

Supplementary Online Content

Marom T, Tan A, Wilkinson GS, Pierson KS, Freeman JL, Chonmaitree T. Trends in otitis media–related health care use in the United States, 2001-2011. *JAMA Pediatr*. Published online November 25, 2013. doi:10.1001/jamapediatrics.2013.3924.

eTable. OM-related complications and surgical interventions rates, by age group

eFigure 1. Recurrent otitis media rates per child-year, by year

eFigure 2. Tympanic perforation/otorrhea rates per 100,000 child-years, according to age group and year

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

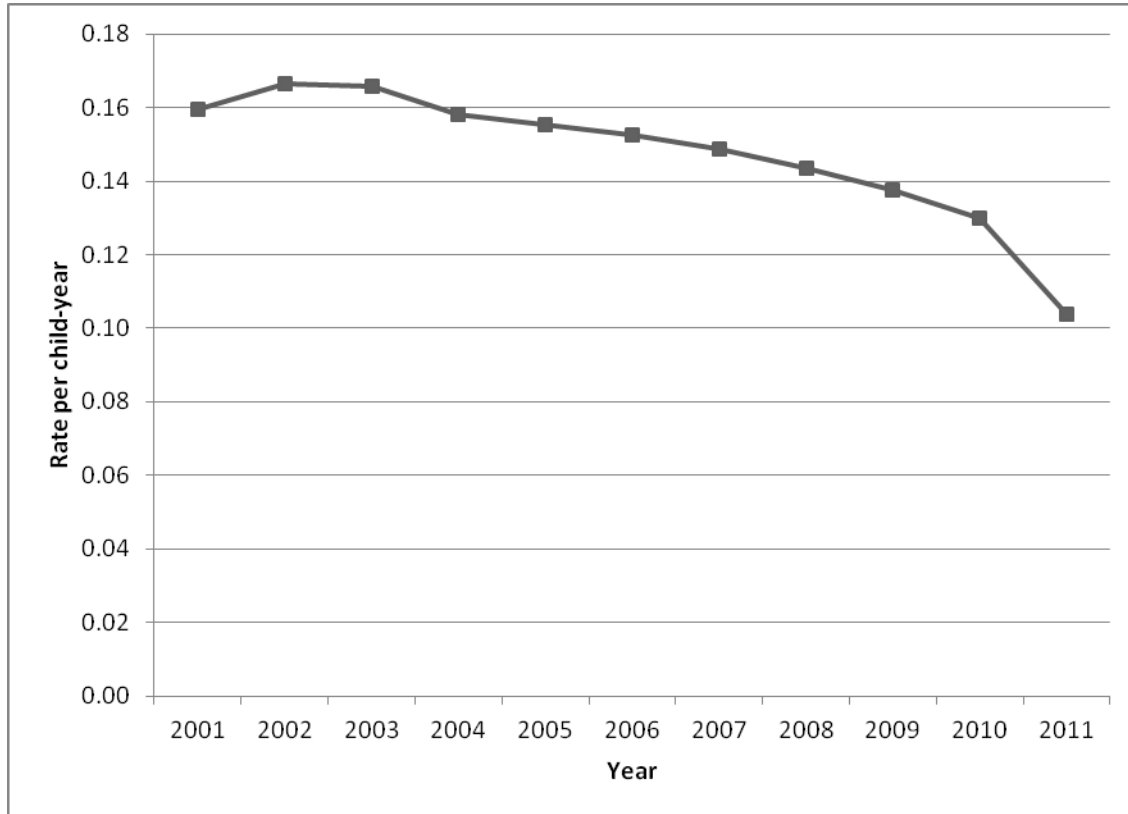
eTable. OM-related complications and surgical interventions rates, by age group

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
TM perforation/ Otorrhea											
2-6 years [‡]	2,286	2,569	2,783	2,857	2,831	2,845	3,024	2,990	3,165	3,286	3,083
<2 years [‡]	1,365	1,357	1,474	1,402	1,501	1,740	1,563	1,600	1,413	1,380	1,428
Rate ratio*	1.68	1.89	1.89	2.04	1.89	1.64	1.93	1.87	2.24	2.38	2.16
95% CI	1.59- 1.76	1.80- 1.99	1.89- 1.98	1.94- 2.14	1.80- 1.98	1.56- 1.71	1.85- 2.03	1.78- 1.96	2.13- 2.35	2.27- 2.50	2.06- 2.27
Mastoiditis											
2-6 years [‡]	31	36	37	44	42	44	37	35	40	33	20
<2 years [‡]	27	20	32	32	31	32	39	49	30	23	13
Rate ratio*	1.18	1.82	1.16	1.36	1.36	1.40	0.93	0.71	1.34	1.41	1.60
95% CI	0.82- 1.69	1.21- 2.72	0.83- 1.61	0.96- 1.93	0.96- 1.92	0.98- 1.99	0.68- 1.28	0.53- 0.97	0.94- 1.90	0.95- 2.10	0.95- 2.72
Ventilating tubes insertion											
2-6 years [‡]	10,716	11,590	12,697	12,238	13,211	12,281	13,153	12,431	12,563	12,649	9,684
<2 years [‡]	24,486	25,579	25,042	24,000	25,547	28,376	24,178	25,556	23,132	20,325	18,274
Rate ratio*	0.44	0.45	0.51	0.51	0.52	0.43	0.54	0.49	0.54	0.62	0.53
95% CI	0.43- 0.44	0.45- 0.46	0.50- 0.51	0.50- 0.52	0.51- 0.52	0.43- 0.44	0.54- 0.55	0.48- 0.49	0.54- 0.54	0.61- 0.63	0.52- 0.54

[‡]Rates are reported per 100,000 child-years

*Rate ratio was calculated as the complication rate in children aged 2-6 years, divided by the complication rate in children <2 years.

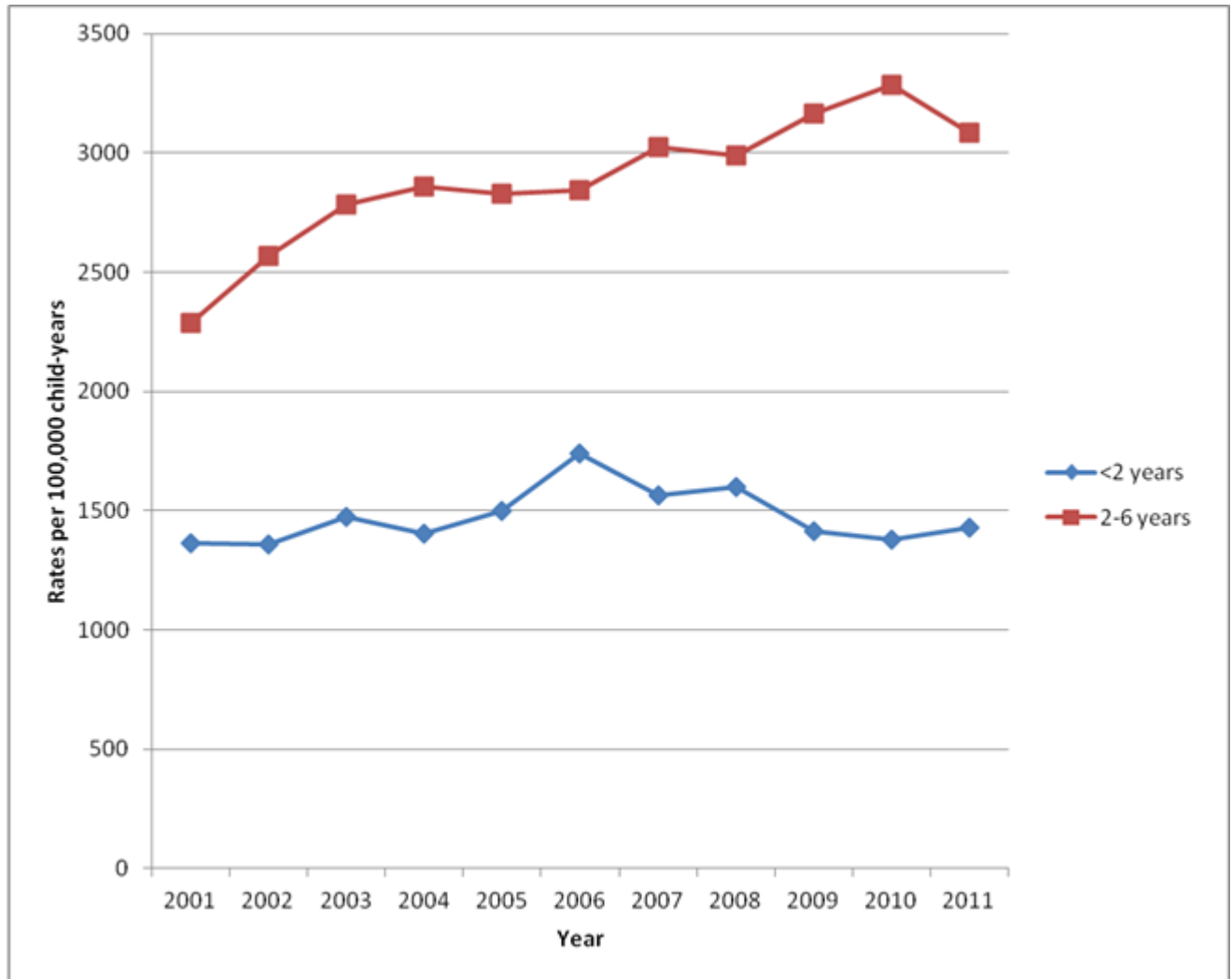
eFigure 1. Recurrent otitis media rates per child-year, by year



“Recurrent otitis media” was defined as 3 episodes or more of primary otitis media diagnosis within 6 months look-back from the index date, excluding otitis media follow-up visits. Rates are shown per each unique patient; multiple episodes in 6 months of the same patient were counted only once.

Joinpoint analysis found significant change in trends before and after 2010: during 2001-2009, recurrent otitis media rates decreased annually at 0.003/100 child-years (95% CI: 0.002-0.004), and during 2010-2011, recurrent otitis media rates decreased annually at 0.018/100 child-years (95% CI: 0.008-0.028).

eFigure 2. Tympanic perforation/otorrhea rates per 100,000 child-years, according to age group and year



For children aged <2 years, TM perforation/otorrhea rates were stable during 2001-2011.

For children aged 2-6 years, TM perforation/otorrhea rates increased annually by 80.3 (95% CI: 57.0-103.6) per 100,000 child-years. Time trends were significantly different between children aged <2 and children aged 2-6 years.