UK trainees. Outside of London 78% of respondents had never received any teaching on healthy sleep practices, and 94% stated they would find this beneficial. Within London 77% of respondents had received teaching, mostly during ST1 or local induction. 76% of paediatricians that received training altered either their core sleep practices (11%), their approach to night shift work (41%), or both (24%).

We then surveyed attitudes to the taking of short naps during statutory breaks on night shifts. Because of the LSP's on-going work to raise awareness on this issue, we separate London and non-London responses. Outside of London 36% of departments actively support naps, 25% actively discourage them. Within London 48% of departments support (an increase from 15% last year) and 10% discourage (a reduction from 30%). Unfortunately even where support is in place adequate facilities are lacking in over 50% of departments.

Conclusions Healthy sleep practices are important, in particular for shift workers. This survey of UK paediatricians demonstrates a lack for training in this area. When teaching is delivered, it results in a change in sleep practices in over 75% of cases. On-going work by the LSP to raise awareness of these issues has resulted in local departmental changes, however there remains much to improve, both locally and nationally.

| P4 | ADVERSE EXPERIENCES OF UNACCOMPANIED ASYLUM SEEKING CHILDREN AND THE IMPACT ON THEIR EMOTIONAL WELLBEING AND MENTAL HEALTH NEEDS |

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Background All Unaccompanied Asylum Seeking Children (UASC) entering local authority care in England must have a holistic health assessment. Within our local authority this includes history and physical examination using a standardised proforma and Strengths and Difficulties Questionnaire (SDQ).

Methods Retrospective review of records from Jan – August 2016. Recording SDQ scores, experiences of abuse and mental health difficulties.

Results 99 UASC; median age 16 (range 12–17) years, 96% male. Ten nationalities, mostly Afghani 39% or Eritrean 35%. High levels of negative life experiences; 46% had experienced the death of a close family member; 75% not in contact with any family. In addition to adversity prior to departure, 51% experienced trauma en route to the UK. 32% reported detention, 27% physical assault and 12% were tortured. Libya was most commonly named, however European countries such as Belgium, Hungary and Bulgaria were also identified as locations of abuse. SDQ scores outside the normal range for emotional distress in 37%, peer relationships in 17% and overall stress in 13%. There was a statistically significant association (Fisher's exact test; p=0.0003) between high SDQ score for emotional distress and adverse experiences during transit to the UK. 43 (43%) were identified as needing referral to mental health services.

Discussion Data from our cohort demonstrates a high burden of distress, with large numbers of UASC experiencing abuse in transit to the UK. This is significantly associated with high levels of emotional distress in our cohort. The predictable need in this population should be accounted for in planning for and increasing access to mental health services.

| P5 | HORIZONTAL SCHOOLS-BASED HEALTH PROGRAMME IN RURAL KENYA: HEALTHSTART |

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Background Children in low-income countries are at increased risk of poor health, which can affect attendance, cognition and ability to learn. Developing school health and nutrition strategies has been extensively highlighted as a global priority, with a particular focus on complex programme design and use of the FRESH framework. However, such programmes are relatively untested in low-income settings, despite that they may improve academic attendance and achievement.

Method We implemented a complex school health and nutrition programme in two schools in Western Kenya over 3 years, with a programme evaluation following the intervention. There were numerous outputs covering health policy, skills-based health education, infrastructure and disease prevention. A local non-governmental organisation, with involvement from local government and the community, performed programme implementation. Height-for-age, weight-for-age, height-for-weight, anaemia prevalence, academic performance and school attendance were the primary outcome measures.

Results The programme improved nutrition, academic performance and anaemia prevalence. The number of underweight children fell from 20% to 11% (OR 0.51 95% CI 0.39 to 0.68 p≤0.01) and stunting prevalence fell from 29.9% to 20% (OR 0.59 95% CI 0.50 to 0.68 p≤0.01). Academic performance improved with a 74% reduction in odds of failing assessments (OR 0.26 95% CI 0.22 to 0.29 p≤0.01). Anaemia prevalence fell from 17.2% to 11%. The programme showed an increase in low body mass index prevalence and no effect on school attendance, the reasons for which are unclear.

Discussion These results are encouraging and demonstrate that complex schools health programmes can lead to positive gains in health, nutrition and importantly academic performance. However they are not conclusive and there is a need for further evaluation of comprehensive school health interventions in poor communities.

| P6 | DO CHILDREN REALLY DIE FROM 'FLU? NATIONAL SURVEILLANCE FOR INFLUENZA RELATED SEVERE COMPLICATIONS IN AUSTRALIAN CHILDREN |

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Aims Severe complications and deaths due to influenza in children were reported during the 2009 influenza pandemic, but there are few reports for non-pandemic periods. We aimed to address this gap in knowledge by describing severe outcomes of influenza among Australian children from 2008 to 2016.

Methods We conducted surveillance through the Australian Paediatric Surveillance Unit (APSU) during July to September

each year, for children aged <15 years, admitted to hospital with severe complications of laboratory proven influenza.

Results A total of 489 cases were reported: median age=3 years (0–14.8) and 56.5% were boys. Most 338 (69%) had influenza A. Complications included pneumonia (61.2%), encephalitis (13.3%), myocarditis/pericarditis (3.7%), shock (3.9%), rhabdomyolysis (3.9%). Viral or bacterial co-infections were reported in 18%. Of the 489 children 24 (5.3%) were vaccinated for influenza and of 174 of children who had chronic conditions pre-disposing for influenza 15 (8.2%) were vaccinated. There were 21 deaths. Deaths occurred in each year of surveillance except for 2016, and in 52.3% the children had a pre-existing condition (e.g.rare genetic syndromes, cerebral palsy, ulcerative colitis), but 47.6% of children that died were previously healthy. Given that almost half of the children who died were previously healthy, there is a need for rapid diagnosis and treatment of children with severe complications of influenza, and all children should be vaccinated for influenza, not just those who have underlying chronic conditions.

Conclusions Awareness raising and education about early diagnosis and treatment in addition to increasing annual influenza vaccination is neded among health professionals caring for children children whether or not the children have pre-disposing medical conditions. Ongoing surveillance is needed to monitor the effectivenes of vaccination programmes to prvent these seious outcomes of influenza infection in children.

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Introduction Basic procedures such as phlebotomy and cannulation are commonly performed in children admitted to hospital by junior doctors. In our tertiary teaching hospital, children are admitted to one of seven wards after initially been seen on the admission unit. Out of hours junior doctors cover a number of wards, often attending wards not worked on in-hours. We highlighted a problem that finding equipment was frequently proving difficult and an in-effective use of time; partly due to varying equipment locations on each ward. We set out to streamline the process by using a standardised procedure trolley.

Methods We surveyed junior doctors to identify equipment that would be used frequently enough to form our prototype trolley. We then timed junior doctors finding a list of equipment using the prototype trolley, and without the trolley on a ward they were familiar working on and on a ward they haven't been before. Following this we agreed with ward managers to roll out the standard trolley to five wards.

Results Junior doctors on unfamiliar wards found the required equipment after an average of 10 min 13 s (6 min 28–15 m 26). On a familiar ward this reduced to 5 min 31 s (2 m 49–9 m 18). Using our prototype trolley the average reduced further to 1 min 35 s (1 m 24–1 m 46). On our unit, 30 procedures were carried out in 24 hours; over 200 in a week. Reducing the average time from 8 min 17 s (combing unfamiliar and familiar results) to 1 min 35 s would save 6 min 42 s per procedure. This would result in over 20 hours of junior

doctor time saved in a single week. Post roll out audit found 3 to be well stocked, 1 to be adequately stocked and 1 poorly stocked. This correlates with our survey of doctors; just over a third felt trollies didn't have enough equipment stocked on it. 94% felt the trollies saves time when stocked!

Conclusions We highlighted a problem with undertaking a common procedure in our patients. We designed a solution, tested its efficacy and engaged stakeholders in its implementation. We have shown how a simple solution could save over 20 hours of junior doctor time a week, improving not only patient care but junior doctor satisfaction.

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Background Cystic fibrosis (CF) is a multi-system disease resulting from mutations in the *CFTR* gene. CF patients are at risk of developing osteopenia. Regular monitoring of bone mineral density (BMD) is currently recommended in the standards of care for CF.

Aims
- To explore the extent of low BMD in children with CF and identify risk factors associated with decreased BMD.
- Establish the rate of decline in BMD to inform future practice.

Methods All children undergo routine DEXA scan at bi-annual assessments from 8 years of age. A single centre retrospective review of CF Registry records and online hospital records was conducted for children born 2000–2006. Z-score values were obtained for BMD and BMI as well as $FEV_1\%/FVC\%$ predicted (GLI), and possible confounding factors were also recorded.

Abstract P8 Table 1

DEXA sequence	Scan 1	Scan 2	Scan 3	Scan 4	ANOVA sig.
Number	96	87	60	18	
Age in years (Mean,SD)	9.98 (1.9)	11.79 (1.8)	13.24 (1.5)	14.34 (1.5)	
M/F	37/59	33/54	25/35	8/10	
L1-L4	−0.12	−0.37	−0.42	−0.96	0.008
L2	−0.27	−0.48	−0.59	−1.13	0.013
FEV1%	86%	83%	80%	78%	0.174
BMI Z-Score	−0.03	−0.05	0.04	0.18	0.844
Vit-D	72	69	71	78	0.577

Results 96 children (59 female) had a first DEXA scan at a mean age of 10 (±1.94 years). 262 DEXA scans were performed with a median of 2 per individual. Thirteen (13.5%) had an abnormal DEXA scan over the course of the study; only 2 of these were age <10 years (n=48 performed in this age range). Risk factors for abnormal BMD (z-score ≤−2) were: a BMI z-score ≤2;>50 days of intravenous antibiotics in the year before the scan; and $FEV_1\%<50$. The table shows