of Cases	National Estimate Per 1,000 Individuals (95% CI) <sup>b</sup>	No. of Cases	National Estimate Per 1,000 Individuals (95% CI) <sup>b</sup>	No. of Cases	National Estimate Per 1,000 Individuals (95% CI) <sup>b</sup>	No. of Cases	National Estimate Per 1,000 Individuals (95% CI) <sup>b</sup>	No. of Cases	National Estimate Per 1,000 Individuals (95% CI) <sup>b</sup>
≤5	4,581	4.6 (3.5-5.8)	5,382	5.0 (3.8-6.2)	6,017	5.7 (4.3-7.2)	5,982	6.0 (4.6-7.4)	5,133	5.2 (3.9-6.4)
6-19	2,652	1.2 (0.9-1.4)	3,114	1.3 (1.0-1.6)	3,550	1.5 (1.1-1.8)	3,993	1.8 (1.3-2.2)	3,452	1.5 (1.2-1.8)
20-34	3,669	2.0 (1.6-2.4)	4,639	2.4 (1.9-2.9)	5,272	2.7 (2.1-3.3)	6,032	3.1 (2.4-3.8)	5,638	2.7 (2.1-3.2)
35-49	4,043	2.1 (1.6-2.5)	4,914	2.3 (1.9-2.8)	5,606	2.8 (2.2-3.4)	6,328	3.3 (2.6-4.1)	5,928	3.0 (2.4-3.5)
50-64	3,701	2.5 (1.8-3.1)	5,265	3.0 (2.3-3.7)	6,482	3.4 (2.5-4.2)	7,874	4.3 (3.2-5.4)	8,797	4.3 (3.3-5.3)
≥65	5,152	5.2 (3.2-7.2)	7,956	6.8 (4.7-8.9)	10,160	7.9 (5.5-10.4)	11,845	9.5 (6.8-12.2)	13,636	9.7 (6.6-12.9)
Total	23,798	2.6 (1.9-3.2)	31,271	3.0 (2.4-3.7)	37,088	3.5 (2.7-4.4)	41,994	4.2 (3.2-5.2)	42,585	4.0 (3.1-5.0)

<sup>&</sup>lt;sup>a</sup> Data are from the National Electronic Injury Surveillance System–Cooperative Adverse Drug Event Surveillance project, US Centers for Disease Control and Prevention.
<sup>b</sup> Calculated from statistical weighting of cases based on the sample design.

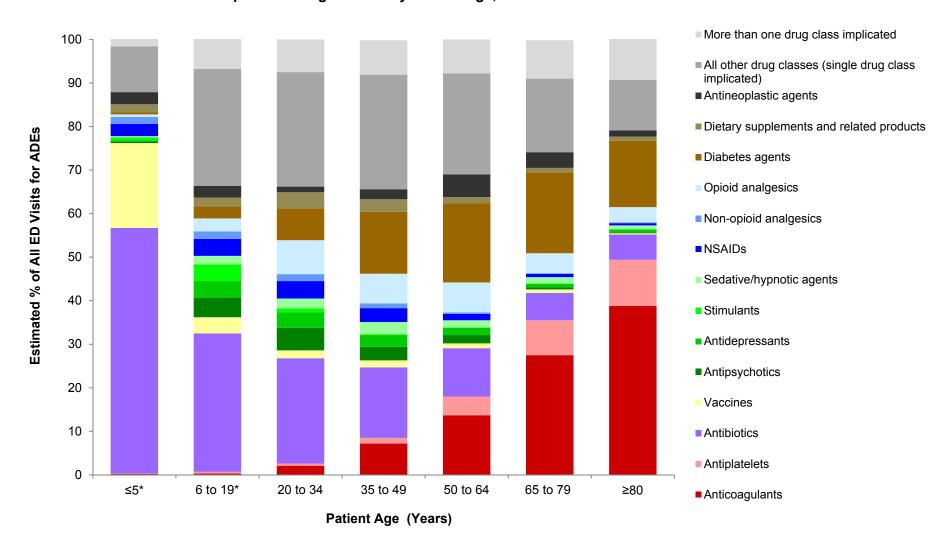
<sup>&</sup>lt;sup>c</sup> Patient age missing for one case.

eTable 3. US Emergency Department (ED) Visits for Adverse Drug Events (ADEs) from Commonly Implicated Drug Classes by Year, 2005-2014 <sup>a</sup>										
	2005-2006		2007-2008		2009-2010		2011-2012		2013-2014	
Drug Class	Number of Cases	National Estimate, % (95% CI) <sup>b</sup>								
Antibiotics	4,618	19.2 (17.7-20.7)	5,752	18.6 (16.8-20.4)	6,769	18.6 (16.7-20.6)	7,486	17.9 (16.6-19.3)	6,426	16.1 (14.4-17.8)
Anticoagulants	1,576	7.3 (4.6-9.9)	3,086	9.9 (7.6-12.2)	4,224	11.2 (8.2-14.1)	5,237	13.3 (11.1-15.4)	7,211	17.6 (14.2-21.0)
Antineoplastic agents	575	1.8 (0.8-2.8)	650	1.6 (0.8-2.4)	1,172	2.5 (1.2-3.9)	1,437	2.4 (1.3-3.4)	2,007	3.0 (1.6-4.3)
Antiplatelets	736	3.7 (2.1-5.2)	1,389	4.6 (2.7-6.5)	1,744	4.6 (2.9-6.2)	1,858	4.8 (3.2-6.4)	2,656	6.6 (4.7-8.5)
Antipsychotics	720	2.8 (2.2-3.4)	983	3.0 (2.5-3.5)	1,156	3.0 (2.6-3.4)	1,396	3.1 (2.5-3.7)	1,281	2.7 (2.1-3.2)
Diabetes agents	2,522	10.9 (7.3-14.5)	3,855	12.8 (9.1-16.6)	4,572	12.0 (9.1-14.9)	5,007	12.0 (9.1-14.8)	5,995	13.3 (10.8-15.8)
NSAIDs	996	4.1 (3.4-4.8)	1,053	3.5 (3.0-3.9)	1,133	3.2 (2.8-3.6)	1,341	3.2 (2.7-3.7)	1,199	2.8 (2.4-3.2)
Opioid analgesics	1,781	7.7 (6.9-8.6)	2,288	7.9 (7.1-8.8)	2,535	7.2 (6.6-7.8)	3,090	7.9 (7.2-8.5)	2,714	6.8 (6.3-7.4)
RAS inhibitors	559	2.4 (1.9-2.9)	769	2.5 (1.9-3.0)	1,074	2.9 (2.2-3.7)	1,443	3.2 (2.4-4.0)	1,578	3.5 (2.6-4.4)
Sedative/hypnotic agents	780	3.2 (2.7-3.7)	1,015	3.2 (2.8-3.6)	1,266	3.6 (3.1-4.2)	1,414	3.4 (2.8-3.9)	1,218	3.0 (2.4-3.5)

<sup>&</sup>lt;sup>a</sup> Data are from the National Electronic Injury Surveillance System–Cooperative Adverse Drug Event Surveillance project, US Centers for Disease Control and Prevention. Data exclude ED visits for abuse or self-harm. NSAIDs = Non-steroidal anti-inflammatory drugs. RAS = Renin-angiotensin system.

<sup>&</sup>lt;sup>b</sup> Calculated from statistical weighting of cases based on the sample design.

eFigure. US Emergency Department (ED) Visits for Adverse Drug Events (ADEs) from Commonly Implicated Drug Classes by Patient Age, 2013-2014<sup>a</sup>



Data are from the National Electronic Injury Surveillance System—Cooperative Adverse Drug Event Surveillance project, US Centers for Disease Control and Prevention. Data exclude ED visits for abuse or self-harm. Data for specific drug classes represent only ED visits in which a single drug class was implicated. National estimates are calculated from statistical weighting of cases based on the sample design. Small estimates for some age groups may not be statistically reliable (eg, percentage of ED visits in which anticoagulants were implicated among patients ≤5 years of age). Refer to Table 4 for data in tabular form (including confidence intervals). NSAIDs = Non-steroidal anti-inflammatory drugs.

<sup>\*</sup> Excludes ED visits for unsupervised medication ingestions by children aged 10 years or younger.