# Royal College of General Practitioners and Warwick Medical School Annual Education, Research and Innovation Symposium 18<sup>th</sup> May 2017 Abstract Submission Form

PRESENTER'S DETAILS	Session A. Quality
Title	
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Department or organisation	
Institute of Applied Health Research, University of Birmingham	
Category Research	
PRESENTATION DETAILS	
Authors	Title of Study
Dana Sumilo	How many tonsillectomies are necessary? An
Ronan Ryan	eleven year retrospective cohort study of
Tom Marshall	indications and eligibility for childhood
	tonsillectomy in UK primary care

## What's the problem you are tackling?

Tonsillectomy is one of the most common childhood surgical procedures. It has long been the poster-boy for overtreatment, with wide national and international variations in the use of the procedure. Evidence-based indications for tonsillectomy include documented sore throats of sufficient frequency and severity (Paradise criteria), aphthous stomatitis, pharyngitis and cervical adenitis syndrome (PFAPA), or tonsillar tumour. As far as we are aware, our analysis for the first time describes the incidence of evidence-based indications for tonsillectomy in UK children, proportion of children with evidence-based indications who actually undergo tonsillectomy and the proportion of tonsillectomies that are evidence-based.

### How did/will you do it?

We analysed electronic medical records of 1.5 million UK children aged 0-15 years registered with one of 688 UK general practices contributing to a research database (The Health Improvement Network) between 2005-2015. We identified children with recorded evidence-based indications for tonsillectomy and we determined the proportion subsequently undergoing tonsillectomy. We also identified children who had undergone tonsillectomy and identified the indications for surgery. From this we calculated the proportion with evidence-based indications.

#### What did you find?

Between 2005 and 2015, on average 4.3 children per 1,000 person years annually met evidence-based criteria for tonsillectomy; 97.9% of these met the Paradise criteria. The great majority of children with evidence-based indications for tonsillectomy never had surgery (86.8% 12,613/14,528). The great majority of children undergoing tonsillectomy did not have evidence-based indications (88.0% 14,100/16,015). Most (79.0% 12,649/16,015) tonsillectomies were undertaken in children with insufficient documented sore throats.

#### Why does this matter?

We have convincingly demonstrated dramatic overuse alongside potential underuse of one of the most common surgical procedures of childhood. Parents should be informed that tonsillectomy potentially offers only modest benefits to children meeting Paradise criteria but not to less severely affected children. Parents should also be informed that the vast majority of children meeting Paradise criteria do not undergo tonsillectomy.