are fever, dysuria, frequency, urgency, suprapubic tenderness and haematuria. Symptoms indicating upper UTI are loin pain, flank tenderness, fever and rigors. Common causative organisms are *Escherichia coli* followed by *Klebsiella*, *Enterococci*, *Proteus*, Coagulase negative staphylococci and *Staphylococcus saprophyticus*. If not managed adequately UTI has been considered a risk factor for the development of renal insufficiency, scarring and end stage renal disease in children. UTI may be suspected on the basis of clinical features or findings on urinalysis or both. A urine culture is necessary for confirmation and appropriate therapy. Nitrites and leukocyte esterase are usually positive in infected urine, WBC count > 100/cmm is highly suggestive of UTI.

Aim This audit aims to assess sensitivity and resistance of *E. coli* causing UTI in children admitted to Mayo University Hospital where children with presumed UTI are empirically treated with co-amoxiclav as first line therapy until culture and sensitivity results are available. The level of resistance to Co-Amoxiclav has been increasing over the years.

Methodology Retrospective cross sectional hospital based study of children admitted to the Paediatric Ward in Mayo University Hospital, with a primary diagnosis of UTI over a period of 12 months from the beginning of July 2016 to the end of June 2017. The list of patients with the diagnosis of UTI was obtained from the HIPE department of the hospital. Charts of children from birth up to the age of 15 years were reviewed.

Results During the study period, there were 93 admissions to the hospital with UTI. Children from 1–5 years of age were the most affected age group (39.8%) followed by those less than 1 year old (36.6%), females accounted for (74%) of cases. Fever (78.5%) and irritability (47%) were the most common presenting symptoms. The most common pathogen was *E. coli* (76%) followed by *Pseudomonas* and *Proteus*. Almost (44%) of cases of *E. coli* UTI were resistant to Co-Amoxiclav.

Conclusion There is high level of *E. coli* resistance to Co-Amoxiclav in our region. According to microbiology recommendations, a resistance of 20% is significant enough to warrant a change of practice. Due to high resistance in our cohort that has emerged over the last few years we advise updating departmental protocol and adding a second antibiotic.

GP120

BRONCHO-OBSTRUCTIVE SYNDROME IN EARLY CHILDHOOD. THE BREASTFEEDING AS A PROTECTIVE AND THE ANTIBIOTIC USE THROUGH THE FIRST YEAR OF LIFE AS A PREDISPOSING FACTOR

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The broncho-obstructive syndrome/BOS/is a common health problem in the early childhood. The frequency of 'wheezing' in infancy and its etiopathogenetic factors are very important for the likelihood of development of asthma.

The present research includes 131 children with 'wheezing' before the age of three years and 74 healthy children without similar symptoms.

The results of complex study of 33 etiopathogenetic factors for the development of BOS syndrome in early childhood shows 10 of them as most significant, including cow's milk

allergy, breastfeeding duration, period of introduction of milk formula, application of antibiotic through the first year of life.

The study confirms the importance of breastfeeding as a protective factor against the development of BOS in infancy/ $p < 0.05$.

It shows also the role of the early introducing of nutrition with milk formula/ $p < 0.1$ / and the antibiotic treatment throughout the first year of life/ $p < 0.001$ /as a predisposing factors for the occurrence of BOS.

The role of cow's milk allergy for the development of BOS/ $p < 0.1$ /shows the importance of breastfeeding and avoidance of the early introducing of milk formula too.

Except all other positive influences the group of the breastfeeding children needs significant less antibiotic use compared to the others/ $p < 0.005$.

In conclusion the long term of breastfeeding, the avoidance of the early introducing of milk formula and antibiotic use may help to reduce the early childhood 'wheezing' and probably its conversion into asthma later.

GP121

MAKE A LIST, CHECK IT TWICE: IMPROVING WRITTEN COMMUNICATION IN PAEDIATRIC OUTPATIENT DEPARTMENTS

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Aims This quality improvement initiative aimed to improve the quality of paediatric out-patient department (OPD) letters in a non-tertiary centre, by assessing adherence to a pre-designed layout. The Sheffield Assessment Instrument for Letters (SAIL) is an assessment tool that gauges written communication performance in the OPD setting. This pre-designed layout has been proven to improve the quality of clinic letters. We assessed its efficacy and looked at the uptake of this template over a year long period.

Method Clinic letters generated from consultant led general paediatric clinics over one year were retrospectively analysed via a hospital database. A checklist based on SAIL assessment tool was designed. This modified checklist included the following parameters; word count, NCHD grade, use of paragraphs, problem list. All doctors starting or continuing to work in the paediatrics outpatients department were introduced to the template system at the beginning of their clinic. We compared our numbers between each of the four interventions which included; education sessions and laminated template placement in each clinic room to assess our progress. We performed a comparative analysis on the uptake of this intervention following its initial introduction in January 2018 and its continued use from July 2018. Our main focus was on inclusion of problem lists and medication lists in the GP letter

Results Initial assessment: 51% (n=132) of the letters included problem lists. 19.3% (n=50) included medication lists. Post first intervention: 77% (n=94) had problem lists and 47% (n=57) had medication lists. A template was placed in all clinic rooms.

A year on: 78.9% (n=94) had problem lists. 31% (n=38) had medication lists. A repeat education session took place. Post third intervention: 88% (n=208) had problem lists and 58% (n= 136) had medication lists. Over all there was a