

Piloting an EMR Technology to Facilitate Transition Counseling at an Adolescent Primary Care Clinic

Khristine Arrieta, DNP(c), BSN, RN; Kimberly Mcilrot, DNP, CPNP, CWOCN, CNE, FAANP, FAAN; Renata Sanders, MD, MPH, ScM
The Johns Hopkins University, School of Nursing, Baltimore, MD

Background

- Transition from the pediatric to the adult care setting is a vulnerable period for adolescents and young adults¹
- Transition improves healthcare outcomes and reduces costs. Thus, the “Six Core Elements of Health Care Transition 2.0” guidelines were established^{1,2}:



- Evidence suggests the use of provider education, EMR-based technologies, and constant visual reminders as strategies to optimizing adoption of the best practice recommendations in clinical practice^{1,3}

Purpose & Aims

The purpose of this quality improvement (QI) project was to determine if a combination of evidence-based interventions would facilitate transition counseling and increase adherence to transition practice recommendations at an adolescent primary care clinic.

- Aim 1:** Increase transition counseling by improving provider knowledge of transition topics and use of available EMR-based technology as measured by chart audit
- Aim 2:** Assess post-intervention provider satisfaction using a Qualtrics survey adapted from Weimann et al. (2015)

Methods

Design: Pre- and post-test pilot study over a 20-week period

Setting: Adolescent primary care clinic affiliated with an academic hospital

Sample: 2 convenience samples

- Electronic medical records of patients, ages 17 to 26 years
- Adolescent clinic providers who received educational in-service

Interventions & Procedures:

- Collaborated with IT and Chief of Pediatrics to build an EMR Best Practice Alert (BPA)
- Created educational in-service materials: PowerPoint lecture and infographics
- Conducted educational in-service during a staff meeting and monthly resident orientation
- Posted infographics (Figure 1) in provider workroom
- Administered a post-intervention Provider Satisfaction Survey
- Incorporated educational in-service materials in residency orientation process

A PREPARATORY TIMELINE

STEPWISE APPROACH TO TRANSITION OF CARE



17 years

BEGIN ANNUAL COUNSELING

Introduce the Harriet Lane Clinic's transition policy to patients and caregivers



19 to 20 years

CONTINUE ANNUAL COUNSELING

Assess the patient's and caregiver's transitional care needs. You can access the Transition Readiness Assessment tool under the Flowsheets tab



21 to 24 years

COUNSEL EVERY 6 MONTHS

Provide information based on needs and specify adult care provider options within the area



25 years

COUNSEL EVERY 3 MONTHS

Connect with an adult care provider and plan on a date for transfer of care



26 years

COUNSEL MONTHLY UNTIL CARE IS TRANSFERRED

Complete transfer of care. Follow-up with patient and adult care provider in 3 - 6 months after transfer of care

THE EPIC ALERT SIMPLIFIES THE PROCESS WITH JUST ONE CLICK!



- Autodocument the transition brochure on the AVS
- Autodocument transition counseling in the clinical note
- Automatically add the transition counseling visit diagnosis and ICD Code for transition tracking & monitoring
- Reset the alert to reappear in one year

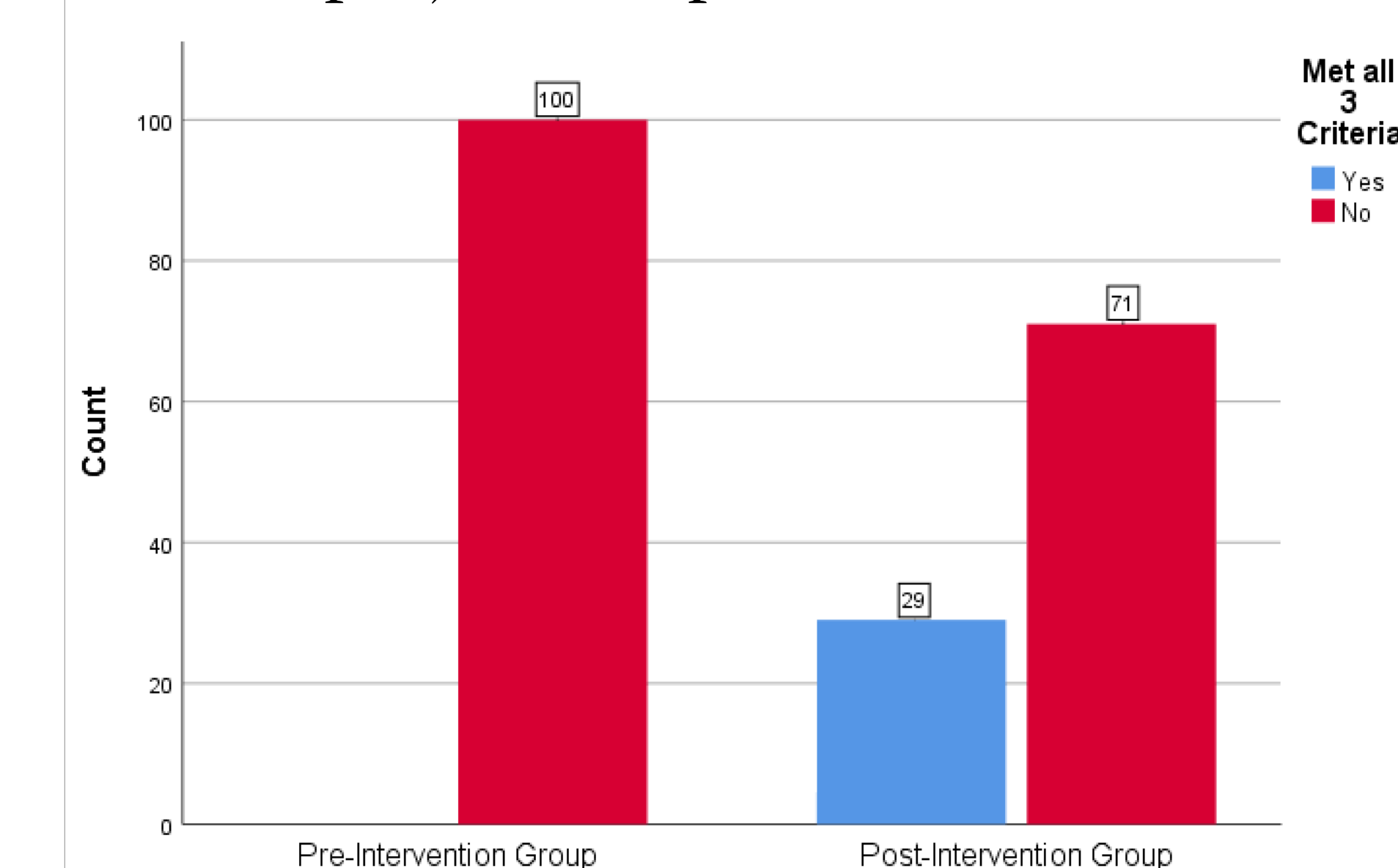


- Option to defer until later during the same visit
- Option to reset alert for 3 months or 6 months depending on the patient's age and needs

Figure 1. Infographic summarizing lecture presentation content regarding clinic transition policy and EMR-based technology

Results

- Twenty-three of 28 eligible providers recruited during a staff meeting and monthly resident orientation program
- 200 patient charts were audited, 100 each from the pre- and post-test groups
- Twenty-nine percent increase in documented transition counseling for meeting all three benchmark criteria (Graph 1).
- “Satisfied” was the most commonly selected response for the majority of the provider satisfaction survey items (Table 1)
- Sixty-three percent of providers responded “Probably yes” or “Definitely yes” when asked about intended continued use of the EMR-based BPA intervention after project completion



Graph 1. Pre- vs. Post-Intervention Chart Audit for Meeting All 3 Benchmark Criteria

How satisfied are you with...	N = 16, n (%)
The ease of using the Epic alert?	7 (43.8)
The ease of using the infographics?	5 (31.3)
The accessibility of the Epic alert?	9 (56.3)
The accessibility of the infographics?	7 (43.8)
The time it takes to utilize the Epic alert?	7 (43.8)
The time it takes to utilize the infographics?	3 (60.0)
The training you were given prior to using the Epic alert?	10 (62.5)
The training you were given prior to using the infographics?	9 (56.3)
The technical assistance or troubleshooting in using the Epic alert?	8 (53.3)
The flow between titles, topics, and teaching points of the transition brochure smartphrase as a result of acknowledging the Epic alert?	8 (53.3)
The flow between the titles, topics, and teaching points of the infographics?	8 (53.3)

Table 1. Proportion of “Satisfied” providers on the Provider Satisfaction Survey items

Conclusions

- Feasible to develop an EMR-based BPA with participating providers reporting satisfaction with its ease of use, accessibility, and efficiency
- An EMR-based BPA can be a clinically significant and sustainable transition tool as long as providers are formally educated and trained on its use
- Need more innovative payment approaches to incentivize provision of transition services, reduce the burden on providers, increase adoption of practice recommendations

Dissemination

- Project results presented at project site's grand rounds
- Abstract was accepted to the National Association of Pediatric Nurse Practitioners – Maryland Chesapeake Chapter's Spring 2020 Conference
- Manuscript pending submission to a peer-review journal to inform adolescent providers regarding the utility of EMR technology in transition counseling.