

Project ECHO™: Building Primary Care Capacity for Autism Diagnosis and Care



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Background

- Less than half of children with ASD receive a comprehensive evaluation by 36 months, despite earlier developmental concerns in most children (Maenner et al., 2020).
- Workforce shortages in specialty care are common across disciplines, resulting in long wait times for families seeking an ASD diagnostic evaluation and unmet service needs in at least 25% of children with ASD (Benevides et al, 2016).

Seattle Children's Autism Center

- SCAC serves approximately 4,300 unique patients annually for diagnostic and intervention services (Gerdts et al., 2018).
- Currently the diagnostic waitlist has remained steady at approximately 3,500 patients, despite efforts to streamline the diagnostic evaluation process (Gerdts et al., 2018).

ECHO Autism Washington

- Project Extension for Community Healthcare Outcomes (ECHO)™ is a telementoring program that connects community-based primary-care providers (PCPs) with subject matter experts (SMEs).
- ECHO sessions consist of redacted PCP case presentations and SME-delivered didactics to increase PCP capacity for specialized care.
- ECHO Autism Washington launched its first cohort of PCPs ($n=28$) in December 2019 to support participants in the diagnosis and management of ASD.

Aims

We sought to examine changes in PCP self-efficacy levels and barriers to diagnosing and treating individuals with ASD after participating in 1 year of ECHO Autism Washington.

Method

- 28 ECHO Autism Washington PCPs were sent a questionnaire pre-participation (Time 1) and at completion of the program (1-year; Time 2).
- 67.85% ($n=19$, see Table 1) completed the questionnaire at both Times 1 and 2.
- PCPs represent 12 counties across Washington State.

Table 1

Participant Professional Background

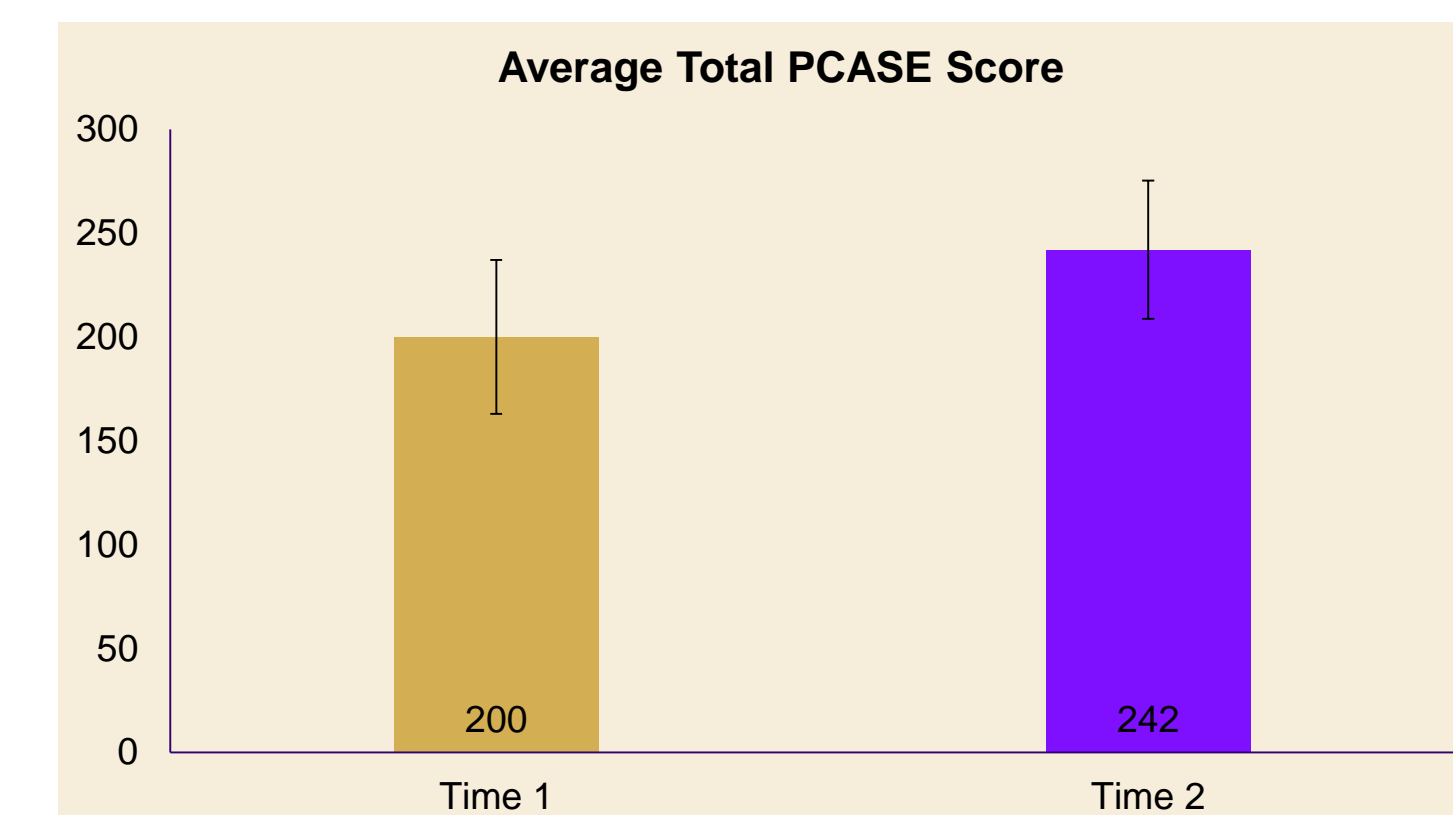
Provider Type	<i>n</i>	%
PhD (<i>Clin. Psych.</i>)	2	10.53
ARNP	6	31.58
MD	11	57.89

Survey

- The survey asked PCPs about practice barriers for diagnosing and caring for individuals with ASD.
- The survey included a modified *Primary Care Autism Self-Efficacy* (PCASE) survey (Mazurek et al., 2017).
 - ASD screening items were replaced with ASD diagnostic items.
- Items are rated on a Likert scale ranging from 1 (no confidence) to 6 (highly confident/expert).
- Items yield a Total Score and six subscale domain scores:
 - Diagnosis across age groups
 - Diagnostic criteria
 - Referrals & resources
 - Medical comorbidities
 - Psychiatric symptoms
 - Additional aspects of care

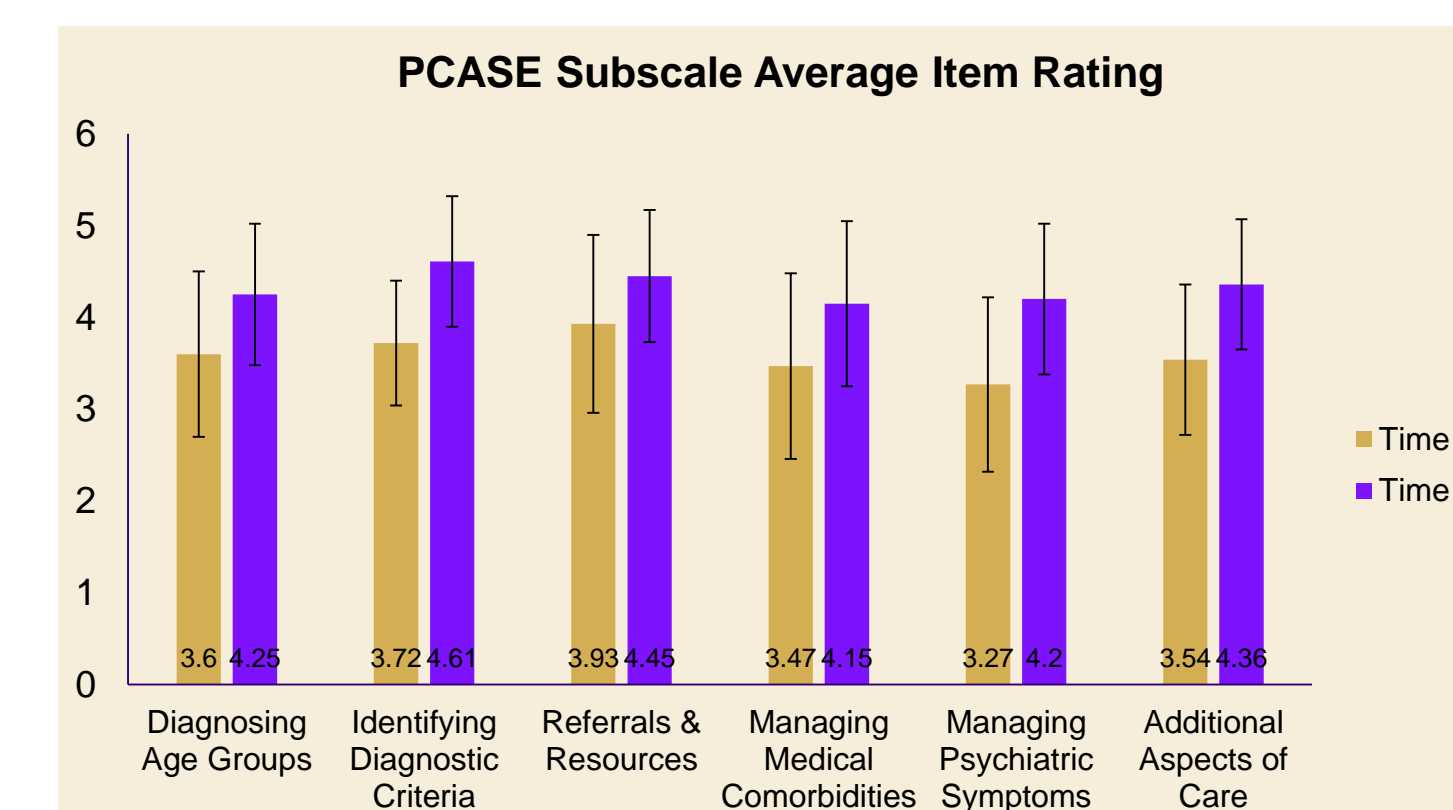
Results

There was a significant increase in overall PCP self-efficacy levels from Time 1 ($M = 200$, $SD = 37.07$) to Time 2 ($M = 242$, $SD = 33.24$); $t(18) = -5.31$, $p < .001$.



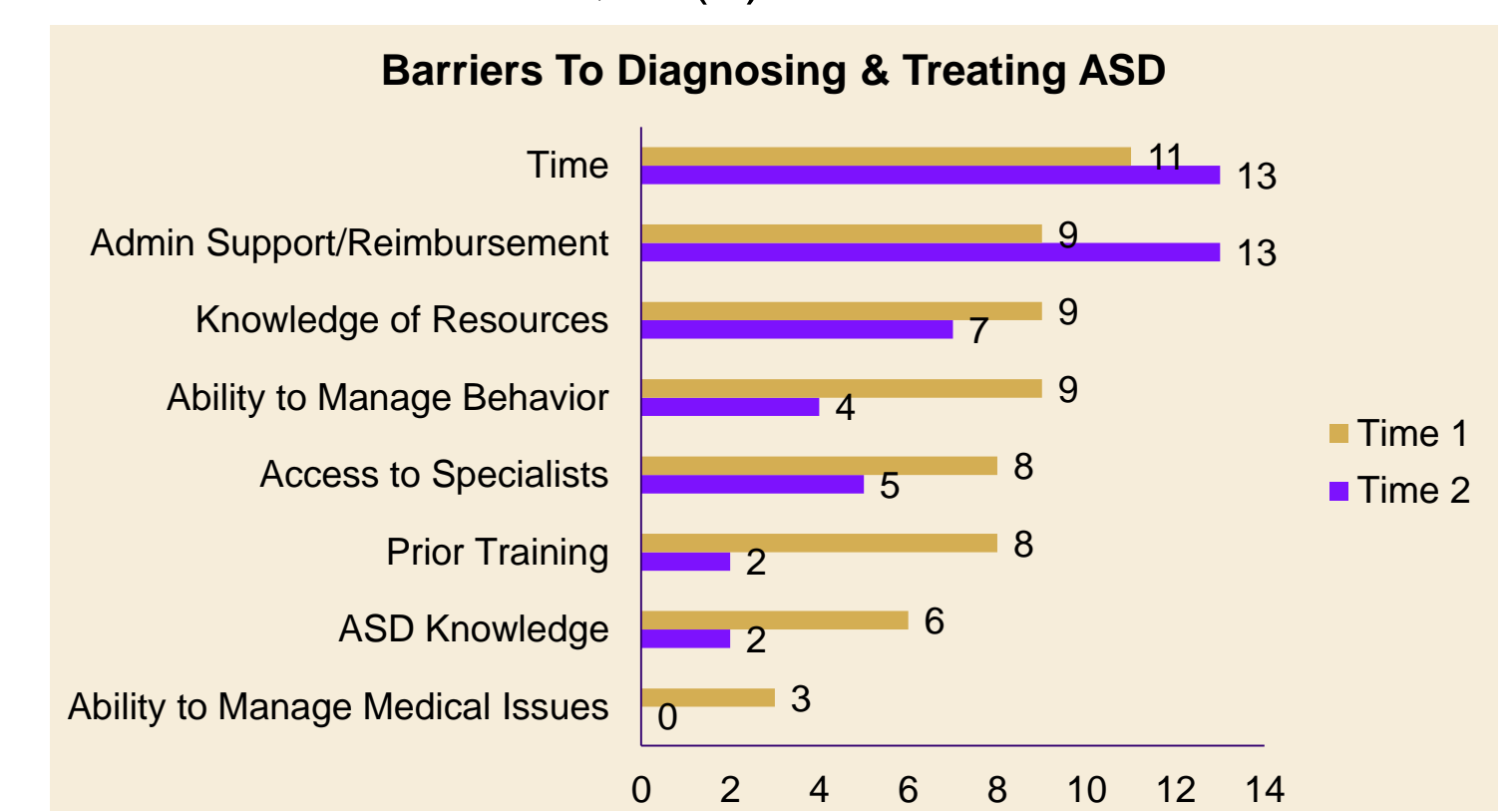
Note. Highest possible score on PCASE = 336.

PCPs reported the greatest increase in self-efficacy in the subscale domain of managing psychiatric symptoms in individuals with ASD (+0.93), followed by identifying diagnostic criteria for ASD (+0.89), providing for additional aspects of care (+0.82), managing medical comorbidities (+0.68), diagnosing different age groups (+0.65), and referring and helping connect families with resources (+0.52).



Note. Average scores across subscales. 1=no confidence, 2=very little confidence, 3=slight confidence, 4=confident, 5=very confident, 6=highly confident/expert.

Percentage of PCPs endorsing barriers of (1) lack of prior training in ASD, (2) lack of knowledge about ASD symptoms, or (3) lack of confidence managing behaviors decreased from (1) 42.11% to 10.52%, (2) 31.58% to 10.52%, & (3) 47.37% to 21.05%.



Note. Perceived barriers for diagnosing and treating children with ASD pre- and post-participation in ECHO Autism Washington.

Discussion

- PCPs reported a significant increase in self-efficacy related to ASD diagnosis & care after 1-year of participation in ECHO Autism Washington.
- PCPs less often reported that ASD knowledge and training were significant barriers to completing ASD diagnostic evaluations in their practice.
- This suggests that telementoring models such as Project ECHO may be one way in which to build PCP capacity & expand ASD expertise within local communities.
- Future research will include a comparison group to evaluate ECHO and non-ECHO PCP changes in self-efficacy levels over time.
- Future research will also evaluate ECHO PCP care recommendations to newly diagnosed individuals & assess patient access to care 1-year post-diagnosis.

References

Benevides, T. W., Carretta, H. J., & Lane, S. J. (2016) Unmet need for therapy among children with autism spectrum disorder: Results from the 2005-2006 and 2009-2010 National Survey of Children with Special Health Care Needs. *Maternal Child Health Journal*, 20, 878-88.

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Maenner, M. J., Shaw, K. A., Baio, J., et al. (2020). Prevalence of autism spectrum disorder among children aged 8 years - Autism and Developmental Disabilities Monitoring Network, 11 Sites, United States, 2016. *MMWR Surveillance Summaries*, 69(4), 1-12.