- 11–18 year olds consume 8 times the recommended sugar allowance, which has not significantly decreased compared to 4–10 year olds.
- 46% of 15 year olds have decay in their permanent teeth
- 20% of secondary school aged children are already obese and trends show no improvement in obesity prevalence for children in Year 6 compared to children in reception.
- 5% of 15 year olds smoke regularly
- 10–14 is peak age for diagnosis of Type 1 diabetes, with low rates of secondary complication screening
- Average age for child sexual exploitation concerns to be raised is 15–17 years

Contrary to popular understanding, young people are frequent users of health services

- Half of Year 10 pupils report visiting their GP in the last 3 months.
- 369 out of 1000 young people aged 15–19 had an A&E attendance in 2014/2015

Despite being frequent users of health services, services are not youth friendly

- Only a third of young people aged 18–24 report their GP appointment as good/very good.
- Training in adolescent health is not mandatory for GP practices

Conclusions The health of young people is not improving at the same rate as that of younger children, particularly in relation to obesity. These data provide a strong case for making young people's early intervention and age-appropriate health promotion a priority. It is vital that we collect data and commission services specially to meet the health needs of young people in order to prevent non-communicable diseases; caused by lifestyle behaviours that commonly start in adolescence.

G423(P) FROM REFLECTION TO ACTION: A MULTIMODAL, INTERACTIVE APPROACH TO ENHANCING TRAINING ON CHILD REFUGEE HEALTH

¹G Singh, ²C Sen. ¹Community Child Health, London North West Healthcare Trust, London, UK; ²Academic, Royal Society of Medicine, London, UK

10.1136/archdischild-2018-rcpch.412

Aims Child refugees have specific but complex health needs that place significant demands on health systems and those working within them. Public and professional expectation is that health workers are proficient in caring for this vulnerable population.^{1–3} Despite increasing numbers of child refugees to the UK,⁴ health professionals report feeling ill-equipped to address these needs, and unable to fulfil their ethical obligations.⁵

We designed a training course to address this gap, and evaluated the impact on professional confidence and competency in caring for child refugees.

Methods Our interdisciplinary, one-day course for child health professionals aimed to deepen understanding of: the geopolitical origins of the 'migration crisis'; the physical and mental health needs of child refugees; and advocacy for vulnerable populations. Following established pedagogical theory,⁶ we utilised a multimodal and interactive model: digital technology; skills workshops; first-hand testimonies and the use of literary and visual art were employed alongside more traditional

lectures. An online pre- and post-course questionnaire with multiple-choice and free-text questions captured professionals' perceptions about confidence and competence.

Results Of the 190 course delegates, responses were as follows (table 1):

Abstract G423(P) Table 1

'I feel confident to deal with child refugee...'	Pre-course	Post-course
• Physical needs	34% (31/91)	88% (60/88)
• Mental health needs	9% (8/88)	43% (32/74)

For delegates, the biggest obstacles to managing the 'migrant crisis' were: lack of awareness of problems faced by refugees (47% – 50/107) and lack of collaboration between health and social care (31% – 33/107). Free-text responses consistently reflected a desire to learn how to: advocate for child refugees in both local and national spheres; educate other professionals and the public about refugee needs; and be more active politically and as a volunteer.

Conclusion This study confirms significant demand for professional training around child refugee health needs. Our interdisciplinary, multimodal and interactive approach increased confidence of delegates to manage child refugee physical and mental health, stimulated interagency collaboration and provided a platform for actualising professional ethical and advocacy responsibilities to vulnerable populations. This model has potential for professional training elsewhere.

G424(P) THE IMPACT OF AGE AND DEDICATED AGE-APPROPRIATE SERVICES ON TRANSITION OUTCOMES FROM PAEDIATRIC TO ADULT HEALTH SYSTEMS: A REVIEW OF REVIEWS

AA Yassae, D Hale, A Armitage, R Viner. General Adolescent Paediatrics Unit, Institute of Child Health, University College London, London, UK

10.1136/archdischild-2018-rcpch.413

Aims To identify healthcare transition models associated with positive outcomes, and review evidence regarding the optimum age of transfer and the value of existing age-appropriate services.

Methods A systematic search strategy was used across multiple databases to identify systematic reviews addressing two review questions.

- What is the evidence for a delayed transition?
- What is the value of existing age-appropriate services?

Reviews that were not systematic, did not cover healthcare transitions, did not concern long-term conditions, or were not reviews of primary literature were excluded. Reviews of quantitative, qualitative or mixed methods studies were included. Quality was assessed using the R-AMSTAR tool. Studies with a score below 22 were excluded. The search strategy was initially applied in April 2015 and was repeated in May 2017 to include newly published literature.

Results The initial search strategy produced 2533 results with 11 systematic reviews meeting all inclusion criteria. Repeating the search criteria produced 3616 new results published between April 2015 and May 2017, with an additional 13

systematic reviews meeting all inclusion criteria. Of the 24 identified reviews, 16 reviews addressed question 1, whilst 19 reviews addressed question 2. The primary studies within these reviews included a number of interventional studies and several randomised control trials.

The majority of studies which examined the optimum age of transition stated that transition time should be determined by developmental maturity, not a rigid age threshold. However, delayed transition was associated with improved outcomes. These included health-service use, clinical outcomes, reduced care gaps and patient satisfaction. Evidence from individual programmes found potential benefits from commencing transition preparedness training in early adolescence.

Studies which evaluated age-appropriate services found that they were generally well-regarded by patients and often result in improved outcomes, better engagement with healthcare services or improved patient health behaviours.

Conclusions This review suggests that delayed transition and dedicated age-appropriate services result in improved outcomes and increased patient satisfaction. These findings appear to be consistent across a range of long-term conditions and in a variety of healthcare systems. Further work is required to identify specific barriers and facilitators to successful health-care transition.

G425(P) A SYSTEMATIC REVIEW AND META-ANALYSIS OF OUT OF HOSPITAL NURSING INTERVENTIONS TO REDUCE EMERGENCY DEPARTMENT ATTENDANCES IN CHILDREN AND YOUNG PEOPLE

¹R Satherley, ²K Lonergan, ³D Devakumar, ³R Cheung, ³M Cortina-Borja, ⁴M Heys, ¹I Wolfe. ¹School of Population Sciences and Health Services Research, King's College London, London, UK; ²Division of Health and Social Care Research, King's College London, London, UK; ³Institute of Child Health, University College London, London, UK; ⁴Evelina London Children's Hospital, Guy's and St Thomas', London, UK

10.1136/archdischild-2018-rcpch.414

Aims Rising use of emergency departments has resulted in increased costs and poor quality of care for children and young people. Clear evidence on which interventions work in reducing the number of unplanned admissions is important for those who use and commission emergency department services and to improve the quality of healthcare services. There is a policy imperative to shift care out of hospitals but insufficient evidence on the effectiveness of out of hospital care. This review aims to identify, critique, and collate outcomes in published evidence for nurse-led out hospital care for children and young people with chronic conditions.

Methods Two databases were systematically searched from 1965–2017, to identify randomised controlled trials that used nurse-led out of hospital care to reduce emergency department attendances in children and young people (0–18 years) with at least one chronic condition. The pooled incidence rate ratio (IRR) was estimated using the R package metaphor.

Results Five randomised controlled trials (3 USA, 1 Canada, 1 Scotland) met the inclusion criteria. All five trials were included in the qualitative review but four were included in the meta-analysis due to heterogeneity in outcome measures. Four papers reported on CYP with asthma and the fifth on chronic illness. Only three papers reported significant effect for a reduction in emergency department attendances. Study quality was moderate, with a medium risk of bias. The meta-

analysis fitted a random-effects model, which estimated a pooled IRR of 0.65 (95% CI 0.40, 1.03) implying a non-significant positive effect of nurse-led out of hospital care on reducing emergency department attendance.

Conclusions Although this review found no association between emergency department usage and nurse-led out of hospital care, the effect sizes were large and three papers found positive associations. Only five randomised controlled trials were included in this review, most of which studied children and young people with asthma, highlighting the need for further research in this area.

G426(P) PAEDIATRIC DENTISTS' IDENTIFICATION AND MANAGEMENT OF UNDERWEIGHT AND OVERWEIGHT CHILDREN

¹EM Clark, ¹D Tuthill, ²EJ Hingston. ¹Paediatrics and Child Health, Noah's Ark Children's Hospital for Wales, Cardiff, UK; ²Paediatric Dentistry, University Dental Hospital, Cardiff, UK

10.1136/archdischild-2018-rcpch.415

Aim Dental caries and obesity are increasing challenges for the NHS. Dentists see children frequently and are well placed to identify both conditions and potentially intervene, in line with government strategy of 'making every contact count'. We aimed to identify routine practice of Specialists in Paediatric Dentistry (SPD) regarding diagnosis and management of children with abnormal body mass index (BMI).

Methods An anonymous online survey was emailed to all SPD in the UK. Questions investigated whether and when height, weight or BMI were measured; actions taken; and dentists' feelings regarding their role.

Results 49/112 (42%) of SPDs responded (table 1). All felt they had a responsibility to identify underweight or overweight/obese children.

Abstract G426(P) Table 1 Dentists' habits regarding assessment of children's weight, height, and BMI

How frequently do you measure X?	Weight n	%	Height n	%	BMI n	%
Always	8	17	7	15	3	7
Often	12	26	11	24	9	20
Occasionally	18	39	14	30	13	28
Rarely	2	4	3	7	4	9
Never	6	13	11	24	17	37

Weight was the most commonly measured anthropometric value; height less so. BMI was most commonly calculated if a general anaesthetic/sedation was planned (n=21/29), or if the patient 'looked overweight' (n=16/29). Of those measuring BMI only 41% had taken action more than twice in a year: most commonly (90%) the child's GP was informed. Challenges to intervention included the sensitive nature of weight, and the lack of protocol. Of the 37% that did not measure BMI, two-thirds felt they did not know how to interpret the result.

Conclusions SPD were supportive of their role in the identification of underweight or overweight/obese children presenting to their clinics. However, many felt uncertain about BMI