Adolescence and young adulthood is a time of rapid change, biologically, psychologically and socially. Although there is a developmental continuity over this time, for adolescents and young people this period coincides with major upheavals including leaving school, leaving home and moving city or even country. For those with chronic diseases these all represent potential barriers to maintaining effective disease control and as a result young people often find the transition from paediatric to adult services a challenge for their health. Healthcare services themselves are predominantly designed for the very young (<5 year age group) or the frail elderly, whilst the respective experience of both adult physicians and paediatricians may still neglect wider needs of adolescents and young adults.

All these issues; as well as new risk factors such as risky-behaviour, alcohol and drugs; contribute to the fact that transition between services is associated with poor health outcomes for young people. 1 To help address some of these issues, there has been guidance for several years at national and international level on how to achieve successful transition but despite this, there is no consensus on the optimum model for young people. 2 In conditions such as congenital heart disease where we are seeing increases in life expectancies there has been a push to develop dedicated adolescent health services aimed at ages 15-24. Further development of services for this age group would mean significant reform of healthcare service structures. We therefore sought to identify the evidence base for healthcare services focussed on the 15-24 year age group.

Methods

We conducted a systematic review of literature which collected quantitative, qualitative and mixed methods studies regarding age of transition, transition models, components of transition models and existing age-appropriate services in long-term conditions. All studies were assessed for quality using the R-AMSTAR tool and studies that scored fewer than 22 points were excluded. This resulted in 19 studies suitable for inclusion.

Results

What is the value of age-appropriate services for adolescents and young adults?

Within the literature there are a number of models of age-appropriate services. One model highlighted in rheumatic disease is a dedicated clinic shared between paediatricians and rheumatologists and supported by a multidisciplinary team. 4 Another model showcased in cancer services has a single health specialist co-ordinating developmentally appropriate services for patients during their transition. 2, 12

In diabetes, trials of dedicated young-adult clinics demonstrated improved glycaemic control (measured by HbA1c levels). 5 Such clinics have also been shown in other conditions (including IBD, cystic fibrosis and organ transplantation) to reduce hospital admissions, improve key health indicators, and improve clinic attendance. Young people report better satisfaction when these clinics are in the same location as their paediatric clinic.

Some studies suggested that in some conditions these dedicated services have no significant impact on transition outcomes. In mental health services there is evidence to suggest that health outcomes are not affected by dedicated services, but that they still report increased engagement with care. 3 Overall, the wider evidence indicates that dedicated services are successful in improving various health outcomes and demonstrate no evidence of harm.

Planning

Introducing a clear transition plan, identifying the patient’s individual health, social and educational needs, early in the transition process leads to favourable outcomes. 2, 12 A named transition co-ordinator is associated with better health outcomes. This planning must involve the patient, parents and input from an multidisciplinary team.

Young people often feel anxious and unprepared for transition. Key to successful transition outcomes is the provision of skills and knowledge related to disease management but also on relevant health risk behaviours (e.g. sexual health). 6 Resources that guide young people in this life stage (e.g. employment advice) and foster autonomy and self-advocacy improves outcomes.

Which aspects of transition models are associated with positive outcomes?

<table>
<thead>
<tr>
<th>Skills/knowledge</th>
<th>Health professionals</th>
<th>Healthcare systems</th>
<th>Continuity of care</th>
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<tbody>
<tr>
<td>Patients' perspective on factors that facilitate transition outcomes</td>
<td>Young people often perceive adult service as unwavering of, and unable to provide, adolescence. Communication skills, condition-specific knowledge and confidentiality have been noted to improve this perception. Improving trust between paediatric and adult services can also reduce the stigma of the transition process. 2</td>
<td>Particularly in conditions such as ADHD, obesity and psychosis, there is a difficulty in accessing age-appropriate services. In mental health, strict eligibility criteria as a key marker of successful and lack of alternative pathways is a transition. Introducing young people identified as facilitators for successful transition. Despite transition between paediatric and adult services often being fragmented, young people report continuity of care.</td>
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Discussion

Dedicated services for young people and adolescents are a valuable opportunity to deliver healthcare appropriate for this population’s developmental and health needs as well as improving the experience of care. 3 However, evidence (particularly in diabetes) that such clinics result in improved health outcomes is limited.

There is evidence that a later age of transition may result in better health outcomes and better engagement with adult services. However throughout the literature there is a consistent view that individual readiness and not age much be the key consideration when deciding when to initiate transition for an individual patient.

References