Building the Bridge Between Pediatric & Adult Diabetes Care: Making the Connection

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Educational Objectives

- To identify barriers to transition
- To identify complications & cost related to “loss to follow up” when emerging adults do not complete transition
- To identify beneficial elements of a structured transition program

Disclosure to Participants

- Notice of Requirements For Successful Completion
  - Please refer to learning goals and objectives
    - Learners must attend the full activity and complete the evaluation in order to claim continuing education credit/hours
- Conflict of Interest (COI) and Financial Relationship Disclosures:
  - Presenter: Eileen Egan, DNP, FNP-C, CDE - No COI/Financial Relationship to disclose
  - Presenter: Jean Corrigan, RN, MA, CDE - No COI/Financial Relationship to disclose
- Non-Endorsement of Products:
  - Accredited status does not imply endorsement by AADE, ANCC, ACPE or CDR of any commercial products displayed in conjunction with this educational activity
- Off-Label Use:
  - Participants will be notified by speakers to any product used for a purpose other than for which it was approved by the Food and Drug Administration.
Transition Begins.....

- Long before the physical move to the adult practice actually happens
- Discussion about transition begins at about the age of 12

Why Transition?

- The needs of emerging adults are different & unique
- Increasing independence may lead to “outgrowing” the pediatric team
- Transition will ultimately assist the emerging adult in being fully responsible for their diabetes care
- Adult providers may be better equipped to handle additional health changes

Our Goals

- A guided, therapeutic, educational transition rather than an administrative event
- Transitioning from child centered to adult oriented thought processes
- Keeping the initial phases of the transition family centered
- Complete coordination between the pediatric & adult practices

Background & Significance

- 215,000 emerging adults <21 y/o with T1 DM; tens of thousands transition annually
- 25%-40% lost to follow up as they transition care
- Increased risk of acute & chronic complications
- $184 billion spent on diabetes hospitalizations
- Many barriers to transition: providers, patients, parents, health care system

Review of the Literature

- No standardized process or best practice methods
- Many programs tried with mixed results & limited outcome data; most data from outside the U.S.
- Emerging literature indicating little progress
- Parental role gaining attention
- ......lot’s of discussion about the problems but not the solution

Clinical Question

- Does a structured transition program, facilitated by coordinated efforts between pediatric and adult diabetes providers impact:
  - adherence to follow up?
  - psychometric measures?
  - development of acute complications or A1C?
Design/Methods/Procedure

• Mixed Method, Prospective, Longitudinal Study
• Joint visit with pediatric & adult provider transitioning the emerging adult together
• Transition coordinator facilitating appointments
• Chart review for adherence to follow up, acute complications/hospitalizations, A1C

Methods/Procedure

• Emerging adults: Pre & post transition questionnaires (baseline & at first follow up, 3-6 months post transition)
  – Diabetes Quality of Life - Youth; short form
  – Diabetes Distress Scale
  – Health care climate questionnaire
  – Open ended questionnaire
• Parents:
  – Parent Diabetes Distress Scale
  – Open ended questionnaire

Project Progress

• 29 emerging adults transitioned (n=29)
• 29 have returned for routine follow up thus far
• 15 parents completed surveys
• Study is Ongoing:
  – Underpowered; will continue enrollment in the upcoming year to improve power
  – IRB approval for continuation of project

Summary of Pre & Post Transition Correlations

Pearson Correlation Coefficient

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<th>Measure</th>
<th>A1C</th>
<th>DPI</th>
<th>DQOL</th>
<th>HCCQ</th>
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</tbody>
</table>

✓: correlation is significant at the 0.05 level (2-tailed). ✓: correlation is significant at the 0.01 level (2-tailed). ◯: no significant correlation.

Demographics

| Emerging Adult Demographics
|   |
|---|---|---|---|---|---|
| Age | Mean | Minimum | Maximum |
| 25  | 18   | 14   | 26     |

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Statistical Significance of Psychometric Evaluations

Paired t-Test

• HCCQ:
  – t = -2.73, df = 27, p = 0.011
  • Biggest improvement noted in ability to ask questions, feeling understood, and feeling confident
• DDS:
  – t = -2.55, df = 27, p = 0.017
  • 44% reporting moderate to high distress pre-transition vs. 23.4% post-transition
  • Biggest reduction of distress noted in areas of regimen distress & emotional burden

Statistical significance = p<.05
HCCQ= Health Care Climate Questionnaire, DDS= Diabetes Distress Scale
Parent Psychometric Evaluation

Parent DDS (frequencies):
- 75% low distress
- 25% moderate distress

Worry about their relationship with their emerging adult
Worry about their emerging adult in general

*Highest scores on DQOL indicated that emerging adults felt their parents worried too much, that they were too protective, & that they acted like DM was their disease*

Summary of Clinical Outcomes

Summary of Clinical Outcomes

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<th>N</th>
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*One subject was hospitalized with DKA, secondary to a strep throat infection. This subject was adherent with follow up appointments.*

Qualitative Results-
Content Comparative Analysis

- Emerging Adults
  - Readiness for transition
  - Confidence/satisfaction with their DM provider pre & post transition
  - Process was easy
  - Feeling more in charge of DM & more informed
- Parents
  - Involved in making appointments & ordering supplies
  - 18-20 y/o: transition/ independent appointments
  - Received little education regarding transition

Implications for Diabetes Educators

- Seamless, uninterrupted health care
- Potential reduction in complications & health care costs
- Parents want and need continued education/involvement; keep them informed
- Program could be utilized with other chronic illnesses

References