

## Highlight and Current Opinion

# Towards safe and effective transition from adolescence to adult care

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## ABSTRACT

Transitional care is an important step in patients' care. This article aims to give some guidance towards a safe and smooth transition from adolescence to adult care. It highlights the definition, elements, steps, effects and benefits of an effective transition system.

### Keywords:

Transition; Care; Safe; Adult; Adolescence.

### Definitions of Transition

Several definitions exist to describe transition. In its simplest term, Transition is defined by the process of which the total care of children and adolescents with chronic medical conditions is transferred to the adult teams. Carrizosa et al defined Transition as "a purposeful, planned process that addresses the medical, psychosocial, educational, and vocational needs of adolescents and young adults with chronic medical conditions, as they advance from a pediatric and family-centered to an adult, individual focused health care provider" [1]. Healthcare transition is defined by the American national alliance to advance adolescents healthcare as the process of changing from a pediatric to an adult model of health care [2].

Inappropriate transition can be a risky process especially if care is missed during the interim of the adult team taking over and the paediatric team stepping down from the patient care; this may be critical as loss of continuity of care is a major factor [3]. The Institute of Medicine recommended prioritization of transition as a key factor in improving care of young adults [3]. For example non-structured transition of children with diabetes was associated in one study with increased risk of hospitalization [4].

### Elements of transition (Adapted from the transitionwise [2])

1. Transition policy: Transition should be a well planned process. This will need a clear policy stating who should be transitioning, to which services and at what age. It should also set standards which are clearly defined and measurable. Developing a policy should involve not only health-care providers but also adolescents and their families and should be open to continuous revision and improvement.
2. Follow-up and monitoring: There should be clear followup of both patients and the transition process. This will involve assessing the transferring and receiving health services abilities and understanding

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of transition.

3. Transition planning: transition should be planned carefully. This involve selection of time place and personnel to complete the process effectively and in a way that's comfortable to the patient and family.
4. Joint Transition clinic. This is ideally a joint clinic that should be attended by the memebers of the paediatric team and the receiving team. The patient and family should have been prepared and well informed about the transisition services and what it involves. Also sufficient time should be allocated to each patient attending on the day for the process.
5. Care transfer to the receiving team. This involves full take-over of the patient by the adult team following transfer of medical notes and all relevant clinicial information.

### Steps of transition

1. Transition policy: the concept of multidisciplinary transition progrmme should be designed around the adolscents; aiming for their reinforcement of patients autonomy, coordinating medical educational/professional and psychological needs [5]. These should be clear and detailed indicating the following:
  - A. Who should benedfit from the services: Ideally children with some chronic illness that will need follow-up with a dedicated adult team. Children with the following conditions, for example should have a dedicated transition services: Cystic Fibrosis, Diabetes Mellitus, Inflammatory bowel disease, Neurodisability syndromes, organ transplant patients and severe epilepsy. Planning should also include cases that needs transitioning but not necessary transition clinics such as bronchial asthma and thyroid abnormalities.
  - B. Criteria for the receiving team: The receiving team should have all the qualifications and experience to manage the patient appropriately and effectively.
  - C. Timing for transition: The plan should provide a guide when to start the process and when should it be completes. In some cases preparation for transition should start early. There is no agreed universal guidelines now regarding the best timing, as even within the same institution different departments would have different time-line. This is probably understandable due to differences in cases and centres facilities.
  - D. How transition should happen: Some cases will require dedicated combined clinics whereas some for example non complicated cases will do only with transition letters.
  - E. Follow-up of transitioned patients and making sure that patients and families are comfortable with the new team and its care.
2. Policy should also include ways of rigourous reviews and continuous monitoring. It should assess the transferring and receiving center's abilities and qualities and set standards for both centers and service. A systematic review of the impact of transition on the adult healthcare concluded that evaluation of transfer appears to be hindered by methodological challenges. Authors also identified establishing clearer definitions and metrics of transfer and creating the infrastructure to monitor the transfer of patients more consistently as important goals [6].
3. Transition planning: As stated earlier should start as early as possible, so as not to delay transfer and to give the patient the chance to be looked after by the adult team. Early adolescence is probably the right time to start discussing the future of the care of a young adult with him/herself and the family. Many ways exist as to how should the adolescents learn about their disease. Ascertaining the patients' preferred method of learning about the disease and its management is important in order to customize and enhance health care transition readiness, self-efficacy, and medication adherence [7].
4. Joint transition clinic is the core element of transition care. It needs to be well-planned and scheduled in terms of time, location and personnel. Most centers se single clinic for example in the paediatric hospital but using 2 steps clinic is not unusual.
5. Care is taken by the receiving team: The transition from child to adult services is a crucial time in the health of young people who may potentially fall into a poorly managed 'care gap' [8]. The main critical period is the period between the times the patient is transferred to the moment he or she is

being seen officially by the adolescent team. Under no circumstance should this gap exist. Most centers inform the patient that he will be under the care of the paediatric team till he/she is officially seen by the Adolescents team in the adult center and the care is fully taken over.

The process and policy should be regularly reviewed and revised. A study involving 155 patients and parents identified gaps in education with regards to sexual health, health of future offspring, pregnancy, drug abuse and future career or vocational counseling [8,9]. Use of technology has helped a lot in informing and educating patients not only about their disease but also about the transition process. Huang et al found that use of web-based programme in addition to a texting system that help in disease management and skill based intervention has positive cost-effective influence on transition outcome [10].

### Benefits of transition

1. Preparing the adolescent early for taking responsibility for his care by knowing his own condition, progress, medications and possible disease outcome
2. Helping the youngster psychologically to understand the changes expected to occur in the near future
3. Smooth transition means good control and less hospital admission which will improve patients quality of life
4. Reducing cost of healthcare.

For example, common conditions that benefit from planned transition clinic include:

1. Cystic fibrosis
2. Diabetes

3. Chronic kidney disease
4. Inflammatory bowel disease
5. Sickle cell disease

Some cases of these conditions might not need specified clinics. These are cases with mild disease and good control with minimal medications.

In some cases like familial immune-deficiencies and cystic fibrosis it would appear difficult for siblings from same family with similar diagnosis to be looked after by two different teams. This is particularly challenging if the service is split between two different centers, exposing patients to different infective agents, with high risk of exchanging the bugs at home. Certainly presence of one center will help a lot but not prevent this.

### Effects of transitioning to adult-care on Adolescents

Adolescents experienced loss of familiar environment combined with insecurity as shown in a study by Fergan et al [11]. They also suffered stress with new relationship with clinicians in addition to the stress of taking responsibility [11].

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## CONCLUSION

The need of a planned, dynamic, multidisciplinary well-organized transition service is really important to ensure patients safety and autonomy [12]. Psychosocial, educational and medical requirements for the young adult should be thought of when setting such service [11]. Presence of a key- worker could play a pivotal role in organization, setting and coordinating the service [12].

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