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# DNP Project Proposal: Toolkit for Transition of Young Adults with Autism Spectrum Disorder (YA-ASD) to Primary Care

Dawn Boal Sacred Heart University, boald@mail.sacredheart.edu

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# DNP Project Proposal: Toolkit for Transition of Young Adults with Autism Spectrum Disorder (YA-ASD) to Primary Care

D B, BSN, RN, DNP Student/Project Lead

A DNP project submitted in partial fulfillment of the requirements for the degree of Doctor of

Nursing Practice

Sacred Heart University Davis & Henley College of Nursing

Dr. M, DNSc, APRN, FNP-BC, EBP-C

+

# **Approval Page**

This is to certify that the DNP Project Final Report by DB, BSN, RN has been approved by the DNP Project Team on April 10, 2024

for the Doctor of Nursing Practice degree

DNP Project Faculty Advisor: Dr. M, DNSc, APRN, FNP-BC, EBP-C

Project Site Clinical Mentor

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#### Abstract

**Significance and Background**: Young adults (YA) with autism spectrum disorder (ASD) transitioning from pediatric to adult care may have more difficulty finding a primary care clinician trained to address their unique medical and mental health needs. Transition resources need to be developed to help these patients and their caregivers while they are still being cared for by their pediatrician.

**Purpose:** To develop an ASD resource toolkit with resources designed to help YA-ASD and their caregivers with the transition from pediatric care to adult primary care.

**Methods:** The Model for Healthcare Improvement guided this evidence-based quality improvement project. An evidence review informed the resources that were included in the toolkit. Training on the toolkit and the process for accessing it was delivered by video to all clinicians and nurses in the pediatric practice within a large children's health system. Access to the toolkit was offered to applicable caregivers of YA-ASD during well-child visits.

**Results:** During the 18-week project, only three caregivers had YA-ASD transitioning. Only one initial survey was accessed but none were filled out. No ASD resource toolkits were distributed. **Conclusion:** The next steps must focus on finding the caregivers of YA-ASD transitioning to adult primary care and effective strategies for getting the ASD resource toolkit to caregivers of YA-ASD.

**Keywords:** pediatrics, young adults with autism spectrum disorder (YA-ASD), transitions, resources, toolkit, primary care

#### Phase 1: Problem Identification and Evidence Review

#### **Description of the Problem**

It is estimated that 1 in 44 children in the United States is diagnosed with autism spectrum disorder (ASD) (Christensen et al., 2018). Prevalence rates have increased over time resulting in more adolescent / young adults with autism spectrum disorder (YA-ASD) transitioning to adult primary care (Christensen et al., 2018). It is critical for this patient population to receive uninterrupted quality care throughout their life, because of the frequent range of physical and mental conditions that often accompany autism like gastrointestinal disorders, seizure disorders, attention deficit/hyperactivity disorder, and obsessive-compulsive disorder (Ames et al., 2021; Jones et al, 2016). Patients with these disabilities do not access preventive care as much as their peers without disabilities and utilize the emergency room (ER) for regular healthcare (Verlenden et al., 2021). Consequently, when ER services are used more than primary care it causes an increase in healthcare costs.

Adolescent / YA-ASD transition from a pediatric health care clinician to an adult primary care clinician around the time that typical peers make this transition. Adolescent /YA-ASD may have more difficulty finding an adult primary care clinician trained to address their unique medical and mental health needs (Harris et al., 2021). The lack of a coordinated transition plan may lead to these adolescent /YA-ASD continuing to receive extended care from their pediatric clinicians or have adult primary care clinicians who lack the training to address their health care needs. Efforts are necessary to ensure that the health care transition is seamless, high quality, and tailored to the individual needs of adolescent /YA-ASD and their caregivers.

The local pediatric practice for this project has expressed the need to improve the transition of adolescent /YA-ASD to adult primary care. The current process for transition is

done individually and the opportunity exists to improve this process. The local problem is that the pediatrician office does not have a resource list of adult primary care clinicians that will accept YA-ASD to give to caregivers. The practice understands the need for improvement because they know it is important to direct patients to available adult primary care clinicians who are willing to take patients with ASD. The practice also understands that there are services available for this population that need to be communicated.

#### **Focused Search Question**

The focused search question is, in caregivers of adolescents /YA-ASDin the primary care setting (P) does a transitional resource toolkit (I) compared to usual care (C) affect YA-ASD transition to adult primary care (O)? This question will be used to find evidence on resources, tools, and supports to aid the caregiver's planning the transition from pediatric to adult primary care in adolescents /YA-ASD.

#### Methods for Gathering Evidence, Search Results and Tools used for Appraisal

The following databases were searched; CINAHL, MEDLINE, Nursing & Allied Health Premium, and TRIP. The keywords searched were ASD or autis\*, autism spectrum disorder, transition\* resource\*, primary care or primary health care, "adolescent / young adult" or emerging adult, health care or healthcare transition resource, transition resources, primary care transition. The keywords transitions and ASD narrowed the initial search. Limits for all searches were English language, adolescents (age 13-18), adults (age 18 and over), and published between 2012-2022. Appendix A, Tables A1 through A3 display the search results by database.

The final yield from each database search was 22 articles (CINAHL), 24 articles (MEDLINE), and nine articles (Nursing & Allied Health Premium). A search in TRIP pro using the PICO question function yielded three systematic reviews on adolescent / YA-ASD transition

into adult services with special health needs. The CDC on Autism was contacted for information on the transition to primary care in adolescent/YA-ASD, and this yielded four articles and three websites addressing youth with disabilities transitioning into adult healthcare. There were 62 articles collected and reviewed/skimmed for relevance of the project and level of evidence (LOE). Since the LOE was low due to adolescent /YA-ASD transitioning to primary care being a new phenomenon, articles selected for critical appraisal had a primary focus on improvements for transitioning care from pediatric to adult primary care for adolescent /YA-ASD (n=7 articles).

#### **Evidence Appraisal Summary, Synthesis, and Recommendations**

#### Evidence Appraisal Summary

The seven articles that made the final evaluation underwent rapid critical appraisal (RCA) using Melnyk & Fineout-Overholt's (2019) tools. The individual RCAs for each article are found in Appendix B. Pertinent information from each article was abstracted and entered in an evidence summary table found in Appendix B.

#### Evidence Synthesis

The LOE synthesis table appears in Appendix C. Transitioning adolescent / YA-ASD is a newer phenomenon, so the overall body of evidence is at a lower level. The highest LOE is IV, a systematic review of experimental and non-experimental studies, and most of the articles in this evidence review have a LOE VI.

Appendix D displays Table Variables of Interest: PICO Question. All seven articles described the problem and identified barriers encountered by adolescent / YA-ASD transitioning to adult primary care. Across the seven articles, 10 improvements were found to facilitate the transition from pediatric to adult primary care. The systematic review gave recommendations for improvements for adolescent / YA-ASD of the articles had a LOE IV, qualitative single study or

meta-synthesis. The LOE IV articles gave other improvements this can be seen in the synthesis table (Appendix D). One was a 25-year longitudinal cohort study at LOE V. Finally, the last study was a quality improvement (QI) project at LOE VIII, which had a new resource, creating a template in the electronic medical record (EMR) described in the synthesis table (Harris et al, 2021) (Appendix D).

#### Recommendation

In the current evidence searched, appraised, and synthesized (see Appendices B, C, and D), the recommendation is to have a notebook of resources and an adult primary care clinician list for caregivers of adolescent / YA-ASD (Ames et al., 2022; Kuhlthau et al., 2015; Verlenden, et al., Voorheis et al., 2020; Harris et al., 2021). Additional recommendations that are not included in this scope of the project are information sessions for parents and youth, care coordination, adult clinician training, and transition specific appointments (Ames et al., 2022; Jones et al., 2016; Kuhlthau et al., 2015; Verlenden et al., 2021; Voorheis et al., 2020; Harris et al., 2021).

#### **Project Plan**

The project team, described later in the project plan, met to review the evidenced based recommendations. The team collaboratively decided to develop a toolkit instead of a notebook to distribute resources to caregivers. Toolkits can help with implementing evidence-based knowledge and treatments into clinical practice (Thoele et al., 2020). Toolkits have information accessible all in one location. Universal precautions for health literacy were implemented in the toolkit development for the ease of accessibility, improved comprehension and to strengthen health literacy (Brega et al., 2015).

#### **Project Goals**

- To develop an ASD transition resource toolkit for English speaking caregivers of adolescent / YA-ASD ages 15-21 and distribute during well visits in a pediatric primary care office.
- To train clinicians and registered nurses (RNs) on the toolkit and process for caregivers of adolescents/YA-ASD to access the toolkit.
- 3. To obtain feedback on the toolkit from caregivers of adolescents/YA-ASD.

#### Framework

The Model for Improvement guided this evidence-based quality improvement (EBQI) project (Institute for Healthcare Improvement, n.d.; Langley et al., 2009). This model was chosen because of the Plan, Do, Study, Act (PDSA) method which is essential to process improvement. Having an essential understanding of EBQI and EBP will impact positive outcomes in healthcare (Milner et al., 2024). PDSA cycles for this project are outlined in Appendix E.

#### **Context: Description of the Setting**

The term 'project setting' is used to describe the setting for this manuscript. The project setting is a suburban free standing primary care pediatric office. The practice is comprised of four physicians, two nurse practitioners, 13 registered nurses (RN), one licensed practical nurse (LPN), one business manager and six patient service representatives. The office has 7800 active patients and sees approximately 1700-1800 visits per month. The project setting is a part of a large urban academic east coast health system with a level one trauma center. The health system has inpatient, outpatient, research, rehabilitation facilities and alliances with 15 community hospitals.

#### **Description of Participants**

The project participants are providers, nurses and caregivers of YA-ASD child ages 15-21 with an ASD diagnosis documented in Epic. They are being seen for a primary care well visit during the project's 18-week time frame. The project setting currently has 63 children aged 12-18 years with ASD. The number of adolescents / YA-ASD who transitioned in 2021 was two. There are four additional ASD patients who turned 18 in 2021 that have extended their care to age 21. The target group will be caregivers of adolescents 15 years of age or older with ASD. Age 12 is the standard age to introduce ASD resources and the idea of transitioning to adult primary care in the future, starting in early adolescence is acceptable for transition guidance due to the variable communication with caregivers (Harris et al., 2021). The importance of early introduction is so the caregiver and patients with ASD can start preparing for transitions. For this project, the practice has decided that the induction age is 15. Previously at the practice, a task list was handed out a year before the patient turned 18. There was not an updated clinician list.

#### **Project Team and Roles**

Table 1 displays the project team members and their roles.

**Table 1**.

Project Team Members and Their Roles

Team Member	Role
DB RN, BSN	DNP student, project lead
Dr. M	DNP Faculty Project Advisor, evidence-based practice, and quality improvement expert
Dr. D.	Project Site Clinical Mentor

#### Key Stakeholders, Staff, and Buy-in

Table 2 displays the key stakeholders and strategies to gain their buy-in.

#### Table 2

Stakeholder	Buy-in Strategy
Caregivers of YA-ASD*	<ul> <li>Transitioning their child to adulthood takes extra steps</li> <li>Empower the caregivers with critical information that is difficult to find for the public through an easy-to-use toolkit</li> </ul>
Pediatricians, nurse practitioners, nursing staff	<ul> <li>Educate about this problem and project. Specifically, the ASD resource toolkit is intended to help caregivers of adolescents/ YA-ASD with their transition to adult primary care.</li> <li>To utilize the snack and learn method with staff and listen to their concerns to help overcome barriers.</li> <li>Develop a script for clinicians so the information will be consistent for each caregiver.</li> <li>Clinicians will use a script on a laminated flyer and hand out paper flyers.</li> <li>Provide a training video on how to discuss the project and the process about handing out flyers</li> </ul>

<sup>\*</sup>The term caregiver refers to parent, guardian, or caregiver throughout this project

#### **Description of Practice Change**

This practice change aims to improve the process for caregivers of adolescent/ YA-ASD who are transitioning to adult primary care by providing a toolkit with a clinician list and community resources. The ASD resource toolkit will be given to caregivers of adolescents/YA-ASD during a clinic visit. Evaluation of the ASD resource toolkit will be done by asking caregivers of adolescent/YA-ASD for feedback. The specifics of the practice change and the implementation plan are fully described in the next several sections.

#### **Goal #1 Development of the ASD Transition Resource Toolkit**

#### Pre-implementation Plan

Goal # 1, PDSA cycle, develop a toolkit with a current clinician list and community resources. The description of the toolkit is found later in plan under Pre-implementation Creation of Toolkit section.

#### Implementation Plan

The project team created an ASD transition resource toolkit based on a review of the literature and physician/clinician feedback see Appendix F. The project team is seeking caregivers of YA-ASD to provide their feedback on the helpfulness of the ASD resource toolkit so that it can be further refined in a meaningful way. Obtaining the caregiver feedback is addressed in goal #3.

#### **Goal #2 Training of Setting's Clinical Staff**

#### Pre-implementation Plan

Goal #2, PSDA cycle, training of four physicians (including the project site clinical mentor), two nurse practitioners and 13 RN staff, had a video recording with a transcript for staff using Vyond.com (2023), Appendix G. The clinicians were introduced to the project process plan during the toolkit meeting. Clinicians (MDs and APPs) at the practice setting will introduce the opportunity to participate in this project to caregivers at the end of their child's clinic visit.

#### Implementation Plan

To ensure a sound implementation, all clinical staff at the project setting will be asked to watch a project introduction video and attest to completion of this activity. All clinicians' and nurses' emails will be entered into the REDCap survey distribution tool. Automations will be created within REDCap to distribute the instructional video (Appendix G) and include an attestation for staff. The staff will then attest through a unique REDCap survey that they watched the instructional video and understand the scope of the project, "ASD Transition Project Introduction, Staff Attestation," see Appendix H. A setting-specific project email will be set up so staff with questions can communicate with the DNP student/project lead. The DNP student/project lead will be available for questions or concerns and plans to be at the practice at

the project's start. A clear emphasis will be that the DNP student/project lead is implementing a QI project to satisfy her academic requirements and that participation is voluntary

#### **Evaluation Plan**

There are four physicians (including the project site clinical mentor), 2 nurse practitioners, and 13 nurses in the setting. Before the project is launched, 100% of the clinicians (MDs and NPs, n=6/6) and 80% of the nurses (n=10/13) will need to attest they watched the project's instructional video and have no further questions regarding the project's implementation plan. REDCap will be used to manage the completed attestations.

# Goal #3 Distribution of Toolkit and Creation of Caregiver Feedback Survey Pre-Implementation Plan

Using Readable.com all interfacing communication with the project's potential caregiver participants was at a fifth-grade reading level to ensure universal precautions accessibility were followed. For Readability reports for all components of the project see Appendix I. A Likert scale for each item in the toolkit was developed with two open ended questions, "Caregiver Feedback" survey, see Appendix J.

#### Implementation Plan

Presenting the project's introduction to the caregiver will be at the discretion of the clinician or with the clinician in collaboration with the nursing staff at each well visit. The criterion for inclusion in this project is to be a caregiver of a child with ASD between the ages of 15-21 being seen for a well visit. The clinicians will use a laminated introduction flyer with a standard script on the back 'Instructions for Potential Participants", see Appendix K, and process map for toolkit distribution, see Appendix L. The caregiver will be given a paper flyer to scan in privately. Copies of the flyer will be stored at the nurse's station. If interested, the

potential caregiver participant will scan the QR code on the introduction flyer, which will link to a secure REDCap web-survey, with a welcome page, see Appendix M. Then the welcome page will lead them to "Caregiver Participation" survey, which explains the project to the caregiver and prompts interested participants to enter their email (See Appendix N). Once the caregiver's email is entered, REDCap will automatically send a toolkit link and a link to the feedback survey, see Appendix O. The caregiver will review the toolkit (Appendix F). After reviewing the toolkit, the caregiver will be asked to take the feedback survey (Appendix J). If the caregiver does not fill out the survey, REDCap will send two reminders 3 days apart to the caregiver's self-provided email. Caregivers' perceptions will be collected by asking them to report which components of the "The ASD transition resource toolkit" were MOST helpful and which components of the "The ASD transition resource toolkit" were LEAST helpful with a Likert scale for each item in the toolkit "Caregivers Feed Back Survey," see Appendix J. Combining this feedback with their self-reported demographics will enable the project team to refine the toolkit to meet families' needs.

#### Post Implementation Plan

Data gathered during the implementation will be evaluated (see Evaluation Plan) and presented to the practice setting. An executive summary of the project results will be prepared for the key stakeholders.

#### **Evaluation Plan**

The project will track how many toolkits links were sent out using reporting technology in REDCap. There will be a record of how many paper flyers were made and handed out. The DNP student/project lead will track how many flyers were made and distributed by counting flyers every other week in person in the office. The project site clinical mentor will let the DNP

student/project lead know if more flyers are needed. The DNP student/project lead will identify how many flyers are accepted by caregivers and will record how many flyers are gone every other week along with account of how often Survey 1 "Caregiver Participation" (Appendix N) was accessed. The DNP student/project lead will identify how many surveys were accessed by having a structured query language (SQL) unique identifier placed on each survey by REDCap. The information gathered from the REDCap evaluation survey will be tabulated and displayed in table format as frequencies and percents. This project's first outcome is a summary description of families' overall interest in engagement in the project, and caregiver participant completion rates in this project as a proxy measure to determine a need for this type of toolkit/resource.

- A. The DNP student/project lead will work with the project setting to build an Epic query of all encounters at the setting during the project duration period where there was a child seen for a well visit with an ASD diagnosis between 15 and 21 years of age
- B. Number of times the project introduction flyer QR code was scanned by an interested caregiver (structured query language (SQL) placed on each survey by REDCap) divided by A = % of interested caregivers
- C. Number of caregiver interest forms completed in REDCap divided by B=% of interested AND engaged caregivers
- D. Number of caregiver feedback survey responses divided by C = completion rate

  This project's second outcome is a determination of parental perceptions of the toolkit's overall "helpfulness." For the purposes of this project, "helpfulness," is defined as "intent to use, now or in the future." Helpfulness will be measured by toolkit component sections via a 5-point Likert scale and two questions about the toolkit (See Appendix J). Combining this feedback with

caregivers' self-reported demographics will enable the project team to refine the ASD resource toolkit to meet families' needs.

#### **Barriers to Implementation with Mitigation Plan**

The first anticipated barrier is the setting's clinical staff ability or desire to hand out the project introduction flyers with QR codes per protocol. This will be a new practice for the staff. The DNP student/ project lead will create an educational video on how to implement the project and the importance of the population for the staff. The staff would attest to watching the video. With this plan staff can watch the video when it is convenient for them and use it as a reference for the project. One way to overcome this barrier is to initially have a lunch/snack and learn session with staff. In addition, weekly reminders could be placed for staff to give patients the flyers QR code resources. Another prompting could be a weekly email to designated staff as project facilitators. Getting their time through lunches and their support through the understanding of the impact on patients and the depth of the problem would be a critical dual approach.

The second barrier would be the potential caregiver project participants not showing interest in engagement wanting to utilize the flyer with the QR code. There will also be caregivers who are afraid to change or transition. To overcome this barrier, the caregiver could express concerns to the DNP student/project lead. The DNP student/project lead's contact information will be in the flyer.

#### **Sustainment Plan**

Once the project is complete, it will be handed over to the project's setting. The evaluations and information from caregivers on what resources were most utilized, this will be including the ASD resource toolkit. The DNP student will work with the project site clinical

mentor and staff to ensure the process is sustainable for future potential caregiver project participants.

# Timeline

Table 3

#### Timeline

Milestone Date	Milestone Description
May 2022	Began asking questions about YA-ASD transitions
May 2022	Developed PICO question and began searching literature and other healthcare systems on how they transition YA-ASD
July 2022	Started onboarding with project setting
December 2022	SHU IRB approval and Project presentation
January 2023	Met with project site mentor and started gathering resources for toolkit
June-September 2023	Worked on flyer, toolkit, instructional video REDCap surveys for IRB submission at project setting site
September 2023	IRB approval at project setting site and started staff training/attestation with video
October 2023	Started project
February 2024	Finished project
April 2024	Present Project Findings

The timeline was May 2022 through April 2024. See Appendix P for more specific details

# **Estimated Resources and Budget**

The budget will be reviewed and discussed with the practice setting. The material cost will be a copy of the flyers, laminated covers, and Drop Box account cost. Table 4 describes the estimated project resource and budget.

**Table 4**Project Resources and Estimated Costs

Categories of resources	Но	ours	The number	The cost	Total cost
	dev	oted	of items		
Human Resources					
Student					
DNP student/project lead	100			\$50/hour	\$5,000*
* Project setting support					
Consultation hours	98				
IRB hours	8				
REDCap hours	15				
Ongoing follow-up consultation	20				
Project data review	3				
Final review of dissemination products	3				
Center credentialing	3				
Center IS Support	5				
Staff completing learning/participation	3				
Clinical Project Mentor's time in consultation	40				
Project setting total support hours	200				
Material Resource					
Flyers	20	100		\$0.10	\$10
Lunch and learns/ snacks for staff	5	2		\$100	\$200

Survey's development with QR code.	40	2		
Drop Box	4	1	Free	Free
	house			
	hours			

Table 5 displays the project dissemination plan. Results will be presented to the practice setting and the Davis and Henley College of Nursing community.

Table 5

Project Dissemination Plan

Deliverable	Group and Timeframe
Executive Summary	Practice setting by spring 2024
Abstract and Poster	Davis & Henley College of Nursing and Sacred Heart University community by spring 2024
	Explore abstract submission to local or regional conference winter 2024-2025
Manuscript	Explore developing final DNP project paper into a manuscript and submitting to a practice journal winter 2024-2025

### **Pre-implementation Creation of Toolkit**

#### **Design and Accessibility**

This section describes the development of the toolkit. The final toolkit is in Appendix F. The toolkit utilized Health Literacy Universal Precautions, meaning all components interfacing with the guardian were at a fifth-grade reading level or less and have 100% reachability in English, (Brega et al., 2015). This was achieved through Readable.com, which gave the Flesher-Kincaid score and readability score, see Appendix I. The toolkit/flyer colors were chosen from an accessible color palette generator from Venngage.com (2023). The vibrant palette, #00B4C5 and #2546F0, color coupling along with black and white text followed the Web Content

Accessibility Guidelines (WCAG) and has a contrast ratio 4.5:1 (Venngage.com, 2023). This means the presentation of the toolkit and flyer will accommodate those with low visual acuity in combination with 16-point text (U.S. General Services Administration, n.d). All graphics were noncopyrighted through stock photos on PowerPoint or from Unsplashed.com.

#### **Healthcare and Service Clinician**

To identify clinicians accepting new patients and accepting YA-ASD patients see

Appendix T, Adult Primary Care Physician contact list. The adult clinician's offices will be surveyed about their willingness to accept adolescent / young adults with chronic diseases like

ASD from Gottrasistions.org (2020), see Appendix U. For the current clinician list, the websites google maps, Health Grades and Penn Med websites were used. Adult clinicians in the local area were assessed by phone call. The criteria for barbers and hair salons had to have a Google review rating 4.0 stars or more, have at least 15 reviews, and needed to be in the project setting's regional service area. Barbers and hair salons were asked "Will you take young adults with ASD and accommodate them?"

When surveying clinicians, services and healthcare clinicians that did not answer the phone during regular business hours were not placed on the list, due to accessibility concerns. The recommendation of lawyers and University of West Chester programs were from a mom's group that have already transitioned their children along with a local school program. The school program assists parents/guardians of special needs children.

#### The ASD Transition Resource Toolkit Components

The included component parts of the ASD transition resource toolkit are all evidence-based and the references appear next to each component. The DNP student/project lead will solicit input for resources from the project setting's site clinical mentor and clinicians at the setting,

Children's Hospital of Philadelphia's Center for Autism Research Autism Roadmap<sup>TM</sup> (https://www.research.chop.edu/car-autism-roadmap), and local Kennett Square mom's group with children with YA-ASD or other disabilities that are transitioning "Questions for Mom's Group," see Appendix V.

- Insurance and Financial Help: This section gives links to local Medicaid resources and social security income directions (Kuhlthau et al., 2015; Verlenden et al., 2021; CHOP, 2020c).
- Legal Help: This section will assist caregivers to help decide to obtain guardianship, waivers program to help children stay in their homes and a special needs trust. (Kuhlthau et al., 2015; Harris et al., 2021; CHOP, 2020b & d).
- Educational Help: This section provides a list of services from the state of PA, which
  help train, obtain, and maintain employment in PA. Resources to get federal aid for living
  and education, and University of West Chester programs for students with ASD
  (Kuhlthau et al., 2015; Christensen et al., 2018; CHOP, 2020a).
- Other Programs: This section is a link to Autism Speaks's Toolkit for transitions and a
  link to the state of PA's support of caregivers and people with ASD. (Kuhlthau et al.,
  2015; Harris et al., 2021; Autism Speaks, 2018).
- A list of local barbers and hair salons: This section is a list of service clinicians willing to take YA-ASD (Kuhlthau et al., 2015; Thoele et al., 2020).
- Eye doctors: This section is a list of local service clinicians willing to take YA-ASD (Kuhlthau et al., 2015; Harris et al., 2021).
- Dentists and orthodontists: This section is a list of local service clinicians willing to take YA-ASD (Kuhlthau et al., 2015; Verlenden et al., 2021; Harris et al., 2021).

- Adult daycare clinicians: This section is a list of local service clinicians willing to take
   YA-ASD (Kuhlthau et al., 2015; Thoele et al., 2020).
- Lawyers: This section is a list of lawyers who provide legal services for guardianship and special needs trust (Kuhlthau et al., 2015; Harris et al., 2021).
- Adult primary care clinicians: This section is list of local adult primary care clinicians willing to take new YA-ASD patients (Kuhlthau et al., 2015; Harris et al., 2021).

#### **Pre-implementation Ethical Reviews and Approvals**

This DNP student has completed the required SHU IRB CITI (see Appendix R) and project setting specific CITI training (see Appendix S). Appendix Q has the completed QI checklist demonstrating that this is an evidence-based QI project. The project was reviewed and given an exempt status by SHU IRB on 12/5/2022 (see Appendix W for email). The project was reviewed and given a determination of non-human subject's research by the project's setting's IRB on 09/12/2023 (see Appendix X for email).

#### **Project Implementation**

#### **Description of Actual Project Implementation and Deviation from Project**

The DNP student/project lead was present for the staff at the practice setting and started the project on October 11, 2023. The project lasted 18 weeks with the DNP coming to the practice setting bi-weekly to count flyers. The project lead monitored the email box and survey results weekly. The project ended February 9, 2024. The deviation from the project was the extended time requested by the project's setting's center for nursing research and evidence-based practice team. It was the team's hope that there would be more qualified participants.

#### **Evaluation**

#### **Results and Interpretation**

#### **Process and Outcome Measures**

Goal #1 was to develop a transitional toolkit (The ASD resource toolkit) for English-speaking caregivers of adolescent / YA-ASD ages 15-21 and to disseminate this toolkit during well child visits at a pediatric office. The toolkit in Appendix F was completed in September 2023. It took 80 hours to create and edit the toolkit. The toolkit was checked for accessibility and fifth grade reading level.

Goal #2 was to train clinicians and RNs on the toolkit and the process for caregivers of adolescents/YA-ASD to access it. This was done through the REDCap survey tool. An email was sent to all the clinicians and nurses with a link to REDCap. REDCap provided the project education video and an entry for attestation for all the staff. Over a 2-week period, all six (100%) of the clinicians (MDs and APPs) and 85% (n=11/13) RNs viewed the training video and completed attestations. The DNP student/project lead visited the practice setting 9 times (biweekly) over the 18 weeks (about 4 months). During these visits, the DNP student/project lead counted flyers and placed project reminder signs with new colors, and encouraging messages were brought into the staff breakroom along with treats and snacks to keep the project present. At the end of 18 weeks only 5 (5%) of the flyers that described the project and had the QR code to access the toolkit were handed out by staff.

Goal #3 was to distribute the toolkit and obtain feedback from caregivers of adolescent / YA-ASD regarding the toolkit. Queries were every 9 weeks (about 2 months) for the 18 weeks of the project. There were 3 patients/caregivers who qualified during that 18-week period. According to the database report, one caregiver accessed the project introduction and was asked to share their email address if interested in participation, but this potential participant did not complete the form (no interest). No caregivers accessed the toolkit and evaluation survey.

#### **Lessons Learned**

#### Conducting a Project in Health System as a Non-paid Employee

This DNP student gained an appreciation for the challenges a non-employee encounters when trying to carry out a DNP project in a large health system. To ensure compliance with the setting's policies, procedures, and standards, this DNP student needed to gain non-paid employee credentials for the setting. These credentials allow the DNP student/project lead to have access to REDCap, email, and conduct the project in the project setting.

Lack of institutional knowledge (e.g., the process for DNP scholarly project approval within the setting, the setting's data use and access policies, the setting's eIRB approval processes) was a big learning curve resulting in project implementation delays. Without the guidance of the setting's center for nursing research and evidence-based practice, this project would not have been approved.

#### Small Numbers of YA-ASD Prevented Assessment of Toolkit Impact

The DNP student used the clinician's feedback and their recommendations to initiate the project in a single primary care office setting knowing that the numbers of YA-ASD were low. The thought process that this DNP student agreed with was to test the toolkit in this one setting and adjust based on feedback before offering it to other pediatric primary care practices within the health system. In hindsight, this DNP student realizes that to assess caregivers' perceptions of the helpfulness of the toolkit, more potential participants were needed. This could have been achieved by partnering with the setting to gather data on the number of potentially eligible caregivers meeting project criteria and ensuring that the project implementation plan represented the setting's primary care office(s) with high frequencies.

#### Access to Data in Real-time

Having access to weekly reports would have been ideal for tracking use of the toolkit. The qualified patient query was run at the 2-month point and at the 4-month point. Three eligible caregivers were identified during the 18-week implementation. The patient population being small was more of an issue than anticipated and more access to data earlier might have sent the project in a different direction. One consideration for the future is to provide the toolkit to all healthcare clinicians in the area or even expand the offering to local schools to ensure maximum impact. However, this could be offset by the cost the clinical site would have to maintain the toolkit.

#### Addressing a Clinical Issue Versus Problem for a DNP Project

This DNP student/project lead gained an understanding of the difference between a clinical issue and a clinical problem. While clinical issues should not be minimized, it can be challenging to address a clinical issue for a DNP project because the sense of urgency that comes with a clinical problem is not present. In hindsight, there was low frequency of potentially eligible caregivers (n = 3) over the 18-week project period; therefore, this DNP student was unable to assess caregivers' perceptions of this clinical need.

#### Time it Takes to Create a Quality Toolkit

Designing a universally accessible toolkit was a learning curve for this DNP student. It took time to understand the color palette, font size, and how to write and evaluate a 5<sup>th</sup> grade reading level. Visual clarity and accessibility were important when making the toolkit to avoid issues with reading the material such as certain color contrast was difficult to read. Learning this new information was invaluable, but it did cause a delay in the project implementation.

#### Health System Approval and Protecting Patients and Staff Information

Submitting to the setting's IRB for a determination of human subjects research was a new experience for this DNP student. Additional setting-specific CITI training modules had to be completed. This DNP student learned that protecting the setting's patient data was at the forefront of approval processes. The setting's health system's research and evidence-based practice support staff assisted in developing all necessary components for the IRB review, including the development, design, and testing of the data collection and management forms (via the setting's REDCap platform). All project training presentations were done at the pediatric office using the setting's REDCap platform. REDCap is a closed system for data privacy and all information was kept within the setting's network. REDCap is a secure web application commonly used in research for data privacy. All project related information was kept within REDCap and/or a password protected OneDrive site.

#### Complex Toolkit Distribution

To protect patient data REDCap was used to distribute the toolkit. This distribution was complex and may have been a barrier for the caregiver to access resources. The caregiver had to put down their email to receive a link to the toolkit. Accessing the toolkit took several steps. First scanning the QR code, then filling out their preferred email, then finding the survey/ toolkit in the email, then viewing the toolkit, and finally filling out a caregiver feedback survey. A better design may be to send the toolkit to qualified caregivers. Another possibility is to distribute the toolkit in paper form to caregivers.

#### Toolkit in Spanish

Nearly a third of the pediatric clinic population was children of Hispanic migrants working in the local mushroom farms. The next steps should include translating the toolkit into Spanish, so this population could access it. Originally the DNP student/project lead wanted the

toolkit in Spanish because of the pediatric patients. The DNP student/project lead was advised not to translate due to the health care system's translation process being time consuming and costly.

#### **What Went Well**

This DNP student created an instructional project video with an overview of the project used to educate the setting's staff. The Vyond.com tool was used for making and editing videos. The DNP project student received good feedback on the video and as the project changed the video could be edited easily to accommodate the new modifications. The video made it possible for asynchronous staff education, which fostered a high participation rate of staff watching the video. It was also visually appealing and offered the ability to use images of the material being used, making communication more effective.

Using REDCap for project education to staff was quick and efficient. The educational video viewing and along with staff attestation, REDCap kept a good account of staff completions. This made it easier to obtain the goals of 100% of the clinicians and 80% of the RNs educated for the project. The REDCap tool was useful organizing this part of the project. By using REDCap, the staff could view the video when it was convenient for them.

Lastly, the toolkit itself was very well received by the clinicians. They gave enthusiastic feedback that this would help their patients and their caregivers. The universal precautions evidence-based toolkit was an appreciated concept by the clinicians.

#### Final Costs of Project and Return of Investment

Table 6 displays the final costs for the project.

#### Table 6

Actual Project Resources and Costs

Categories of resources	Original Estimate	Hours devoted	The number of items	The cost	Total cost
Human Resources DNP student/project lead, Onboarding to completion	100 hours	300 hours		\$50/hour	\$15,000 gratis
Project Site Team hours Onboarding to Completion	200 hours	250 hours			
Material Resource					
Flyers	20 hours	20 hours	100	\$0.75	\$75
Snack and learns	5 hours	5 hours	2	\$50	\$100
Survey's development with QR code.	40 hours	80 hours			
Drop Box (went unused)	4 hours	6 hours	1	Free	Free
Material hours TOTAL	69 hours	111 hours		\$50/hour	\$5,550 gratis
Total Costs					\$20,725

ROI was not able to be calculated because of the lack of YA-ASD transitioning to adult PCP. In terms of VOI, this project brought additional attention to the clinical issue of YA-ASD transitioning to adult PCPs and the staff was more knowledgeable after receiving the education. The pediatric clinicians were enthusiastic about the toolkit for their patients because of the vetted services and identifying adult PCPs accepting YA-ASD.

## Dissemination

A PowerPoint presentation was done for the health system, the primary care pediatric practice, and the Sacred Heart University community. An executive summary was shared with the health system and pediatric practice (Appendix Y). As part of the DNP program course, the project was presented in poster format for the Davis & Henley College of Nursing faculty and students (Appendix Z).

#### **Sustainability**

The ASD transition resource toolkit has already been established and needs to continue distribution. All materials such as flyers and paper examples of the toolkit have been left at the pediatric practice. The REDCap survey is still live for anyone who wants to participate in receiving the toolkit. A designated person or group is needed to respond to the emails and observe the survey participation. Perhaps, a query on all qualified patients/caregivers at the practice and an email sent directly to them telling them about the project. Also, monitoring of the email made for communication of this project needs to be continued.

Going forward to increase the impact, material distribution needs to be dramatically increased. The most logical way to do this would be to consider the following:

- Disseminate the toolkit directly to caregivers and YA-ASD during their visit.
- Expand the scope beyond well visits.
- Distribute the ASD resource toolkit to non-health system practices for their use.
- Distribute the ASD resource toolkit to schools to share with students and caregivers who meet the criteria.

#### References

- Ames, J. L., Massolo, M. L., Davignon, M. N., Qian, Y., & Croen, L. A. (2021). Healthcare service utilization and cost among transition-age youth with autism spectrum disorder and other special healthcare needs. Autism, 25(3), 705–718.

  https://doi.org/10.1177/1362361320931268
- Autismspeaks.org. (2018). *Autism and the transition to adulthood toolkit*. Autism Speaks.

  Transition Toolkit.pdf (autismspeaks.org)
- Brega, A.G, Barnard, J., Mabachi, N.M., Weiss, B.D., DeWalt, D.A., Brach, C., Cifuentes, M., Albright, K., & West, D.R. (2015). *AHRQ health literacy universal precautions toolkit, second edition*. Agency for Healthcare Research and Quality. AHRQ Publication No. 15-0023-EF. <a href="https://www.ahrq.gov/health-literacy/improve/precautions/toolkit.html">https://www.ahrq.gov/health-literacy/improve/precautions/toolkit.html</a>
- Children's Hospital of Philadelphia. (2020a). *Higher education opportunity act of 2008*.

  Children's Hospital of Philadelphia Research Institute: CAR Autism Roadmap<sup>TM</sup>.

  Higher Education Opportunity Act of 2008 | CHOP Research Institute
- Children's Hospital of Philadelphia. (2020b). *Special needs trust*. Children's Hospital of

  Philadelphia Research Institute: CAR Autism Roadmap<sup>TM</sup>. Special Needs Trusts | CHOP |

  Research Institute
- Children's Hospital of Philadelphia. (2020c). Supplemental security income for children with disabilities. Children's Hospital of Philadelphia Research Institute: CAR Autism Roadmap<sup>TM</sup>. Supplemental Security Income for Children with Disabilities | CHOP Research Institute

- Children's Hospital of Philadelphia. (2020d). *Turning 18: Options for when your child needs*decision-making. Children's Hospital of Philadelphia Research Institute: CAR Autism

  Roadmap<sup>TM</sup>. Turning 18: Options for When Your Child Needs Decision-Making Help |

  CHOPResearch Institute
- Christensen, D. L., Braun, K. V. N., Baio, J., Bilder, D., Charles, J., Constantino, J. N., Daniels, J., Durkin, M. S., Fitzgerald, R. T., Kurzius-Spencer, M., Lee, L.-C., Pettygrove, S., Robinson, C., Schulz, E., Wells, C., Wingate, M. S., Zahorodny, W., & Yeargin-Allsopp, M. (2018). Prevalence and characteristics of autism spectrum disorder among children aged 8 years—Autism and developmental disabilities monitoring network, 11 sites, united states, 2012. MMWR. Surveillance Summaries, 65(13),1–23. https://doi.org/10.15585/mmwr.ss6513a1
- Foster, J. (2013). Differentiating quality improvement and research activities. Clinical Nurse Specialist, 27(1), 10–13. https://doi.org/10.1097/NUR.0b013e3182776db5
- Harris, J. F., Gorman, L. P., Doshi, A., Swope, S., & Page, S. D. (2021). Development and Implementation of health care transition resources for youth with autism spectrum disorders within a primary care medical home. *Autism*, 25(3), 753–766. <a href="https://doi.org/10.1177/1362361320974491">https://doi.org/10.1177/1362361320974491</a>
- Institute for Healthcare Improvement. (n.d.). How to improve: Model for improvement. https://www.ihi.org/resources/how-to-improve
- Jones, K. B., Cottle, K., Bakian, A., Farley, M., Bilder, D., Coon, H., & McMahon, W. M. (2016). A description of medical conditions in adults with autism spectrum disorder: A follow-up of the 1980s Utah/UCLA Autism Epidemiologic Study. Autism, 20(5), 551–

## 561. https://doi.org/10.1177/1362361315594798

- Kuhlthau, K. A., Warfield, M. E., Hurson, J., Delahaye, J., & Crossman, M. K. (2015). Pediatric clinician's perspectives on the transition to adult health care for youth with autism spectrum disorder: Current strategies and promising new directions. Autism, 19(3), 262–271. <a href="https://doi.org/10.1177/1362361313518125">https://doi.org/10.1177/1362361313518125</a>
- Langley, G. J., Moen, R., Nolan, K. M., Nolan, T. W., Norman, C. L., & Provost, L. P. (2009).

  The Improvement Guide: A Practical Approach to Enhancing Organizational

  Performance (2nd ed.). Jossey-Bass.
- Lee, G. K., Curtiss, S. L., Kuo, H. J., Chun, J., Lee, H., & Nimako, D. D. (2022). The role of acceptance in the transition to adulthood: A multi-informant comparison of practitioner parents/guardians, and youth with autism. Journal of Autism and Developmental Disorders, 52(4), 1444–1457. <a href="https://doi.org/10.1007/s10803-021-05037-1">https://doi.org/10.1007/s10803-021-05037-1</a>
- Gottransitions.org. (2022). Resources and research: Clinician education and resources. Got

  Transition. Got Transition® Resources & Research- Clinician Education & Resources
- Melnyk, B.M. & Fineout-Overholt, E. (2019) *Evidence-based practice in nursing and healthcare: A guide to best practice* (4<sup>th</sup> ed.). Wolters Kluwer Health.
- Milner, K. A., Hays, D., Farus-Brown, S., Zonsius, M. C., & Fineout-Overholt, E. (2024).

  Cultivating an Evidence-Based Decision-Making Mindset. *The American Journal of Nursing*, 124(2), 40–46. https://doi.org/10.1097/01.NAJ.0001006696.57334.1a
- Readable. (2020). Take control of your content with readablepro. https://readable.com
- Thoele, K., Ferren, M., Moffat, L., Keen, A., & Newhouse, R. (2020). Development and use of a toolkit to facilitate implementation of an evidence-based intervention: A descriptive case

study. *Implementation Science Communications*, 1(1), 86. https://doi.org/10.1186/s43058-020-00081-x

- U.S. General Services Administration. (n.d.). Accessibility for Teams: Visual design:

  Typography.https://accessibility.digital.gov/visual-design/typography/
- Venngage.com. (2023). Accessible color palette generator: WCAG compliant. https://venngage.com/tools/accessible-color-palette-generator
- Verlenden, J. V., Zablotsky, B., Yeargin-Allsopp, M., & Peacock, G. (2022). Healthcare access and utilization for adolescent / young adults with disability: U. S., 2014–2018. Journal of Adolescent Health, 70(2), 241–248. <a href="https://doi.org/10.1016/j.jadohealth.2021.08.023">https://doi.org/10.1016/j.jadohealth.2021.08.023</a>
- Voorheis P, Wilson MG, Scallan E. (2020). Rapid synthesis: Identifying features of novel approaches to supporting transitions from child to adult care for young people with special healthcare needs in Canada. Hamilton: McMaster Health Forum.

  Identifying Features of Approaches to Supporting Transitions from Child to Adult Care for Young People with Special Healthcare Needs (mcmasterforum.org)
- $Vy ond. com.\ (2023).\ Vy ond\ video\ animation\ software\ solutions\ for\ everyone.$

https://www.vyond.com/solutions/everyone

# Appendix A

**Table A1**Search Terms and Search Results by Database CINAHL

Search Terms	Number of hits	Number of title & abstract reviewed	Number of full-text articles reviewed	Number of articles selected for this review without duplicates
ASD or Autis*	1,444			
ASD or autis*or	280			
"autism spectrum				
disorder" and				
transition*				
"Autism spectrum	26	26	5	17
disorder" or ASD				
or autis* and				
transition* and				
resource*				
ASD or Autis*,	8	8	2	0
And transition* and				
resource* and				
primary care and				
primary healthcare				
or health care	1.41			
ASD or autis*or	141			
"autism spectrum				
disorder" and				
transition* and				
adolescent / young				
adults or				
adolescents or				
teenagers or college				
students or young				
person or emerging adult				
ASD or autis*or	23	23	4	4
	23	23	4	4
"autism spectrum disorder" and				
transitions* and				
adolescent / young				
adults or				
auulis 01				

adolescents or				
teenagers or college				
students or young				
person or emerging				
adult and resource*				
or tools				
Primary care or	153			
primary healthcare				
or primary health				
care and ASD or				
autis*or "autism				
spectrum disorder"				
ASD or autis*or	2	2	2	2
"autism spectrum				
disorder" and				
transitions* and				
adolescent / young				
adults or				
adolescents or				
teenagers or college				
students or young				
person or emerging				
adult and resource*				
or tool* or service*,				
Primary care or				
primary healthcare				
or primary health				
care				

**Table A2**Search Results by Medline Database.

Search Terms	Number of hits	Number of title & abstract reviewed	Number of full-text articles reviewed	Number of articles selected for this review without duplicates
ASD or Autis*	5,277			•
ASD or autis*or "autism spectrum disorder" and transition*	169			

"Autism spectrum disorder" or ASD or autis* and transition* and resource*	13	13	5	5
ASD or Autis*, And transition* and resource* and primary care and primary healthcare or health care	4	4	1	0
ASD or autis*or "autism spectrum disorder" and transition* and adolescent / young adults or adolescents or teenagers or college students or young person or emerging adult	169			
ASD or autis*or "autism spectrum disorder" and transitions* and adolescent / young adults or adolescents or teenagers or college students or young person or emerging adult and resource* or tool*	22	22	4	4
Primary care or primary healthcare or primary health ASD or autis*or "autism spectrum disorder"	85	85	9	9
ASD or autis*or "autism spectrum disorder" and transitions* and adolescent / young adults or	17	17	6	6

adolescents or		
teenagers or college		
students or young		
person or emerging		
adult and resource*		
or tools or services,		
Primary care or		
primary healthcare		
or primary health		
care		

Search terms and search results by database Medline limiter that would only take one criterion

for age, therefore adolescent / young adult: 19-24years

**Table A3**Nursing & Allied Health Premium Database Results

Search Terms	Number of hits	Number of title & abstract reviewed	Number of full-text articles reviewed	Number of articles selected for this review without duplicates
ASD or Autis*	706			
ASD or autis*or "autism spectrum disorder" and transitions*	701			
"Autism spectrum disorder" or ASD or autis* and "transition" and "Resources"	262			
ASD or Autis*, And transition* and resources* and primary care and primary healthcare and health care	259			
ASD or autis*or "autism spectrum disorder" and transitions* and	259			

			T	
"adolescent / young				
adults" and				
"adolescent" and				
"teenagers" and				
"college students"				
and "young person"				
and "emerging				
adult"				
ASD or autis*or	599			
"autism spectrum				
disorder" and				
transitions* and				
"adolescent / young				
adults" and				
"adolescent" and				
"teenagers" or				
"college students"				
and "young person"				
and "emerging				
adult" and				
"resource" and				
"tool"				
	(00			
ASD or autis*or	609			
"autism spectrum				
disorder" and				
transitions* and				
adolescent / young				
adults or				
adolescents or				
teenagers or college				
students or young				
person or emerging				
adult and resource				
or tools, Primary				
care or primary				
healthcare or				
primary health care				
"Adolescent /	15	15	2	9
young adults with				
ASD" and "autism				
spectrum disorder"				
and "healthcare"				
and "transition" and				
"resources" and				
"primary care"				
			l	I

Search Terms and Search Results by Nursing & Allied Health Premium, children were excluded from the search and adolescent and adolescent / young adult were included in the search.

# **Appendix B**

## **Evidence Synthesis Table and Rapid Critical Appraisals**

PICO question: The focused search question is, in caregivers of adolescents /YA-ASD in the primary care setting (P) does a transitional resource toolkit (I) compared to usual care (C) affect YA-ASD transition to adult primary care (O)? This question will be used to find evidence on resources, tools, and supports to aid the caregiver's planning the transition from pediatric to adult primary care in adolescents /YA-ASD.

**Table B1** *Evidence Synthesis Table* 

Citation	Conceptua l Framewor k	Evide nce Type/ Desig n/ Metho d	Sample/ Setting	Major Variable s Studied and Their Definitio ns	Outcome Measure ment	Data Anal ysis	Findings	Leve l of Evid ence /Qu ality	Quality of Evidence: Critical Worth to Practice
Author Year Title County Funding	Theoretica l basis for study		Number Charact eristics Exclusio n criteria	Indepen dent variable s IV1 = IV2 =	What scales used - reliability info (alphas)	What stats used	Statistical findings or qualitative findings	Leve l=	Strengths Limitations Risk or harm if implemented Feasibility of use in your practice

			Attrition	Depende nt variable s					
Article 1									
Ames 2021 Transitioning youth with autism spectrum disorders and other special health care needs into adult primary care: A clinician survey USA Funded by Autism Speaks and the Working for Inclusive and Transformative Healthcare	To find informati on on transition readiness for adolescen t / young adults with ASD and healthcar e clinician	surve y	Online Volunta ry to Norther n Californ ia adolesc ent / young adults with ASD or SHCN and clinicia ns	none	Informat ion tables	Chisquar e Com pare d pedia tric to adult clini cians	Adolescent / young adults with ASD and healthcare clinicians are not transition ready	5	To look at the need for resources to help transition with care for both the clinician, adolescent / young adults with ASD and their parents/guardians

(WITH) Foundation									
Article 2						<u> </u>			
Kuhlthau 2015 perspectives on the transition to adult health care for youth with autism spectrum disorder: Current strategies and promising new directions.	To find transition improve ments for youth with ASD	Qualit ative interv iews	ASD pediatri c specialt y ASD clinicia ns in clinics	none	improve ments for ASD transitio n suggeste d	Num ber of sugg estio ns	suggestions for improveme nts for adolescent / young adults with ASD transitionin g into primary care	6	this article had many suggestions for improvements to help adolescent / young adults with ASD transitions into primary care  a) trainings for adult clinicians; (b) systematic medical summaries; (c) information sessions for parents/guardians and youth; (d) transition folders; (e) a transition center; (f) care coordination; (g) systematic lists of adult clinicians who are open

									for patients, willing to care for individuals with ASD, and knowledgeable; and (h) a transition-point person.  Transition specific appointments, pediatrician communicates with adult primary care Community resource list
Article 3									
Voorhies 2020 Rapid Synthesis: Identifying Features of Approaches to Supporting Transitions from Child to Adult Care for	To conduct a systemati c review on qualitativ e studies	syste matic revie w on qualit ative studie s	Adolesc ent / young adults with disabilit ies	none	Informat ion tables	reco mme ndati ons	Evidence and recommend ations for transition of care	4	Look at barriers, improvements, and recommendations for adolescent / young adults with disabilities in Canada. Current evidence Building relationships in transition improvements was established through

Young People with Special Healthcare Needs McMaster Forum									fostering patient- clinician interactions and patient-peer connections  giving tours of adult care facilities, introducing patients to adult clinicians, organizing informal luncheons, and scheduling introductory appointments with adult clinicians A platform to text and follow up with patients Transition center
									Transition center Barriers identified child health system to adults—not equal
									services
Article 4	1		ı		ı				•
(Verlenden, J. V., 2021) Healthcare Access and	Identify barriers and health	Meta analy sis of a	unweig hted n =15,710	health care utilizati on for	differenc es	Chi- squar e, using	Those with disabilities were more likely to	6	Those with disabilities were more likely to use the emergency room as their usual place of care

Utilization for	care	surve	18–30-	young	pair	use the	(5.3% vs. 1.8%). A
Adolescent /	utilization	y	year-old	people	wise	emergency	greater percentage of
young adults	for young	y	adults	(18-30)	com	room as	adolescent / young
with Disability:	people		with/wit	with or	paris	their usual	adults with disabilities
-			hout	without	•		
U.S.,	(18-30)				ons	place of	delayed medical care
2014e2018	with or		disabilit	disabilit	via	care (5.3%	due to cost (19.1% vs.
	without		ies	ies	bivar	vs. 1.8%).	8.9%) and reported an
	disabilitie				iate	A greater	unmet medical need
	S				logis	percentage	(21% vs. 10.2%).
					tic	of	
					regre	adolescent /	
					ssion	young	
					S.	adults with	
					Com	disabilities	
					pare	delayed	
					d	medical	
					nond	care due to	
					isabl	cost	
					ed to	(19.1% vs.	
					disab	8.9%) and	
					led	reported an	
					adult	unmet	
					S	medical	
					5	need (21%	
						vs. 10.2%).	
						vs. 10.270).	

Article 5

(Jones et al, 2016) A description of medical conditions in adults with autism spectrum disorder: A follow-up of the 1980s Utah/UCLA Autism Epidemiologic Study	Identify what kind of health condition s of ASD adolescen t / young adult- adult In Utah	Cohor t 25yea r longit udinal study	N = 92 N=11 died	descript ion of illnesse s	informat ion tables	descr iptiv e statis tics Fishe r's exact test Man n Whit ney U	obesity seizures GI neurologica l ear nose and throat sleep disturbance s and Constipatio n	5	obesity seizures GI neurological ear nose and throat sleep disturbances and Constipation
Article 6						l.			
Lee et al, 2022 The Role of Acceptance in the Transitio n to Adulthood: A Multi-Infor mant Comparison of Practitioners	Thematic study adds adolescen t / young adults with autism parents and	qualit ative study	N=6 N=7 N=11	describ e feelings of adolesc ent / young adults with autism	discussio n on thematic results	them atic analy sis	This study used multiple stakeholder groups of autistic youth, parents, and practitioner	6	Autistic youth highlighted the lack of understanding of sensory needs and parents underscored the lack of understanding by medical professionals. In contrast, practitioners highlighted the

,	practition	their		s in sharing	presence of Community
Parents/guardia	ers	parents'		their	Openness in the sense
ns, and Youth		concern		experience	of welcoming autistic
with Autism		s and		of the	adolescents / young
		practiti		transition	adults to work and the
		oner's		process. As	need to provide
		viewpoi		part of a	accommodation to
		nts		broader	address deficits. Both
				study,	practitioners and
				results	parents discussed
				reported in	Finding Personal
				this study	Support through
				represented	Acceptance. Although
				the four	the importance of self-
				unique	acceptance and
				themes on	acceptance was
				acceptance.	conveyed, there needs
				Autistic	to continue advocating
				youth	for the true sentiment
				discussed	and actions of
				Self-	acceptance for autistic
				Advocacy	adolescent / young
				and Self-	adults and
				Acceptance	parents/guardians to
				as a salient	achieve well-being.
				theme,	
				speaking	
	<u> </u>				

				ŀ		
			on the			
			importance			
			of not only			
			focusing on			
			the formal			
			transition			
			service			
			process but			
			also the			
			developme			
			ntal			
			experience			
			of			
			transitions.			
			Both youth			
			and parents			
			discussed			
			the next			
			theme,			
			Lack of			
			Understand			
			ing and			
			Acceptance			
						—
Article 7						

Harris et al, 2021 Development and implementatio n of health care transition resources for youth with autism spectrum disorders within a primary care medical home	QI	N=199	NA	NA	Yes 199/ 484 Whe re trans ition impr ove ment s occu rred	Need to think of other ways for transition to be talked about not just by physicians and need to involve adult primary care physicians/ clinicians	8	Resource notebook transition template created for EMR workshop seminar for parents/guardians and patients physician and staff education on transitioning
--	----	-------	----	----	---	--	---	--

# **Rapid Critical Appraisals**

Rapid Critical Appraisal of a Descr	riptive Study			Rapid Critical Appraisal of a Descri	riptive Study	,	
Project Title: Transitioning youth with autism spectrum disord	ers and other special he	ealth care needs	5. Data Collection:	We designed separate surveys for ped	diatric and ad	ult provider	rs
into adult primary care: A provider survey			(Supplementary Fi	igure 1). The pediatric provider survey	y had 20 ques	itions and th	he adult provid
Date: 2021			survey had 15 que	estions. Nine questions were identical	or compleme	entarily phr	ased across th
Date. 2021			two surveys and fo	ormatted using either Likert-type scale	e (n=5) or mu	ıltiple choic	te (n=4).
PICOT Question: In young adults with ASD (P) does health care	e transition resources (I	compared to	Questions unique	to the pediatric survey addressed pra	ctices in assis	iting with m	nedical
usual care (C) affect their transition to primary care (O)? I obtain	ned three systematic re	views on young	documentation fo	r educational and vocational program	ıs and in helpi	ing families	identify an ad
adults with ASD transition into adult services with special health	needs.		provider and plan	the optimal timing of the transition.			
Article citation (APA): Ames, J. L., Massolo, M. L., Davignon, M	. N., Qian, Y., & Croen, I	A. (2021).		Quality of the Study			
Healthcare service utilization and cost among transition-age you	uth with autism spectru	m disorder and	Validity: Are the results	of this study valid?			
other special healthcare needs. Autism, 25(3), 705–718. https://	/doi.org/10.1177/13623	861320931268					
indicate the level of the study you are appraising: 8: survey	for information gatheri	ng	Were the study/s	survey methods appropriate for the	e.question? ⊠Yes	□No	☐ Unkno
			Comments: Click	k here to enter text.			
Recommendation for article inclusion in the body of eviden			Were the study/s     Unknown	survey methods clearly described?	⊠Ye	s 🗆 No	
article starts the information collecting process. There is a know	needs of transitioning	young adults with	Comments: Click	chere to enter text.			
ASD, however, how to do that is the unknown.			Were instrument	ts used to measure the outcomes v		able? □No	
Overview			Unknown	instruments tested to be valid and	Caldeiles is		☑ Yes □I
Purpose of study, including research question(s) or	hypotheses: To gathe	r information	What start	tistic was reported and what was the te tests and cronbach alpha		Cronbach's	
2. Design/Method: ON-line survey				iate variable and interventions clea	arly describe	M2	
3. Sample: 354 pediatric (43% response rate) and 715 add	ult providers (30% resp	onse rate) from			⊠Yes		☐ Unknov
Kaiser Permanente Northern California voluntary parti	icipants		Comments: Just	Information			
4. Setting; on-line			5. Were outcome a Unknown	ppropriate for the question?	⊠Yes	S □No	
Copyright 2012-2013, Nettern full factors of Intell Trust Installation for Column Season.  Section 1. Conference on Column Section 1. Colu	39-550), by Melnyk, Bernadette	Mazurek, and Fineout-	permission, from Evidence-based p	of National Health Trust Institute for Evidence-based reaction inversing and healthcare, Expendix 19; a Land aith, 2015 and with permission, from Gindenati Ch streen, 2006-2013.	539-550), by Melny	vyk, Bernadette	Mazurek, and Finer
Rapid Critical Appraisal of a Descri	riptive Study			Rapid Critical Appraisal of a Descri	riptive Study	,	
Comments: Click here to enter text.				Unknown	□ Yes	□ No	
6. Were outcomes clearly described?	⊠Yes □No	□ Unknown	Comments: Click	here to enter text.			
Comments: Click here to enter text.				ement of the outcome(s) appropria	ate?		
7. Was sampling clearly described?	⊠Yes □No	□ Unknown			✓ Yes	□ No	□Unknov
Comments: volunteers	Elles Ello	- OTRIOWIT		here to enter text.			
Were all participants accounted for throughout the	duration of the study	?	15. Was measureme	nts of the outcome(s) clearly define	ed? ⊠ Yes	□ No	□Unknov
What was the rate attrition? Click here to enter	■Yes □No	Unknown	Comments: Click	here to enter text.			
What reason were given to explain why subjects     Comments: Click here to enter text.		dy?	16. Did the study has Unknown	ve a sufficient sample size?	⊠ Yes	□ No	
Was there freedom from conflict of interest?     Unknown	⊠Yes □No			wer analysis conducted?			□Yes ⊠No
<ul> <li>Sponsorship/funding agency</li> </ul>				ample size achieve or exceed the pe		s requirer	□Yes □No
Investigator				subgroup also have sufficient samp	de size?		⊠Yes □No
Comments: Click here to enter text.	Ev. Eu		Comments: s				
10. Was the date range of the cited literature current? Unknown  • What date ranges were included? 1993to 20  • If older literature was included, why the "service cliff" that occurs when pediatric care and school services, cl	was it included? 1993 young adults transitio an have a profound in	n out of npact on the	<ul> <li>Statistical</li> <li>Confiden</li> <li>How prec</li> <li>No</li> </ul>	nain results of the case control stud I significance (p value): Click here to ce interval and/or Standard devisition is was the intervention/treatment arrow? Wide: Click here to enter te e: Click here to enter text.	o enter text. ion: Click her it?		text.

11. What were the results? Explained the need to have a transition policy

12. Was measurement of the intervention(s) appropriate  $\ \, \boxtimes \, {\sf Yes} \ \, \square$  No  $\ \, \square$  Unknown

Reliability: Are these valid study results important?

Comments: survey

18. Were the results clinically significant?

Comments: Click here to enter text.

Comments: Click here to enter text.

Unknown

a. Were the following reported: NNH (number needed to harm), NNT (number needed to treat), OR (odds ratio), RR (relative risk)? Click here to enter text.

Rapid Critical Appraisal of a Descriptive Study	Rapid Critical Appraisal of a Descriptive Study				
☐ Yes ☐ No ☐	Level of study: $\square$     $\square$     $\square$   $\square$   $\square$   $\square$     $\square$     $\square$     $\square$     $\square$     $\square$     $\square$     $\square$     $\square$     $\square$     $\square$     $\square$     $\square$     $\square$     $\square$       $\square$				
Comments: Click here to enter text.	Quality of Study: ☐ High ☐ Medium 図 Low				
Applicability/Generalizability: Can I apply these valid, important study results?	Strength = Level + Quality				
21. Can the results be applied to my population of interest? ⊠Yes □No □Unknown	What is the strength of this study? 5, descriptive informational study				
a. Is the treatment feasible in my care setting?	What is your recommendation for article inclusion in the body of evidence to answer				
⊠No	your question?				
b. Do the outcomes apply to my population of interest? $\hfill \square No$	⊠Include this article in the body of evidence (place article on evaluation and				
c. Are the likely benefits worth the potential harm and costs?	synthesis table)				
d. Are the subjects/participants in this study similar to my population of interest?	$\Box$ Do NOT include this article in the body of evidence				
⊠Yes □No	Additional comments: Click here to enter text.				
e. Were all clinically important outcomes considered? $\hfill \ensuremath{\boxtimes} \ensuremath{\forall} \en$					
□No					
Comments: Click here to enter text.					
22. Will you use the study/article in your practice to make a difference in outcomes?					
⊠Yes □No □Unknown					
f. If yes, why would you do this & how? Help develop a resource packet					
g. If no, why would you not include the results to make a difference? Click here to					
enter text.					
Strength of Study					
© Copyright IEEE 2015, Histors following Vision From Institute for Collection has not Procincia in Serving and Institutes, Adepted with permission, from Collection has on particular in Market, and Institutes, Adepted with permission, From Collection has a particular institute, and Institutes Collection School (Institute School) (Insti	O Capyrich 1953-3016, litter Fold Microson Health Four Institute for Edition-Naved Principle in Healthcare, Adapted with permission, From Edition-Chane placetic in northing and enablization, Epopular Bis 3, 193-5058, by Health, Esternalist Microson, and Emmand- Owerholt, Eller. Wilders Science Health, 2025 and with permission, from Oriclandal Children's Hospital Medical Center, Exidence based Destrian Medical Connect Enabling Comput. (1950-1951).				

### Rapid Critical Appraisal Questions for EBP Implementation or Quality Improvement Projects

rate the extent to which the item is met in the published report of the EBP or QI project.

٧	alidity of Evidence Synthesis (i.e., good methodology)	I= No.	2×A Little	Ja Samura	4= Ouite a	5-Very	Data to support cating
1.	The title of the publication identifies the report project as an evidence-based practice implementation or quality improvement, project.	140	Lane	J.Com. W	Quita	X.	Development and implementation of health care transition resources for youth with autism spectrum disorders within a primary care medical home
2.	The project report provides a structured summary that includes, as applicable data to establish the existence and background of the chinical issue, included and eschalation criteria and survey(s) of evidence, evidence synthesis, objective(s) and setting of the EBP or OJ project, project limitations, results/outcomes, reconstructation and implications for option.						Transition from pediatric to outsit health care patterns presents unique older erges for addressents with autism spectrum disorder who other has propiet mediate and mercial health needs. Without a coordinated has stillar plan, pediatric providers often contract to previde core to our golds with visitor systems offered by eyouth the cope of their medical warms, Adult providers may be surviving and unit aimed to cope of core for young outsit with multiple spectrum disorder. This quality cope of core for young outs the thination procedum disorder. This quality
3.	Report includes existing internal evidence to describe the clinical issue					x	As addrescents become adults, they typically change from seeing a pediatric health core provider to seeing a health core provider who
ŧ.	Provides an explicit statement of the question being addressed with reference to participates or population intervention comparison/outcome (PICO).					_	before the supports were put into place, patients and families received limited and inconsistent communication to help them with transition. While the supports helped increase the amount and qualifies of help outliness and families received, medical
5.	Explicitly describes the search method, inclusion and exclusion criteria, and rationale for search strategy limits.					×	ocreased prevalence leads to a growing number of adolescents and ourg adults with ASD transitioning from pediatric to adult health core systems.
í.	Describes multiple information sources (e.g., databases, contact with study authors to identify additional studies, or any other additional search strategies) included in the search strategy, and date.						CDC, Got Transitions, multiple authors in multiple studies
7.	States the process for title, abstract, and article screening for selecting studios.						Does not describe the process, or studies just uses them as support for her QI
k.	Describes the method of data extraction (e.g., independently or process for validating data from multiple reviewees).						She obtained the information from Got Transition and othe endies
Э.	Includes conceptual and operational definitions for all variables for which data were abstracted (e.g., define blood pressure as systolic blood pressure, distolic blood pressure, ambalancy blood pressure, amount of the definition of the definitio					nu	
10.	Describes methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level).	х					80
II.	States the principal stummary measures (e.g., risk ratio, difference in month).						Baseline resources were coptured to determine the "As is" state of the practice and consisted of surveying parents and pediatric medical

Validity	of Evidence Synthesis (i.e., good methodology)	l- No	2-A Little	3- Somew	4- Ouiten		Data to support coting
	be the method of combining results of studies including g, quantity, and consistency of evidence.				20000	×	large quantity of evidence and quality of evidence
<ol> <li>Specif evider</li> </ol>	ies assessment of risk of bias that may affect the cumulative see (e.g., publication bias, selective reporting within studies).						she did not talk about bias
14. Descri	hes appraisal procedure and conflict resolution.					x	do not talk about conflict resolution
includ	les manber of soulies serecued, assessed for eligibility, and ed in the review, with reasons for exclusion at each stage, r with a flow diagram.					x	she talked about eligibility being 12 to 21 years of age with being diagnosed with ASD
	ch study, presents characteristics for which data were extracted study size, design, method, follow-up period) and provides as:					x	There was one study and intervention
entece	rs data on risk of bias of each study and, if available, any ne-level assessment.					×	doctors not following up with transition conversation
suntm	outcomes considered (beaufit or hums), include a table with any data for each intervention group, effect estimates, and ence intervals, ideally with a forest plot.	×					flo
each n	arizes the main findings including the strength of evidence for tain outcome; considering their relevance to key groups (i.e., cite providers, usees, and policy mokees).						It was hard to get everyone on board with the process interventions
ued ut	sees limitatious at sendy and ontecome level (e.g., risk of bias), persiew level (e.g., incomplete retrieval of identified research, ing bias).					x	Yes, Physicians found it difficult to discuss transition whil doing medical exacts and primary care, they suggested the other ancillary staff members provide the education.
	les a general interpretation of the results in the context of other ice, and implications for further research, practice or policy 26.					x	suggest increasing relationships with adult providers on young adults with ASD
	of Implementation (i.e., well-done project)					x	
	re of project flows from evidence synthesis					z	
	solders (active & parsive) are identified and communication turn is described					*	patients ductors and their families
	neastration protocol is congruent with evidence synthesis by of the intervention)					x	) as
replies	mentation protocol is sufficiently detailed to provide for affice among project participants					x	yes, they had a notebook of consition materials
<ol> <li>Educa descri</li> </ol>	tion of project participants and other stakeholders is clearly had					Z	they also provided a weekthop for patients and families
<ol> <li>Outco synths</li> </ol>	mes are measured with measures supported in the evidence					k	the physicinus did increase their discussions with family and patience about transitions

Validity of Evidence Synthesis (i.e., good methodology)	1-	2-A	3-	4-	5-Very	Data to support rating
	No	Little	Somew	Quiteu	much	
Reliability of Implementation Project (i.e., I can learn from or implement project results)					,	
<ol> <li>Data are collected with sufficient rigo; to be dependable for like groups to those participants of the project.</li> </ol>						No, I did not see that
Results of evidence implementation are clinically meaningful (statistics are interpreted as such)	×					
Application of Implementation (i.e., this project is useful for my						
patients)						
. How feasible is the project protocol?					ς	She provided a notebook, seminar, educated pediatricians
<ol> <li>Have the project managers considered/included all outcomes that are important to my work?</li> </ol>					z	Yes, people beaefixed and listen to the transition seminar
3. Is implementing the project safe (i.e., low risk of harm)?					7	(c)
Summary Score						140

S2011 Finance-Overhold: This form may be used for observious prepares without pennisolous from the outher. Other trees, plants informed the author of your intent to wate the form.

Quality Ruises for Organizational Experience (Quality improvement, program or financial evaluation) (Dearbot & Dang, 2018).

A <u>High analyte</u>: Cleer sizes and objectives, consistent reads serous manifest entirgs, formed quality improvement or financial evaluation methods used, definitive conclusions; consistent recommendations to such fire evidence in scientific evidence.

<u>B Good analyte</u>: Cleer sizes and objectives, formed quality improvement or financial evaluation methods used; consistent resolutes in recommendations with some reference of scientific evidence.

<u>Cl.em quality or major fluors</u>: Cocker or mining aims and objectives; reconsistent results, posity defined quality improvement/financial analysis method: recommendations carent be reads.

Dearthol, S., & Dang, D. (2018). John Highen Norsing Evidence-based Practice: Models and Guidelines (Fel el.). Indisraporiis, IN: Signa Thea Tas.

#### RAPID CRITICAL APPRAISAL OF A COHORT STUDY

Project Title: A description of medical conditions in adults with autism spectrum disorder: A follow-up of the 1980s Utah/UCLA Autism Epidemiologic Study

Date: 92

Appraiser's Name: Dawn Boal

PICO(T) Question: 1 in young adults with ASD (P) does health care transition resources (I) compared to usual care (C) affect their transition to primary care (O)? I obtained three systematic reviews on young adults with ASD transition into adult services with special health needs.

Article Citation (in APA 6<sup>th</sup> ed format) Jones, K. B., Cottle, K., Bakian, A., Farley, M., Bilder, D., Coon, H., & McWahon, W. M. (2016). A description of medical conditions in adults with autism spectrum disorder: A follow-up or the 1980s Utaly/LOLA Autism Epidemiologic Study. Autism, 20(5), 551–561. https://doi.org/10.1177/1362361315594798

Indicate the level of the study you are appraising: observational studies cohort

#### GENERAL DESCRIPTION OF STUDY

- 1. Purpose of study, including research question(s) or hypotheses: This study describes medical Purpose of study, including research question(s) or hypotheses: Init study describes medical conditions experienced by a population-based cohort of adults with autism spectrum disorder whose significant developmental concerns were apparent cluring childhood. As part of a 25-year outcome study of autism spectrum disorder in adulthood, medical histories were collected on 92 participants) who were first ascertained as children in the mid-1980s, 11 of whom were deceased at the time of follow-up
- Design/Method: longitude study of children growing into adults with ASD and assessing their medical conditions

O Copyright 2013-2013, Helene Aud National Health Trust Institute for Evidence based Francis: In Namina; and Healthcra. Adapted with permission, from Enderson-based practice in monity and healthcra. Appendix 9, 12, 1955 (8), 4 MeNey, Bernadette Mausevie, Amortion Chercholt, Illian. Wolfers Kluwer Realth, 2015 and with permission, from Cincinnati Children's Houghtal Medical Center, Evidence-based Decision Making Found, UERDAN 1944 (1996-2011).

	Commence. Check here to enter text.			
4.	Were all appropriate predictor variables (predictive cor interventions clearly described?	nfounders/exp ⊠ Yes	posures) an	<b>d</b> □Unknown
	Comments: Click here to enter text.			
5.	Were objective and unbiased outcomes criteria used?		□ No	□Unknown
	Comments: Click here to enter text.			
6.	Were outcomes clearly described?	Yes	□ No	☐ Unknown
	Comments: Click here to enter text.			
7.	Was the follow up process described and complete		□ No	□Unknown
	<ul> <li>a. Was the follow up long enough to fully study th</li> </ul>	e effects of th		
				_Yes □No
	b. What was the rate of attrition (how many of th	e original part	ticipants we	ere lost?)
	(NOTE: If greater than 20% of the original parti	cipants are lo	st, then bia	s is a greater
	concern): Click here to enter text.			
	Comments: 11 people died			
8.	Was there freedom from conflict of interest?	∀es	□ No	Unknown
	Comments: Click here to enter text.			
9.	Was the date range of the cited literature current? What was the date range? 1980 to 2014	☐ Yes	⊠ No	□Unknown
	NOTE: If older literature was included, why wa	s it included?	Dx of ment	al disorders
	Comments: Click here to enter text.			
	RELIABILITY: Are the study res	ults importan	t?	
10.	Did the study have a sufficiently large sample size?	Yes	□ No	Unknown
	a. Was a power analysis conducted?	☐ Yes	□ No	⊠Unknown
	b. IF YES to guestion A: Did the sample size meet	or exceed the	needed no	wer analysis
	requirement?	= Yes	= No	⊠Unknown
	c. Did each subgroup also have sufficient sample	sizer 🛆 Yes	_ NO	□Unknown

11. What were the main results of the cohort study? Click here to enter text.

a. Were the results statistically significant (p < 0.05)? □ Yes □ No □ Unknown

b. Was the Confidence Interval and/or Standard Deviation reported? ☑Yes □ No

#### 5. Data Collection methods: questionnaires

Indicate the level of evidence of the study you are appraising:  $\ensuremath{\mathsf{V}}$ 

Recommendation for article inclusion in your body of evidence to answer your question: queried medical symptoms, disorders, hospitalizations, surgeries, and medication use. Median age at follow-up was 36 years (range: 23.5–50.5 years), and intellectual disability co-occurred in 62%. The most common medical conditions were seizures, obesity, insomnia, and constipation. The median number of medical conditions per person was 11. Increased medical comorbidity was associated with female gender (p = 1) and p = 1. 0.01) and obesity (p= 0.03), but not intellectual disability (p = 0.79). Adults in this cohort of autism spectrum disorder first ascertained in the 1980s experience a high number of chronic medical conditions, regardless of intellectual ability. Understanding of these conditions commonly experienced should direct community-based and medical primary care for this population.

#### QUALITY OF STUDY

These questions will help you determine the VALIDITY of the study; whether or not the results of the study factually sound.

1.	Were the study methods appropriate for the	question?   Yes	_No	J Unknow	/n
	a. Were the study methods clearly desc	ribed (i.e. sample, set	ting, etc)		☐ No
	b. Were the instruments clearly describe	ed?		✓ Yes	☐ No
	<ul> <li>Were the interventions clearly descri</li> </ul>	bed?		⊴Yes	☐ No
	Comments: Click here to enter text.				
2.	Was there a representative and well defined course of the disease, event, etc?	sample population at ⊠Yes	a similar po	oint in the	
		22163	_140		III WIII
	Comments: Click here to enter text.				
3.	Were the instruments used to measure the o	outcomes valid and rel	iable?		
		Yes	_ No	□Unkı	nown

"What statistic was reported and what were the findings (Cronbach's Alpha/other)? Fisher's exact tests were used in cases where cell frequencies were less than five. Mann-whitney U tests were used to test for differences among variables measured on the interval or ratio scale such as psychotropic medication use frequency between participants with and without cardiovascular risk factors (i.e. hypertension, hyperflipidemia, and diabetes). Cougright 233 2818. Helener full knison in freith Tront insistes for beforee based retacts in Nursing and Healthoree. Adapted with mission, from beforee soled retaction nursing and healthore. Alepsed healthoree healthoree soled retaction. The Medican Student Retails (253 and with permission, from Cindensia Children's Hospital Medical Center, Deferree based risk Medican Student Retails. 2013 and with permission, from Cindensia Children's Hospital Medical Center, Deferree based risk Medican Student Retails. 2013 and with permission, from Cindensia Children's Hospital Medical Center, Deferree based risk Medican Student Retails.

☐ Unknown

	<li>i. IF YES, what was the effect size?   S</li>	mall (0.2 🗌	Medium (0.5	) _Large (0.8)
	Comments: Click here to enter text.			
12.	Were the results clinically significant?  a. Were the following reported: NNH (number r to treat), OR (odds ratio), RR (relative risk)?			_Unknown umber needed
	Comments: Click here to enter text.			
	Were the potential confounders identified? Comments: Click here to enter text.	⊠ Yes	□ No	□Unknown
14.	Were adverse events identified?	Yes	□ No	□Unknown
	Comments: Click here to enter text.			
15.	Were safety concerns including risks/benefits identif	ied? ⊠ Yes	□ No	Unknown
	Comments: Click here to enter text.			
	APPLICABILITY/TRANSFERABILITY: "Can I apply these	e valid, impo	rtant study r	esults?"
16.	Can the results be applied to my population of intere	st? ⊠ Yes	□ No	□Unknown
	*Is the treatment feasible in my care setting?		≤Yes	□No
	*Do the outcomes apply to my population of	interest?	⊠Yes	□ No
	*Are the likely benefits worth the potential ha	arm and cost	s? ⊠Yes	□No
	*Were the subjects/participants in this study	similar to my	population	of interest?
			□Yes	_No
	*Were all clinically important outcomes consi	dered?	□Yes	□No
	Comments: Click here to enter text.			
17.	Will you include this article/study in your practice de	cision to mal	ke a differen	ce in outcomes?
		Yes	□ No	Unknown

"If no, why would you not include the results to make a difference? Click here to enter text.

\*If yes, why would you do this? Specific with out comes

Comments: Click here to enter text.

### STRENGTH OF STUDY

Quality of study: ☐ High ☐ Medium ☐ Low

STRENGTH = LEVEL + QUALITY

What is the strength of the study? Click here to enter text.

What is your recommendation for article inclusion in the body of evidence to answer your question? Click here to enter text.

☐Include this article in the body of evidence (place this article's information on the evaluation & synthesis tables)

 $\equiv$  Do NOT include this article in the body of evidence

Additional comments: Click here to enter text.

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#### Rapid Critical Appraisal of a Descriptive Study

Project Title: Pediatric provider's perspectives on the transition to adult health care for youth with autism spectrum disorder: Current strategies and promising new directions

#### Date: 06/20/2022

PICOT Question: 1 In young adults with ASD (P) does health care transition resources (I) compared to usual care {C} affect their transition to primary care {O}? I obtained three systematic reviews on young adults with ASD transition into adult services with special health needs.

Article citation (APA): Kuhlthau, K. A., Warfield, M. E., Hurson, J., Delahaye, J., & Crossman, M. K. (2015). Pediatric provider's perspectives on the transition to adult health care for youth with autism spectrum disorder: Current strategies and promising new directions. Autism, 19(3), 262–271. https://doi.org/10.1177/1362361313518125

Indicate the level of the study you are appraising; level 6 Qualitative single study

Recommendation for article inclusion in the body of evidence to answer your question:  $\,8\,$ suggestions or recommendations to help transition young adults with ASD into primary care

- $1. \ \ \, \text{Purpose of study, including research question(s) or hypotheses: }. \, \text{What are the current}$ strategies or interventions taking place in ASD-specific pediatric settings to facilitate successful transition from pediatric to adult health care for youth with ASD? 2. What strategies or interventions are needed or would be most helpful in facilitating the
- transition from pediatric to adult health care for youth with ASD? © Copyright 2013-2018, Helene Fuld National Health Trust Institute for Evidence-based Practice in Nursing and Healthcare. Adapted permission, from Cividence-based practice in rurning and healthcare. (Appendix B; p. 539-550), by Melnyk, Bernadette Masurek, and F Overholt, Illes. Woltes Nurver Health, 2013 and with permission, from Circinnati Children's Hospital Medical Center, Evidence based Decision Making Crust (EGMD system, 2006-2013).

### Rapid Critical Appraisal of a Descriptive Study

	Comments: Click here to enter text.			
7.	Was sampling clearly described?	⊠Yes	□No	□ Unknov
	Comments: Click here to enter text.			
8.	Were all participants accounted for throughout the dur	ation of t	he study?	
		⊠Yes	□No	☐ Unkno
	. What was the rate attrition? Low, greater that 76%	participa	ted no att	rition
	<ul> <li>What reason were given to explain why subjects did Comments: Click here to enter text.</li> </ul>	not com	plete stud	y?
9.	Was there freedom from conflict of interest? Unknown  Sponsorship/funding agency Investigator	□Yes	□No	⊠
	Comments: No COI Click here to enter text.			
10	Was the date range of the cited literature current? Unknown	⊠Yes	□No	
	<ul> <li>What date ranges were included? 1989to 2013</li> <li>If older literature was included, why was text. Previous studies done on autism tr sited 1993 and 1989 was on transforming</li> </ul>	ansitions	again serv	

### Reliability: Are these valid study results important?

- 11. What were the results? Click here to enter text.
- 12. Was measurement of the intervention(s) appropriate  $\square$  Yes  $\square$  No  $\square$

Comments: Click here to enter text.

13. Was measurement of the intervention(s) clearly defined? Unknown

14. Was the measurement of the outcome(s) appropriate?
oppight 2013-2015, Helders Fuld Nictional Health Trust Institute for Evidence-based Practice in Numing and Healthcare. Adapted with
sinch, more indexes absorb graction in number gar of healthcare. Reposite 9, 238-2016, by Melmyk, Bernsdette Mazurek, and Fine
richle, Eller. Wolters (Nuters Health, 2015 and with permission, from Circlinate Children's Hospital Medical Center, Evidence-based
time Medical Control Open James 2016.

⊠ Yes □ No □

#### Rapid Critical Appraisal of a Descriptive Study

- 2. Design/Method: Surveyed and interviewed pediatric providers/clinic for ASD in the USA and
- 3. Sample: 13/17 clinics participated
- 4. Setting: ASD clinics and phone interviews
- 5. Data Collection: Surveys and interviews

#### Quality of the Study

#### Validity: Are the results of this study valid?

1.	Were the study/survey methods appropriate for the qu	estion?	□No	□ Unknown
	Comments: Click here to enter text.			
2.	Were the study/survey methods clearly described? Unknown Comments: Click here to enter text.	⊠Yes	□No	
3.	Were instruments used to measure the outcomes valid	and relial	ble?	
٥.	Unknown	□Yes	□No	
	Were the instruments tested to be valid and rel What statistic was reported and what was the fi		ronbach's	⊠ Yes □No s alpha/other)?
4.	Were all appropriate variable and interventions clearly	described	?	
	Comments: Click here to enter text.	□Yes	⊠No	Unknown
5.	Were outcome appropriate for the question? Unknown	⊠Yes	□No	
	Comments: Click here to enter text.			
6.	Were outcomes clearly described?	⊠Yes	□No	☐ Unknown

### Rapid Critical Appraisal of a Descriptive Study

rapid circum Appreisar or die	resempere sta	<b>.</b> ,	
	✓ Yes	□ No	□Unknown
Comments: Click here to enter text.			
15. Was measurements of the outcome(s) clearly d	lefined?		
		□ No	Unknown
Comments: Click here to enter text.			
16. Did the study have a sufficient sample size? Unknown	Yes	□ No	
<ul> <li>Was a power analysis conducted?</li> </ul>			□Yes ⊠No
<ul> <li>Did the sample size achieve or exceed the</li> </ul>	he power analy	sis requiren	ent? ⊠Yes □No
Did each subgroup also have sufficient s	ample size?		⊠Yes □No
Comments: Click here to enter text.			
17. What were the main results of the case control	study?		
<ul> <li>Statistical significance (p value): Click he</li> </ul>	ere to enter tex	it.	
<ul> <li>Confidence interval and/or Standard de</li> </ul>	viation: Click h	ere to enter	text.
<ul> <li>How precise was the intervention/treat</li> </ul>	ment?		
<ul> <li>Narrow? Wide: Click here to ent</li> </ul>	er text.		

- Effect size: Click here to enter text.
- □ Yes ⊠ No □ 18. Were the results clinically significant?
- Unknown

  a. Were the following reported: NNH (number needed to harm), NNT (number

needed to treat), OR (odds ratio), RR (relative risk)? Click here Comments: Click here to enter text.

19. Were the potential confounders identified? ⊠ Yes □ No □ Comments: Click here to enter text.

20. Were safety concerns including risks/benefits identified? Yes □ No □

Comments: Click here to enter text.

yright 2013-2018, Helene Fuld National Health Trust Institute for Evidence-based Practice in Nursing and Healthcure. Adapted sxion, from Cividence-based practice in nursing and healthcure. (Appendix 1); a. 518-526), by Melnyk, Bernadette Masuvek, and Civilian William (Strong Health, 2015 and with permission, from Cincinnal Children's Hospital Medical Center, Evidence-base on Making Group; LIGEMD system, 2006-2013.

Rapid Critical Appraisal of a Descriptive Study		Rapid Critical Appraisal of a Descriptive Study
$. Applicability/Generalizability: Can \ Lapply \ these \ valid, important \ study \ results?$		Strength = Level + Quality
21. Can the results be applied to my population of interest? $\hfill \square \mbox{No}$	□Unknown	What is the strength of this study? 6+
a. Is the treatment feasible in my care setting?	□Yes	What is your recommendation for article inclusion in the body of evidence to answer
□No		your question?
b. Do the outcomes apply to my population of interest?	⊠Yes □No	$\boxtimes \mbox{Include}$ this article in the body of evidence (place article on evaluation and
c. Are the likely benefits worth the potential harm and costs?	⊠Yes □No	synthesis table)
d. Are the subjects/participants in this study similar to my population	n of interest?	$\hfill\square Do \ NOT include this article in the body of evidence$
	⊠Yes □No	Additional comments: Click here to enter text.
e. Were all clinically important outcomes considered?	⊠Yes	
□No		
Comments: Click here to enter text.		
22. Will you use the study/article in your practice to make a difference in out	comes?	
⊠Yes □No	□Unknown	
f. If yes, why would you do this & how? Apply their interventions		
g. If no, why would you not include the results to make a difference	Click here to	
enter text.		
Strength of Study		
Level of study:		
Quality of Study: ☐ High ☑ Medium ☐ Low		

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### Rapid Critical Appraisal of a Descriptive Study

Project Title: The Role of Acceptance in the Transition to Adulthood: A Multi-Informant Comparison of Practitioners, Families, and Youth with Autism

PICOT Question: 1 In young adults with ASD (P) does health care transition resources (I) compared to usual care (C) affect their transition to primary care (O)? I obtained three systematic reviews on young adults with ASD transition into adult services with special health needs.

Article citation (APA): Lee, G. K., Curtiss, S. L., Kuo, H. J., Chun, J., Lee, H., & Nimako, D. D. (2022). The role of acceptance in the transition to adulthood: A multi-informant comparison of practitioners, families, and youth with autism. Journal of Autism and Developmental Disorders, 52(4), 1444–1457. https://doi.org/10.1007/s10803-021-05037-1

Indicate the level of the study you are appraising: VI qualitative single study

Recommendation for article inclusion in the body of evidence to answer your question: YES

- 1. Purpose of study, including research question(s) or hypotheses: This study investigated the role of acceptance during the transition process among autistic young adults, parents, and practitioners
- 2. Design/Method: six focus groups were run and thematic analysis was used to identify 4 themes
- 3. Sample: six focus groups
- 4. Setting: Midwestern University

O Copyright 2013-2018, Helene Fuld National Health Trust Institute for Evidence-based Practice in Nursing and He permission, from Evidence-based practice in nursing and healthcare. [Appendix 8: p. 539-550], by Melnyk, Bernadd Overheld, Ellen, Visiten Klawer Health, 2015 and with permission, from Gincinnati Children's Hospital Medical Ces Decision Making Group: LEGEND system, 2006-2013.

### Rapid Critical Appraisal of a Descriptive Study

	⊠Yes	□No	☐ Unknown
<ul> <li>What was the rate attrition? none</li> <li>What reason were given to explain why subjects comments: Click here to enter text.</li> </ul>	did not comp	lete stud	y?
9. Was there freedom from conflict of interest? Unknown  • Sponsorship/funding agency  • Investigator	⊠Yes	□No	
Comments: Click here to enter text.			
10. Was the date range of the cited literature current? Unknown  What date ranges were included? 2005to 201  If older literature was included why were considered.		□No	ance book une

qualitative studies in special education

### Reliability: Are these valid study results important?

11. What were the results? This study used multiple stakeholder groups of autistic youth, parents, and practitioners in sharing their experience of the transition process. As part of a broader study, results reported in this study represented the four unique themes on acceptance. Autistic youth discussed Self-Advocacy and Self-Acceptance as a salient theme, speaking on the importance of not only focus on the formal transition service process but also the developmental experience of transitions. Both youth and parents discussed the next theme, Lack of Understanding and Acceptance.

12.	Was measurement of the intervention(s) appropriate	Yes	□ No	
	Unknown			

Comments: Click here to enter text.

13. Was measurement of the intervention(s) clearly defined?

Unknown

Comments: Click here to enter text.

14. Was the measurement of the outcome(s) appropriate?

⊠ Yes □ No □Unknown

### Rapid Critical Appraisal of a Descriptive Study

5. Data Collection: Click here to enter text.

Quality of the Study

#### Validity: Are the results of this study valid?

1.	Were the study/survey methods appropriate for the qu	estion? ⊠Yes	□No	☐ Unknow
	Comments: Click here to enter text.			
2.	Were the study/survey methods clearly described? Unknown Comments: Click here to enter text	⊠Yes	□No	
3.	Were instruments used to measure the outcomes valid	and relial	ole?	
		⊠Yes	□No	
	Unknown			
	<ul> <li>Were the instruments tested to be valid and reli</li> <li>What statistic was reported and what was the fithematic analysis</li> </ul>		ronbach's	⊠ Yes □Ne alpha/other)i
4.	Were all appropriate variable and interventions clearly		?	
	Comments: Click here to enter text.	⊠Yes	□No	Unknown
5.	Were outcome appropriate for the question? Unknown	⊠Yes	□No	
	Comments: Click here to enter text.			
6.	Were outcomes clearly described?	⊠Yes	□No	☐ Unknown
	Comments: Click here to enter text.			
7.	Was sampling clearly described?	⊠Yes	□No	Unknown
	Comments: Click here to enter text.			
8.	Were all participants accounted for throughout the dur	ation of ti	ne study?	

### Rapid Critical Appraisal of a Descriptive Study

Comments: Click here to enter text.			
15. Was measurements of the outcome(s) clearly de			
		□ No	□Unknov
Comments: Click here to enter text.			
16. Did the study have a sufficient sample size? Unknown	☐ Yes	⊠ No	
<ul> <li>Was a power analysis conducted?</li> </ul>			□Yes □No
<ul> <li>Did the sample size achieve or exceed the</li> </ul>	e power analy	sis requirem	
			□Yes □No
<ul> <li>Did each subgroup also have sufficient sa</li> </ul>	mple size?		□Yes ⊠No
Comments: Click here to enter text.			
Statistical significance (p value): Click her     Confidence interval and/or Standard dev     How precise was the intervention/treatur	lation:_Click h ent?		ext.
18. Were the results clinically significant? Unknown a. Were the following reported: NNH (num needed to treat), OR (odds ratio), RR (relation).			
Comments: Click here to enter text.	and hongs		
Were the potential confounders identified?     Unknown     Comments: Click here to enter text.	☐ Yes	⊠ No	
20. Were safety concerns including risks/benefits ide			
Unknown Comments: Click here to enter text.	☐ Ye	s 🗆 No	

### Applicability/Generalizability: Can I apply these valid, important study results?

Rapid Critical Appraisal of a Descriptive Study		Rapid Critical Appraisal of a Descriptive Study			
21. Can the results be applied to my population of interest?	lo Unknown	What is the strength of this study? Medium			
$\ensuremath{\mathrm{a}}.$ Is the treatment feasible in my care setting?	⊠Yes	What is your recommendation for article inclusion in the body of evidence to answer			
□No		your question?			
b. Do the outcomes apply to my population of interest?	⊠Yes □No	⊠Include this article in the body of evidence (place article on evaluation and			
c. Are the likely benefits worth the potential harm and costs?	⊠Yes □No	synthesis table)			
d. Are the subjects/participants in this study similar to my populat	tion of interest?	$\square$ Do NOT include this article in the body of evidence			
	⊠Yes □No	Additional comments: Click here to enter text.			
e. Were all clinically important outcomes considered?	⊠Yes				
□No					
Comments: Click here to enter text.					
22. Will you use the study/article in your practice to make a difference in o	utcomes?				
⊠Yes □N	lo □Unknown				
f. If yes, why would you do this & how? Click here to enter text.					
g. If no, why would you not include the results to make a difference	ce? Click here to				
enter text.					
trength of Study					
evel of study:					
tuality of Study: ☐ High ☑ Medium ☐ Low					
trength = Level + Quality					

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#### Rapid Critical Appraisal of a Descriptive Study

Project Title: Healthcare Access and Utilization for Young Adults with Disability: U.S., 2014e2018

Date: 06/26/2022 By Dawn Boal

PICOT Question: 1 In young adults with ASD (P) does health care transition resources (I) compared to usual care (C) affect their transition to primary care (O)? I obtained three systematic reviews on young adults with ASD transition into adult services with special health needs

.Article citation (APA): Verlenden, J. V., Zabiotsky, B., Yeargin-Allsopp, M., & Peacock, G. (2022). Healthcare access and utilization for young adults with disability: U. S., 2014-2018. Journal of Adolescent Health, 70(2), 241-248. https://doi.org/10.1016/j.jadohealth.2021.08.023

Indicate the level of the study you are appraising: Level 6 meta-synthesis

Recommendation for article inclusion in the body of evidence to answer your question: Yes, show problem, barriers, and suggestions

#### Overview

1. Purpose of study, including research question(s) or hypotheses: Young adults with disability experience barriers to healthcare access and are at risk for not receiving needed services as they transition from pediatric to adult health systems. This study examined patterns of healthcare utilization for young adults with disability and potential barriers to receipt of care.

- 2. Design/Method: meta-synthesis 2014 to 2018 National Health Interview Survey
- 3. Sample: (unweighted n =15,710) 18-30 year old adults with/without disabilities
- 4. Setting: National survey
- 5. Data Collection: Interview

3. Data Currectuons I riter view prophytical 2012 (III and For Vidence-based Practice in Nursing and Healthcare, Adapted with Sixton, two Edderschaused practice in nursing and healthcare, Adapted with Sixton, two Edderschaused practice in nursing and healthcare, Adapted with passage of the Sixton Si

### Rapid Critical Appraisal of a Descriptive Study

- . What was the rate attrition? NA
- What reason were given to explain why subjects did not complete study? Comments: Cli
- 9. Was there freedom from conflict of interest?
  - Sponsorship/funding agency
  - Investigator

Comments: Click here to enter text.

- 10. Was the date range of the cited literature current?  $\hfill \hfill \hfill$ 
  - What date ranges were included? 2000 to 2020
    - o If older literature was included, why was it included? Click here to enter

⊠Yes □No □

### Reliability: Are these valid study results important?

- 11. What were the results? Significant difference between young adults with disabilities and young adults without disabilities, among young adults with disabilities 19.1% report having had to delay medical care due to cost and 11.9 reported not receiving medical care due to costs, significantly more than young adults without disabilities and 21.2% of young adults with disabilities had unmet medical medical care needs compared to just 10.2% without disabilities, those with disability were more likely to use the emergency room as their usual place of care (5.3% vs. 1.8%). A greater percentage of young adults with disability delayed medical care due to cost (19.1% vs. 8.9%) and reported an unmet medical need (21% vs. 10.2%).
- 12. Was measurement of the intervention(s) appropriate ⊠ Yes □ No □

Comments: Click here to enter text.

13. Was measurement of the intervention(s) clearly defined? 

Unknown

Comments: Click here to enter text.

14. Was the measurement of the outcome(s) appropriate?

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### Rapid Critical Appraisal of a Descriptive Study

#### Quality of the Study

Validity: Are the results of this study valid?

1.	Were the study/survey methods appropriate for the qu	uestion?			
		⊠Yes	□No	☐ Unknov	wr
	Comments: Click here to enter text.				
2.	Were the study/survey methods clearly described? Unknown	⊠Yes	□No		
	Comments: Click here to enter text.				
3.	Were instruments used to measure the outcomes valid			_	
		⊠Yes	□No	Ш	
	Were the instruments tested to be valid and re     What statistic was reported and what was the t     Chi-square, using pairwise comparisons via biv     Compared non -disabled to diabled adults	finding? (C			
4.	Were all appropriate variable and interventions clearly	described	?		
	Comments: Click here to enter text.	⊠Yes	□No	Unknow	m
5.	Were outcome appropriate for the question? Unknown	⊠Yes	□No		
	Comments: Click here to enter text.				
6.	Were outcomes clearly described?	□Yes	□No	☐ Unknow	m
	Comments: Click here to enter text.				
7.	Was sampling clearly described?	⊠Yes	□No	□ Unknow	vn
	Comments: unweighted				
8.	Were all participants accounted for throughout the du	ration of ti ⊠Yes	he study? □No	☐ Unknow	wr

nt 2013-2018, Helene Fuld National Health Trust institute for Cvidence-based Practice in Nursing and Healthcare, I, from Evidence-based practice in nursing and healthcare. (Appendix B; p. 539-550), by Melnyk, Bærnadette Max Hellen, Wolters Kluwer Health, 2015 and with permission, from Cincinnati Children's Hospital Medical Center, Evidabling Groups (EGEN)

### Rapid Critical Appraisal of a Descriptive Study

		□ No	□Unknown			
Comments: Click here to enter text.						
15. Was measurements of the outcome(s) clearly de	fined?  ⊠ Yes	□ No	□Unknown			
Comments: Click here to enter text.						
16. Did the study have a sufficient sample size? Unknown	Yes	□ No				
<ul> <li>Was a power analysis conducted?</li> <li>Did the sample size achieve or exceed the</li> </ul>	e power analy	sis requirem	□Yes ⊠No ent?			
			⊠Yes □No			
<ul> <li>Did each subgroup also have sufficient sa</li> </ul>	mple size?		□Yes □No			
Comments: Click here to enter text.						
17. What were the main results of the case control study?  Statistical significance (p value): < .001)  Confidence interval and/or Standard deviationi; CI+ 1.68-3.12, p < .001  How precise was the intervention/treatment?  o Narrow? Wide: Click here to enter text.  Effect size: Click here to enter text.						
18. Were the results clinically significant? Unknown	∀es	□ No				
<ul> <li>Were the following reported: NNH (number needed to harm), NNT (number needed to treat), OR (odds ratio), RR (relative risk)? Click here to enter text.</li> </ul>						
Comments: Click here to enter text.						
Were the potential confounders identified?     Unknown     Comments: Click here to enter text.	⊠ Yes	□ No				
20. Were safety concerns including risks/benefits ide	entified?					

Unknown

Comments: Click here to enter text.

### Rapid Critical Appraisal of a Descriptive Study Rapid Critical Appraisal of a Descriptive Study Applicability/Generalizability: Can I apply these valid, important study results? Quality of Study: ⊠High □ Medium □ Low 21. Can the results be applied to my population of interest? Strength = Level + Quality a. Is the treatment feasible in my care setting? What is the strength of this study? high □No What is your recommendation for article inclusion in the body of evidence to answer b. Do the outcomes apply to my population of interest? ⊠Yes □No your question? c. Are the likely benefits worth the potential harm and costs? ⊠Include this article in the body of evidence (place article on evaluation and d. Are the subjects/participants in this study similar to my population of interest? ⊠Yes □No ☐Do NOT include this article in the body of evidence ⊠Yes e. Were all clinically important outcomes considered? Additional comments: Click here to enter text. □No Comments: Click here to enter text. 22. Will you use the study/article in your practice to make a difference in outcomes? ⊠Yes □No □Unknown f. If yes, why would you do this & how? The disparities of health care for diabled Yong $g. \;\;$ If no, why would you not include the results to make a difference? Click here to enter text. Strength of Study Level of study: □ I □ II □ III □ IV □ V □ VII

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## Rapid Critical Appraisal of a Systematic Review/Meta Analysis of Quantitative Studies

Project Title: Rapid Synthesis: Identifying Features of Approaches to Supporting Transitions from Child to Adult Care for Young People with Special Healthcare Needs—McMaster Forum

Date: March 27, 2020

PICOT Question: PICO Question #1 In young adults with ASD (P) does health care transition resources

(I) compared to usual care (C) affect their transition to primary care (O)? I obtained three systematic
reviews on young adults with ASD transition into adult services with special health needs.

Article citation (APA): Voorheis P, Wilson MG, Scallan E. (2020). Rapid synthesis: Identifying features of novel approaches to supporting transitions from child to adult care for young people with special healthcare needs in Canada. Hamilton: McMaster Health Forum. Identifying Features of Approaches to Supporting Transitions from Child to Adult Care for Young People with Special Healthcare Needs (mcmasterforum.org)

Indicate the level of the study you are appraising: Level 4: Systematic review of mixed experimental and non-experimental

Recommendation for article inclusion in the body of evidence to answer your question: It gave recommendations for resources for transition and explained barriers

#### Overview

- Purpose of study, including research question(s) or hypotheses: What are the features of novel approaches to supporting transitions from child to adult care for young people with special healthcare needs in Canada?

# Rapid Critical Appraisal of a Systematic Review/Meta Analysis of Quantitative Studies

Comments: Click here to enter text.

4. Did the systematic review/meta-analysis include non-RCTs?

⊠Yes □No □Unknown

a. Was criteria used to select articles for inclusion? ⊠Yes

b. What were the criteria for inclusion? Transitioning young adults with special

c. .Analyzed in assigned groups?

□Yes

No
d. Complete follow-up of subjects?

□Yes ⊠No

e. Blind? f. Double-blind? □Yes ⊠No

5. Were the included studies appraised to be highly quality by the authors?

⊠Yes □No □ Unknown

Comments: high- medium quality

6. Were the methods consistent from study to study?

⊠Yes □No □Unknown

a. Were the populations in the included studies comparable?  $\hfill \square \mbox{No}$ 

b. Were the outcomes, interventions, and exposures measured the same way in the

groups being compared in the included studies?

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# Rapid Critical Appraisal of a Systematic Review/Meta Analysis of Quantitative Studies

- 3. Sample: Canada health system
- 4. Setting: Canada

Quality of the Study

### Validity: Are the results of this study valid?

1. Did the systematic review/meta-analysis address a focused clinical question?

⊠Yes □No □ Unknown

What was the focused clinical question? What are the features of novel approaches to supporting transitions from child to adult care for young people with special healthcare needs in Canada?

2. Was the search for relevant studies detailed and exhaustive?

f. Blind?

Groupidth 2013-2013, Helene y dud National Health Trust Institute for Culdence-based Practice in Nursing and Healthcare. Adapted with permission, from Culdence-based practice in nursing and healthcare. Adapted particle in Nursing and Healthcare. Adapted particle premission, from Cindence-based practice in nursing and healthcare. Appendix 8 p. 339-3505, by Medry, Barnastech Massuret, and Fierout-Overholt, Ellies. Workers Kluwer Health, 2015 and with permission, from Cindensid Children's Hoopital Medical Center, Evidence-based Decision Madeign Court (LCRAW) system, 2002-2013.

# Rapid Critical Appraisal of a Systematic Review/Meta Analysis of Quantitative Studies

Comments: Click here to enter text.

7. Were the results consistent across the included studies?

⊠Yes □No □ Unknown

Comments: Charts included for intervention

8. Was there freedom from conflict of interest?  $\hfill \hfill \$ 

Unknown

- Sponsorship/funding agency
- Investigators

Comments: Funding: Scotlabank Chair in Child Health Research held by Dr. Jan Willem Gorter. The McMaster Health Forum receives both financial and in-kind support from McMaster University.

- 9. Was the date range of the cited literature current?  $\ \, \boxtimes \, {\rm Yes} \ \, \square \qquad {\rm No} \qquad \, \square \, {\rm Unknown}$ 
  - a. What date ranges were included? 2006 to 2020
  - b. If older literature was included, why? Click here to enter text.

Comments: Click here to enter text.

### Reliability: Are these valid study results important?

- $10. \ \mbox{What were the main results of the systematic review/meta-analysis?}$ 
  - a. For each individual study:
    - i. Statistical Significance (p value): no meta analysis

O Copyright 2013-2018, Helene Fuld National Health Trust Institute for Evidence-based Practice in Nursing and Healthcare. Adapted with permission, from Evidence-based practice in nursing and healthcare. Adapted with permission, from Certifice, Illen. Worker Schwer Health, 2015 and with permission, from Certifice Illnifero's Hospital Medical Center, Evidence-based Decision Making Center (IECMN System, 2005–2013).

Rapid Critical Appraisal of a Systematic Review/Meta Analysis of Qu Studies	uantitative	Rapid Critical Appraisal of a Systematic Review/Meta Analysis of Quantitative Studies
ii. Confidence Interval and/or Standard Deviations: Click here	to enter text.	Comments: Click here to enter text.
iii. How precise was the intervention/treatment? Click here to	enter text.	Applicability/Generalizability: Can I apply these valid, important study results?
1. Narrow/wide? Click here to enter text.		
b. For the summary statistic?		14. Can the results be applied to my population of interest?
i. Statistical significance (z statistic): Click here to enter text.		a. Is the treatment feasible in my care setting?
ii. Were the studies heterogeneous?	☑Yes □No	□No
III. Confidence Interval: Click here to enter text.		b. Do the outcomes apply to my population of interest?
iv. Effect size: Click here to enter text.		c. Are the likely benefits worth the potential harm and costs?
v. Did it favor the intervention?	⊠Yes □No	dAre the subjects/participants in this study similar to my population of interest?
vi. Did it favor the control?	⊠Yes □No	⊠Yes □No
Comments: Click here to enter text.		e. Were all clinically important outcomes considered? $\hfill \boxtimes Yes$
11. Were the results clinically significant? ⊠Yes □ No	□Unknown	□No
a. Were the following reported: NNT, NNH, OR, RR?	⊠Yes □No	15. Will you use the study/article in your practice to make a difference in outcomes?
<b>Comments:</b> Click here to enter text.		⊠Yes □No □Unknown
12. Were potential confounders identified?	□Unknown	a. If yes, why would you do this & how? It explores all aspects of transition and barriers
a. Were the potential confounders discussed in the relationship to ti	ne results?	b. If no, why would you not include the results to make a difference? Click here to
	⊠Yes □No	enter text.
Comments: Click here to enter text.		Strength of Study
13. Were adverse events identified?	□Unknown	Level of study:         □ I         □ II         □ III         □ IV         □ V         □ VI         □ VII
© Copyright 2013-2018, leitene Fuld National Health Trust Incititute for Evidence-based Practice in Nursing and Health permission, from Evidence-based particle in nursing and healthcare, (Appendix p. 5, 238-500), by Melnyk, Bernadett Overhold, Eller, Wildens Evalver Reland, 2014 and with permission, from Cincinnate Children's Hospital Medical Cester Decision Making Group: LGGMD system, 2005-2013.	Mazurek, and Fineout-	© Copyright 2013-2018, Inleiner Fuld National Health Trust Institute for Evidence-based Practice in Nursing and Healthcare. Adapted with permission, from Evidence-based practice in entire and healthcare, (Appendix 1): 3.33-526, by Meinyt, Earnadette Mazuvek, and Finecut Overhich, Illew. Merket Schwer Health, 2015 and with permission, from Gindmust Children's Hospital Medical Center, Evidence-based Decision Making Group: LEGEND system, 2006-2013.
Rapid Critical Appraisal of a Systematic Review/Meta Analysis of Quality of Study: ☐ High ☑ Medium ☐ Low	uantitative	
Strength = Level + Quality  What is the strength of this study? Medium		
What is your recommendation for article inclusion in the body of evidence	e to answer	

⊠Include this article in the body of evidence (place article on evaluation and

☐Do NOT include this article in the body of evidence

Additional comments: Click here to enter text.

# Appendix C

# Level of Evidence Table for PICO Question

Level of Evidence Table for PICO

Levels of Evidence	1	2	3	4	5	6	7
Level I: Systematic review							
or meta-analysis of RCTs							
Level II: Randomized controlled trial							
Level III: Systematic review with or without							
metanalysis of mixed experimental study							
design							
Level IV: Systematic Review of experimental			x				
and non-experimental study design			Λ				
Level V: Observational studies (cohort, case-					x		
control, cross-sectional)					Λ		
Level VI: Qualitative single study or meta-	x	x		X		x	
synthesis	Λ	Λ		Λ		Λ	
Level VII: Peer reviewed							
Professional and organizational standards							
with clinical studies to support							
recommendations							
Level VIII: expert opinion or literature review							
or peer reviewed professional and							
organizational standards without clinical							X
studies to support recommendations, or							^
quality improvement study or evident							
evidence-based practice project							
Level IX manufacturers' recommendations							

# LEGEND

**1**= Ames et al., 2022, **2**= Kuhlthau et al., 2015. **3**= Voorhies et al., 2020. **4**= Verlenden, et al., 2021. **5**= Jones et al., 2016, **6**= Lee et al., 2022, **7**=Harris et al, 2018.

# Appendix D

Table 1
Variables of Interest: PICO Question

P Variables in Articles	1	2	3	4	5	6	7
Describes the Problem	P	P	P	P	P	P	P
Describes Barriers to Transition	P	P	P	P	P	P	P
Trainings for adult clinicians	P	P	P		P		P
Systematic medical summaries		P					P
Information sessions for parents/guardians and youth	P	P	P	P			P
Transition notebooks	P	P	P				P
Care coordination	P	P	P				P
Systematic lists of adult clinicians willing to care for individuals with ASD and knowledgeable about their care needs	P	P	P				P
Transition-point person	P	P	P				
Transition specific appointments, pediatrician communicates with adult primary care	P	P	P				P
Community resource list	P	P	P	P			P
EMR transition documentation	P		P				P

# SYMBOL KEY P That it is present in the report

**LEGEND 1**= Ames et al., 2022, **2**= Kuhlthau et al., 2015. **3**= Voorhies et al., 2020. **4**= Verlenden, et al., 2021. **5**= Jones et al., 2016, **6**= Lee et al., 2022, **7**=Harris et al, 2018.

# Appendix E

Figure 1. Implementation of PDSA Cycle

PDSA CYCLES				TIME OF IMPLEMENTATION						
PDSA	Description Activity	PDSA	Description	April	May	June	July	August & Sept		
1 <sup>ST</sup> PDSA	CYCLE May 2022- May	2023 prepa	ration							
PLAN	Develop and create a Transitional Tool kit for Caregivers with YA-ASD				Х	Х	Х	X		
PLAN	Gather information on what restransition	sources are val	luable for	Х						
DO	Call providers in the are new patients and will ac			X						
DO	"The lead investigator (D. Boal)			oting new Y	A-ASD pati	ient	<u> </u>	<u> </u>		
DO	Activity/intervention A Complete provider list	STUDY		Once all the numbers on the original provider list have been called and survey taken with Got transition questions 1 &3 asked						
DO	Activity/intervention B Met with Dr. D	STUDY	Discussed what re	Discussed what resources need to go into tool kit						
DO	Activity/intervention C Connected with local Mom's group	STUDY	Read emails abou	Read emails about caregivers' transitional stories and input						
DO		STUDY								
DO	Tool kit Assembly	<u> </u>			X	Х	х	х		
DO	"The lead investigator (D. Boal) v	vui assembie 10	ооки апа иргова и ю	) керсар						
DO	Activity/intervention A Test links of resources	STUDY	How will you determine/measure if activity A is an effective intervention activity? What are your outcomes and measurements? To see if the links work							
DO	Activity/intervention B Place provider list/ resources	STUDY	To see if the provi caregivers in using	To see if the provider list and resources are an easy-to-read list for caregivers in using readable.com and are at 5 <sup>th</sup> grade reading level						
DO	<b>Obtain Feedback on Too</b>	olkit			X					
DO	Will ask for feedback From Clinical expert, Project mentor and project advisor and Providers from the practice setting	STUDY	Listen to feedback	c and adju	st toolkits an	nd resource	es			
ACT & PLAN	If our goal is not met, and using the lead investigator (D. Boal) in PDSA cycle # 2					Х				
	CLE QR code/ REDcap categories of the PDSA cycle will					CA ovolo	_	•		
PLAN	Working with the team, the lea				ile 1 PD	SA CYCIE				
PLAIN	survey for caregivers to evaluate			лор а			X			
DO	Activity/intervention: Ask questions to clinical specialist	STUDY	The design is to have a Likert scale that will evaluate each section of the toolkit. There will, also be two questions for feedback.							
DO	Activity/intervention B Learn REDcap	STUDY	REDcap can capte Test surveys to ma					alyzed.		
DO	Obtain Feedback on fina	al survey qu	uestions		X			1		
DO	Will ask feedback for change in process From Clinical expert, and project advisor	STUDY	Check if QR Cod the tool kit needs					Then see if		

ACT & PLAN	the lead investigator (D. Boal) in PDSA cycle # 2			ifferently		Х		х	
	PDSA CYCLES			TIME OF IMPLEMENTATION					
PDSA	Description Activity	PDSA	Description	April	May	June	July	Augus & Sep	
PDSA CY	CLE- May 2023 implement	ntation pla	n						
PLAN	To train clinicians & collaborat need for project	ŭ	•		х	x	x	х	
PLAN	Develop and create a script, fly code link to REDcap survey to personal information				х	х	x	x	
DO	"The lead investigator (D. Boal) v	d investigator (D. Boal) will develop a video explaining the and the role for the clinicians and collaborating RNs in the			х	х	x	х	
DO	"The lead investigator (D. Boal) v consistently	vill create a scr	ipt for on the flyer to	ensure the	same inform	nation is gi	ven to every	vone	
DO	Activity/intervention A Develop flyer with script on it explaining project	STUDY	Look at the flyer and think about the most effective and efficient way to explain project for script. For flyer, convey what resources are important and the necessity of the information in the toolkit						
DO	Activity/intervention B Have a laminated flyer for the clinicians	STUDY	The clinicians and RNs will have a laminated flyer for the project and will give a regular flyer to caregivers who want to receive the toolkit.						
DO	Activity/intervention C Have a QR code explaining who the project manager is and capture caregiver's information	STUDY	The lead investigator will have to learn how to capture this on RED cap via QR Code on flyer and make sure all information in QR code is correct.						
DO	Make sure the automated Redcap survey and toolkit are sent to caregivers	STUDY	Once contact data has been captured on REDcap, Redcap will automatically send the toolkit to the Caregiver via email with the feedback survey. Test Redcap Surveys to make sure they work with smart phones and computers.					the	
DO	Project management and	l continuat			х	х	x	x	
DO DO	"The lead investigator (D. Boal) vevery other week throughout the padvocates. if project manager country/intervention A & B Script on flyer	vill visit as ofte project. follow	n as requested for the up/nudge emails will	l be sent to t Square of rmine/mea	encourage a fice will be a sure if activ	and remind addressed d rity A is an	designated aily. effective in	<i>project</i> itervention	
<b>D</b> O		CTUDA	can offer the project with ease and will demonstrate understanding of the video by filling out the attestation in REDcap.  This will be assessed by the caregiver giving out contact information in						
DO	Activity/intervention C	STUDY	the QRcode link to	RED cap					
DO	Obtain Feedback on Too	lkit distrib	oution process		X	x	x	x	
DO	Will ask for feedback, from clinicians and nurses	STUDY	Listen to feedback		t project pr	ocess as ne	eded		
ACT & PLAN	If our goal is not met, and using the lead investigator (D. Boal) in PDSA cycle # 2					x		x	

# Appendix F

#### **ASD Resource Toolkit**



**Toolkit for Caregivers** of Young People with **Autism Spectrum** Disorder (ASD) Moving to Adult Primary Care Quality Improvement Project by Dawn Boal BSN, RN

ASDtransitions@xxx.edu

Doctor of Nursing Practice Student - Sacred Heart University

Project Site Clinical Mentor Dr. Kerry A. Milner, DNSc, APRN, EBP-CH

Faculty Advisor

# **Purpose of the Toolkit** This tool kit is to help caregivers of children with autism spectrum disorder. It is for the County area. It has key links to helpful resources. Did you know that some service providers won't take new customers or new patients with ASD? Our lists show providers who will take them! This toolkit is a QI project led by Dawn Boal, a student at Sacred Heart University. Faculty Advisor is Dr Kerry Milner. Please contact Dawn Boal BSN, RN with questions at: ASDtransitions@xxx.edu

# **Table of Contents**



- 1 Insurance and Financial Help
- 2 Legal Help



- 3 Educational Help
- 4 Other Programs



5 Barbers & Hair Salons



6 Eye Doctors



7 Dentists / Orthodontists



8 Adult Day Care



10 Adult Providers

9 Lawyers



11 Survey (Please help me by taking this)

# 1. Insurance and Financial Help

#### Local Medicaid resource link

In Pennsylvania: <a href="https://www.compass.state.pa.us">https://www.compass.state.pa.us</a>

In Delaware: www.dhss.delaware.gov/dss/medicaid.html

Your child could qualify them for support income. This link gives directions on how to meet them and what to bring.

https://www.research.chop.edu/car-autism-roadmap/supplementalsecurity-income-for-children-with-disabilities







# 2. Legal Help

Here are options for when your child needs to decide. This link helps you and your child of 18 years or older to make decisions when they are an adult.

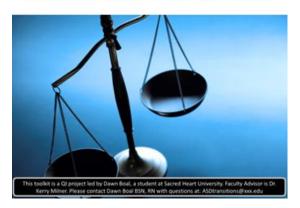
https://www.research.chop.edu/car-autism-roadmap/turning-18-optionsfor-when-your-child-needs-decision-making-help

Waivers are programs that are to help someone stay in their home. Some kids move to an institution because of a need for care.

https://www.research.chop.edu/car-autism-roadmap/waivers

Special needs trust are a way to help your child have money. This link explains what is a special needs trust.

https://www.research.chop.edu/car-autism-roadmap/special-needs-trusts





# 4. Other Programs

This link is to the Autism Speaks toolkit for transitions, which covers general topics.

https://www.autismspeaks.org/tool-kit/transition-tool-kit

This link is for a program offered by the state of PA. It is to support caregivers of and people with ASD.

https://www.dhs.pa.gov/contact/DHS-Offices/Pages/ODP-Bureau%20of%20Autism%20Services.aspx





# 3. Educational Help

Services from the state of PA. This link is to services which help train, obtain, and maintain employment in PA.

https://www.dli.pa.gov/Individuals/Disability-Services/ovr/Pages/default.aspx

This link informs you how your child can get federal aid for school.

Help for living and academics are also a part of this program.

https://www.research.chop.edu/car-autism-roadmap/higher-education-opportunity-act-of-2008

This link is to a local college that has a program designed for students with ASD.

https://www.wcupa.edu/deputy-provost/dcap/

This link is to a program to assess readiness for college at West Chester University

https://www.wcupa.edu/deputy-provost/dcap/carr.aspx



# 5. Barbers and Hair Salons

• Blue 52 Barber Shop 610-612-9361 331 State St, Kennett Square, PA 19348

Burton's Barber Shop 610-444-9964
 105 W State St # A. Kennett Square. PA 19348

• B&B Barber Lounge 484-732-7951

116 S Union St, Kennett Square, PA 19348

 Pepe's Barbershop 610-492-2244 1153 Newark Rd, Toughkenamon, PA 19374

• Holiday Hair 610-444-9997

350 Scarlet Rd suite 25-b, Kennett Square, PA 19348

• Supercuts Kennett Square 484-732-8053

817 E Baltimore Pike, Kennett Square, PA 19348

• Flips Barber Shop 610-467-1670

10 S 3rd St, Oxford, PA 19363

• SmartStyle Hair Salon 610-998-1483

800 Commons Dr, Oxford, PA 19363

• Top-Notch Barbershop 610-806-5412

11 Exchange Pl, West Grove, PA 19390 Great Clips

144 Onix Dr, Kennett Square, PA 19348

Salon Secrets Spa- Kennett Square
 610-444-0605

829 E Baltimore Pike, Kennett Square, PA 19348

Linda's Hair Techniques 610-268-3221

911 Gap Newport Pike, Avondale, PA 19311

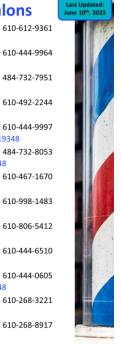
• Shear Satisfaction 610-268-8917

1120 Newark Rd, Toughkenamon, PA 19374

• Jillian Grace Salon 610-869-4114

2050 Newark Rd, Lincoln University, PA 19352

This toolkit is a QI project led by Dawn Boal, a student at Sacred Heart University. Faculty advisor is I Kerry Milner. Please contact Dawn Boal BSN, RN with questions at: ASDtransitions@xxx.edu



#### Last Updated: June 10<sup>th</sup>, 2023

#### 6. Eye Doctors

Ganly Vision Care

 484-770-8132

 402 Bayard Rd #200, Kennett Square, PA 19348

• MyEyeDr. - Kennett 610-444-5252 841 E Baltimore Pike, Kennett Square, PA 19348

Kennett Square Eye Care 610-444-5522
 216 S Mill Rd Ste 112, Kennett Square, PA 19348

 Chester County Eye Care Associates 610-696-1230 455 W Woodview Rd #125, West Grove, PA 19390

Miller Eye Care
 610-869-4200
 57 Jenners Vlg Ctr, West Grove, PA 19390

MyEyeDr. - Oxford 610-932-9356
 49 S 2nd St, Oxford, PA 19363



#### Last Updated: June 10th, 2023

#### 7a. Dentists

Leardi Family Dentistry 610-571-2520
 690 Unionville Rd, Kennett Square, PA 19348

 Albert J Schmitt DMD 610-444-6300 413 McFarlan Rd, Kennett Square, PA 19348

Jay W. Dorgan DDS 610-925-3222
 127 W Street Rd #301, Kennett Square, PA 19348

C Christian Franck Family Dental 610-444-3212
 721 E Baltimore Pike # 301, Kennett Square, PA 19348

 Dental Health Associates 610-444-0750 687 Unionville Rd, Kennett Square, PA 19348

Kennett Dental
 610-444-4033
 402 McFarlan Rd #303, Kennett Square, PA 19348

#### 7b. Orthodontists

 The Orthodontic Group of Chester County 484-218-0088 400 McFarlan Rd STE 200, Kennett Square, PA 19348

McCormick Orthodontics
 888-333-3757
 900 W Baltimore Pike #201, West Grove, PA 19390



# Last Updated:

### 8. Adult Day Care

 Chester County Department of Mental Health/ Intellectual & Developmental Disabilities (MH/IDD) 610-344-6265 <u>www.chesco.org/mhidd</u> (Can help with free adult day care)

Active Day of Kennett Square 610-388-1166
 500 Old Forge Ln, Kennett Square, PA 19348

• Kennett Area YMCA 610-444-9622



#### Last Updated: June 10<sup>th</sup>, 2023

# 9. Lawyers

Randy Hope Steen, Esq 215-570-0047
 600 Eagleview Blvd, Exton, PA 19341

Stephan D. Potts, Esq 610-254-0114
 138 West Gay St, West Chester, PA 19380



#### 10. Adult Providers for 18 years olds+

Your child's provider will continue to work with them. Even when your child becomes an adult and moves into adult care.

#### Dr. Cheryl Hlavac, MD

- 402 McFarlan Rd Ste 102, Kennett Square, PA 19348
- 610-444-5678
- · Practice Name: Penn Family Medicine Kennett

- Megan M. Gaskill, MD

   402 McFarlan Rd Ste 102 Kennett Square, PA 19348
- 610-444-5678
- Practice Name: Penn Family Medicine Kennett

#### Dr. Deepika Suri MD

- 404 McFarlan Road, Suite 101, Kennett Square, PA 19348
- 610-925-3835
- · Practice Name: Penn Family and Internal Medicine Longwood

#### Melissa Hubley, DO

- 620 Spear Street, Oxford, PA 19363
- 610-932-9300
- Practice Name: LG Health Physicians Family Medicine Oxford

#### Spencer S. Hoffman, DO

- 620 Spear Street, Oxford, PA 19363
- 610-932-9300
- Practice Name: LG Health Physicians Family Medicine Oxford

#### Dr. Karl Zimmerman, MD

- 127 W Street Rd Ste 101 Kennett Square, PA 19348
- dale Internal Medicine Associates

#### Appendix G

### Link to clinician instruction video and Transcript

#### https://youtu.be/fY27cgliJZg

Hi, I am a Doctor of Nursing practice student at an University. I'm here to talk about my project, a toolkit to help transitioning young adults with autism spectrum disorder move to primary care. This is a quality improvement project. The purpose of this project is to provide a The ASD transition resource toolkit that presents numerous important resources and lists of supportive local service clinicians with a criterion that includes caregivers of adolescents and young adults with autism spectrum disorder ages 15-21. We have an additional goal to get the caregiver's feedback on how to improve the toolkit.

When the caregiver comes in for a well office visit that meets the criteria, it is up to the discretion of the clinician to present the quality improvement project to the caregiver. Nurses in collaboration with the clinician may also present the project to the caregiver.

There will be a laminated flyer with a script on the back, for the clinician or nurse to present the project to the caregiver, The script would need to be followed exactly. If possible, please present this at the end of the visit.

Remember we are not trying to transition everyone out of pediatric care, this project is to get feedback on the toolkit and its contents. This project attempts to prepare the caregiver and what the next steps are when their child becomes an adult with A.S.D.

If the caregiver chooses to participate, there will be flyers to give to them. This process allows them to scan the QR code without pressure, I will need to keep an account of the flyers, so please do not make extra copies without letting me know. I will keep extra copies in the office.

When Caregivers scan the QR code, a welcome page will be presented. The caregiver will enter their email address to participate; once entered the caregiver survey will be presented and upon completion the tool kit will automatically be emailed to the caregiver.

This email will include the tool kit and a link to the survey for evaluation. This email and toolkit can be accessed as many times as the caregiver needs.

Thank you for helping me with my quality improvement project.

I also want to recognize and acknowledge...

My Faculty Advisor,

My Project Site Clinical Mentor,

For any questions email at ASDtransitions@xxxedu

#### Appendix H

# **ASD Transition Project Introduction, Staff Attestation**

Thank you for your participation in this project, "Toolkit for Transition of Young Adults with Autism Spectrum Disorder (YA-ASD) to Primary Care." Ensuring all of the team members at Project Setting are aware of the project, understand the impact of the project to the staff, our patients, and their families, and have the opportunity to ask questions or give feedback is a priority for the project team.

This project has been supported by Project Settings Center for Pediatric Nursing Research & Evidence-Based Practice and has been reviewed by Project Setting's IRB and determined to be non-human subjects research.

The project lead is DNP Student/Project Lead, xxx@xxx.edu, and the project's co-investigator is Project Site Clinical Mentor, xxx@xxx.edu. The project team has a shared inbox that is continuously monitored, and questions or comments can be directed here at any time: <u>ASDtransitions@xxx.edu</u>.

To ensure all of the team at the Project Site have completed the needed preparation for the project, we are asking everyone to complete the following attestation. Once you have watched the introduction video, please complete the form below. Thank you!

Please watch the attached video and then fill out the following	
1) What is your name?	
2) What is your Project Site email address?	
3) What is your role at the Project Site?	
•	clinical nurse
	nurse practitioner
	medical doctor
	other
4) I attest that I have reviewed and understood the video explain project "Toolkit for Transition of Young Adults with Autism Specare	
	YES
(If you have not yet finished the project's introductory video, plewill provide instruction as to how to return to it AFTER you have 5) If you have any questions or comments, please share them be in touch soon!	ve watched the video. Thank you!)
(required so that the DNP Student/project lead can follow up wi	th staff as needed)

# Appendix I

#### Readable.com Reports for Project Interface with Caregiver



R readable

Text readability report generated on 2023-06-22 03:31.

Text readability report generated on 2023-08-16 06:07.

Readability Grade Levels		ReadablePro Rating		Text Quality		
Flesch-Kincaid Grade Level	5.14			Spelling Issues	0	0%
Gunning Fog Index	5.01	A		Grammar Issues	2	22%
Coleman-Liau Index	10.36			Sentences > 30 Syllables	0	0%
SMOG Index	7.39	Readability Scores		Sentences > 20 Syllables	1	11%
Automated Readability	7.35	Flesch Reading Ease	78.78	Words > 4 Syllables	0	0%
Index	7.55	CEFR Level	B2	Words > 12 Letters	0	0%
FORCAST Grade Level	9.76	IELTS Level	5-6			
Powers Sumner Kearl Grade	4.18	Spache Score	4.34	Writing Style		
Rix Readability	7.00	New Dale-Chall Score	5.58	Passive Voice Count	0	0%
Raygor Readability	7.00	Lix Readability	32.71	Adverb Count	0	0%
Fry Readability	5.00	Lensear Write	85,58	Cliché Count	0	0%



#### Caregiver Feedback 1 week reminder

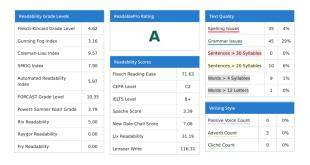
# **Automated Bridge with Toolkit and Survey link**

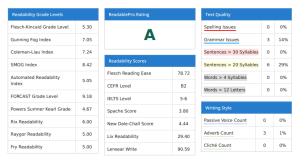


R readable

Text readability report generated on 2023-06-22 03:07.

Text readability report generated on 2023-06-22 02:43.





Report for Toolkit v9

**Report for Flyer and Script** 



Text readability report generated on 2023-06-20 18:30.

# R readable

Text readability report generated on 2023-06-09 22:25.

Readability Grade Levels		ReadablePro Rating	ReadablePro Rating		Text Quality		
Flesch-Kincaid Grade Level	-			Spelling Issues	-	-	
Gunning Fog Index	-	Readability Scores		Grammar Issues			
Coleman-Liau Index	-	Flesch Reading Ease	-	Sentences > 30 Syllables			
SMOG Index	-	CEFR Level	-	Sentences > 20 Syllables	-		
Automated Readability		IELTS Level	-	Words > 4 Syllables			
Index		Spache Score	-	Words > 12 Letters			
FORCAST Grade Level		New Dale-Chall Score					
Powers Sumner Kearl Grade		Lix Readability		Writing Style			
Rix Readability	-	Lensear Write		Passive Voice Count			
Raygor Readability	-	CONSCIONATION CONTRACTOR CONTRACT		Adverb Count	-	-	
Fry Readability				Cliché Count		-	

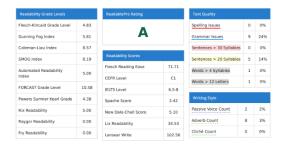
Readability Grade Levels		ReadablePro Rating		Text Quality		
Flesch-Kincaid Grade Level	4.19			Spelling Issues	0	0%
Gunning Fog Index	5.02	A		Grammar Issues	6	169
Coleman-Liau Index	7.63			Sentences > 30 Syllables	1	3%
SMOG Index	7.43	Readability Scores		Sentences > 20 Syllables	6	169
Automated Readability	4.45	Flesch Reading Ease	80.88	Words > 4 Syllables	1	09
Index	4.45	CEFR Level	B2	Words > 12 Letters	0	09
FORCAST Grade Level	9.32	IELTS Level	5-6			
Powers Sumner Kearl Grade	4.21	Spache Score	3.30	Writing Style		
Rix Readability	6.00	New Dale-Chall Score	4.99	Passive Voice Count	2	1%
Raygor Readability	0.00	Lix Readability	31.34	Adverb Count	1	0%
Fry Readability	4.00	Lensear Write	99.39	Cliché Count	0	09

# **Survey Welcome Page**

# Caregiver intertest, survey 1 (participation)

R readable

Text readability report generated on 2023-06-11 19:22.



### Appendix J

# **Caregiver Feedback Survey**

It is now time for you to provide your feedback on the RESOURCE TOOLKIT,	
"Toolkit for Caregivers of young People with Autism Spectrum Disorder (ASD) Moving to Adult Prim	ary
Care"	

This online survey will take no more than 5 minutes of your time.

Questions? Please email the DNP Student / project lead at <u>ASDtransitions@xxx.edu</u>

Thank You for reviewing the "Toolkit for Caregivers of Young People with Autism Spectrum Disorder (ASD) Moving to Adult Primary Care."

Thank you! You have now had time using our newly designed "Toolkit for Caregivers of Young People with Autism Spectrum Disorder (ASD) Moving to Adult Primary Care. Please let us know which parts of the "Toolkit for Caregivers of Young People with Autism Spectrum Disorder (ASD) Moving to Adult Primary Care" you found MOST and LEAST helpful by answering the questions below:

Please let us know if you agree or disagree, if the resources are helpful now or in the future.

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Insurance and Financial Help					
) Legal Help ) Educational Help					
) Educational Help ) Other Programs					
Barbers & Hair Salons					
Eye Doctors					
Dentists/Orthodontists					
Adult Day Care					
) Lawyers )) Adult Providers					
) Adult Hoviders					

Do you have any suggestions on how to make the "Toolkit for Caregivers of Young People with Autism Spectrum Disorder (ASD) Moving to Adult Primary Care" better?

<del></del>
Oo you have any comments on things the "Toolkit for Caregivers of Young People with Autism Spectrum
Disorder (ASD) Moving to Adult Primary Care" does well?

Have you already attempted to transfer the care of your child with ASD from a pediatric primary care provider to an adult primary care provider or practice?

Yes	No	

# Appendix K

# **Flyer and Script**

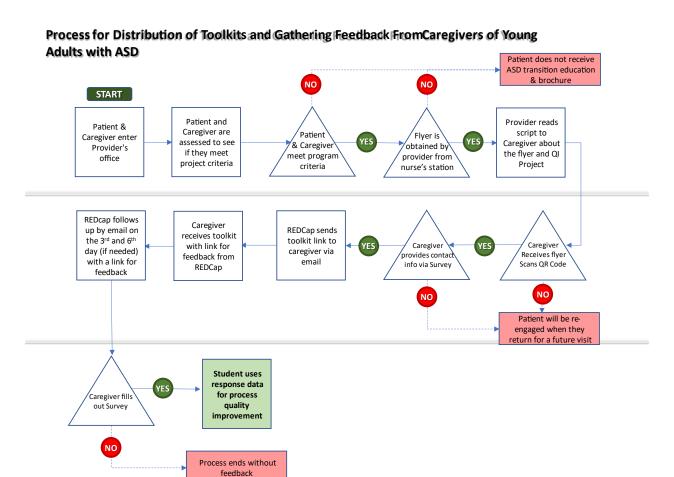


### Instructions for Potential Participants

Thank you again for coming in today. Before you leave, I wanted to let you know that our practice is working with a nursing student named Dawn Boal. She is leading a project focused on helping families with children that have Autism Spectrum Disorder (ASD). She will give you tools to help your child move into adulthood. She will also ask for your feedback on her toolkit. If you would like to do this, here's a flyer for you to take with you. Please know you are not required to do this. We are offering this project to caregivers of children with ASD.

# Appendix L

# **Process Map**



# Appendix M

# **Welcome Page to Surveys**

# **Welcome Page**

Please complete the survey below.	
Thank you!	

Thank you for your interest in our Resource Toolkit for Caregivers of Young People with Autism Spectrum Disorder! This project is led by DNP Student/ Project Lead, a doctoral student at xxx University (faculty advisor is Faculty Advisor) in partnership with Project Site Clinical Mentor and the team at the Practice Setting primary care office. Any questions you have can be sent via email to ASDtransitions@xxx.edu

Please press "Continue" to submit your information to participate in this project

### Appendix N

## **Caregiver Participation Survey**

Thank you for your interest in our project!

Thank you for your interest in providing feedback on our resource toolkit, "Toolkit for Caregivers of Young People with Autism Spectrum Disorder (ASD) Moving to Adult Primary Care."

#### WHAT IS THIS PROJECT ABOUT?

We would like feedback from caregivers of children with ASD this toolkit. The toolkit has resources that can help your child.

#### WHY PARTICIPATE?

If you would like to give feedback as a caregiver of a child with ASD, here's what this project will mean for you: The RESOURCE TOOLKIT will be provided to you, free of charge.

You will use the RESOURCE TOOLKIT how you see best!

You will complete 1 survey to let us know which parts of the RESOURCE TOOLKIT you find most and least helpful.

#### TO QUALIFY FOR THIS PROJECT, YOU MUST

Be a parent or caregiver of a child with ASD and Your child with ASD is a patient at CHOP's Kennett Square Practice Your child with ASD is between the ages of 15-21 years old

#### I WANT TO HELP! WHAT CAN I DO?

Please complete the form below with your name and email, then you will receive a resource toolkit and a follow up survey to provide your feedback.

#### WHO CAN I CONTACT IF I HAVE QUESTIONS?

E-mail the project team at <u>ASDtransitions@xxx.edu</u>

Setting Primary Care Practice's lead	nt/Project Lead in partnership with Project Site Clinical Mentor and Practic dership team. DNP student/Project Lead is a student in a doctorate of niversity with xxx as Faculty Advisor. The DNP student/Project Lead is a
This project is focused on feedback	x from parents or legal guardians of children with ASD
How old is your child with ASD th	at was seen for primary care at Practice Setting Primary Care Practice?
	Less than Age 15
	15
	16
	17
	18
	19
	20
	21
	Greater than Age 21
What is your full name?	
Thank you! From your responses,	you qualify to participate in this project.

The "Toolkit for Caregivers of Young People with Autism Spectrum Disorder moving to Adult Primary Care" will be sent to interested caregivers via email.

NOTE: If you do not see the toolkit in your email inbox, please look in your junk or spam folder. All project-related communications will be sent from <u>ASDtransitions@xxx.edu</u>

Please enter your preferred email address here	

#### **Appendix O**

### REDCap Automated Link to Toolkit and Caregiver feedback Survey

Thank you for your interest in our toolkit, "Toolkit for Caregivers of Young People with Autism Spectrum Disorder (ASD) Moving to Adult Primary Care."

#### WHAT IS THIS PROJECT ABOUT?

We would like feedback from caregivers of children with ASD about this toolkit. The toolkit has resources that can help your child move into adulthood. This is an ongoing quality improvement (QI) project.

#### WHY PARTICIPATE?

If you would like to give feedback as a caregiver of a child with ASD, here's what this project will mean for you:

The RESOURCE TOOLKIT will be provided to you, free of charge.

You will use the RESOURCE TOOLKIT to see how useful it is!

You can view the toolkit now or later. Click the link to the toolkit below.

#### Link to the ASD resource toolkit was here

You will have access to the RESOURCE TOOLKIT. You can also copy and paste the link into your web browser.

#### After you review the RESOURCE TOOLKIT:

You will complete 1 survey to let us know what parts of the toolkit you find most and least helpful. You can complete the survey now or later. When you are ready to take the survey:

- You can view the survey after clicking the survey link down below
- If the survey remains incomplete, 2 reminders will be emailed

## TO QUALIFY FOR THIS PROJECT, YOU MUST

- Be a parent or caregiver of a child with ASD and
- your child with ASD is a patient at CHOP's Kennett Square Practice
- your child with ASD is between the ages of 15 21 years old

#### WHO CAN I CONTACT IF I HAVE QUESTIONS?

E-mail DNP Student/Project Lead at ASDtransitions@chop@xxx.edu

This project is led by DNP Student/Project Lead in partnership with Practice Setting's Primary Care Practice's leadership team. DNP Student/Project Lead is a student in a Doctor of Nursing practice program at xxx University. DNP Student/Project Lead is also a parent of a child with ASD.

Toolkit for Transitioning Young Adults with Autism Spectrum Disorder to Primary Care Led by DNP Student/Project Lead at xxx University with Faculty Advisor and Project Site Clinical Mentor.

You may open the survey in your web browser by clicking the link below: [survey-link]

If the link above does not work, try copying the link below into your web browser: [survey-url]

This link is unique to you and should not be forwarded to others.

# Appendix P

# **Summarized Action Plan**

# Summarized Action Plan

# Project Director DB

Dr. M will be advising when needed throughout the project.

**Project purpose** To gather caregivers' perceptions of the usefulness/helpfulness of an evidence-based ASD transitions toolkit to enable the transition from pediatric to adult care provider services

Key step	Specific	Person	Materials or	Timeline	Evaluation
or	activities to	responsible	resources		
objective	meet objective	•	needed		
Talk to	To gain	Dawn	Appointment	May 10 <sup>th</sup> ,	Discussed
project	knowledge on		with children	2022	my son's
setting's	how my				transitioning
clinical	pediatrician,				to primary
project site	oversees				care
clinical	adolescent /				
mentor on	young adults				
overcoming	ASD transition				
barriers of					
transitionin					
g of ASD					
adolescent /					
young					
adults					
Backgroun	Searching	Dawn	Phone		5/25 -
d	literature, calling				Children's
information	health systems				Hospital,
on	-John Hopkin's				called back
Strategies	-Georgetown				E. M.
for	-University of				explained
improving	Pittsburg				they have a
primary	-Nemours-				transition
care for	DuPont				program for
adolescent /					ages 17, 18,
young					19 only and
adults with					emailed list
autism					of state
transitionin					agencies for
g from					resource
pediatric					
services					

Called setting's Autism Center  PICO question to Dr. M	To ask how they transition from pediatric to adolescent / young adult with ASD	D D	Phone	May 24 <sup>th</sup> , 2022	Referred to affiliated university's behavioral health program
Resource librarian	Went over how to search for resources using PICO question	D& Geoffrey	zoom	5/26	I learned a lot and Geoffrey recorded the session for me. Met three times with librarians
Evidence searches	Finding evidence for PICO question	Dawn	School on-line library	5/27-28	
Project setting's clinical project site clinical mentor	about site for project	Dawn	Various modalities (Back and forth communicatio n)	6/3 started	7/8 Project setting's clinical project site clinical mentor to do project
Emailed Dr. P, CDC's Autism task force	Ask about transition of adolescent / young adults with autism into primary care resources	Dawn	email	6/7	6/8 Dr. P wrote back with resources and contacts/expe rts
Start going over literature and evidence search using RCA tools		Dawn		6/8	
Worked on evidence		Dawn		6/17-6/21	

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	T	1	1	1	,
Completing		Dawn		12/16/22	12/16/22
Information			-access to		
for the			project setting		
project			as non-		
setting's			traditional		
center for			employee		
nursing			(non-paid)		
research					
and					
evidence-					
based					
practice					
G					
Start		Dawn			Estimate
project					July
	m +2	-	D1		28 <sup>th</sup> ,2023
Call local	To assess if	Dawn	Phone call/		Estimate
primary	taking new		Website		1/09/2023
Care	patients and		email		March &
clinicians	ASD patients.				April 2023
	For resource for				
D:	patients	<b>D</b>	T		01/00/2022
Discuss	Resources to go	Dawn	In person or		01/09/2023
with Dr D	in the folder	Dr. D	video call		
Contents					
for					
resource					
folder/					
toolkit		Davis			
Finish: Toolkit		Dawn			June 2023
Flyer					June 2023
Instruction					Recheck
video					August 2023
Check a					1105001 2023
component					
s of project					
meeting					
universal					
precautions					
Have staff	To educate staff	Dawn	In person	Attempted	June 1 zoom
meeting-	on project/	with support		May 25 <sup>th</sup>	meeting.
lunch and	toolkits and	from project	Email	2023	2023
10711011 001107					

	contact information sheet l	clinical project site clinical mentor			
Create a Project instructiona l video for Clinicians and Staff	To educate staff on project/ toolkits and taking pt.'s contact information	Dawn	Vyond.com	Final draft on You tube	August 2023
Wait time for project to clear IRB at project setting		Dawn	Email		IRB determined project to be non-human subjects research on 9/12/2023
Completion of staff training	Send REDCap with video and attestation to staff	Dawn	REDCap websurvey tool	Estimate Sept 25th	
Start distribution of toolkits		Staff & D			C October 2023
Every other week office visits and weekly follow ups Monitor on- line input	check-ins (one more lunch and learn beginning of)	Dawn	In person & Emails	Estimate Start 2023	Project started October 11 <sup>th</sup> , 2023
Monitor on- line input	Check REDCap surveys	Dawn	Access to project setting's secure network		Sept 2023
Start data collection on project	Start taking surveys of, patient, and parents/guardian s,	Dawn	Access to project setting's secure network		Oct 2023 – Feb 2024

	Compile on-line surveys and QR		Setting's REDCap	
	code access.		КЕВСар	
Evaluation of data	Begin to start report of	D	Computer	
	findings of QI project			February 2024
Prepare project	Dissemination	Dawn	Computer PowerPoint	
presentatio n			Poster	March 2024
Present project for setting's health		Dawn	virtually	April 2024
Present project for project				April 2024
setting's primary care office				

Appendix Q

Differentiating Quality Improvement and Research Activities Tool

Question	Yes	No
Is the project designed to bring about immediate improvement in patient care?	X	
Is the purpose of the project to bring new knowledge to daily practice?		X
Is the project designed to sustain the improvement?	X	
Is the purpose to measure the effect of a process change on delivery of care?	X	
Are findings specific to this pediatric clinic?	X	
Are all patients who participate in the project expected to benefit?	X	
Is the improvement at least as safe as routine care?	X	
Will all participants receive at least usual care?	X	
Do you intend to gather just enough data to learn and complete the cycle?	X	
Do you intend to limit the time for data collection to accelerate the rate of improvement?	X	
Is the project intended to test a novel hypothesis or replicate one?		X
Does the project involve withholding any usual care?		X
Does the project involve testing improvements/practices that are not usual or standard of care?		X
Will any of the 18 identifiers according to the HIPAA Privacy Rule be included?		X

Adapted from Foster, J. (2013). Differentiating quality improvement and research activities.

Clinical Nurse Specialist, 27(1), 10–3. https://doi.org/10.1097/NUR.0b013e3182776db

# Appendix R

# **CITI Training**







# **Appendix S**

# **Project Site Specific CITI Training**

# Course Completion for DB

Congratulations on your recent course completion!

Name: **DB** (ID: 11287912)

Institution: [xxxx]

Course: **Group 2: Social-Behavioral-Educational Researchers** 

Stage: **1 - Basic Course** 

Completion Date: 20 Dec 2022

Expiration Date: 20 Dec 2025

Completion Record ID: **53243804** 

# Appendix T

# List of potential primary care clinicians, other health care clinicians and barbers/hairstylists

Taking New Patients w/ ASD2	Willing to Participate?	Adult Primary Care Provider	Address	Phone	Practice Name	Affiliation	Profile Page
		Mary-Anne Ost, MD	West Grove)	610-869-0311	Office of Mary-Anne Ost, MD, Ltd	Indpenedent	https://www.pennmedicine.org/providers/profile/mary-anne-ost?fadf=pennmedicine&keyword=family%20medicine
		Dr. Raymond McLaughlin, MD	701 E Baltimore Pike Kennett Square, PA 19348	610-444-4060	Office of Ray McLaughlin MD	Indpenedent	https://www.pennmedicine.org/providers/profile/raymond-mclaughlin?fadf=pennmedicine&keyword=family%20medicine
×	×	Dr. Cheryl Hlavac, MD	402 McFarlan Rd Ste 102 Kennett Square, PA 19348	610-444-5678	Penn Family Medicine Kennett	Penn Med	https://www.pennmedicine.org/providers/profile/cheryl-hlavac?fadf=pennmedicine&keyword=family%20medicine
		Martha Lynn Brinsfield, MD	402 McFarlan Rd Ste 102 Kennett Square, PA 19348	610-444-5678	Penn Family Medicine Kennett	Penn Med	https://www.pennmedicine.org/providers/profile/martha-lynn-brinsfield?fadf=pennmedicine&keyword=family%20medicine
×	×	Megan M. Gaskill, MD	402 McFarlan Rd Ste 102 Kennett Square, PA 19348	610-444-5678	Penn Family Medicine Kennett	Penn Med	https://www.pennmedicine.org/providers/profile/megan-gaskill?fadf=pennmedicine&keyword=family%20medicine
		Dr. Steven Ginsburg, DO	402 McFarlan Rd Ste 102 Kennett Square, PA 19348	610-444-5678	Penn Family Medicine Kennett	Penn Med	https://www.pennmedicine.org/providers/profile/steven-ginsburg?fadf=pennmedicine&keyword=family%20medicine
		Mark J. Barimani, MPAS PA-C	402 McFarlan Rd Ste 102 Kennett Square, PA 19348	610-444-5678	Penn Family Medicine Kennett	Penn Med	https://www.pennmedicine.org/providers/profile/mark-barimani?fadf=pennmedicine&keyword=family%20medicine
		Dr. Thomas Santamaria, MD	830 W Cypress St Kennett Square, PA 19348	610-444-8084	Kennett Primary Care	Penn Med	https://www.pennmedicine.org/providers/profile/thomas-santamaria?fadf=pennmedicine&keyword=family%20medicine
		Pedro M. Solanet, MD	830 W Cypress St Kennett Square, PA 19348	610-444-8084	Kennett Primary Care	Penn Med	https://www.pennmedicine.org/providers/profile/pedro-solanet?fadf=pennmedicine&keyword=family%20medicine
×	Dr. Deepika Suri MI	D Matthew Pagano, DO	404 McFarlan Road, Suite 101, Kennett Square, PA 19348	610-925-3835	Penn Family and Internal Medicine Longwood	Penn Med	Matthew Pagano, DO profile   PennMedicine.org
		David G. Rooney, MD	455 Woodview Road, Suite 100, West Grove, PA 19390	610-345-1900	Penn Medicine Southern Chester County	Penn Med	https://www.pennmedicine.org/providers/profile/david-rooney?fadf=pennmedicine&keyword=Family%20medicine
		Theresa Metanchuk, DO	455 Woodview Road, Suite 100, West Grove, PA 19390	610-345-1900	Penn Medicine Southern Chester County	Penn Med	https://www.pennmedicine.org/providers/profile/theresa-metanchuk?fadf=pennmedicine&keyword=Family%20medicine
		Michael D Kirk, MD	455 Woodview Road, Suite 100, West Grove, PA 19390	610-345-1900	Penn Medicine Southern Chester County	Penn Med	https://www.pennmedicine.org/providers/profile/michael-kirk?fadf=pennmedicine&keyword=Family%20medicine
		Stephen Navior, DO	455 Woodview Road, Suite 100, West Grove, PA 19390	610-345-1900	Penn Medicine Southern Chester County	Penn Med	https://www.pennmedicine.org/providers/profile/stephen-navlor?fadf=pennmedicine&keyword=Family/%20medicine
		John N. Daghir, MD	455 Woodview Road, Suite 100, West Grove, PA 19390	610-345-1900	Penn Medicine Southern Chester County	Penn Med	https://www.pennmedicine.org/providers/profile/john-daghir?fadf=pennmedicine&keyword=Family%20medicine
		Debra Didomizio Wright, CRNP, MSN	455 Woodview Road, Suite 100, West Grove, PA 19390	610-345-1900	Penn Medicine Southern Chester County	Penn Med	https://www.pennmedicine.org/providers/profile/debra-wright?fadf=gennmedicine&keyword=Family%20medicine
		Judith Gawlikowski, CRNP	455 Woodview Road, Suite 100, West Grove, PA 19390	610-345-1900	Penn Medicine Southern Chester County	Penn Med	https://www.pennmedicine.org/providers/profile/judith-gawlikowski?fadf=pennmedicine&keyword=Family%20medicine
		Sophia Sabio-Gesmundo, CRNP	455 Woodview Road, Suite 100, West Grove, PA 19390	610-345-1900	Penn Medicine Southern Chester County	Penn Med	https://www.pennmedicine.org/providers/profile/sophia-sabio-gesmundo?fadf=pennmedicine&keyword=Family%20medicin
		Michael K. Robinson, II. MD	620 Spear Street, Oxford, PA 19363	610-932-9300	LG Health Physicians Family Medicine Oxford	Penn Med	https://www.pennmedicine.org/providers/profile/michael-k-robinson?fadf=pennmedicine&keyword=Family%20medicine
x	×	Melissa Hubley, DO	620 Spear Street, Oxford, PA 19363	610-932-9300	LG Health Physicians Family Medicine Oxford	Penn Med	https://www.pennmedicine.org/providers/profile/melissa-hublev?fadf=pennmedicine&keyword=Family%20medicine https://www.pennmedicine.org/providers/profile/melissa-hublev?fadf=pennmedicine&keyword=Family%20medicine
×	×	Spencer S. Hoffman, DO	620 Spear Street, Oxford, PA 19363	610-932-9300	LG Health Physicians Family Medicine Oxford	Penn Med	https://www.pennmedicine.org/providers/profile/spencer-hoffman?fadf=pennmedicine&keyword=Family%20medicine
		Ashlev Allis, CRNP	620 Spear Street, Oxford, PA 19363	717-394-8908	LG Health Physicians Family Medicine Oxford	Penn Med	https://www.pennmedicine.org/providers/profile/spencer-norman/radr=pennmedicine&keyword=Family%20medicine https://www.pennmedicine.org/providers/profile/ashlev-allis?fadf=pennmedicine&keyword=Family%20medicine
		Sarah L. Keiser, CRNP	620 Spear Street, Oxford, PA 19363	610-932-9300	LG Health Physicians Family Medicine Oxford	Penn Med	https://www.pennmedicine.org/providers/profile/sarial-y-aiiis/radi=pennmedicine&keyword=Family%20medicine https://www.pennmedicine.org/providers/profile/sarial-keiser?fadf=pennmedicine&keyword=Family%20medicine
		Susan M. Wolf, CRNP	620 Spear Street, Oxford, PA 19363	610-932-9300	LG Health Physicians Family Medicine Oxford	Penn Med	https://www.pennmedicine.org/providers/profile/saran-xeiser/radr=pennmedicine&keyword=Family%20medicine https://www.pennmedicine.org/providers/profile/susan-m-wolf?fadf=pennmedicine&keyword=Family%20medicine
		Mary-Anne Ost, MD (See above in KS)	1 Commerce Blvd Ste 203 West Grove, PA 19390	610-860-2199	Office of Many-Anne Ost, MD, Ltd	Indpenedent	https://www.pennmedicine.org/providers/profile/susan-m-wolf/fadf=pennmedicine&keyword=Family%20medicine
					Office of Mary-Anne Ost, MD, Ltd	Inapenedent	
		Dr. Marylou Checchia-Romano, DO	1660 E Street Rd Kennett Square, PA 19348	610-388-5634			
×	×	Dr. Karl Zimmerman, MD	127 W Street Rd Ste 101 Kennett Square, PA 19348	610-444-1212			
		Dr. Julia Elcock-Vengen, MD	200 Old Forge Ln Ste 203 Kennett Square, PA 19348	484-628-0797			
		Dr. Stefanie Steiner, DO	West Grove)	484-628-0797	Also at Family Practice Associates WG		
		Kathryn Mitchell, FNP-C	200 Old Forge Ln Ste 203 Kennett Square, PA 19348	484-628-0797			
		Dr. Peter Baddick III, DO	300 Old Forge Ln Ste 302 Kennett Square, PA 19348	484-778-8000			
		Dr. Paul Chwiecko, MD	300 Old Forge Ln Ste 302 Kennett Square, PA 19348	484-778-8000	Tower Health		
		Dr. Ziad Osman, MD	300 Old Forge Ln Ste 302 Kennett Square, PA 19348	484-778-8000	Tower Health		
		Dr. Robert McKinstry, MD	548 SCHOOL HOUSE RD Kennett Square, PA 19348	484-770-8558			
		Dr. Shannon Lieb, DO	404 McFarlan Rd Ste 101 Kennett Square, PA 19348	610-925-3835			
		Dr. Uzma Quraishi, MD	701 E Baltimore Pike Ste C Kennett Square, PA 19348	610-444-5630	Brandywine Internal Medicine PC		
		Dr. Faye Meyers, MD	731 W Cypress St Kennett Square, PA 19348	610-444-0070			
		Dr. Elaine Kirchdoerfer,MD	731 W Cypress St Kennett Square, PA 19348	610-444-0070			
		Dr. David Hoffman, MD	20 McMaster Blvd # 100 Landenberg, PA 19350	610-320-2373			
		Dr. Richard Stratchko, DO	620 SPEAR ST Oxford, PA 19363	610-932-9300	LG Health Physicians Family Medicine Oxford	Not listed	
		Dr. Patrick Anderson, DO	620 SPEAR ST Oxford, PA 19363	610-932-9300	LG Health Physicians Family Medicine Oxford	Not listed	
		Dr. Daniel Duran, MD	900 W Baltimore Pike Ste 200 West Grove, PA 19390	610-869-4627	Family Practice Associates WG		
		Dr. Michael Barkasy Jr, MD	900 W Baltimore Pike Ste 200 West Grove, PA 19390	610-869-4627	Family Practice Associates WG		
		KS)	900 W Baltimore Pike Ste 200 West Grove, PA 19390	610-869-4627	Family Practice Associates WG		
		Dr. Steven Breslow, DO	390 Vineyard Way Ste 501 West Grove, PA 19390	484-628-9156			
		Dr. Noah Bass, DO	1015 W Raltimore Pike West Grove PA 19390	610-869-1068	Allied Diagnsto Pthlov Costots		
		Dr. Noari Bass, DO Dr. Sony John, MD	404 McFarland Rd Ste 101 Kennett Square, PA 19348	610-925-3835			
		Dr. Paula Barry, MD	404 McFarland Rd Ste 101 Kennett Square, PA 19348	610-925-3835			
		Lindsay Calio, MMS, PAC	404 McFarland Rd Ste 101 Kennett Square, PA 19348	610-925-3835			

Service	Y/N	Provider Name	Phone Number	Provider Address	Website
Barber / Hairdresser	У	Blue 52 Barber Shop	610-612-9361	331 State St, Kennett Square, PA 19348	https://www.vagaro.com/blue52barbershop
Barber / Hairdresser	у	Burton's Barber Shop	610-444-9964	105 W State St # A, Kennett Square, PA 19348	NA NA
Barber / Hairdresser	n	KSQ Barber Lounge	484-731-4189	106 Sycamore Alley, Kennett Square, PA 19348	http://www.vagaro.com/ksqbarberlounge
Barber / Hairdresser	v	B&B Barber Lounge	484-732-7951	116 S Union St, Kennett Square, PA 19348	https://bb-barber-lounge.business.site/?utm_source=gmb&utm_medium=referral
Barber / Hairdresser	v	Pepe's Barbershop	610-492-2244	1153 Newark Rd, Toughkenamon, PA 19374	https://www.vagaro.com/pepesbarbershop
Barber / Hairdresser	v	Holiday Hair	610-444-9997	350 Scarlet Rd suite 25-b, Kennett Square, PA 19348	https://www.signaturestyle.com/locations/pa/kennett-square/holiday-hair-new-garden-town-square-haircuts-19293.html
	·		610-764-0584		
Barber / Hairdresser	n	Rivera's Barber Shop	610-268-5545	88 Pennsylvania Ave, Avondale, PA 19311	NA .
Barber / Hairdresser	v	Supercuts Kennett Square	484-732-8053	817 E Baltimore Pike, Kennett Square, PA 19348	https://www.supercuts.com/checkin/82817
Barber / Hairdresser	y	Flips Barber Shop	610-467-1670	10 S 3rd St, Oxford, PA 19363	https://flips-barber-shop.edan.io/
Barber / Hairdresser	y	SmartStyle Hair Salon	610-998-1483	800 Commons Dr, Oxford, PA 19363	https://www.smartstyle.com/checkin/18798
Barber / Hairdresser	n	3rd Street Parlor	484-746-0055	3 S 3rd St, Oxford, PA 19363	https://3rdstreetparlorbarbershop.com/
Barber / Hairdresser	ves	Top-Notch Barbershop	610-806-5412	11 Exchange PI, West Grove, PA 19390	https://linktr.ee/TopNotchBarbershopInc
Barber / Hairdresser	no	Ruffini's Barber Shop	610-869-3002	104 Rosehill Ave, West Grove, PA 19390	NA NA
Barber / Hairdresser	ves	Great Clips	610-444-6510	144 Onix Dr. Kennett Square, PA 19348	https://salons.greatclips.com/us/pa/kennett-square/144-onix-dr?utm_source=google&utm_medium=organic&utm_campaign=gmb
Barber / Hairdresser	ves	Salon Secrets Spa- Kennett Square	610-444-0605	829 E Baltimore Pike, Kennett Square, PA 19348	http://www.salonsecretsspa.com/
Barber / Hairdresser	ves	Linda's Hair Techniques	610-268-3221	911 Gap Newport Pike, Avondale, PA 19311	http://www.lindashairtechniques.com/
Barber / Hairdresser	ves	Shear Satisfaction	610-268-8917	1120 Newark Rd. Toughkenamon, PA 19374	http://www.shearsatisfaction.com/
Barber / Hairdresser	no	Fa Shears By Aimee	610-444-1430	910 E Baltimore Pike, Kennett Square, PA 19348	http://www.fashears.com/?v_source=1_MiAxNzA4ODEtNzE1LWxvY2F0aW9uLndlYnNpdGU%3D
Barber / Hairdresser	ves	Jillian Grace Salon	610-869-4114	2050 Newark Rd, Lincoln University, PA 19352	http://igsalon.com/
Eye Doctor	ves	Ganly Vision Care	484-770-8132	402 Bayard Rd #200, Kennett Square, PA 19348	http://www.ganlyvisioncare.com/
Eye Doctor	yes	MyEyeDr Kennett	610-444-5252	841 E Baltimore Pike, Kennett Square, PA 19348	https://locations.myevedr.com/pa/kennett-square/841-e-baltimore-pike?utm_source=google-gmb&utm_medium=organic
Eve Doctor	ves	Kennett Square Eye Care	610-444-5522	216 S Mill Rd Ste 112. Kennett Square, PA 19348	http://www.kennettsguareevecare.com/
Eve Doctor	ves	Chester County Eye Care Associates	610-696-1230	455 W Woodview Rd #125. West Grove, PA 19390	https://www.chestercountyevecare.com/?utm_source=GMB-WGJ&utm_medium=oreanic
Eve Doctor	ves	Miller Eye Care	610-869-4200	57 Jenners VIg Ctr, West Grove, PA 19390	http://www.millerevecareonline.com/
Eye Doctor	ves	MyEyeDr Oxford	610-932-9356	49 S 2nd St. Oxford, PA 19363	https://locations.myevedr.com/pa/oxford/49-south-2nd-street?utm_source=google-gmb&utm_medium=organic
Adult Daycare	ves	Active Day of Kennett Square	610-388-1166	500 Old Forge Ln, Kennett Square, PA 19348	https://www.activedav.com/locations/states/pa/
Adult Daycare	ves	Kennett Area YMCA	610-444-9622	101 Race St, Kennett Square, PA 19348	https://ymcaebw.org/locations/kennett-branch
Adult Daycare	no	Jennersville YMCA	610-869-9622	880 W Baltimore Pike. West Grove. PA 19390	https://ymcaebw.org/locations/iennersville-branch
Dentist	no	P. Randall Eckman, DDS	610-388-0223	966 E Baltimore Pike, Kennett Square, PA 19348	http://eckmandds.com/
Dentist	no	Kennett Center for Advanced Dentistry	610-444-6311	208 N Union St, Kennett Square, PA 19348	https://www.kennettsmiles.com/
Dentist	ves	Leardi Family Dentistry	610-571-2520	690 Unionville Rd, Kennett Square, PA 19348	https://www.leardidental.com/?utm source=GMB&utm medium=organic&utm campaign=DevOptimization&utm content=Website
Dentist	ves	Albert J Schmitt DMD	610-444-6300	413 McFarlan Rd, Kennett Square, PA 19348	http://www.doctorschmitt.com/
Dentist	ves	Jay W. Dorgan DDS	610-925-3222	127 W Street Rd #301, Kennett Square, PA 19348	http://www.drdorean.com/
Dentist	yes	C Christian Franck Family Dental	610-444-3212	721 E Baltimore Pike # 301, Kennett Square, PA 19348	
Dentist	ves	Dental Health Associates	610-444-0750	687 Unionville Rd, Kennett Square, PA 19348	https://dentalhealthcareassociates.com
Dentist	no	Adey Family Dentistry	610-444-2928	120 Lafayette St, Kennett Square, PA 19348	https://www.adeyfamilydentistry.com/
Dentist	ves	Kennett Dental	610-444-4033	402 McFarlan Rd #303. Kennett Square, PA 19348	
Dentist	?	Avondale Family & Cosmetic Dentistry	610-268-8300	8830 Gap Newport Pike, Avondale, PA 19311	https://avondalefamilyandcosmeticdentistry.com/
Orthodontist	no	Greeley Orthodontics	484-346-6000	400 Old Forge Ln #406. Kennett Square. PA 19348	http://greelevortho.com/
Orthodontist	ves	The Orthodontic Group of Chester County	484-218-0088	400 McFarlan Rd STE 200, Kennett Square, PA 19348	https://www.chesterountvorthodontics.com/locations/kennett-square/
Orthodontist	yes ?	Tamburrino Family Orthodontics of Kennett Square	484-730-1921	688 Unionville Rd #101, Kennett Square, PA 19348	https://www.tfortho.com/
Orthodontist	?	Cari Orthodontics	610-444-2343	201 Marshall St. Kennett Square, PA 19348	http://cariorthodontics.com/
Orthodontist	,	Hendrix Orthodontics	610-869-5850	695 W Baltimore Pike, West Grove, PA 19390	https://leisshendrix.com/location/iennersville-orthodontics/
Orthodontist	ves	McCormick Orthodontics	888-333-3757	900 W Baltimore Pike #201. West Grove, PA 19390	http://mccormickorthodontics.com/
Attorney	ves	Randy Hope Steen, Esq	(215) 570-0047	600 Eagleview Blvd. Exton. PA 19341	https://www.rsteenlaw.com/
Attorney	ves	Stephan D. Potts, Esq	610-254-0114	138 West Gav St. West Chester, PA 19380	https://herrpottsandpotts.com/attorney/stephen-d-potts/
Attorney	yes	acephan v. Potts, Esq	010-254-0114	136 West day St, West Chester, PA 19380	nttps://nemportsanuports.com/attomes/stepnen-o-ports/

### Appendix U

# Survey Questions for Adult Primary Care Clinician, Other Healthcare Clinicians and Hairstylist

The survey questions that will be used to screen are question #1 and #3c.



#### Survey Questions for Adult Providers about their Willingness to Accept Young Adults With and Without Chronic Illnesses<sup>1</sup>

Below are suggested questions and example answer choices that can be used to learn about adult providers' willingness to accept young adult patients with and without chronic illnesses.

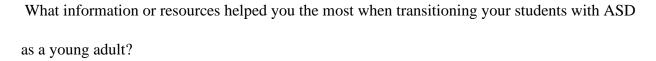
- 1. Will you accept new young adult patients ages 18-25?
  - a. Yes, all
  - b. Yes, but only those without chronic Illness
  - c. Yes, only those with chronic illness
  - d. No, none
- 2. If you prefer NOT to accept ANY new young adult patients, what are the important reasons for this decision?
  - a. Full practice
  - b. Lack of time in appointment
  - c. Payment for RVUs for time needed to care for YA
  - d. Problem with adherence to care of YA
  - e. High no show rate for appointments by YA
  - f. Training and/or experience gaps
  - g. Specialty referral difficulties
  - h. Lack of pediatric consultation support
  - i. Lack of care coordination
  - j. Other (please specify)
- Will you accept new young adult patients with the following specific conditions? (Possible answers for each below: Yes; Yes, but only oversee their primary care needs; Yes, but with pediatric provider consultation support; No)
  - a. Asthma
  - b. ADHD/ADD
  - c. Autism Spectrum Disorder
  - d. Congenital Anomalies
  - e. Congenital Heart Disease
  - f. Cystic Fibrosis
  - g. Depression/behavioral health problem
  - h. Genetic disorders (Down Syndrome, Rett Syndrome, CHARGE Association
  - i. Juvenile arthritis
  - j. Obesity
  - k. Type 1 Diabetes

<sup>1</sup>Data taken from poster presented at the 2016 Health Care Transition Research Consortium in Houston, Texas from Got Transition, Cleveland Clinic, Henry Ford Health System and University of Rochester

Barbers and hairstylist were asked "Will you take young adults with ASD and accommodate them?"

# Appendix V

# **Questions for Local Mom's Group**



- Is there any information you wished you had?
- What advice would you give to parents/guardians or students who are about to transition from school to young adulthood who have ASD?
- Do you have any other thoughts or information you would like to share with me that might help these students?

# Appendix W

# **IRB Approval**



#### Dear Applicant,

Thank you for your submission to the IRB requesting exempt review. Based on the application submitted, the IRB is pleased to approve your submission and we wish you great success in your research.

Chair, IRB

Director, Exercise and Sport Science M.S. Program Associate Professor
College of Health Professions

To learn more about the M.S. in Exercise and Sport Science program, click here.

To see where our M.S. alumni are working, click here.

# Appendix X Setting's IRB Determination Review



To: NS CC: DB

**From:** The Committees for the Protection of Human Subjects (IRB)

**Re:** IRB 23-021121, **Protocol Title:** Toolkit for Transitioning Young Adults with Autism Spectrum Disorder (YA-ASD) to Primary Care and Personal Care Service Providers

Sponsor or Funder: null

### IRB SUBMISSION: DETERMINATION OF NOT HUMAN SUBJECTS RESEARCH

Dear Dr.

The IRB acknowledges receipt of the above-referenced proposal. This proposal was reviewed on 9/11/2023. It has been determined that the proposal does not meet the criteria for human subjects research (see below) and, therefore, ongoing IRB oversight is not required.

**PLEASE NOTE:** A determination of non-human subjects research by the IRB does not necessarily constitute authorization to initiate the project. The Investigator is responsible for satisfying any additional institutional requirements that may apply (e.g. execution of the appropriate agreement with the Office of Collaborative and Corporate Research Contracts for sending or receiving data or samples, execution of an <u>internal Data Use Agreement</u> for sharing or receiving a limited data set, etc.).

#### **Documents Reviewed:**

- Toolkit Flyer (attached 9/6/2023)
- REDCap Welcome Page (attached 9/6/2023)
- REDCap Participation Agreement (attached 9/6/2023)
- Automated Link to Toolkit (attached 9/6/2023)
- REDCap Caregiver Feedback Survey (attached 9/6/2023)
- Letter of Support (dated 6/1/2023)
- Toolkit for Caregivers (attached 9/6/2023)
- Education Video (attached 9/6/2023)
- Staff Attestation (attached 9/6/2023)

This proposal does not meet the following regulatory definitions of human subjects research:

**Does not meet the definition of "research"**: According to 45 CFR 46.102(l), "Research means a systematic investigation, including research development, testing and evaluation, designed to develop or contribute to generalizable knowledge."

**Please note:** It is the responsibility of the Principal Investigator to communicate any changes in the proposal to the IRB, including the use or incorporation of other data sets which may not be de-identified or publicly available. If you wish to change any aspect of this study, a new proposal will need to be submitted for review. New procedures cannot be initiated until IRB review and approval has taken place.

If you have any questions, please click on the IRB# (above) and contact the IRB analyst listed in the study workspace.

DHHS Federal Wide Assurance Identifier: FWA00000459

### Appendix Y

### **Executive Summary**

It is estimated that 1 in 44 children in the United States is diagnosed with autism spectrum disorder (ASD). Young adults (YA) with autism spectrum disorder (ASD) transitioning from pediatric to adult care may have more difficulty finding a primary care clinician trained to address their unique medical and mental health needs. Transition resources need to be developed to help these patients and their caregivers while they are patients under their pediatrician.

The purpose of this evidence-based quality improvement project was to develop a toolkit with resources designed to help YA-ASD ages 15-21 years and their caregivers with the transition from pediatric care to adult primary care services. The Model for Improvement guided this project. The setting was a single pediatric primary care office within a large pediatric health system. The ASD resource toolkit encapsulates the range of support and resources available for individuals with ASD and their caregivers in Pennsylvania, covering various aspects such as healthcare, education, employment, legal considerations, and community support. Access to the ASD resource toolkit was offered by nurses and clinicians to potentially eligible caregivers of YA-ASD during well-child visits.

During the 18-week project, only three caregivers met the project's criteria for inclusion. Only one caregiver started the initial participant survey but did not complete the form to express their interest in project participation. No toolkits were distributed to caregivers during the project's implementation. The next steps must focus on finding the caregivers of YA-ASD transitioning to adult primary care and effective strategies for getting the toolkit to caregivers of YA-ASD.

## Appendix Z

#### **Poster**



An Evidence Based Project : Improving the Transition of Young Adults with Autism Spectrum

Disorder (ASD) to Primary Care

#### Background

The lack of a coordinated transition plan may lead to adolescents/young adults (YA) with ASD continuing to receive extended care from their pediatric providers or having adult or primary care providers who lack the training to address their health care needs. Efforts are necessary to ensure that the health care transition is seamless, high quality, and tailored to the individual needs of addresser/young adult with ASD and their parentiquardian.

#### Evidence

- Internal Data

  Local practice expressed the need to improve the transition of adolescent //A-ASD to adult primary care processes for transition is done individually

  There is no resource list of adult primary care providers that will accept YA-ASD to give careal/vers.

- Providers want to be able to direct patients to available adult primary care providers who
  are willing to take YA-ASD and want to be able to communicate the available services.

- External Data
  Young adults with ASD, despite a higher usage of health care services, have poorer health outcomes than the general population.
  Cince the obstacles are identified, implementations can be made for YA-ASD to improve their access to healthcare providers trained to work with ASD patients.
  YA-ASD and their caregiver's main concern is integrating different health services and family support.
  There is a need for increased training for adult primary care providers in caring for YA-ASD.

#### PICO Question

In the primary care setting (P) does a transitional resource toolkit (I) compared to usual care (C) affect YA-ASD transition to adult primary care (O)?

#### Project Goals

- To develop a universal precautions transition resource toolkit for English speaking caregivers of adolescent/YA-ASD ages 15-21 and to distribute during well visits in a pediatric primary care office.
- To train clinicians and registered nurses (RNs) on the toolkit and process for caregivers of adolescents/YA-ASD to access the toolkit.
- Caregivers of adolescents re-ASD to access one count.
   To obtain feedback on the toolkit from caregivers of adolescents/YA-ASD.

#### Methods / Implementation Plan

Setting/Population: Children's Hospital of Philadelphia Primary Care Office Kennett Square,

Participants: 1 LPNs, 13 RNs, 6 Providers (2 APRNs, 4 Physicians) & Caregivers Design: The Model for improvement will guide this evidence-based quality improvement (EBQI)

<u>DO</u>: Educate the staff (e.g., nurses and providers) via video through REDCap

<u>STUDY</u>: Staff implementation YA-ASD OI project from October 11, 2023, to February 8, 2024

<u>ACT</u>. Revise process implementation based upon what was observed in the PDSA cycle

#### Toolkit Creation

Information Sources
CINAHI, MEDLINE, Nursing & Allied Health Premium, TRIP, Provider's of Kennett Square project
setting, project setting, project setting, project setting, project setting, project setting, a crimer resources, AHRQ — Health literacy guide, U.S. General Sarvices
Administration—Accessibility for Teams. Visual design: Typography, Venngage, com. Accessible Color
Patiet Generator. WCAG complaint, Readable.com.

ASD or autils\*, autism spectrum disorder, transition\* resource\*, primary care or primary health care, "adolescent / young adult" or emerging adult, health care or healthcare transition resource, transition resources, primary care transition. Limits for all searches were English language, adolescents (age 13-18), adults (age 18 and over), and published between 2012-2022.

Model and Evaluation critical appraisal (RCA) using Melnyk & Fineout-Overholt's (2019) tools...

Level to the consequence appears of Article/Study Selection. Article/Study Selection in These were 62 articles collected and reviewed/skimmed for relevance to the project and level of There were 62 articles collected on the VA-ASD transitioning to primary care being a new phenomenon, articles selected for critical appraisal had a primary focus on improvements for transitioning care from pediatric to adult primary care for VA-ASD (n-2 articles).





Educational Video used for to teach providers and RNs about the projec

Toolkit with federal, state and local services

#### Results

- Using REDCap education video and an entry for attestation for all the staff. Over a 2-week
  period, all six (10%) of the clinicians participated, and 85% («In1) Risk.
   Fiyer developed using universal precautions with a QRCode to access REDCap
   REDCap survey to Using universal precautions developed to explain project to participant, distribute toolkit and survey evaluation.
- During the 18-week project, only three caregivers had YA-ASD transitioning. Only one initial survey was accessed but none were filled out. No toolkits were distributed.





#### Sustainability Plan

The staff at the project setting will be educated to distribute resource toolkit, continue with the implementation of the process improvement project and oversee REDCap. This will be overseen by the project site's clinical mentor

#### Lessons Learned

- · REDCap survey is an effective way to account for attestation of the project
- Conducting a Project in Health System as a Non-employee required more time and approvals to start the project.
- Small Numbers of YA-ASD Prevented Assessment of Toolkit Impact
- project settings Approval and Protecting Patient and Staff Information
   Complex Toolkit Distribution
- · Time it Takes to Create a Quality Toolkit
- Access to Data in Real-time
- Leadership Change Resulting in Project Change and Longer Timeline
- Time it Takes to Create a Quality Toolkit

Contact: Dawn Boal, BSN, RN, boald@mail.sacredheart.edu, 913-461-4675