friendly. The team initially comprised a Lead Nurse for Children and Young People, a part-time Registered Children's Nurse and informal medical leadership from a medical Consultant.

Results Successful bid to increase the team which now comprises of a Clinical Lead with dedicated hours, Lead Nurse for Children and Young People, a full-time Registered Children's Nurse, a Learning Disability Nurse, Operational Management Lead and admin support. 275 Trust staff trained in developmentally appropriate health care an transition in one year. Development of an agreed pathway between the Children's Hospital NHS foundation Trust and the author's acute adult NHS Foundation Trust Development of new transition pathways in areas such as critical care and ENT. Development of guidelines for practitioners working in the Emergency Department to improve care of young people aged 16 and 17 who present with mental health problems. Direct support to patients and their families moving into adult services, particularly through the team coordinating the transition of young people transitioning across 3+ specialties. Direct support to staff and clinical teams around the needs of adolescents and young adults, to troubleshoot problems. Increased membership in Trust steering group to include representation from partner agencies such as CCG, mental health services, learning disability services and social care. Hosted a multi-partner, city-wide Transition evening with representation from over 35 services from health partners, local authority, voluntary sector with over 100 families attending and good feedback received.

Conclusion A central young adult care and transition team has been demonstrated to be a successful way to raise the profile of developmentally appropriate healthcare and develop services to more effectively meet the needs of young adults. This model may be effective in many provider organisations.

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COMPARISONS OF THE METABOLIC CONSEQUENCES AMONG ADOLESCENTS WITH DIFFERENT SEVERITY OF OBESITY: A THREE-YEAR LONGITUDINAL COHORT STUDY

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Aim Adolescent obesity is an important issue, especially severe obesity which will increase the risks of future morbidity and life quality. Our study aims to define the impact of severe childhood obesity in term of metabolic consequences.

Methods Nineteen obese adolescents were enrolled due to abnormal body mass index (BMI) categorized as obesity (95th percentile of BMI). They were further divided into two groups: obesity (n=14) versus severe obesity (n=5). Severe obesity was defined as the BMI greater than 120% of the 95th percentile BMI of their age and gender. Data collections by questionnaire included the demographics, family history of metabolic related diseases, sleep schedules, the habit of daily exercise and diet, and awareness of their health issue. Postural related vital signs change and the data of serum biochemical profile were also detected.

Result Sixty-three percent (12/19) of these obese children belonged the category of obesity at their 1st grade of the elementary school. Subjects of severe obesity had significantly

higher body weight and BMI (both $p=0.002^*$) at 1st grade, bigger waist circumference ($p=0.046^*$) at 4th grade if compared with obese subjects. No significant finding was measured in hypertension, orthostatic changes, and SpO2 among these two groups. There was no significant difference in family history of metabolic related diseases (hypertension, diabetes, heart disease, and weight problems). Comparisons of serum biochemical profile among these two groups showed significant differences including higher uric acid ($p\text{-value}=0.039^*$), total bilirubin ($p\text{-value}=0.030^*$), triglyceride ($p\text{-value}=0.018^*$), and low density lipoprotein ($p\text{-value}=0.018^*$). Statistical trends were noted in the followings: blood urea nitrogen ($p\text{-value}=0.064$), total cholesterol ($p\text{-value}=0.07$), and gamma-glutamyltransferase ($p\text{-value}=0.075$). The prevalence of metabolic syndrome was 10.5% (2/19) in this study, and without statistically significant if compared among these two groups (7.1% vs. 20%, $p\text{-value}=0.468$).

Conclusion Subjects with severe obesity tend to have bigger waist circumference at 4th grade. Although the prevalence of metabolic syndrome among these two groups didn't show statistical significance, the biochemical profile including elevated triglyceride, low-density lipoprotein, total bilirubin and uric acid which might be good markers for early detections of metabolic changes in severe obesity.

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THE IMPORTANCE OF THE PHYSICAL ENVIRONMENT IN CREATING A SOCIAL ENVIRONMENT FOR ADOLESCENTS AND YOUNG ADULTS IN HOSPITAL

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Aim There has been a welcome trend toward separate services for young people. This has been in direct response to young people consistently calling for dedicated hospital services for their age group. Despite this trend, specialist cancer units for adolescents and young adults (AYA) only provide care for approximately half of AYA in England, the rest being cared for in child or adult environments. Previous research has described the importance of the environment on experiences of cancer care but this has centred mainly on specialist units only. It is unknown whether this is the same or different for all places of care. This study explored the impact of the physical healthcare environment on young people and professionals' social experiences of care and care delivery.

Methods A multiple-case study was conducted in 24 hospitals in England between 2014 and 2015. It included: semi-structured interviews with AYA (n=29) and healthcare professionals (n=41); and observations (total=120hrs). Thematic analysis was used to analyse transcripts and field notes.

Results Three key themes were apparent in the data relating to the environment: the physical environment; the social environment; and the relationship between the two. The provision of a physical space for socialising was seen to be vital as it enabled AYA to come together, engage in peer support opportunities, socialise with existing peers, and to spend time with their family away from their hospital bed. Although fun, bright décor was described as beneficial, the positive impact of the social space had greater significance. The majority of those in child and adult-focused care