Antibiotic stewardship has been a frequent topic for studies and commentaries in our journal. Still, it can be challenging not to prescribe antibiotics even when the potential benefit is small. What do we know about delaying antibiotics to ensure that they are really needed? Mas-Dalmau et al (10.1542/peds.2020-1323) share with us the results of a randomized clinical trial in Spain involving 436 patients ages 2-14 years-old seen in 39 primary care centers with acute otitis, pharyngitis, rhinosinusitis, or acute bronchitis and whose providers had some doubts about whether antibiotics were needed. The investigators randomized these children into three groups to receive (1) an immediate prescription for an oral antibiotic; (2) a delayed prescription for antibiotic use if symptoms did not improve after a set period of time; or (3) no antibiotic prescription. The primary outcomes were symptom duration and severity and secondary outcomes were use of antibiotics in the delayed and no antibiotic categories parent satisfaction, and parent beliefs regarding the importance of using antibiotics for ARTIs. The results for all these outcomes are shared in detail in this study, but the bottom line is that there were no meaningful differences in duration or severity of symptoms regardless of group. Furthermore, only parents in the immediate prescription group that felt like antibiotics made a difference, even though there was no clinical difference.

So, does this mean we should not use antibiotics at all for treatment of uncomplicated ARTIs? To answer that question, and to comment on the implications of this study, we asked infectious disease expert Dr. Jeffrey Gerber and clinical effectiveness specialists Dr. Bonnie Offit from the Children's Hospital of Philadelphia to weigh in with an accompanying commentary (10.1542/peds.2020-046839). They point out that since pharyngitis should not be treated unless a rapid strep assay or culture is positive; since "bronchitis" (which is still not well defined in children) is viral; and since sinusitis and otitis already have delayed options for use of antibiotics per evidence-based clinical practice guidelines and guidelines, we should spend far more time educating families about ARTIs and their typical viral course rather than overprescribe antibiotics for these disorders. Prescribe some time for yourself to read this article and commentary and then consider whether there are more opportunities to reduce antibiotic use in ARTIs than you are already doing in your practice.